



Official Partner of the Olympic Winter Games Beijing 2022



中国石油化工股份有限公司 SINOPEC CORP.

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	al report includes forward-looking statements. All statements

This annual report includes forward-looking statements. All statements, other than statements of historical facts, that address activities, events or developments that the Company expects or anticipates will or may occur in the future (including but not limited to projections, targets, reserve and other estimates and business plans) are forward-looking statements. The Company's actual results or developments may differ materially from those indicated by these forward-looking statements as a result of various factors and uncertainties. The Company makes the forward-looking statements referred to herein as at 25 March 2022 and unless required by regulatory authorities, the Company undertakes no obligation to update these statements.

IMPORTANT NOTICE: THE BOARD OF DIRECTORS, THE BOARD OF SUPERVISORS, DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT OF SINOPEC CORP. WARRANT THAT THERE ARE NO FALSE REPRESENTATIONS, MISLEADING STATEMENTS OR MATERIAL OMISSIONS IN THIS ANNUAL REPORT, AND JOINTLY AND SEVERALLY ACCEPT FULL RESPONSIBILITY FOR THE AUTHENTICITY, ACCURACY AND COMPLETENESS OF THE INFORMATION CONTAINED IN THIS ANNUAL REPORT. THERE IS NO OCCUPANCY OF NON-OPERATING FUNDS BY THE CONTROLLING SHAREHOLDERS OF SINOPEC CORP.

ALL DIRECTORS ATTENDED THE 7TH MEETING OF THE EIGHTH SESSION OF THE BOARD. MR. MA YONGSHENG, CHAIRMAN OF THE BOARD, MR. YU BAOCAI, PRESIDENT, MS. SHOU DONGHUA, CHIEF FINANCIAL OFFICER AND HEAD OF THE FINACIAL DEPARTMENT OF SINOPEC CORP. WARRANT THE AUTHENTICITY AND COMPLETENESS OF THE FINANCIAL STATEMENTS CONTAINED IN THIS ANNUAL REPORT. THE AUDIT COMMITTEE OF SINOPEC CORP. HAS REVIEWED THE ANNUAL REPORT OF SINOPEC CORP. FOR THE YEAR ENDED 31 DECEMBER 2021.

THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2021 OF THE COMPANY PREPARED IN ACCORDANCE WITH THE PRC ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES (CASs) AND INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) HAVE BEEN AUDITED BY KPMG HUAZHEN LLP AND KPMG RESPECTIVELY. BOTH FIRMS HAVE ISSUED STANDARD UNQUALIFIED AUDITOR'S REPORT.

AS APPROVED AT THE 7TH MEETING OF THE EIGHTH SESSION OF THE BOARD OF DIRECTORS OF SINOPEC CORP., THE BOARD PROPOSED A FINAL CASH DIVIDEND OF RMB0.31 (TAX INCLUSIVE) PER SHARE FOR 2021, COMBINING WITH THE INTERIM DIVIDEND OF RMB0.16 (TAX INCLUSIVE) PER SHARE, THE TOTAL CASH DIVIDEND FOR 2021WILL BE RMB0.47 (TAX INCLUSIVE) PER SHARE. THE DIVIDEND PROPOSAL IS SUBJECT TO THE SHAREHOLDERS' APPROVAL AT THE ANNUAL GENERAL MEETING FOR THE YEAR 2021.

COMPANY PROFILE

Sinopec H shares were listed in Hong Kong, New York and London exchanges on October 18 and 19, 2000, respectively, and A shares were listed in the Shanghai Stock Exchange on August 8, 2001.Sinopec Corp. is one of the largest integrated energy and chemical companies in China. Its principal operations include the exploration and production, pipeline transportation and sale of petroleum and natural gas; the production, sale, storage and transportation of refinery products, petrochemical products, coal chemical products, synthetic fibre, and other chemical products; the import and export, including an import and export agency business, of petroleum, natural gas, petroleum products, petrochemical products, and other commodities and technologies; and research, development and application of technologies and information; hydrogen energy business and related services such as hydrogen production, storage, transportation and sales; battery charging and swaping, solar energy, wind energy and other new energy business and related services °

DEFINITIONS:

In this report, unless the context otherwise requires, the following terms shall have the meaning as set out below: Sinopec Corp.: China Petroleum & Chemical Corporation Company: Sinopec Corp. and its subsidiaries China Petrochemical Corporation: The controlling shareholder of Sinopec Corp., China Petrochemical Corporation Sinopec Group: China Petrochemical Corporation and its subsidiaries NDRC: China National Development and Reform Commission RMC: Oil and Natural Gas Reserves Management Committee of the Company Sinopec Finance Co.: Sinopec Finance Co., Ltd. Century Bright: Sinopec Century Bright Capital Investment, Ltd. CSRC: China Securities Regulatory Commission. Hong Kong Stock Exchange: The Stock Exchange of Hong Kong Limited Hong Kong Listing Rules: Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited

CONVERSION:

For domestic production of crude oil, 1 tonne = 7.1 barrels; For overseas production of crude oil: 1 tonne = 7.22 barrels in 2021, 1 tonne = 7.20 barrels in 2020, 1 tonne = 7.21 barrels in 2019; For production of natural gas, 1 cubic meter = 35.31 cubic feet; Refinery throughput is converted at 1 tonne = 7.35 barrels.

1 FINANCIAL DATA AND INDICATORS PREPARED IN ACCORDANCE WITH CASS

(1) Principal financial data

			For the year ended	31 December		
		2020	2020		2019	2019
		After	Before		After	Before
	2021	adjustment	adjustment	Change	adjustment	adjustment
Items	RMB million	RMB million	RMB million	(%)	RMB million	RMB million
Operating income	2,740,884	2,104,724	2,105,984	30.2	2,957,868	2,959,799
Operating profit	112,414	50,803	50,331	121.3	90,273	90,134
Profit before taxation	108,348	48,441	47,969	123.7	90,250	90,111
Net profit attributable to equity shareholders of the Company	71,208	33,271	32,924	114.0	57,643	57,619
Net profit/(loss) attributable to equity shareholders of the Company excluding						
extraordinary gains and losses	72,220	(1,565)	(1,565)	-	54,280	54,280
Net cash flow from operating activities	225,174	168,520	167,518	33.6	154,380	153,619

			2021		
	First	Second	Third	Fourth	
	Quarter	Quarter	Quarter	Quarter	Total
	RMB million				
Operating income	576,559	684,214	740,918	739,193	2,740,884
Net profit attributable to equity shareholders of the Company	18,160	21,266	20,603	11,179	71,208
Net profit attributable to equity shareholders of the Company					
excluding extraordinary gains and losses	17,674	20,746	20,300	13,500	72,220
Net cash flow from operating activities	(15,188)	63,535	68,397	108,430	225,174

	For the year ended 31 December						
		2020	2020		2019	2019	
		After	Before		After	Before	
	2021	adjustment	adjustment	Change	adjustment	adjustment	
Items	RMB million	RMB million	RMB million	(%)	RMB million	RMB million	
Total assets	1,889,255	1,738,896	1,733,805	8.6	1,765,702	1,760,286	
Total liabilities	973,214	850,176	849,929	14.5	882,554	881,912	
Total equity attributable to equity shareholders of the Company	775,102	747,294	742,463	3.7	744,738	739,965	
Total number of shares (1,000 shares)	121,071,210	121,071,210	121,071,210	-	121,071,210	121,071,210	

(2) Principal financial indicators

			For the year ende	d 31 December		
		2020	2020		2019	2019
		After	Before		After	Before
	2021	adjustment	adjustment	Change	adjustment	adjustment
Items	RMB Yuan	RMB Yuan	RMB Yuan	(%)	RMB Yuan	RMB Yuan
Basic earnings per share	0.588	0.275	0.272	113.8	0.476	0.476
Diluted earnings per share	0.588	0.275	0.272	113.8	0.476	0.476
Basic earnings per share (excluding extraordinary gains and losses)	0.597	(0.013)	(0.013)	-	0.448	0.448
Weighted average return on net assets (%)	9.35	4.46	4.44	4.89	7.85	7.90
				percentage		
				points		
Weighted average return (excluding extraordinary gains and losses)	9.49	(0.21)	(0.21)	9.70	7.39	7.44
on net assets (%)				percentage		
				points		
Net cash flow from operating activities per share	1.860	1.392	1.384	33.6	1.275	1.269

		For the y	ear ended 31 Dec	ember		
		2020	2020		2019	2019
		After	Before		After	Before
	2021	adjustment	adjustment	Change	adjustment	adjustment
Items	RMB Yuan	RMB Yuan	RMB Yuan	(%)	RMB Yuan	RMB Yuan
Net assets attributable to equity shareholders of the Company per share	6.402	6.172	6.132	3.7	6.151	6.112
Liabilities to assets ratio (%)	51.51	48.89	49.02	2.62	49.98	50.10
				percentage		
				points		

(3) Extraordinary items and corresponding amounts

	For the year ended 31 December (Income)/expenses					
	2021	2020	2019			
Items	RMB million	RMB million	RMB million			
Net (gain)/loss on disposal of non-current assets	(665)	(973)	1,318			
Donations	165	301	209			
Government grants	(3,085)	(8,605)	(6,857)			
Gain on holding and disposal of various investments	(259)	(37,520)	(410)			
Other non-operating expenses, net	4,720	2,992	634			
Net (loss)/profit acquired through business combination under common control						
during the reporting period	101	(472)	(139)			
Subtotal	977	(44,277)	(5,245)			
Tax effect	(72)	6,736	1,757			
Total	905	(37,541)	(3,488)			
Attributable to: Equity shareholders of the Company	1,012	(34,836)	(3,363)			
Minority interests	(107)	(2,705)	(125)			

(4) Items measured by fair values

Unit: RMB million

Items	Beginning of the year	End of the year	Changes	Influence on the profit of the year
Other equity instruments	1,525	767	(758)	_
Derivative financial instruments	157	1,350	1,193	(14,873)
Cash flow hedging	7,545	13,798	6,253	10,690
Financial assets held for trading	1	-	(1)	99
Receivables financing	8,735	5,939	(2,796)	-
Total	17,963	21,854	3,891	(4,084)

(5) Significant changes of items in the financial statements The table below sets forth reasons for those changes where the fluctuation was more than 30% during the reporting period:

	As of 31 [December	Increase/(decrease)	
	2021	2020	Amount	Percentage	
Items	RMB million	RMB million	RMB million	(%)	Reasons for change
Dperating income	2,740,884	2,104,724	636,160	30.2	A result of sharp increase in the price and sales volume of
					refining products
Operating costs	2,216,551	1,685,674	530,877	31.5	Increase in procurement cost of raw materials due to the rising
					prices of commodities including crude oil
nvestment income	6,032	47,486	(41,454)	(87.3)	Lump-sum income from the restruction of PipeChina was recognised
					in 2020
Gains/(Losses) from changes in fair value	3,341	(1,253)	4,594	-	Impact of changes in variable gains and losses on hedged derivatives
mpairment losses	(13,165)	(26,087)	12,922	(49.5)	Decrease in allowance for diminution in value of inventories
Operating profit	112,414	50,803	61,611	121.3	Increase in demand and gross margins of main products
Profit before taxation	108,348	48,441	59,907	123.7	Expansion of operation and increase in the level of gross profit
ncome tax expense	23,318	6,344	16,974	267.6	Increase in profit for the year
Net profit	85,030	42,097	42,933	102.0	Increase in operating profit
Cash flow hedges	19,018	7,073	11,945	168.9	Increase in effective portion of cash flow hedges
Derivative financial assets	18,371	12,528	5,843	46.6	-Unrealised profit increased from crude oil hedging
Derivative financial liabilities	3,223	4,826	(1,603)	(33.2)	-Onrealised profit increased from crude on nedging
Receivables financing	5,939	8,735	(2,796)		Improvement in fund efficiency and increase of bills turnover
nventories	207,433	152,191	55,242	36.3	Increase in the prices of crude oil, refined oil products and the cost
					of inventory
Short-term loans	27,366	20,756	6,610	31.8	Increase in loan of holding subsidiaries.
Accounts payable	203,919	151,514	52,405	34.6	Increase in procurement cost due to increase in the price of crude oil
					and refined oil
Other payables	114,701	85,012	29,689		Increase in derivative commodity margins
Net cash flow from operating activities	225,174	168,520	56,654	33.6	Increase in cash income from net profit due to higher gross profit
Net cash received from disposal of	5,205	49,869	(44,664)	(89.6)	Mainly due to the cash consideration received from the restruction
subsidiaries and other business entities					of PipeChina in 2020
Net cash flow from investing activities	(145,198)	(102,650)	(42,548)	41.4	Mainly because of the cash consideration received from the restruction
					of PipeChina in 2020
Net cash flow from financing activities	(57,942)	(37,510)	(20,432)	54.5	Increase in actual cash dividend paid for 2021

2 FINANCIAL INFORMATION EXTRACTED FROM THE FINANCIAL STATEMENTS PREPARED IN ACCORDANCE WITH IFRS

Unit: RMB million

	For the year ended 31 December							
Items	2021	2020	2019	2018	2017			
Revenue	2,740,884	2,104,724	2,957,868	2,879,192	2,347,726			
Operating profit	94,628	13,669	86,516	82,884	72,396			
Profit before taxation	109,169	48,615	90,161	99,658	87,544			
Profit attributable to shareholders of the Company	71,975	33,443	57,517	61,920	51,821			
Basic earnings per share (RMB)	0.594	0.276	0.475	0.511	0.428			
Diluted earnings per share (RMB)	0.594	0.276	0.475	0.511	0.428			
Return on capital employed (%)	11.29	6.22	8.94	9.21	8.27			
Return on net assets (%)	9.30	4.48	7.73	8.57	7.08			
Net cash generated from operating activities per share (RMB)	1.860	1.392	1.275	1.455	1.579			

Unit: RMB million

	As of 31 December						
Items	2021	2020	2019	2018	2017		
Non-current assets	1,331,231	1,283,236	1,318,258	1,097,045	1,074,985		
Net current liabilities	83,256	67,335	133,166	63,514	52,466		
Non-current liabilities	332,901	328,199	303,014	170,803	163,387		
Non-controlling interests	140,892	141,377	138,359	139,922	127,510		
Total equity attributable to shareholders of the Company	774,182	746,325	743,719	722,806	731,622		
Net assets per share (RMB)	6.394	6.164	6.143	5.970	6.043		
Adjusted net assets per share (RMB)	6.225	5.954	5.993	5.787	5.913		

3 MAJOR DIFFERENCES BETWEEN THE AUDITED FINANCIAL STATEMENTS PREPARED UNDER CASS AND IFRS PLEASE REFER TO PAGE 216 OF THE REPORT.



Dear Shareholders and Friends:

First, I would like to express my sincere gratitude to our shareholders and directors for their valued trust and support in nominating me as Chairman of the Company. I am honored to take on this mission and the responsibilities of the role. Together with the Board, we will fulfill our duties with diligence, promote high-quality development of the Company, and continuously improve our corporate value.

In 2021, confronted with the impacts of the Covid-19 pandemic as well as the complex and challenging macroeconomic environment, the Board of Directors fully evaluated market conditions both domestically and internationally, adhered to the goal of pursuing progress while maintaining stability, dedicated the Company to vigorously implementing its world-leading development strategy, and focused on promoting high-quality development. At the same time, the management led the entire staff with great dedication in order to accomplish all of the Company's targets and tasks, getting off to a good start of the 14th Five-Year Plan.

Operating results for 2021 achieved a 10-year record high. Over the past year, the Company has taken full advantage of its integrated businesses, made every effort to optimize operations, expanded sales and markets, and reduced costs and expenses, resulting in a substantial increase in operating performance. In accordance with International Financial Reporting Standards, our revenue increased by 30.2% from the previous year to RMB2.74 trillion, operating profit increased by 592.3% to RMB94.628 billion, and profits attributable to shareholders of the Company increased by 115.2% to RMB71.975 billion. Net cash flow from operating activities amounted to RMB225.174 billion, reaching a historical high. The ratio of liabilities to assets at the end of the year was 51.56%, representing a solid financial position. In view of the Company's profitability, shareholder return, and future development needs, the Board of Directors recommended the payment of a final dividend of RMB0.31 per share. Taking into account the interim dividend of RMB0.16 per share, the total dividend for the year was RMB0.47 per share, with a dividend payout ratio of 80%.

Corporate governance has continued to evolve. During the year, the Company elected new members to the Board of Directors and the Board of Supervisors and made appointments to senior management, enhancing diversity on the board level. All independent directors fulfilled their duties with diligence and offered strategic advice for reform and development. The Company optimized a number of corporate governance practices and laid a solid foundation

for its compliance management system. By deepening reforms and strengthening management, the Company put the SOE Reform 3-year action plan into effect and implemented the benchmarking programme of improving management, enhanced the effectiveness of its internal controls, and upgraded its corporate management performance. Taking advantage of its Party-building activities, the Company further enhanced its supervision mechanisms, motivating staff to increase productivity and pursue career development. In addition, we placed great emphasis on shareholder returns, improved communications with stakeholders. and strengthened environmental, social, and governance measures and disclosures in an effort to consistently increase corporate transparency. Continuing connected transactions of the Company for the next three years gained support and approval by shareholders, ensuring greater production and operational stability.

Research and development initiatives achieved fruitful results. We have vigorously implemented an innovation-driven strategy, deepened reform of our R&D mechanisms, built new R&D institutions and technology incubators, and accelerated the deployment of cuttingedge technologies in key areas, including oil & gas exploration and production, chemical new materials, new energy, and green and lowcarbon development. As a result, a number of our major R&D projects achieved breakthroughs, and the Company's comprehensive patent advantages continued to rank at the forefront of domestic enterprises, providing vital support for quality development of the Company.

The Company has steadily improved the overall quality of its development. We have strengthened scientific and technological innovation, optimized production and operations, accelerated transformation and development, and upgraded the quality and efficiency of the industrial chain. In upstream, we accelerated our efforts in oil and gas exploration, and we achieved major breakthroughs in continental facies shale oilfields exploration. The domestic oil and gas reserve replacement rate reached 154%, while natural gas production grew by 11.9% over the previous year, thereby increasing reserves, stabilizing oil production, increasing gas output, and improving efficiency. In refining, throughput and major products have seen significant growth as a result of the Company's ongoing structural adjustment, including initiatives to shift from oil products to chemicals and specialty products, as well as efforts to construct world-class refining and chemical production clusters. In the chemicals segment, we optimized our raw material and product mix, achieving ongoing increases in production of high-value-added products. In the marketing and distribution segment, we strove to integrate and coordinate

production and sales to increase market share, leading to steady growth of domestic sales of refined oil products. We have also achieved rapid development of our non-fuel businesses, as the Company accelerated its development into a comprehensive provider of gasoline, natural gas, hydrogen, power, and energy services. The Company accelerated the pace of its low-carbon transition, deployed projects for hydrogen energy, photovoltaic power stations, and battery charging and swapping, and actively developed biodegradable materials, medical and healthcare materials, and other new businesses. E-commerce platforms such as EPEC, Easy Joy and Chememall have also advanced rapidly.

The Company also effectively fulfilled its corporate social responsibilities over the past year. As a Lead member of the United Nations Global Compact, the Company actively responded to climate change by implementing a green and low-carbon development strategy. It has been awarded the title of China Low-Carbon Model for eleven consecutive years. The Company diligently promoted the construction of its health, safety, and environment management system and carried out a three-year campaign to address production safety. We have also strengthened pollution prevention and control to better ensure ecological wellbeing and biodiversity. We implemented multiple measures to support the rural revitalization plan and proactively rendered assistance in flooded areas, as well as undertaking domestic disaster relief and post-disaster reconstruction. As a sponsor of the Beijing Winter Olympics and Paralympics, the Company was committed to providing the best services and disseminating the Olympic spirit. The Company actively and consistently participated in various social welfare initiatives, such as the Warm Stations Program and Drivers' Home Program. We have always valued the physical and psychological health of all our staff, strictly following all mandated measures for pandemic control to safeguard health management. Moreover, the Company has been well recognized for supporting the fight against the pandemic in its business operating locations, and promoting local economic development and environmental protection.

We attribute our hard-won achievements in 2021 to the efforts and dedication of the Company's Board of Directors, the Board of Supervisors, the management, and all staff, as well as the valued support of our shareholders and the community. On behalf of the Board of Directors, the management, and our staff, I thank our shareholders and the community for their continued interest in and support of Sinopec Corp. Due to new working arrangements, Mr. Zhang Yuzhuo ended his term as the Chairman of the Company. During his tenure, he was devoted to his duties and played a vital role in improving corporate governance and promoting sustainable development of the Company. On behalf of the Board of Directors, I would like to extend my sincere gratitude to him.

Looking ahead, in light of the country's carbon peak and carbon neutrality goals, resource and environmental constraints will have a profound impact on the development of the energy and chemical industries. The energy industry has entered a phase of transition requiring qualitative changes and a deepening structural adjustment, which will pose serious challenges to the Company's high-quality development. Considering the current stage of its development, as well as the existing opportunities and challenges, the Company will continue to optimize its 14th Five-Year Plan and Vision 2035, and will set out a clear path towards sustainable development through actionable goals and principles:

Focus on promoting corporate governance. Through further improvements in its corporate governance system and enhancements to governance efficiency, the Company will ensure that it can achieve superior operating standards. To fulfill the goals of strengthening internal controls, reducing risk, and promoting compliance, we will work on the integration of risk control, internal control, and compliance management, and we will minimize risk in all aspects of our operations, including safety in production, environmental protection, and operations management. We will deepen our corporate reform to maintain the vitality of operating systems and mechanisms. In addition. the Company will elevate corporate management performance to new levels by benchmarking world-class management practices. The Company will further improve its Party-building efforts to promote high-quality development.

Focus on implementing an innovation-driven

strategy. The Company will strive to nurture a wellspring of self-developed new technologies, promote research and development of advanced oil and gas exploration technologies, and enhance innovation and breakthroughs in high-end chemicals, new materials, modern coal chemical technology, and new energy products, as well as in key, generic and advanced technologies. The Company will turn those technological achievements into its competitive business advantages to support its transformation and upgrading.

Focus on improving energy supply capacity. The Company will redouble its efforts in exploration, especially in shale oil and shale gas. It will continue to implement integrated development of natural gas production, supply, storage, and sales. It will continue to develop its hydrogen energy business at a reliable pace, while building out photovoltaic power stations according to local conditions, thereby expanding the scope of its energy and resources. In addition, the Company will strengthen its international trade capability, coordinate the allocation of global resources, and further explore the build-out of a successful multi-energy supply system.

Focus on enhancing the quality and upgrading of the petrochemical industry. Adhering to the goal of excelling in the refining business and strengthening its chemicals business

and strengthening its chemicals business, the Company will speed up the development of initiatives to shift from oil products to chemicals and specialty products, upgrade the chemicals business to concentrate on mid-tohigh-end products, advance construction of world-class, large-scale, intelligent, integrated refining and chemical production clusters, and strengthen the resilience of its industrial chain. Following the general trend in transportation energy, the Company will accelerate its transformation to a comprehensive provider of gasoline, natural gas, hydrogen, power, and energy services. Furthermore, the Company will commit to implementing the digital transition and intelligent manufacturing of its traditional businesses, and further develop e-commerce platforms to expand momentum of new business growth.

Focus on boosting green and low-

carbon competitiveness. By coordinating its environmental goals with production development, the Company will base its emission reduction targets on scientifically achievable approaches, and continue to optimize its industrial and energy structure. It will enhance its energy efficiency with the aim of establishing an industry benchmark. The Company will establish its green and low-carbon initiatives and help advance the circular development system, thereby promoting resource utilization that is efficient, intensive, and recyclable. It will also accelerate research and innovation in green and low-carbon technologies such as carbon capture, utilization, and storage to take the initiative in innovative development.

With the challenges of the ongoing global pandemic, geopolitical tensions, and high spot prices of commodity, the recovery of the world economy is still subject to significant uncertainties. The international environment faced by the Company has grown more complex. Nevertheless, China's economy is expected to maintain steady growth, with strong resilience, great potential, and risk resistance capabilities. Domestic economic fundamentals will remain strong in the long term. The stable and healthy domestic economic environment will create great opportunities for the Company's future development.

In 2022, the Company will continue to adhere to the principle of pursuing progress while maintaining stability. In complete, accurate and comprehensive implementation of China's new development philosophy, the Company will integrate the new development philosophy with its existing businesses by high quality to further enhance its corporate governance, production and operations, transformation and development, technological innovation, management reform, risk control, and Party building, making every effort to achieve its goal of becoming a world-leading company. In its upstream businesses, the Company will make greater efforts to increase reserves with higher efficiency, upgrade production in an economical way, and reduce costs and fees, while expanding its resource channels and improving its energy supply capacity. In refining, the Company will strive to adjust its structure to reduce costs and improve supply capacity. In the chemicals business, the Company will accelerate advanced capacity construction to extend its highend industrial chain and develop new growth engines. In the marketing and distribution segment, it will further take advantage of its marketing network to provide customers with comprehensive, high-quality services. Moreover, the Company will actively and steadily deploy new energy businesses such as hydrogen energy and photovoltaic stations to strengthen its green and low-carbon competitiveness. Capital expenditures will be RMB198 billion in 2022, mainly for investments in highquality exploration and production: natural gas systems including production, supply, storage, and sales; adjustments in the structure of the refining business; construction of refining and chemical production clusters; high-end materials projects; and integrated energy service stations for gasoline, natural gas, hydrogen, power, and services, as well as new energy businesses. The Company will endeavor to consolidate and enhance its business competitiveness to achieve a healthier and more sustainable growth.

When the path ahead is tortuous, the only way forward is trailblazing. I cherish the strong belief that under the leadership of the Board of Directors and through the combined efforts of the management and staff, as well as the strong support of our shareholders and the community, Sinopec Corp. will be able to take full advantage of its strengths in the industry, its technologies, and its talents to forge a distinctive path to highquality growth, creating greater value for our shareholders and society at large and providing cleaner energy for a better life.

> Ma Yongsheng Chairman

25 March 2022



BUSINESS REVIEW

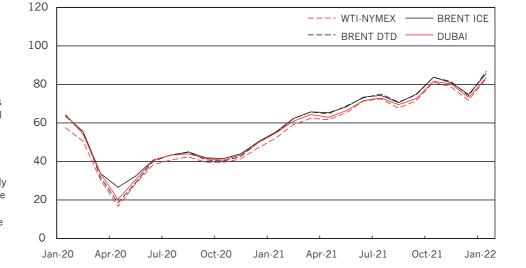
In 2021, the COVID-19 pandemic continued and the world economic recovery was weak. China achieved remarkable results in pandemic prevention and control, and its economy continued to grow. The annual gross domestic product (GDP) increased by 8.1% year on year. International oil prices fluctuated with upward trend, the domestic demand for refined oil products recovered, the demand for natural gas increased rapidly, and the demand for chemical products remained stable.

Following market conditions, the Company optimized the whole business chain, expanded market, increased sales volume, and significantly improved the profits of our core businesses. The net profit attributable to the shareholders of the company reached the best level in the same period for nearly a decade.

1 MARKET REVIEW

(1) Crude Oil & Natural Gas Market

In 2021, international crude oil prices fluctuated with upward trend. The spot price of Platts Brent for the year averaged USD70.7 per barrel, up by 69.7% year on year. In the context of energy transition, the domestic natural gas demand grew rapidly. Based on statistics by NDRC, the domestic apparent consumption of natural gas reached 372.6 billion cubic meters, up by 12.7% year on year.



Movement of International Crude Oil Prices

(2) Refined Oil Products Market

USD/Barrel

In 2021, the domestic refined oil products market demand picked up. According to NDRC statistics, the apparent consumption of refined oil products (including gasoline, diesel and kerosene) was 340 million tonnes, up by 3.2% from the previous year. Among them, gasoline, diesel and kerosene increased by 5.7%, 0.5% and 5.7%, respectively. According to the change of international crude oil prices, there were 21 price adjustments domestically for refined oil products throughout the year with 15 increases and 6 decreases.

(3) Chemical Products Market

In 2021, the domestic demand for chemicals maintained stable. Based on our statistics, the domestic apparent consumption of ethylene equivalent decreased by 1.7% from the previous year, and the apparent consumption of synthetic resin, synthetic fiber and synthetic rubber decreased by 0.3%, increased by 0.3% and decreased by 4.5%,, respectively. Domestic prices of chemical products increased year on year.

2 PRODUCTION & OPERATION REVIEW

(1) Exploration and Production

In 2021, the Company seized the opportunity of rising oil prices to promote oil and gas exploration and development in major target basins, continuously scaled up profitable capacity, and made new breakthroughs in increasing reserves, maintaining oil production, increasing gas output, and improving efficiency. In exploration, we strengthened risk exploration and trap pre-exploration in new areas, and made a number of new oil and gas discoveries, including major breakthroughs in continental facies shale oilfields exploration in Bohai Bay Basin, North Jiangsu Basin and Sichuan Basin. In crude oil development, we accelerated building of production capacity in Shunbei and Tahe, and strengthened fine development in mature fields. In natural gas development, we sped up capacity building of Weirong, Yongchuan South and Nanchuan fields, strengthened fine development of Puguang, Yuanba and other fields, and deepened the development of Fuling shale gas field. In the meantime, we signed medium and long-term LNG agreements to increase overseas natural gas supply. We developed new natural gas market reaching more quality end users with sales volume and market share rising constantly. The Company's production of oil and gas equivalent reached 479.74 million barrels including 249.60 million barrels of domestic crude which kept flat year on year, and 1,199.4 billion cubic feet of natural gas which increased by 11.9% year on year.

Summary of Operations for the Exploration and Production Segment

				Change from
	2021	2020	2019	2020 to 2021(%)
Oil and gas production (mmboe)	479.74	459.02	458.92	4.5
Crude oil production (mmbbls)	279.76	280.22	284.22	(0.2)
China	249.60	249.52	249.43	0.0
Overseas	30.16	30.70	34.79	(1.8)
Natural gas production (bcf)	1,199.44	1,072.33	1,047.78	11.9

Summary of Reserves of Crude Oil and Natural Gas

	Crude oil reserves (mmbbls)				
Items	31 December 2021	31 December 2020			
Proved reserves	1,749	1,542			
Proved developed reserves	1,578	1,389			
China	1,291	1,130			
Consolidated companies	1,291	1,130			
Shengli	961	821			
Others	330	309			
Overseas	287	259			
Consolidated companies	24	15			
Equity accounted entities	263	244			
Proved undeveloped reserves	171	153			
China	125	102			
Consolidated companies	125	102			
Shengli	17	16			
Others	108	86			
Overseas	46	51			
Consolidated companies	0	5			
Equity accounted entities	46	46			

	Natural gas r	eserves (bcf)
Items	31 December 2021	31 December 2020
Proved reserves	8,456	8,191
Proved developed reserves	6,740	6,365
China	6,734	6,357
Consolidated companies	6,734	6,357
Puguang	1,582	1,675
Fuling	1,529	1,491
Others	3,623	3,191
Overseas	6	8
Consolidated companies	0	0
Equity accounted entities	6	8
Proved undeveloped reserves	1,716	1,826
China	1,715	1,824
Consolidated companies	1,715	1,824
Fuling	99	119
Others	1,616	1,705
Overseas	1	2
Consolidated companies	0	0
Equity accounted entities	1	2

Exploration and Production Activities

	Wells drilled (as of 31 December)							
		2021				20	20	
	Explorato	ry	Developm	ent	Explorato	ory	Developn	nent
	Productive	Dry	Productive	Dry	Productive	Dry	Productive	Dry
China	363	129	1,828	4	383	136	2,015	3
Consolidated companies	363	129	1,828	4	383	136	2,015	3
Shengli	170	58	944	2	204	64	1,080	2
Others	193	71	884	2	179	72	935	1
Overseas	2	1	114	0	2	0	100	0
Consolidated companies	0	0	2	0	0	0	4	0
Equity accounted entities	2	1	112	0	2	0	96	0
Total	365	130	1,942	4	385	136	2,115	3

	Wells drilling (as of 31 December)							
		20	21			20	20	
	Gı	ross	1	let	Gr	oss	Net	
	Exploratory	Development	Exploratory	Development	Exploratory	Development	Exploratory	Development
China	108	201	108	201	92	212	92	212
Consolidated companies	108	201	108	201	92	212	92	212
Shengli	33	55	33	55	29	52	29	52
Others	75	146	75	146	63	160	63	160
Overseas	0	123	0	62	2	0	2	0
Consolidated companies	0	3	0	1	0	0	0	0
Equity accounted entities	0	120	0	61	2	0	2	0
Total	108	324	108	263	94	212	94	212

		Oil productive wells (as 2021		
	Gross	Net	Gross	Net
China	53,851	53,851	53,240	53,240
Consolidated companies	53,851	53,851	53,240	53,240
Shengli	34,991	34,991	34,572	34,572
Others	18,860	18,860	18,668	18,668
Overseas	5,534	2,372	7,055	2,752
Consolidated companies	30	11	28	10
Equity accounted entities	5,504	2,361	7,027	2,742
Total	59,385	56,223	60,295	55,992

Natural gas	(as of 31 Deceml	ber)	
2021		2020	
Gross	Net	Gross	Net
7,539	7,489	6,976	6,928
7,539	7,489	6,976	6,928
79	79	67	67
779	779	632	632
6,681	6,631	6,277	6,229
7,539	7,489	6,976	6,928
	2021 Gross 7,539 7,539 79 779 6,681	2021 Gross Net 7,539 7,489 7,539 7,489 79 79 779 779 6,681 6,631	GrossNetGross7,5397,4896,9767,5397,4896,9767979677797796326,6816,6316,277

Unit: Square kilometers

	Area under license (as of 31	Area under license (as of 31 December)			
	2021	2020			
Acreage with exploration licenses	390,023	436,864			
China	390,023	436,864			
Acreage with development licenses	42,391	39,195			
China	36,480	33,965			
Overseas	5,911	5,230			

(2) Refining

In 2021, the Company seized the favorable opportunity of recovery and rising oil prices, insisted on integration and optimisation of production and marketing, focused on expanding scale and adjusting structure, and maximized the overall profits along the value chain. Guided by the market demand, we expedited adjustment to increase the yield of chemicals feedstock and

refining specialities. We vigorously increased production of gasoline and light chemical feedstock, continued to expand marketing and sales of special products such as low-sulfur bunker fuel, and maintained high utilization rate. The Company optimized resource allocation and achieved significant cost reduction in procurement. We accelerated building up advanced production capacity and promoted structural adjustments. Six

hydrogen purification units and filling facilities were built throughout the year. In 2021, the Company processed 255 million tonnes of crude oil, up by 7.8%, yielding 146 million tonnes of refined oil products, with a year-on-year increase of 3.3%. Among them, gasoline output was 65.21 million tonnes, increased by 12.6%, and light chemical feedstock was 45.41 million tonnes, up by 12.9%.

Summary of Operations for the Refining Segment

Unit: million tonnes

				Change from
	2021	2020	2019	2020 to 2021 (%)
Refinery throughput	255.28	236.91	248.52	7.8
Gasoline, diesel and kerosene production	146.21	141.50	159.99	3.3
Gasoline	65.21	57.91	62.77	12.6
Diesel	59.85	63.21	66.06	(5.3)
Kerosene	21.15	20.38	31.16	3.8
Light chemical feedstock production	45.41	40.22	39.78	12.9
Light product yield (%)	73.83	74.34	76.38	(0.51) percentage points
Refinery yield (%)	94.65	94.77	94.98	(0.12) percentage points

Note: Includes 100% of the production from domestic joint ventures.

(3) Marketing and Distribution

In 2021, domestic consumption of refined oil products recovered. The company gave full play to the advantages of integration and marketing network to continuously improve quality and scale in operation. We innovated marketing approaches, implemented precision marketing strategies, and expanded sales. Our network layout for end-users were further optimized, and an internet operation center was established, with online and offline businesses constantly integrated. We actively promoted the construction of comprehensive service stations including oil, gas, hydrogen, electricity and non-fuel businesses and accelerated building up new energy service networks. Total annual sales volume of refined oil products was 221 million tonnes, of which total domestic sales volume amounted to 171 million tonnes, up by 2.0% year on year.

Summary of Operations for the Marketing and Distribution Segment

				Change from
	2021	2020	2019	2020 to 2021 (%)
Total sales volume of oil products (million tonnes)*	220.79	217.91	254.95	1.3
Total domestic sales volume of oil products (million tonnes)	171.31	167.99	184.45	2.0
Retail sales (million tonnes)	114.30	113.19	122.54	1.0
Direct sales and distribution (million tonnes)	57.01	54.80	61.91	4.0
Annual average throughput per station (tonne/station)	3,720	3,686	3,992	0.9

				Change from
				the end of the
				previous year to
				the end of the
	31 December	31 December	31 December	reporting period
	2021	2020	2019	(%)
Total number of service stations under the Sinopec brand	30,725	30,713	30,702	0.04
Number of company-operated stations	30,725	30,707	30,696	0.06

Note: The total sales volume of refined oil products includes the amount of refined oil marketing and trading sales volume.

(4) Chemicals

In 2021, the Company adhered to "basic plus high-end", accelerated the construction of advanced production capacity, strengthened structural adjustment, extended the industrial chain and cultivated growth points. We continuously diversified raw materials, optimized structure and maintenance scheduling of facilities, and maintained high-profitable units' utilization rates. We further integrated process of production, marketing, research and application, strengthened R&D efforts for highend products and new materials, and increased output of high value-added products such as metallocene polyolefin and carbon fiber. The production ratio of synthetic resin, synthetic rubber, synthetic fiber and fine chemicals with added value were increased by 1.0, 3.5, 1.6 and 3.0 percentage points respectively. The annual ethylene output was 13.38 million tonnes, representing a year-on-year increase of 10.9%. At the same time, we vigorously developed strategic customers and continuously improved the service level. The total operating volume of chemical products in 2021 was 81.6 million tonnes, realizing full production and sales.

Unit: thousand tonnes

Summary of Operations for the Chemicals Segment

				Change from 2020 to 2021
	2021	2020	2019	(%)
Ethylene	13,380	12,060	12,493	10.9
Synthetic resin	18,999	17,370	17,244	9.4
Synthetic rubber	1,252	1,067	1,047	17.3
Synthetic fiber monomer and polymer	9,201	9,057	10,029	1.6
Synthetic fiber	1,357	1,313	1,289	3.4

Note: Includes 100% of the production of domestic joint ventures.

(5) Research and Development

In 2021, the Company deepened the reform of science and technology system and mechanism, increased science and technology investment, promoted key core technology research, and achieved fruitful results, giving full play to the leading role of science and technology in industrial development. In upstream, new progress was made in exploration theory and breakthrough was achieved in key technology for exploration and development of Sichuan Basin and Shunbei area. In refining, the world's first industrial test of full distillates crude oil catalytic cracking technology was completed. The industrial application of MFP technology, which produces more propylene and low-sulfur fuel, realized a breakthrough. We also successfully developed and produced needle coke products. In chemicals, we took the lead in completing the industrial test of direct cracking of crude oil to ethylene in China, and we successfully developed 15 new lightweight products for green and environment-friendly vehicles, such as carbon fiber reinforced epoxy resin composites. Breakthroughs were made in the development of hydrogenated styrenic thermal-plastic elastomer. In 2021, the Company had 8,045 patent applications at home and abroad, among which 4,868 were granted. We won 1 first prize and 5 second prizes of National Scientific and Technological Progress Award and 1 second prize of National Technological Invention Award for 2020. We also obtained 1 gold, 4 silver and 11 excellence awards for Chinese patents.

(6) Health and Safety

In 2021, the Company comprehensively promoted HSE management system and continuously strengthened management. We focused on employees' health, safety and security management, enhanced pandemic prevention and control mechanism, and improved emergency response capacity, so as to maintain occupational, physical and mental health of employees at home and abroad. We implemented production safety responsibility among all employees, popularized prevention mechanisms of safety risk controlling and hidden risks shooting. We promoted the pilot project of "Industrial Internet plus Safe Production", carried out special actions including a 3-year rectification program for production safety, and "A Hundred Days without Accidents" activity. The Company witnessed overall stable and safe production in 2021.

(7) Capital Expenditures

In 2021, focusing on investment quality and return, the Company continued to optimize investment management. The capital expenditures for the whole year were RMB167.9 billion. Capital expenditures of the exploration and production segment were RMB68.1 billion, mainly used for crude production capacity construction in Shunbei Oilfield, natural gas production capacity construction in Western Sichuan, Fuling and Weirong, storage and transmission facilities of Tianjin LNG Phase II and Qingdao LNG Phase III, and the CCUS Project in Shengli Oilfield. The capital expenditures of the refining segment were RMB22.5 billion, mainly used for the expansion of Zhenhai refinery and structural adjustment of Anging and Yangzi refineries. The capital expenditures of the marketing and distribution segment were RMB21.9 billion, mainly used for service stations, integrated energy stations and logistics facilities. The capital expenditures of the chemicals segment were RMB51.6 billion, mainly used for Zhenhai, Sinopec-SK, Hainan, Tianjin Nangang, Gulei ethylene projects, AGCC project, Jiujiang Aromatics project, Shanghai large-tow carbon fiber project, Yizheng PTA project, Guizhou PGA project, and Qilu CCUS project. The capital expenditures for corporate and others were RMB3.8 billion, mainly for R&D facilities and information technology projects.

BUSINESS PROSPECTS

(1) Market Prospects

Looking forward to 2022, the world economic growth is expected to maintain the recovery. China's economy is expected to achieve stable growth, and the long-term positive fundamentals will remain unchanged. It is expected that the market demand for refined oil products will continue to recover, and that for natural gas and petrochemical products will continue to grow. Oil prices may face greater volatility risks due to geopolitical situation, changes in global supply and demand, inventory levels, and carbon peaking and neutrality targets.

(2) Production & Operation

In 2022, guided by the development strategy of building a world-leading company, the Company will focus on optimization of production and operation, transition and development, technology innovation, reform and management, and risk prevention and control to march toward its targets firmly. The following are specific measures:

Exploration and production segment:

The Company will enhance risk exploration and trap pre-exploration efforts, strengthen profitable development, and speed up the construction of natural gas production, supply, storage and marketing system, so as to achieve better results in oil production stabilization, gas production increase, cost reduction and efficiency improvement. In terms of crude oil development, the Company will scale up the production in Shunbei and Tahe oilfields, accelerate the construction of the national demonstration zone of continental facies shale oilfields in Jiyang, and refine the development of mature oilfields, so as to achieve steady crude oil production growth and a significant decrease in the break-even point. In terms of natural gas development, the Company will accelerate the capacity building of Dongsheng and Western Sichuan gas fields, further expand and tap the potential of Puguang, Yuanba gas fields, and deepen the development adjustment of Fuling gas field. At the same time, more efforts will be made in taking a diversified approach to expand resource channels, cultivate high-quality and efficient end-user markets, and maintain the good momentum of natural gas development. The planned annual production of crude oil is 281.20 million barrels, of which 31.28 million barrels will come from overseas and that of natural gas is 1,256.7 billion cubic feet.

Refining segment: The Company will prioritize structural adjustment and cost reduction, speed up the construction of world-class refining and chemical bases, and promote the systemic improvement of the refining value chain. Oriented by profitability, the Company will make appropriate arrangement for facilities utilization and production scheduling, flexibly adjust the yield of refined oil products and diesel-gasoline ratio; dynamically optimize the allocation of crude oil resources to reduce procurement costs; accelerate the shift from refined oil products to chemicals, increase the production of chemical raw materials, improve the self-sufficient rate of chemical feedstocks; speed up the shift from refined oil products to special products, expand the market of special products such as low-sulfur bunker fuel, lubricating grease, base oil, needle coke, etc., and improve profitability. The annual plan for crude oil throughput is 258 million tonnes and that for refined oil products production is 147 million tonnes.

Marketing segment: Giving full play to integrated advantages, the Company will make every effort to expand the market, improve efficiency, and consolidate its position in the market. The Company plans to improve the market monitoring system, implement well-targeted marketing strategies, increase both retailing sales volume and efficiency; implement network development strategies by different regions and levels, continue to optimize network layout, enhance network integrity, stability and competitiveness; strengthen the development of Sinopec-brand products, improve the quality and profitability of non-fuel business; promote gas and hydrogen refueling, power charging and battery swapping, build integrated energy stations covering gasoline, diesel, gas, hydrogen, electricity and non-fuel services; and accelerate the construction of carbon-neutral gas stations. The annual domestic sales volume of refined oil products is planned to be 174 million tonnes

Chemicals segment: Adhering to "basic + high-end", the Company will promote the building of advanced capacity, speed up the deployment of large-scale ethylene plants, promote the upgrading and appropriate extension of the aromatics industry chain, continuously enhance market competitiveness; diversify raw materials, enhance the cost advantage: dynamically optimize and adjust the utilization, continue to promote facilities' operation efficiency; stay market-oriented, vigorously develop new materials and applications with high added value and advanced technology. Meanwhile, we will optimize the mechanism to respond to market need rapidly, strengthen refined management, and improve service quality and efficiency. The planned annual ethylene production is 15.25 million tonnes.

Technological development: Following the innovation-driven strategy, the Company aims to make breakthroughs in core technologies, promote the mechanism reform of the technological system, accelerate the intelligent application and digital transformation to build a technology-leading company. Specific focuses include technological breakthroughs in oil and gas exploration and production with the emphases on oil production stabilization, gas production increase, cost reduction, and efficiency improvement, oil and gas reserves and production increase; coordinated development of integration of refining and chemical technologies, refined oil products structure optimization, clean, efficient and low-carbon utilization of resources; key raw materials and high-end new materials development. coordination of the development and application of technologies such as safety and environmental protection: energy conservation and emission reduction, and intelligent optimization; forwardlooking and basic research on such areas as green and low-carbon, new energy, and new materials to support industrial transition and upgrading.

Capital expenditures: In 2022, the Company's planned capital expenditures are RMB198 billion, of which, RMB81.5 billion will be for the exploration and production segment, including the construction of crude oil production capacity in Shunbei and Tahe oilfields, and natural gas production capacity in Western Sichuan, Dongsheng and Zhongjiang and construction of storage and transmission facilities such as Longkou LNG. Capital expenditures for the refining segment will be RMB20.4 billion, mainly for the construction of Anqing, Yangzi refinery structural adjustment projects and Zhenhai refinery Phase II. Capital expenditures for the marketing and distribution segment will be RMB23.7 billion, mainly used for the construction of service stations, integrated energy stations and logistics facilities. The capital expenditures of the chemicals segment will be RMB66.1 billion, which will be mainly used for Hainan and Tianjin Nangang ethylene projects, Jiujiang Aromatics project, Shanghai large-tow carbon fiber project, Yizheng PTA project, Guizhou PGA project, Zhenhai Refinery Phase II. Capital expenditures for corporate and others are planned to be RMB6.3 billion, which will be mainly used for R&D facilities and information technology projects.



THE FOLLOWING DISCUSSION AND ANALYSIS SHOULD BE READ IN CONJUNCTION WITH THE COMPANY'S AUDITED FINANCIAL STATEMENTS AND THE ACCOMPANYING NOTES. PARTS OF THE FOLLOWING FINANCIAL DATA WERE ABSTRACTED FROM THE COMPANY'S AUDITED FINANCIAL STATEMENTS THAT HAVE BEEN PREPARED ACCORDING TO THE IFRS, UNLESS OTHERWISE STATED. THE PRICES IN THE FOLLOWING DISCUSSION DO NOT INCLUDE VALUE-ADDED TAX.

1 CONSOLIDATED RESULTS OF OPERATIONS

In 2021, the Company's revenue was RMB2,740.9 billion, increased by 30.2% compared with that of 2020. That was mainly due to the good momentum of Chinese economy, increase of international crude oil price, recovery of domestic refined oil products demand and increase of chemical products prices. The Company sized the opportunity of demand recovery, optimised operation and production, promoted structural adjustment and transition and upgrading, and realised RMB94.6 billion operating profit, up by 592.3% year on year.

The following table sets forth the main revenue and expenses from the Company's consolidated financial statements:

	Year ended 31 December				
	2021	2020	Change (%)		
	RMB million	RMB million			
Revenue	2,740,884	2,104,724	30.2		
Revenue from primary business	2,679,500	2,048,654	30.8		
Other operating revenues	61,384	56,070	9.5		
Operating expenses	(2,646,256)	(2,091,055)	26.6		
Purchased crude oil, products and operating supplies and expenses	(2,076,665)	(1,589,821)	30.6		
Selling, general and administrative expenses	(54,978)	(53,668)	2.4		
Depreciation, depletion and amortisation	(115,680)	(107,461)	7.6		
Exploration expenses, including dry holes	(12,382)	(9,716)	27.4		
Personnel expenses	(103,492)	(87,525)	18.2		
Taxes other than income tax	(259,032)	(235,018)	10.2		
Other operating expenses, net	(21,716)	(5,780)	275.7		
Operating profit	94,628	13,669	592.3		
Net finance costs	(9,010)	(9,510)	(5.3)		
Investment income and share of profits less losses from associates and joint ventures	23,551	44,456	(47.0)		
Profit before taxation	109,169	48,615	124.6		
Income tax expense	(23,318)	(6,344)	267.6		
Profit for the year	85,851	42,271	103.1		
Attributable to:					
Shareholders of the Company	71,975	33,443	115.2		
Non-controlling interests	13,876	8,828	57.2		

(1) Revenue

In 2021, the Company's revenue from primary business was RMB2,679.5 billion, representing an increase of 30.8% over 2020. This was mainly due to the price and sales volume increase in refined oil products and chemical products.

The following table sets forth the external sales volume, average realised prices and respective rates of change of the Company's major products in 2021 and 2020:

	Sales volur Year ended 31	ne (thousand December	tonnes)	Averag (RMB/tonne, RM Year ended 31 I		
	2021	2020	Change (%)	2021	2020	Change (%)
Crude oil	7,162	7,422	(3.5)	3,049	2,029	50.3
Natural gas (million cubic meters)	29,953	26,280	14.0	1,606	1,352	18.8
Gasoline	90,836	86,193	5.4	7,731	6,300	22.7
Diesel	78,335	77,280	1.4	5,891	4,789	23.0
Kerosene	21,270	20,828	2.1	3,772	2,635	43.1
Basic chemical feedstock	36,173	36,683	(1.4)	5,486	3,636	50.9
Monomer and polymer for synthetic fibre	6,955	9,691	(28.2)	6,537	4,297	52.1
Synthetic resin	17,923	17,112	4.7	8,325	7,148	16.5
Synthetic fibre	1,457	1,402	3.9	7,521	6,381	17.9
Synthetic rubber	1,286	1,361	(5.5)	11,099	7,982	39.1
Chemical fertiliser	976	1,177	(17.1)	2,807	1,955	43.6

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Most crude oil and a small portion of natural gas produced by the Company were internally used for refining and chemical production, with the remaining sold to external customers. In 2021, the turnover from crude oil, natural gas and other upstream products sold externally amounted to RMB156.0 billion, representing an increase of 49.3% over 2020. The change was mainly due to increases in crude oil and natural gas prices, and the increase of natural gas sales volume.

In 2021, petroleum products (mainly consisting of refined oil products and other refined petroleum products) sold by Refining Segment and Marketing and Distribution Segment achieved external sales revenues of RMB1,535.5 billion (accounting for 56.0% of the Company's revenue), representing an increase of 30.6% over 2020, mainly due to the increase in prices and volume of refined oil products. The sales revenue of gasoline, diesel and kerosene was RMB1,243.9 billion, representing an increase of 28.5% over 2020, and accounting for 81.0% of the total sales revenue of petroleum products. Turnover of other refined petroleum products was RMB291.6 billion, representing an increase of 49.0% compared with that of 2020, accounting for 19.0% of the total sales revenue of petroleum products.

The Company's external sales revenue of chemical products was RMB424.8 billion, representing an increase of 31.8% over 2020, accounting for 15.5% of the Company's total revenue. This was mainly due to the increase in price and sales volume of chemical products.

(2) Operating expenses

In 2021, the Company's operating expenses was RMB2,646.3 billion, increased by 26.6% compared with that of 2020. The operating expenses mainly consisted of the following:

Purchased crude oil, products and operating supplies and expenses was RMB2,076.7 billion, representing an increase of 30.6% over the same period of 2020, accounting for 78.5% of the total operating expenses, of which: Crude oil purchasing expenses was RMB689.5 billion, representing an increase of 43.9% over the same period of 2020. Crude oil purchased externally used for processing in 2021 was 212.55 million tonnes (excluding the volume processed for third parties), representing an increase of 7.9% over the same period of 2020. The average cost of crude oil purchased externally was RMB3,244 per tonne, representing an increase by 33.3% over 2020.

The Company's other purchasing expenses was RMB1,387.2 billion, representing an increase of 24.9% over the same period of 2020. This was mainly attributable to the sharp increase in international bulk raw material prices and purchasing volume increase.

Selling, general and administrative expenses was RMB55.0 billion, representing an increase of 2.4% over 2020.

Depreciation, depletion and amortisation was RMB115.7 billion, representing an increase of 7.6% over the same period of 2020. That was mainly because that the proved reserve decreased resulting from the decrease of international crude oil prices and appreciation of RMB exchange rate in 2020, thus the depletion ratio of oil and gas assets increased, which led to the depreciation and depletion increased.

Exploration expenses was RMB12.4 billion, representing an increase of 27.4% compared with 2020. That was mainly due to increased investment in exploration and development to improve the quality of oil and gas assets.

Personnel expenses was RMB103.5 billion, representing an increase of 18.2% over 2020. That was due to the government's preferential policy on social insurance during the COVID-19 pandemic in 2020, which was cancelled in 2021, as well as a year-on-year increase in performance-related bonus as a reward for the significant improvement in operating profit.

Taxes other than income tax was RMB259.0 billion, representing an increase of 10.2% over the same period of 2020. That was mainly due to the increase of consumption tax resulting from the increase of production volume in gasoline and diesel.

Other operating expense, net was RMB21.7 billion, representing an increase of RMB275.7% over the same period of 2020. That was mainly due to impact of the loss on disposal of property, plant, equipment and other non-current assets.

- (3) Operating profit was RMB94.6 billion, representing an increase of 592.3% over the same period of 2020. That was mainly because that with the increase of international crude oil prices and steady improvement of market demand, the Company increased its processing volume and sales volumes which led to an increase in the gross profit margin of petrochemical products and significant improvement of the Company's operating results.
- (4) Profit before taxation was RMB109.2 billion, representing an increase of 124.6% compared with 2020.
- (5) Income tax expense was RMB23.3 billion, representing an increase of 267.6% year on year. That was mainly due to the taxable income increase as a result of good profit the Company achieved in 2021.
- (6) Profit attributable to non-controlling shareholders was RMB13.9 billion, representing an increase of RMB5.0 billion and 57.2% over the same period of 2020. That was mainly due to the improvement in the profits of our nonwholly owned subsidiaries.
- (7) Profit attributable to shareholders of the Company was RMB72.0 billion, representing a year-on-year increase of 115.2%.

2 RESULTS OF SEGMENT OPERATIONS

The Company manages its operations through four business segments, namely exploration and production segment, refining segment, marketing and distribution segment and chemicals segment, and corporate and others. Unless otherwise specified, the inter-segment transactions have not been eliminated from financial data discussed in this section. In addition, the operating revenue data of each segment include other operating revenues.

The following table shows the operating revenues by each segment, the contribution of external sales and inter-segment sales as a percentage of operating revenues before elimination of inter-segment sales, and the contribution of external sales as a percentage of consolidated operating revenues (i.e. after elimination of inter-segment sales) for the periods indicated.

	Operating revenues Year ended 31 December		As a percentage of consolidated operating revenue before elimination of inter-segment sales Year ended 31 December		of inter-segment sale Year ended 31 Decemb	
	2021 RMB million	2020	2021	2020	2021	2020
Exploration and Production Segment		RIVIB MILLION	(%)	(%)	(%)	(%)
	162.700	110.242	3.4	3.2	5.9	5.2
Inter-segment sales	87.298	57.513	1.8	1.7	0.5	0.2
Operating revenues	249.998	167.755	5.2	4.9		
Refining Segment						
External sales*	173,109	117,847	3.6	3.4	6.3	5.6
Inter-segment sales	1,212,455	826,219	24.9	23.7		
Operating revenues	1,385,564	944,066	28.5	27.1		
Marketing and Distribution Segment						
External sales*	1,404,469	1,097,352	29.0	31.6	51.2	52.1
Inter-segment sales	7,075	4,854	0.1	0.1		
Operating revenues	1,411,544	1,102,206	29.1	31.7		
Chemicals Segment						
External sales*	435,261	330,927	9.0	9.5	16.0	15.2
Inter-segment sales	70,242	40,702	1.4	1.2		
Operating revenues	505,503	371,629	10.4	10.7		
Corporate and Others						
External sales*	565,345	460,210	11.7	13.2	20.6	21.9
Inter-segment sales	732,356	430,073	15.1	12.4		
Operating revenues	1,297,701	890,283	26.8	25.6		
Operating revenue before elimination of inter-segment sales	4,850,310	3,475,939	100.0	100.0		
Elimination of inter-segment sales	(2,109,426)	(1,371,215)				
Revenue	2,740,884	2,104,724			100.0	100.0

* Other operating revenues are included.

The following table sets forth the operating revenues, operating expenses and operating profit by each segment before elimination of the intersegment transactions for the periods indicated, and the percentage change of 2021 compared to 2020.

		ended 31 December	
	2021	2020	Change
	RMB million	RMB million	(%)
Exploration and Production Segment			
Operating revenues	249,998	167,755	49.0
Operating expenses	245,313	184,231	33.2
Operating profit/(loss)	4,685	(16,476)	-
Refining Segment			
Operating revenues	1,385,564	944,066	46.8
Operating expenses	1,320,285	949,591	39.0
Operating profit/(loss)	65,279	(5,525)	-
Marketing and Distribution Segment			
Operating revenues	1,411,544	1,102,206	28.1
Operating expenses	1,390,340	1,081,378	28.6
Operating profit	21,204	20,828	1.8
Chemicals Segment			
Operating revenues	505,503	371,629	36.0
Operating expenses	494,397	360,811	37.0
Operating profit	11,106	10,818	2.7
Corporate and Others			
Operating revenues	1,297,701	890,283	45.8
Operating expenses	1,300,926	890,676	46.1
Operating loss	(3,225)	(393)	-
Elimination of inter-segment profit/(loss)	(4,421)	4,417	-

(1) Exploration and Production Segment

Most crude oil and a small portion of the natural gas produced by the exploration and production segment were used for the Company's refining and chemical production. Most of the natural gas and a small portion of crude oil were sold externally to other customers.

In 2021, the operating revenues of this segment was RMB250.0 billion, representing an increase of 49.0% over 2020. This was mainly attributed to the increase of realised price in crude oil and natural gas, as well as the sales volume of natural gas increase.

In 2021, the segment sold 34.09 million tonnes of crude oil, representing a decrease of 1.2% over 2020. Natural gas sales volume was 30.8 billion cubic meters (bcm), representing an increase of 11.1% over 2020. Regasified LNG sales volume was 19.1 bcm, representing an increase of 22.3% over 2020. LNG sales volume was 6.18 million tonnes, representing an increase of 0.1% over 2020. Average realised prices of crude oil, natural gas, Regasified LNG, and LNG were RMB2,932 per tonne, RMB1,605 per thousand cubic meters, RMB2,119 per thousand cubic meters, and RMB3,909 per tonne, respectively, representing an increase of 54.2%, 18.0%, 19.4%, and 53.7% respectively over 2020.

In 2021, the operating expenses of this segment was RMB245.3 billion, representing an increase of 33.2% over 2020. That was mainly due to the following:

Procurement cost of LNG increased by RMB45.0 billion year on year; Depreciation, depletion and amortisation increased by RMB6.6 billion year on year, as a result of the increase of depletion ratio; Resource Tax and special oil income levy increased by RMB3.9 billion year on year; Exploration expense increased by RMB2.7 billion year on year; Impairment decreased by RMB6.0 billion year on year;

In 2021, the oil and gas lifting cost was RMB776.94 per tonne, representing a year on year increase of 6.5%, mainly attributable to the increase in the cost of purchased material, fuels, and power as the international commodities prices increased, and the increase of personnel expenses.

In 2021, the operating profit of the exploration and production segment was RMB4.7 billion, representing an increase of RMB21.2 billion over the same period of 2020, which was mainly attributable to the fact that the segment promoted high-quality exploration and profitable development, focused on reducing cost, enhanced integrated operation of production, supply, storage and sales.

(2) Refining Segment

Business activities of the refining segment include purchasing crude oil from third parties and the exploration and production segment of the Company, as well as processing crude oil into refined petroleum products. Gasoline, diesel and kerosene were sold internally to the marketing and distribution segment of the Company; part of the chemical feedstock was sold to the chemicals segment of the Company; and other refined petroleum products were sold externally to both domestic and overseas customers.

In 2021, the operating revenues of this segment was RMB1,385.6 billion, representing an increase of 46.8% over 2020. This was mainly attributed to the demand recovery and the increases of refined oil products prices and sales volume. The following table sets forth the sales volumes, average realised prices and the respective changes of the Company's major refined oil products of the segment in 2021 and 2020.

		Sales Volume (thousand tonnes) Year ended 31 December			Average realised price (RMB/tonne) Year ended 31 December		
	2021	2020	Change (%)	2021	2020	Change (%)	
Gasoline	63,827	56,259	13.5	7,208	5,813	24.0	
Diesel	58,807	61,167	(3.9)	5,563	4,354	27.8	
Kerosene	17,313	17,309	0.0	3,734	2,673	39.7	
Chemical feedstock	45,234	39,872	13.5	3,989	2,596	53.7	
Other refined petroleum products	68,783	65,353	5.3	5,061	3,004	68.5	

In 2021, sales revenue of gasoline was RMB460.1 billion, representing an increase of 40.7% over 2020.

The sales revenue of diesel was RMB327.1 billion, representing an increase of 22.8% over 2020.

The sales revenue of kerosene was RMB64.6 billion, representing an increase of 39.7% over 2020.

The sales revenue of chemical feedstock was RMB180.4 billion, representing an increase of 74.3% over 2020.

The sales revenue of refined petroleum products other than gasoline, diesel, kerosene and chemical feedstock was RMB348.1 billion, representing an increase of 77.3% over 2020.

In 2021, the segment's operating expenses was RMB1,320.3 billion, representing an increase of 39.0% over 2020. This was mainly attributed to the increase in procurement cost of crude oil, and the increase of taxes and surcharges related to sales revenue year on year.

In 2021, the average processing cost for crude oil was RMB3,329 per tonne, representing a increase of 35.6% over 2020. Total crude oil processed was 263.85 million tonnes (excluding volume processed for third parties), representing an increase of 7.3% over 2020. The total cost of crude oil processed was RMB878.4 billion, representing an increase of 45.5% over 2020.

In 2021, refining margin was RMB532 per tonne, representing an increase of RMB292 per tonne compared with that of the same period of 2020. This was mainly attributed to the increase in demand for refined oil products and chemical raw materials, and substantial improvement in gross margin of refined oil products and naphtha, as well as the significant inventory gains of crude oil and refined products.

In 2021, the refining unit cash operating cost (defined as operating expenses less the processing cost of crude oil and refining feedstock, depreciation and amortisation, taxes other than income tax and other operating expenses, then divided by the throughput of crude oil and refining feedstock) was RMB213 per tonne, representing an increase of 17.5% over 2020, which was mainly attributed to the increased expense of safety, environment protection, and maintenance year on year.

In 2021, the operating revenue of the segment totaled RMB65.3 billion, representing an increase of RMB70.8 billion compared with that of 2020. This was mainly due to the fact that the segment seized the opportunity of market recovery to increase the utilisation rates of facilities and made efforts to optimise the product slate. The inventory gains of crude oil and refined products increased, and the refining margin improved significantly.

(3) Marketing and distribution segment

The business activities of the marketing and distribution segment include purchasing refined oil products from the refining segment and the third parties, conducting direct sales and wholesale to domestic customers and retailing, distributing oil products through the segment's retail and distribution network as well as providing related services.

In 2021, the operating revenues of this segment was RMB1,411.5 billion, up by 28.1% year-on-year. This was mainly attributed to the recovery of market demand and thus the increase in the sales volume and price of refined oil products. The sales revenues of gasoline totaled RMB702.5 billion, up by 27.9% year-on-year; the sales revenues of diesel was RMB462.8 billion, up by 22.7% year-on-year; the sales revenues of kerosene was RMB80.3 billion, up by 46.4% year-on-year.

The following table sets forth the sales volumes, average realised prices and respective percentage changes of the segment's four major refined oil products in 2021 and 2020, including detailed information about retail, direct sales and distribution of gasoline and diesel:

	Sales volume (thousand tonnes) Year ended 31 December			Average realised price (RMB/tonne) Year ended 31 December		
	2021	2020	Change (%)	2021	2020	Change (%)
Gasoline	90,873	86,216	5.4	7,730	6,370	21.4
Retail	64,325	61,446	4.7	8,223	6,940	18.5
Direct sales and distribution	26,548	24,770	7.2	6,537	4,955	31.9
Diesel	78,566	77,507	1.4	5,890	4,865	21.1
Retail	33,644	36,757	(8.5)	6,537	5,351	22.2
Direct sales and distribution	44,923	40,750	10.2	5,406	4,426	22.1
Kerosene	21,296	20,828	2.2	3,772	2,634	43.2
Fuel oil	25,847	23,331	10.8	3,437	2,536	35.6

In 2021, the operating expenses of the segment were RMB1,390.3 billion, up by 28.6% year-on-year. This was mainly due to the increase of sales volumes and prices of refined oil products, and thus the increase of procurement costs.

In 2021, the segment's marketing expense (defined as the operating expenses less the purchase costs, taxes other than income tax, depreciation and amortization, divided by sales volume) was RMB197.66 per tonne, up by 4.11% year on year.

In 2021, the operating revenues of nonfuel business was RMB35.4 billion, up by RMB1.5 billion year-on-year and the profit of non-fuel business was RMB4.1 billion, up by RMB0.4 billion. This was mainly because the Company vigorously promoted company-owned and actively explored emerging business models to maintain the increase of volume and profit of non-fuel business.

In 2021, the segment seized the favorable opportunity of market recovery, brought synergy advantages of industrial chain into full play, coordinated internal and external resources, expanded market and increased sales, and continuously expand business volume. Operating profit was RMB21.2 billion, representing an increase of RMB0.4 billion or 1.8% year on year.

(4) Chemicals segment

The business activities of the chemicals segment include purchasing chemical feedstock from the refining segment and the third parties and producing, marketing and distributing petrochemical and inorganic chemical products.

In 2021, the operating revenues of this segment was RMB505.5 billion, up by 36.0% year-on-year. This was mainly due to the steady growth of domestic economy, and the fact that the demand for chemical products still maintained a high level, and the product prices increased year on year.

In 2021, the sales revenue generated by the segment's six major categories of chemical products (namely basic organic chemicals, synthetic resin, synthetic fiber monomer and polymer, synthetic fibre, synthetic rubber, and chemical fertiliser) was RMB478.6 billion, up by 34.9%, accounting for 94.7% of the operating revenues of the segment.

The following table sets forth the sales volume, average realised prices and respective changes of each of the segment's six categories of chemical products in 2021 and 2020.

		Sales Volume (Thousand tonnes) Year ended 31 December			Average realised price (RMB/ton Year ended 31 December		
	2021	2020	Change (%)	2021	2020	Change (%)	
Basic organic chemicals	48,059	47,109	2.0	5,311	3,569	48.8	
Synthetic fibre monomer and polymer	7,010	9,743	(28.1)	6,580	4,302	53.0	
Synthetic resin	17,924	17,124	4.7	8,325	7,150	16.4	
Synthetic fibre	1,457	1,403	3.8	7,521	6,407	17.4	
Synthetic rubber	1,289	1,364	(5.5)	11,104	7,986	39.0	
Chemical fertiliser	981	1,181	(16.9)	2,797	1,950	43.4	

In 2021, the operating expenses of the chemicals segment was RMB494.4 billion, representing an increase of 37.0% over 2020, mainly because of the increase in the price of externally procured raw materials as a result of crude oil price increase.

In 2021, the Company seized the favorable opportunities of economy recovery and high realised prices of chemical products, continuously optimised the structures of feedstock, product and facilities, and achieved growing profits with increased margins of petrochemicals. The operating profit of this segment was RMB11.1 billion, representing an increase of 2.7% over 2020.

(5) Corporate and Others

The business activities of corporate and others mainly consist of import and export business activities of the Company's subsidiaries, R&D activities of the Company, and managerial activities of headquarters.

In 2021, the operating revenue generated from corporate and others was approximately RMB1,297.7 billion, representing an increase of 45.8% over 2020. This was mainly attributed to the great increase in the trading prices of crude oil and refined oil products. In 2021, the operating expenses of corporate and others was RMB1,300.9 billion, representing an increase of 46.1% over 2020.

In 2021, the operating loss from corporate and others was RMB3.2 billion, representing an increase in loss of RMB2.8 billion over the same period of 2020. This was mainly attributed to the expansion of R&D investment scale which led to increase in R&D expenses and the increase of personnel expenses. The major funding sources of the Company are its operating activities and short-term and long-term loans. The major use of funds includes operating expenses, capital expenditures, and repayment of the short-term and long-term debts.

(1) Assets, liabilities and equity

Unit: RMB million

	As of 31 December 2021	As of 31 December 2020	Change
Total assets	1,889,255	1,738,896	150,359
Current assets	558,024	455,660	102,364
Non-current assets	1,331,231	1,283,236	47,995
Total liabilities	974,181	851,194	122,987
Current liabilities	641,280	522,995	118,285
Non-current liabilities	332,901	328,199	4,702
Total equity attributable to shareholders of the Company	774,182	746,325	27,857
Share capital	121,071	121,071	-
Reserves	653,111	625,254	27,857
Non-controlling interests	140,892	141,377	(485)
Total equity	915,074	887,702	27,372

As of 31 December 2021, the Company's total assets was RMB1,889.3 billion, representing an increase of RMB150.4 billion compared with that of the end of 2020, of which:

Current assets was RMB558.0 billion, representing an increase of RMB102.4 billion compared with that of the end of 2020, mainly because the cash and cash equivalents and time deposit increased by RMB33.9 billion, and crude oil and refined oil product inventories increased by RMB55.2 billion as a result of international crude oil price increase.

Non-current assets was RMB1,331.2 billion, representing an increase of RMB48.0 billion as compared with that

of the end of 2020. This was mainly due to the net value of property plant and equipment increased by RMB5.3 billion, construction in progress increased by RMB30.4 billion equity of associates and joint ventures increased by RMB20.8 billion because of the increased profit in these companies.

The Company's total liabilities was RMB974.2 billion, representing an increase of RMB123.0 billion compared with that of the end of 2020, of which:

Current liabilities was RMB641.3 billion, representing an increase of RMB118.3 billion as compared with that of the end of 2020. This was mainly due to the fact that the short-term debts increased by RMB11.5 billion, accounts payable and bills payable and liabilities from contracts increased by RMB53.7 billion as a result of raw materials price escalation and operation scale expansion, other payables increased by RMB60.6 billion, and contract liabilities decreased RMB1.6 billion.

Non-current liabilities was RMB332.9 billion, representing an increase of RMB4.7 billion compared with that of the end of 2020.

Total equity attributable to owners of the Company was RMB774.2 billion, representing an increase of RMB27.9 billion compared with that of the end of 2020.

(2) Cash Flow

The following table sets forth the major items in the consolidated cash flow statements for 2021 and 2020.

Unit: RMB million

Major items of cash flows	Year ended 31 December			
	2021	2020		
Net cash generated from operating activities	225,174	168,520		
Net cash used in investing activities	(145,198)	(102,650)		
Net cash used in financing activities	(57,942)	(37,510)		

In 2021, the net cash generated from operating activities of the Company was RMB225.2 billion, representing an increase of RMB56.7 billion over 2020. This was mainly due to the increase of RMB60.6 billion in profit before taxation.

In 2021, the net cash used in investing activities was RMB145.2 billion, representing an increase of RMB42.5 billion over 2020, of which: income from sales of investment and gains from investing in associates and joint ventures decreased by RMB44.8 billion, capital expenditure increased by RMB9.6 billion, exploratory wells expenditure increased by RMB3.6 billion, purchasing investment and associates and joint ventures investments decreased by RMB1.1 billion, and cash outflow from changes in time deposit with maturities over three months decreased by RMB13.2 billion.

In 2021, the net cash used in the Company's financing activities was

RMB57.9 billion, representing an increase of cash outflow by RMB20.4 billion over 2020. This was mainly due to an increase of RMB3.2 billion in investments from non-controlling shareholders,, increase of RMB3.6 billion in cash paid for dividends, decrease of RMB3.2 billion in dividends allocated to non-controlling shareholders by subsidiaries, and increase of RMB7.1 billion in acquisition of non-controlling equity interests, and increase in repayment for lease liabilities of RMB4.1 billion.

At the end of 2021, the cash and cash equivalents was RMB108.6 billion.

(3) Contingent Liabilities

Please refer to "Material Guarantee Contracts and Their Performance" in the "Significant Events" section of this report.

(4) Capital Expenditure

Please refer to "Capital Expenditures" in the "Business Review and Prospects" section of this report.

(5) Research & Development and Environmental Expenditures

R&D expenditures include expenses occurred in the period. In 2021 the expenditures for R&D was RMB21.1 billion, of which expense was RMB11.5 billion, and capitalised cost was RMB9.6 billion.

Environmental expenditures refer to the normal routine pollutant discharge fees paid by the Company, excluding capitalised cost of pollutant treatment properties. In 2021, the Company paid environmental expenditures of RMB11.0 billion.

(6) Measurement of fair values of derivatives and relevant system

The Company has established sound decision-making mechanism, business process and internal control systems relevant to financial instrument accounting and information disclosure.

Items relevant to measurement of main fair values

Items	Beginning of the year	End of the year	Profits and losses from variation of fair values in the current year	Accumulated variation of fair values recorded as equity	Impairment loss provision of the current year	Funding source
Financial assets held for trading	1	-	-	-	-	Self-owned fund
Stock	1	-	_	_	_	
Derivative financial instruments	157	1,350	(14,873)	-	-	Self-owned fund
Cash flow hedges	7,545	13,798	694	15,659	_	Self-owned fund
Other equity instruments investment	1,525	767	-	(6)	-	Self-owned fund
Total	9,228	15,915	(14,179)	15,653	-	

4 ANALYSIS OF FINANCIAL STATEMENTS PREPARED UNDER CASs

The major differences between the Company's financial statements prepared under CASs and IFRS are set out in Section C of the financial statements of the Company on page 216 of this report.

(1) Under CASs, the operating income and operating profit or loss by reportable segments were as follows:

	Year ended 31 D	ecember
	2021	2020
	RMB million	RMB million
Operating income		
Exploration and Production Segment	249,998	167,755
Refining Segment	1,385,564	944,066
Marketing and Distribution Segment	1,411,544	1,102,206
Chemicals Segment	505,503	371,629
Corporate and Others	1,297,701	890,283
Elimination of inter-segment sales	(2,109,426)	(1,371,215)
Consolidated operating income	2,740,884	2,104,724
Operating profit/(loss)		
Exploration and Production Segment	613	(20,570)
Refining Segment	65,360	(6,526)
Marketing and Distribution Segment	23,102	19,634
Chemicals Segment	11,361	9,592
Corporate and Others	9,521	(2,048)
Elimination of inter-segment sales	(4,421)	4,417
Financial expenses, investment income, losses from changes in fair value,		
other income and asset disposal gains/(losses)	6,878	46,304
Consolidated operating profit	112,414	50,803
Net profit attributable to equity shareholders of the Company	71,208	33,271

Operating profit: In 2021, the operating profit of the Company was RMB112.4 billion, representing an increase of RMB62.1 billion as compared with that of 2020.

Net profit: In 2021, the net profit attributable to the equity shareholders of the Company was RMB71.2 billion, representing an increase of RMB37.9 billion or 114.02% compared with 2020.

Unit: RMB million

(2) Financial data prepared under CASs

	As of 31 December 2021 RMB million	As of 31 December 2020 RMB million	Change
Total assets	1,889,255	1,738,896	150,359
Non-current liabilities	331,934	327,181	4,753
Shareholder's equity	916,041	888,720	27,321

Change analysis:

At the end of 2021, the Company's total assets was RMB1,889.3 billion, representing an increase of RMB150.4 billion compared with that of the end of 2020, mainly because inventory increased by RMB55.2 billion, cash at bank and on hand increased by RMB37.6 billion, long-term equity investment increased by RMB20.8 billion, and construction in progress increased by RMB30.4 billion.

At the end of 2021, the Company's non-current liabilities was RMB331.9 billion, representing an increase of RMB4.8 billion compared with that of the end of 2020.

At the end of 2021, the shareholders' equity of the Company was RMB916.0 billion, representing an increase of RMB27.3 billion compared with that of the end of 2020.

(3) The results of the principal operations by segments

Cogmonto	Operation income RMB million	Operation cost RMB million	Gross profit	year-on-year	Increase of operation cost on a year-on-	Increase/ (decrease) of gross profit margin on a year-on-year
Segments			margin* (%)	basis (%)	year basis (%)	basis (%)
Exploration and Production	249,998	206,332	12.9	49.0	37.3	7.0
Refining	1,385,564	1,061,650	6.0	46.8	50.8	4.0
Marketing and Distribution	1,411,544	1,317,918	6.4	28.1	29.4	(0.9)
Chemicals	505,503	466,971	6.9	36.0	38.8	(2.0)
Corporate and Others	1,297,701	1,268,685	2.2	45.8	45.1	0.4
Elimination of inter-segment sales	(2,109,426)	(2,105,005)	N/A	N/A	N/A	N/A
Total	2,740,884	2,216,551	9.7	30.2	31.5	0.9

*: Gross profit margin = (operation income - operation cost, tax and surcharges)/operation income.

5 THE CAUSE AND IMPACT OF THE CHANGE IN THE COMPANY'S ACCOUNTING POLICY, ACCOUNTING ESTIMATES AND ACCOUNTING METHODS For details, please refer to Note 3(26) to the financial statements prepared in accordance with CASs and Note 1 to the financial statement prepared in accordance with IFRS.



1 IMPROVEMENTS IN CORPORATE GOVERNANCE DURING THE REPORTING PERIOD

During the reporting period, the Company complied with the Articles of Association as well as domestic and overseas laws and regulations, adhered to the standard operation, continuously improved the corporate governance and promoted the corporate quality. The Company further improved its corporate governance structure by completing the re-election of the Board of Directors and Board of Supervisors, which improved the diversity of the Board; adjusting the members of special committees of the Board, renaming the Social Responsibility Management Committee as the Sustainable Development Committee; and appointing the Senior Management. The Independent Non-executive Directors of Sinopec Corp. conscientiously fulfilled their duties, actively attended the board meetings and meetings of special committees of the Board, reviewed and considered proposals with due care, and offered advice and suggestions on the Company's reforms and development. The Company strengthened the edifice of the fundamental system of corporate governance and laid a solid foundation by revising management regulations of Information Disclosure and Investor Relations, the Terms of Reference of the Independent Non-Executive Directors, the Nomination Committee and the Sustainable Development Committee according to the latest regulatory requirements and work practice. The Company endeavoured to improve the effectiveness of internal control policy, and the edifice of internal control system had reached a new level. The Company continuously improve the quality of information disclosure and enhance transparency by paying more attention to the information disclosure about ESG, appointing an independent third party to verify the sustainable development report. and providing more information voluntarily. As a result, the Company obtained an A-level rating of Shanghai Stock Exchange in the assessment of information disclosure. The Company focused on communication with investors, maintained positive interaction with investors despite of the adverse impact

of the Covid-19 pandemic, resulting in new enhancements of investor relations. The Company continuously improved the quality of Party building to stimulate the enthusiasm of the staff for work, and enhanced the discipline inspection and supervision to maintain the effective implementation of the deployments of the Board all of which achieve the high-quality development of the Company.

During the reporting period, there was no material inconsistency between Sinopec Corp.'s corporate governance and the requirements of the PRC Company Law and relevant regulations of the CSRC. The Board of Supervisors of Sinopec Corp. had no objection to any of the supervised matters. None of Sinopec Corp., the Board, the Directors, the Supervisors, the Senior Management, the controlling shareholder or de facto controllers of Sinopec Corp. were under the investigation by the CSRC or received any regulatory sanction or public condemnation by the CSRC, the Hong Kong Securities and Futures Commission, or the Securities and Exchange Commission of the United States, or received any public censure from Shanghai Stock Exchange, the Hong Kong Stock Exchange, the New York Stock Exchange or the London Stock Exchange.

2 GENERAL MEETINGS

During the reporting period, Sinopec Corp. convened 2020 Annual General Meeting on 25 May 2021 in Beijing, China, and 2021 First Extraordinary General Meeting on 20 October 2021 in Beijing, China in accordance with the procedures of noticing, convening and holding pursuant to the relevant laws and regulations and the Articles of Association. For details of the general meetings, please refer to the poll results announcements published on 26 May and 21 October 2021 respectively on China Securities Journal. Shanghai Securities News, Securities Times and the website of Shanghai Stock Exchange, as well as those published on 25 May and 20 October 2021 respectively on the website of Hong Kong Stock Exchange.

3 EQUITY INTERESTS OF DIRECTORS, SUPERVISORS AND OTHER SENIOR MANAGEMENT

As of December 31, 2021, Mr. Ling Yiqun, Director, Senior Vice President, held 13,000 A shares of Sinopec Corp., and Mr. Li Defang, Supervisor, held 40,000 A shares of Sinopec Corp. (held as interest of spouse).

Save as disclosed above, during the reporting period, none of the Directors, Supervisors and Senior Management of Sinopec Corp. and their respective associates had any interests or short positions (including any interest or short position that is regarded or treated as being held in accordance with the SFO) in the shares, debentures and underlying shares of Sinopec Corp. or any associated corporations (as defined in Part XV of SFO) would fall to be disclosed to the Sinopec Corp. and the Hong Kong Stock Exchange under the Divisions 7 and 8 of Part XV of SFO or which was recorded in the register required to be kept under section 352 of SFO or otherwise should notified Sinopec Corp. or the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Company under the Hong Kong Listing Rules.

4 COMPANY'S INDEPENDENCE FROM CONTROLLING SHAREHOLDER

The Company is independent from its controlling shareholder in terms of, among other matters, business, assets and finances. The controlling shareholder of the Company exercised shareholder's rights through the general meeting according to applicable laws and didn't overstep the authority of the general meeting or directly or indirectly interfere with the Company's operating decisions and operating activities. The Company has a well-integrated independent business and independent operating capabilities. During the reporting period, the Company did not identify the controlling shareholder taking advantage of its special position to misappropriate and damage the interests of the Company or the other shareholders

5 COMPETITION BETWEEN SINOPEC CORP. AND ITS CONTROLLING SHAREHOLDER Please refer to "Performance of Undertaking by China Petrochemical Corporation" under

by China Petrochemical Corporation" under the section "Significant Events" in this annual report for details.

6 IMPROVEMENT AND IMPLEMENTATION OF THE INTERNAL CONTROL SYSTEM

For details of internal control self-assessment and internal control auditing, please refer to the internal control assessment report and the internal control auditing report disclosed by the Company on the same date of this annual report.

MANAGEMENT CONTROL OF SUBSIDIARIES

The Company implements standardized control over different types of subsidiaries in accordance with laws and regulations, the Articles of Association and the internal control system. During the Reporting Period, the Company did not purchase subsidiaries that met material criteria.

3 SENIOR MANAGEMENT APPRAISAL AND INCENTIVE SCHEMES

Sinopec Corp. has established and is continuously improving its fair and transparent set of performance appraisal standards, incentive and restrictive mechanisms for Directors, Supervisors and other Senior Management. Sinopec Corp. has implemented incentive policies including the Measures of Sinopec Corp. for the Management of Performance Evaluations.

9 CORPORATE GOVERNANCE REPORT (IN ACCORDANCE WITH HONG KONG LISTING RULES)

(1) Compliance with the Corporate Governance Code

Sinopec Corp. complied with all code provisions of the Corporate Governance Code set out in Appendix 14 of the Hong Kong Listing Rules during the reporting period.

A Board of Directors

A.1Board of Directors

- a. The Board is the decision-making body of Sinopec Corp. and abides by good corporate governance practices and procedures. All decisions made by the Board are implemented by the Management of Sinopec Corp.
- b. The Board of the Company held its meetings at least once a quarter. The Board will usually communicate the time and proposals of the Board meeting 14 days before convening of the meeting. The relevant documents and materials for Board meetings are usually delivered to each Director 10 days in advance. In 2021, Sinopec Corp. held seven Board meetings. For details about each Director's attendance at the Board meetings and the general meetings, please refer to the section "Report of the Board of Directors" in this annual report.
- c. Each Director of the Board can submit proposals to be included in the agenda of Board meetings, and each Director is entitled to request other related information.
- d. The Board has reviewed and evaluated its performance in 2021 and is of the view that the Board made decisions in compliance with domestic and overseas regulatory authorities' requirements and the Company's internal rules; that the Board has considered the suggestions from the Party organisation, Board of Supervisors and management during its decision-making process; and that the Board safeguarded the legitimate rights and interests of Sinopec Corp. and its shareholders.

e. The Secretary to the Board assists the Directors in handling the day-to-day work of the Board, continuously informs the Directors of the regulations, policies or other requirements of domestic or overseas regulatory authorities in relation to corporate governance and ensures that the Directors comply with domestic and overseas laws and regulations when performing their duties and responsibilities. Sinopec Corp. has purchased liability insurance for all Directors to minimise the potential risks that might arise from the adequate performance of their duties.

A.2Chairman and President

- a. Mr. Ma Yongsheng serves as Chairman of the Board and Mr. Yu Baocai serves as President of Sinopec Corp. The Chairman of the Board is elected by a majority vote of all Directors, and the President is nominated and appointed by the Board. The respective main duties and responsibilities of the Chairman and the President are clearly distinguished from each other, and the scope of their respective duties and responsibilities are set out in the Articles of Association.
- b. The Chairman of the Board places great emphasis on communication with the Independent Nonexecutive Directors. The Chairman independently held three meetings with the Independent Non-executive Directors in respect of development strategy, corporate governance, and operational management, etc.
- c. The Chairman encourages open and active discussions. The Directors fully and deeply participated in the discussions of significant decisions in the Board meetings.

A.3Board composition

- a. The Board of Directors currently consists of ten members, among whom are four Executive Directors and six Non-executive Directors. Among the Non-executive Directors, there are four Independent Nonexecutive Directors, accounting for two-fifths of the total number of Directors. For details, please refer to the section "Directors, Supervisors, Senior Management and Employees" of this annual report.
- b. Sinopec Corp. has received from each of the Independent Non-executive Directors a letter of confirmation for 2022 regarding their compliance with relevant independence requirements set out in Rule 3.13 of the Hong Kong Listing Rules. Sinopec Corp. considers that each of the Independent Nonexecutive Directors is independent.

A.4Appointment, re-election and dismissal

a. The Directors serve three-year terms, and the consecutive terms of office of any Independent Non-executive Director cannot exceed six years. In May 2021, Mr. Zhang Yuzhuo, Mr. Ma Yongsheng, Mr. Zhao Dong, Mr. Yu Baocai, Mr. Ling Yiqun, Mr. Li Yonglin, Mr. Liu Hongbin, Mr. Cai Hongbin, Mr. Ng, Kar Ling Johnny, Ms. Shi Dan, and Mr. Bi Mingjian, nominated by the Board of Directors as the candidates for the eighth session of the Board based on the actual needs of the Company, were elected by the general meeting of shareholders as Directors of the Company; Mr. Ma Yongsheng was elected by the Board of Directors as Chairman of the Board of Directors of Sinopec Corp on 29 November 2021. For details about the tenure of each Director, please refer to the section "Directors, Supervisors, Senior Management and Employees".

Mr. Bi was a Director of China International Capital Corporation Limited ("CICC") before his retirement in February 2020. China International Capital Corporation Limited provided financial advisory services to China Petrochemical Corporation (being the controlling shareholder of the Company) and its subsidiaries during the period from 1 January 2019 to the date of this report. However, the Board is of the view that Mr. Bi satisfies the independence requirements for Independent Nonexecutive Directors, taking into account the following factors:

- Mr. Bi was not a relationship holder of the Company or China Petrochemical Corporation in CICC throughout his service in CICC;
- (2) Other than being a consultant ending in March 2022, which is of honorary nature, Mr. Bi does not involve in the management or operation of CICC, and Mr. Bi has not had any engagement with CICC, nor holds any position in CICC after his retirement;
- (3) Mr. Bi holds no share in the Company or China Petrochemical Corporation as at the date of this report;
- (4) Mr. Bi holds 1,501,451 shares in CICC, representing 0.03% of the total issued shares of CICC as at the date of this report, which constitutes a minimal part of the share capital of CICC and is immaterial in the context of independence, and Mr. Bi does not have any other economic interest in or in association with CICC;

- (5) Mr. Bi has not involved or participated in, and will not involve or participate in, any transaction (if any) between the Company (or its controlling shareholder, or their respective subsidiaries or core connected persons) and CICC in his capacity as a consultant of CICC; and
- (6) Mr. Bi has met all requirements under Rule 3.13 (other than Rule 3.13(3)) of the Hong Kong Listing Rules ("Listing Rules") and there are no other matters that would potentially compromise Mr. Bi's compliance with the independence criterion as set out in Rule 3.13.
- All Directors of Sinopec Corp. have been elected at the general meeting of shareholders. The Board has no power to appoint temporary Directors.
- c. Sinopec Corp. engages professional consultants to prepare detailed materials for newly elected Directors, to notify them of the regulations of each listing place of Sinopec Corp. and to remind them of their rights, responsibilities, and obligations as Directors.

A.5 Nomination Committee

a. The Board of Directors established Nomination Committee, consisting of the Independent Non-executive Director, Ms. Shi Dan, who serves as the chairman, and the Chairman of the Board, Mr. Ma Yongsheng, and Mr. Ng, Kar Ling Johnny, who serve as members. The principal responsibilities of Nomination Committee are to provide suggestions to the Board on Board's size and composition, the selecting standards and procedures, and candidates for Directors and senior management. Procedures to Propose a Person for Election as a Director of Sinopec Corp. are published on Sinopec Corp.'s website at http://www.sinopec.com.

- b. The Board established the Board Diversity Policy which stipulates that the members of the Board shall be nominated and appointed based on the skills and experience for the overall optimum operation of the Board, while taking into account the targets and requirements of the board diversity. When deciding the composition of the Board, Sinopec Corp. shall consider several factors in relation to the diversity of the Board, including but not limited to professional experience, skills, knowledge, length of service, regions, cultural and educational backgrounds, gender, and age. The provisions of the Articles of Association concerning the term of office of directors help to ensure that the Board of Directors has a proper balance between continuous experience and new thinking, and enhance the level of diversity. Sinopec Corp. focuses on the implementation of the Board Diversity Policy. Currently, the Board has achieved diversity in terms of gender, culture, educational backgrounds, professional specialties, etc. The Directors come from different industries at home and abroad with rich work experience. Professional backgrounds of Directors include petroleum and petrochemical corporate management, as well as economics, accounting, finance, and industry and energy economy, which are conductive to strategic planning and scientific decision-making.
- c. The members of the Nomination Committee can engage professionals when performing their duties. Reasonable costs arising from such consultations are borne by Sinopec Corp. In the meantime, the Nomination Committee has also appointed consultant members and can require such member to provide advice. The working expenses of the Nomination Committee are included in the budget of Sinopec Corp.
- d. During the reporting period, the Nomination Committee held two meetings (please refer to "Meetings Held by the Board Committees" under the section "Report of the Board of Directors" in this annual report).

A.6 Responsibility of Directors

- a. All Non-executive Directors have the same duties and powers as the Executive Directors. In addition, the Independent Non-executive Directors are entitled to certain specific powers. The Articles of Association and the Rules of Procedure of Board Meetings clearly prescribe the duties and powers of Directors, Non-executive Directors including Independent Non-executive Directors, which are published on the Sinopec Corp.'s website at http://www.sinopec.com.
- Each of the Directors was able to devote sufficient time and efforts to handling the affairs of Sinopec Corp.
- c. Each of the Directors confirmed that he/she has complied with the Model Code for Securities Transactions by Directors of Listed Issuers during the reporting period. Meanwhile, Sinopec Corp. formulated the Rules Governing Shares Held by Company Directors, Supervisors and Senior Managers and Changes in Shares and the Model Code of Securities Transactions by Company Employees to regulate the purchase and sale of Sinopec Corp.'s securities by relevant personnel.
- d. Sinopec Corp. organised and arranged training sessions for Directors and paid the relevant fees as well as making relevant records. During the reporting period, the Directors actively participated in the trainings and attached great importance to continuing professional development to ensure that their contribution to the Board remains informed and relevant.

A.7 Provision and use of information

- a. The agenda and other documents for reference for meetings of the Board and Board committees are distributed prior to the meetings to allow each Director sufficient time to review the materials so that Directors can make informed decisions.
- b. Each Director can obtain all related information in a comprehensive and timely manner. The Secretary of the Board is responsible for organising and preparing the materials for the Board meetings, including preparation of explanations for each proposal to ensure fully understanding by the Directors. The Management is responsible for providing the Directors with necessary information and materials. The Directors may require the Management, or require, via the Management, relevant departments to provide necessary information or explanations. The Directors may seek advice from professional consultants when necessary.

B REMUNERATION AND APPRAISAL COMMITTEE

- a. Remuneration and Appraisal Committee ("Remuneration Committee") consists of Independent Non-executive Director, Mr. Bi Mingjian, who serves as the Chairman, and the Chairman of the Board, Mr. Ma Yongsheng and the Independent Nonexecutive Director, Mr. Ng, Kar Ling Johnny, who serve as the members of the Remuneration Committee. The Remuneration Committee is responsible for reviewing the implementation of the annual remuneration plans for Directors, Supervisors, and other senior management as approved at the general meeting of the shareholders, and reporting to the Board.
- b. The Remuneration Committee always consults the Chairman of the Board and the President about the remuneration plans for other Executive Directors. After the Remuneration Committee's review, it is of the view that all the Executive Directors of Sinopec Corp. have fulfilled the duty clauses in their service contracts in 2021.

- c. The members of the Remuneration Committee can engage independent professionals when performing its duties. Reasonable costs arising from such consultations are borne by Sinopec Corp. In the meantime, the Remuneration Committee has also appointed consultant members and can require such members to provide advice. The working expenses of the Remuneration Committee are included in the budget of Sinopec Corp. According to the policies of Sinopec Corp., the senior management and relevant departments of Sinopec Corp. shall actively cooperate with the Remuneration Committee.
- d. During the reporting period, the Remuneration Committee held one meeting (please refer to "Meetings Held by the Board Committees" under the section of "Report of the Board of Directors" in this annual report).

C ACCOUNTABILITY AND AUDITING

C.1Financial reporting

- a. Directors are responsible for supervising the preparation of accounts for each fiscal period to ensure that the accounts truly and fairly reflect the condition of the business, the performance, and the cash flow of the Company during the period. The Board approved the Financial Report for 2021 and warranted that the annual report contained no false representations, no material omissions or misleading statements and jointly and severally accepted full responsibility for the authenticity, accuracy, and completeness of the content.
- b. Sinopec Corp. provides Directors with information about the financial, production and operating data of the Company, capital market updates, and securities regulatory developments every month to ensure that the Directors can learn about the latest developments of the Company and regulatory changes in a timely manner.

- c. Sinopec Corp. has adopted an internal control mechanism to ensure that the Management and relevant departments have provided the Board and the Audit Committee with sufficient financial data and related explanations and materials.
- d. The external auditors of Sinopec Corp. made a statement on their reporting responsibilities in the auditor's report contained in the financial report.

C.2Internal Control and Risk Management

- a. Sinopec Corp. has formulated and implemented its internal control and risk management system. The Board as a decision-making body is responsible for evaluating and reviewing the effectiveness of its internal control and risk management. The Board and the Audit Committee periodically (at least annually) receive reports of the Company regarding internal control and risk management information from the Management. All major internal control and risk management issues are reported to the Board and the Audit Committee. Sinopec Corp. has set up its internal control and risk management department and internal auditing departments, which are equipped with sufficient staff, and these departments periodically (at least twice per year) report to the Audit Committee. The internal control and risk management system of the Company are designed to manage rather than eliminate all the risks of the Company.
- b. In terms of internal control, Sinopec Corp. adopted the internal control framework prescribed in the internationally accepted Committee of Sponsoring Organisations of the Treadway Commission Report ("COSO"). Based upon the Articles of Association and the applicable management policies currently in effect, as well as in accordance with relevant domestic and overseas applicable regulations, Sinopec Corp. formulates and continuously improves the Internal Control Manual

to achieve internal control of all factors of internal environment, risk assessment, controlling activities, information and communication, and internal supervision. At the same time, Sinopec Corp. has constantly supervised and evaluated its internal control, and conducted comprehensive and multi-level inspections including regular test, enterprise selfexamination and auditing check, and included headquarters, branches and subsidiaries into the scope of internal control evaluation, with an internal control evaluation report being produced. The Board annually reviews the internal control evaluation report. For detailed information about the internal control during the reporting period, please refer to the "Report on Internal Control Evaluation" prepared by Sinopec Corp.

Sinopec Corp. has formulated and implemented its information disclosure policy and insider registration policy. The Company regularly evaluates the policy implementation and makes disclosure in accordance with relevant regulations. Please refer to the website of Sinopec Corp. (http://www.sinopec.com) for the details of the information disclosure policy.

c. In terms of risk management, Sinopec Corp. adopts the enterprise risk management framework provided by COSO, and establishes its risk management policy and risk management organisation system. The Company annually conducts risk evaluation to identify major and important risks and perform risk management duties. It has designed major and important risks tackling strategies and measures combined with its internal control system and periodically monitors their implementation to ensure adequate care, monitor and tackling of major risks.

d. Based upon the review and evaluation of internal control and risk management of the reporting period, the Board is of the view that the internal control and risk management of the Company are effective.

C.3Audit Committee

- a. The Board has established an Audit Committee. The Audit Committee consists of Independent Non-executive Director, Mr. Ng, Kar Ling Johnny, who serves as the Chairman, and Independent Non-executive Directors, Mr. Cai Hongbin, Ms. Shi Dan, and Mr. Bi Mingjian, who serve as members.
- b. During the reporting period, the Audit Committee held five meetings (please refer to the "Meetings Held by the Board Committees" under the section of "Report of the Board of Directors" in this annual report). The review opinions were issued at each meeting and submitted to the Board. During the reporting period, the Board and the Audit Committee had no disagreement.
- c. Audit Committee can engage independent professionals when performing its duties. Reasonable costs arising from such consultations are borne by Sinopec Corp. In the meantime, the Audit Committee has appointed consultant members and can request such members to provide advice. The working expenses of the Audit Committee are included in the budget of Sinopec Corp. In accordance with the policies of Sinopec Corp., the senior management and relevant departments of Sinopec Corp. shall actively cooperate with the Audit Committee.
- d. The Audit Committee has reviewed the adequacy and sufficiency of the resources for accounting and financial reporting and the qualifications and experience of the relevant employees as well as the sufficiency of the training courses and the budget thereof. Audit Committee is of the view that the Management has fulfilled the duties to establish an

effective internal control system. The Company established a whistleblowing policy in its internal control system, providing several channels including online reporting, reporting by letters, appeals and complaint mailbox, etc. to employees to report behaviour that violates the internal control system of the Company. The Audit Committee has reviewed and approved such policy.

D DELEGATION OF POWER BY THE BOARD

- a. The Board and the Management have clear duties and responsibilities under written rules. The Articles of Association and the Rules of Procedure for the General Meetings of Shareholders and the Rules of Procedure of the Board Meetings clearly set forth the scope of duties, powers, and delegation of power of the Board and Management, which are published on the website of Sinopec Corp. at http://www.sinopec.com.
- b. In addition to the Audit Committee, the Remuneration Committee and Nomination Committee, the Board had established the Strategy Committee and the Sustainable Development Committee (formerly known as Social Responsibility Management Committee). The Strategy Committee is responsible for overseeing long-term development strategies and significant investment decisions of the Company. The Strategy Committee consists of eight Directors, including the Chairman of the Board, Mr. Ma Yongsheng, who serves as Chairman, Executive Directors, Mr. Yu Baocai, Mr. Ling Yiqun, Mr. Li Yonglin, Mr. Liu Hongbin, and Independent Nonexecutive Directors, Mr. Cai Hongbin, Ms. Shi Dan, and Mr. Bi Mingjian, who serve as members. The Sustainable Development Committee (formerly known as Social Responsibility Management Committee) is responsible for preparing policies, governance, strategies and plans for sustainable development of the Company, which consists of four Directors, including the Chairman of the Board, Mr. Ma Yongsheng, who serves as Chairman, the Non-executive Director, Mr. Zhao Dong, the Executive Director, Mr. Li Yonglin, and the Independent Nonexecutive Director, Mr. Cai Hongbin, who serve as members.

c. Each Board Committee shall report its decisions and recommendations to the Board and has formulated its terms of references. The Terms of Reference of the Audit Committee, the Terms of Reference of the Remuneration Committee, the Terms of Reference of the Nomination Committee and the Terms of Reference of the Nomination Committee are published on the website of Sinopec Corp. at http://www.sinopec.com.

E INVESTOR RELATIONS

- a. Sinopec Corp. attach considerable significance to investor relations. The Management attends road shows every year to answer questions on subjects of concern to investors, such as introducing the development strategies and the production and business performance of the Company. The Board Secretariat of Sinopec Corp. is responsible for communicating with investors. In compliance with regulatory provisions, Sinopec Corp. enhances communication with investors by holding meetings with institutional investors, setting up an investor hotline, and communicating through internet platform, etc.
- b. During the reporting period, separate resolutions were proposed for each substantially separate issue at the general meeting of shareholders. All resolutions were voted by poll in protection of the interest of all shareholders. Notices of the general meeting were dispatched to shareholders 45 days (excluding the date of the general meeting) in advance.
- c. The Chairman (or the director who performs the duties of Chairman) of the Board hosted the annual general meeting for the year 2020 and the First Extraordinary General Meeting for the year 2021. Several members of the Board of Directors, the Board of Supervisors, and senior management attended the meetings and conducted in-depth communication with the investors.

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d. According to relevant rules of Sinopec Corp., the Secretary to the Board is responsible for establishing an effective communication channel between Sinopec Corp. and its shareholders, for setting up special departments to communicate with the shareholders and for passing the opinions and proposals of the shareholders to the Board and Management in a timely manner. Contact details of Sinopec Corp. can be found in the "Investor Centre" column on Sinopec Corp.'s website.

F COMPANY SECRETARY

- a. The Hong Kong Stock Exchange recognised the Secretary to the Board as having the relevant qualifications as company Secretary. Nominated by the Chairman of the Board and appointed by the Board, the Secretary to the Board is a senior management officer of Sinopec Corp. and responsible for the Company and the Board. The Secretary gives opinions on corporate governance to the Board and arranges orientation training and professional development for the Directors.
- b. During the reporting period, the Secretary to the Board actively participated in career development training for more than 15 training hours.

G SHAREHOLDERS' RIGHTS

a. Shareholders who individually or collectively hold 10% of the total voting shares of Sinopec Corp. may request the Board in writing to convene the general meeting of shareholders. If the Board fails to approve the request to convene the meeting according to the Rules of Procedure for General Meetings of Shareholders, the shareholders may convene and hold the meeting at their discretion according to applicable laws, and reasonable expenses incurred will be borne by Sinopec Corp. These aforementioned provisions are subject to the following conditions: the proposals at the general meeting of shareholders must fall within the responsibilities of the general meeting of shareholders, with specific proposals and resolutions and in compliance with relevant laws, administrative regulations and the Articles of Association.

- b. When Sinopec Corp. holds the general meeting of shareholders, shareholders who individually or collectively hold 3% of the total voting shares of Sinopec Corp. may propose a supplemental proposal 10 days before the date of the general meeting.
- c. The eligibility for attending the general meeting, the rights of shareholders, the resolutions at the meeting and the voting procedures are clearly stated in the notice of the general meeting of shareholders of Sinopec Corp. dispatched to the shareholders.
- d. Sinopec Corp. has established a special organisation for communication with shareholders and publishes relevant contact details to facilitate shareholders to make enquiries in accordance with Articles of Association.

(2) Auditors

The appointment of KPMG Huazhen LLP and KPMG as Sinopec Corp.'s external auditors for 2021 and the authorisation of the Board to determine their remuneration were approved at Sinopec Corp.'s Annual General Meeting for the Year 2020 on 25 May 2021. The audit fee for 2021 is RMB41.69 million (including audit fee of internal control), which was approved at the 7th Meeting of the Eighth Session of the Board. The annual financial statements of the year ended 31 December 2021 have been audited by KPMG Huazhen LLP and KPMG. The Chinese certified public accountants signing the report are Yang Jie and He Shu from KPMG Huazhen LLP.During the reporting period, KPMG Huazhen LLP and KPMG and their affiliates firms provided non-audit service, such as tax consulting and due diligence investigation to the Company, and the fee charged was RMB8.11 million. PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian LLP (collectively, the "Former Auditors") served respectively as the external auditors of the Company for the year 2013 to 2020 and retired as the external auditors of the Company as resolved by shareholders at the annual general

meeting for the year 2020. Each of the Former Auditors has no objections to the retirement, and has confirmed that there are no matters in relation to their retirement which should be brought to the attention of the shareholders of the Company. The Board is not aware of any matters in relation to the change in Auditors that need to be brought to the attention of the shareholders of the Company.

(3) Other information about Sinopec Corp.'s corporate governance

Except for their working relationships with Sinopec Corp., none of the Directors, Supervisors or other senior management has any financial, business or family relationship or any relationship in other material aspects with one another. For information about shareholdings of substantial shareholders and changes in share capital, please refer to page 77 to page 78; for information about meetings of the Board, please refer to page 65 to page 66; for information about meetings held by Board Committees, please refer to page 67; for information about tenure of Non-executive Directors, please refer to page 42; for information about equity interests of Directors, Supervisors and other senior management, please refer to page 31; for information about the biographies and annual remuneration of Directors, Supervisors and other senior management, please refer to page 38 to page 49.

10 DETAILED IMPLEMENTATION OF THE SHARE INCENTIVE SCHEME DURING THE REPORTING PERIOD

The Company did not implement any share incentive scheme during the reporting period.



11 INTRODUCTION OF DIRECTORS, SUPERVISORS AND OTHER SENIOR MANAGEMENT

(1) Directors

Ma Yongsheng, aged 60, Chairman of the Board of Sinopec Corp. Mr. Ma is a professor level senior engineer with a Ph.D. degree. Mr. Ma is a member of the 13th National Committee of Chinese People's Political Consultative Conference ("CPPCC") and an academician of the Chinese Academy of Engineering. In April 2002, he was appointed as Chief Geologist of Sinopec Southern Exploration and Production Company; in April 2006, he was appointed as Executive Deputy Manager (in charge of overall management), Chief Geologist of Sinopec Southern Exploration and Production Company; in January 2007, he was appointed as General Manager and Party Secretary of CPC Committee of Sinopec Southern Exploration and Production Company; in March 2007, he served as General Manager and Deputy Party Secretary of CPC Committee of Sinopec Exploration Company; in May 2007, he was appointed as Deputy

Commander of Sichuan-East China Gas Pipeline Project Headquarter of Sinopec Corp.; in May 2008, he was appointed as Deputy Director General of Exploration and Production Department of Sinopec Corp. (Director General Level); in July 2010, he served as Deputy Chief Geologist of Sinopec Corp.; in August 2013, he was appointed as Chief Geologist of Sinopec Corp.; in December 2015, he served as Vice President of China Petrochemical Corporation and was appointed as Senior Vice President of Sinopec Corp.; in January 2017, he was appointed as Member of the Leading Party Member Group of China Petrochemical Corporation; in October 2018, he was appointed as President of Sinopec Corp; in April 2019, he was appointed as Director, President and Vice Secretary of the Leading Party Member Group of China Petrochemical Corporation; in November 2021, he was appointed as Chairman and Secretary of the Leading Party Member Group of China Petrochemical Corporation. Mr. Ma was elected as Director of Sinopec Corp. in February 2016, and was elected as the Chairman of the Board of Sinopec Corp. in November 2021.



Zhao Dong

Zhao Dong, aged 51, Director of Sinopec Corp. Mr. Zhao is a professor level senior accountant with a Ph.D. degree. In July 2002, he was appointed as Chief Accountant and General Manager of Financial Assets Department of CNPC International (Nile) Ltd.; in January 2005, he was appointed as Deputy Chief Accountant and Executive Deputy Director of Financial and Capital **Operation Department of China National** Oil and Gas Exploration and Development Corporation; in April 2005, he was appointed as Deputy Chief Accountant and General Manager of Financial and Capital Operation Department of China National Oil and Gas Exploration and Development Corporation; in June 2008, he was appointed as Chief Accountant of China National Oil and Gas Exploration and Development Corporation; in October 2009, he was appointed as Chief Accountant of China National Oil and Gas Exploration and Development Corporation and Chief Financial Officer of PetroChina International Investment Company Limited; in September 2012, he was appointed as Deputy General Manager of CNPC Nile Company; in August 2013, he was appointed as General Manager of CNPC Nile Company; in November 2015, he was appointed as Chief Financial Officer of PetroChina Company Limited. In November 2016, he was appointed as a Member of the Leading Party Member Group and Chief Accountant of China Petrochemical Corporation; in May 2020, he was appointed as Director and Deputy Secretary of the Leading Party Member Group of China Petrochemical Corporation. In June 2017, he was elected as Chairman of Board of Supervisors of Sinopec Corp.; in May 2021, he was elected as Director of Sinopec Corp.



Yu Baocai



Ling Yiqun

Li Yonglin

Yu Baocai, aged 57, Director and President of Sinopec Corp. Mr. Yu is a senior engineer with a master's degree in economics. In September 1999, Mr. Yu was appointed as Deputy General Manager of Daqing Petrochemical Company; in December 2001, he was appointed as General Manager and Deputy Secretary of CPC Committee of Daqing Petrochemical Company; in September 2003, he was appointed as General Manager and Secretary of CPC Committee of Lanzhou Petrochemical Company; in June 2007, he was appointed as General Manager and Deputy Secretary of CPC Committee of Lanzhou Petrochemical Company and General Manager of Lanzhou Petroleum & Chemical Company; in September 2008, he was appointed as a member of the Leading Party Member Group and Deputy General Manager of China National Petroleum Corporation ("CNPC") and since May 2011, he acted concurrently as Director of PetroChina Company Limited; in June 2018, he was appointed as a Member of the Leading Party Member Group and Vice President of China Petrochemical Corporation; in September 2020, he was appointed as Senior Vice President of Sinopec Corp. Mr. Yu was elected as Director of Sinopec Corp. in October 2018, and was appointed as President of Sinopec Corp. in November 2021.

Ling Yiqun, aged 59, Director and Senior Vice President of Sinopec Corp. Mr. Ling is a professor level senior engineer with a Ph.D. degree. From August 1983, he worked in the refinery of Beijing Yanshan Petrochemical Company and the Refining Department of Beijing Yanshan Petrochemical Company Ltd.; in February 2000, he was appointed as Deputy Director General of Refining Department of Sinopec Corp.; in June 2003, he was appointed as Director General of Refining Department of Sinopec Corp.; in July 2010, he was appointed as Vice President of Sinopec Corp.; in May 2012, he was appointed concurrently as Executive Director, President and Secretary of CPC Committee of Sinopec Refinery Product Sales Company Limited; in August 2013, he was appointed concurrently as President and Secretary of CPC Committee of Sinopec Qilu Petrochemical Company, and President of Sinopec Qilu Company; in March 2017, he was appointed as Vice President of China Petrochemical Corporation; since April 2019, he has been a member of the Leading Party Member Group of China Petrochemical Corporation. In February 2018, he was appointed as Senior Vice President of Sinopec Corp.; in May 2018, he was elected as Director of Sinopec Corp.

Li Yonglin, aged 55, Director and Senior Vice President of Sinopec Corp. Mr. Li is a professor level senior engineer with a Ph.D. degree. Mr. Li is a member of the 13th National Committee of CPPCC. He was appointed as Vice General Manager of Sinopec Maoming Company in March 2003; in July 2009, he was appointed as Chief of Preparatory Group for the Beihai Refining Off-Site Reconstruction Project; in November 2011, he was appointed as General Manager and Deputy Secretary of CPC Committee of Sinopec Beihai Refining & Chemical Co., Ltd.; in March 2015, he was appointed as Vice Director General of Refining Division of Sinopec Corp. (Director General Level); in December 2016 he was appointed as General Manager and Deputy Secretary of CPC Committee of Sinopec Tianjin Petrochemical Company, General Manager of Sinopec Tianjin Company and Vice Chairman of SINOPEC SABIC Tianjin Petrochemical Co., Ltd.; in October 2019, he was appointed as Secretary of CPC Committee of Sinopec Tianjin Petrochemical Company and Corporate Representative of Sinopec Tianjin Company; in July 2020, he was appointed as Assistant to the President of China Petrochemical Corporation, concurrently serving as General Manager of Human Resources Department and Head of Organizational Department of the Leading Party Member Group; in November 2020, he was appointed as a member of Leading Party Member Group and Vice President of China Petrochemical Corporation.; in May 2021, he was elected as Director of Sinopec Corp. and was appointed as Senior Vice President of Sinopec Corp.



Liu Hongbin



Cai Hongbin



Ng, Kar Ling Johnny, aged 61, Independent Director of Sinopec Corp. Mr. Ng currently is a practicing Certified Public Accountant in Hong Kong, a practicing auditor and accountant in Macau, a Fellow of the Hong Kong Institute of Certified Public Accountants (FCPA), a Fellow of the Association of Chartered Certified Accountant (FCCA), and a Fellow of the Institute of Chartered Accountants in England and Wales (FCA). Mr. Ng obtained a bachelor's degree and a master's degree in business administration from the Chinese University of Hong Kong in 1984 and 1999, respectively. Mr. Ng joined KPMG (Hong Kong) in 1984 and became a Partner in 1996. He acted as a Managing Partner from June 2000 to September 2015 and Vice Chairman of KPMG China from October 2015 to March 2016. Mr. Ng currently serves as Independent Nonexecutive Director of China Vanke Co., Ltd., Fangdd Network Group Ltd. and Metallurgical Corporation of China Ltd. In May 2018, he was elected as Independent Director of Sinopec Corp.

a senior engineer with a bachelor's degree. In June 1995, he was appointed as Chief Engineer of Tuha Petroleum Exploration & Development Headquarters; in July 1999, he was appointed as Deputy General Manager of PetroChina Tuha Oilfield Company; in July 2000, he was appointed as Commander and Deputy Secretary of CPC Committee of Tuha Petroleum Exploration & Development Headquarters; in March 2002, he served as General Manager of the Planning Department of PetroChina Company Limited; in September 2005, he served as Director of the Planning Department of CNPC; in June 2007, he was appointed as Vice President of PetroChina Company Limited, and in November 2007, he served concurrently as General Manager and Secretary of CPC Committee of the Marketing Branch of PetroChina Company Limited; in June 2009, he served concurrently as General Manager and Deputy Secretary of CPC Committee of the Marketing Branch of PetroChina Company Limited; in July 2013, he was appointed as Member of the Leading Party Member Group and Deputy General Manager of CNPC and in August 2013, he served concurrently as an Executive Director and General Manager of Daqing Oilfield Company Limited, Head of enterprise Coordination in Heilongjiang Province, Director of Daqing Petroleum Administration Bureau and Deputy Secretary of CPC Committee of Daqing Oilfield; in May 2014, he served concurrently as Director of PetroChina Company Limited; in November 2019, he was appointed as a member of the Leading Party Member Group of China Petrochemical Corporation; in December 2019, he was appointed as Vice President of China Petrochemical Corporation. In March 2020, he was appointed as Senior Vice President of Sinopec Corp. In May 2020, he was elected as Director of Sinopec Corp.

Liu Hongbin, aged 59, Director and Senior

Vice President of Sinopec Corp. Mr. Liu is

Cai Hongbin, aged 54, Independent Director of Sinopec Corp. Mr. Cai is Dean of Faculty of Business and Economics and Professor of Economics of the University of Hong Kong. Mr. Cai has a Ph.D. degree in Economics. From 1997 to 2005, Mr. Cai taught at the University of California, Los Angeles. Since 2005, he served as a professor and Ph.D. supervisor in Applied Economics Department at Guanghua School of Management at Peking University, and he once served as Director, Assistant to the Dean and Vice Dean of the Applied Economics Department. From December 2010 to January 2017, he served as Dean of Guanghua School of Management at Peking University. In June 2017, he joined the Faculty of Business and Economics of the University of Hong Kong. Mr. Cai once served as a member of the 12th National People's Congress, a member of Beijing Municipal Committee of CPPCC, a member of the 11th Central Committee of China Democratic League, Deputy Chairman of Beijing Municipal Committee of China Democratic League and a Special Auditor of the National Audit Office. He currently serves as an Independent Director of CCB International (Holdings) Limited and Ping An Bank Co., Ltd. In May 2018, he was elected as Independent Director of Sinopec Corp.



Shi Dan



Bi Mingjian

Shi Dan, aged 60, Independent Director of Sinopec Corp. Ms. Shi is the legal representative and Chairman of China Industrial Economics Society, a member of Expert Advisory Committee of the National Energy Commission and a member of National Expert Committee on Climate Change and enjoys special government subsidies from the State Council. Ms. Shi obtained bachelor's degree in engineering, master's degree in economics, master's degree of development economics and Ph.D. degree in management from Changchun University of Technology, Renmin University of China, Australian National University and Huazhong University of Science and Technology respectively. In October 1993, Ms. Shi was appointed as Research Fellow and Assistant to the Dean of the Institute of Industrial Economics of Chinese Academy of Social Sciences; in August 2010, Ms. Shi was appointed as a Research Fellow and Deputy Dean of National Academy of Economic Strategy, Chinese Academy of Social Sciences; in November 2013, she was appointed as a Research Fellow and Secretary of CPC Committee (Deputy Dean) of the Institute of Industrial Economics of Chinese Academy of Social Sciences: in November 2017, she served as External Director of China Energy Investment Corporation Limited. In March 2019, she was appointed as Dean of Institute of Industrial Economics of Chinese Academy of Social Sciences. In May 2021, she was elected as Independent Director of Sinopec Corp.

Bi Mingjian, aged 66, Independent Director of Sinopec Corp. Mr. Bi obtained the certificate of diploma majoring in English from East China Normal University in 1982 and master's degree in business administration from George Mason University in the United States of America in 1993 respectively. Mr. Bi served as a cadre at Shanghai Subei Haifeng Farm from April 1977 to April 1979; he studied at the External Training Program of the Cadre School of the Ministry of State Farms and Land Reclamation, and subsequently he studied at a farm in Saskatchewan Province of Canada from April 1979 to November 1980; he served as a cadre at the Foreign Affairs Bureau of the Ministry of State Farms and Land Reclamation from November 1980 to December 1983; he served as Deputy Division Chief of the State Farms and Land Reclamation Bureau of the Ministry of Agriculture from January 1984 to December 1985; he served as Operation Officer of the World Bank Representative Office in China from December 1985 to June 1988; he served as Deputy Director of the project office of China Rural Trust and Investment Corporation from June 1988 to October 1988; he served as Project Economist and Advisor of the World Bank from October 1988 to January 1994; he served as a cadre at People's Construction Bank of China from January 1994 to July 1995; he served as Deputy Chief Executive Officer, member and Deputy Chairman of the Management Committee, Co-Chief Operating Officer

and Co-Head of the Investment Banking Department of China International Capital Corporation Limited ("CICC") from August 1995 to February 2006; he served as a Senior Advisor to CICC from March 2006 to November 2012; he served as a Managing Partner of HOPU Investment Management Co., Ltd. from November 2012 to March 2015; he served as a non-executive director for China Investment Securities Co., Ltd. (currently known as China CICC Wealth Management Securities Company Limited) from March 2017 to January 2020; from March 2015 to December 2019, he served as Chief Executive Officer and Chairman of Management Committee of CICC; from May 2015 to February 2020, he served as Executive Director of CICC. In May 2021, he was elected as Independent Director of Sinopec Corp.

LIST OF MEMBERS OF THE BOARD

			Position in		Remuneration paid by in 2021 (RMB1,000,	Whether paid by the holding	Equity interests ir (as at 31 D	
Name	Gender	Age	Sinopec Corp.	Tenure	before tax)	Company	2021	2020
Ma Yongsheng	Male	60	Board Director, President	2016.02.2024.05	715.3	No	0	0
Zhao Dong	Male	51	Board Director	2021.05-2024.05	_	Yes	0	0
Yu Baocai	Male	57	Board Director, President	2018.10-2024.05	441.8	No	0	0
Ling Yiqun	Male	59	Board Director,	2018.05-2024.05	-	Yes	13,000	13,000
			Senior Vice President					
Li Yonglin	Male	55	Board Director,	2021.05-2024.05	-	Yes	0	0
			Senior Vice President					
Liu Hongbin	Male	59	Board Director,	2020.05-2024.05	-	Yes	0	0
			Senior Vice President					
Cai Hongbin	Male	54	Independent Director	2018.05-2024.05	416.7	No	0	0
Ng, Kar Ling Johnny	Male	61	Independent Director	2018.05-2024.05	416.7	No	0	0
Shi Dan	Female	60	Independent Director	2021.05-2024.05	300.0	No	0	0
Bi Mingjian	Male	66	Independent Director	2021.05-2024.05	300.0	No	0	0

LIST OF FORMER MEMBERS OF THE BOARD

Position in					Remuneration paid by in 2021 (RMB1,000,	Whether paid by the holding	Equity interests i (as at 31 [
Name	Gender	Age	Sinopec Corp.	Tenure	before tax)	Company	2021	2020
Zhang Yuzhuo	Male	60	Former Chairman	2020.03-2021.08	-	Yes	0	0
Zhang Shaofeng	Male	50	Former Director	2020.09-2021.05	_	Yes	0	0
Tang Min	Male	68	Former Independent Director	2015.05-2021.05	116.7	No	0	0

Note: According to regulation of the authority, Mr. Fan Gang did not get remuneration from the Company.



Zhang Shaofeng



Jiang Zhenying

(2) Supervisors

Zhang Shaofeng, aged 50, Chairman of Board of Supervisors of Sinopec Corp. Mr. Zhang is a professor level senior accountant with a master's degree in business administration. In December 2008, he was appointed as Chief Accountant and Member of the CPC Committee of Trans-Asia Gas Pipeline Company Limited of China National Petroleum Corporation ("CNPC"); in July 2017, he was appointed as General Manager of Finance Department of CNPC (PetroChina Company Limited); in December 2017, he was appointed as General Manager of Finance Department of CNPC (PetroChina Company Limited); in July 2020, he was appointed as Member of the Leading Party Member Group and Chief Accountant of China Petrochemical Corporation. In September 2020, he was elected as Director of Sinopec Corp.; in May 2021, he was elected as Chairman of Board of Supervisors of Sinopec Corp.

Jiang Zhenying, aged 57, Supervisor of Sinopec Corp. Mr. Jiang is a professor level senior economist with a Ph.D. degree in management. In December 1998, he was appointed as Vice President of China Petrochemical Supplies & Equipment Co., Ltd.; in February 2000, he was appointed as Deputy Director General of Sinopec Procurement Management Department; in December 2001, he was appointed as Director General of Sinopec Procurement Management Department; in November 2005, he concurrently held the positions of Chairman of Board of Directors, President and Secretary of CPC Committee of China Petrochemical International Co., Ltd.; in March 2006, he was appointed as Director General (General Manager), Executive Director and Secretary of the CPC Committee of Sinopec Procurement Management Department (Sinopec International Co. Ltd.); in April 2010, he was appointed as Director General (General Manager), Executive Director and Deputy Secretary of the CPC Committee of Sinopec Procurement Management Department (Sinopec International Co. Ltd.); in November 2014, he was appointed as Director of Safety Supervisory Bureau of China Petrochemical Corporation and Director General of Safety Supervisory Department of Sinopec Corp. In May 2017, he was appointed as Deputy Director General (Director General level) of the Office of Leading Party Member Group Inspection Work of China Petrochemical Corporation; in December 2018, he was appointed as Director of Audit Bureau of China Petrochemical Corporation, and Director of Audit Department of Sinopec Corp.: in December 2019, he was appointed as President of Audit Bureau of Sinopec Corp. and Director of the Office of Audit Committee of Leading Party Member Group of China Petrochemical Corporation. In December 2010, he was elected as Employee's Representative Supervisor of Sinopec Corp.; in May 2018, he was elected as Supervisor of Sinopec Corp.

Zhang Zhiguo

Zhang Zhiguo, aged 59, Supervisor of Sinopec Corp. Mr. Zhang is a professor level senior administration engineer with a master's degree. In September 2009, he was appointed as Deputy Director General of Corporate Office of China Petrochemical Corporation (Sinopec President's office); in March 2015, he was appointed as Secretary of CPC Committee of Sinopec Management Institute (Sinopec Communist Party School); in December 2018, he was appointed as Director General of the Office of Leading Party Member Group Inspection Work of China Petrochemical Corporation; in December 2019, he was appointed as Director General of the General Management Department and Director of Leading Party Member Group Office of China Petrochemical Corporation. In May 2021, he was elected as Supervisor of Sinopec Corp.



Yin Zhaolin

Guo Hongjin



Li Defang, aged 60, Employee's Representative Supervisor of Sinopec Corp. Mr. Li is a professor level senior engineer with a Ph.D. degree. In May 2001, he was appointed as Deputy Secretary of CPC Committee and Trade Union Chairman of Sinopec Engineering Incorporation; in December 2001, he was appointed as Director General of Information System Management Department of Sinopec Corp.; in September 2013, he was appointed as Director General of Informatisation Management Department of Sinopec Corp.: in October 2014. he was appointed as Chairman of Petro-CyberWorks Information Technology Co., Ltd.; in January 2018, he was elected as Employee Supervisor of China Petrochemical Corporation; in March 2019, he was appointed as Secretary of CPC Committee of Sinopec Management Institute (Sinopec Communist Party School); in November 2020, he was appointed as the Secretary of CPC Committee of Sinopec Management Institute and Executive Vice Principal of Sinopec Communist Party School. In May 2020, he was elected as Employee's Representative Supervisor of Sinopec Corp.

Yin Zhaolin, aged 56, Supervisor of Sinopec Corp. Mr. Yin is a professor level senior engineer with a master's degree in engineering. In April 2010, he was appointed as Deputy General Manager of Sinopec Maoming Company; in January 2017, he was appointed as Executive Deputy General Manager of Sinopec Maoming Company (administrated as a General Manager of a Level-I Largescale Enterprise); in April 2017, he was appointed as General Manager and Deputy Secretary of CPC Committee of Sinopec Maoming Petrochemical Company and General Manager of Sinopec Maoming Company; in July 2017, he was appointed to serve a temporary position as a member of the Standing Committee of the CPC Maoming Municipal Committee; in October 2020, he was appointed as Executive Director and Secretary of CPC Committee of the Sinopec Maoming Petrochemical Company and the representative of the Sinopec Maoming Company, head of Maoming-Zhanjiang Integration Leading Group. In May 2021, he was elected as Supervisor of Sinopec Corp.

Guo Hongjin, aged 56, Supervisor of Sinopec Corp. Mr. Guo is a professor level senior engineer with a Ph.D. degree. In July 2013, he was appointed as Deputy General Manager of Sinopec Shengli Oilfield Company; in March 2018, he was appointed as General Manager and Deputy Secretary of CPC Committee of Sinopec Shengli Petroleum Administrative Bureau Co., Ltd. and General Manager of Sinopec Shengli Oilfield Company; in December 2018, he was appointed as Executive Director, General Manager and Deputy Secretary of CPC Committee of Sinopec Jianghan Petroleum Administrative Bureau Co., Ltd. and General Manager of Sinopec Jianghan Oilfield Company; in July 2019, he was appointed as Executive Director and Secretary of CPC Committee of Sinopec Jianghan Petroleum Administrative Bureau Co., Ltd. and the representative of Sinopec Jianghan Oilfield Company; in April 2020, he was appointed as General Manager of the Petroleum Exploration & Development Department of Sinopec Corp. In May 2021, he was elected as Supervisor of Sinopec Corp.

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Lv Dapeng



Chen Yaohuan

Lv Dapeng, aged 60, Employee's Representative Supervisor of Sinopec Corp. Mr. Lv is a professor level senior administration engineer with a Master's degree of business administration. In December 2001, he was appointed as Deputy Director General of China Petrochemical News; in March 2003, he was appointed as Deputy Director General and Chief Editor of China Petrochemical News; in June 2004, he was appointed as Director General and Chief Editor of China Petrochemical News; in December 2004, he was appointed as Director General, Secretary of CPC Committee and Chief Editor of China Petrochemical News: in March 2011, he was appointed as Director General of Corporate Culture Department of Sinopec Corp., and Director General of the Political Work Department of and Deputy Secretary of the CPC Committee directly under China Petrochemical Corporation; in June 2012, he was appointed concurrently as Deputy Director General of Working Committee of Trade Union and Deputy Director of the Youth Working Committee of China Petrochemical Corporation; in March 2015, he was appointed as Director General of Corporate Culture Department of Sinopec Corp. and Director General of Communications Department (Press Office) of China Petrochemical Corporation; in December 2019, he was appointed as Director General of Corporate Culture Department of Sinopec Corp., Director General of Communication Department and Director General of Press Office of China Petrochemical Corporation. In January 2021, he was elected as Employee's Representative Supervisor of Sinopec Corp.

Chen Yaohuan, aged 58, Employee's Representative Supervisor of Sinopec Corp. Mr. Chen is a professor level senior engineer with a Master's degree awarded by Central Party School of the CPC. In October 2008, he was appointed as Deputy Director General of Refining Department of Sinopec Corp.; in March 2015, he was appointed as Executive Director, General Manager and Deputy Secretary of the CPC Committee of Sinopec Beihai Refining and Chemical Limited Liability Company; in May 2015, he was appointed as a member of the Standing Committee of the CPC Beihai Municipal Committee; in June 2018, he was appointed as General Manager and Deputy Secretary of the CPC Committee of Guanzhou Branch of Sinopec Corp. and General Manager of Guangzhou Branch of Sinopec Assets Management Corporation; in July 2019, he was appointed as Deputy Director General (Director General Level) and Chief Engineer of Refining Department of Sinopec Corp.; in October 2019, he was appointed concurrently as Chairman of Sinopec Kantons International Limited and Sinopec Kantons Holdings Limited; in December 2019, he was appointed as General Manager and Chief Engineer of Refining Department of Sinopec Corp.; in December 2019, he was appointed concurrently as Vice Chairman and Chairman of Audit Committee of Yanbu Aramco Sinopec Refining Company Ltd.; in August 2020, he was appointed concurrently as Executive Director and Secretary of CPC Committee of Sinopec Petroleum Marketing Company Limited and Chairman of Sinopec Petroleum Storage and Reserve Limited. In January 2021, he was elected as Employee's Representative Supervisor of Sinopec Corp.

LIST OF MEMBERS OF THE BOARD OF SUPERVISORS

Name	Gender	Age	Position in Sinopec Corp.	Tenure	Remuneration paid by Sinopec Corp. in 2021 (RMB1,000, before tax)	Whether paid by the shareholders of the Company or their related entities	Equity int in Sinoped (as of 31 De 2021	c Corp.
Zhang Shaofeng	Male	50	Chairman of the	2021.05-2024.05	-	Yes	0	0
			Board of Supervisors					
Jiang Zhenying	Male	57	Supervisor	2018.05-2024.05	-	Yes	0	0
Zhang Zhiguo	Male	59	Supervisor	2021.05.2024.05	-	Yes	0	0
Yin Zhaolin	Male	56	Supervisor	2021.05.2024.05	-	Yes	0	0
Guo Hongjin	Male	56	Supervisor	2021.05.2024.05	403.2	No	0	0
Li Defang	Male	60	Employee Representative Supervisor	2020.05-2024.05	298.4	No	40,000	40,000
Lv Dapeng	Male	60	Employee representative Supervisor	2021.01.2024.05	417.2	No	0	0
Chen Yaohuan	Male	58	Employee Representative Supervisor	2021.01.2024.05	1,165.4	No	0	0

Note: Mr. Li Defang holds 40,000 A shares of Sinopec Corp.(the actual holder of the said shares is the spouse of Mr. Li Defang).

LIST OF FORMER MEMBERS OF THE BOARD OF SUPERVISORS

Name	Gender	Age	Position in Sinopec Corp.	Tenure	Remuneration paid by in 2020 (RMB1,000, before tax)	Whether paid by the shareholders of the Company or their related entities	Equity inte in Sinopec (as of 31 Dec 2021	Corp.
Zhao Dong	Male	51	Former Chairman of the	2017.06-2021.05	-	Yes	0	0
			Board of supervisor					
Zou Huiping	Male	61	Supervisor	2006.05-2021.01	0	No	0	0
Sun Huanquan	Male	57	Employee Representative Supervisor	2020.05-2021.01	-	Yes	0	0
Yu Renming	Male	58	Employee Representative Supervisor	2010.12-2021.01	-	Yes	0	0



Chen Ge

Yu Xizhi, aged 59, Vice President of

Yu Xizhi



Shou Donghua

(3) Other Members of Senior Management

Chen Ge, aged 59, Senior Vice President of Sinopec Corp. Mr. Chen is a senior economist with a Master's degree. In February 2000, he was appointed as Deputy Director General of the Board Secretariat of Sinopec Corp.; in December 2001, he was appointed as Director General of the Board Secretariat of Sinopec Corp.; in April 2003, he was appointed as Secretary to the Board of Directors of Sinopec Corp.; from April 2005 to August 2013, he was appointed concurrently as Director General of Corporate Reform & Management Dept. of Sinopec Corp.; in July 2010, he was appointed as Assistant to President of China Petrochemical Corporation; from December 2013 to December 2015, he was appointed temporarily as Deputy Secretary-General of Guizhou Provincial People's Government and a member of the Leading Party Member Group of Guizhou Provincial General Office; in November 2015, he was appointed as Employee's Representative Director of China Petrochemical Corporation; in December 2017, he was appointed concurrently as Director General of Corporate Reform & Management Dept. of Sinopec Corp.; in October 2018, he was appointed as Senior Vice President of Sinopec Corp.; in July 2020, he was appointed concurrently as General counsel.

Sinopec Corp. Mr Yu is a professor-level senior engineer with a Ph.D. degree in engineering. In August 1997, he was appointed as Deputy General Manager of Anging Petrochemical General Plant and concurrently as General Manager of Fertiliser Plant; in September 1999, he became a member of the CPC Standing Committee of Anging Petrochemical General Plant; in February 2000, he was appointed as Deputy General Manager of Sinopec Anging Company and in September 2000, he was appointed as General Manager of Sinopec Anging Company; in January 2005, he was appointed as General Manager of Anging Petrochemical General Plant and from May 2009 to July 2010, he temporarily served as a member of the Standing Committee of the CPC Anging Municipal Committee; in July 2010, he became General Manager and Deputy Secretary of the CPC Committee of Maoming Petrochemical Company and General Manager of Sinopec Maoming Company; in July 2016, Mr. Yu was appointed as head of Maoming-Zhanjiang Integration Leading Group; in December 2016, he became Executive Director, General Manager and Deputy Secretary of the CPC Committee of Zhongke (Guangdong) Refining and Petrochemical Co., Ltd.; in April 2017, Mr. Yu was appointed as Director General of Human Resources Department of Sinopec Corp.; in June 2017, he was elected as Employee's Representative Supervisor of Sinopec Corp.; in December 2019, he was appointed as President of Human Resource Department of Sinopec Corp. and the Director General of Organization Department of China Petrochemical Corporation; in January 2020, he was elected as Director of China Petrochemical Corporation. In July 2020, he was appointed as Vice President of Sinopec Corp.

Shou Donghua, aged 52, Chief Financial Officer and General Manager of Finance Department of Sinopec Corp. Ms. Shou is a professor level senior accountant with a Master's degree of business administration. In July 2010, she was appointed as the Chief Financial Officer of Sinopec Zhenhai Refining & Chemical Company; in October 2014, she was appointed as Deputy Director General of Human Resource Department of Sinopec Corp.; in August 2017, she was appointed as the Secretary of CPC Committee of Sinopec Zhenhai Refining & Chemical Company and Deputy General Manager of Sinopec Zhenhai Refining & Chemical Company; in August 2018, she was appointed as the Director General of Finance Department of China Petrochemical Corporation and concurrently served as the Chairman of Sinopec Century Bright Capital Investment Limited; in December 2019, she was appointed as General Manager of Finance Department of Sinopec Corp. and concurrently served as the Chairman of Sinopec Century Bright Capital Investment Limited. In January 2020, she was appointed as Chief Financial Officer of Sinopec Corp. and General Manager of Finance Department.

Corporate Governance



Zhao Rifeng



Zhao Rifeng, aged 59, Vice President of Sinopec Corp. Mr. Zhao is a professor level Senior Engineer with a Master's degree. In July 2000, he was appointed as Deputy General Manager of Sinopec Jinling Petrochemical Co., Ltd. and Deputy Manager of Sinopec Jinling Company; in October 2004, he was appointed as General Manager of Sinopec Jinling Company; in October 2006, he was appointed as Vice Chairman and General Manager of Sinopec Jinling Petrochemical Co., Ltd.; in November 2010, he was appointed as Chairman, General Manger, Deputy Secretary of CPC Committee of Sinopec Jinling Petrochemical Co., Ltd.; in August 2013, he was appointed as Director General of Refining Department of Sinopec Corp.; in December 2017, he was appointed as the Director General of the Marketing Department of Sinopec Corp. and Chairman and Secretary of CPC Committee of Sinopec Marketing Company Limited; in December 2019, he was appointed as the President of the Marketing Department of Sinopec Corp. and Chairman and Secretary of CPC Committee of Sinopec Marketing Company Limited. In February 2018. he was appointed as Vice President of Sinopec Corp.

Huang Wensheng, aged 55, Vice President of Sinopec Corp., Secretary to the Board of Directors. Mr. Huang is a professor level senior economist with a university diploma. In March 2003, he was appointed as Deputy Director General of the Board Secretariat of Sinopec Corp.; in May 2006, he was appointed as Representative on Securities Matters of Sinopec Corp.; in August 2009, he was appointed as the Deputy Director General of President's office of Sinopec Corp.; in September 2009, he was appointed as Director General of the Board Secretariat of Sinopec Corp.; in June 2018, he was appointed concurrently as Director General of Department of Capital Management and Financial Services of China Petrochemical Corporation; in July 2018, he was appointed concurrently as Chairman and Secretary of CPC Committee of Sinopec Capital Co., Ltd.; in December 2019, he was appointed as President of Department of Capital Management and Financial Services of China Petrochemical Corporation. In May 2012, he was appointed as Secretary to the Board of Directors of Sinopec Corp.; in May 2014, he was appointed as Vice President of Sinopec Corp.

	LIST	OF	MEMBERS	OF	THE	SENIOR	MANAGEMENT
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			Position in	Remuneration paid by Sinopec Corp. in 2021 (RMB1,000,	Whether paid by the shareholders of the Company or their related	Equity interests in (as of 31 De	ecember)
Name	Gender	Age	Sinopec Corp.	before tax)	entities	2021	2020
Chen Ge	Male	59	Senior Vice President	1,586.7	No	0	0
Yu Xizhi	Male	59	Vice President	1,411.0	No	0	0
Shou Donghua	Female	52	Chief Financial Officer	1,292.4	No	0	0
Zhao Rifeng	Male	59	Vice President	1,451.9	No	0	0
Huang Wensheng	Male	55	Vice President, Board Secretary	1,407.9	No	0	0

12 INFORMATION ON APPOINTMENT OR TERMINATION OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

On 1 January 2021, Mr. Yu Renming, Mr. Sun Huanquan resigned as Employee's Representative Supervisors of Sinopec Corp. due to change of working arrangement. Mr. Lv Dapeng and Mr. Chen Yaohuan were elected as the employee's representative supervisors of the seventh session of the Board of Supervisors of Sinopec Corp. through democratic procedure, for a term commencing from 11 January 2021 to the date when the term of the seventh session of the board of supervisors of the Company expires.

On 28 January 2021, Mr. Zou Huiping resigned as Supervisor of Sinopec Corp. due to age.

On 25 May 2021, the members of the Eighth Session of the Board of Directors and the Board of Supervisors (non-Employee-Representative Supervisors) were elected at the 2020 general meeting of shareholders. The Chairman of the Board was elected and the senior management appointed at the 1st meeting of the Eighth session of Board held at the same date. The Chairman of the Board of Supervisors was elected at The 1st meeting of the Eighth Session of the Board of Supervisors. The changes of the Directors, Supervisors and other senior management are as follows: Board of Directors: Mr. Zhang Yuzhuo was elected as Non-executive Director and Chairman of the Board. Mr. Ma Yongsheng was elected as Executive Director and President; Mr. Zhao Dong was elected as Non-executive Director; Mr. Yu Baocai, Mr Ling Yiqun, Mr. Li Yonglin, Mr. Liu Hongbin were elected as Executive Directors and Senior Vice President. Mr. Cai Hongbin and Mr. Ng Kar Ling Johnny, Ms. Shi Dan, Mr. Bi Mingjian were elected as Independent Non-executive Directors. Mr. Tang Min was no longer the Independent Non-executive Directors of the Board.

Board of Supervisors: Mr. Zhang Shaofeng was elected as the Chairman of Board of Supervisors. Mr. Jiang Zhenying, Mr. Zhang Zhiguo, Mr. Yin Zhaolin, Mr. Guo Hongjin were elected as Supervisors. Mr. Li Defang, Mr. Lv Dapeng, Mr. Chen Yaohuan were elected as Employee Representative Supervisors.

Other Senior Management: Mr. Chen Ge was elected as Senior Vice President. Mr. Yu Xizhi, Mr. Zhao Rifeng, Mr. Huang Wensheng were elected as Vice Presidents. Ms. Shou Donghua was appointed as Chief Financial Officer. Mr. Huang Wensheng was elected as Secretary to the Board. On 2 August 2021, Mr. Zhang Yuzhuo resigned as Chairman of the Board, Nonexecutive Director and Chairman of each of the Strategy Committee, Nomination Committee and Sustainable Development Committee (Social Responsibility Management Committee)of the Board of Sinopec Corp. due to change of working arrangement.

On 29 November 2021, Mr. Ma Yongsheng was appointed as Chairman of the Board, Chairman of each of the Strategy Committee, Nomination Committee and Sustainable Development Committee (formerly, the Social Responsibility Management Committee) of the Board of Sinopec Corp. resigned as President and became a non-executive director.

On 29 November 2021, Mr. Yu Baocai was appointed as President of Sinopec Corp.

13 CHANGE OF SHAREHOLDING OF DIRECTORS, SUPERVISORS, AND THE SENIOR MANAGEMENT

There is no change in shareholdings of the Company by Directors, Supervisors and other senior managers during the reporting period.

14 CONTRACTUAL INTERESTS OF DIRECTORS AND SUPERVISORS

As of 31 December 2021 or any time during the reporting period, no Director or Supervisor of the Company entered into any agreement with Sinopec Corp., its controlling shareholder, any subsidiary or related subsidiary which shall substantially benefit such Director or Supervisor.

15 CONTRACTS WITH DIRECTORS AND SUPERVISORS

The Company has entered into service contracts with all the Directors and Supervisors. None of the Directors and Supervisors has entered into or will enter into service contracts that are not terminable by the Company within one year without compensation (except for statutory compensation).

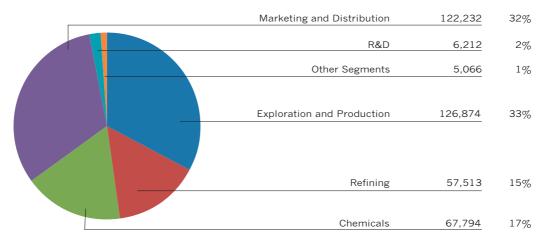
16 REMUNERATION OF DIRECTORS, SUPERVISORS, AND THE SENIOR MANAGEMENT

During this reporting period, a total of 16 Directors, Supervisors and other senior managers received remuneration from Sinopec Corp. with a total amount of RMB12.1413 million.

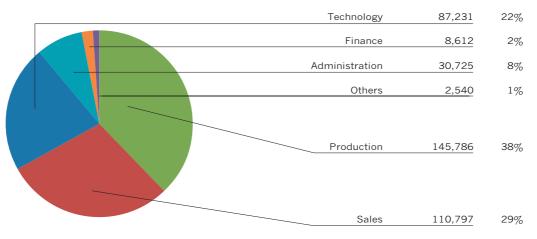
17 THE COMPANY'S EMPLOYEES

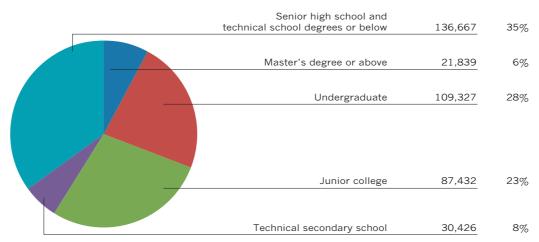
As at 31 December 2021, the Company has a total of 385,691 employees. There are a total of 280,216 retired employees to be reimbursed by Sinopec Corp. Sinopec Marketing Co. Limited, the principal subsidiaries of Sinopec Corp., has 122,232 employees.

THE BREAKDOWN OF NUMBER OF EMPLOYEES BY OPERATION SEGMENTS IS AS FOLLOWS: (INCLUDING EXPLORATION AND PRODUCTION, REFINING, MARKETING AND DISTRIBUTION, CHEMICALS, R&D AND OTHERS)



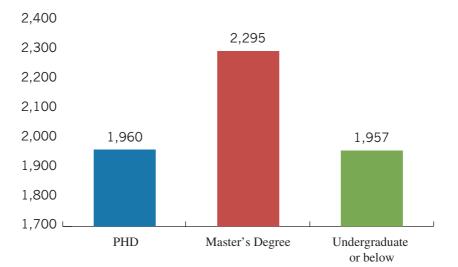
EMPLOYEES' PROFESSIONAL STRUCTURE AS FOLLOWS: (INCLUDING PRODUCTION, SALES, TECHNOLOGY, FINANCE, ADMINISTRATION AND OTHERS)



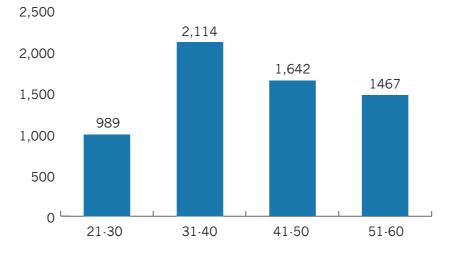


EDUCATIONAL BACKGROUND STRUCTURE FOR EMPLOYEES AS FOLLOWS: (INCLUDING MASTER'S DEGREE OR ABOVE, UNDERGRADUATE, JUNIOR COLLEGE, SENIOR HIGH SCHOOL AND TECHNICAL SCHOOL DEGREES OR BELOW)

TECHNOLOGY PERSONNEL EDUCATION STRUCTURE: (INCLUDING PHD, MASTER'S DEGREE, UNDERGRADUATE OR BELOW)



TECHNOLOGY PERSONNEL AGE STRUCTURE



18 CHANGES OF CORE TECHNICAL TEAM OR KEY TECHNICIANS

During the reporting period, there are no significant changes of core technical team or key technicians.

19 EMPLOYEE BENEFITS SCHEME

Details of the Company's employee benefits scheme are set out in Note 40 of the financial statements prepared under IFRS of this annual report. As at 31 December 2021, the Company has a total of 280,216 retired employees. All of them participated in the basic pension schemes administered by provincial governments (or those of autonomous regions or municipalities). Government-administered pension schemes are responsible for the payments of basic pensions.

20 REMUNERATION POLICY

Based on a relatively unified basic remuneration system, Sinopec Corp. has established its remuneration distribution system based on the value of positions, performance & contribution, with an aim to improve employee capabilities, and constantly improve employee performance evaluation and incentive & discipline mechanisms.

21 TRAINING PROGRAMS

In 2021, the Company strengthened coordination for training programs, took innovative approaches to establish high quality training system, and conducted training programs for all types of talents. The training for management staff became more systematic, with the 8-level echelon training system being constantly improved, covering new employees up to top management staff of subsidiaries, with an emphasis on middleaged and young management staff training programs. The technician, skilled worker and specialist training proved more practically effective, with programmes focusing on oil and gas exploration specialists' versatile knowledge and advanced study, high-end synthetic material specialists' research and study, "future scientist" creativity upgrading, state craftsman forging and upgrading. The programmes enhanced post exposure, basic skill training and contingent skill training. The international talent training was further strengthened, focusing on overseas project teams, with training projects covering overseas project managers, international trade managers, refining and chemical international talents. The headquarters trained 5,122 key talents of various types. In addition, the Company strengthened online training by rendering it more intelligent and tailor-made, and participants have spent over 50 million hours on the online training program during the year of 2021.

1 WORK CONDUCTED IN ECOLOGICAL PROTECTION, POLLUTION PREVENTION AND ENVIRONMENTAL RESPONSIBILITIES IMPLEMENTATION IN THE REPORTING PERIOD

In the reporting period, the Company targeted to build a world-leading clean energy and chemical company, stuck to green and clean development strategy, persistently carried out "green enterprise action", deepened the campaign of pollution prevention, kept environment risk from occurring, thus no substantial or sudden environmental incident happened. The COD and sulphur dioxide emissions decreased by 2.1% and 4.2% respectively, and the solid waste was 100% properly treated.

2 MEASURES TAKEN TO MITIGATE CARBON EMISSION AND ITS EFFECT IN THE REPORTING PERIOD

In the reporting period, the Company, guided by the carbon peak and carbon neutrality targets, advanced the "energy efficiency upgrading plan" in depth, persistently intensified carbon assets management, thus the energy saving and carbon reduction has been further improved. In 2021, the Company decreased its greenhouse gas emission by 2.38 million ton carbon dioxide equivalent, recycled 1.52 million tons of carbon dioxide, used 0.31 million tons of carbon dioxide for EOR, recycled 717 million cubic meters of methane which is equivalent to 10.75 million tons of carbon dioxide in terms of greenhouse gas emission.

3 ENVIRONMENTAL PROTECTION SOLUTIONS OF COMPANIES AND THEIR SUBSIDIARIES AS MAJOR POLLUTANT DISCHARGING COMPANIES IDENTIFIED BY ENVIRONMENTAL PROTECTION DEPARTMENTS

(1) Pollutant discharge information

In the reporting period, certain subsidiaries of Sinopec Corp. listed as major pollutant discharge units announced by national or local ecological and environmental authorities have disclosed environmental information in accordance with the requirements of the national list of fixed pollution source emission permit classification management and acquired their pollutant discharge license as required by the relevant authorities and local government. The details of such information was published on national pollutant discharge license management information platform (http://permit.mee.gov.cn/permitExt/ defaults/default-index!getInformation. action) and the local government website.

(2) Construction and operation of pollution prevention facilities

In the reporting period, the Company built prevention and control facilities for sewage, flue gas, solid waste and noise in accordance with the requirements of the national and local pollution prevention and environmental protection standards, kept effective and stable operation of pollution prevention and control facilities.

(3) Environmental influence evaluation for construction projects and other administrative permit for environmental protection

In the reporting period, the Company standardized environmental protection management for construction projects, enforced whole process construction and operation management, with measures of the "simultaneous three" implemented, all new projects have acquired approval for environmental evaluation from government.

(4) Contingent scheme for sudden environmental incident

In the reporting period, the Company complied with the requirements for environmental incident contingent scheme by the State, promulgated "contingent scheme for sudden environmental incidents", and persistently improved its contingent scheme against sudden environmental incidents of enterprises and severe pollution weather.

(5) Scheme for environment self-monitoring In the reporting period, the Company improved its self-monitoring scheme in accordance with the industry guideline, enforced the new requirements for sewage, flue gas and noise monitoring, and disclosed the monitor information as required.

(6) Administrative penalties due to environmental problems in the reporting period

In the reporting period, no penalty for significant environmental protection incident was imposed on the Company. The subsidiaries' administrative penalties have been disclosed in the website required by environment departments of local government.

(7) Other environmental information to be disclosed

In the reporting period, for subsidiaries not listed as major pollution units, the Company has acquired related permissions from national and local government, and enforces environmental protection measures. The above mentioned subsidiaries are not obliged to disclose in accordance with the requirements of national and local ecological environment authorities.

4 EXPAND THE ACHIEVEMENTS IN POVERTY-ALLEVIATION AND RURAL REVITALIZATION

In the reporting period, the Company focused its rural revitalisation efforts on the 8 counties designated for its assistance, the poverty of which has already been alleviated. The Company recognised industry, education and consumption as three main fields of work, and strengthened the linkage between the outcome of poverty alleviation and rural revitalization.

On 1 March 2021, Sinopec Corp. became the first to publish its 14th-five-year plan to support rural revitalization, mapped out its education and consumption support enforcement plans respectively, including the vision to be realized in the 14th-five-year period, the planed fund and major projects, which ensured the all-round support work. In 2021, the Company accumulatively dispatched 349 village teams and 925 village cadres to undertake 610 village-level support projects, invested and introduced to-be-paid and non-to-be-paid funds of RMB580 million in total, trained over 30,000 entry-level personnel and supported local consumption by RMB950 million.

5 SUPPORT THE WINTER OLYMPIC AND PARALYMPIC GAMES BEIJING 2022

As an official sponsor for Winter Olympic and Paralympic Games Beijing 2022, Sinopec Corp. proactively implemented its concept of "clean energy, serve the Winter Olympic Games", dedicated itself to service, supply and promotion for the Olympic Games. The Company facilitated the construction of oil and hydrogen energy stations, used the hydrogen it produced to fuel the Olympic torches, and supplied clean energy for the Games. Meanwhile, the Company developed and manufactured the carbon fibre synthetic material used in the coat of the "flying upward" torch, which has promoted the Company's brand concept of "cleaner energy, better life".



1 MAJOR PROJECTS

(1) Zhenhai refining & chemical expansion project (phase 1)

Zhenhai Refining & Chemical expansion project (phase 1) consists of 4,000,000 tpa crude oil modification project for old refinery and 1,200,000 tpa ethylene project. The project was approved in June 2018, ethylene and relevant projects started at the end of October 2018. The mechanical completion was finished in June 2021. The Company's self-owned fund accounts for 30% of the project investment, bank loan is the main source of the remaining 70%. As of 31 December 2021, the aggregate amount invested was RMB23 billion.

(2) Zhenhai refining & chemical expansion project (phase 2)

Zhenhai Refining & Chemical expansion project (phase 2) consists of building 11,000,000 tpa refinery project and 600,000 tpa propane dehydrogenatin and downstream projects. The project is expected to begin in March 2022 and mechanical completion is expected to be finished in June 2024. The Company's self-owned fund accounts for 30% of the project investment, bank loan is the main source of the remaining funds. As of 31 December 2021, the aggregate amount invested was RMB2.1 billion.

(3) Tianjin Nanggang ethylene and downstream high-end new material industry cluster project

Tianjin Nanggang Ethylene and downstream High-End New Material Industry Cluster Project consists of 1,200,000 tpa ethylene project and downstream processing units. The project began in May 2021 and mechanical completion is expected to be finished in the end of 2023. The Company's selfowned fund accounts for approximately 30% of the project investment and bank loan is the main source of the remaining funds. As of 31 December 2021, the aggregate amount invested was RMB3.0 billion.

(4) Wuhan de-bottleneck project

Wuhan de-bottleneck project expands the original an 800,000 tpa-to-1,100,000 tpa ethylene capacity expansion project. The project started at the end of October 2018 and mechanical completion was finished in June.2021. It's put into operation in Sep. 2021. The Company's self-owned fund accounts for approximately 30% of the project investment and bank loan is the main source of the remaining funds. As of 31 December 2021, the aggregate amount invested was RMB3.9 billion.

(5) Hainan 1,000,000 tpa ethylene and refining expansion project

Hainan Ethylene and Refining Expansion project mainly consists of 1,000,000 tpa ethylene and auxiliary units. The project started at the end of December 2018 and is expected to achieve the mechanical completion in Jun. 2022. The Company's self-owned fund accounts for approximately 30% of the project investment and bank loan is the main source of the remaining funds. As of 31 December 2021, the aggregate amount invested was RMB15.6 billion.

(6) Yifzheng PTA project

Yizheng 3 million tpa PTA project mainly consists of oxidation, purification units and auxiliary units. The project started in July 2021 and the mechanical completion is expected to be finished in Aug. 2023. The Company's self-owned fund accounts for 30% of the project investment, bank loan is the main source of the remaining funds. As of 31 December 2021, the aggregate amount invested was RMB0.65 billion. (7) Weirong shale gas project (phases 1 & 2) Guided by the principle of "overall deployment, stage-wise implementation

and fully consideration", the building of first phase of production capacity, which is 1 billion cubic meters per year, unfolded comprehensively since August 2018. The phase-one 1 billion-cubicmeter capacity was built up in December 2020. It is expected to complete phasetwo 2 billion-cubic-meter capacity in December 2022. The Company's selfowned fund accounts for 30% of the project investment and bank loan is the main source of the remaining funds. As of 31 December 2021, the aggregate amount invested was RMB6.3 billion.

(8) Tianjin LNG project (phase 2)

Tianjin LNG project (phase 2) mainly consists of a new wharf, five new 220,000-cubic-meter storage tanks etc. LNG capacity will reach 11 million tons per year after phase 2 is completed. The project started in January 2019 and is expected to put into operation in August 2023. The Company's self-owned fund accounts for approximately 30% of the project investment and bank loan is the main source of the remaining funds. As of 31 December 2021, the aggregate amount invested was RMB3.0 billion.

(9) Longkou LNG project

Longkou LNG project mainly consists of a wharf, terminal and power plant warm drainage and water Intake. The first phase designed LNG capacity is 6 million tons per year. One LNG berth with 0.266 million cubic meter capacity will be modified and four 0.22 million cubic meter capacity storage tanks will be newly built up. The project started in Nov. 2021 and is expected to put into operation in Nov. 2024. The Company's self-owned fund accounts for approximately 30% of the project investment and bank loan is the main source of the remaining funds. As of 31 December 2021, the aggregate amount invested was RMB1.4 billion.

2 PURCHASE OF EQUITY AND NON-EQUITY ASSETS

On 26 March 2021, Sinopec Corp. and Sinopec Group Asset Management Co., Ltd. ("Asset Company") entered into acquisition agreements to purchase the equity interest in Cangzhou Toray and the polypropylene and utilities assets, Sinopec Corp. and Orient Petrochemical entered into agreement to purchase equipment and related assets. On the same day, Overseas Investment Company of Sinopec Corp. and Century Bright Company entered into agreement to purchase equity interest in Hainan Refining and Chemical, Beihai Refining & Chemical of Sinopec Corp. and Beihai Petrochemical entered into agreement to purchase the nonequity assets including the pier operation platform. As of 1 July 2021, conditions precedent for closing in above agreements have been met, the ownership, obligations, responsibilities and risks of targeted assets have been transferred to Sinopec Corp. or its subsidiaries.

On 29 November 2021, Sinopec Corp. and Assets Company entered into the agreement on purchasing the equity assets, non-equity assets and liabilities of the production and operating business held by the Assets Company, Sinopec Yizheng Chemical Fibre Company Limited and Assets Company entered into the agreement on purchasing the equity assets, non-equity assets and liabilities of the production and operating business held by the Assets Company, Sinopec Corp. and Sinopec Beijing Yanshan Petrochemical Co., Ltd. entered into the agreement on purchasing the non-equity assets and liabilities of the production and operating business held by Sinopec Beijing Yanshan Petrochemical Co., Ltd. As of 1 December 2021, the ownership, obligations, responsibilities and risks of targeted assets have been transferred to Sinopec Corp. or its subsidiaries.

For details, please refer to the announcements published by Sinopec Corp. on China Securities Journal, Shanghai Securities News, Securities Times, and on the website of Shanghai Stock Exchange on 29 March 2021, 2 July 2021, 30 November 2021 and 2 December 2021, on the website of Hong Kong Stock Exchange on 28 March 2021, 1 July 2021, 29 November 2021 and 1 December 2021.

3. THE TRANSACTIONS WITH CHINA OIL & GAS PIPELINE NETWORK CORPORATION (PIPECHINA)

On 28 January 2021, the Board approved the continuing related party transaction cap in relation to refined oil pipeline transportation between Marketing Company and PipeChina for the period from 1 October 2020 to 31 December 2021. The aggregate amount of the continuing related party transaction of the Company from 1 January 2021 to 31 December 2021 was RMB5.93 billion.

4 PERFORMANCE OF THE UNDERTAKINGS BY CHINA PETROCHEMICAL CORPORATION

Background	Type of Undertaking	Party	Contents	Term for performance	Whether bears deadline or not	Whether strictly performed or not
Undertakings related to Initial Public Offerings (IPOs)	IPOs	China Petrochemical Corporation	 agreements; Solving the issues regarding the legality of land- use rights certificates and property ownership rights certificates within a specified period of time; Implementation of the Reorganisation Agreement (please refer to the definition of Reorganisation Agreement in the H share prospectus of Sinopec Corp.); Granting licenses for intellectual property rights; Avoiding competition within the same industry; Abandonment of business competition and conflicts 		No	Yes
Other undertakings	Other	China Petrochemical Corporation		d	Yes	Yes

As of the date of this report, Sinopec Corp. had no undertakings in respect of financial performance, asset injections or asset restructuring that had not been fulfilled, nor has Sinopec Corp. made any profit forecast in relation to any asset or project.

5 MATERIAL GUARANTEE CONTRACTS AND THEIR PERFORMANCE

Unit: RMB million

	Relationship with the Company	Name of guaranteed company	Amount*1	Transaction date (date of signing)	Period of guarantee	Туре	Principal debt condition	guaranty	Whether completed or not	Whether overdue or not	overdue	Counter- guaranteed	Whether guaranteed for connected parties yes or no)*2
inopec Corp.	The listed company	Zhongtian Hechuang	5,746	May-16	May 2016.December	Joint and several	Normal	-	No	No	-	No	No
	itself	Energy Co., Ltd			2023 (the mature date is estimated)	liability guarantee	performance						
inopec Corp.	The listed company	Zhong An United Coal	5,680	Apr-18	April 2018-December 2031	Joint and several	Normal	-	No	No	-	No	No
	itself	Chemical Co., Ltd.				liability guarantee	performance						
inopec Corp.	The listed company	Russian Amur	3,264*4	Dec-21	December 2021-December	Joint and several	Normal	-	No	No	-	No	No
	itself	Natural Gas Chemical Integrated LLC			2035 (the mature date is estimated)	liability guarantee	performance						
inopec Corp.	The listed company	Russian Amur	173	Jan-21	January 2021-June 2026	Joint and several	Normal	-	No	No	-	No	No
	itself	Natural Gas Chemical Integrated LLC			(the mature date is estimated)	liability guarantee	performance						
otal amount of gu	uarantees provided du	uring the reporting perio	d*4										3,437
otal amount of gu	uarantees outstanding	g at the end of reporting	period*4 (A)										14,863

Total amount of guarantee provided to controlled subsidiaries during the reporting period	0
Total amount of guarantee for controlled subsidiaries outstanding at the end of the reporting period (B)	11,157

Total amount of guarantees for the Company (including those provided for controlled subsidiaries)

Total amount of guarantees (A+B)	26,020
The proportion of the total amount of guarantees to the Sinopec Corp.'s net assets (%)	3.36
Guarantees provided for shareholder, de facto controller and its related parties (C)	0
Amount of debt guarantees provided directly or indirectly to the companies with liabilities to assets ratio over 70% (D)	9,117
The amount of guarantees in excess of 50% of the net assets (E)	0
Total amount of the above three guarantee items (C+D+E)	9,117
Statement of guarantee undue that might be involved in any joint and several liabilities	None
Statement of guarantee status	

* 1: Guarantee amount refers to the actual amount of guarantee liability that the company may undertake during the reporting period within the approved guarantee limit.

* 2: As defined in the Rules Governing the Listing of Stocks on Shanghai Stock Exchange.

* 3: Excluding the interest corresponding to the loan principal agreed in the guarantee contract, export credit premium and other expenses

* 4: The amount of guarantees provided during the reporting period and the outstanding balance of guarantees amount at the end of the reporting period include the guarantees provided by the controlled subsidiaries to external parties. The amount of the guarantees provided by these subsidiaries is derived from multiplying the guarantees provided by Sinopec Corp.'s subsidiaries by the percentage of shareholding of Sinopec Corp. in such subsidiaries.

For the details of the guarantees provided by Sinopec Corp. for Zhongtian Hechuang Energy Co., Lt, Zhong An United Coal Chemical Co., Ltd., and Russian Amur Natural Gas Chemical Integrated LLC in the above table, please refer to the Company's respective documents dated December 29, 2015, March 26, 2018, And April 16, 2020 26 January 2021 A notice disclosed on the website of the Shanghai Stock Exchange on 16 December 2021 and a circular dated 7 January 2016, a circular dated 23 March 2018, and a notice dated 15 December 2021, respectively disclosed on the website of the Hong Kong Stock Exchange.

6. SPECIFIC STATEMENTS AND INDEPENDENT OPINIONS FROM INDEPENDENT NON-EXECUTIVE DIRECTORS REGARDING OUTSTANDING EXTERNAL GUARANTEES PROVIDED BY THE COMPANY DURING AND BY THE END OF 2021:

We, as independent directors of Sinopec Corp., hereby make the following statements after conducting a thorough check of external guarantees provided by the Company accumulated up to and during 2021 in accordance with the requirements of the domestic regulatory authorities: The external guarantees prior to 2021 had been disclosed in previous annual report. The aggregate balance of outstanding external guarantees provided by Sinopec Corp. for the year 2021 was RMB26 billion, accounting for approximately 3.36% of the Company's net assets. The total amount of guarantees provided during the reporting period was RMB3.4 billion, accounting for approximately 0.44% of the Company's net assets. In accordance with the Articles of Association of the Company and the relevant laws and regulations and securities regulatory authorities on external guarantees, we hereby present the following opinions:

In the reporting period, Sinopec Corp. strictly complied with the approval requirements by regulatory authorities and stock exchanges at home and abroad. There was no violation of decision-making procedures for offering external guarantees, no misconduct impairing the company's and minority shareholders' interest, thus no witness of possible significant risks. Sinopec Corp. shall continue to strengthen its management and actively monitor guarantee risks. It shall strictly follow the approval and disclosure procedures in relation to guarantee businesses for any new external guarantees provided thereafter.

7 SIGNIFICANT LITIGATION, ARBITRATION RELATING TO THE COMPANY

No significant litigation, arbitration relating to the Company occurred during the reporting period.

8 INSOLVENCY AND RESTRUCTURING

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

9 OTHER MATERIAL CONTRACTS

Saved as disclosed by Sinopec Corp., the Company did not enter into any material contracts subject to disclosure obligations during the reporting period.

10 CREDIBILITY FOR THE COMPANY, CONTROLLING SHAREHOLDERS AND DE FACTO CONTROLLER

During the reporting period, the Company and its controlling shareholder did not fail to perform any effective judgments of the courts or fail to repay any substantial amount of debt due.

11 TRUSTEESHIP, CONTRACTING AND LEASES

During the reporting period, the Company was not involved in any events relating to significant trusteeship, contracting or leases for the assets of any other company, nor has it placed its assets with any other company under a trust, contracting or lease agreement subject to disclosure obligations.

12 ENTRUSTED FINANCING AND LOAN (1) ENTRUSTED FINANCING

During the reporting period, the Company was not involved in any entrusted financing.

unit : RMB million

unit : RMB million

(2) ENTRUSTED LOAN

		Transaction	Undue	
Class	Origin	amount	amount	Overdue
Working capital loan	Self-owned fund	(467)	154	0
Project construction loan	Self-owned fund	(42)	2,690	0

(3) OTHER LOAN

		Transaction	Undue	
Class	Origin	amount	amount	Overdue
Project construction loan	Self-owned fund	3,060	3,060	0

(4) OTHER FINANCING AND DERIVATIVE INVESTMENT

During the reporting period, the Company was not involved in other financing or derivative investment.

13 BUSINESS WITH SINOPEC FINANCE CO., LTD. (SINOPEC FINANCE) AND SINOPEC CENTURY BRIGHT CAPITAL INVESTMENT, LTD. (CENTURY BRIGHT)

(1) DEPOSIT

unit: RMB million

				Transaction amount			
				Balance	Total	Total	Balance
Related party	Related party relationship	Daily Cap	Interest rate range	at beginning	deposit	withdrawn	in the end
Sinopec Finance	Sinopec Group 51%;		current : 0.35%-1.725% ;	23,953	9,385	9,480	15,708
	Sinopec Corp.49%	RMB80 billion by Sinopec	time deposit: 1.35%-7.4%				
Century Bright	Sinopec Group 100%	Finance and Century Bright	current : 0%-0.25% ; time	29,464	197,800	176,800	45,974
			deposit: 0.08%-1.23%				

Note 1: generally, the deposit interest rate at Sinopec Finance and Century Bright is no lower than that of the same type of deposits for the same period from major commercial banks

Note 2: the current period's occurrence is on a time deposit basis.

(2) LOAN

unit: RMB million

					Transaction amount			
			Interest	Balance at	Total	Total	Balance	
Related party	Related party relationship	Daily Cap	rate range	beginning	loan	withdrawn	in the end	
Century Bright	Sinopec Group 100%	127,920	0.56%-4.25%	6,614	151,233	154,648	3,199	
Sinopec Finance	Sinopec Group 51%; Sinopec Corp. 49%	13,364	1.08%-5.23%	10,428	32,305	29,369	13,364	

Note: generally, the loan interest rate at Sinopec Finance and Century Bright is no higher than that of the same type of deposits for the same period from major commercial banks.

(3) CREDIT OR OTHER FINANCIAL BUSINESS

unit: RMB million

Related party relationship	Business	Total	Transaction
	nature	amount	amount
Sinopec Group 51%: Sinopec Corp. 49%	Credit	9,494	23,590
	Discounted bills	-	7,194
	Related party relationship Sinopec Group 51%; Sinopec Corp. 49%	Related party relationship nature Sinopec Group 51%; Sinopec Corp. 49% Credit	Related party relationship nature amount Sinopec Group 51%; Sinopec Corp. 49% Credit 9,494

Note: the occurred amount includes the newly issued bills and discounts in the year

In order to regulate related party transactions between the Company and Sinopec Finance Co., Ltd. (Sinopec Corp.'s domestic settlement center, hereinafter referred as the Finance Company) and to ensure the safety and liquidity of the deposits of the Company at the Finance Company, Sinopec Corp. and the Finance Company formulated the Risk Control System on Connected Transactions between China Petroleum & Chemical Corporation and Sinopec Finance Co., Ltd., which covers the risk control system and the risk management plan of the Company to prevent financial risks, ensuring the Company's discretion to use and control its deposits with the Finance Company. At the same time, as the controlling shareholder of the Finance Company, China Petrochemical Corporation undertook that in case of an emergency when the Finance Company has difficulty in making payments, China Petrochemical Corporation would increase the capital of the Finance Company to meet the need for the purpose of making payment.

In order to regulate related party transactions between the Company and Sinopec Century Bright Capital Investment, Ltd. (Sinopec Corp.'s overseas settlement center, hereinafter referred at the Century Bright Company), Century Bright Company ensures the safety of the deposits of the Company at Century Bright Company by strengthening internal risk controls and obtaining support from China Petrochemical Corporation. China Petrochemical Corporation has formulated a number of internal rules, including the Rules for the Internal Control System, the Rules for Implementation of Overseas Capital Management Methods, and the Provisional Methods for Overseas Fund Platform Management, to impose strict restrictions on Century Bright Company regarding the provision of overseas financial services. Century Bright Company has also established the Rules for the Implementation of the Internal Control System, which ensures the standardisation and safety of its corporate deposits business. At the same time, as the wholly controlling shareholder of Century Bright Company, China Petrochemical Corporation entered into a keep-well agreement with Century Bright Company in 2013, in which China Petrochemical Corporation undertakes that when Century Bright Company has difficulty in making payments, China Petrochemical Corporation will ensure that Century Bright Company will fulfill its repayment obligation through various channels.

The deposits of the Company at the Finance Company and Century Bright Company during the reporting period are in strict compliance with the relevant caps as approved at the general meeting of Sinopec Corp. During daily operations, the Company can withdraw the full amount of its deposits at the Finance Company and Century Bright Company.

14 APPROPRIATION OF NON-OPERATIONAL FUNDS BY THE CONTROLLING SHAREHOLDER AND ITS RELATED PARTIES AND THE PROGRESS FOR CLEARING UP Not applicable

15 STRUCTURED ENTITY CONTROLLED BY THE COMPANY None

16 INFLUENCE ON THE INDUSTRY FROM NEWLY-ENFORCED LAW, ADMINISTRATIVE RULES, REGULATIONS AND INDUSTRY POLICIES

In 2021, the NPC Standing Committee promulgated the Safety Production Law (revised in 2021) to strengthen the supervision on safety production. The State Council promulgated Sewage Permission Management Rules which set up a system to take sewage permit as core to monitor stationary pollution source. The NDRC promulgated Natural Gas Pipe Transportation Price Management Regulation and Natural Gas Pipe Transportation Pricing Cost Supervision Regulation (provisional) which specifies the trans-province natural gas pipe transportation pricing principle, method, procedures, cost structure and review method etc in detail.

In addition, governmental departments promulgated relevant carbon peak and carbon neutrality guidelines which stress on the need to curb high energy consumption and high emission projects, and promote green transformation and high quality development.

1 AGREEMENTS CONCERNING CONTINUING CONNECTED TRANSACTIONS BETWEEN SINOPEC CORP. AND CHINA PETROCHEMICAL CORPORATION

Prior to Sinopec Corp.'s overseas listing, in order to ensure the smooth continuation of production and business conducted by the Company and China Petrochemical Corporation, the two parties entered into the agreements on continuing connected transactions.

On 27 August 2021, Sinopec Corp. and China Petrochemical Corporation entered into the sixth supplemental agreement on continuing connected transactions. The resolution relating to continuing connected transactions for the three years from 2022 to 2024 was approved at the first extraordinary general meeting of Sinopec Corp. for the year of 2021 held on 20 October 2021. For details of the above continuing connected transactions, please refer to relevant announcements published on 30 August 2021 in China Securities Journal, Shanghai Securities News and Securities Times and on 29 August 2021 on the website of the Shanghai Stock Exchange and the website of the Hong Kong Stock Exchange. The capitalised terms used in this section shall have the same meaning as that used in the above-mentioned announcements.

2 COMPLIANCE OF DISCLOSURE AND APPROVALS OF CONTINUING CONNECTED TRANSACTIONS BETWEEN THE COMPANY AND SINOPEC GROUP WITH HONG KONG LISTING RULES AND THE SHANGHAI LISTING RULES

Pursuant to the Hong Kong Listing Rules and the Shanghai Listing Rules, the continuing connected transactions between the Company and Sinopec Group are subject to disclosure, independent non-executive directors' approval and/or independent shareholders' approval (if needed) based on the nature and the value of the transactions. Sinopec Corp. has fully complied with the above requirements in relation to the continuing connected transaction between the Company and Sinopec Group.

The aggregated amount of the continuing connected transactions for 2021 of the Company is in compliance with the relevant requirements of the Hong Kong Listing Rules and the Shanghai Listing Rules. For performance details of connected transaction agreements, please refer to Item 3 below.

3 ACTUAL CONTINUING CONNECTED TRANSACTIONS ENTERED INTO BY THE COMPANY DURING THE YEAR

Pursuant to the above-mentioned agreements on continuing connected transactions, the aggregate amount of the continuing connected transactions of the Company during the reporting period was RMB382.445 billion. Among which, purchases expenses amounted to RMB259.882 billion, representing 9.35% of the total amount of this type of transaction for the reporting period, including purchases of products and services (procurement, storage and transportation, exploration and development services, and production-related services) of RMB246.211 billion, purchases of auxiliary and community services of RMB1.730 billion, payment of property rent of RMB565 million, payment of land use right of RMB10.831 billion, other lease payment RMB159 million, and the interest expenses amounted to RMB386 million. The sales income amounted to RMB122.563 billion, representing 4.25% of the total amount of this type of transaction for the reporting period, including RMB121.676 billion for sales of products and services, RMB165 million for agency commission income, and RMB722 million for interest income.

The amounts of the above continuing connected transactions between the Company and Sinopec Group did not exceed the relevant caps for the continuing connected transactions as approved by the general meeting of shareholders and the Board.

The pricing principles for the continuing connected transactions are as follows:

- (a) The government-prescribed price, if any, will apply;
- (b) where there is no government-prescribed price but where there is a governmentguidance price, the government-guidance price will apply;
- (c) where there is neither a governmentprescribed price nor a governmentguidance price, the market price will apply; or
- (d) where none of the above is applicable, the price for the provision of the products or services is to be agreed between the relevant parties, which shall be the reasonable cost incurred in providing the same plus 6% or less of such cost.

For details of the pricing principle, please refer to relevant announcements published on 30 August 2021 in China Securities Journal, Shanghai Securities News and Securities Times and on 29 August 2021 on the website of the Shanghai Stock Exchange and the website of the Hong Kong Stock Exchange. Decision-making procedures:

The continuing connected transaction agreements were entered into in the ordinary course of the Company's business and in accordance with normal commercial terms that are fair and reasonable to the Company and its shareholders. The Company, according to its internal control procedures, adjusts the scope and the relevant caps of continuing connected transactions every three years, and will announce and implement upon the approval of the Board and/or independent shareholders. For the other connected transactions, Sinopec Corp., in strict compliance with domestic and overseas regulatory rules, will publish the announcement and implement the transactions only after submitting the relevant proposals of connected transactions to the Board and/or the general meeting of shareholders for consideration and approval according to internal control procedures.

5 FUNDS PROVIDED BETWEEN RELATED PARTIES

Related party transactions with the Sinopec Group that occurred during the year, as set out in Note 39 to the financial statements prepared under the IFRS in this annual report, also fall under the definition of connected transactions under Chapter 14A of the Hong Kong Listing Rules.

The above-mentioned connected transactions between the Company and Sinopec Group were approved at the 2nd meeting of the eighth session of the Board and have complied with the requirements under Chapter 14A of the Hong Kong Listing Rules.

The external auditor of Sinopec Corp. was engaged to report on the Company's continuing connected transactions in accordance with the Hong Kong Standard on Assurance Engagements 3000, Assurance Engagement Other Than Audits or Reviews of Historical Financial Information, and with reference to Practice Note 740. Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules, issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued its unqualified letter containing its conclusions in respect of the above-mentioned continuing connected transactions in accordance with Rule 14A.56 of the Hong Kong Listing Rules. Sinopec Corp. has submitted a copy of the auditor's letter to the Hong Kong Stock Exchange.

After reviewing the above-mentioned connected transactions, the independent non-executive directors of Sinopec Corp. have confirmed the following:

- (a) The transactions have been conducted in the ordinary course of the Company's business;
- (b) The transactions have been entered into based on either of the following terms:
 - i normal commercial terms; or
 - terms not less favorable than those available from or to independent third parties, where there is no available comparison to determine whether such terms are on normal commercial terms; and
- (c) The transactions were conducted pursuant to the terms of relevant agreements, and the terms were fair and reasonable and in the interests of Sinopec Corp. and its shareholders as a whole.

4 OTHER SIGNIFICANT CONNECTED TRANSACTIONS OCCURED THIS YEAR

For details, please refer to item 2 "purchase of equity and non-equity assets" and item 3 "The transactions with China Oil & Gas Pipeline Network Corporation" of the section "Significant Events".

Unit: RMB million

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	Funds Balance	to related p	arties	Funds from related parties Balance			
Related Parties	Relations	at the beginning of the year	Amount incurred	Balance at the end of the year	at the beginning of the year	Amount incurred	Balance at the end of the year
Sinopec Group	Parent company and affiliated companies*	10,645	(848)	9,797	9,670	21,012	30,682
Other related parties	Associates and joint ventures	11,328	(4,185)	7,143	6,087	(2,494)	3,593
Total		21,973	(5,033)	16,940	15,757	18,518	34,275
Reason for provision of funds between related parties		Loans and othe	er accounts r	eceivable and	payable		
Impacts on the Company	No material ne	gative impac	:t				

*: affiliated companies include subsidiaries, associates and joint ventures.



The Board is pleased to present the report of the Board of Directors for the year ended 31 December 2021 for the shareholders' review.

1 MEETINGS OF THE BOARD

During this reporting period, Sinopec Corp. held seven (7) Board meetings. The details are as follows:

- The 20th meeting of the seventh session of the Board was held by written proposals on 28 January 2021, whereby the proposals in relation to the following matters were approved:(i) the continuing connected transactions with China Oil & Gas Pipeline Network Corporation for the year 2020-2021; (ii) Information Disclosure Management Regulation; (iii) Investor Relations Management Regulation; (iv) the Internal Control Manual (2021).
- (2) The 21st meeting of the seventh session of the Board was held by onsite meeting and via video conference on 26 March 2021, whereby the proposals in relation to the following matters were approved: (i) the development strategy of Sinopec Corp. (ii) the Work Report of the seventh session of the Board; (iii) the Work Report of the seventh session of the Senior Management; (iv) financial results and business performance of the Company for the year 2020; (v) provision for impairment for the year 2020; (vi) the continuing connected transactions for the year 2020; (vii) profit distribution plan for the year 2020; (viii) audit costs for the year 2020; (ix) to authorize the Board to determine the interim profit distribution plan of Sinopec Corp. for the year 2021; (x) to authorize the Board to determine the plan for issuance of debt financing instrument(s); (xi) the report of Risk Assessment for Capital Deposits at Finance Company and Century Bright Company; (xii) change in the accounting firm; (xiii) Internal control assessment report of Sinopec Corp. for the year 2020; (xiv) Financial Statements of Sinopec Corp. for the year 2020; (xv) Annual Report of the Company for the year 2020; (xvi) Form 20F of the Company for the year 2020; (xvii) Acquisition of relevant assets and equities of the Sinopec Group;

(xviii) investment and construction of 11 million tonnes/year refinery and highend synthetic new materials project; (xix) the report of Sustainable Development of Sinopec Corp. for the year 2020; (xx) granting to the Board a general mandate to issue new domestic shares and/or overseas-listed foreign shares of Sinopec Corp.; (xxi) the re-election of the Board of Directors; (xxii) the reelection of the Board of Supervisors; (xxiii) Service Contract for the Directors of the eighth session of the Board (including remuneration clauses) and Supervisors of the eighth session of the Board of Supervisors (including remuneration clauses); (xxiv) Notice of 2020 Annual General Meeting.

- (3) The 22th meeting of the seventh session of the Board was held by way of written resolution on 28 April 2021, whereby the proposals in relation to the following matters were approved: (i) the first quarterly report for the three months ended 31 March 2021; (ii) transformation and upgrading of refining business and improvement of ethylene business for Maoming Branch.
- (4) The 1st meeting of the eighth session of the Board was held by on-site meeting and via video conference on 25 May 2021, whereby the proposals in relation to the following matters were approved: (i) election of the Chairman of the eighth session of the Board; (ii) to rename the Social Responsibility Management Committee and revise the Term of Reference of Social Responsibility Management Committee; (iii) the revision of the terms of reference of the Nomination Committee; (iv) composition of the special committees of the eighth session of the Board; (v) the appointment of President of Sinopec Corp.: (vi) the appointment of Senior Vice President, Vice President, Chief Financial Officer of Sinopec Corp.; (vii) the appointment of the Secretary to the Board of Sinopec Corp., the Authorized Representative of the Hong Kong Stock Exchange and the Authorized Representative of the Shanghai Stock Exchange.
- (5) The 2nd meeting of the eighth session of the Board was held by on-site meeting on 27 August 2021, whereby the proposals in relation to the following matters were approved: (i) the report on the fulfillment of the key targets for the first half of the year 2021 and the work arrangements for the second half of the year 2021; (ii) amendments to the Article of Association: (iii) profit distribution plan for the first half of the year 2021; (iv) the report of Risk Assessment for Capital Deposits at Finance Company and Century Bright Company; (v) the financial statements for the first half of the year 2021; (vi) interim report for the six months ended 30 June 2021; (vii) the continuing connected transactions for the year 2022 to 2024; (viii) establishment of a joint venture by Shanghai Petrochemical and Baling Petrochemical; (ix) investment and construction of 1.5 million tonnes/year ethylene project for Zhenhai Refinery & Chemical Branch; (x) Notice of 2021 First Extraordinary General Meeting.
- (6) The 3rd meeting of the eighth session of the Board was held by written resolution on 28 October 2021, whereby the proposal in relation to the third quarterly report for three months ended 30 September 2021 was approved.
- (7) The 4th meeting of the eighth session of the Board was held by way of written resolution on 29 November 2021, whereby the proposals in relation to the following matters were approved: (i) the election of the Chairman of the Board; (ii) adjustment of the composition of the board special committees; (iii) the appointment of President of Sinopec Corp.; (iv) acquisition of relevant assets and equities of Sinopec Group; (v) the Terms of Reference of the Independent Non-Executive Directors.

For details of each meeting, please refer to the announcements published in China Securities Journal, Shanghai Securities News and Securities Times after each meeting and on the websites of Shanghai Stock Exchange, Hong Kong Stock Exchange and Sinopec Corp.

2 IMPLEMENTATION OF RESOLUTIONS APPROVED AT THE GENERAL MEETINGS OF SHAREHOLDERS BY THE BOARD

During this reporting period, in accordance with relevant laws and regulations as well as the Articles of Association, all members of the Board diligently implemented the resolutions approved at the general meetings of Sinopec Corp., and had completed all the tasks delegated to them at the general meetings.

3 DIRECTORS' ATTENDANCE TO THE BOARD MEETINGS AND TO THE GENERAL MEETINGS

(1) Attendance to the board meetings and general meetings during the reporting period by the Directors of the eighth session of the Board

Director titles	Name	Board meeting					General meeting		
		No. of meetings held	On-site attendance	Meetings attended by communication	Meetings attend by proxy	Absent	No. of meetings held	Actual attendance	
Chairman	Ma Yongsheng	7	3	4	0	0	2	2	
Director	Zhao Dong	4	1	2	1	0	1	1	
Director	Yu Baocai	7	2	4	1	0	2	2	
Director	Ling Yiqun	7	3	4	0	0	2	0	
Director	Li Yonglin	4	2	2	0	0	1	0	
Director	Liu Hongbin	7	2	4	1	0	2	0	
Independent Director	Cai Hongbin	7	2	4	1	0	2	0	
Independent Director	Ng, Kar Ling Johnny	7	3	4	0	0	2	0	
Independent Director	Shi Dan	4	2	2	0	0	1	0	
Independent Director	Bi Mingjian	4	2	2	0	0	1	0	

(2) Attendance to the board meetings and general meetings during the reporting period by the former Directors of the eighth session of the Board

Director titles	Name			Board meeting Meetings Meetings			General meeting		
		No. of meetings held	On-site attendance	attend by communication	attend by proxy	Absent	No. of meetings held	Actual attendance	
Former Chairman	Zhang Yuzhuo	4	2	2	0	0	1	1	
Former Director	Zhang Shaofeng	3	1	2	0	0	1	0	
Former Independent Director	Tang Min	3	1	2	0	0	1	0	

Note 1: No directors were absent from two consecutive meetings of the Board.

Note 2: Mr. Zhang Yuzhuo resigned as the Chairman, Director of the Board on 2 August 2021.

(3) Attendance to the general meetings by the Independent Director

During the reporting period, none of the Independent Directors had attended the general meetings of shareholders in person due to Covid-19 pandemic or official duties.

4 MEETINGS HELD BY THE BOARD COMMITTEES

During the reporting period, the Board committees held ten (10) meetings, among which the Audit Committee held five (5) meetings, the Strategy Committee held one (1) meeting, the Remuneration and Appraisal Committee held one (1) meeting, the Sustainable Development Committee (formerly known as Social Responsibility Management Committee) held one (1) meeting, and the Nomination Committee held two (2) meetings. All members of each committee had attended the relevant meetings. Details of those meetings are as follows:

- (1) The 14th meeting of the seventh session of the Audit Committee was held by way of written resolution on 28 January 2021, whereby the proposal in relation to the Internal Control Manual (2021) was approved.
- (2) The 15th meeting of the seventh session of the Audit Committee was held by onsite meeting and via video conference on 25 March 2021, whereby the proposals in relation to the following matters were approved: (i) Financial results and business performance of the Company for the year 2020; (ii) Financial statements of Sinopec Corp. for the year 2020; (iii) Annual Report of the Company for the year 2020; (iv) Form 20F of the Company for the year 2020; (v) change in the accounting firm; (vi) Internal control assessment report of Sinopec Corp. for the year 2020; (vii) Report on audit work for 2020 and audit work arrangement for 2021.
- (3) The 16th meeting of the seventh session of the Audit Committee was held by way of written resolution on 28 April 2021, whereby the proposal in relation to the first quarterly report for the three months ended 31 March 2021 was approved.

- (4) The 1st meeting of the eighth session of the Audit Committee was held by on site meeting on 25 August 2021, whereby the proposals in relation to the following matters were approved: (i) Notes on financial results and business performance for the first half of the year 2021; (ii) Financial statements for the first half of the year 2021;(iii) Interim report for the six months ended 30 June 2021; (iv) Proposal in relation to the continuing connected transactions for the year 2022 to2024; (v) Report on the main audit work for the first half of 2021 and the overall arrangement of audit work for the second half of 2021.
- (5) The 2nd meeting of the eighth session of the Audit Committee was held by way of written resolution on 28 October 2021, whereby the proposal in relation to the third quarterly report for the three months ended 30 September 2021 was approved.
- (6) The 7th meeting of the seventh session of the Strategy Committee was held by way of written resolution on 25 March 2021, whereby the proposals in relation to the following matters were approved:(i) the development strategy of Sinopec Corp.; (ii) the investments plan of 2021 of Sinopec Corp.
- (7) The 3rd meeting of the seventh session of the Remuneration and Appraisal Committee was held by way of written resolution on 25 March 2021 whereby the proposal in relation to implementation of the rules of the remuneration of directors, supervisors and senior management for 2020 and the remuneration of the Board of Directors and the Board of Supervisors of the eighth session of the Board was approved.
- (8) The 3rd meeting of the seventh session of the Social Responsibility Management Committee was held by way of written resolution on 25 March 2021, whereby the proposals in relation to the following matters were approved:(i) Report of Sustainable Development of Sinopec Corp. for the year 2020; (ii) Report on the environmental protection work of Sinopec Corp. for the year 2020 and the plan of 2021; (iii) Report on the anticorruption compliance work of Sinopec Corp. for the year 2020 and the plan of 2021.

- (9) The 8th meeting of the seventh board of the Nomination Committee was held by way of written resolution on 25 March 2021, whereby the proposal in relation to the re-election of the Board of Directors was approved.
- (10) The 1st meeting of the eighth session of the Nomination Committee was held by on site meeting and via video conference on 25 May 2021, whereby the proposals in relation to the following matters were approved:(i) the appointment of President of Sinopec Corp.; (ii) the appointment of Senior Vice President, Vice President, Chief Financial Officer of Sinopec Corp.; (iii) the appointment of the Secretary to the Board of Directors of Sinopec Corp..
- 5 BOARD SPECIAL COMMITTEES ISSUED REVIEW OPINIONS TO THE BOARD WHEN PERFORMING THEIR DUTIES DURING THE REPORTING PERIOD, WITHOUT OBJECTION.

6 PERFORMANCE OF THE DIRECTORS' DUTIES

During the reporting period, the Directors of Sinopec Corp. fulfilled their duties diligently in accordance with the Articles of Association, actively attended Board meetings and meetings of the Board committees (please refer to the Report of the Board of Directors in this annual report for their attendance of the meeting), reviewed the relevant documents with due care. They utilised their professional expertise to provide suggestions on decision-making of the Company of significant events. The Directors maintained timely and effective communication with the management, external auditors and internal audit department, and promoted scientific decision-making by offering advice on the Company's development strategy, and operations and reform. The Independent Directors of Sinopec Corp. fulfilled their duties in good faith as required by Terms of Reference of the Independent Directors, put forward specific requirements on auditing, participated in the replacement of external auditor and other significant events, issued their independent opinions on matters such as appointment of senior management, connected transactions and profit distribution plan, and protected the legitimate interests of the minority shareholders' interests. All directors had no objection to the Company's resolutions, and every director's suggestions to the Company were accepted.

eport of the Board of Directors

Pursuant to requirements of securities regulatory authority of China, Independent Directors of Sinopec Corp. reviewed the performance of the senior management of Sinopec Corp. who held concurrent positions as senior management in China Petrochemical Corporation and issued a special opinion as follows: "The President Mr. Yu Baocai, Senior Vice President Mr. Ling Yiqun, Mr. Li Yonglin and Mr. Liu Hongbin, each of whom concurrently held position as senior management of China Petrochemical Corporation, have obtained the exemptions for holding concurrent position from CSRC in accordance with the applicable rules. In 2021, Mr. Yu Baocai, Mr. Ling Yiqun, Mr. Li Yonglin and Mr. Liu Hongbin strictly abided by the provisions of laws and regulations, the Articles of Association and the service contract, conscientiously fulfilled their duties of loyalty and diligence, devoted sufficient time and energy to organize production, operation and management in accordance with the decision and deployment of the Board, and earnestly implemented the decisions of the Board. They protected the interests of the Company and its shareholders effectively and had not violated the legitimate interests of Sinopec Corp. and its shareholders due to holding aforesaid concurrent positions in China Petrochemical Corporation."

7 BUSINESS PERFORMANCE

The financial results of the Company for the year ended 31 December 2021, which were prepared in accordance with IFRS and the financial position as at that date and the accompanying analysis are set out from page 155 to page 215 in this annual report. A fair review of the Company's business, a discussion and analysis on business performance using financial key performance indicators and the material factors underlying our results and financial position during the reporting period, particulars of significant events affecting the Company and the outlook of the Company's business are discussed throughout this annual report and included in the sections "Chairman's Address", "Business Review and Prospects", "Management's Discussion and Analysis" and "Significant Events" of this annual report. All of the above discussions constitute parts of the report of the Board of Directors.

8 DIVIDEND

The profit distribution policy of Sinopec Corp. maintains consistency and steadiness and considers the long-term interests of the Company, overall interests of all the shareholders and the sustainable development of the Company. Sinopec Corp. gives priority to adopting cash dividends for profit distribution and is allowed to deliver an interim profit distribution. When the net profits and retained earnings of the Company are positive in current year and in the event that the cash flow of Sinopec Corp. can satisfy the normal operation and sustainable development, Sinopec Corp. should adopt cash dividends and the distribution profits in cash every year are no less than 30% of the net profits of the Company realised during the corresponding year.

The profit distribution plan of Sinopec Corp. for the corresponding year will be carried out in accordance with the policy and procedures stipulated in the Articles of Association, taking into account the advice from the minority shareholders. Meanwhile, the Independent Directors will issue independent opinions.

Proposals for dividend distribution

At the 7th meeting of the eighth session of the Board, the Board approved the proposal to distribute a final cash dividend of RMB0.31 (tax inclusive) per share for 2021. Taking into account the distributed interim dividend of RMB0.16 (tax inclusive) per share for the first half of 2021, the total dividend for the whole year is RMB0.47 (tax inclusive) per share.

The final cash dividend will be distributed on or before Thursday, 23 June 2022 to all shareholders whose names appear on the register of members of Sinopec Corp. on the record date of Thursday, 9 June 2022. In order to qualify for the final dividend for H shares, the holders of H shares must lodge all share certificates accompanied by the transfer documents with Hong Kong Registrars Limited located at 1712-1716, 17th Floor Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong before 4:30 p.m. on Wednesday, 1 June 2022 for registration. The H shares register and transfer of members of Sinopec Corp. will be closed from Thursday, 2 June 2022 to Thursday, 9 June 2022 (both dates inclusive). The dividend will be denominated and declared in RMB, and distributed to the domestic shareholders and investors participating in the Shanghai-Hong Kong and Shenzhen-Hong Kong Stock Connect Programmes in RMB and to the overseas shareholders in Hong Kong Dollar. The exchange rate for the dividend calculated in Hong Kong Dollar is based on the average benchmark exchange rate of RMB against Hong Kong Dollar as published by the People's Bank of China one week preceding the date of the declaration and distribution of such dividend.

In accordance with the Enterprise Income Tax Law of the People's Republic of China and its implementation regulations which came into effect on 1 January 2008, Sinopec Corp. is required to withhold and pay enterprise income tax at the rate of 10% on behalf of the non-resident enterprise shareholders whose names appear on the register of members for H Shares of Sinopec Corp. when distributing the cash dividends or issuing bonus shares by way of capitalisation from retained earnings. Any H Shares of the Sinopec Corp. which are not registered under the name of an individual shareholder, including those registered under HKSCC Nominees Limited, other nominees, agents or trustees, or other organisations or groups, shall be deemed as shares held by nonresident enterprise shareholders. On such basis, enterprise income tax shall be withheld from dividends payable to such shareholders. If holders of H Shares intend to change their shareholder status, please enquire about the relevant procedures with your agents or trustees. Sinopec Corp. will strictly comply with the law or the requirements of the relevant government authority to withhold and pay enterprise income tax on behalf of the relevant shareholders based on the registration of members for H shares of Sinopec Corp. as at the record date.

If the individual holders of H shares are residents of Hong Kong, Macau or countries which had an agreed tax rate of 10% for cash dividends or bonus shares by way of capitalisation from retained earnings with China under the relevant tax agreement, Sinopec Corp. should withhold and pav individual income tax on behalf of the relevant shareholders at a rate of 10%. If the individual holders of H Shares are residents of countries which had an agreed tax rate of less than 10% with China under relevant tax agreement, Sinopec Corp. shall withhold and pay individual income tax on behalf of the relevant shareholders at a rate of 10%. In that case, if the relevant individual holders of H Shares wish to reclaim the extra amount withheld due to the application of 10% tax rate, Sinopec Corp. would apply for the relevant agreed preferential tax treatment pursuant to the relevant tax agreement provided that the relevant shareholders submit the evidence required by the notice of the tax agreement to the share register of H Shares of Sinopec Corp. in a timely manner. Sinopec Corp. will assist with the tax refund after the approval of the competent tax authority. If the individual holders of H Shares are residents of countries which had

an agreed tax rate of over 10% but less than 20% with China under the tax agreement, Sinopec Corp. shall withhold and pay the individual income tax at the agreed actual rate in accordance with the relevant tax agreements. If the individual holders of H Shares are residents of countries which had an agreed tax rate of 20% with China, or which had not entered into any tax agreement with China, or otherwise, Sinopec Corp. shall withhold and pay the individual income tax at a rate of 20%.

Pursuant to the Notice on the Tax Policies Related to the Pilot Program of the Shanghai-Hong Kong Stock Connect (關於滬港股票市 場交易互聯互通機制試點有關税收政策的通知) (Caishui [2014] No. 81) and the Notice on the Tax Policies Related to the Pilot Program of the Shenzhen-Hong Kong Stock Connect (《關於深港股票市場交易互聯互通機制試點有關税 收政策的通知》) (Caishui [2016] No.127):

For dividends of domestic investors investing in the H Shares of Sinopec Corp. through Shanghai-Hong Kong and Shenzhen-Hong Kong Stock Connect Program, the Company shall withhold and pay income tax at the rate of 20% on behalf of individual investors and securities investment funds. The Company will not withhold or pay the income tax of dividends for domestic enterprise investors and those domestic enterprise investors shall report and pay the relevant tax by themselves.

For dividends of investors of the Hong Kong Stock Exchange (including enterprises and individuals) investing in the A Shares of Sinopec Corp. through Shanghai-Hong Kong Stock Connect Program, the Company will withhold and pay income taxes at the rate of 10% on behalf of those investors and will report to the competent tax authorities for the withholding. For investors who are tax residents of other countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of lower than 10%, the enterprises and individuals may, or may entrust a withholding agent to, apply to the competent tax authorities for the entitlement of the rate under such tax treaty. Upon approval by the tax authorities, the amount paid in excess of the tax payable based on the tax rate according to such tax treaty will be refunded.

According to the PRC Accounting Standards, the dividend distribution and bonus shares declared by Sinopec Corp. in the past three years are as follows:

	2021	2020	2019
Cash dividends (RMB/Share, tax inclusive)	0.47	0.20	0.31
Total amount of cash dividends (RMB billion, tax inclusive)	569.03	242.14	375.33
Net profits attributed to the shareholders of the listed company shown in the			
consolidated statement for the dividend year (RMB billion)	712.08	332.71	576.43
Ratio of the dividends to the net profit attributed to the shareholders of		·	
the listed company in the consolidated statement (%)	79.9	72.8	65.1

Note: The final cash dividend for 2021 is subject to the approval at the 2021 annual general meeting.

The aggregate cash dividend declared by Sinopec Corp. during three years from 2019 to 2021 is RMB0.98 per share, and the total dividend payment from 2019 to 2021 as a percentage of average net profit attributed to the shareholders of the listed company in the three years is 220%.

9 RESPONSIBILITIES FOR THE COMPANY'S INTERNAL CONTROL

The Board is fully responsible for establishing and maintaining the internal control system related to the financial statements as well as ensuring its effective implementation. In 2021, the Board assessed and evaluated the internal control of Sinopec Corp. according to the Basic Standard for Enterprise Internal Control, Application Guidelines for Enterprise Internal Control and Assessment Guidelines for Enterprise Internal Control. There were no material defects in relation to the internal control system as of 31 December 2021. The internal control system of Sinopec Corp. related to the financial statements is sound and effective. 2021 Internal Control Assessment Report of Sinopec Corp. was reviewed and approved at the 7th meeting of the eighth session of the Board on 25 March 2022, and all members of the Board warrant that the contents of the report are true, accurate and complete, and there are no false representations, misleading statements or material omissions contained in the report.

10 DURING THE REPORTING PERIOD, THE IMPLEMTATION OF ENVIRONMENTAL POLICIES BY THE COMPANY

During the reporting period, the Company complied with the environmental policy in all material aspects. Details with regard to the Company's performance in relation to environmental and social-related policies and performances are provided in the section "Environment and Social Responsibilities" in this annual report as well as the 2021 Sustainability Report of Sinopec Corp.

11 DURING THE REPORTING PERIOD, THE COMPANY DID NOT VIOLATE LAWS OR REGULATIONS WHICH HAVE A MATERIAL IMPACT ON THE COMPANY

12 MAJOR SUPPLIERS AND CUSTOMERS

During the reporting period, the total value of the purchasing from the top five crude oil suppliers of the Company accounted for 31% of the total value of the crude oil purchasing by the Company, of which the total value of the purchasing from the largest supplier accounted for 12% of the total value of the crude oil purchasing by the Company.

The total revenue from the five largest customers of the Company in 2021 was RMB216,201 million, accounting for 7.89% of the total revenue of the Company, of which the sales value to the connected party Sinopec Group among the five largest customers was RMB73,186 million, accounting for 2.67% of the total revenue for the year.

During the reporting period, other than disclosed above, to the best knowledge of the Board of the Directors of the Company, none of the Directors of the Company, their close associates, and shareholders holding more than 5% of the shares of the Company had any interest in the top five suppliers or the top five customers of the Company. There were no suppliers, customers, employees or others that have a significant impact on the Company and on which the Company's success depends.

13 BANK LOANS AND OTHER BORROWINGS

Details of bank loans and other borrowings of the Company as of 31 December 2021 are set out in Note 30 to the financial statements prepared in accordance with IFRS in this annual report.

14 FIXED ASSETS

During the reporting period, changes to the fixed assets of the Company are set out in Note 17 to the financial statements prepared in accordance with IFRS in this annual report.

15 RESERVES

During the reporting period, the changes to the reserves of the Company are set out in the consolidated statement of changes in shareholders' equity in the financial statements prepared in accordance with IFRS in this annual report.

16 DONATIONS

During the reporting period, the amount of charity donations made by the Company amounted to RMB165 million.

17 PRE-EMPTIVE RIGHTS

Pursuant to the Articles of Association and the laws of the PRC, the shareholders of Sinopec Corp. are not entitled to any pre-emptive rights. Therefore the existing shareholders cannot request Sinopec Corp. to issue shares to them on a preferential basis in proportion to their shareholdings.

18 REPURCHASE, SALES AND REDEMPTION OF SHARES

During the reporting period, neither Sinopec Corp. nor any of its subsidiaries repurchased, sold or redeemed any listed shares of Sinopec Corp. or its subsidiaries.

19 DIRECTORS' INTERESTS IN COMPETING BUSINESS

As at the end of the reporting period, the Company has resolved its competition with Sinopec Group in the chemical business. For details for the positions held by the Directors (excluding Independent Non-Executive Directors) of Sinopec Corp. in the Sinopec Group during the reporting period, please refer to the section "Corporate Governance" of this annual report.

20 DIRECTORS' INTERESTS IN CONTRACTS

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

21 MANAGEMENT CONTRACTS

No contracts concerning management or administration of the whole or any substantial part of the business of the Company were entered into or existed during the reporting period.

22 PERMITTED INDEMNITY PROVISIONS

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

23 EQUITY-LINKED AGREEMENTS

As of 31 December 2021, the Company has not entered into any equity-linked agreement.

24 OIL & GAS RESERVE APPRAISAL PRINCIPLES

We manage our reserves estimation through a two-tier management system. Our Oil and Natural Gas Reserves Management Committee, or RMC, at the headquarters level oversees the overall reserves estimation process including organisation, coordination, monitoring and major decision-making, and reviews the reserves estimation of our Company. Each of our branches has a reserves management committee that manages and coordinates the reserves estimation, organises the estimation process and reviews the reserve estimation report at the branch level, being responsible to the RMC of the Company. Our RMC consists of the senior management of the Company, related departments of headquarters, Petroleum Exploration and Production Research Institute of Sinopec (PEPRIS) and senior managers of oilfield branches. Mr. Liu Hongbin, the Chairman of RMC is Senior Vice President of Sinopec Corp., with over 30 years of experience in oil and gas industry. A majority of our RMC members hold master's or Ph.D. degrees, and have an average of more than 20 years of technical experience in relevant professional fields, such as geology, engineering and economics.

Our reserves estimates are guided by procedural manuals and technical guidance formulated by the Company. A number of working divisions at the production bureau level, including the exploration, development and financial divisions, are responsible for initial collection and compilation of information about reserves. Experts from exploration, development and economic divisions prepare the initial report on the reserves estimate which is then reviewed by the RMC at the subsidiary level to ensure the qualitative and quantitative compliance with technical guidance as well as its accuracy and reasonableness. We also engage external consultants to assist in our compliance with the rules and regulations of the U.S. Securities and Exchange Commission. Our reserves estimation process is further facilitated by a specialised reserves database, which is improved and updated periodically.

25 CORE COMPETITIVENESS ANALYSIS

The Company is a large scale integrated energy and petrochemical company with upstream, mid-stream and downstream operations. The Company is a large scaled oil and gas producer in China; in respect of refining capacity, it ranks first in China; equipped with a well-developed refined oil products sales network, the Company is the largest supplier of refined oil products in China; and in terms of ethylene production capacity, the Company ranks first in China, and has a well-established marketing network for chemical products.

The integrated business structure of the Company carries strong advantages in synergy among its various business segments, enabling the Company to continuously tap onto potentials in attaining an efficient and comprehensive utilisation of its resources, and endowed the Company with strong resistance against risks, as well as remarkable capabilities in sustaining profitability.

The Company enjoys a favourable positioning with its operations located close to the consumer markets. Along with the steady growth in the Chinese economy, sales volume of both refined oil products and chemical products of the Company has been increasing steadily over the years; through continuous and specialised marketing efforts, the Company's capability in international operations and market expansion has been further enhanced. The Company owns a team of professionals with expertise in the production of oil and gas, operation of refineries and chemical plants, as well as marketing activities. The Company applies outstanding fine management measures with its remarkable capabilities in management of operations, and enjoys a favourable operational cost advantage in its downstream businesses.

The Company has formulated a wellestablished technology system and mechanism, and owns competent teams specialised in R&D covering a wide range of subjects; the four platforms for technology advancement is taking shape, which includes exploration and development of oil and gas, refining, petrochemicals and strategic emerging technology. With its overall technologies reaching state of the art level in the global arena, and some of them taking the lead globally, the Company enjoys a strong technical strength.

The Company always attaches great importance to the fulfilment of social responsibilities, and carries out the green and low carbon development strategy to pursue a sustainable development. Moreover, the Company enjoys an outstanding "Sinopec" brand name, plays an important role in the national economy and is a renowned and reputable company in China.

26 RISK FACTORS

In the course of its production and operations, the Company will actively take various measures to circumvent operational risks. However, in practice, it may not be possible to prevent the occurrence of all risks and uncertainties described below.

Risks with regard to the variations from macroeconomic situation: The business results of the Company are closely related to China's and global economic situation. China achieved remarkable results in pandemic prevention and control, and its economy continued to grow. World economic recovery was weak, and with significant imbalance situation. The development of economy is increasingly constrained by climate change and environmental issues. The Company's business could also be adversely affected by other factors such as the impact on export due to trade protectionism from certain countries, and negative impact on the investment of overseas oil and gas exploration and development and refining and chemical storage projects which results from the uncertainty of geopolitics, international crude oil price and etc.

Risks with regard to the cyclical effects

from the industry: The majority of the Company's operating income comes from the sales of refined oil products and petrochemical products, and part of those businesses and their related products are cyclic and are sensitive to macro-economy, cyclic changes of regional and global economy, the changes of the production capacity and output, demand of consumers, prices and supply of the raw materials, as well as prices and supply of the alternative products etc. Although the Company is an integrated company with upstream, midstream and downstream operations, it can only counteract the adverse influences of industry cycle to a certain extent.

Risks from the macroeconomic policies and government regulation: Although the

Chinese government is gradually liberalizing the market entry regulations on petroleum and petrochemicals sector, the petroleum and petrochemical industries in China are still subject to entry regulations to a certain degree, which include: issuing the exploration and development licenses of crude oil and natural gas; issuing licenses in relation to exploration and development of crude oil and natural gas, issuing business licenses for trading crude oil and refined oil, setting caps for retail prices of gasoline, diesel and other oil products, the imposition of the special oil income levy; the formulation of refined oil import and export quotas and procedures; the formulation of safety, quality and environmental protection standards and the formulation of energy conservation policies. In addition, the changes which have occurred or might occur in macroeconomic and industry policies such as the opening up the right of managing and using of imported crude oil; reforming and improvement in pricing mechanism of natural gas, cost supervision of gas pipeline and access to third party; cancellation of qualification approval of the wholesale and storage of refined oil business, decentralisation of retail business authorisation of refined oil products to regional and city level government, further improvement in pricing mechanism of refined oil products, gas stations investment being fully opened to foreign investment; and reforming in resource tax and environmental tax, etc. Such changes might further intensify market competition and have certain effects on the operations and profitability of the Company.

Risks with regard to the changes from environmental legislation requirements: Our production activities generate waste liquids, gases and solids. The Company has built up the supporting effluent treatment systems to prevent and reduce the pollution to the environment. However, the relevant government authorities may issue and implement much stricter environmental protection laws and regulations, adopt much stricter environment protection standards. Under such situations, the Company may increase expenses in relation to the environment protection accordingly.

Risks from the uncertainties of obtaining additional oil and gas resources: The future sustainable development of the Company is partly dependent to a certain extent on our abilities in continuously discovering or acquiring additional oil and natural gas resources. To obtain additional oil and natural gas resources, the Company faces some inherent risks associated with exploration and development and/or with acquisition activities, and the Company has to invest a large amount of money with no guarantee of certainty. If the Company fails to acquire additional resources through further exploration, development and acquisition to increase the reserves of crude oil and natural gas, the oil and natural gas reserves and production of the Company may decline over time which may adversely affect the Company's financial situation and operation performance.

of currencies in terms of the exchange rate of Renminbi. As the Company purchases a significant portion of crude oil in foreign denominated prices, the realized price of crude oil is based on international crude oil price. Despite the fact that, the price

of crude oil: A significant amount of crude oil as needed by the Company is satisfied through external purchases. In recent years, especially influenced by the continues spread of COVID-19 pandemic, mismatch between supply and demand of crude oil. geopolitics, global economic growth and other factors, the prices of crude oil fluctuate sharply. Additionally, the supply of crude oil may even be interrupted due to some extreme major incidents in certain regions. Although the Company has taken flexible countermeasures, it may not fully avoid risks associated with any significant fluctuation of international crude oil prices and sudden disruption of supply of crude oil from certain regions. Risks with regard to the operation and

Risks with regard to the external purchase

natural disasters: The process of petroleum chemical production is exposed to the high risks of inflammation, explosion, toxicity, harm and environmental pollution and is vulnerable to extreme natural disasters. Such contingencies may cause serious impacts to the society, major financial losses to the Company and grievous injuries to people. The Company has always been laying great emphasis on the safety production, and has implemented a strict HSSE management system as an effort to avoid such risks as far as possible. Meanwhile, the main assets and inventories of the Company as well as the possibility of damage to a third party have been insured. However, such measures may not shield the Company from financial losses or adverse impact resulting from such contingencies.

Investment risks: Petroleum and chemical sector is a capital intensive industry. Although the Company has adopted a prudent investment strategy, as stipulated and enforced by the new investment decision-making rules in 2021, developed negative investment lists, and conducted rigorous feasibility study and risk evaluation on each investment project, which consists of special verifications in raw material market, technical scheme, profitability, safety and environmental protection, legal compliance, etc., certain investment risks will still exist and expected returns may not be achieved due to major changes in factors such as market environment, prices of equipment and raw materials, and construction period during the implementation of the projects.

Risks with regard to overseas business development and management: The Company engages in oil and gas exploration, refining and chemical, warehouse logistics and international trading businesses in some regions outside China. The Company's overseas businesses and assets are subject to the jurisdiction of the host country's laws and regulations. In light of the complicated factors such as changes in international geopolitics, spread of COVID-19, uncertainty of economic recovery, imbalance of global economy, competitiveness of industry and trade structure, exclusiveness of regional trading blocs, polarisation of benefits distribution in trade, and politicisation of economic and trade issues, including sanctions, barriers to entry, instability in the financial and taxation policies, contract defaults, tax dispute, the Company's risks with regard to overseas business development and management could be increased.

of the domestic refined oil products will change as the exchange rate of the Renminbi changes according to the pricing mechanism for the domestic refined oil products, and the price of other domestic petrochemical products will also be influenced by the price of the imported products, which to a large extent, smooths the impact of the Renminbi exchange rate on the processing and sales of the Company's crude oil refined products. However, the fluctuation of the Renminbi exchange rate will still have an effect on the income of the upstream sector. Cyber-security risks: The Company has a well-established network safety system. We establish an emergency response mechanism in relation to network security operation and information system, build an information platform of network security risk management and control, and devote significant resources to protecting our digital infrastructure and data against cyber-attacks. However, if our systems against cyber-security risk are proved to be ineffective, we could be adversely affected by, among other things, disruptions to our business operations, and loss of proprietary information, including, intellectual property, financial information and employer and customer data, thus causing harm to our personnel, property, environment and reputation. As cyber-security attacks continue to evolve, we may be required to expend additional resources to enhance our protective measures against cyber-security

Currency risks: At present, China implements an administered floating exchange rate

regime based on market supply and demand

which is regulated with reference to a basket

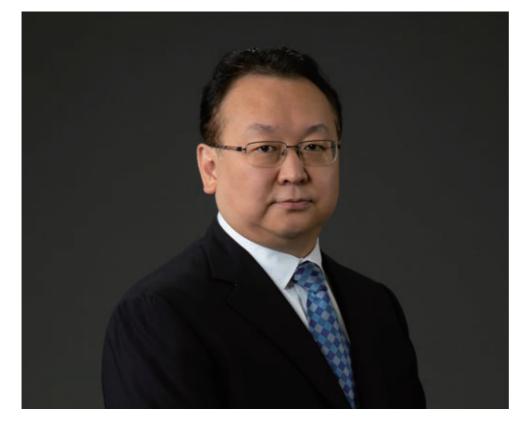
currency which is based on US dollar-

By Order of the Board Ma Yongsheng Chairman

Beijing, China, 25 March 2022

breaches.





Dear Shareholders:

In 2021, the Board of Supervisors and each supervisor of Sinopec Corp. diligently performed their supervision responsibilities, actively participated in the supervision process of decision making, carefully reviewed and effectively supervised the major decisions of the Company, and endeavored to safeguard the interests of shareholders and the Company in accordance with the PRC Company Law and the Articles of Association of Sinopec Corp.

During the reporting period, the Board of Supervisors held five (5) meetings in total, and mainly reviewed and approved the proposals in relation to the Company's annual report, financial statements, sustainable development report, internal control assessment report and working report of the Board of Supervisors etc. On 26 March 2021, the 12th meeting of the seventh session of the Board of Supervisors was held, and the proposals in relation to Annual Report of Sinopec Corp. for 2020, the Financial Statements of Sinopec Corp. for 2020, Sustainable Development Report of Sinopec Corp. for 2020, Internal Control Assessment Report of Sinopec Corp. for 2020, Work Report of the Board of Supervisors of Sinopec Corp. for 2020, Work Report of the 7th Session of Board of Supervisors of Sinopec Corp. for 2021, were reviewed and approved at the meeting.

On 28 April 2021, the 13th meeting of the seventh session of the Board of Supervisors was held, and the proposal in relation to the First Quarterly Report of Sinopec Corp. for the three months ended 31 March 2021 was reviewed and approved at the meeting.

On 25 May 2021, the 1st meeting of the eighth session of the Board of Supervisors was held, on which Mr. Zhang Shaofeng was elected as Chairman of the eighth session of the Board of Supervisors.

On 27 August 2021, the 2nd meeting of the eighth session of the Board of Supervisors was held, the Interim Financial Statements of Sinopec Corp. for 2021, the Interim Report of Sinopec Corp. for 2021 for 2021 and the proposal of continuing connected transactions for 2022 to 2024, were reviewed and approved at the meeting.

On 28 October 2021, the 3rd meeting of the eighth session of the Board of Supervisors was held, and the Third Quarterly Report of Sinopec Corp. for the three months ended 31 September 2021 was reviewed and approved at the meeting.

In addition, the Company organised the supervisors to attend the general meetings of shareholders and meetings of the Board. The Company also organised some of the supervisors to attend the trainings for directors and supervisors of listed companies organised by Beijing Securities Supervisory Bureau under CSRC, which have further improved the Supervisors' capabilities in performing supervisory duties.

Through supervision and inspection on the production and operation management as well as financial management, the Board of Supervisors and all the supervisors conclude that in 2021, although the COVID-19 pandemic accelerates unprecedented change in a century and the external situation tends to be more complicated and severe, China is establishing its new development pattern, with all industries restructuring and deep adjustment. Energy development has entered into a phase of transformative and qualitative change. The Company conscientiously implements the decision-making and deployment of the board of directors to improve performance, coordinates energy supply, scores new achievements in scientific and technological innovation and promotes all work as a whole to maintain the steady advance of business operations, and achieves the best business performance in the company's history. The Board of Supervisors had no objection to the supervised issues during the reporting period.

Firstly, the Board and the senior management of Sinopec Corp. performed their responsibilities pursuant to relevant laws and regulations, and implemented efficient management. The Board diligently fulfilled its obligations and exercised its rights under the PRC Company Law and the Articles of Association, and made informed decisions on major issues. The senior management diligently executed the resolutions approved by the Board, made all-out efforts to tap potentials and enhance efficiency, optimise business structures, committed to achieving the target of business operations set by the Board. During the reporting period, the Board of Supervisors did not discover any behavior of any director or senior management which violated laws, regulations, or the Articles of Association, or was detrimental to the interests of Sinopec Corp. or its shareholders.

Secondly, the reports and financial statements prepared by Sinopec Corp. in 2021 complied with the relevant regulation of domestic and overseas securities regulators, the disclosed information truly, accurately, completely and fairly reflected Sinopec Corp.'s financial results and operation performance. The dividend distribution plan was made after comprehensive consideration of the long-term interests of Sinopec Corp. and the interests of the shareholders. No violation of confidential provisions of persons who prepared and reviewed the report was found. Thirdly, Sinopec Corp.'s internal control system was effective. No material defects of internal control were found.

Fourthly, the consideration for assets transactions made by Sinopec Corp. was fair and reasonable, neither insider trading, damage to shareholders' interest nor losses of corporate assets were discovered.

Fifthly, all connected transactions between the Company and Sinopec Group were in compliance with the relevant rules and regulations of domestic and overseas listing exchanges. The pricing of all the connected transaction was fair and reasonable. No behavior detrimental to the interests of Sinopec Corp. or its shareholders was discovered.

In 2022, the Board of Supervisors and each supervisor will continue to follow the principle of due diligence and integrity, earnestly perform the duties of supervision as delegated by the shareholders, strictly review the significant decisions, strengthen the process control and supervision, increase the strength of inspection and supervision on subsidiaries and protect Sinopec Corp.'s benefit and its shareholders' interests.

> **Zhang Shaofeng** *Chairman of the Board of Supervisors*

> > 25 March 2022

1 CHANGES IN THE SHARE CAPITAL

There was no change in the number and nature of shares of Sinopec Corp. during the reporting period

2 NUMBER OF SHAREHOLDERS AND THEIR SHAREHOLDINGS

As of 31 December 2021, the total number of shareholders of Sinopec Corp. was 517,592 including 512,026 holders of A shares and 5,566 holders of H shares. As of 28 February 2022, the total number of shareholders of Sinopec Corp. was 527,563. Sinopec Corp. has complied with requirement for minimum public float under the Hong Kong Listing Rules.

(1) Shareholdings of top ten shareholders

The shareholdings of top ten shareholders as of 31 December 2021 are listed as below:

Unit: share

Name of shareholders	Nature of Shareholders	Percentage of shareholdings %	Total number of shares held	$Changes \ of \\ shareholding^1$	Number of shares subject to pledges or lock-up
China Petrochemical Corporation	State-owned Share	68.31	82,709,227,393	0	0
HKSCC Nominees Limited ²	H Share	20.97	25,386,207,159	926,751	unknown
中國證券金融股份有限公司	A Share	1.92	2,325,374,407	(283,937,650)	0
香港中央結算有限公司	A Share	0.87	1,054,953,821	213,881,539	0
中國人壽保險股份有限公司-傳統-普通保險產品-005L-CT001滬	A Share	0.69	834,160,431	19,554,400	0
中央匯金資產管理有限責任公司	A Share	0.26	315,223,600	(6,814,300)	0
國信證券股份有限公司	A Share	0.17	202,363,585	183,178,790	0
中國工商銀行一上證50交易型開放式指數證券投資基金	A Share	0.09	113,436,276	13,846,100	0
全國社保基金——三組合	A Share	0.09	110,044,157	110,044,157	0
中國人壽保險股份有限公司一分紅一個人分紅一005L-FH002滬	A Share	0.08	98,655,327	(717,014,841)	0

Note 1: As compared with the number of shares held as of 31 December 2020.

Note 2: Sinopec Century Bright Capital Investment Limited, an overseas wholly-owned subsidiary of China Petrochemical Corporation, held 623,454,000 H shares, accounting for 0.52% of the total issued share capital of Sinopec Corp. Those shareholdings were included in the total number of the shares held by HKSCC Nominees Limited.

Statement on the connected relationship or acting in concert among the above-mentioned shareholders:

Apart from 除中國人壽保險股份有限公司 - 分紅 - 個人分紅 - 005L - FH002 滬and 中國人壽保險股份有限公司 - 傳統 - 普通保險產品 - 005L - CT001滬 which were both managed by 中國人壽保險股份有限公司, Sinopec Corp. is not aware of any connected relationship or acting in concert among or between the above-mentioned shareholders.

(2) Information disclosed by the shareholders of H shares in accordance with the Securities and Futures Ordinance (SFO) as of 31 December 2021

			% of Sinopec Corp.'s issued
Name of shareholders	Status of shareholders	Number of shares interested	voting shares (H Share)
BlackRock, Inc.	Interest of corporation controlled by the substantial shareholder	2,029,241,960(L)	7.95(L)
Citigroup Inc.	Person having a security interest in shares	11,307,899(L)	0.04(L)
	Interest of corporation controlled by	68,263,244(L)	0.27(L)
	the substantial shareholder	66,210,083(S)	0.26(S)
	Approved lending agent	1,704,518,264(L)	6.68(L)

(L): Long position, (S): Short position

3 ISSUANCE AND LISTING OF SECURITIES

Issuance of securities during the reporting period

There was no issuance of securities of the Company during the reporting period.

(2) Existing employee shares

There was no existing employee shares of the Company during the reporting period.

4 CHANGES IN THE CONTROLLING SHAREHOLDERS AND THE DE FACTO CONTROLLER

There was no change in the controlling shareholder and the de facto controller of Sinopec Corp. during the reporting period.

(1) Controlling shareholder

The controlling shareholder of Sinopec Corp. is China Petrochemical Corporation. Established in July 1998, China Petrochemical Corporation is a state-authorised investment organisation and a state-owned enterprise. The legal representative is Mr. Ma Yongsheng. Through re-organization in 2000, China Petrochemical Corporation injected its principal petroleum and petrochemical businesses into Sinopec Corp. and retained certain petrochemical facilities. It provides well-drilling services, welllogging services, downhole operation services, services in connection with manufacturing and maintenance of production equipment, engineering construction, and utility services including water and power and social services.

Shares of other listed companies directly held by China Petrochemical Corporation as of the end of the reporting period

Name of Company	Number of Shares Held	Shareholding Percentage
Sinopec Engineering (Group)		
Co. Ltd	2,907,856,000	65.67%
Sinopec Oilfield Service		
Corporation	10,727,896,364	56.51%
Sinopec Oilfield Equipment		
Corporation	456,756,300	58.74%
China Merchants Energy		
Shipping Co., Ltd	1,095,463,711	13.54%

(2) Other than HKSCC Nominees Limited, there was no other legal person shareholder holding 10% or more of the total issued share capital of Sinopec Corp.

(3) Basic information of the de facto controller

China Petrochemical Corporation is the de facto controller of Sinopec Corp.

(4) Diagram of the equity and controlling relationship between Sinopec Corp. and its de facto controller



* : Inclusive of 623,454,000 H shares held by Sinopec Century Bright Capital Investment Ltd. (overseas wholly-owned subsidiary of China Petrochemical Corporation) through HKSCC Nominees Limited.

1. CORPORATE BOND

Bond name	Sinopec Corp. 2012 Corporate bond
Abbreviation	12石化02
Code	122150
Issuance date	1 June 2012
Interest commencement date	1 June 2012
Maturity date	1 June 2022
Amount issued (RMB billion)	7
Outstanding balance (RMB billion)	7
Interest rate (%)	4.90
Principal and interest repayment	Simple interest is calculated and paid on an annual basis without compounding interests. Interest is paid
	once a year. The principal will be paid at maturity with last instalment of interest.
Investor Qualification Arrangement	12石化02 was publicly offered to qualified investors in accordance with Administration of the Issuance and Trading of Corporate Bonds.
Applicable trading mechanism	Floor trading at Shanghai Stock Exchange, in line with pledge repurchase requirement
Risk of suspension for listed trading,	N/A
and countermeasures	
Listing exchange	Shanghai Stock Exchange
Use of proceeds	Proceeds from the above-mentioned corporate bonds have been used for their designated purpose as
	disclosed. All the proceeds have been completely used.
Credit rating	During the reporting period, China Lianhe Credit Rating Co., Ltd. tracked and provided credit rating for 12 石化02 and reaffirmed AAA credit rating in the continuing credit rating report. The long-term credit rating of Sinopec Corp. remained AAA with its outlook being stable. Pursuant to relevant regulations, the latest credit rating results have been published through media designated by regulators within six months commencing from the disclosure of annual report for 2020.
Special terms for Issuer or investor option or investor protection, whether triggered or executed	No special terms for Issuer or investor option or investor protection, thus not applicable
Guarantee, repayment scheme and other related events during the	China Petrochemical Corporation bears non-irrevocable joint liability guarantee. Interest is paid as usual during the reporting period without triggering any guarantee.
reporting period	
Convening of corporate bond holders' meeting	During the reporting period, the bondholders' meeting was not convened.
Performance of corporate bonds trustee	During the durations of the above-mentioned bonds, the bond trustee, China International Capital Corporation Limited, has strictly followed the Bond Trustee Management Agreement and continuously tracked the Company's credit status, utilisation of bond proceeds and repayment of principals and interests of the bond. The bond trustee has also advised the Company to fulfil obligations as described in the corporate bond prospectus and actively exercised its duty to protect the bondholders' legitimate rights and interests. The bond trustee has disclosed the Trustee Management Affairs Report of last year. The full disclosure is available on the website of Shanghai Stock Exchange (http://www.sse.com.cn).

2. INTERBANK BOND MARKET DEBT FINANCING INSTRUMENT OF NON-FINANCIAL ENTERPRISES

	The first	The second	The third	The first	The second	The third	The first green	
	medium-term	medium-term	medium∙term	medium-term	medium-term	medium-term	medium-term	
Bond name	notes in 2020	notes in 2020	notes in 2020	notes in 2021	notes in 2021	notes in 2021	notes in 2021	
Abbreviation	20中石化MTN001	20中石化MTN002	20中石化MTN003	21中石化MTN001	21中石化MTN002	21中石化MTN003	21中石化GN001	
code	102000568	102000569	102001109	102101386	102101480	102101489	132100172	
Issuance date	2020/3/31	2020/3/31	2020/5/27	2021/7/23	2021/8/5	2021/8/5	2021/12/27	
Interest commencement date	2020/4/1	2020/4/1	2020/5/28	2021/7/27	2021/8/6	2021/8/9	2021/12/28	
Maturity date	2023/4/1	2023/4/1	2023/5/28	2026/7/27	2024/8/6	2023/8/9	2024/12/28	
Amount issued (RMB billion)	5	5	10	5	2	2	2.55	
Outstanding balance (RMB billion)	5	5	10	5	2	2	2.55	
Interest rate (%)	2.7	2.7	2.2	3.2	2.95	2.8	2.5	
Principal and interest repayment	Interest is paid once	e a year. The princip	al will be paid at ma	turity with last instal	ment of interest.			
Investor Qualification Arrangement	Nationwide inter-bank bond market institutional investors							
Applicable trading mechanism	Circulated and trans	sferred in nationwide	inter-bank bond mar	rket				
Risk of suspension for listed trading	Not applicable							
(if any), and countermeasures								
Trading market	Nationwide inter-bai							
Use of proceeds	Proceeds from the a	above-mentioned cor	porate bonds have be	een used for their de	signated purpose as	disclosed in the corp	orate bond	
	<u> </u>		completely used till r					
Credit rating	During the reporting	g period, United Crec	lit Ratings Co., Ltd. i	ssued the continuing	credit rating report	on May 21. The long-	term credit rating of	
	Sinopec Corp. rema	ined AAA with its out	tlook being stable.					
Special terms for Issuer or investor	Not applicable							
option or investor protection,								
whether triggered or executed								
Guarantee, repayment scheme and	No guarantee. Intere	est is paid as usual o	during the reporting p	period without trigge	ring any guarantee.			
other related events during								
the reporting period								
Convening of corporate bond holders'	Not applicable							
meeting								
Performance of corporate bonds trustee	Corporate bonds tru	istee has performed	its duties in accorda	nce with regulatory r	equirements			

Note: Please refer to the website of Shanghai Stock Exchange (http://www.sse.com.cn), China Money Network (WWW) for the name, office address, name, contact person and telephone number of the intermediary institutions providing services for the issuance and maturity of the debt financing instruments of the above-mentioned corporate bonds and non-financial enterprises in the interbank market. Chinamoney.com.cn) and other websites disclosed the relevant contents of the prospectus and other documents.

Principal accounting data and financial indicators for the two	years ended 31 December 2021
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Principal data	31 Dec. 2021	31 Dec. 2020	Change	Reasons for change
Current ratio	0.87	0.87	0	
Quick ratio	0.55	0.58	(0.03)	Increase in current liabilities
Liability-to-asset ratio (%)	51.51	48.89	2.62 percentage points	Increase in liabilities
Loan repayment rate (%)	100	100	0	
	2021	2020	Change	Reasons for change
Net profit/(loss) attributable to equity shareholders of the Company excluding extraordinary gains and losses				
(RMB million)	72,220	(1,565)	73,785	Increase in total profit
Net profit of the Company excluding extraordinary gains				
and losses (RMB million)	85,935	4,556	81,379	Increase in total profit
EBITDA to total debt ratio	1.41	1.14	0.27	Increase in total profit
EBITDA to interest coverage ratio	15.12	9.89	5.23	Increase in total profit
Interest coverage ratio	8.28	4.05	4.23	Increase in total profit
Cash interest coverage ratio	43.56	24.65	18.91	Increase in net cash flow
Interest payment rate (%)	100	100	0	

Note: Liability-to-asset ratio indicates the ratio of total liabilities to total assets

During the reporting period, the Company paid in full and on time the interest accrued for the other bonds and debt financing instruments. As at 31 December 2021, the standby credit line provided by several domestic financial institutions to the Company was RMB441.6 billion in total, facilitating the Company to get such amount of unsecured loans. The Company has fulfilled all the relevant undertakings in the corporate bond prospectus and had no significant matters which could influence the Company's operation and debt paying ability.

On 18 April 2013, Sinopec Capital (2013) Limited, a wholly-owned overseas subsidiary of Sinopec Corp., issued senior notes guaranteed by the Company with four different maturities, 3 years, 5 years, 10 years and 30 years. The 3-year notes principal totaled USD750 million, with an annual interest rate of 1.250% and had been repaid and delisted; the 5-year notes principal totaled USD1 billion, with an annual interest rate of 1.875% and had been repaid and delisted; the 10-year notes principal totaled USD1.25 billion, with an annual interest rate of 3.125%; and the 30-year notes principal totaled USD500 million, with an annual interest rate of 4.250%. These notes were listed on the Hong Kong Stock Exchange on 25 April 2013, with interest payable semi-annually. The first payment of interest was made on 24 October 2013. During the reporting period, the Company has paid in full the current-period interests of all notes with maturity of 5 years, 10 years and 30 years.

On 31 December 2021, details of the principal wholly-owned and controlled subsidiaries of the Company were as follows:

		-				
		Percentage of				
	D · · · ·	Shares Held				
	Registered	by Sinopec	T-+-! A+-		Net Profit/	
Name of Company	Capital RMB million	Corp. (%)	Total Assets RMB million	RMB million	(Net Loss) RMB million	Principal Activities
Sinopec International Petroleum	8,250	100	31,713	12,460		Investment in exploration, production and
Exploration and Production Limited						sale of petroleum and natural gas
Sinopec Great Wall Energy & Chemical Company Limited	22,761	100	30,655	14,187	3,714	Coal chemical industry investment management, production and
						sale of coal chemical products
Sinopec Yangzi Petrochemical Company Limited	15,651	100	36,602	22,482	1,945	Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Yizheng Chemical Fibre Limited Liability Company	4,000	100	9,100	4,330	(1,290)	Production and sale of polyester chips and polyester fibres
Sinopec Lubricant Company Limited	3,374	100	9,311	4,789	141	Production and sale of refined petroleum products, lubricant base oil,
Sinopec Qingdao Petrochemical	1,595	100	5,319	1,370	873	and petrochemical materials Manufacturing of intermediate petrochemical
Company Limited	1,595	100	5,519	1,370	0/5	products and petroleum products
Sinopec Chemical Sales Company Limited	1,000	100	22,423	5,476	1,547	Marketing and distribution of petrochemical products
China International United Petroleum and Chemical Company Limited	5,000	100	229,548	44,082	6,268	Trading of crude oil and petrochemical products
Sinopec Overseas Investment	3,009 Million USD	100	23,019	13,467	(27)	Overseas investment holding
Sinopec Catalyst Company Limited	1,500	100	11,330	6,317	715	Production and sale of catalyst products
China Petrochemical International Company Limited	1,400	100	21,113	4,270		Trading of petrochemical products
Sinopec Beihai Refining and Chemical Limited Liability Company	5,294	99	19,396	13,461	2,729	Import and processing of crude oil, production storage and sale of petroleum products and petrochemical products
Sinopec Qingdao Refining and Chemical Company Limited	5,000	85	23,807	13,357	3,711	Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Hainan Refining and Chemical Company Limited	9,606	100	40,040	23,265	4,097	Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Marketing Co., Limited	28,403	70	486,036	233,117	18,582	Marketing and distribution of refined petroleum products
Sinopec Shanghai SECCO Petrochemical Company Limited	500	68	17,468	10,616	2,817	Production and sale of petrochemical product
Sinopec-SK(Wuhan) Petrochemical Company Limited	7,193	59	27,441	11,807	1,606	Production, sale, research and development o petroleum, petrochemical, ethylene and downstream by-products
Sinopec Kantons Holdings Limited	248 Million HKD	60	12,956	12,590	871	Oil jetty and nature gas pipeline
Sinopec Shanghai Gaoqiao Petroleum and Chemical Limited	10,000	55	37,561	18,214	3,536	Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Shanghai Petrochemical Company Limited	10,824	50	47,039	30,395	2,004	Manufacturing of synthetic fibres, resin and plastics, intermediate petrochemical
Fujian Petrochemical Company Limited	10,492	50	14,672	13,830	951	products and petroleum products Manufacturing of plastics, intermediate petrochemical products and petroleum products

Note 1: All above subsidiaries except Fujian Petrochemical Company Limited are audited by KPMG Huazhen LLP or KPMG.

2: The above indicated total assets and net profit has been prepared in accordance with CASs. Except for Sinopec Kantons Holdings Limited and Sinopec Overseas Investment Holdings Ltd., which are incorporated in Bermuda and Hong Kong SAR, respectively, all of the above wholly-owned and non-wholly-owned subsidiaries are incorporated in the PRC. All of the above wholly-owned and controlling subsidiaries are limited liability companies except for Sinopec Shanghai Petrochemical Company Limited, Sinopec Marketing Co., Limited and Sinopec Kantons Holdings Limited. The Board of Directors considered that it would be redundant to disclose the particulars of all subsidiaries of Sinopec Corp. and, therefore, only those which have material impact on the results or assets of Sinopec Corp. are set out above.

Principal Wholly-Owned d Controlled Subsidiaries



AUDITOR'S REPORT

KPMG Huazhen LLP 8th Floor, KPMG Tower Oriental Plaza 1 East Chang An Avenue Beijing 100738 China Telephone +86 (10) 8508 5000 Fax +86 (10) 8518 5111 Internet kpmg.com/cn 畢馬威華振會計師事務所 (特殊普通合夥)
中國北京
東長安街1號
東方廣場畢馬威大樓8層
郵政編碼:100738
電話 +86 (10) 8508 5000
傅真 +86 (10) 8518 5111
網址 kpmg.com/cn

畢馬威華振審字第2202273號

The Shareholders of China Petroleum & Chemical Corporation:

OPINION

We have audited the accompanying financial statements of China Petroleum & Chemical Corporation ("the Company"), which comprise the consolidated and company balance sheets as at 31 December 2021, the consolidated and company income statements, the consolidated and company cash flow statements, the consolidated and company statements of changes in shareholders' equity for the year then ended, and notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated and company financial position of the Company as at 31 December 2021, and the consolidated and company financial performance and cash flows of the Company for the year then ended in accordance with Accounting Standards for Business Enterprises issued by the Ministry of Finance of the People's Republic of China.

BASIS FOR OPINION

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

KEY AUDIT MATTERS

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

Assessment of impairment of fixed assets relating to oil and gas producing activities

Refer to Note 3 (8) Oil and gas properties, (12) Impairment of other non-financial long-term assets, Note 13 Fixed assets, and Note 58 Principal accounting estimates and judgements to the financial statements

The Key Audit Matter

The Company reported fixed assets of Renminbi ("RMB") 598,932 million as at 31 December 2021, a portion of which related to oil and gas producing activities. The Company reported impairment losses of RMB2,467 million for the fixed assets relating to oil and gas producing activities for the year ended 31 December 2021.

The Company groups fixed assets relating to oil and gas producing activities into cash-generating units ("CGUs") for impairment assessment. The Company compares the carrying amount of individual CGU with its value in use, using a discounted cash flow forecast, which was prepared based on the future production profiles included in the oil and gas reserves reports, to determine the impairment loss to be recognised.

We identified assessment of impairment of fixed assets relating to oil and gas producing activities as a key audit matter. The value in use amounts of these CGUs are sensitive to the changes to future selling prices and production costs for crude oil and natural gas, future production profiles, and discount rates. Therefore a higher degree of subjective auditor judgment was required to evaluate the Company's impairment assessment of fixed assets relating to oil and gas producing activities.

How the matter was addressed in our audit

The following are the primary procedures we performed to address this key audit matter:

- we evaluated the design and tested the operating effectiveness of certain internal controls related to the process for impairment assessment of fixed assets relating to oil and gas producing activities;
- we assessed the competence, capabilities and objectivity of the Company's reserves specialists and evaluated the methodology adopted by them in estimating the oil and gas reserves against the recognised industry standards;
- we compared future selling prices for crude oil and natural gas used in the discounted cash flow forecasts with the Company's business plans and forecasts by external analysts;
- we compared future production costs and future production profiles used in the discounted cash flow forecasts with oil and gas reserves reports issued by the reserves specialists; and
- we involved valuation professionals with specialised skills and knowledge, who assisted in assessing the discount rates applied in the discounted cash flow forecasts against a discount rate range that was independently developed using publicly available market data for comparable companies in the same industry.



OTHER INFORMATION

The Company's management is responsible for the other information. The other information comprises all the information included in 2021 annual report of the Company, other than the financial statements and our auditor's report thereon.

Our opinion on the 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 financial statements, our responsibility is to read the other information 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, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

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

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the Accounting Standards for Business Enterprises, and for the design, implementation and maintenance of such internal control necessary to enable that the financial statements are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company'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 Company or to cease operations, or has no realistic alternative but to do so.

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

AUDITOR'S 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 auditor's 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 CSAs 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 financial statements.

As part of an audit in accordance with CSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- 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.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of 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 Company'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 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 Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the 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 Company to express an 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.



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

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and 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 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.

KPMG Huazhen LLP

Beijing, China

Certified Public Accountants Registered in the People's Republic of China

Yang Jie (Engagement Partner)

He Shu

25 March 2022

(A) FINANCIAL STATEMENTS PREPARED UNDER CHINA ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES CONSOLIDATED BALANCE SHEET

As at 31 December 2021

	Notes	At 31 December 2021	At 31 December 2020
		RMB million	RMB million
Assets			
Current assets			
Cash at bank and on hand	5	221,989	184,412
Financial assets held for trading		-	1
Derivative financial assets	6	18,371	12,528
Accounts receivable	7	34,861	35,439
Receivables financing	8	5,939	8,735
Prepayments	9	9,267	4,857
Other receivables	10	35,664	33,724
Inventories	11	207,433	152,191
Other current assets		24,500	23,773
Total current assets		558,024	455,660
Non-current assets			
Long-term equity investments	12	209,179	188,342
Other equity instrument investments		767	1,525
Fixed assets	13	598,932	593,653
Construction in progress	14	155,939	125,525
Right-of-use assets	15	184,974	189,018
Intangible assets	16	119,210	114,280
Goodwill	17	8,594	8,620
Long-term deferred expenses	18	10,007	9,584
Deferred tax assets	19	19,389	25,054
Other non-current assets	20	24,240	27,635
Total non-current assets		1,331,231	1,283,236
Total assets		1,889,255	1,738,896
Liabilities and shareholders' equity			
Current liabilities			
Short-term loans	22	27,366	20,756
Derivative financial liabilities	6	3,223	4,826
Bills payable	23	11,721	10,394
Accounts payable	24	203,919	151,514
Contract liabilities	25	124,622	126,241
Employee benefits payable	26	14,048	7,129
Taxes payable	27	81,267	76,848
Other payables	28	114,701	85,012
Non-current liabilities due within one year	29	28,651	22,494
Other current liabilities	30	31,762	17,781
Total current liabilities		641,280	522,995
Non-current liabilities			
Long-term loans	31	49,341	45,459
Debentures payable	32	42,649	38,356
Lease liabilities	33	170,233	171,740
Provisions	34	43,525	45,552
Deferred tax liabilities	19	7,910	8,124
Other non-current liabilities	35	18,276	17,950
Total non-current liabilities		331,934	327,181
Total liabilities		973,214	850,176
Shareholders' equity			
Share capital	36	121,071	121,071
Capital reserve	37	120,188	127,389
Other comprehensive income	38	(690)	1,038
Specific reserve		2,664	1,941
Surplus reserves	39	213,224	209,280
Retained earnings		318,645	286,575
Total equity attributable to shareholders of the Company		775,102	747,294
Minority interests		140,939	141,426
Total shareholders' equity		916,041	888,720
Total liabilities and shareholders' equity		1,889,255	1,738,896

These financial statements have been approved for issue by the board of directors on 25 March 2022.

Ma Yongsheng

Yu Baocai President

Chairman (Legal representative) **Shou Donghua** *Chief Financial Officer*

The accompanying notes form part of these financial statements.

	Notes	At 31 December	At 31 December
		2021 RMB million	2020 RMB million
Assets			
Current assets			
Cash at bank and on hand		110,691	99,188
Derivative financial assets		4,503	7,776
Accounts receivable	7	21,146	21,763
Receivables financing		227	707
Prepayments	9	4,540	2,626
Other receivables	10	46,929	37,938
Inventories		63,661	39,034
Other current assets		23,408	14,048
Total current assets		275,105	223,080
Non-current assets			
Long-term equity investments	12	360,847	343,356
Other equity instrument investments		201	428
Fixed assets	13	284,622	283,695
Construction in progress	14	66,146	59,880
Right-of-use assets	15	105,712	108,737
Intangible assets		9,334	8,779
Long-term deferred expenses		2,875	2,499
Deferred tax assets		8,715	12,661
Other non-current assets		34,227	26,828
Total non-current assets		872.679	846,863
Total assets		1,147,784	1,069,943
Liabilities and shareholders' equity		, , -	//-
Current liabilities			
Short-term loans		16,550	20,669
Derivative financial liabilities		1,121	362
Bills payable		6,058	6,061
Accounts payable		85,307	65,779
Contract liabilities		7,505	5,840
Employee benefits payable		8,398	1,673
Taxes payable		46,333	43,500
Other payables		211,179	188,568
Non-current liabilities due within one year		16,737	12,026
Other current liabilities		13,702	439
Total current liabilities		412.890	<u> </u>
Non-current liabilities		412,090	544,917
		24.050	20.412
Long-term loans		<u> </u>	<u> </u>
Debentures payable			
Lease liabilities		104,426	105,691
Provisions		35,271	36,089
Other non-current liabilities		3,103	3,581
Total non-current liabilities		208,580	202,751
Total liabilities		621,470	547,668
Shareholders' equity			
Share capital		121,071	121,071
Capital reserve		67,897	68,976
Other comprehensive income		6,024	5,910
Specific reserve		1,658	1,189
Surplus reserves		213,224	209,280
Retained earnings		116,440	115,849
Total shareholders' equity		526,314	522,275
Total liabilities and shareholders' equity		1,147,784	1,069,943

These financial statements have been approved for issue by the board of directors on 25 March 2022.

Ma Yongsheng *Chairman (Legal representative)* Yu Baocai President

CONSOLIDATED INCOME STATEMENT

For the year ended 31 December 2021

	Notes	2021 RMB million	2020 RMB million
Operating income	40	2,740,884	2,104,724
Less: Operating costs	40	2,216,551	1,685,674
Taxes and surcharges	41	259,032	235,018
Selling and distribution expenses	44	57,891	64,495
General and administrative expenses	45	62,535	67,082
Research and development expenses	46	11,481	10,087
Financial expenses	42	9,010	9,510
Including: Interest expenses		15,018	15,198
Interest income		5,732	4,803
Exploration expenses, including dry holes	47	12,382	9,716
Add: Other income	48	5,850	7,514
Investment income	49	6,032	47,486
Including: Income from investment in associates and joint ventures		23,253	6,712
Losses from changes in fair value	50	3,341	(1,253
Credit impairment losses		(2,311)	(2,066
Impairment losses	51	(13,165)	(26,087
Asset disposal gains		665	2,067
Operating profit		112,414	50,803
Add: Non-operating income	52	3,516	2,370
ess: Non-operating expenses	53	7,582	4,732
Profit before taxation		108,348	48,441
_ess: Income tax expense	54	23,318	6,344
Net profit		85,030	42,097
ncluding: Net (loss)/profit of acquiree before business combination under common control		(200)	347
Classification by going concern:			
Continuous operating net profit		85,030	42,097
Termination of net profit		-	-
Classification by ownership:			
Equity shareholders of the Company		71,208	33,271
Minority interests		13,822	8,826
Basic earnings per share	65	0.588	0.275
Diluted earnings per share	65	0.588	0.275
Other comprehensive income	38		
tems that may not be reclassified subsequently to profit or loss		(4)	(22
Changes in fair value of other equity instrument investments		(4)	(22
tems that may be reclassified subsequently to profit or loss		17,511	337
Other comprehensive income that can be converted into profit under the equity method		441	(2,441
Cost of hedging reserve		(220)	162
Cash flow hedges		19,018	7,073
Foreign currency translation differences		(1,728)	(4,457
Total other comprehensive income		17,507	315
Fotal comprehensive income		102,537	42,412
Attributable to:			
Equity shareholders of the Company		88,782	34,665
Minority interests		13,755	7,747

These financial statements have been approved for issue by the board of directors on 25 March 2022.

Ma Yongsheng Chairman (Legal representative)

Yu Baocai President **Shou Donghua** *Chief Financial Officer*

The accompanying notes form part of these financial statements.

	Notes	2021 RMB million	2020 RMB million
Operating income	40	1,045,000	770,321
Less: Operating costs	40	808,540	584,315
Taxes and surcharges		156,174	148,350
Selling and distribution expenses		1,774	3,256
General and administrative expenses		30,551	29,868
Research and development expenses		10,102	9,098
Financial expenses		10,644	8,749
Including: Interest expenses		13,602	11,892
Interest income		2,953	3,181
Exploration expenses, including dry holes		10,502	8,297
Add: Other income		4,045	4,922
Investment income	49	30,881	43,356
Including: Income from investment in associates and joint ventures		8,151	3,637
Gains from changes in fair value		644	350
Credit impairment reversal		1	71
Impairment losses		(7,192)	(16,374)
Asset disposal gains		58	261
Operating profit		45,150	10,974
Add: Non-operating income		776	900
Less: Non-operating expenses		2,209	1,319
Profit before taxation		43,717	10,555
Less: Income tax expense		4,273	(8,017)
Net profit		39,444	18,572
Classification by going concern:			
Continuous operating net profit		39,444	18,572
Termination of net profit		-	-
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss		13,612	4,766
Other comprehensive income that can be converted into profit or loss under the equity r	method	12	(182)
Cash flow hedges reserve		13,600	4,948
Total other comprehensive income		13,612	4,766
Total comprehensive income		53,056	23,338

These financial statements have been approved for issue by the board of directors on 25 March 2022.

Ma Yongsheng *Chairman (Legal representative)* **Yu Baocai** President

For the year ended 31 December 2021

	Notes	2021 RMB million	2020 RMB million
Cash flows from operating activities:			
Cash received from sale of goods and rendering of services		2,980,918	2,295,665
Refund of taxes and levies		4,641	2,985
Other cash received relating to operating activities		158,049	212,918
Sub-total of cash inflows		3,143,608	2,511,568
Cash paid for goods and services		(2,317,629)	(1,749,873)
Cash paid to and for employees		(95,778)	(85,481)
Payments of taxes and levies		(325,348)	(282,390)
Other cash paid relating to operating activities		(179,679)	(225,304)
Sub-total of cash outflows		(2,918,434)	(2,343,048)
Net cash flow from operating activities Cash flows from investing activities:	56(a)	225,174	168,520
Cash received from disposal of investments		9,812	11,651
Cash received from returns on investments		10,134	11,510
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		1,478	2,656
Net cash received from disposal of subsidiaries and other business entities	56(d)	5,205	49,869
Other cash received relating to investing activities		38,208	58,669
Sub-total of cash inflows		64,837	134,355
Cash paid for acquisition of fixed assets, intangible assets and other long-term assets		(144,921)	(131,636)
Cash paid for acquisition of investments		(13,085)	(12,740)
Net cash paid for the acquisition of subsidiaries and other business entities		(1,106)	(340)
Other cash paid relating to investing activities		(50,923)	(92,289)
Sub-total of cash outflows		(210,035)	(237,005)
Net cash flow from investing activities		(145,198)	(102,650)
Cash flows from financing activities:			
Cash received from capital contributions		1,001	4,219
Including: Cash received from minority shareholders' capital contributions to subsidiaries		1,001	4,219
Cash received from borrowings		356,459	558,680
Other cash received relating to financing activities		133	700
Sub-total of cash inflows		357,593	563,599
Cash repayments of borrowings		(338,232)	(540,015)
Cash paid for dividends, profits distribution or interest		(49,027)	(43,812)
Including: Subsidiaries' cash payments for distribution of dividends or profits to			
minority shareholders		(8,068)	(4,821)
Other cash paid relating to financing activities	56(e)	(28,276)	(17,282)
Sub-total of cash outflows		(415,535)	(601,109)
Net cash flow from financing activities		(57,942)	(37,510)
Effects of changes in foreign exchange rate		(1,003)	(1,239)
Net increase in cash and cash equivalents	56(b)	21,031	27,121
Add: Cash and cash equivalents at the beginning of the year		87,559	60,438
Cash and cash equivalents at the end of the period		108,590	87,559

These financial statements have been approved for issue by the board of directors on 25 March 2022.

Ma Yongsheng *Chairman (Legal representative)* **Yu Baocai** President

	Notes	2021 RMB million	2020 RMB million
Cash flows from operating activities:			
Cash received from sale of goods and rendering of services		1,155,516	862,093
Refund of taxes and levies		2,959	2,796
Other cash received relating to operating activities		13,868	9,407
Sub-total of cash inflows		1,172,343	874,296
Cash paid for goods and services		(823,402)	(606,295)
Cash paid to and for employees		(49,784)	(44,139)
Payments of taxes and levies		(181,187)	(164,635)
Other cash paid relating to operating activities		(25,895)	(19,239)
Sub-total of cash outflows		(1,080,268)	(834,308)
Net cash flow from operating activities		92,075	39,988
Cash flows from investing activities:			
Cash received from disposal of investments		32,738	12,157
Cash received from returns on investments		22,712	18,805
Net cash received from disposal of fixed assets, intangible assets and other long term assets		72	6,579
Other cash received relating to investing activities		136,276	78,751
Sub-total of cash inflows		191,798	116,292
Cash paid for acquisition of fixed assets, intangible assets and other long-term assets		(70,578)	(59,216)
Cash paid for acquisition of investments		(52,212)	(41,066)
Other cash paid relating to investing activities		(134,009)	(66,408)
Sub-total of cash outflows		(256,799)	(166,690)
Net cash flow from investing activities		(65,001)	(50,398)
Cash flows from financing activities:			
Cash received from borrowings		159,879	195,770
Other cash received relating to financing activities		298,755	70,516
Sub-total of cash inflows		458,634	266,286
Cash repayments of borrowings		(151,310)	(199,727)
Cash paid for dividends or interest		(42,933)	(36,973)
Other cash paid relating to financing activities		(284,979)	(7,074)
Sub-total of cash outflows		(479,222)	(243,774)
Net cash flow from financing activities		(20,588)	22,512
Effects of changes in foreign exchange rate		8	(5)
Net increase in cash and cash equivalents		6,494	12,097
Add: Cash and cash equivalents at the beginning of the year		28,081	15,984
Cash and cash equivalents at the end of the period		34,575	28,081

These financial statements have been approved for issue by the board of directors on 25 March 2022.

Ma Yongsheng *Chairman (Legal representative)* **Yu Baocai** President

For the year ended 31 December 2021

							Total		
							shareholders'		
							equity		
							attributable		
			Other				to equity		Total
	Share	Capital	comprehensive	Specific	Surplus	Retained	shareholders of	Minority	shareholders'
	capital	reserve	income	reserve	reserves	earnings	the Company	interests	equity
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 31 December 2019	121,071	122,864	(321)	1,741	207,423	287,187	739,965	138,409	878,374
Adjustment for business combination of entities under									
common control (Note 60)	-	4.773	-	-	-	-	4.773	1	4.774
Balance at 1 January 2020	121.071	127.637	(321)	1.741	207.423	287.187	744.738	138.410	883.148
Change for the year	1.		(/_	1		- , -		, .	
1. Net profit	-			-	_	33,271	33,271	8.826	42.097
2. Other comprehensive income (Note 38)	-	-	1,406	-	-	(12)	1,394	(1,079)	315
Total comprehensive income	-	-	1,406	-	-	33,259	34,665	7,747	42,412
Amounts transferred to initial carrying amount of hedged items	-		(47)	-		-	(47)	48	1
Transactions with owners, recorded directly in shareholders' equity:									
3. Appropriations of profits:									
 Appropriations for surplus reserves 	-	-	-	-	1,857	(1,857)	-	-	-
- Distributions to shareholders (Note 55)	-	_	_	-	_	(31,479)	(31,479)	-	(31,479)
4. Contributions to subsidiaries from minority interests	-	_		-	_	-	-	3,325	3.325
5. Transaction with minority interests	-	(138)		-	_	-	(138)	13	(125)
6. Distributions to minority interests	-	-	_	-	_	_	-	(6,726)	(6,726)
7. Adjustment for business combination of entities under								(1) 1	(
common control	-	(972)	-	-	-	-	(972)	972	-
Total transactions with owners, recorded directly in shareholders' equity	-	(1.110)	_	-	1.857	(33,336)	(32,589)	(2,416)	(35,005)
8. Net increase in specific reserve for the year	-	-		200	_	-	200	37	237
9. Others	-	862	-	-	-	(535)	327	(2,400)	(2,073)
Balance at 31 December 2020	121,071	127,389	1,038	1,941	209,280	286,575	747,294	141,426	888.720
Balance at 1 January 2021	121,071	127,389	1,038	1,941	209,280	286,575	747,294	141,426	888,720
Change for the year	,			,		,		,	· · · · ·
1. Net profit	-	-	-	-	-	71,208	71,208	13,822	85.030
2. Other comprehensive income (Note 38)	-	_	17.574	-	_	-	17.574	(67)	17.507
Total comprehensive income	-	_	17,574	-	-	71,208	88,782	13,755	102,537
Amounts transferred to initial carrying amount of hedged items	-		(19,302)	-			(19,302)	(648)	(19,950)
Transactions with owners, recorded directly in shareholders' equity:									
3. Appropriations of profits:									
– Appropriations for surplus reserves (Note 39)	-	-	-	-	3,944	(3,944)	-	-	-
- Distributions to shareholders (Note 55)	-	_	_	-	_	(35,110)	(35,110)	-	(35,110)
4. Contributions to subsidiaries from minority interests	-	_	_	-	_	-	-	1.973	1.973
5. Transaction with minority interests	-	(1,396)	-	-	-	-	(1,396)	(6,796)	(8,192)
6. Distributions to minority interests	-		-	-	-	-	-	(8,982)	(8,982)
7. Adjustment for business combination of entities under									
common control (Note 60)	-	(6,124)	-	-	-	-	(6,124)	-	(6,124)
Total transactions with owners, recorded directly in shareholders' equity					2.044	(20.0E.4)	(42,630)	(13,805)	(56,435)
	-	(7,520)	-	-	3,944	(39,054)	(42,030)	(13,003)	(00,400)
	-	(7,520)	-	723	3,944	(39,034)	(42,030) 723	(13,803)	775
		(7,520) - 319			3,944	(39,054)		()	,

These financial statements have been approved for issue by the board of directors on 25 March 2022.

Ma Yongsheng *Chairman (Legal representative)* Yu Baocai President **Shou Donghua** *Chief Financial Officer*

The accompanying notes form part of these financial statements.

STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2021

			Other				Total
	Share	Canital	comprehensive	Specific	Surplus	Retained	shareholders'
	capital	reserve	income	reserve	reserves	earnings	equity
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 1 January 2020	121,071	68,841	1,181	949	207,423	130,645	530,110
Change for the year							
1. Net profit	-	-	-	-	-	18,572	18,572
2. Other comprehensive income	-	-	4,766	-	-	-	4,766
Total comprehensive income	-	-	4,766	-	-	18,572	23,338
Amounts transferred to initial carrying amount of hedged items	-	-	(37)	-	-	-	(37)
Transactions with owners, recorded directly in shareholders' equity:							
Appropriations of profits:							
 Appropriations for surplus reserves 	-	-	-	-	1,857	(1,857)	-
-Distributions to shareholders (Note 55)	-	-	-	-	-	(31,479)	(31,479)
Total transactions with owners, recorded directly in shareholders' equity	-	-	-	-	1,857	(33,336)	(31,479)
4. Net increase in specific reserve for the year	-	-	-	240	-	-	240
5. Others	-	135				(32)	103
Balance at 31 December 2020	121,071	68,976	5,910	1,189	209,280	115,849	522,275
Balance at 1 January 2021	121,071	68,976	5,910	1,189	209,280	115,849	522,275
Change for the year							
1. Net profit	-	-	-	-	-	39,444	39,444
2. Other comprehensive income	-	-	13,612	-	-	-	13,612
Total comprehensive income	-	-	13,612	-		39,444	53,056
Amounts transferred to initial carrying amount of hedged items	-	-	(13,498)	-	-	-	(13,498)
Transactions with owners, recorded directly in shareholders' equity:							
3. Appropriations of profits:	-	-	-	-	-	-	
 Appropriations for surplus reserves (Note 39) 	-	-	-	-	3,944	(3,944)	
-Distributions to shareholders (Note 55)	-	-	-	-	-	(35,110)	(35,110)
Total transactions with owners, recorded directly in shareholders' equity	-	-	-	-	3,944	(39,054)	(35,110)
4. Net increase in specific reserve for the year	-	-	-	469	-	-	469
5. Others		(1,079)				201	(878)
Balance at 31 December 2021	121,071	67,897	6,024	1,658	213,224	116,440	526,314

These financial statements have been approved for issue by the board of directors on 25 March 2022.

Ma Yongsheng *Chairman (Legal representative)* Yu Baocai President

1 STATUS OF THE COMPANY

China Petroleum & Chemical Corporation (the "Company") was established on 25 February 2000 as a joint stock limited company. The company is registered in Beijing, the People's Republic of China, and the headquarter is located in Beijing, the People's Republic of China. The approval date of the financial report is 25 March 2022.

According to the State Council's approval to the "Preliminary Plan for the Reorganisation of China Petrochemical Corporation" (the "Reorganisation"), the Company was established by China Petrochemical Corporation, which transferred its core businesses together with the related assets and liabilities at 30 September 1999 to the Company. Such assets and liabilities had been valued jointly by China United Assets Appraisal Corporation, Beijing Zhong Zheng Appraisal Company, CIECC Assets Appraisal Corporation and Zhong Fa International Properties Valuation Corporation. The net asset value was determined at RMB98,249,084,000. The valuation was reviewed and approved by the Ministry of Finance (the "MOF") (Cai Ping Zi [2000] No. 20 "Comments on the Review of the Valuation Regarding the Formation of a Joint Stock Limited Company by China Petrochemical Corporation").

In addition, pursuant to the notice Cai Guan Zi [2000] No. 34 "Reply to the Issue Regarding Management of State-Owned Equity by China Petroleum and Chemical Corporation" issued by the MOF, 68.8 billion domestic state-owned shares with a par value of RMB1.00 each were issued to Sinopec Group Company, the amount of which is equivalent to 70% of the above net asset value transferred from Sinopec Group Company to the Company in connection with the Reorganisation.

Pursuant to the notice Guo Jing Mao Qi Gai [2000] No. 154 "Reply on the Formation of China Petroleum and Chemical Corporation", the Company obtained the approval from the State Economic and Trade Commission on 21 February 2000 for the formation of a joint stock limited company.

The Company took over the exploration, development and production of crude oil and natural gas, refining, chemicals and related sales and marketing business of Sinopec Group Company after the establishment of the Company.

The Company and its subsidiaries (the "Group") engage in the oil and gas and chemical operations and businesses, including:

- (1) the exploration, development and production of crude oil and natural gas;
- (2) the refining, transportation, storage and marketing of crude oil and petroleum product; and
- (3) the production and sale of chemical.

Details of the Company's principal subsidiaries are set out in Note 59.

2 BASIS OF PREPARATION

(1) Statement of compliance of China Accounting Standards for Business Enterprises ("CASs")

The financial statements have been prepared in accordance with the requirements of Accounting Standards for Business Enterprises – Basic Standards, specific standards and relevant regulations (hereafter referred as CASs collectively) issued by the MOF on or after 15 February 2006. These financial statements also comply with the disclosure requirements of "Regulation on the Preparation of Information Disclosures of Companies Issuing Public Shares, No.15: General Requirements for Financial Reports" issued by the China Securities Regulatory Commission ("CSRC"). These financial statements present truly and completely the consolidated and company financial position as at 31 December 2021, and the consolidated and company financial performance and the consolidated and company cash flows for the year ended 31 December 2021.

These financial statements are prepared on a basis of going concern.

(2) Accounting period

The accounting year of the Group is from 1 January to 31 December.

(3) Measurement basis

The financial statements of the Group have been prepared under the historical cost convention, except for the assets and liabilities set out below:

- Financial assets held for trading (see Note 3(11))
- Other equity instrument investments (see Note 3(11))
- Derivative financial instruments (see Note 3(11))
- Receivables financing (see Note 3(11))

(4) Functional currency and presentation currency

The functional currency of the Company's and most of its subsidiaries are Renminbi. The Company and its subsidiaries determine their functional currency according to the main economic environment in where they operate. The Group's consolidated financial statements are presented in Renminbi. Some of subsidiaries use other currency as the functional currency. The Company translates the financial statements of subsidiaries from their respective functional currencies into Renminbi (see Note 3(2)) if the subsidiaries' functional currencies are not Renminbi.

3 SIGNIFICANT ACCOUNTING POLICIES

The Group determines specific accounting policies and accounting estimates based on the characteristics of production and operational activities, mainly reflected in the accounting for allowance for financial assets (Note 3(11)), valuation of inventories (Note 3(4)), depreciation of fixed assets and depletion of oil and gas properties (Note 3(7), (8)), measurement of provisions (Note 3(16)), etc.

Principal accounting estimates and judgements of the Group are set out in Note 58.

(1) Accounting treatment of business combination involving entities under common control and not under common control

(a) Business combination involving entities under common control

A business combination involving entities or businesses under common control is a business combination in which all of the combining entities or businesses are ultimately controlled by the same party or parties both before and after the business combination, and that control is not transitory. The assets and liabilities that the acquirer receives in the acquisition are accounted for at the acquiree's carrying amount on the acquisition date. The difference between the carrying amount of the acquired net assets and the carrying amount of the consideration paid for the acquisition (or the total nominal value of shares issued) is recognised in the share premium of capital reserve, or the retained earnings in case of any shortfall in the share premium of capital reserve. Any costs directly attributable to the combination shall be recognised in profit or loss for the current period when occurred. The expense incurred for equity securities and debt securities issued as the consideration of the combination is recognised in the initial cost of the securities. The combination date is the date on which the acquirer effectively obtains control of the acquiree.

(b) Business combination involving entities not under common control

A business combination involving entities or businesses not under common control is a business combination in which all of the combining entities or businesses are not ultimately controlled by the same party or parties both before and after the business combination. Difference between the consideration paid by the Group as the acquirer, comprises of the aggregate of the fair value 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, and the Group's interest in the fair value of the identifiable net assets of the acquiree, is recognised as goodwill (Note 3(10)) if it is an excess, otherwise in the profit or loss. The expense incurred for equity securities and debt securities issued as the consideration of the combination is recognised in the initial cost of the securities. Any other expense directly attributable to the business combination is recognised in the profit or loss. The acquiree between the fair value and the book value of the assets given is recognised in profit or loss. The acquiree's identifiable assets, liabilities and contingent liabilities, if satisfying the recognition criteria, are recognised by the Group at their fair value at the acquisition date. The acquisition date is the date on which the acquirer effectively obtains control of the acquiree.

(c) Method for preparation of consolidated financial statements

The scope of consolidated financial statements is based on control and the consolidated financial statements comprise the Company and its subsidiaries. Control means an entity is exposed to, or has 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 financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Where the Company combines a subsidiary during the reporting period through a business combination involving entities under common control, the financial statements of the subsidiary are included in the consolidated financial statements as if the combination had occurred at the beginning of the earliest comparative year presented or, if later, at the date that common control was established. Therefore the opening balances and the comparative figures of the consolidated financial statements are restated. In the preparation of the consolidated financial statements, the subsidiary's assets, liabilities and results of operations are included in the consolidated balance sheet and the consolidated income statement, respectively, based on their carrying amounts in the subsidiary's financial statements, from the date that common control was established.

Where the Company acquires a subsidiary during the reporting year through a business combination involving entities not under common control, the identifiable assets, liabilities and results of operations of the subsidiaries are consolidated into consolidated financial statements from the date that control commences, based on the fair value of those identifiable assets and liabilities at the acquisition date.

Where the Company acquired a minority interest from a subsidiary's minority shareholders, the difference between the investment cost and the newly acquired interest into the subsidiary's identifiable net assets at the acquisition date is adjusted to the capital reserve (capital surplus) in the consolidated balance sheet. Where the Company partially disposed an investment of a subsidiary that do not result in a loss of control, the difference between the proceeds and the corresponding share of the interest into the subsidiary is adjusted to the capital reserve (capital surplus) in the consolidated balance sheet. If the credit balance of capital reserve (capital surplus) is insufficient, any excess is adjusted to retained profits.

In a business combination involving entities not under common control achieved in stages, the Group remeasures its previously held equity interest in the acquiree on the acquisition date. The difference between the fair value and the net book value is recognised as investment income for the year. If other comprehensive income was recognised regarding the equity interest previously held in the acquiree before the acquisition date, the relevant other comprehensive income is transferred to investment income in the period in which the acquisition occurs.

(1) Accounting treatment of business combination involving entities under common control and not under common control (Continued)

(c) Method for preparation of consolidated financial statements (Continued)

Where control of a subsidiary is lost due to partial disposal of the equity investment held in a subsidiary, or any other reasons, the Group derecognises assets, liabilities, minority interests and other equity items related to the subsidiary. The remaining equity investment is remeasured to fair value at the date in which control is lost. The sum of consideration received from disposal of equity investment and the fair value of the remaining equity investment, net of the fair value of the Group's previous share of the subsidiary's identifiable net assets recorded from the acquisition date, is recognised in investment income in the period in which control is lost. Other comprehensive income related to the previous equity investment in the subsidiary, is transferred to investment income when control is lost. Other comprehensive income related to the equity investment of the original subsidiary shall be converted into the current investment income in the event of loss of control.

Minority interest is presented separately in the consolidated balance sheet within shareholders' equity. Net profit or loss attributable to minority shareholders is presented separately in the consolidated income statement below the net profit line item.

The excess of the loss attributable to the minority interests during the period over the minority interests' share of the equity at the beginning of the reporting period is deducted from minority interests.

Where the accounting policies and accounting period adopted by the subsidiaries are different from those adopted by the Company, adjustments are made to the subsidiaries' financial statements according to the Company's accounting policies and accounting period. Intra-group balances and transactions, and any unrealised profit or loss arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

The unrealised profit or loss arising from the sale of assets by the Company to its subsidiaries is eliminated in full against the net profit attributed to shareholders; the unrealised profit or loss from the sale of assets by subsidiaries to the Company is eliminated according to the distribution ratio between shareholders of the parent company and minority interests. For sale of assets that occurred between subsidiaries, the unrealised gains and losses is eliminated according to the distribution ratio for its subsidiaries seller between net profit attributable to shareholders of the parent company and minority interests.

(2) Transactions in foreign currencies and translation of financial statements in foreign currencies

Foreign currency transactions are, on initial recognition, translated into Renminbi at the spot exchange rates quoted by the People's Bank of China ("PBOC rates") at the transaction dates.

Foreign currency monetary items are translated at the PBOC rates at the balance sheet date. Exchange differences, except for those directly related to the acquisition, construction or production of qualified assets, are recognised as income or expenses in the income statement. Non-monetary items denominated in foreign currency measured at historical cost are not translated. Non-monetary items denominated in foreign currency measured at historical cost are not translated. Non-monetary items denominated in foreign currency measured at historical cost are not translated. Non-monetary items denominated in foreign currency measured at the exchange rates at the date when the fair value was determined. The difference between the translated amount and the original currency amount is recognised as other comprehensive income, if it is classified as other equity instrument investments; or charged to the income statement if it is measured at fair value through profit or loss.

The assets and liabilities of foreign operation are translated into Renminbi at the spot exchange rates at the balance sheet date. The equity items, excluding "Retained earnings", are translated into Renminbi at the spot exchange rates at the transaction dates. The income and expenses of foreign operation are translated into Renminbi at the spot exchange rates or an exchange rate that approximates the spot exchange rates on the transaction dates. The resulting exchange differences are separately presented as other comprehensive income in the balance sheet within equity. Upon disposal of a foreign operation, the cumulative amount of the exchange differences recognised in which relate to that foreign operation is transferred to profit or loss in the year in which the disposal occurs.

(3) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, demand deposits, short-term and highly liquid investments which are readily convertible into known amounts of cash and are subject to an insignificant risk of change in value.

(4) Inventories

Inventories are initially measured at cost. Cost includes the cost of purchase and processing, and other expenditures incurred in bringing the inventories to their present location and condition. The cost of inventories is mainly calculated using the weighted average method. In addition to the cost of purchase of raw material, work in progress and finished goods include direct labour and an appropriate allocation of manufacturing overhead costs.

At the balance sheet date, inventories are stated at the lower of cost and net realisable value.

Any excess of the cost over the net realisable value of each item of inventories is recognised as a provision for diminution in the value of inventories. Net realisable value is the estimated selling price in the normal course of business less the estimated costs of completion and the estimated costs necessary to make the sale and relevant taxes. The net realisable value of materials held for use in the production is measured based on the net realisable value of the finished goods in which they will be incorporated. The net realisable value of the quantity of inventory held to satisfy sales or service contracts is measured based on the contract price. If the quantities held by the Group are more than the quantities of inventories specified in sales contracts, the net realisable value of the excess portion of inventories is measured based on general selling prices.

Inventories include raw materials, work in progress, semi-finished goods, finished goods and reusable materials. Reusable materials include low-value consumables, packaging materials and other materials, which can be used repeatedly but do not meet the definition of fixed assets. Reusable materials are amortised in full when received for use. The amounts of the amortisation are included in the cost of the related assets or profit or loss.

Inventories are recorded by perpetual method.

(5) Long-term equity investments

(a) Investment in subsidiaries

In the Company's separate financial statements, long-term equity investments in subsidiaries are accounted for using the cost method. Except for cash dividends or profits distributions declared but not yet distributed that have been included in the price or consideration paid in obtaining the investments, the Company recognises its share of the cash dividends or profit distributions declared by the investee as investment income irrespective of whether these represent the net profit realised by the investee before or after the investments. Investments in subsidiaries are stated at cost less impairment losses (see Note 3(12)) in the balance sheet. At initial recognition, such investments are measured as follows:

The initial investment cost of a long-term equity investment obtained through a business combination involving entities under common control is the Company's share of the carrying amount of the subsidiary's equity at the combination date. The difference between the initial investment cost and the carrying amounts of the consideration given is adjusted to share premium in capital reserve. If the balance of the share premium is insufficient, any excess is adjusted to retained earnings.

For a long-term equity investment obtained through a business combination not involving enterprises under common control, the initial investment cost comprises the aggregate of the fair values of assets transferred, liabilities incurred or assumed, and equity securities issued by the Company, in exchange for control of the acquiree. For a long-term equity investment obtained through a business combination not involving enterprises under common control, if it is achieved in stages, the initial cost comprises the carrying value of previously-held equity investment in the acquiree immediately before the acquisition date, and the additional investment cost at the acquisition date.

An investment in a subsidiary acquired otherwise than through a business combination is initially recognised at actual purchase cost if the Group acquires the investment by cash, or at the fair value of the equity securities issued if an investment is acquired by issuing equity securities, or at the value stipulated in the investment contract or agreement if an investment is contributed by investors.

(5) Long-term equity investments (Continued)

(b) Investment in joint ventures and associates

A joint venture is an incorporated entity over which the Group, based on legal form, contractual terms and other facts and circumstances, has joint control with the other parties to the joint venture and rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the Group and the parties sharing control.

An associate is the investee that the Group has significant influence on their financial and operating policies. Significant influence represents the right to participate in the financial and operating policy decisions of the investee but is not control or joint control over the establishment of these policies. The Group generally considers the following circumstances in determining whether it can exercise significant influence over the investee: whether there is representative appointed to the board of directors or equivalent governing body of the investee; whether to participate in the investee's policy-making process; whether there are significant transactions with the investees; whether there is management personnel sent to the investee; whether to provide critical technical information to the investee.

An investment in a joint ventures or an associate is accounted for using the equity method, unless the investment is classified as held for sale.

The initial cost of investment in joint ventures and associates is stated at the consideration paid except for cash dividends or profits distributions declared but unpaid at the time of acquisition and therefore included in the consideration paid should be deducted if the investment is made in cash. Under the circumstances that the long-term investment is obtained through non-monetary asset exchange, the initial cost of the investment is stated at the fair value of the assets exchanged if the transaction has commercial substance, the difference between the fair value of the assets exchanged and its carrying amount is charged to profit or loss; or stated at the carrying amount of the assets exchanged if the transaction lacks commercial substance.

The Group's accounting treatments when adopting the equity method include:

Where the initial investment cost of a long-term equity investment exceeds the Group's interest in the fair value of the investee's identifiable net assets at the date of acquisition, the investment is initially recognised at the initial investment cost. Where the initial investment cost is less than the Group's interest in the fair value of the investee's identifiable net assets at the time of acquisition, the investment is initially recognised at the investes, and the difference is charged to profit or loss.

After the acquisition of the investment, the Group recognises its share of the investee's net profits or losses and other comprehensive income as investment income or losses and other comprehensive income, and adjusts the carrying amount of the investment accordingly. Once the investee declares any cash dividends or profits distributions, the carrying amount of the investment is reduced by that attributable to the Group.

The Group recognises its share of the investee's net profits or losses after making appropriate adjustments to align the accounting policies or accounting periods with those of the Group based on the fair values of the investee's net identifiable assets at the time of acquisition. Under the equity accounting method, unrealised profits and losses resulting from transactions between the Group and its associates or joint ventures are eliminated to the extent of the Group's interest in the associates or joint ventures. Unrealised losses resulting from transactions between the Group and its associates or joint ventures are fully recognised in the event that there is an evidence of impairment.

The Group discontinues recognising its share of net losses of the investee after the carrying amount of the long-term equity investment and any long-term interest that is in substance forms part of the Group's net investment in the associate or the joint venture is reduced to zero, except to the extent that the Group has an obligation to assume additional losses. However, if the Group has incurred obligations for additional losses and the conditions on recognition of provision are satisfied in accordance with the accounting standard on contingencies, the Group continues recognising the investment losses and the provision. Where net profits are subsequently made by the associate or joint venture, the Group resumes recognising its share of those profits only after its share of the profits equals the share of losses not recognised.

The Group adjusts the carrying amount of the long-term equity investment for changes in owners' equity of the investee other than those arising from net profits or losses and other comprehensive income, and recognises the corresponding adjustment in capital reserve.

(c) The impairment assessment method and provision accrual on investment

The impairment assessment and provision accrual on investments in subsidiaries, associates and joint ventures are stated in Note 3(12).

(6) Leases

A lease is a contract that a lessor transfers the right to use an identified asset for a period of time to a lessee in exchange for consideration.

(a) As Lessee

The Group recognises a right-of-use asset at the commencement date, and recognises the lease liability at the present value of the lease payments that are not paid at that date. The lease payments include fixed payments, the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and payments of penalties for terminating the lease if the lease term reflects the Group exercising that option, etc. Variable payments that are based on a percentage of sales are not included in the lease payments, and should be recognised in profit or loss when incurred. Lease liabilities to be paid within one year (including one year) from balance sheet date is presented in non-current liabilities due within one year.

Right-of-use assets of the Group mainly comprise land. Right-of-use assets are measured at cost which comprises the amount of the initial measurement of the lease liability, any lease payments made at or before the commencement date, any initial direct costs incurred by the lessee, less any lease incentives received. The Group depreciates the right-of-use assets over the shorter of the asset's useful life and the lease term on a straight-line basis. When the recoverable amount of a right-of-use asset is less than its carrying amount, the carrying amount is reduced to the recoverable amount.

Payments associated with short-term leases with lease terms within 12 months and leases for which the underlying assets are individually of low value when it is new are recognised on a straight-line basis over the lease term as an expense in profit or loss or as cost of relevant assets, instead of recognising right-of-use assets and lease liabilities.

(b) As Lessor

A lease that transfers substantially all the risks and rewards incidental to ownership of an asset is a finance lease. An operating lease is a lease other than a finance lease.

When the Group leases self-owned plants and buildings, equipment and machinery, lease income from an operating lease is recognised on a straight-line basis over the period of the lease. The Group recognises variable lease income which is based on a certain percentage of sales as rental income when occurred.

(7) Fixed assets and construction in progress

Fixed assets represent the tangible assets held by the Group using in the production of goods, rendering of services and for operation and administrative purposes with useful life over one year.

Fixed assets are stated in the balance sheet at cost less accumulated depreciation and impairment losses (see Note 3(12)). Construction in progress is stated in the balance sheet at cost less impairment losses (see Note 3(12)).

The cost of a purchased fixed asset comprises the purchase price, related taxes, and any directly attributable expenditure for bringing the asset to working condition for its intended use. The cost of self-constructed assets includes the cost of materials, direct labour, capitalised borrowing costs (see Note 3(19)), and any other costs directly attributable to bringing the asset to working condition for its intended use. According to legal or contractual obligations, costs of dismantling and removing the items and restoring the site on which the related assets located are included in the initial cost.

Construction in progress is transferred to fixed assets when the asset is ready for its intended use. No depreciation is provided against construction in progress.

Where the individual component parts of an item of fixed asset have different useful lives or provide benefits to the Group in different patterns thus necessitating use of different depreciation rates or methods, each part is recognised as a separate fixed asset.

The subsequent costs including the cost of replacing part of an item of fixed assets are recognised in the carrying amount of the item if the recognition criteria are satisfied, and the carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of fixed assets are recognised in profit or loss as incurred.

The Group terminates the recognition of an item of fixed asset when it is in a state of disposal or it is estimated that it is unable to generate any economic benefits through use or disposal. Gains or losses arising from the retirement or disposal of an item of fixed asset are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

(7) Fixed assets and construction in progress (Continued)

Other than oil and gas properties, the cost of fixed assets less residual value and accumulated impairment losses is depreciated using the straight-line method over their estimated useful lives, unless the fixed asset is classified as held for sale. The estimated useful lives and the estimated rate of residual values adopted for respective classes of fixed assets are as follows:

	Estimated	Estimated rate
	useful life	of residual value
Plants and buildings	12-50 years	3%
Equipment, machinery and others	4-30 years	3%

Useful lives, residual values and depreciation methods are reviewed at least each year end.

(8) Oil and gas properties

Oil and gas properties include the mineral interests in properties, wells and related support equipment arising from oil and gas exploration and production activities.

The acquisition cost of mineral interest is capitalised as oil and gas properties. Costs of development wells and related support equipment are capitalised. The cost of exploratory wells is initially capitalised as construction in progress pending determination of whether the well has found proved reserves. Exploratory well costs are charged to expenses upon the determination that the well has not found proved reserves. However, in the absence of a determination of the discovery of proved reserves, exploratory well costs are not carried as an asset for more than one year following completion of drilling. If, after one year has passed, a determination costs, including geological and geophysical costs, are charged to profit or loss in the year as incurred.

The Group estimates future dismantlement costs for oil and gas properties with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with the industry practices. These estimated future dismantlement costs are discounted at credit-adjusted risk-free rate and are capitalised as oil and gas properties, which are subsequently amortised as part of the costs of the oil and gas properties.

Capitalised costs of proved oil and gas properties are amortised on a unit-of-production method based on volumes produced and reserves.

(9) Intangible assets

Intangible assets, where the estimated useful life is finite, are stated in the balance sheet at cost less accumulated amortisation and provision for impairment losses (see Note 3(12)). For an intangible asset with finite useful life, its cost less estimated residual value and accumulated impairment losses is amortised on a straight-line basis over the expected useful lives, unless the intangible assets are classified as held for sale.

An intangible asset is regarded as having an indefinite useful life and is not amortised when there is no foreseeable limit to the year over which the asset is expected to generate economic benefits for the Group.

Useful lives and amortisation methods are reviewed at least each year end.

(10) Goodwill

The initial cost of goodwill represents the excess of cost of acquisition over the acquirer's interest in the fair value of the identifiable net assets of the acquiree under the business combination involving entities not under common control.

Goodwill is not amortised and is stated at cost less accumulated impairment losses (see Note 3(12)). On disposal of an asset group or a set of asset groups, any attributable amount of purchased goodwill is written off and included in the calculation of the profit or loss on disposal.

(11) Financial Instruments

Financial instruments, refer to the contracts that form one party's financial assets and form the financial liabilities or equity instruments of the other party. The Group recognises a financial asset or a financial liability when the Group enters into and becomes a party to the underlining contract of the financial instrument.

(a) Financial assets

(i) Classification and measurement

The Group classifies financial assets into different categories depending on the business model for managing the financial assets and the contractual terms of cash flows of the financial assets: (1) financial assets measured at amortised cost, (2) financial assets measured at fair value through other comprehensive income, (3) financial assets measured at fair value through profit or loss. A contractual cash flow characteristic which could have only a de minimis effect, or could have an effect that is more than de minimis but is not genuine, does not affect the classification of the financial asset.

Financial assets are initially recognised at fair value. For financial assets measured at fair value through profit or loss, the relevant transaction costs are recognised in profit or loss. The transaction costs for other financial assets are included in the initially recognised amount. However, accounts receivable arising from sales of goods or rendering services, without significant financing component, are initially recognised based on the transaction price expected to be entitled by the Group.

Debt instruments

The debt instruments held by the Group refer to the instruments that meet the definition of financial liabilities from the perspective of the issuer, and are measured in the following ways:

- Measured at amortised cost:

The business model for managing such financial assets by the Group are held for collection of contractual cash flows. The contractual cash flow characteristics are to give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Interest income from these financial assets is recognised using the effective interest rate method. The financial assets include cash at bank and on hand and receivables.

- Measured at fair value through other comprehensive income:

The business model for managing such financial assets by the Group are held for collection of contractual cash flows and for selling the financial assets, the contractual cash flow characteristics of such financial assets are consistent with the basic lending arrangements. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment gains or losses, foreign exchange gains and losses and interest income calculated using the effective interest rate method, which are recognised in profit or loss. The financial assets include receivables financing.

Equity instruments

Equity instruments that the Group has no power to control, jointly control or exercise significant influence over, are measured at fair value through profit or loss and presented as financial assets held for trading.

In addition, the Group designates some equity instruments that are not held for trading as financial assets at fair value through other comprehensive income, and presented in other equity instrument investments. The relevant dividends of these financial assets are recognised in profit or loss. When derecognised, the cumulative gain or loss previously recognised in other comprehensive income is transferred to retained earnings.

(ii) Impairment

The Group recognises a loss allowance for expected credit losses on financial assets measured at amortised cost and receivables financing measured at fair value through other comprehensive income.

The Group measures and recognises expected credit losses, considering reasonable and supportable information about the relevant past events, current conditions and forecasts of future economic conditions.

The Group measures the expected credit losses of financial instruments on different stages at each balance sheet date. For financial instruments that have no significant increase in credit risk since the initial recognition, on first stage, the Group measures the loss allowance at an amount equal to 12-month expected credit losses. If there has been a significant increase in credit risk since the initial recognition of a financial instrument but credit impairment has not occurred, on second stage, the Group recognises a loss allowance at an amount equal to lifetime expected credit losses. If credit impairment has occurred since the initial recognition of a financial instrument, on third stage, the Group recognises a loss allowance at an amount equal to lifetime expected credit losses.

(11) Financial Instruments (Continued)

(a) Financial assets (Continued)

(ii) Impairment (Continued)

For financial instruments that have low credit risk at the balance sheet date, the Group assumes that there is no significant increase in credit risk since the initial recognition, and measures the loss allowance at an amount equal to 12-month expected credit losses.

For financial instruments on the first stage and the second stage, and that have low credit risk, the Group calculates interest income according to carrying amount without deducting the impairment allowance and effective interest rate. For financial instruments on the third stage, interest income is calculated according to the carrying amount minus amortised cost after the provision of impairment allowance and effective interest rate.

For accounts receivable and receivables financing related to revenue, the Group measures the loss allowance at an amount equal to lifetime expected credit losses.

The Group recognises the loss allowance accrued or written back in profit or loss.

(iii)Derecognition

The Group derecognises a financial asset when a) the contractual right to receive cash flows from the financial asset expires; b) the Group transfers the financial asset and substantially all the risks and rewards of ownership of the financial asset; c) the financial assets have been transferred and the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, but the Group has not retained control.

On derecognition of other equity instrument investments, the difference between the carrying amounts and the sum of the consideration received and any cumulative gain or loss previously recognised in other comprehensive income, is recognised in retained earnings. While on derecognition of other financial assets, this difference is recognised in profit or loss.

(b) Financial liabilities

The Group, at initial recognition, classifies financial liabilities as either financial liabilities subsequently measured at amortised cost or financial liabilities at fair value through profit or loss.

The Group's financial liabilities are mainly financial liabilities measured at amortised cost, including bills payable, accounts payable, other payables, loans and debentures payable, etc. These financial liabilities are initially measured at the amount of their fair value after deducting transaction costs and use the effective interest rate method for subsequent measurement.

Where the present obligations of financial liabilities are completely or partially discharged, the Group derecognises these financial liabilities or discharged parts of obligations. The differences between the carrying amounts and the consideration received are recognised in profit or loss.

Financial guarantee liabilities

Financial guarantees are contracts that requires the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.

Financial guarantees issued are initially recognised at fair value, which is determined by reference to fees charged in an arm's length transaction for similar services, when such information is obtainable, or to interest rate differentials, by comparing the actual rates charged by lenders when the guarantee is made available with the estimated rates that lenders would have charged, had the guarantees not been available, where reliable estimates of such information can be made. Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognised in accordance with the Group's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognised in profit or loss.

Subsequent to initial recognition, the amount initially recognised as deferred income is amortised in profit or loss over the term of the guarantee as income from financial guarantees issued.

(11) Financial Instruments (Continued)

(c) Determination of fair value

If there is an active market for financial instruments, the quoted price in the active market is used to measure fair values of the financial instruments. If no active market exists for financial instruments, valuation techniques are used to measure fair values. In valuation, the Group adopts valuation techniques that are applicable in the current situation and have sufficient available data and other information to support it, and selects input values that are consistent with the asset or liability characteristics considered by market participants in the transaction of relevant assets or liabilities, and gives priority to relevant observable input values. Use of unobservable input values where relevant observable input values cannot be obtained or are not practicable.

(d) Derivative financial instruments and hedge accounting

Derivative financial instruments are recognised initially at fair value. At each balance sheet date, the fair value is remeasured. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss, except where the derivatives qualify for hedge accounting.

Hedge accounting is a method which recognises the offsetting effects on profit or loss of changes in the fair values of the hedging instrument and the hedged item in the same accounting period, to represent the effect of risk management activities.

Hedged items are the items that expose the Group to risks of changes in future cash flows and that are designated as being hedged and that must be reliably measurable. The Group's hedged items include a forecast transaction that is settled with an undetermined future market price and exposes the Group to risk of variability in cash flows, etc.

A hedging instrument is a designated derivative whose changes in cash flows are expected to offset changes in the cash flows of the hedged item.

The hedging relationship meets all of the following hedge effectiveness requirements:

- (1) There is an economic relationship between the hedged item and the hedging instrument, which share a risk and that gives rise to opposite changes in fair value that tend to offset each other.
- (2) The effect of credit risk does not dominate the value changes that result from that economic relationship.
- (3) The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item. However, that designation shall not reflect an imbalance between the weightings of the hedged item and the hedging instrument.
 - Cash flow hedges

Cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognised asset or liability (such as all or some future interest payments on variable-rate debt) or a highly probable forecast transaction, and could affect profit or loss. As long as a cash flow hedge meets the qualifying criteria for hedge accounting, the hedging relationship shall be accounted for as follows:

- The cumulative gain or loss on the hedging instrument from inception of the hedge;
- The cumulative change in present value of the expected future cash flows on the hedged item from inception of the hedge.

The gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in other comprehensive income.

The portion of the gain or loss on the hedging instrument that is determined to be an ineffective hedge is recognised in profit or loss.

If a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability, or a hedged forecast transaction for a non-financial asset or a non-financial liability becomes a firm commitment for which fair value hedge accounting is applied, the entity shall remove that amount from the cash flow hedge reserve and include it directly in the initial cost or other carrying amount of the asset or the liability. This is not a reclassification adjustment and hence it does not affect other comprehensive income.

(11) Financial Instruments (Continued)

(d) Derivative financial instruments and hedge accounting (Continued)

(3) (Continued)

Cash flow hedges (Continued)

For cash flow hedges, other than those covered by the preceding two policy statements, that amount shall be reclassified from the cash flow hedge reserve to profit or loss as a reclassification adjustment in the same period or periods during which the hedged expected future cash flows affect profit or loss.

If the amount that has been accumulated in the cash flow hedge reserve is a loss and the Group expects that all or a portion of that loss will not be recovered in one or more future periods, the Group immediately reclassify the amount that is not expected to be recovered into profit or loss.

When the hedging relationship no longer meets the risk management objective on the basis of which it qualified for hedge accounting (i.e. the entity no longer pursues that risk management objective), or when a hedging instrument expires or is sold, terminated, exercised, or there is no longer an economic relationship between the hedged item and the hedging instrument or the effect of credit risk starts to dominate the value changes that result from that economic relationship or no longer meets the criteria for hedge accounting, the Group discontinues prospectively the hedge accounting treatments. If the hedged future cash flows are still expected to occur, that amount shall remain in the cash flow hedge reserve and shall be accounted for as cash flow hedge reserve to profit or loss as a reclassification adjustment. A hedged future cash flow that is no longer highly probable to occur may still be expected to occur, if the hedged future cash flows are still expected to occur, that amount shall remain in the cash flows are still expected to occur, that amount shall remain in the cash flows are still expected to occur, that is no longer highly probable to occur may still be expected to occur, if the hedged future cash flows are still expected to occur, that amount shall remain in the cash flows are still expected to occur, that amount shall remain in the cash flows are still expected to occur, that amount shall remain in the cash flow hedge reserve and shall be accounted for as cash flow hedge reserve and shall be accounted for as cash flow hedge reserve and shall be accounted for as cash flow hedges.

- Fair value hedges

A fair value hedge is a hedge of the exposure to changes in the fair value of a recognized asset or liability or an unrecognised firm commitment, or a portion of such an asset, liability or firm commitment.

The gain or loss from remeasuring the hedging instrument is recognised in profit or loss. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the recognised hedged item not measured at fair value and is recognised in profit or loss.

Any adjustment to the carrying amount of a hedged item is amortised to profit or loss if the hedged item is a financial instrument (or a component thereof) measured at amortised cost. The amortisation is based on a recalculated effective interest rate at the date that amortisation begins.

(12) Impairment of other non-financial long-term assets

Internal and external sources of information are reviewed at each balance sheet date for indications that the following assets, including fixed assets, construction in progress, right-of-use assets, goodwill, intangible assets, long-term deferred expenses and investments in subsidiaries, associates and joint ventures may be impaired.

Assets are tested for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. The recoverable amounts of goodwill and intangible assets with uncertain useful lives are estimated annually no matter there are any indications of impairment. Goodwill is tested for impairment together with related asset units or groups of asset units.

An asset unit is the smallest identifiable group of assets that generates cash inflows largely independent of the cash inflows from other assets or groups of assets. An asset unit comprises related assets that generate associated cash inflows. In identifying an asset unit, the Group primarily considers whether the asset unit is able to generate cash inflows independently as well as the management style of production and operational activities, and the decision for the use or disposal of asset.

(12) Impairment of other non-financial long-term assets (Continued)

The recoverable amount is the greater of the fair value less costs to sell and the present value of expected future cash flows generated by the asset (or asset unit, set of asset units).

Fair value less costs to sell of an asset is based on its selling price in an arm's length transaction less any direct costs attributable to the disposal. Present value of expected future cash flows is the estimation of future cash flows to be generated from the use of and upon disposal of the asset, discounted at an appropriate pre-tax discount rate over the asset's remaining useful life.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount is reduced to the recoverable amount. The amount by which the carrying amount is reduced is recognised as an impairment loss in profit or loss. A provision for impairment loss of the asset is recognised accordingly. Impairment losses related to an asset unit or a set of asset units first reduce the carrying amount of any goodwill allocated to the asset unit or set of asset units, and then reduce the carrying amount of the other assets in the asset unit or set of asset units on a pro rata basis. However, the carrying amount of an impaired asset will not be reduced below the highest of its individual fair value less costs to sell (if determinable), the present value of expected future cash flows (if determinable) and zero.

Once an impairment loss is recognised, it is not reversed in a subsequent period.

(13) Long-term deferred expenses

Long-term deferred expenses are amortised on a straight-line basis over their beneficial periods

(14) Employee benefits

Employee benefits are all forms of considerations and compensation given in exchange for services rendered by employees, including short-term compensation, post-employment benefits, termination benefits and other long term employee benefits.

(a) Short-term compensation

Short term compensation includes salaries, bonuses, allowances and subsidies, employee benefits, medical insurance premiums, work-related injury insurance premium, maternity insurance premium, contributions to housing fund, unions and education fund and short-term absence with payment etc. When an employee has rendered service to the Group during an accounting period, the Group shall recognise the short-term compensation actually incurred as a liability and charge to the cost of an asset or to profit or loss in the same period, and non-monetary benefits are valued with the fair value.

(b) Post-employment benefits

The Group classifies post-employment benefits into either Defined Contribution Plan (DC plan) or Defined Benefit Plan (DB plan). DC plan means the Group only contributes a fixed amount to an independent fund and no longer bears other payment obligation; DB plan is post-employment benefits other than DC plan. In this reporting period, the post-employment benefits of the Group primarily comprise basic pension insurance and unemployment insurance and both of them are DC plans.

Basic pension insurance

Employees of the Group participate in the social insurance system established and managed by local labor and social security department. The Group makes basic pension insurance to the local social insurance agencies every month, at the applicable benchmarks and rates stipulated by the government for the benefits of its employees. After the employees retire, the local labor and social security department has obligations to pay them the basic pension. When an employee has rendered service to the Group during an accounting period, the Group shall recognise the accrued amount according to the above social security provisions as a liability and charge to the cost of an asset or to profit or loss in the same period.

(c) Termination benefits

When the Group terminates the employment relationship with employees before the employment contracts expire, or provides compensation as an offer to encourage employees to accept voluntary redundancy, a provision for the termination benefits provided is recognised in profit or loss under the conditions of both the Group has a formal plan for the termination of employment or has made an offer to employees for voluntary redundancy, which will be implemented shortly; and the Group is not allowed to withdraw from termination plan or redundancy offer unilaterally.

(15) Income tax

Current tax and deferred tax are recognised in profit or loss except to the extent that they relate to business combinations and items recognised directly in equity (including other comprehensive income).

Current tax is the expected tax payable calculated at the applicable tax rate on taxable income for the year, plus any adjustment to tax payable in respect of previous years.

At the balance sheet date, current tax assets and liabilities are offset if the Group has a legally enforceable right to set them off and also intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Deferred tax assets and liabilities are recognised based on deductible temporary differences and taxable temporary differences respectively. Temporary difference is the difference between the carrying amounts of assets and liabilities and their tax bases. Unused tax losses and unused tax credits able to be utilised in subsequent years are treated as temporary differences. Deferred tax assets are recognised to the extent that it is probable that future taxable income will be available to offset the deductible temporary differences.

Temporary differences arise in a transaction, which is not a business combination, and at the time of transaction, does not affect accounting profit or taxable profit (or unused tax losses), will not result in deferred tax. Temporary differences arising from the initial recognition of goodwill will not result in deferred tax.

At the balance sheet date, the amounts of deferred tax recognised is measured based on the expected manner of recovery or settlement of the carrying amount of the assets and liabilities, using tax rates that are expected to be applied in the period when the asset is recovered or the liability is settled in accordance with tax laws.

The carrying amount of deferred tax assets is reviewed at each balance sheet date. If it is unlikely to obtain sufficient taxable income to offset against the benefit of deferred tax asset, the carrying amount of the deferred tax assets is written down. Any such write-down should be subsequently reversed where it becomes probable that sufficient taxable income will be available.

At the balance sheet date, deferred tax assets and liabilities are offset if all the following conditions are met:

- the taxable entity has a legally enforceable right to offset current tax assets and current tax liabilities; and
- they relate to income taxes levied by the same tax authority on either:
 - the same taxable entity; or
 - different taxable entities which either to intend to settle the current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

(16) Provisions

Provisions are recognised when the Group has a present obligation as a result of a contingent event, it is probable that an outflow of economic benefits will be required to settle the obligations and a reliable estimate can be made. Where the effect of time value of money is material, provisions are determined by discounting the expected future cash flows.

Provisions for future dismantlement costs are initially recognised based on the present value of the future costs expected to be incurred in respect of the Group's expected dismantlement and abandonment costs at the end of related oil and gas exploration and development activities. Any subsequent change in the present value of the estimated costs, other than the change due to passage of time which is regarded as interest costs, is reflected as an adjustment to the provision of oil and gas properties.

(17) Revenue recognition

Revenue arises in the course of the Group's ordinary activities, and increases in economic benefits in the form of inflows that result in an increase in equity, other than those relating to contributions from equity participants.

The Group sells crude oil, natural gas, petroleum and chemical products, etc. Revenue is recognised according to the expected consideration amount, when a customer obtains control over the relevant goods or services. To determine whether a customer obtains control of a promised asset, the Group shall consider indicators of the transfer of control, which include, but are not limited to, the Group has a present right to payment for the asset; the Group has transferred physical possession of the asset to the customer; the customer has the significant risks and rewards of ownership of the asset; the customer has accepted the asset.

Sales of goods

Sales are recognised when control of the goods have transferred, being when the products are delivered to the customer. Advance from customers but goods not yet delivered is recorded as contract liabilities and is recognised as revenues when a customer obtains control over the relevant goods.

(18) Government grants

Government grants are the gratuitous monetary assets or non-monetary assets that the Group receives from the government, excluding capital injection by the government as an investor. Special funds such as investment grants allocated by the government, if clearly defined in official documents as part of "capital reserve" are dealt with as capital contributions, and not regarded as government grants.

Government grants are recognised when there is reasonable assurance that the grants will be received and the Group is able to comply with the conditions attaching to them. Government grants in the form of monetary assets are recorded based on the amount received or receivable, whereas non-monetary assets are measured at fair value.

Government grants received in relation to assets are recorded as deferred income, and recognised evenly in profit or loss over the assets' useful lives. Government grants received in relation to revenue are recorded as deferred income, and recognised as income in future periods as compensation when the associated future expenses or losses arise; or directly recognised as income in the current period as compensation for past expenses or losses.

(19) Borrowing costs

Borrowing costs incurred on borrowings for the acquisition, construction or production of qualified assets are capitalised into the cost of the related assets in the capitalisable period.

Except for the above, other borrowing costs are recognised as financial expenses in the income statement when incurred.

(20) Repairs and maintenance expenses

Repairs and maintenance (including overhauling expenses) expenses are recognised in profit or loss when incurred.

(21) Environmental expenditures

Environmental expenditures that relate to current ongoing operations or to conditions caused by past operations is expensed as incurred. Liabilities related to future remediation costs are recorded when environmental assessments and/or cleanups are probable and the costs can be reliably estimated. As facts concerning environmental contingencies become known to the Group, the Group reassesses its position both with respect to accrued liabilities and other potential exposures.

(22) Research and development costs

Research costs and development costs that cannot meet the capitalisation criteria are recognised in profit or loss when incurred.

3 SIGNIFICANT ACCOUNTING POLICIES (Continued)

(23) Dividends

Dividends and distributions of profits proposed in the profit appropriation plan which will be authorised and declared after the balance sheet date, are not recognised as a liability at the balance sheet date and are separately disclosed in the notes to the financial statements. Dividends are recognised as a liability in the period in which they are declared.

(24) Related parties

If a party has the power to control, jointly control or exercise significant influence over another party, or vice versa, or where two or more parties are subject to common control, joint control from another party, they are considered to be related parties, except for the two parties significantly influenced by a party. Related parties may be individuals or enterprises. Where enterprises are subject to state control but are otherwise unrelated, they are not related parties.

In addition to the related parties stated above, the Company determines related parties based on the disclosure requirements of Administrative Procedures on the Information Disclosures of Listed Companies issued by the CSRC.

(25) Segment reporting

Reportable segments are identified based on operating segments which are determined based on the structure of the Group's internal organisation, management requirements and internal reporting system. An operating segment is a component of the Group that meets the following respective conditions:

- engage in business activities from which it may earn revenues and incur expenses;
- whose operating results are regularly reviewed by the Group's management to make decisions about resource to be allocated to the segment and assess its performance; and
- for which financial information regarding financial position, results of operations and cash flows are available.

Inter-segment revenues are measured on the basis of actual transaction price for such transactions for segment reporting, and segment accounting policies are consistent with those for the consolidated financial statements.

(26) Changes in significant accounting policies

In 2021, the Group has adopted the following newly revised accounting standards and implementation guidance and illustrative examples issued by the MOF, mainly include:

- CAS Bulletin No.14 (Caikuai [2021] No.1) ("Bulletin No. 14")
- Notice of Extending the Applicable Period of 'Accounting Treatment of COVID-19 Related Rent Concessions' (Caikuai [2021] No.9)

(a) Bulletin No.14

Bulletin No.14 takes effect on 26 January 2021 (implementation date).

(i) "Public-private partnership" (PPP) arrangements

Bulletin No.14, implementation Q&As and illustrative examples clarify the features and conditions of PPP arrangements, sets out the accounting and disclosure requirements of a private entity in PPP arrangements. The adoption of Bulletin No.14 does not have significant effect on the financial position and financial performance of the Group.

(b) Caikuai [2021] No.9

The Accounting Treatment of COVID-19 Related Rent Concessions (Caikuai [2020] No.10) provides practical expedient under certain conditions for rent concessions occurring as a direct consequence of the COVID-19 pandemic, and combining the requirements of Caikuai [2021] No.9, such practical expedient is only applicable to any reduction in lease payments due before 30 June 2022. The adoption of the above regulations does not have significant effect on the financial position and financial performance of the Group.

4 TAXATION

Major types of tax applicable to the Group are value-added tax, resources tax, consumption tax, income tax, crude oil special gain levy, city construction tax, education surcharge and local education surcharge.

Tax rate of products is presented as below:

Type of taxes	Tax rate	Tax basis and method
Value Added Tax (the "VAT")	13%, 9%, 6%	Based on taxable value added amount. Tax payable is
		calculated using the taxable sales amount multiplied by the applicable tax rate less current period's deductible VAT input.
Resource Tax	6%	Based on the revenue from sales of crude oil and natural gas.
Consumption Tax	RMB2,109.76 per tonnage for Gasoline, RMB1,411.20	<u> </u>
	per tonnage for Diesel, RMB2,105.20 per tonnage	
	for Naphtha, RMB1,948.64 per tonnage for Solvent	
	oil, RMB1,711.52 per tonnage for Lubricant	
	oil, RMB1,218.00 per tonnage for Fuel oil, and	
	RMB1,495.20 per tonnage for Jet fuel oil.	
Corporate Income Tax	5% to 50%	Based on taxable income.
Crude Oil Special Gain Levy	20% to 40%	Based on the sales of domestic crude oil at prices higher
		than a specific level.
City Maintenance and	1%, 5% or 7%	Based on the actual paid VAT and consumption tax.
Construction Tax		
Education surcharges	3%	Based on the actual paid VAT and consumption tax.
Local Education surcharges	2%	Based on the actual paid VAT and consumption tax.

5 CASH AT BANK AND ON HAND

The Group

	At 3	At 31 December 2021				0	
	Original	Original			Original		
	currency	Exchange	RMB	currency	Exchange	RMB	
	million	rates	million	million	rates	million	
Cash on hand							
Renminbi			1			8	
Cash at bank							
Renminbi			144,294			120,542	
US Dollar	2,027	6.3757	12,924	1,054	6.5249	6,875	
Hong Kong Dollar	3,533	0.8176	2,888	1,377	0.8416	1,159	
EUR	3	7.2197	20	1	8.0250	8	
Others			180			2,403	
			160,307			130,995	
Deposits at related parities							
Renminbi			15,758			23,737	
US Dollar	6,943	6.3757	44,266	4,443	6.5249	28,993	
EUR	67	7.2197	483	49	8.0250	394	
Others			1,175			293	
			61,682			53,417	
Total			221,989			184,412	

Deposits at related parties represent deposits placed at Sinopec Finance Company Limited and Sinopec Century Bright Capital Investment Limited. Deposits interest is calculated based on market rate.

At 31 December 2021, time deposits with financial institutions of the Group amounted to RMB113,399 million (2020: RMB96,853 million).

6 DERIVATIVE FINANCIAL ASSETS AND DERIVATIVE FINANCIAL LIABILITIES

Derivative financial assets and derivative financial liabilities of the Group are primarily commodity futures and swaps contracts. See Note 64.

7 ACCOUNTS RECEIVABLE

	The (The Group		
	At 31 December	At 31 December At 31 December		At 31 December
	2021	2020	2021	2020
	RMB million	RMB million	RMB million	RMB million
Accounts receivable	38,894	39,299	21,239	21,871
Less: Allowance for doubtful accounts	4,033	3,860	93	108
Total	34,861	35,439	21,146	21,763

Ageing analysis on accounts receivable is as follows:

		The Group							
		At 31 Dece	mber 2021			At 31 December 2020			
	Amount	Percentage to total accounts receivable	Allowance	Percentage of allowance to accounts receivable balance	Amount	Percentage to total accounts receivable	Allowance	Percentage of allowance to accounts receivable balance	
	RMB million	%	RMB million	%	RMB million	%	RMB million	%	
Within one year	34,263	88.1	83	0.2	34,478	87.7	117	0.3	
Between one and two years	623	1.6	181	29.0	4,062	10.3	3,131	77.1	
Between two and three years	3,411	8.8	3,190	93.5	149	0.4	85	57.0	
Over three years	597	1.5	579	97.0	610	1.6	527	86.4	
Total	38,894	100.0	4,033		39,299	100.0	3,860		

				The Co	mpany			
		At 31 Dece	mber 2021			At 31 Dece	mber 2020	
				Percentage				Percentage
		Percentage		of allowance		Percentage		of allowance
		to total		to accounts		to total		to accounts
		accounts		receivable		accounts		receivable
	Amount	receivable	Allowance	balance	Amount	receivable	Allowance	balance
	RMB million	%	RMB million	%	RMB million	%	RMB million	%
Within one year	20,196	95.1	9	0.1	21,647	99.0	1	-
Between one and two years	946	4.5	6	0.6	76	0.3	7	9.2
Between two and three years	20	0.1	2	10.0	49	0.2	13	26.5
Over three years	77	0.3	76	98.7	99	0.5	87	87.9
Total	21,239	100.0	93		21,871	100.0	108	

At 31 December 2021 and 31 December 2020, the total amounts of the top five accounts receivable of the Group are set out below:

	At 31 December	At 31 December
	2021	2020
Total amount (RMB million)	10,444	15,628
Percentage to the total balance of accounts receivable	26.9%	39.8%
Allowance for doubtful accounts	2,062	2,057

Sales are generally on a cash term. Credit is generally only available for major customers with well-established trading records. Amounts due from China Petrochemical Corporation ("Sinopec Group Company") and fellow subsidiaries are repayable under the same terms.

Accounts receivable (net of allowance for doubtful accounts) primarily represent receivables that are neither past due nor impaired. These receivables relate to a wide range of customers for whom there is no recent history of default. Information about the impairment of accounts receivable and the Group exposure to credit risk can be found in Note 64.

During 2021 and 2020, the Group and the Company had no individually significant accounts receivable been fully or substantially provided allowance for doubtful accounts.

During 2021 and 2020, the Group and the Company had no individually significant write-off or recovery of doubtful debts which had been fully or substantially provided for in prior years.

7 ACCOUNTS RECEIVABLE (Continued)

Ageing started from the overdue date of accounts receivable. The Group always measured the provision for impairment of accounts receivable based on the amount equivalent to the expected credit loss during the entire duration. The ECLs were calculated based on historical actual credit loss experience. The rates were considered the differences between economic conditions during the period over which the historical data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables. The Group performed the calculation of ECL rates by the operating segment and geographical location.

					Impairment provision on provision matrix basis		
31 December 2021	Gross carrying amount RMB million	Carrying amount RMB million	Impairment provision on individual basis RMB million	Weighted- average loss rate %	Impairment provision RMB million	Loss allowance RMB million	
Current and within 1 year past due	34,263	4,280	26	0.2%	57	83	
1 to 2 years past due	623	500	137	35.8%	44	181	
2 to 3 years past due	3,411	3,324	3,146	50.6%	44	3,190	
Over 3 years past due	597	208	190	100.0%	389	579	
Total	38,894	8,312	3,499		534	4,033	

		Impairment provision on individual basis		Impairment on provision i		
31 December 2020	Gross carrying amount RMB million	Carrying amount RMB million	individual basis	Weighted- average loss rate %	Impairment provision RMB million	Loss allowance RMB million
Current and within 1 year past due	34,478	5,023	117	0.0%	-	117
1 to 2 years past due	4,062	3,637	3,024	25.2%	107	3,131
2 to 3 years past due	149	27	18	54.9%	67	85
Over 3 years past due	610	218	182	88.0%	345	527
Total	39,299	8,905	3,341		519	3,860

8 RECEIVABLES FINANCING

Receivables financing represents mainly the bills of acceptance issued by banks for sales of goods and products and certain trade accounts receivable. The business model of financial assets is achieved both by collecting contractual cash flows and selling of these assets.

At 31 December 2021, the Group's derecognised but outstanding bills due to endorsement or discount amounted to RMB36,400 million (2020: RMB25,740 million).

At 31 December 2021, the Group considers that its bills of acceptance issued by banks do not pose a significant credit risk and will not cause any significant loss due to the default of drawers.

9 PREPAYMENTS

	The (Group	The Company		
	At 31 December	At 31 December	At 31 December	At 31 December	
	2021	2020	2021	2020	
	RMB million	RMB million	RMB million	RMB million	
Prepayments	9,350	4,934	4,556	2,637	
Less: Allowance for doubtful accounts	83	77	16	11	
Total	9,267	4,857	4,540	2,626	

Ageing analysis of prepayments is as follows:

				The (Group			
		At 31 Dece	mber 2021			At 31 Dece	mber 2020	
		Percentage to total		Percentage of allowance to prepayments		Percentage to total		Percentage of allowance to prepayments
	Amount	prepayments	Allowance	balance	Amount	prepayments	Allowance	balance
	RMB million	%	RMB million	%	RMB million	%	RMB million	%
Within one year	8,541	91.3	-	-	4,435	89.9	-	-
Between one and two years	444	4.8	7	1.6	267	5.4	20	7.5
Between two and three years	166	1.8	25	15.1	142	2.9	8	5.6
Over three years	199	2.1	51	25.8	90	1.8	49	54.4
Total	9,350	100.0	83		4,934	100.0	77	

	The Company							
		At 31 Dece	mber 2021			At 31 Dece	mber 2020	
	Percentage of							Percentage of
		Percentage		allowance to		Percentage		allowance to
		to total		prepayments		to total		prepayments
	Amount	prepayments	Allowance	balance	Amount	prepayments	Allowance	balance
	RMB million	%	RMB million	%	RMB million	%	RMB million	%
Within one year	3,965	87.0	-	-	2,337	88.6	-	-
Between one and two years	369	8.1	2	0.5	159	6.0	7	4.4
Between two and three years	99	2.2	10	10.1	39	1.5	-	-
Over three years	123	2.7	4	3.3	102	3.9	4	3.9
Total	4,556	100.0	16		2,637	100.0	11	

At 31 December 2021 and 31 December 2020, the total amounts of the top five prepayments of the Group are set out below:

	At 31 December 2021	At 31 December 2020
Total amount (RMB million)	2,939	1,131
Percentage to the total balance of prepayments	31.4%	22.9%

10 OTHER RECEIVABLES

	The (Group	The Company		
	At 31 December	At 31 December	At 31 December	At 31 December	
	2021	2020	2021	2020	
	RMB million	RMB million	RMB million	RMB million	
Other receivables	37,254	35,255	47,827	38,835	
Less: Allowance for doubtful accounts	1,590	1,531	898	897	
Total	35,664	33,724	46,929	37,938	

Ageing analysis of other receivables is as follows:

				The G	aroup					
		At 31 Dece	mber 2021		At 31 December 2020					
				Percentage of allowance			Percentage of allowance			
		Percentage to total other		to other receivables		Percentage to total other		to other receivables		
	Amount	receivables	Allowance	balance	Amount	receivables	Allowance	balance		
	RMB million	%	RMB million	%	RMB million	%	RMB million	%		
Within one year	26,579	71.3	35	0.1	24,010	68.1	51	0.2		
Between one and two years	597	1.6	112	18.8	8,513	24.2	196	2.3		
Between two and three years	7,661	20.6	165	2.2	1,169	3.3	84	7.2		
Over three years	2,417	6.5	1,278	52.9	1,563	4.4	1,200	76.8		
Total	37,254	100.0	1,590		35,255	100.0	1,531			

				The Co	mpany					
		At 31 Dece	mber 2021		At 31 December 2020					
				Percentage				Percentage		
				of allowance				of allowance		
		Percentage		to other		Percentage		to other		
		to total other		receivables		to total other		receivables		
	Amount	receivables	Allowance	balance	Amount	receivables	Allowance	balance		
	RMB million	%	RMB million	%	RMB million	%	RMB million	%		
Within one year	28,176	58.9	-	-	21,378	55.0	-	-		
Between one and two years	3,740	7.8	2	0.1	2,123	5.5	1	-		
Between two and three years	1,414	3.0	2	0.1	1,618	4.2	5	0.3		
Over three years	14,497	30.3	894	6.2	13,716	35.3	891	6.5		
Total	47,827	100.0	898		38,835	100.0	897			

At 31 December 2021 and at 31 December 2020, the total amounts of the top five other receivables of the Group are set out below:

	At 31 December 2021	At 31 December 2020
Total amount (RMB million)	19,056	22,581
	Within one year,	Within one year,
	one to two years,	one to two years,
	two to three years	two to three years
Ageing	and over three years	and over three years
Percentage to the total balance of other receivables	51.2%	64.1%
Allowance for doubtful accounts	74.0	-

During the year ended 31 December 2021 and 2020, the Group and the Company had no individually significant other receivables been fully or substantially provided allowance for doubtful accounts.

During the year ended 31 December 2021 and 2020, the Group and the Company had no individually significant write-off or recovery of doubtful debts which had been fully or substantially provided for in prior years.

11 INVENTORIES

The Group

	At 31 December 2021 RMB million	At 31 December 2020 RMB million
Raw materials	109,940	60,379
Work in progress	15,701	13,066
Finished goods	84,174	78,481
Spare parts and consumables	2,515	3,372
	212,330	155,298
Less: Provision for diminution in value of inventories	4,897	3,107
Total	207,433	152,191

At 31 December 2021, the provision for diminution in value of inventories of the Group was primarily due to the costs of finished goods were higher than net realisable value.

12 LONG-TERM EQUITY INVESTMENTS

The Group

	Investments in joint ventures RMB million	Investments in associates RMB million	Provision for impairment losses RMB million	Total RMB million
Balance at 1 January 2021	55,018	136,872	(3,548)	188,342
Additions for the year	4,110	5,212	-	9,322
Share of profits less losses under the equity method	9,366	13,887	-	23,253
Change of other comprehensive loss under the equity method	155	286	-	441
Other equity movements under the equity method	24	675	-	699
Dividends declared	(3,872)	(7,120)	-	(10,992)
Disposals for the year	(1,176)	(97)	-	(1,273)
Foreign currency translation differences	(368)	(315)	42	(641)
Other movements	127	100	-	227
Movement of provision for impairment	-	-	(199)	(199)
Balance at 31 December 2021	63,384	149,500	(3,705)	209,179

The Company

	Investments in subsidiaries RMB million	Investments in joint ventures RMB million	Investments in associates RMB million	Provision for impairment losses RMB million	Total RMB million
Balance at 1 January 2021	266,939	14,762	69,540	(7,885)	343,356
Additions for the year	12,646	812	1,014	-	14,472
Share of profits less losses under the equity method	-	4,190	3,961	-	8,151
Change of other comprehensive loss under the equity method	-	-	12	-	12
Other equity movements under the equity method	-	18	155	-	173
Dividends declared	-	(1,387)	(1,019)	-	(2,406)
Disposals for the year	(2,275)	(786)	(8)	-	(3,069)
Other movement	-	-	199	-	199
Movement of provision for impairment	-	-	_	(41)	(41)
Balance at 31 December 2021	277,310	17,609	73,854	(7,926)	360,847

For the year ended 31 December 2021, the Group and the Company had no individually significant long-term investment impairment.

Details of the Company's principal subsidiaries are set out in Note 59.

12 LONG-TERM EQUITY INVESTMENTS (Continued)

Principal joint ventures and associates of the Group are as follows:

(a) Principal joint ventures and associates

Name of investees	Principal place of business	Register location	Legal representative	Principal activities	Registered Capital RMB million	Percentage of equity/voting right directly or indirectly held by the Company
1. Joint ventures						
Fujian Refining & Petrochemical Company Limited ("FREP")	PRC	PRC	Gu Yuefeng	Manufacturing refining oil products	14,758	50.00%
BASF-YPC Company Limited ("BASF-YPC")	PRC	PRC	Gu Yuefeng	Manufacturing and distribution of petrochemical products	12,704	40.00%
Taihu Limited ("Taihu")	Russia	Cyprus	NA	Crude oil and natural gas extraction	25,000 USD	49.00%
Yanbu Aramco Sinopec Refining Company Ltd. ("YASREF")	Saudi Arabia	Saudi Arabia	NA	Petroleum refining and processing	1,560 million USD	37.50%
Sinopec SABIC Tianjin Petrochemical Company Limited ("Sinopec SABIC Tianjin") 2. Associates	PRC	PRC	AHMED AL-SHAIKH	Manufacturing and distribution of petrochemical products	10,520	50.00%
China Oil & Gas Pipeline Network Corporation ("PipeChina") (i)	PRC	PRC	Zhang Wei	Operation of oil and natural gas pipelines and auxiliary facilities	500,000	14.00%
Sinopec Finance Company Limited ("Sinopec Finance")	PRC	PRC	Jiang Yongfu	Provision of non-banking financial services	18,000	49.00%
Sinopec Capital Co.,Ltd. ("Sinopec Capital")	PRC	PRC	Sun Mingrong	Project management, equity management, investment consulting, self-owned equity management	10,000	49.00%
Zhongtian Synergetic Energy Company Limited ("Zhongtian Synergetic Energy")	PRC	PRC	Peng Yi	Mining coal and manufacturing of coal- chemical products	17,516	38.75%
Caspian Investments Resources Ltd. ("CIR")	The Republic of Kazakhstan	British Virgin Islands	NA	Crude oil and natural gas extraction	10,002 USD	50.00%

Joint ventures and associates above are limited companies.

12 LONG-TERM EQUITY INVESTMENTS (Continued)

(b) Major financial information of principal joint ventures

Summarised balance sheet and reconciliation to their carrying amounts in respect of the Group's principal joint ventures:

	FG	EP	BVC	YPC	Ta	ihu	VAC	SREF	Sinopec SABIC Tianjin	
	At 31	At 31								
	December	December								
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million	RMB million								
Current assets										
Cash and cash equivalents	6,562	7,448	5,375	1,838	1,258	1,280	5,441	1,408	4,820	5,259
Other current assets	9,217	7,492	6,953	4,777	2,188	1,223	12,404	7,516	3,437	2,665
Total current assets	15,779	14,940	12,328	6,615	3,446	2,503	17,845	8,924	8,257	7,924
Non-current assets	13,744	15,237	9,336	9,993	14,032	12,531	41,947	45,413	18,835	18,258
Current liabilities										
Current financial liabilities	(1,177)	(1,203)	(77)	(456)	(32)	(38)	(9,549)	(9,520)	(597)	(998)
Other current liabilities	(5,008)	(5,147)	(2,546)	(2,190)	(1,931)	(1,043)	(15,844)	(8,644)	(3,547)	(3,052)
Total current liabilities	(6,185)	(6,350)	(2,623)	(2,646)	(1,963)	(1,081)	(25,393)	(18,164)	(4,144)	(4,050)
Non-current liabilities										
Non-current financial liabilities	(6,857)	(8,761)	-	-	(85)	(85)	(30,903)	(29,650)	(7,599)	(6,773)
Other non-current liabilities	(242)	(235)	(92)	(42)	(1,439)	(2,017)	(1,723)	(2,008)	(382)	(378)
Total non-current liabilities	(7,099)	(8,996)	(92)	(42)	(1,524)	(2,102)	(32,626)	(31,658)	(7,981)	(7,151)
Net assets	16,239	14,831	18,949	13,920	13,991	11,851	1,773	4,515	14,967	14,981
Net assets attributable to										
shareholders of the company	16,239	14,831	18,949	13,920	13,523	11,439	1,773	4,515	14,967	14,981
Net assets attributable to										
minority interests	-	-	-	-	468	412	-	-	-	-
Share of net assets from										
joint ventures	8,120	7,416	7,580	5,568	6,626	5,605	-	-	7,484	7,491
Carrying Amounts	8,120	7,416	7,580	5,568	6,626	5,605	-	-	7,484	7,491

Summarised income statement

For the year ended										
31 December 2021	FR	EP	BASE	-YPC	Ta	ihu	YAS	SREF	Sinopec SA	ABIC Tianjin
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million									
Turnover	47,224	38,691	27,499	15,701	15,190	9,528	68,548	37,337	24,631	14,881
Interest income	147	118	52	27	451	291	6	17	209	183
Interest expense	(411)	(535)	(5)	(16)	(107)	(20)	(945)	(1,136)	(89)	(131)
Profit/(loss) before taxation	2,261	520	8,218	1,518	2,864	2,304	(2,868)	(7,193)	1,393	954
Tax expense	(597)	(87)	(2,054)	(379)	(601)	(378)	332	1,057	(407)	(236)
Profit/(loss) for the year	1,664	433	6,164	1,139	2,263	1,926	(2,536)	(6,136)	986	718
Other comprehensive loss	-	-	-	-	(123)	(3,368)	(206)	(584)	-	-
Total comprehensive income/(loss)	1,664	433	6,164	1,139	2,140	(1,442)	(2,742)	(6,720)	986	718
Dividends from joint ventures	128	300	454	691	-	-	-	-	500	-
Share of net profit/(loss) from										
joint ventures	832	217	2,466	456	1,081	911	-	(2,301)	493	359
Share of other comprehensive loss										
from joint ventures (ii)	-	-	-	-	(60)	(1,593)	-	(219)	-	-

The share of profit and other comprehensive income for the year ended 31 December 2021 in all individually immaterial joint ventures accounted for using equity method in aggregate was RMB4,494 million (2020: RMB993 million) and RMB215 million (2020: other comprehensive income RMB808 million) respectively. As at 31 December 2021, the carrying amount of all individually immaterial joint ventures accounted for using equity method in aggregate was RMB30,640 million (2020: RMB26,099 million).

12 LONG-TERM EQUITY INVESTMENTS (Continued)

(c) Major financial information of principal associates

Summarised balance sheet and reconciliation to their carrying amounts in respect of the Group's principal associates:

	PipeChina		Sinopec Finance		Sinopec	Sinopec Capital		ergetic Energy	C	IR
	At 31	At 31	At 31	At 31	At 31	At 31	At 31	At 31	At 31	At 31
	December	December	December	December	December	December	December	December	December	December
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Current assets	86,335	74,012	194,458	175,139	13,140	11,871	3,532	3,721	576	2,402
Non-current assets	768,161	655,982	55,086	53,008	102	106	51,331	53,124	870	903
Current liabilities	(136,150)	(55,562)	(217,987)	(197,872)	(28)	(18)	(8,577)	(8,315)	(822)	(699)
Non-current liabilities	(103,243)	(104,150)	(602)	(514)	(676)	(411)	(22,216)	(28,422)	(144)	(286)
Net assets	615,103	570,282	30,955	29,761	12,538	11,548	24,070	20,108	480	2,320
Net assets attributable to										
shareholders of the Company	526,241	505,336	30,955	29,761	12,538	11,548	24,070	20,108	480	2,320
Net assets attributable to										
minority interests	88,862	64,946	-	-	-	-	-	-	-	-
Share of net assets from associates	73,674	70,747	15,168	14,583	6,144	5,659	9,327	7,792	240	1,160
Carrying Amounts	73,674	70,747	15,168	14,583	6,144	5,659	9,327	7,792	240	1,160

Summarised income statement

For the year ended											
31 December 2021	PipeChina		Sinoped	: Finance	Sinope	Sinopec Capital		ZTHC Energy		CIR	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	
	RMB million	RMB million	RMB million	RMB million	RMB million						
Turnover	101,572	22,766	5,177	4,742	2	2	16,959	11,707	1,826	1,252	
Profit for the year	29,776	6,444	2,168	2,027	990	1,278	4,184	551	461	181	
Other comprehensive income	2	-	26	(372)	-	-	-	-	3	(308)	
Total comprehensive income	29,778	6,444	2,194	1,655	990	1,278	4,184	551	464	(127)	
Dividends declared by associates	442	-	490	-	-	-	86	284	1,152	2,517	
Share of profit from associates	3,205	709	1,062	993	485	626	1,621	214	231	91	
Share of other comprehensive											
income from associates (ii)	-	-	13	(182)	-	-	-	-	2	(154)	

The share of profit and other comprehensive income for the year ended 31 December 2021 in all individually immaterial associates accounted for using equity method in aggregate was RMB7,283 million (2020: RMB3,444 million) and RMB271 million (2020: loss of RMB1,101 million) respectively. As at 31 December 2021, the carrying amount of all individually immaterial associates accounted for using equity method in aggregate was RMB44,176 million (2020: RMB36,222 million).

Notes:

(i) Sinopec is able to exercise significant influence in PipeChina since Sinopec has a member in PipeChina's Board of Directors and has a member in PipeChina's Management Board.

(ii) Including foreign currency translation differences.

13 FIXED ASSETS

The Group

	At 31 December	At 31 December
	2021	2020
	RMB million	RMB million
Fixed assets (a)	598,925	593,615
Fixed assets pending for disposal	7	38
Total	598,932	593,653

(a) Fixed assets

	Plants and buildings RMB million	Oil and gas properties RMB million	Equipment, machinery and others RMB million	Total RMB million
Cost:				
Balance at 1 January 2021	138,550	757,592	996,702	1,892,844
Additions for the year	509	2,192	5,177	7,878
Transferred from construction in progress	5,487	40,357	65,182	111,026
Reclassifications	646	(617)	(29)	-
Decreases for the year	(1,970)	(5,539)	(18,710)	(26,219)
Exchange adjustments	(57)	(940)	(95)	(1,092)
Balance at 31 December 2021	143,165	793,045	1,048,227	1,984,437
Less: Accumulated depreciation:				
Balance at 1 January 2021	59,471	572,603	577,748	1,209,822
Additions for the year	4,586	39,670	48,568	92,824
Reclassifications	185	(410)	225	-
Decreases for the year	(734)	(7)	(12,987)	(13,728)
Exchange adjustments	(29)	(844)	(56)	(929)
Balance at 31 December 2021	63,479	611,012	613,498	1,287,989
Less: Provision for impairment losses:				
Balance at 1 January 2021	4,069	48,117	37,221	89,407
Additions for the year	742	1,904	6,774	9,420
Decreases for the year	(124)	(135)	(984)	(1,243)
Exchange adjustments	_	(60)	(1)	(61)
Balance at 31 December 2021	4,687	49,826	43,010	97,523
Net book value:				
Balance at 31 December 2021	74,999	132,207	391,719	598,925
Balance at 31 December 2020	75,010	136,872	381,733	593,615

The Company

	At 31 December	At 31 December
	2021	2020
	RMB million	RMB million
Fixed assets (a)	284,618	283,691
Fixed assets pending for disposal	4	4
Total	284,622	283,695

13 FIXED ASSETS (Continued)

(a) Fixed assets (Continued)

The Company (Continued)

	Plants and buildings RMB million	Oil and gas properties RMB million	Equipment, machinery and others RMB million	Total RMB million
Cost:				
Balance at 1 January 2021	49,356	618,483	484,351	1,152,190
Additions for the year	2,056	1,592	10,850	14,498
Transferred from construction in progress	970	29,458	27,752	58,180
Reclassifications	360	(620)	260	-
Transferred from subsidiaries	_	_	33	33
Transferred to subsidiaries	(422)	(286)	(667)	(1,375)
Decreases for the year	(624)	(2,607)	(8,157)	(11,388)
Balance at 31 December 2021	51,696	646,020	514,422	1,212,138
Accumulated depreciation:				
Balance at 1 January 2021	25,189	468,718	309,841	803,748
Additions for the year	2,604	31,534	27,473	61,611
Reclassifications	98	(412)	314	-
Transferred from subsidiaries	_	_	1	1
Transferred to subsidiaries	(91)	_	(383)	(474)
Decreases for the year	(428)	(7)	(6,793)	(7,228)
Balance at 31 December 2021	27,372	499,833	330,453	857,658
Provision for impairment losses:				
Balance at 1 January 2021	1,917	41,406	21,428	64,751
Additions for the year	359	1,901	3,472	5,732
Transferred to subsidiaries	(27)	_	(2)	(29)
Decreases for the year	(21)	_	(571)	(592)
Balance at 31 December 2021	2,228	43,307	24,327	69,862
Net book value:				
Balance at 31 December 2021	22,096	102,880	159,642	284,618
Balance at 31 December 2020	22,250	108,359	153,082	283,691

The additions to oil and gas properties of the Group and the Company for the year ended 31 December 2021 included RMB2,163 million (2020: RMB1,563 million) and RMB1,525 million (2019: RMB1,256 million), respectively of the estimated dismantlement costs for site restoration.

In 2021, the impairment loss on fixed assets was mainly due to the impairment loss of the chemical segment of RMB5,184 million (2020: RMB2,680 million), and the impairment loss of the exploration and development segment of RMB2,467 million (2020: RMB8,435 million). RMB894 million (2020: RMB226 million), impairment loss of the refining segment and RMB873 million (2020: RMB442 million) of the marketing and distribution segment. The impairment losses in the exploration and development segment were mainly impairment losses on fixed assets related to oil and gas production activities. Among them, oil and gas properties and other fixed assets provided impairment losses of RMB1,904 billion and RMB563 million respectively, which were mainly related to the decline in oil and gas reserves of individual oilfields. The Exploration and Development segment allocates fixed assets related to oil and gas production activities into individually identifiable groups of assets and estimates their recoverable amounts. The recoverable amount is determined based on the discounted value of the reserves of the relevant asset group and estimated future cash flows, and the pre-tax discount rate adopted is 10.47% (2020: 10.47%). If the Group's estimate of future oil prices is lowered, further impairment losses may be incurred and the aggregate amount of impairment losses may be significant. With other conditions remaining constant and a 5% drop in oil prices, the Group's impairment loss on fixed assets related to oil and gas production activities will increase by approximately RMB3,628 million (2020: RMB4,548 million); Other conditions remain unchanged and operating costs increase by 5%, the Group's impairment loss on fixed assets related to oil and gas production activities will increase by approximately RMB2,400 million (2020: RMB2,836 million); With other conditions remaining unchanged and the discount rate increasing by 5%, the Group's impairment loss on fixed assets related to oil and gas production activities will increase by approximately RMB180 million (2020: RMB287 million). Impairment losses recognised in the chemical segment and refining segment relate to certain refinery and chemical production facilities and are not individually significant. The primary factors resulting in the impairment losses were due to the suspension of operations of certain production facilities, and evidence that indicate the economic performance of certain production facilities was lower than the expectation, thus the carrying amounts of these facilities were written down to their recoverable amounts, which were determined based on the present values of expected future cash flows of the assets using a pre-tax discount rates ranging from 10.50% to 13.9% (2020: 9.87% to 11.60%).

At 31 December 2021 and 31 December 2020, the Group and the Company had no individually significant fixed assets which were pledged.

At 31 December 2021 and 31 December 2020, the Group and the Company had no individually significant fixed assets which were temporarily idle or pending for disposal.

At 31 December 2021 and 31 December 2020, the Group and the Company had no individually significant fully depreciated fixed assets which were still in use.

14 CONSTRUCTION IN PROGRESS

	The Group RMB million	The Company RMB million
Cost:		
Balance at 1 January 2021	127,572	60,182
Additions for the year	159,729	72,196
Disposals for the year	(146)	(90)
Dry hole costs written off	(7,702)	(6,733)
Transferred to fixed assets	(111,026)	(58,180)
Reclassification to other assets	(10,302)	(927)
Exchange adjustments	(56)	-
Balance at 31 December 2021	158,069	66,448
Provision for impairment losses:		
Balance at 1 January 2021	2,047	302
Additions for the year	144	-
Decreases for the year	(39)	_
Exchange adjustments	(22)	-
Balance at 31 December 2021	2,130	302
Net book value:		
Balance at 31 December 2021	155,939	66,146
Balance at 31 December 2020	125,525	59,880

At 31 December 2021, major construction projects of the Group are as follows:

Project name	Budgeted amount RMB million	Balance at 1 January 2021 RMB million	Net change for the year RMB million	Balance at 31 December 2021 RMB million	Percentage of project investment to budgeted amount	Source of funding	Accumulated interest capitalised at 31 December 2021 RMB million
Hainan Refining and Chemical Ethylene and							
Refining Reconstruction and Expansion Project	28,565	5,002	10,600	15,602	55%	Bank loans & self-financing	63
Zhenhai Refinery Expansion Ethylene Project	23,055	9,155	2,022	11,177	48%	Bank loans & self-financing	305
Caprolactam Industry Chain Relocation and							
Upgrading Transformation Development Project	13,950	1,000	2,700	3,700	27%	Bank loans & self-financing	32
Tianjin Nangang Ethylene and Downstream High-end							
New Material Industry Cluster Project	29,052	-	2,999	2,999	10%	Bank loans & self-financing	13
Zhenhai Refining and Chemical Refining and							
High-end Synthetic New Material Project	41,639	328	1,800	2,128	5%	Self-financing	

15 RIGHT-OF-USE ASSETS

The Group

	Land	Others	Total
	RMB million	RMB million	RMB million
Cost :			
Balance at 1 January 2021	171,392	40,698	212,090
Additions for the year	2,389	9,653	12,042
Decreases for the year	(1,677)	(3,430)	(5,107)
Balance at 31 December 2021	172,104	46,921	219,025
Accumulated depreciation:			
Balance at 1 January 2021	12,591	10,481	23,072
Additions for the year	6,495	6,863	13,358
Decreases for the year	(182)	(2,197)	(2,379)
Balance at 31 December 2021	18,904	15,147	34,051
Net book value:			
Balance at 31 December 2021	153,200	31,774	184,974
Balance at 31 December 2020	158,801	30,217	189,018

The Company

	Land	Others	Total
	RMB million	RMB million	RMB million
Cost :			
Balance at 1 January 2021	115,047	2,272	117,319
Additions for the year	653	1,619	2,272
Decreases for the year	(211)	(935)	(1,146)
Balance at 31 December 2021	115,489	2,956	118,445
Accumulated depreciation:			
Balance at 1 January 2021	7,494	1,088	8,582
Additions for the year	3,760	882	4,642
Decreases for the year	(50)	(441)	(491)
Balance at 31 December 2021	11,204	1,529	12,733
Net book value:			
Balance at 31 December 2021	104,285	1,427	105,712
Balance at 31 December 2020	107,553	1,184	108,737

16 INTANGIBLE ASSETS

The Group

			Non-patent			
	Land use rights	Patents	technology	Operation rights	Others	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Cost:						
Balance at 1 January 2021	102,177	5,383	5,593	53,567	6,179	172,899
Additions for the year	10,690	1,159	379	912	2,122	15,262
Decreases for the year	(1,003)	(9)	(832)	(688)	(84)	(2,616)
Balance at 31 December 2021	111,864	6,533	5,140	53,791	8,217	185,545
Accumulated amortisation:						
Balance at 1 January 2021	24,957	3,791	3,477	21,522	3,931	57,678
Additions for the year	3,406	1,123	332	2,458	604	7,923
Decreases for the year	(169)	(7)	(9)	(310)	(43)	(538)
Balance at 31 December 2021	28,194	4,907	3,800	23,670	4,492	65,063
Provision for impairment losses:						
Balance at 1 January 2021	226	482	27	189	17	941
Additions for the year	11	-	103	241	-	355
Decreases for the year	(1)	-	-	(23)	-	(24)
Balance at 31 December 2021	236	482	130	407	17	1,272
Net book value:						
Balance at 31 December 2021	83,434	1,144	1,210	29,714	3,708	119,210
Balance at 31 December 2020	76,994	1,110	2,089	31,856	2,231	114,280

Amortisation of the intangible assets of the Group charged for the year ended 31 December 2021 is RMB6,363 million (2020: RMB5,907 million).

17 GOODWILL

Goodwill is allocated to the following Group's cash-generating units:

		At 31 December	At 31 December
Name of investees	Principal activities	2021	2020
		RMB million	RMB million
Sinopec Zhenhai Refining and Chemical Branch	Manufacturing of intermediate petrochemical products and petroleum products	4,043	4,043
Shanghai SECCO Petrochemical Company Limited ("Shanghai SECCO")	Production and sale of petrochemical products	2,541	2,541
Sinopec Beijing Yanshan Petrochemical Branch	Manufacturing of intermediate petrochemical products and petroleum products	1,004	1,004
Other units without individual significant goodwill		1,006	1,032
Total		8,594	8,620

Goodwill represents the excess of the cost of purchase over the fair value of the underlying assets and liabilities. The recoverable amounts of the above cash generating units are determined based on value in use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a one-year period and pre-tax discount rates primarily ranging from 11.4% to 11.7% (2020: 11.4% to 13.4%). Cash flows beyond the one-year period are maintained constant. Based on the estimated recoverable amount, no major impairment loss was recognised.

Key assumptions used for cash flow forecasts for these entities are the gross margin and sales volume. Management determined the budgeted gross margin based on the gross margin achieved in the period immediately before the budget period and management's expectation on the future trend of the prices of crude oil and petrochemical products. The sales volume was based on the production capacity and/or the sales volume in the period immediately before the budget period.

18 LONG-TERM DEFERRED EXPENSES

Long-term deferred expenses primarily represent catalysts expenditures and improvement expenditures of fixed assets.

19 DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets and liabilities before the consolidated elimination adjustments are as follows:

	Deferred	Deferred tax assets		x liabilities
	At 31 December	At 31 December At 31 December A	At 31 December	At 31 December
	2021	2020	2021	2020
	RMB million	RMB million	RMB million	RMB million
Receivables and inventories	3,763	2,411	-	-
Payables	2,858	1,286	-	-
Cash flow hedges	258	1,790	(2,709)	(4,420)
Fixed assets	16,777	15,793	(15,037)	(13,415)
Tax value of losses carried forward	4,749	13,322	-	-
Other equity instrument investments	127	127	(9)	(11)
Intangible assets	1,008	869	(492)	(517)
Others	1,056	371	(870)	(676)
Deferred tax assets/(liabilities)	30,596	35,969	(19,117)	(19,039)

The consolidated elimination amount between deferred tax assets and liabilities are as follows:

	At 31 December	At 31 December
	2021	2020
	RMB million	RMB million
Deferred tax assets	11,207	10,915
Deferred tax liabilities	11,207	10,915

Deferred tax assets and liabilities after the consolidated elimination adjustments are as follows:

At	31 December	At 31 December
	2021	2020
	RMB million	RMB million
Deferred tax assets	19,389	25,054
Deferred tax liabilities	7,910	8,124

At 31 December 2021, certain subsidiaries of the Company did not recognise deferred tax of deductible loss carried forward of RMB18,342 million (2020: RMB17,718 million), of which RMB5,564 million (2020: RMB4,349 million) was incurred for the year ended 31 December 2021, because it was not probable that the related tax benefit will be realised. These deductible losses carried forward of RMB4,135 million, RMB2,308 million, RMB1,986 million, RMB4,349 million and RMB5,564 million will expire in 2022, 2023, 2024, 2025, 2026 and after, respectively.

Periodically, management performed assessment on the probability that future taxable profit will be available over the period which the deferred tax assets can be realised or utilised. In assessing the probability, both positive and negative evidence was considered, including whether it is probable that the operations will have sufficient future taxable profits over the periods which the deferred tax assets are deductible or utilised and whether the tax losses result from identifiable causes which are unlikely to recur.

20 OTHER NON-CURRENT ASSETS

Other non-current assets mainly represent long-term receivables, prepayments for construction projects and purchases of equipment.

21 DETAILS OF IMPAIRMENT LOSSES

At 31 December 2021, impairment losses of the Group are analysed as follows:

	Note	Balance at 1 January 2021 RMB million	Provision for the year RMB million	Written back for the year RMB million	Written off for the year RMB million	Other increase/ (decrease) RMB million	Balance at 31 December 2021 RMB million
Allowance for doubtful accounts							
Included: Accounts receivable	7	3,860	436	(127)	(30)	(106)	4,033
Prepayments	9	77	14	(54)	-	46	83
Other receivables	10	1,531	83	(12)	(12)	-	1,590
Other non-current assets		-	1,931	-	-	2	1,933
		5,468	2,464	(193)	(42)	(58)	7,639
Inventories	11	3,107	3,148	(18)	(1,300)	(40)	4,897
Long-term equity investments	12	3,548	206	-	(7)	(42)	3,705
Fixed assets	13	89,407	9,420	-	(1,141)	(163)	97,523
Construction in progress	14	2,047	144	_	(33)	(28)	2,130
Intangible assets	16	941	262	-	(24)	93	1,272
Goodwill	17	7,861	_	_	-	-	7,861
Others		6	43	_	-	-	49
Total		112,385	15,687	(211)	(2,547)	(238)	125,076

The reasons for recognising impairment losses are set out in the respective notes of respective assets.

22 SHORT-TERM LOANS

The Group's short-term loans represent:

	At 31 December 2021		At 31	1 December 20	2020	
	Original			Original		
	currency	Exchange		currency	Exchange	RMB
	million	rates	RMB million	million	rates	million
Short-term bank loans			24,959			16,111
– Renminbi Ioans			24,959		· · ·	16,111
Short-term other loans			-			3
– Renminbi Ioans			-			3
Short-term loans from Sinopec Group Company and						
fellow subsidiaries			2,407			4,642
– Renminbi Ioans			1,320			1,141
– US Dollar Ioans	146	6.3757	934	505	6.5249	3,298
– Hong Kong Dollar Ioans	-		-	37	0.8416	31
– Euro Ioans	21	7.2197	153	21	8.0250	172
Total			27,366			20,756

At 31 December 2021, the Group's interest rates on short-term loans were from interest 0.53% to 4.20% (At 31 December 2020: 0.63% to 4.55%) per annum. The majority of the above loans are by credit.

At 31 December 2021 and 31 December 2020, the Group had no significant overdue short-term loans.

23 BILLS PAYABLE

Bills payable primarily represented bank accepted bills for the purchase of material, goods and products. Bills payable were due within one year.

At 31 December 2021 and 31 December 2020, the Group had no overdue unpaid bills.

24 ACCOUNTS PAYABLE

At 31 December 2021 and 31 December 2020, the Group had no individually significant accounts payable aged over one year.

25 CONTRACT LIABILITIES

As at 31 December 2021 and 31 December 2020, the Group's contract liabilities primarily represent advances from customers. Related performance obligations are satisfied and revenue is recognised within one year.

26 EMPLOYEE BENEFITS PAYABLE

(1) Employee benefits payable:

	Balance at the beginning of the year	Accrued during the year	Decreased during the year	Balance at the end of the year
Short-term employee benefits	7,043	97,396	(90,472)	13,967
Post-employment benefits	74	12,241	(12,246)	69
defined contribution plans	12	91	(91)	12
Total	7,129	109,728	(102,809)	14,048

(2) Short-term employee benefits

	Balance at the beginning of the year	Accrued during the year	Decreased during the year	Balance at the end of the year
Salaries, bonuses, allowances	3,836	72,704	(65,810)	10,730
Staff welfare	2,660	7,610	(7,684)	2,586
Social insurance	234	5,955	(5,912)	277
Medical insurance	224	5,423	(5,382)	265
Work-related injury insurance	5	381	(380)	6
Maternity insurance	5	151	(150)	6
Housing fund	47	6,244	(6,243)	48
Labour union fee, staff and workers' education fee	236	2,246	(2,203)	279
Other short-term employee benefits	30	2,637	(2,620)	47
Total	7,043	97,396	(90,472)	13,967

(3) Post-employment benefits – defined contribution plans

	Balance at the beginning of the year	Accrued during the year	Decreased during the year	Balance at the end of the year
Basic pension insurance	51	8,147	(8,148)	50
Unemployment insurance	8	305	(305)	8
Annuity	15	3,789	(3,793)	11
Total	74	12,241	(12,246)	69

27 TAXES PAYABLE

The Group

	At 31 December 2021 RMB million	At 31 December 2020 RMB million
Value-added tax payable	8,818	5,089
Consumption tax payable	56,084	56,762
Income tax payable	4,809	6,586
Mineral resources compensation fee payable	8	132
Other taxes	11,548	8,279
Total	81,267	76,848

28 OTHER PAYABLES

At 31 December 2021 and 31 December 2020, other payables of the Group over one year primarily represented payables for constructions.

29 NON-CURRENT LIABILITIES DUE WITHIN ONE YEAR

The Group's non-current liabilities due within one year represent:

	At 31 December 2021			At 31 December 2020		
	Original currency million	Exchange rates	RMB million	Original currency million	Exchange rates	RMB million
Long-term bank loans						
– Renminbi Ioans			3,281			4,613
– US Dollar Ioans	2	6.3757	12	4	6.5249	24
Long-term loans from Sinopec Group Company and						
fellow subsidiaries						
– Renminbi Ioans			466			622
Long-term loans due within one year			3,759			5,259
Debentures payable due within one year						
– Renminbi debentures			7,000			_
Lease liabilities due within one year			15,173			15,293
Others			2,719			1,942
Non-current liabilities due within one year			28,651			22,494

At 31 December 2021 and 31 December 2020, the Group had no significant overdue long-term loans.

30 OTHER CURRENT LIABILITIES

At 31 December 2021 and 31 December 2020, other current liabilities mainly represent output VAT to be transferred.

31 LONG-TERM LOANS

The Group's long-term loans represent:

		At 31 December 2021 Original		At 3 Original	1 December 2	020	
		currency	Exchange	RMB	currency	Exchange	RMB
	Interest rate and final maturity	million	rates	million	million	rates	million
Long-term bank loans							
– Renminbi Ioans	Interest rates ranging from interest 1.08%			38,880			38,226
	to 4.00% per annum at 31 December 2021						
	(2020: 1.08% to 5.23%) with maturities						
	through 2039						
– US Dollar Ioans	Interest rates at 1.55% per annum at	10	6.3757	64	14	6.5249	92
	31 December 2020 (2020: 1.55%) with						
	maturities through 2038						
Less: Portion with one year				(3,293)			(4,637)
Long-term bank loans				35,651			33,681
Long-term loans from Sinopec Group Con	npany and fellow subsidiaries						
– Renminbi Ioans	Interest rates ranging from interest 1.08%			12,988			11,013
	to 5.23% per annum at 31 December 2021						
	(2020: 1.08% to 5.23%) with maturities						
	through 2037						
– US Dollar Ioans	Interest rates at 1.65% per annum at	183	6.3757	1,168	213	6.5249	1,387
	31 December 2021 (2020:1.60%)with						
	maturities in 2027						
Less: Portion with one year (note 29)				(466)			(622)
Long-term loans from Sinopec Group	Company and fellow subsidiaries			13,690			11,778
Total				49,341			45,459

The maturity analysis of the Group's long-term loans is as follows:

	At 31 December	At 31 December
	2021	2020
	RMB million	RMB million
Between one and two years	18,373	3,520
Between two and five years	26,633	39,504
After five years	4,335	2,435
Total	49,341	45,459

Long-term loans are carried at amortised costs.

32 DEBENTURES PAYABLE

The Group

	At 31 December 2021	At 31 December 2020
	RMB million	RMB million
Debentures payable:		
– Corporate Bonds (i)	49,649	38,356
Less: Portion with one year (Note 29)	7,000	-
Total	42,649	38,356

Note:

(i) The Company issued corporate bonds with a maturity of five years on 26 July 2021 at par value of RMB100. The total issued amount of the corporate bonds is RMB5 billion. The corporate bonds adopt a simple interest rate on an annual basis with a fixed rate at 3.20% per annum and the interest is paid once a year.

The Company issued corporate bonds with a maturity of three years on 5 August 2021 at par value of RMB100. The total issued amount of the corporate bonds is RMB2 billion. The corporate bonds adopt a simple interest rate on an annual basis with a fixed rate at 2.59% per annum and the interest is paid once a year.

The Company issued corporate bonds with a maturity of two years on 6 August 2021 at par value of RMB100. The total issued amount of the corporate bonds is RMB2 billion. The corporate bonds adopt a simple interest rate on an annual basis with a fixed rate at 2.80% per annum and the interest is paid once a year.

The Company issued corporate bonds with a maturity of three years on 27 December 2021 at par value of RMB100. The total issued amount of the corporate bonds is RMB2.55 billion. The corporate bonds adopt a simple interest rate on an annual basis with a fixed rate at 2.50% per annum and the interest is paid once a year.

These corporate bonds are carried at amortised cost, including USD denominated corporate bonds of RMB11,127 million, and RMB denominated corporate bonds of RMB38,521 million (2020: USD denominated corporate bonds of RMB11,379 million, and RMB denominated corporate bonds of RMB26,977 million).

33 LEASE LIABILITY

The Group

	At 31 December 2021	At 31 December 2020
	RMB million	RMB million
Lease liabilities	185,406	187,033
Deduct: Portion of lease liabilities with one year (Note 29)	15,173	15,293
Total	170,233	171,740

34 PROVISIONS

Provisions primarily represent provision for future dismantlement costs of oil and gas properties. The Group has established certain standardised measures for the dismantlement of its retired oil and gas properties by making reference to the industry practices and is thereafter constructively obligated to take dismantlement measures of its retired oil and gas properties. Movement of provision of the Group's obligations for the dismantlement of its retired oil and gas properties is as follows:

	The Group
	RMB million
Balance at 1 January 2021	43,713
Provision for the year	2,163
Accretion expenses	1,135
Decrease for the year	(6,435)
Exchange adjustments	(81)
Balance at 31 December 2021	40,495

35 OTHER NON-CURRENT LIABILITIES

Other non-current liabilities primarily represent long-term payables, special payables and deferred income.

36 SHARE CAPITAL

The Group

	At 31 December 2021 RMB million	At 31 December 2020 RMB million
Registered, issued and fully paid:		
95,557,771,046 listed A shares (2020: 95,557,771,046) of RMB1.00 each	95,558	95,558
25,513,438,600 listed H shares (2020: 25,513,438,600) of RMB1.00 each	25,513	25,513
Total	121,071	121,071

The Company was established on 25 February 2000 with a registered capital of 68.8 billion domestic state-owned shares with a par value of RMB1.00 each. Such shares were issued to Sinopec Group Company in consideration for the assets and liabilities transferred to the Company (Note 1).

Pursuant to the resolutions passed at an Extraordinary General Meeting held on 25 July 2000 and approvals from relevant government authorities, the Company is authorised to increase its share capital to a maximum of 88.3 billion shares with a par value of RMB1.00 each and offer not more than 19.5 billion shares with a par value of RMB1.00 each to investors outside the PRC. Sinopec Group Company is authorised to offer not more than 3.5 billion shares of its shareholdings in the Company to investors outside the PRC. The shares sold by Sinopec Group Company to investors outside the PRC would be converted into H shares.

In October 2000, the Company issued 15,102,439,000 H shares with a par value of RMB1.00 each, representing 12,521,864,000 H shares and 25,805,750 American Depositary Shares ("ADSs", each representing 100 H shares), at prices of HKD1.59 per H share and USD20.645 per ADS, respectively, by way of a global initial public offering to Hong Kong SAR and overseas investors. As part of the global initial public offering, 1,678,049,000 state-owned ordinary shares of RMB1.00 each owned by Sinopec Group Company were converted into H shares and sold to Hong Kong SAR and overseas investors.

In July 2001, the Company issued 2.8 billion listed A shares with a par value of RMB1.00 each at RMB4.22 by way of a public offering to natural persons and institutional investors in the PRC.

During the year ended 31 December 2010, the Company issued 88,774 listed A shares with a par value of RMB1.00 each, as a result of exercise of 188,292 warrants entitled to the Bonds with Warrants.

During the year ended 31 December 2011, the Company issued 34,662 listed A shares with a par value of RMB1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

During the year ended 31 December 2012, the Company issued 117,724,450 listed A shares with a par value of RMB1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

On 14 February 2013, the Company issued 2,845,234,000 listed H shares ("the Placing") with a par value of RMB1.00 each at the Placing Price of HKD8.45 per share. The aggregate gross proceeds from the Placing amounted to approximately HKD24,042,227,300.00 and the aggregate net proceeds (after deduction of the commissions and estimated expenses) amounted to approximately HKD23,970,100,618.00.

In June 2013, the Company issued 21,011,962,225 listed A shares and 5,887,716,600 listed H shares as a result of bonus issues of 2 shares converted from the retained earnings, and 1 share transferred from capital reserve for every 10 existing shares.

During the year ended 31 December 2013, the Company issued 114,076 listed A shares with a par value of RMB1.00 each, as a result of exercise of conversion by the holders of the 2011 Convertible Bonds.

During the year ended 31 December 2014, the Company issued 1,715,081,853 listed A shares with a par value of RMB1.00 each, as a result of exercise of conversion by the holders of the 2011 Convertible Bonds.

During the year ended 31 December 2015, the Company issued 2,790,814,006 listed A shares with a par value of RMB1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

All A shares and H shares rank pari passu in all material aspects.

36 SHARE CAPITAL (Continued)

The Group (Continued)

Capital management

Management optimises the structure of the Group's capital, which comprises of equity and debts and bonds. In order to maintain or adjust the capital structure of the Group, management may cause the Group to issue new shares, adjust the capital expenditure plan, sell assets to reduce debt, or adjust the proportion of short-term and long-term loans and bonds. Management monitors capital on the basis of the debt-to-capital ratio, which is calculated by dividing long-term loans (excluding current portion) and debentures payable, by the total of equity attributable to shareholders of the Company and long-term loans (excluding current portion) and debentures payable, and liability-to-asset ratio, which is calculated by dividing total liabilities by total assets. Management's strategy is to make appropriate adjustments according to the Group's operating and investment needs and the changes of market conditions, and to maintain the debt-to-capital ratio and the liability-to-asset ratio of the Group at a range considered reasonable. As at 31 December 2021, the debt-to-capital ratio and the liability-to-asset ratio of the Group were 10.6% (2020: 10.1%) and 51.5% (2020: 48.9%), respectively.

The schedule of the contractual maturities of loans and commitments are disclosed in Notes 31,32 and 61, respectively.

There were no changes in the management's approach to capital management of the Group during the year. Neither the Company nor any of its subsidiaries is subject to externally imposed capital requirements.

37 CAPITAL RESERVE

The movements in capital reserve of the Group are as follows:

	RMB million
Balance at 1 January 2021	127,389
Adjustment for business combination of entities under common control	(6,124)
Transaction with minority interests	(1,396)
Others	319
Balance at 31 December 2021	120,188

Capital reserve represents mainly: (a) the difference between the total amount of the par value of shares issued and the amount of the net assets transferred from Sinopec Group Company in connection with the Reorganisation; (b) share premiums derived from issuances of H shares and A shares by the Company and excess of cash paid by investors over their proportionate shares in share capital, the proportionate shares of unexercised portion of the Bond with Warrants at the expiration date, and the amount transferred from the proportionate liability component and the derivative component of the converted portion of the 2011 Convertible Bonds; (c) difference between consideration paid for the combination of entities under common control and the transactions with minority interests over the carrying amount of the net assets acquired.

38 OTHER COMPREHENSIVE INCOME

The Group

(a) The changes of other comprehensive income in consolidated income statement

		2021	
	Before-tax amount	Tax effect	Net-of-tax amount
	RMB million	RMB million	RMB million
Cash flow hedges:			
Effective portion of changes in fair value of hedging instruments			
recognised during the year	15,659	(3,881)	11,778
Less: Reclassification adjustments for amounts transferred to the consolidated			
income statement	(8,858)	1,618	(7,240)
Subtotal	24,517	(5,499)	19,018
Cost of hedging reserve	(220)	-	(220)
Changes in fair value of other equity instrument investments	(6)	2	(4)
Other comprehensive loss that can be converted into profit or loss under the			
equity method	441	-	441
Foreign currency translation differences	(1,728)	-	(1,728)
Other comprehensive income	23,004	(5,497)	17,507
		2222	
	Before-tax	2020 _	
		Tax	Net-of-tax
	amount	effect	amount
Cash flow hedges:	amount	effect	amount
Effective portion of changes in fair value of hedging instruments recognised	amount RMB million	effect RMB million	amount RMB million
Effective portion of changes in fair value of hedging instruments recognised during the year	amount	effect	amount
Effective portion of changes in fair value of hedging instruments recognised during the year Less: Reclassification adjustments for amounts transferred to the consolidated	amount RMB million 9,207	effect RMB million (2,295)	amount RMB million 6,912
Effective portion of changes in fair value of hedging instruments recognised during the year Less: Reclassification adjustments for amounts transferred to the consolidated income statement	amount RMB million 9,207 (198)	effect RMB million (2,295) 37	amount RMB million 6,912 (161)
Effective portion of changes in fair value of hedging instruments recognised during the year Less: Reclassification adjustments for amounts transferred to the consolidated income statement Subtotal	amount RMB million 9,207 (198) 9,405	effect RMB million (2,295)	amount RMB million 6,912 (161) 7,073
Effective portion of changes in fair value of hedging instruments recognised during the year Less: Reclassification adjustments for amounts transferred to the consolidated income statement Subtotal Cost of hedging reserve	amount RMB million 9,207 (198) 9,405 162	effect RMB million (2,295) 37 (2,332) -	amount RMB million 6,912 (161) 7,073 162
Effective portion of changes in fair value of hedging instruments recognised during the year Less: Reclassification adjustments for amounts transferred to the consolidated income statement Subtotal Cost of hedging reserve Changes in fair value of other equity instrument investments	amount RMB million 9,207 (198) 9,405	effect RMB million (2,295) 37 (2,332)	amount RMB million 6,912 (161) 7,073
Effective portion of changes in fair value of hedging instruments recognised during the year Less: Reclassification adjustments for amounts transferred to the consolidated income statement Subtotal Cost of hedging reserve Changes in fair value of other equity instrument investments Other comprehensive loss that can be converted into profit or loss under the	amount RMB million 9,207 (198) 9,405 162 (18)	effect RMB million (2,295) 37 (2,332) -	amount RMB million 6,912 (161) 7,073 162 (22)
Effective portion of changes in fair value of hedging instruments recognised during the year Less: Reclassification adjustments for amounts transferred to the consolidated income statement Subtotal Cost of hedging reserve Changes in fair value of other equity instrument investments Other comprehensive loss that can be converted into profit or loss under the equity method	amount RMB million 9,207 (198) 9,405 162	effect RMB million (2,295) 37 (2,332) -	amount RMB million 6,912 (161) 7,073 162
Effective portion of changes in fair value of hedging instruments recognised during the year Less: Reclassification adjustments for amounts transferred to the consolidated income statement Subtotal Cost of hedging reserve Changes in fair value of other equity instrument investments Other comprehensive loss that can be converted into profit or loss under the	amount RMB million 9,207 (198) 9,405 162 (18)	effect RMB million (2,295) 37 (2,332) - (4)	amount RMB million 6,912 (161) 7,073 162 (22)

(b) The change of each item in other comprehensive income

		Equity A	ttributable to share	eholders of the cor	npany			
	Other comprehensive income that can be converted	Changes in			Function			
	into profit or loss under the equity method RMB million	fair value of other equity instrument investments RMB million	fair value hedges RMB million	Cash flow hedges RMB million	Foreign currency translation differences RMB million	Subtotal RMB million	Minority interests RMB million	Total other comprehensive income RMB million
1 January 2020	(4,088)	(16)	-	1,037	2,746	(321)	(1,569)	(1,890)
Changes in 2020	(2,001)	(4)	81	6,768	(3,485)	1,359	(1,031)	328
31 December 2020	(6,089)	(20)	81	7,805	(739)	1,038	(2,600)	(1,562)
1 January 2021	(6,089)	(20)	81	7,805	(739)	1,038	(2,600)	(1,562)
Changes in 2021	324	2	(110)	(591)	(1,353)	(1,728)	(715)	(2,443)
31 December 2021	(5,765)	(18)	(29)	7,214	(2,092)	(690)	(3,315)	(4,005)

As at 31 December 2021, cash flow hedge reserve amounted to a gain of RMB7,244 million (31 December 2020: a gain of RMB8,176 million), of which a gain of RMB7,214 million was attribute to shareholders of the Company (31 December 2020: a gain of RMB7,805 million).

39 SURPLUS RESERVES

Movements in surplus reserves are as follows:

		The Group	
	Statutory	Discretionary	
	surplus reserve	surplus reserves	Total
	RMB million	RMB million	RMB million
Balance at 1 January 2021	92,280	117,000	209,280
Appropriation	3,944	-	3,944
Balance at 31 December 2021	96,224	117,000	213,224

The PRC Company Law and Articles of Association of the Company have set out the following profit appropriation plans:

- (a) 10% of the net profit is transferred to the statutory surplus reserve. In the event that the reserve balance reaches 50% of the registered capital, no transfer is needed;
- (b) After the transfer to the statutory surplus reserve, a transfer to discretionary surplus reserve can be made upon the passing of a resolution at the shareholders' meeting.

40 OPERATING INCOME AND OPERATING COSTS

	The Group		The Company	
	2021 2020 2021		2021	2020
	RMB million	RMB million	RMB million	RMB million
Income from principal operations	2,679,500	2,048,654	1,013,961	743,188
Income from other operations	61,384	56,070	31,039	27,133
Total	2,740,884	2,104,724	1,045,000	770,321
Operating costs	2,216,551	1,685,674	808,540	584,315

The income from principal operations mainly represents revenue from the sales of refined petroleum products, chemical products, crude oil and natural gas, which are recognised at a point in time. The income from other operations mainly represents revenue from sale of materials, services providing, rental income and others. Operating costs primarily represent the products cost related to the principal operations. The Group's segmental information is set out in Note 63.

The detailed information about the Group's operating income is as follows:

	2021	2020
	RMB million	RMB million
Income from principal operations	2,679,500	2,048,654
Gasoline	726,057	557,605
Diesel	542,260	422,566
Crude oil	429,038	351,707
Basic chemical feedstock	242,532	155,397
Synthetic resin	149,208	122,368
Kerosene	112,519	72,385
Natural gas	68,443	48,099
Synthetic fiber monomers and polymers	45,464	42,388
Others (i)	363,979	276,139
Income from other operations	61,384	56,070
Sale of materials and others	59,990	54,986
Rental income	1,394	1,084
Total	2,740,884	2,104,724

Note:

(i) Others are primarily liquefied petroleum gas and other refinery and chemical byproducts and joint products and so on.

(ii) The above incomes, except rental income, are all income from contracts.

41 TAXES AND SURCHARGES

The Group

	2021	2020
	RMB million	RMB million
Consumption tax	213,894	197,542
City construction tax	18,044	15,710
Education surcharge	13,409	11,678
Resources tax	6,432	4,572
Others	7,253	5,516
Total	259,032	235,018

The applicable tax rate of the taxes and surcharges are set out in Note 4.

42 FINANCIAL EXPENSES

The Group

	2021	2020
	RMB million	RMB million
Interest expenses incurred	5,679	6,517
Less: Capitalised interest expenses	996	2,011
Add: Interest expense on lease liabilities	9,200	9,349
Net interest expenses	13,883	13,855
Accretion expenses (Note 34)	1,135	1,343
Interest income	(5,732)	(4,803)
Net foreign exchange gains	(276)	(885)
Total	9,010	9,510

The interest rates per annum at which borrowing costs were capitalised during the year ended 31 December 2021 by the Group ranged from 1.84% to 4.35% (2020: 2.60% to 4.66%).

43 CLASSIFICATION OF EXPENSES BY NATURE

The operating costs, selling and distribution expenses, general and administrative expenses, research and development expenses and exploration expenses (including dry holes) in consolidated income statement classified by nature are as follows:

	2021	2020
	RMB million	RMB million
Purchased crude oil, products and operating supplies and expenses	2,076,665	1,589,821
Personnel expenses	103,492	87,525
Depreciation, depletion and amortisation	115,680	107,461
Exploration expenses (including dry holes)	12,382	9,716
Other expenses	52,621	42,531
Total	2,360,840	1,837,054

44 SELLING AND DISTRIBUTION EXPENSES

Selling expenses mainly include wages and salaries of sales staff, depreciation and amortization of sales equipment and related systems, etc.

45 GENERAL AND ADMINISTRATIVE EXPENSES

Administrative expenses mainly include salaries and salaries of administrative personnel, depreciation and amortization of office facilities, office systems and software, and repair costs.

46 RESEARCH AND DEVELOPMENT EXPENSES

The research and development expenditures are mainly used for the replacement of resources in upstream, optimising structure and operation upgrades in refining sector, structured adjustment of materials and products in chemical segment.

47 EXPLORATION EXPENSES

Exploration expenses include geological and geophysical expenses and written-off of unsuccessful dry hole costs.

48 OTHER INCOME

Other income are mainly the government grants related to the business activities.

49 INVESTMENT INCOME

	The Group		The Company	
	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million
Income from investment of subsidiaries accounted for under cost method	-	-	21,416	19,296
Income from investment accounted for under equity method	23,253	6,712	8,151	3,637
Investment income from disposal of business and long-term	·			
equity investments	82	37,525	56	21,079
Dividend income from holding of other equity instrument investments	34	156	22	16
Investment (loss)/income from holding/disposal of financial assets and	· ·			
liabilities and derivative financial instruments at fair value				
through profit or loss	(17,687)	687	(376)	(1,013)
Gain from ineffective portion of cash flow hedges	266	2,475	409	84
Others	84	(69)	1,203	257
Total	6,032	47,486	30,881	43,356

50 INCOME FROM CHANGES IN FAIR VALUE

The Group

	2021	2020
	RMB million	RMB million
Net fair value gains on financial assets and financial liabilities at fair value through profit or loss	2,913	(1,824)
Unrealised gains from ineffective portion cash flow hedges, net	428	576
Others	_	(5)
Total	3,341	(1,253)

51 IMPAIRMENT LOSSES

The Group

	2021	2020
	RMB million	RMB million
Prepayments	(40)	97
Inventories	3,130	11,361
Long-term equity investment	206	1,955
Fixed assets	9,420	11,783
Intangible assets	262	47
Construction in progress	144	844
Others	43	-
Total	13,165	26,087

52 NON-OPERATING INCOME

The Group

	2021	2020
	RMB million	RMB million
Government grants	806	1,210
Others	2,710	1,160
Total	3,516	2,370

53 NON-OPERATING EXPENSES

The Group

	2021	2020
	RMB million	RMB million
Fines, penalties and compensation	220	43
Donations	165	301
Asset scrap, damage loss	3,727	1,669
Others	3,470	2,719
Total	7,582	4,732

54 INCOME TAX EXPENSE

The Group

	2021	2020
	RMB million	RMB million
Provision for income tax for the year	17,522	14,334
Deferred taxation	6,258	(7,873)
Under-provision for income tax in respect of preceding year	(462)	(117)
Total	23,318	6,344

Reconciliation between actual income tax expense and accounting profit at applicable tax rates is as follows:

	2021 RMB million	2020 RMB million
Profit before taxation	108,348	48,441
Expected income tax expense at a tax rate of 25%	27,087	12,110
Tax effect of non-deductible expenses	6,142	3,340
Tax effect of non-taxable income	(8,085)	(8,345)
Tax effect of preferential tax rate (i)	(2,766)	(1,011)
Effect of income taxes at foreign operations	(222)	(730)
Tax effect of utilisation of previously unrecognised tax losses and temporary differences	(701)	(65)
Tax effect of tax losses not recognised and temporary differences	1,391	1,087
Write-down of deferred tax assets	934	75
Adjustment for under provision for income tax in respect of preceding years	(462)	(117)
Actual income tax expense	23,318	6,344

Note:

(i) The provision for PRC current income tax is based on a statutory income tax rate of 25% of the assessable income of the Group as determined in accordance with the relevant income tax rules and regulations of the PRC, except for certain entities of the Group in western regions in the PRC are taxed at preferential income tax rate of 15% through the year 2021. According to Announcement [2020] No.23 of the MOF "Announcement of the MOF, the State Taxation Administration and the National Development and Reform Commission on continuation of the income tax policy of western development enterprises", the preferential income tax rate extends from 1 January 2021 to 31 December 2030.

55 DIVIDENDS

(a) Dividends of ordinary shares declared after the balance sheet date

Pursuant to a resolution passed at the director's meeting on 25 March 2022, final dividends in respect of the year ended 31 December 2021 of RMB0.31 (2020: RMB0.13) per share totaling RMB37,532 million (2020: RMB15,739 million) were proposed for shareholders' approval at the Annual General Meeting. Final cash dividend proposed after the balance sheet date has not been recognised as a liability at the balance sheet date.

(b) Dividends of ordinary shares declared during the year

Pursuant to the shareholders' approval at the General Meeting on 27 August 2021, the interim dividends for the year ending 31 December 2021 of RMB0.16 (2020: RMB0.07) per share totaling RMB19,371 million (2020: RMB8,475 million) were approved. Dividends were paid on 17 September 2021.

Pursuant to the shareholders' approval at the Annual General Meeting on 25 May 2021, a final dividend of RMB0.13 per share totaling RMB15,739 million according to total shares on 6 June 2021 was approved. All dividends have been paid in the year ended 31 December 2021.

Pursuant to the shareholders' approval at the Annual General Meeting on 19 May 2020, a final dividend of RMB0.19 per share totaling RMB23,004 million according to total shares on 9 June 2020 was approved. All dividends have been paid in the year ended 31 December 2020.

56 SUPPLEMENTAL INFORMATION TO THE CASH FLOW STATEMENT

The Group

(a) Reconciliation of net profit to cash flows from operating activities:

	2021 RMB million	2020 RMB million
t profit	85,030	42,097
d: Impairment losses on assets	13,165	26,087
Credit impairment losses	2,311	2,066
Depreciation of right-of-use assets	12,972	12,842
Depreciation of fixed assets	92,824	85,494
Amortisation of intangible assets and long-term deferred expenses	9,884	9,125
Dry hole costs written off	7,702	5,928
Net loss/(gain) on disposal of non-current assets	3,062	(398)
Fair value (gain)/loss	(3,341)	1,253
Financial expenses	9,286	10,395
Investment income	(6,032)	(47,486)
Decrease/(increase)in deferred tax assets	5,456	(10,143)
Increase in deferred tax liabilities	802	2,270
(Increase)/decrease in inventories	(58,372)	22,407
Safety fund reserve	775	237
Increase in operating receivables	(8,177)	(17,610)
Increase in operating payables	57,827	23,956
t cash flow from operating activities	225,174	168,520

(b) Net change in cash:

2021	2020
RMB million	RMB million
108,590	87,559
87,559	60,438
21,031	27,121
	RMB million 108,590 87,559

(c) The analysis of cash held by the Group is as follows:

	2021	2020
	RMB million	RMB million
Cash at bank and on hand		
– Cash on hand	1	8
– Demand deposits	108,589	87,551
Cash at the end of the year	108,590	87,559

(d) Net cash received from disposal of subsidiaries and other business entities :

	2021 RMB million	2020 RMB million
Cash received from disposal of equity interests in the relevant companies, oil and gas pipeline		
and ancillary facilities	4,225	49,832
Others	980	37
Total	5,205	49,869

(e) Other cash paid relating to financing activities :

	2021	2020
	RMB million	RMB million
Repayments of lease liabilities	19,412	15,327
Others	8,864	1,955
Total	28,276	17,282

57 RELATED PARTIES AND RELATED PARTY TRANSACTIONS

(1) Related parties having the ability to exercise control over the Group

The name of the company Unified social credit identifier Registered address Principal activities	 China Petrochemical Corporation 9111000010169286X1 No. 22, Chaoyangmen North Street, Chaoyang District, Beijing Exploration, production, storage and transportation (including pipeline transportation), sales and utilisation of crude oil and natural gas; refining; wholesale and retail of gasoline, kerosene and diesel; production, sales, storage and transportation of petrochemical and other chemical products; industrial investment and investment management; exploration, construction, installation and maintenance of petroleum and petrochemical constructions and equipments; manufacturing electrical equipment; research, development, application and consulting services of information technology and alternative energy products; import & export of goods and technology.
Relationship with the Group	: Ultimate holding company
Types of legal entity	: State-owned
Authorised representative	: Ma Yongsheng
Registered capital	: RMB326,547 million

Sinopec Group Company is an enterprise controlled by the PRC government. Sinopec Group Company directly and indirectly holds 68.77% shareholding of the Company.

(2) Related parties not having the ability to exercise control over the Group

Related parties under common control of a parent company with the Company: Sinopec Finance (Note) Sinopec Shengli Petroleum Administration Bureau Sinopec Zhongyuan Petroleum Exploration Bureau Sinopec Assets Management Corporation Sinopec Engineering Incorporation Sinopec Century Bright Capital Investment Limited Sinopec Petroleum Storage and Reserve Limited

Associates of the Group: PipeChina Sinopec Finance Sinopec Capital Zhongtian Synergetic Energy CIR

Joint ventures of the Group: FREP BASF·YPC Taihu YASREF Sinopec SABIC Tianjin

Note: Sinopec Finance is under common control of a parent company with the Company and is also the associate of the Group.

57 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)

(3) The principal related party transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures, which were carried out in the ordinary course of business, are as follows:

		The Gro	oup
	Note	2021	2020
		RMB million	RMB million
Sales of goods	(i)	297,381	228,307
Purchases	(ii)	191,888	151,300
Transportation and storage	(iii)	19,443	8,734
Exploration and development services	(iv)	33,930	31,444
Production related services	(v)	44,405	31,915
Ancillary and social services	(vi)	1,730	2,952
Agency commission income	(vii)	194	160
Interest income	(viii)	715	704
Interest expense	(ix)	385	919
Net deposits placed with related parties	(viii)	(8,265)	(17,585)
Net funds obtained from/(repaid to) related parties	(X)	30,305	(31,144)

The amounts set out in the table above in respect of the year ended 31 December 2021 and 2020 represent the relevant costs and income as determined by the corresponding contracts with the related parties.

Included in the transactions disclosed above, for the year ended 31 December 2021 are: a) purchases by the Group from Sinopec Group Company and fellow subsidiaries amounting to RMB173,718 million (2020: RMB149,560 million) comprising purchases of products and services (i.e. procurement, transportation and storage, exploration and development services and production related services) of RMB160,048 million (2020: RMB133,827 million), ancillary and social services provided by Sinopec Group Company and fellow subsidiaries of RMB1,730 million (2020: RMB2,952 million), lease charges for land, buildings and others paid by the Group of RMB10,831 million, RMB565 million and RMB19 million (2020: RMB11,086 million, RMB565 million and RMB211 million), respectively and interest expenses of RMB385 million (2020: RMB69,470 million); and b) sales by the Group to Sinopec Group Company and fellow subsidiaries amounting to RMB54,453 million (2020: RMB69,671 million) (2020: RMB68,683 million) for sales of goods, RMB715 million (2020: RMB704 million) for interest income and RMB67 million (2020: RMB83 million) for agency commission income.

For the year ended 31 December 2021, no individually significant right-of-use assets were leased from Sinopec Group Company and fellow subsidiaries, associates and joint ventures by the Group. The interest expense recognised for the year ended 31 December 2021 on lease liabilities in respect of amounts due to Sinopec Group Company and fellow subsidiaries, associates and joint ventures was RMB7,863 million (2020: RMB8,160 million).

For the year ended 31 December 2021, the amount of rental the Group paid to Sinopec Group Company and fellow subsidiaries, associates and joint ventures for land, buildings and others are RMB10,834 million, RMB572 million and RMB269 million (2020: RMB11,090 million, RMB571 million and RMB330 million). Among them, according to the continuing connected transaction agreement signed in 2000, the fifth supplementary agreement for continuing connected transactions signed on August 24, 2018, and the fourth revision memorandum of the land use right lease contract, the actual payment of land, land and land use rights between Sinopec Group and Sinopec Group The rental amount of houses was RMB10,831 million and RMB565 million respectively (2020: RMB11,086 million and RMB565 million).

As at 31 December 2021 and 31 December 2020, there was no guarantee given to banks by the Group in respect of banking facilities to Sinopec Group Company and fellow subsidiaries, associates and joint ventures, except for the disclosure set out in Note 62(b). Guarantees given to banks by the Group in respect of banking facilities to associates and joint ventures are disclosed in Note 62(b).

Notes:

- (i) Sales of goods represent the sale of crude oil, intermediate petrochemical products, petroleum products and ancillary materials.
- (ii) Purchases represent the purchase of materials and utility supplies directly related to the Group's operations such as the procurement of raw and ancillary materials and related services, supply of water, electricity and gas.
- (iii) Transportation and storage represent the cost for the use of railway, road and marine transportation services, pipelines, loading, unloading and storage facilities.
- (iv) Exploration and development services comprise direct costs incurred in the exploration and development such as geophysical, drilling, well testing and well measurement services.
- (v) Production related services represent ancillary services rendered in relation to the Group's operations such as equipment repair and general maintenance, insurance premium, technical research, communications, firefighting, security, product quality testing and analysis, information technology, design and engineering, construction of oilfield ground facilities, refineries and chemical plants, manufacture of replacement parts and machinery, installation, project management and environmental protection, and management services.
- (vi) Ancillary and social services represent expenditures for social welfare and support services such as educational facilities, media communication services, sanitation, accommodation, canteens and property maintenance.
- (vii) Agency commission income represents commission earned for acting as an agent in respect of sales of products and purchase of materials for certain entities owned by Sinopec Group Company.

57 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)

(3) The principal related party transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures, which were carried out in the ordinary course of business, are as follows: (Continued)

Notes: (Continued)

- (viii)Interest income represents interest received from deposits placed with Sinopec Finance and Sinopec Century Bright Capital Investment Limited, finance companies controlled by Sinopec Group Company. The applicable interest rate is determined in accordance with the prevailing saving deposit rate.
- (ix) Interest expense represents interest charges on the loans obtained from Sinopec Group Company and fellow subsidiaries.
- (x) The Group obtained loans, discounted bills and issued the acceptance bills from Sinopec Group Company and fellow subsidiaries.

In connection with the Reorganisation, the Company and Sinopec Group Company entered into a number of agreements under which 1) Sinopec Group Company will provide goods and products and a range of ancillary, social and supporting services to the Group and 2) the Group will sell certain goods to Sinopec Group Company. These agreements impacted the operating results of the Group for the year ended 31 December 2021. The terms of these agreements are summarised as follows:

- (a) The Company has entered into a non-exclusive "Agreement for Mutual Provision of Products and Ancillary Services" ("Mutual Provision Agreement") with Sinopec Group Company effective from 1 January 2000 in which Sinopec Group Company has agreed to provide the Group with certain ancillary production services, construction services, information advisory services, supply services and other services and products. While each of Sinopec Group Company has agreed not to terminate the agreement if the Group is unable to obtain comparable services from a third party. The pricing policy for these services and products provided by Sinopec Group Company to the Group is as follows:
 - · the government-prescribed price;
 - where there is no government-prescribed price, the government-guidance price;
 - where there is neither a government-prescribed price nor a government-guidance price, the market price; or
 - where none of the above is applicable, the price to be agreed between the parties, which shall be based on a reasonable cost incurred in providing such services plus a profit margin not exceeding 6%.
- (b) The Company has entered into a non-exclusive "Agreement for Provision of Cultural and Educational, Health Care and Community Services" with Sinopec Group Company effective from 1 January 2000 in which Sinopec Group Company has agreed to provide the Group with certain cultural, educational, health care and community services on the same pricing terms and termination conditions as agreed to in the above Mutual Provision Agreement.
- (c) The Company has entered into a number of lease agreements with Sinopec Group Company to lease certain lands and buildings effective on 1 January 2000. The lease term is 40 or 50 years for lands and 20 years for buildings, respectively. The Company and Sinopec Group Company can renegotiate the rental amount every three years for land. The Company and Sinopec Group Company can renegotiate the rental amount for buildings every year. However such amount cannot exceed the market price as determined by an independent third party.
- (d) The Company has entered into agreements with Sinopec Group Company effective from 1 January 2000 under which the Group has been granted the right to use certain trademarks, patents, technology and computer software developed by Sinopec Group Company.
- (e) The Company has entered into a service station franchise agreement with Sinopec Group Company effective from 1 January 2000 under which its service stations and retail stores would exclusively sell the refined products supplied by the Group.
- (f) On the basis of a series of continuing connected transaction agreements signed in 2000, the Company and Sinopec Group Company have signed the Sixth Supplementary Agreement on 27 August 2021, which took effect on 1 January 2022 and made adjustment to "Mutual Supply Agreement" and "Buildings Leasing Contract", etc.

57 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)

(4) Balances with Sinopec Group Company and fellow subsidiaries, associates and joint ventures

The balances with Sinopec Group Company and fellow subsidiaries, associates and joint ventures at 31 December 2021 and 31 December 2020 are as follows:

	The ultimate he	olding company	Other related companies		
	At 31 December 2021 RMB million	At 31 December 2020 RMB million	At 31 December 2021 RMB million	At 31 December 2020 RMB million	
Cash at bank and on hand	_	-	61,682	53,417	
Accounts receivable	30	42	8,625	16,735	
Receivables financing	-	-	186	760	
Other receivables	_	122	13,941	18,062	
Prepayments and other current assets	19	7	577	1,231	
Other non-current assets	-	-	3,116	6,435	
Bills payable	5	8	3,798	3,671	
Accounts payable	228	123	10,139	18,990	
Contract liabilities	50	41	4,627	5,896	
Other payables and other current liabilities	85	681	50,564	12,078	
Other non-current liabilities	_	-	2,779	3,010	
Short-term loans	_	_	2,407	4,642	
Long-term loans (including current portion)	_	-	14,156	12,400	
Lease liabilities (including current portion)	72,176	74,178	86,585	87,870	

Amounts due from/to Sinopec Group Company and fellow subsidiaries, associates and joint ventures, other than short-term loans and long-term loans, bear no interest, are unsecured and are repayable in accordance with normal commercial terms. The terms and conditions associated with short-term loans and long-term loans payable to Sinopec Group Company and fellow subsidiaries are set out in Note 22 and Note 31.

As at and for the year ended 31 December 2021, and as at and for the year ended 31 December 2020, no individually significant impairment losses for bad and doubtful debts were recorded in respect of amounts due from Sinopec Group Company and fellow subsidiaries, associates and joint ventures.

(5) Key management personnel emoluments

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including directors and supervisors of the Group. The key management personnel compensations are as follows:

	2021	2020
	RMB thousand	RMB thousand
Short-term employee benefits	4,612	5,753
Retirement scheme contributions	379	342
Total	4,991	6,095

58 PRINCIPAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The Group's financial condition and results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of the financial statements. The Group bases the assumptions and estimates on historical experience and on various other assumptions that it believes to be reasonable and which form the basis for making judgements about matters that are not readily apparent from other sources. On an on-going basis, management evaluates its estimates. Actual results may differ from those estimates as facts, circumstances and conditions change.

The selection of critical accounting policies, the judgements and other uncertainties affecting application of those policies and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered when reviewing the financial statements. The significant accounting policies are set forth in Note 3. The Group believes the following critical accounting policies involve the most significant judgements and estimates used in the preparation of the financial statements.

58 PRINCIPAL ACCOUNTING ESTIMATES AND JUDGEMENTS (Continued)

(a) Oil and gas properties and reserves

The accounting for the exploration and production segment's oil and gas activities is subject to accounting rules that are unique to the oil and gas industry. The Group has used the successful efforts method to account for oil and gas business activities. The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense. These costs primarily include dry hole costs, seismic costs and other exploratory costs.

Engineering estimates of the Group's oil and gas reserves are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information. There are authoritative guidelines regarding the engineering criteria that have to be met before estimated oil and gas reserves can be designated as "proved". Proved and proved developed reserves estimates are updated at least annually and take into account recent production and technical information about each field. In addition, as prices and cost levels change from year to year, the estimate of proved and proved developed reserves also changes. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depreciation rates. Oil and gas reserves have a direct impact on the assessment of the recoverability of the carrying amounts of oil and gas properties reported in the financial statements. If proved reserves estimates are revised downwards, the Group's earnings could be affected by changes in depreciation expense or an immediate write-down of the carrying amount of oil and properties.

Future dismantlement costs for oil and gas properties are estimated with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with industry practices in the similar geographic area, including estimation of economic life of oil and gas properties, technology and price level. The present values of these estimated future dismantlement costs are capitalised as oil and gas properties with equivalent amounts recognised as provisions for dismantlement costs.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation expense, impairment expense and future dismantlement costs. Capitalised costs of proved oil and gas properties are amortised on a unit-of-production method based on volumes produced and reserves.

(b) Impairment for assets

If circumstances indicate that the net book value of a long-lived asset may not be recoverable, the asset may be considered "impaired", and an impairment loss may be recognised in accordance with "CASs 8 – Impairment of Assets". The carrying amounts of long-lived assets are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to recoverable amount. For goodwill, the recoverable amount is estimated annually. The recoverable amount is the greater of the fair value less costs to sell and the present value of expected future cash flows. It is difficult to precisely estimate the fair value because quoted market prices for the Group's assets or cash-generating units are not readily available. In determining the value of expected future cash flows, expected cash flows generated by the asset or the cash-generating unit are discounted to their present value, which requires significant judgement relating to sales volume, selling price, amount of operating costs and discount rate. The Group uses all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of sales volume, selling price, amount of operating costs and discount rate.

(c) Depreciation

Fixed assets are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. Management reviews the estimated useful lives of the assets at least annually in order to determine the amount of depreciation expense to be recorded during any reporting period. The useful lives are based on the Group's historical experience with similar assets and taking into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

(d) Measurement of expected credit losses

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive).

The Group measures and recognises expected credit losses, considering reasonable and supportable information about the relevant past events, current conditions and forecasts of future economic conditions. The Group regularly monitors and reviews the assumptions used for estimating expected credit losses.

(e) Allowance for diminution in value of inventories

If the costs of inventories become higher than their net realisable values, an allowance for diminution in value of inventories is recognised. Net realisable value represents the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. Management bases the estimates on all available information, including the current market prices of the finished goods and raw materials, and historical operating costs. If the actual selling prices were to be lower or the costs of completion were to be higher than estimated, the actual allowance for diminution in value of inventories would be higher than estimated.

59 PRINCIPAL SUBSIDIARIES

The Company's principal subsidiaries have been consolidated into the Group's financial statements for the year ended 31 December 2021. The following list contains the particulars of subsidiaries which principally affected the results, assets and liabilities of the Group:

Full name of enterprise	Principal activities	Registered capital/paid- up capital million	Actual investment at 31 December 2021 million	Percentage of equity interest/ voting right held by the Group %	Minority Interests at 31 December 2021 RMB million
(a) Subsidiaries acquired through group restructuring:					
China Petrochemical International Company Limited	Trading of petrochemical products	RMB1,400	RMB1,856	100.00	11
China International United Petroleum and Chemical Company Limited	Trading of crude oil and petrochemical products	RMB5,000	RMB6,585	100.00	5,259
Sinopec Catalyst Company Limited	Production and sale of catalyst products	RMB1,500	RMB2,424	100.00	233
Sinopec Yangzi Petrochemical Company Limited	Manufacturing of intermediate petrochemical products and petroleum products	RMB15,651	RMB15,651	100.00	-
Sinopec Lubricant Company Limited	Production and sale of refined petroleum products, lubricant base oil, and petrochemical materials	RMB3,374	RMB3,374	100.00	88
Sinopec Yizheng Chemical Fibre Limited Liability Company	Production and sale of polyester chips and polyester fibres	RMB4,000	RMB6,713	100.00	_
Marketing Company	Marketing and distribution of refined petroleum products	RMB28,403	RMB20,000	70.42	75,560
Sinopec Kantons Holdings Limited ("Sinopec Kantons")	Provision of crude oil jetty services and natural gas pipeline transmission services	HKD248	HKD3,952	60.33	5,011
Sinopec Shanghai Petrochemical Company Limited ("Shanghai Petrochemical")	Manufacturing of synthetic fibres, resin and plastics, intermediate petrochemical products and petroleum products	RMB10,824	RMB5,820	50.44	15,132
Fujian Petrochemical Company Limited ("Fujian Petrochemical") (i)	Manufacturing of plastics, intermediate petrochemical products and petroleum products	RMB10,492	RMB5,246	50.00	6,915
(b) Subsidiaries established by the Group:					
Sinopec International Petroleum Exploration and Production Limited ("SIPL")	Investment in exploration, production and sale of petroleum and natural gas	RMB8,250	RMB8,250	100.00	6,119
Sinopec Overseas Investment Holding Limited ("SOIH")	Investment holding of overseas business	USD3,009	USD3,009	100.00	-
Sinopec Chemical Sales Company Limited	Marketing and distribution of petrochemical products	RMB1,000	RMB1,165	100.00	124
Sinopec Great Wall Energy & Chemical Company Limited	Coal chemical industry investment management, production and sale of coal chemical products	RMB22,761	RMB22,795	100.00	18
Sinopec Beihai Refining and Chemical Limited Liability Company	Import and processing of crude oil, production, storage and sale of petroleum products and petrochemical products	RMB5,294	RMB5,240	98.98	137
ZhongKe (Guangdong) Refinery & Petrochemical Company Limited	Crude oil processing and petroleum products manufacturing	RMB6,397	RMB5,776	90.30	2,288
Sinopec Qingdao Refining and Chemical Company Limited	Manufacturing of intermediate petrochemical products and petroleum products	RMB5,000	RMB4,250	85.00	2,004
Sinopec·SK (Wuhan) Petrochemical Company Limited ("Sinopec·SK")	Production, sale, research and development of ethylene and downstream byproducts	RMB7,193	RMB7,193	59.00	5,130
(c) Subsidiaries acquired through business combination under	common control:				
Sinopec Hainan Refining and Chemical Company Limited	Manufacturing of intermediate petrochemical products and petroleum products	RMB9,606	RMB12,615	100.00	-
Sinopec Qingdao Petrochemical Company Limited	Manufacturing of intermediate petrochemical products and petroleum products	RMB1,595	RMB7,233	100.00	-
Gaoqiao Petrochemical Company Limited	Manufacturing of intermediate petrochemical products and petroleum products	RMB10,000	RMB4,804	55.00	8,197
Sinopec Baling Petrochemical Co. Ltd. ("Baling Petrochemical")	Crude oil processing and petroleum products manufacturing	RMB3,000	RMB3,000	55.00	2,272
(d) Subsidiaries acquired through business combination not un	der common control:				
Shanghai SECCO	Production and sale of petrochemical products	RMB500	RMB500	67.59	3,441

* The minority interests of subsidiaries which the Group holds 100% of equity interests at the end of the year are the minority interests of their subsidiaries.

Except for Sinopec Kantons and SOIH, which are incorporated in Bermuda and Hong Kong SAR, respectively, all of the above principal subsidiaries are incorporated and operate their businesses principally in the PRC.

Note:

(i) The Group consolidated the financial statements of the entity because it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those return through its power over the entity.

59 PRINCIPAL SUBSIDIARIES (Continued)

Summarised financial information on subsidiaries with material minority interests

Set out below are the summarised financial information which the amount before inter-company eliminations for each subsidiary whose minority interests that are material to the Group.

Summarised consolidated balance sheet

	Marketing Company		Marketing Company		Marketing Company SIPL Shanghai Petrochemical		etrochemical	Fujian Petrochemical		Sinoped	Sinopec Kantons		Shanghai SECCO		Sinopec-SK	
	At	At 31	At	At	At	At	At	At	At	At	At	At	At	At		
	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December		
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020		
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million		
Current assets	159,599	172,352	22,759	22,620	20,932	17,305	1,464	1,582	4,761	4,373	6,066	10,431	6,791	3,639		
Current liabilities	(193,315)	(201,678)	(1,430)	(475)	(15,796)	(15,232)	(142)	(458)	(196)	(924)	(5,434)	(2,783)	(8,122)	(6,377)		
Net current (liabilities)/assets	(33,716)	(29,326)	21,329	22,145	5,136	2,073	1,322	1,124	4,565	3,449	632	7,648	(1,331)	(2,738)		
Non-current assets	326,437	323,571	8,954	8,951	26,106	27,444	13,208	12,568	8,195	9,106	11,402	12,177	20,650	22,187		
Non-current liabilities	(59,604)	(59,554)	(17,823)	(18,270)	(847)	(162)	(700)	(693)	(170)	(170)	(1,418)	(1,553)	(7,512)	(8,509)		
Net non-current assets/																
(liabilities)	266,833	264,017	(8,869)	(9,319)	25,259	27,282	12,508	11,875	8,025	8,936	9,984	10,624	13,138	13,678		

Summarised consolidated statement of comprehensive income and cash flow

Year ended 31 December	Marketing	g Company	S	PL	Shanghai P	etrochemical	Fujian Pei	rochemical	Sinoped	: Kantons	Shangh	ai SECCO	Sinop	pec-SK
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million					
Turnover	1,408,523	1,099,680	2,166	2,017	89,280	74,705	5,549	4,871	528	1,064	29,723	21,626	50,208	28,702
Profit/(loss) for the year	18,582	22,415	1,429	1,160	2,004	639	951	243	871	2,047	2,817	2,132	1,606	(920)
Total comprehensive income	18,439	21,149	1,045	(720)	2,145	628	951	243	677	1,814	2,817	2,132	1,606	(920)
Comprehensive income														
attributable to minority														
interests	6,822	7,205	579	(287)	1,065	317	476	121	268	707	2,390	691	659	(377)
Dividends paid to minority														
interests	7,064	2,766	-	316	541	649	64	150	164	175	1,028	767	-	-
Net cash generated from/														
(used in) operating activities	28,923	54,139	690	281	4,060	1,751	(292)	(244)	133	586	3,447	3,119	5,476	(363)

60 CHANGE IN THE SCOPE OF CONSOLIDATION

Business combination under common control

Business combination under common control in 2021

Pursuant to resolution passed at the Director's meeting on 26 March 2021, the Company entered into agreements with Sinopec Assets Management Corporation ("SAMC") and Beijing Orient Petrochemical Industry Co., Ltd. ("BJOPI"), and its subsidiary, Sinopec Beihai Refining and Chemical Limited Liability Company entered into an agreement with Beihai Petrochemical Limited Liability Company of Sinopec Group ("BHP"). According to the relevant agreements, the Company proposed to acquire non equity assets such as the polypropylene devices and utility business assets of Cangzhou Branch held by SAMC, organic plant business held by BJOPI, and the pier operation platform held by BHP.

Pursuant to the resolution passed at the Directors' meeting on 29 November 2021, the Company entered into agreements with SAMC, and Sinopec Beijing Yanshan Petrochemical Co., Ltd. ("SBJYSP"), and its subsidiary, Sinopec Yizheng Chemical Fibre Company Limited entered into an agreement with SAMC. According to the relevant agreements, the Group proposed to acquire non equity assets such as thermal power, water and other business, PBT resin and other business of Yizheng Branch held by SAMC, and thermal power and other businesses held by SBJYSP.

As the Company, SAMC, BJOPI, BHP and SBJYSP are all under the control of Sinopec Group Company, the transaction described above has been accounted as business combination under common control. Accordingly, the equity and assets acquired from Sinopec Group Company have been accounted for at historical cost, and the consolidated financial statements of the Group prior to these acquisitions have been restated to include the results of operation and the assets and liabilities of Sinopec Group Company on a combined basis.

The transactions under the after-mentioned agreements will further improve the integrated operation level of the Group, optimise the allocation of resources, reduce connected transactions on the whole, so as to enhance the comprehensive competitiveness of the Group in its business locations.

The financial condition as at 31 December 2020 and the results of operation for the year ended 31 December 2020 previously reported by the Group have been restated, as set out below:

60 CHANGE IN THE SCOPE OF CONSOLIDATION (Continued)

Business combination under common control (Continued)

Business combination under common control in 2021 (Continued)

(1) The relevant financial information disclosed for changes in the scope of consolidation are as follows:

acquiree	Share of acquired equity	The basis for the business combination under the common control	Date of acquisition	Basis of Determination on the acquisition date	Income of the acquiree from 1 January 2021 to the acquisition date RMB Million	Net profits/ (losses) of the acquiree from 1 January 2021 to the acquisition date RMB Million	Income of the acquiree from 1 January 2020 to 31 December 2020 RMB Million	Net profits/ (losses) of the acquiree from 1 January 2020 to 31 December 2020 RMB Million	Net cash flow from operating activities of the acquiree from 1 January 2021 to the acquisition date RMB Million	Net cash flow of the acquiree from 1 January 2021 to the acquisition date RMB Million
Beihai petrochemical business	98.98%	The acquiree and the company are controlled by Sinopec Group Company both before and after combination, and the control is not transitory	1 July 2021	According to the agreement	13	5	39	19	43	-
Oriental Petrochemical Business	100%	The acquiree and the company are controlled by Sinopec Group Company both before and after combination, and the control is not transitory	1 July 2021	According to the agreement	620	84	1,223	87	162	_
Cangzhou Branch business	100%	The acquiree and the company are controlled by Sinopec Group Company both before and after combination, and the control is not transitory	1 July 2021	According to the agreement	246	(15)	560	(6)	20	-
Asset company business	100%	The acquiree and the company are controlled by Sinopec Group Company both before and after combination, and the control is not transitory	1 December 2021	According to the agreement	7,723	(376)	7,177	242	385	-
Group Yanshan Business	100%	The acquiree and the company are controlled by Sinopec Group Company both before and after combination, and the control is not transitory	1 December 2021	According to the agreement	3,086	102	3,234	5	392	-
Total					11,688	(200)	12,233	347	1,002	-

(2) Cost of acquisition :

Cost of acquisition(RMB Million)

(3) Details of the assets and liabilities acquired are as follows :

	Book value at the Acquisition Date RMB Million	Book value at December 31 2020 RMB Million
Total current assets	974	480
Total assets	6,712	5,875
Total current liabilities	2,540	1,020
Total liabilities	2,557	1,031
Total shareholders' equity	4,155	4,844

The principal subsidiaries included in the scope of consolidation this year are disclosed in Note 59.

6,124

61 COMMITMENTS

Capital commitments

At 31 December 2021 and 31 December 2020, capital commitments of the Group are as follows:

	At 31 December	At 31 December
	2021	2020
	RMB million	RMB million
Authorised and contracted for (i)	184,430	171,597
Authorised but not contracted for	90,227	33,997
Total	274,657	205,594

These capital commitments relate to oil and gas exploration and development, refining and petrochemical production capacity expansion projects, the construction of service stations and oil depots and investment commitments.

Note:

(i) The investment commitments of the Group is RMB3,648 million (2020: RMB13,172 million).

Commitments to joint ventures

Pursuant to certain of the joint venture agreements entered into by the Group, the Group is obliged to purchase products from the joint ventures based on market prices.

Exploration and production licenses

Exploration licenses for exploration activities are registered with the Ministry of Natural Resources. The maximum term of the Group's exploration licenses is 7 years, and may be renewed twice within 30 days prior to expiration of the original term with each renewal being for a two-year term. The Group is obligated to make progressive annual minimum exploration investment relating to the exploration blocks in respect of which the license is issued. The Ministry of Natural Resources also issues production licenses to the Group on the basis of the reserve reports approved by relevant authorities. The maximum term of a full production license is 30 years unless a special dispensation is given by the State Council. The maximum term of the production license is renewable upon application by the Group 30 days prior to expiration.

The Group is required to make payments of exploration license fees and production right usage fees to the Ministry of Natural Resources annually which are expensed. Expenses recognised were approximately RMB181 million for the year ended 31 December 2021 (2020: RMB231 million).

Estimated future annual payments are as follows:

	At 31 December 2021 RMB million	At 31 December 2020 RMB million
Within one year	301	390
Between one and two years	112	99
Between two and three years	110	66
Between three and four years	102	63
Between four and five years	64	56
Thereafter	846	824
Total	1,535	1,498

The implementation of commitments in previous year and the Group's commitments did not have material discrepancy.

62 CONTINGENT LIABILITIES

- (a) The Company has been advised by its PRC lawyers that, except for liabilities constituting or arising out of or relating to the business assumed by the Company in the Reorganisation, no other liabilities were assumed by the Company, and the Company is not jointly and severally liable for other debts and obligations incurred by Sinopec Group Company prior to the Reorganisation.
- (b) At 31 December 2021 and 31 December 2020, the guarantees by the Group in respect of facilities granted to the parties below are as follows:

	At 31 December	At 31 December
	2021	2020
	RMB million	RMB million
Joint ventures(i)	9,117	6,390
Associates (ii)	5,746	8,450
Total	14,863	14,840

Notes:

(i) The Group provided a guarantee in respect to standby credit facilities granted to Zhongan United Coal Chemical Co., Ltd. ("Zhongan United") by banks amount to RMB7,100 million. As at 31 December 2021, the amount withdrawn (The portion corresponding to the shareholding ratio of the Group) by Zhongan United from banks and guaranteed by the Group was RMB5,680 million (31 December 2020: RMB6,390 million). The Group provided a guarantee in respect to standby credit facilities granted to Amur Gas Chemical Complex Limited Liability Company ("Amur Gas") by banks amount to RMB23,208 million. As at 31 December 2021, the amount withdrawn (The portion corresponding to the shareholding ratio of the Group) by Amur Gas from banks and guaranteed by the Group was RMB3,264 million (31 December 2020: Nil).

The Group provided a guarantee in respect to payment obligation under the raw material supply agreements of Amur Gas amount to RMB15,493 million. As at 31 December 2021, Amur Gas has not yet incurred the relevant payment obligations and therefore the Group has no guarantee amount (31 December 2020: Nil).

The Group provided a guarantee in respect engineering services agreement of Amur Gas amount to RMB3,012 million. As at 31 December 2021, the relevant payables for constructions of Amur Gas (The portion corresponding to the shareholding ratio of the Group) and guaranteed by the Group was RMB173 million (31 December 2020: Nil).

(ii) The Group provided a guarantee in respect to standby credit facilities granted to Zhongtian Synergetic Energy by banks amount to RMB17,050 million. As at 31 December 2021, the amount withdrawn (The portion corresponding to the shareholding ratio of the Group) by Zhongtian Synergetic Energy and guaranteed by the Group was RMB5,746 million (2020: RMB8,450 million).

Management monitors the risk that the specified debtor will default on the contract and recognises a provision when ECLs on the financial guarantees are determined to be higher than the carrying amount in respect of the guarantees. At 31 December 2021 and 2020, the Group estimates that there is no material liability has been accrued for ECLs related to the Group's obligation under these guarantee arrangements.

Environmental contingencies

Under existing legislation, management believes that there are no probable liabilities that will have a material adverse effect on the financial position or operating results of the Group. The PRC government, however, has moved, and may move further towards more rigorous enforcement of applicable laws, and towards the adoption of more stringent environmental standards. Environmental liabilities are subject to considerable uncertainties which affect the Group's ability to estimate the ultimate cost of remediation efforts. These uncertainties include (i) the exact nature and extent of the contamination at various sites including, but not limited to refineries, oil fields, service stations, terminals and land development areas, whether operating, closed or sold, (ii) the extent of required cleanup efforts, (iii) varying costs of alternative remediation strategies, (iv) changes in environmental remediation requirements, and (v) the identification of new remediation sites. The amount of such future cost is indeterminable due to such factors as the unknown magnitude of possible contamination and the unknown timing and extent of the corrective actions that may be required. Accordingly, the outcome of environmental liabilities under proposed or future environmental legislation cannot reasonably be estimated at present, and could be material.

The Group recognised normal routine pollutant discharge fees of approximately RMB10,968 million in the consolidated financial statements for the year ended 31 December 2021 (2020: RMB11,368 million).

Legal contingencies

The Group is defendant in certain lawsuits as well as the named party in other proceedings arising in the ordinary course of business. Management has assessed the likelihood of an unfavourable outcome of such contingencies, lawsuits or other proceedings and believes that any resulting liabilities will not have a material adverse effect on the financial position, operating results or cash flows of the Group.

63 SEGMENT REPORTING

Segment information is presented in respect of the Group's operating segments. The format is based on the Group's management and internal reporting structure.

In a manner consistent with the way in which information is reported internally to the Group's chief operating decision maker for the purposes of resource allocation and performance assessment, the Group has identified the following five reportable segments. No operating segments have been aggregated to form the following reportable segments.

- (i) Exploration and production which explores and develops oil fields, produces crude oil and natural gas and sells such products to the refining segment of the Group and external customers.
- (ii) Refining which processes and purifies crude oil, which is sourced from the exploration and production segment of the Group and external suppliers, and manufactures and sells petroleum products to the chemicals and marketing and distribution segments of the Group and external customers.
- (iii) Marketing and distribution which owns and operates oil depots and service stations in the PRC, and distributes and sells refined petroleum products (mainly gasoline and diesel) in the PRC through wholesale and retail sales networks.
- (iv) Chemicals which manufactures and sells petrochemical products, derivative petrochemical products and other chemical products to external customers.
- (v) Corporate and others which largely comprise the trading activities of the import and export companies of the Group and research and development undertaken by other subsidiaries.

The segments were determined primarily because the Group manages its exploration and production, refining, marketing and distribution, chemicals, and corporate and others businesses separately. The reportable segments are each managed separately because they manufacture and/ or distribute distinct products with different production processes and due to their distinct operating and gross margin characteristics.

(1) Information of reportable segmental revenues, profits or losses, assets and liabilities

The Group's chief operating decision maker evaluates the performance and allocates resources to its operating segments on an operating profit basis, without considering the effects of finance costs or investment income. Inter-segment transfer pricing is based on the market price or cost plus an appropriate margin, as specified by the Group's policy.

Assets and liabilities dedicated to a particular segment's operations are included in that segment's total assets and liabilities. Segment assets include all tangible and intangible assets, except for cash at bank and on hand, long-term equity investments, deferred tax assets and other unallocated assets. Segment liabilities exclude short-term loans, non-current liabilities due within one year, long-term loans, debentures payable, deferred tax liabilities, other non-current liabilities and other unallocated liabilities.

63 SEGMENT REPORTING (Continued)

(1) Information of reportable segmental revenues, profits or losses, assets and liabilities (Continued)

Reportable information on the Group's operating segments is as follows:

	2021 RMB million	2020 RMB million
ncome from principal operations		
Exploration and production		
External sales	156,026	104,524
Inter-segment sales	87,298 243,324	57,513 162,037
Refining	_ 10,021	102,007
External sales	167,948	113,214
Inter-segment sales	1,212,455	826,219
Marketing and distribution	1,380,403	939,433
External sales	1,367,605	1,062,447
Inter-segment sales	7,075	4,854
	1,374,680	1,067,301
Chemicals		
External sales	424,774	322,169
Inter-segment sales	70,242	40,702
	495,016	362,871
Corporate and others		
External sales	563,147	458,154
Inter-segment sales	732,356	430,073
	1,295,503	888,227
Elimination of inter-segment sales	(2,109,426)	(1,371,215
Consolidated income from principal operations Income from other operations	2,679,500	2,048,654
Exploration and production	6,674	5,718
Refining	5.161	4,633
Marketing and distribution	36.864	34,905
Chemicals	10,487	8,758
Corporate and others	2,198	2,056
Consolidated income from other operations	61,384	56,070
Consolidated operating income	2,740,884	2,104,724
	2021	2020
	RMB million	RMB million
Operating profit/(loss)		
By segment		
Exploration and production	613	(20,570
Refining	65,360	(6,526
Marketing and distribution	23,102	19,634
Chemicals	11,361	9,592
Corporate and others	9,521	(2,048
Elimination	(4,421)	4,417
Total segment operating profit	105,536	4,499
Investment income Exploration and production	3,023	13,837
Refining	5,025	13,085
Marketing and distribution	1,796	12,230
Chemicals	11,269	1,662
Corporate and others	(10,603)	6,672
Total segment investment income	6,032	47,486
Less: Financial expenses	9,010	9,510
Add: Other income	5,850	7,514
Gains/(losses) from changes in fair value	3,341	(1,253
Asset disposal gains	665	2,067
		50,803
Operating profit	112,414	50,005
Operating profit Add: Non-operating income	3,516	2,370
		2,370 4,732 48,441

63 SEGMENT REPORTING (Continued)

(1) Information of reportable segmental revenues, profits or losses, assets and liabilities (Continued)

	At 31 December	At 31 Decembe
	2021 RMB million	202 RMB millio
lssets		
Segment assets		
Exploration and production	371,100	354,02
Refining	304,785	270,76
Marketing and distribution	377,499	373,43
Chemicals	222,803	194,43
Corporate and others	133,961	118,45
otal segment assets	1,410,148	1,311,11
Cash at bank and on hand	221,989	184,41
.ong-term equity investments	209,179	188,34
Deferred tax assets	19,389	25,05
Other unallocated assets	28,550	29,97
Total assets	1,889,255	1,738,89
jabilities	1,003,233	1,750,05
Segment liabilities		
Exploration and production	159,358	157,43
Refining	129,103	135,15
Marketing and distribution	210,215	,
Chemicals		213,45
	65,103	47,99
Corporate and others	197,447	117,68
Total segment liabilities	761,226	671,71
Short-term loans	27,366	20,75
Non-current liabilities due within one year	28,651	22,49
.ong-term loans	49,341	45,45
Debentures payable	42,649	38,35
Deferred tax liabilities	7,910	8,12
Other non-current liabilities	18,276	17,95
Other unallocated liabilities	37,795	25,31
otal liabilities	973,214	850,17
	2021	202
	RMB million	RMB millio
Capital expenditure		
Exploration and production	68,148	56,41
Refining	22,469	24,75
Marketing and distribution	21,897	25,40
Chemicals	51,648	28,21
Corporate and others	3,786	2,31
	167,948	137,10
Depreciation, depletion and amortisation	, , , , , , , , , , , , , , , , , , , ,	,
Exploration and production	52,880	46,27
Refining	20,743	20,09
Marketing and distribution	23,071	23,19
Chemicals	16,093	14,83
Corporate and others	2,893	3,07
		107,46
mpairment losses on long-lived assets	115,080	107,40
וווייד ווידיו ווידי ווידע מספרול	2,467	8,49
	2467	
Exploration and production		1 04
Exploration and production Refining	860	1,92
Exploration and production Refining Marketing and distribution	860 1,211	53
Exploration and production Refining Marketing and distribution Chemicals	860 1,211 5,332	
Exploration and production Refining Marketing and distribution	860 1,211	53

63 SEGMENT REPORTING (Continued)

(2) Geographical information

The following tables set out information about the geographical information of the Group's external sales and the Group's non-current assets, excluding financial assets and deferred tax assets. In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers, and segment assets are based on the geographical location of the assets.

	2021	2020
	RMB million	RMB million
ternal sales		
Mainland China	2,166,040	1,720,695
Singapore	278,024	215,846
Others	296,820	168,183
	2,740,884	2,104,724
	At 31 December	At 31 December
	At SI December 2021	2020
	RMB million	RMB million
on-current assets		
Mainland China	1,268,814	1,216,267
Others	40,551	36,782
	1,309,365	1,253,049

64 FINANCIAL INSTRUMENTS

Overview

Financial assets of the Group include cash at bank and on hand, financial assets held for trading, derivative financial assets, accounts receivable, receivables financing, other receivables and other equity instrument investments. Financial liabilities of the Group include short-term loans, derivative financial liabilities, bills payable, accounts payable, employee benefits payable, other payables, long-term loans, debentures payable and lease liabilities.

The Group has exposure to the following risks from its uses of financial instruments:

- credit risk;
- · liquidity risk; and
- market risk.

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework, and developing and monitoring the Group's risk management policies.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, and set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations. Internal audit department undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Group's audit committee.

Credit risk

(i) Risk management

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's deposits placed with financial institutions (including structured deposits) and receivables from customers. To limit exposure to credit risk relating to deposits, the Group primarily places cash deposits only with large financial institutions in the PRC with acceptable credit ratings. The majority of the Group's accounts receivable relates to sales of petroleum and chemical products to related parties and third parties operating in the petroleum and chemical industries. No single customer accounted for greater than 10% of total accounts receivable at 31 December 2021, except for the amounts due from Sinopec Group Company and fellow subsidiaries. The Group performs ongoing credit evaluations of its customers' financial condition and generally does not require collateral on accounts receivable. The Group maintains an impairment loss for doubtful accounts and actual losses have been within management's expectations.

The carrying amounts of cash at bank and on hand, financial assets held for trading, derivative financial assets, accounts receivable, receivables financing and other receivables, represent the Group's maximum exposure to credit risk in relation to financial assets.

Credit risk (Continued)

(ii) Impairment of financial assets

The Group's primary type of financial assets that are subject to the expected credit loss model is accounts receivable, receivables financing and other receivables.

The Group's cash deposits are placed only with large financial institutions with acceptable credit ratings, and there is no material impairment loss identified.

For accounts receivable and receivables financing, the Group applies the "No.22 Accounting Standards for Business Enterprises – Financial instruments: recognition and measurement" simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all accounts receivable and receivables financing.

To measure the expected credit losses, accounts receivable and receivables financing have been grouped based on shared credit risk characteristics and the days past due.

The expected loss rates are based on the payment profiles of sales over a period of 36 months before 31 December 2021 or 31 December 2020, respectively, and the corresponding historical credit losses experienced within this period and calculate expected credit losses for the above financial assets using an allowance matrix The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the accounts receivable and receivables financing.

The detailed analysis of accounts receivable and receivables financing is listed in note 7 and note 8.

The Group's other receivables are considered to have low credit risk (Note 10), and the loss allowance recognised during the year was therefore limited to 12 months expected credit losses. The Group considers "low credit risk" for other receivables when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

Liquidity risk

Liquidity risk is the risk that the Group encounters short fall of capital when meeting its obligation of financial liabilities. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed capital conditions, without incurring unacceptable losses or risking damage to the Group's reputation. The Group prepares monthly cash flow budget to ensure that they will always have sufficient liquidity to meet its financial obligations as they fall due. The Group arranges and negotiates financing with financial institutions and maintains a certain level of standby credit facilities to reduce the liquidity risk.

At 31 December 2021, the Group has standby credit facilities with several PRC financial institutions which provide the Group to borrow up to RMB441,559 million (2020: RMB443,966 million) on an unsecured basis, at a weighted average interest rate of 2.81% per annum (2020: 2.85%). At 31 December 2021, the Group's outstanding borrowings under these facilities were RMB11,700 million (2020: RMB4,041 million) and were included in loans.

The following table sets out the remaining contractual maturities at the balance sheet date of the Group's financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on prevailing rates at the balance sheet date) and the earliest date the Group would be required to repay:

	At 31 December 2021					
	Carrying amount RMB million	Total contractual undiscounted cash flow RMB million	Within one year or on demand RMB million	More than one year but less than two years RMB million	More than two years but less than five years RMB million	More than five years RMB million
Short-term loans	27,366	27,787	27,787	-	-	-
Derivative financial liabilities	3,223	3,223	3,223	-	-	-
Bills payable	11,721	11,721	11,721	-	-	-
Accounts payable	203,919	203,919	203,919	-	-	-
Other payables and employee benefits payable	128,749	128,749	128,749	-	-	-
Non-current liabilities due within one year	28,651	29,554	29,554	-	-	-
Long-term loans	49,341	53,704	1,230	19,350	27,786	5,338
Debentures payable	42,649	47,553	1,195	30,645	10,443	5,270
Lease liabilities	170,233	280,652	-	12,030	35,412	233,210
Total	665,852	786,862	407,378	62,025	73,641	243,818

Liquidity risk (Continued)

	At 31 December 2020					
		Total contractual	More than	More than two years but	Within one	
	amount	undiscounted cash flow	less than two years	less than five years	year or on demand	More than five years
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Short-term loans	20,756	20,950	20,950	-	-	-
Derivative financial liabilities	4,826	4,826	4,826	-	-	-
Bills payable	10,394	10,394	10,394	-	-	-
Accounts payable	151,514	151,514	151,514	-	-	-
Other payables and employee benefits payable	92,141	92,141	92,141	-	-	-
Non-current liabilities due within one year	22,494	23,880	23,880	-	-	-
Debentures payable due within one year	3,018	3,024	3,024	-	-	-
Long-term loans	45,459	49,074	936	4,638	41,009	2,491
Debentures payable	38,356	44,791	1,240	8,044	29,514	5,993
Lease liabilities	171,740	312,544	-	15,456	43,513	253,575
Total	560,698	713,138	308,905	28,138	114,036	262,059

Management believes that the Group's current cash on hand, expected cash flows from operations and available standby credit facilities from financial institutions will be sufficient to meet the Group's short-term and long-term capital requirements.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk.

(a) Currency risk

Currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured.

The Group does not have significant financial instruments that are denominated in foreign currencies other than the functional currencies of respective entities as at 31 December, and consequently does not have significant exposure to foreign currency risk.

(b) Interest rate risk

The Group's interest rate risk exposure arises primarily from its short-term and long-term loans. Loans carrying interest at variable interest rates and at fixed interest rates expose the Group to cash flow interest rate risk and fair value interest rate risk respectively. The interest rates and terms of repayment of short-term and long-term loans of the Group are disclosed in Note 22 and Note 31, respectively.

At 31 December 2021, it is estimated that a general increase/decrease of 100 basis points in variable interest rates, with all other variables held constant, would decrease/increase the Group's net profit for the year by approximately RMB254 million (2020: decrease/increase RMB245 million). This sensitivity analysis has been determined assuming that the change of interest rates was applied to the Group's debts outstanding at the balance sheet date with exposure to cash flow interest rate risk. The analysis is performed on the same basis for 2020.

(c) Commodity price risk

The Group engages in oil and gas operations and is exposed to commodity price risk related to price volatility of crude oil, refined oil products and chemical products. The fluctuations in prices of crude oil, refined oil products and chemical products could have significant impact on the Group. The Group uses derivative financial instruments, including commodity futures and swaps contracts, to manage a portion of such risk.

At 31 December 2021, the Group had certain commodity contracts of crude oil, refined oil products and chemical products designated as qualified cash flow hedges and economic hedges. At 31 December 2021, the fair value of such derivative hedging financial instruments is derivative financial assets of RMB18,359 million (2020: RMB12,353 million) and derivative financial liabilities of RMB3,214 million (2020: RMB4,808 million).

At 31 December 2021, it is estimated that a general increase/decrease of USD10 per barrel in basic price of derivative financial instruments, with all other variables held constant, would impact the fair value of derivative financial instruments, which would increase/decrease the Group's net profit for the year by approximately RMB2,996 million (2020: increase/decrease RMB3,592 million), and decrease/increase the Group's other comprehensive income by approximately RMB1,160 million (2020: increase/decrease RMB10,379 million). This sensitivity analysis has been determined assuming that the change in prices had occurred at the balance sheet date and the change was applied to the Group's derivative financial instruments at that date with exposure to commodity price risk. The analysis is performed on the same basis for 2020.

Fair values

(i) Financial instruments carried at fair value

The following table presents the carrying value of financial instruments measured at fair value at the balance sheet date across the three levels of the fair value hierarchy. With the fair value of each financial instrument categorised in its entirely based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

- Level 1 (highest level): fair values measured using quoted prices (unadjusted) in active markets for identical financial instruments.
- Level 2: fair values measured using quoted prices in active markets for similar financial instruments, or using valuation techniques in which all significant inputs are directly or indirectly based on observable market data.
- Level 3 (lowest level): fair values measured using valuation techniques in which any significant input is not based on observable market data.

At 31 December 2021

The Group

	Level 1 RMB million	Level 2 RMB million	Level 3 RMB million	Total RMB million
Assets				
Financial assets held for trading:				
- Derivative financial assets	5,883	12,488	-	18,371
Receivables financing:				
- Receivables financing	-	-	5,939	5,939
Other equity instrument investments:				
- Other Investments	179	-	588	767
	6,062	12,488	6,527	25,077
Liabilities				
Derivative financial liabilities:				
- Derivative financial liabilities	804	2,419	_	3,223
	804	2,419	-	3,223

At 31 December 2020

The Group

	Level 1 RMB million	Level 2 RMB million	Level 3 RMB million	Total RMB million
Assets				
Financial assets held for trading:				
- Equity investments, listed and at quoted market price	1	-	-	1
Derivative financial assets:				
– Derivative financial assets	9,628	2,900	_	12,528
Receivables financing:				
- Receivables financing	-	-	8,735	8,735
Other equity instrument investments:				
– Other Investments	149	_	1,376	1,525
	9,778	2,900	10,111	22,789
Liabilities				
Derivative financial liabilities:				
- Derivative financial liabilities	2,471	2,355	_	4,826
	2,471	2,355	-	4,826

During the year ended 31 December 2021 and 2020, there was no transfer between instruments in Level 1 and Level 2.

Management of the Group uses discounted cash flow model with inputted interest rate and commodity index, which were influenced by historical fluctuation and the probability of market fluctuation, to evaluate the fair value of the structured deposits and receivables financing classified as Level 3 financial assets.

Fair values (Continued)

(ii) Fair values of financial instruments carried at other than fair value

The fair values of the Group's financial instruments carried at other than fair value (other than long-term indebtedness and investments in unquoted equity securities) approximate their carrying amounts due to the short-term maturity of these instruments. The fair values of long-term indebtedness are estimated by discounting future cash flows using current market interest rates offered to the Group for debt with substantially the same characteristic and maturities range from 0.30% to 4.65% (2020: from 0.77% to 4.65%). The following table presents the carrying amount and fair value of the Group's long-term indebtedness other than loans from Sinopec Group Company and fellow subsidiaries at 31 December 2021 and 31 December 2020:

	At 31 December	At 31 December
	2021	2020
	RMB million	RMB million
Carrying amount	88,593	76,674
Fair value	85,610	74,282

The Group has not developed an internal valuation model necessary to estimate the fair value of loans from Sinopec Group Company and fellow subsidiaries as it is not considered practicable to estimate their fair value because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive based on the Reorganisation of the Group, its existing capital structure and the terms of the borrowings.

Except for the above items, the financial assets and liabilities of the Group are carried at amounts not materially different from their fair values at 31 December 2021 and 31 December 2020.

65 BASIC AND DILUTED EARNINGS PER SHARE

(i) Basic earnings per share

Basic earnings per share is calculated by the net profit attributable to equity shareholders of the Company and the weighted average number of outstanding ordinary shares of the Company:

	2021	2020
Net profit attributable to equity shareholders of the Company (RMB million)	71,208	33,271
Weighted average number of outstanding ordinary shares of the Company (million)	121,071	121,071
Basic earnings per share (RMB/share)	0.588	0.275

The calculation of the weighted average number of ordinary shares is as follows:

	2021	2020
Weighted average number of outstanding ordinary shares of the Company at 1 January (million)	121,071	121,071
Weighted average number of outstanding ordinary shares of the Company at 31 December (million)	121,071	121,071

(ii) Diluted earnings per share

There are no potential dilutive ordinary shares, and diluted earnings per share are equal to the basic earning per share.

66 RETURN ON NET ASSETS AND EARNINGS PER SHARE

In accordance with "Regulation on the Preparation of Information Disclosures of Companies Issuing Public Shares No.9 – Calculation and Disclosure of the Return on Net Assets and Earnings Per Share" (2010 revised) issued by the CSRC and relevant accounting standards, the Group's return on net assets and earnings/(loss) per share are calculated as follows:

	Weighted	2021		Weighted	2020	
	average return on net assets (%)	Basic earnings per share (RMB/Share)		average return on net assets (%)	Basic earnings per share (RMB/Share)	Diluted earnings per share (RMB/Share)
Net profit attributable to the Company's ordinary equity shareholders	9.35	0.588	0.588	4.46	0.275	0.275
Net profit/(loss) deducted extraordinary gains and losses attributable to the Company's ordinary equity shareholders	9.49	0.597	0.597	(0.21)	(0.013)	(0.013)

67 EXTRAORDINARY GAINS AND LOSSES

Pursuant to "Explanatory Announcement No.1 on Information Disclosure for Companies Offering Their Securities to the Public- Extraordinary Gain and Loss" (2008), the extraordinary gains and losses of the Group are as follows:

	2021	2020
	RMB million	RMB million
Extraordinary (gains)/losses for the year:		
Net gains on disposal of non-current assets	(665)	(973)
Donations	165	301
Government grants	(3,085)	(8,605)
Gain on holding and disposal of business and various investments	(259)	(37,520)
Other non-operating losses, net	4,720	2,992
Net (loss)/profit acquired through business combination under common control during the reporting period	101	(472)
	977	(44,277)
Tax effect	(72)	6,736
Total	905	(37,541)
Attributable to:		
Equity shareholders of the Company	1,012	(34,836)
Minority interests	(107)	(2,705)



KPMG 8th Floor, Prince's Building Central, Hong Kong G P O Box 50, Hong Kong Telephone +852 2522 6022 Fax +852 2845 2588 Internet kpmg.com/cn 畢馬威會計師事務所 香港中環太子大廈8樓 香港郵政總局信箱50號 電話+852 2522 6022 傳真+852 2845 2588 網址kpmg.com/cn

Independent auditor's report To the shareholders of China Petroleum & Chemical Corporation

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

OPINION

We have audited the consolidated financial statements of China Petroleum & Chemical Corporation ("the Company") and its subsidiaries ("the Group") set out on pages 158 to 215, which comprise the consolidated statement of financial position as at 31 December 2021, the consolidated income statement, 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 ("IASB") 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 Hong Kong Standards on Auditing ("HKSAs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). 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 HKICPA's *Code of Ethics for Professional Accountants* ("the Code") together with any ethical requirements that are relevant to our audit of the consolidated financial statements in the People's Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTER

Key audit matter is the matter that, in our professional judgment, was of most significance in our audit of the consolidated financial statements of the current period. The matter was addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on this matter.

Assessment of impairment of property, plant and equipment relating to oil and gas producing activities

Refer to notes 2(g), 2(n), 8, 17 and 44 to the consolidated financial statements

The Key Audit Matter

The Company reported property, plant and equipment of Renminbi ("RMB") 598,925 million as at 31 December 2021, a portion of which related to oil and gas producing activities. The Company reported impairment losses of RMB2,467 million for the property, plant and equipment relating to oil and gas producing activities for the year ended 31 December 2021.

The Company groups property, plant and equipment relating to oil and gas producing activities into cash-generating units ("CGUs") for impairment assessment. The Company compares the carrying amount of individual CGU with its value in use, using a discounted cash flow forecast, which was prepared based on the future production profiles included in the oil and gas reserves reports, to determine the impairment loss to be recognised.

We identified assessment of impairment of property, plant and equipment relating to oil and gas producing activities as a key audit matter. The value in use amounts of these CGUs are sensitive to the changes to future selling prices and production costs for crude oil and natural gas, future production profiles, and discount rates. Therefore a higher degree of subjective auditor judgment was required to evaluate the Company's impairment assessment of property, plant and equipment relating to oil and gas producing activities.

How the matter was addressed in our audit

The following are the primary procedures we performed to address this key audit matter:

- we evaluated the design and tested the operating effectiveness of certain internal controls related to the process for impairment assessment of property, plant and equipment relating to oil and gas producing activities;
- we assessed the competence, capabilities and objectivity of the Company's reserves specialists and evaluated the methodology adopted by them in estimating the oil and gas reserves against the recognised industry standards;
- we compared future selling prices for crude oil and natural gas used in the discounted cash flow forecasts with the Company's business plans and forecasts by external analysts;
- we compared future production costs and future production profiles used in the discounted cash flow forecasts with oil and gas reserves reports issued by the reserves specialists; and
- we involved valuation professionals with specialised skills and knowledge, who assisted in assessing the discount rates applied in the discounted cash flow forecasts against a discount rate range that was independently developed using publicly available market data for comparable companies in the same industry.



INFORMATION OTHER THAN THE CONSOLIDATED FINANCIAL STATEMENTS AND AUDITOR'S REPORT THEREON

The directors are responsible for the other information. The other information comprises all the information included in the annual report, other than 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.

RESPONSIBILITIES OF THE DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs issued by the IASB 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 assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED 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, 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 HKSAs 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 HKSAs, we exercise professional judgement and maintain professional scepticism 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 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.

The engagement partner on the audit resulting in this independent auditor's report is Ho Ying Man, Simon.

KPMG Certified Public Accountants

8th Floor, Prince's Building 10 Chater Road Central, Hong Kong

25 March 2022

(B) FINANCIAL STATEMENTS PREPARED UNDER INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS") CONSOLIDATED INCOME STATEMENT for the year ended 31 December 2021 (Amounts in million, except per share data)

	Note	Year ended 31	December
		2021	2020
		RMB	RMB
Revenue			
Revenue from primary business	3	2,679,500	2,048,654
Other operating revenues	4	61,384	56,070
		2,740,884	2,104,724
Operating expenses			
Purchased crude oil, products and operating supplies and expenses		(2,076,665)	(1,589,821)
Selling, general and administrative expenses	5	(54,978)	(53,668)
Depreciation, depletion and amortisation		(115,680)	(107,461)
Exploration expenses, including dry holes		(12,382)	(9,716)
Personnel expenses	6	(103,492)	(87,525)
Taxes other than income tax	7	(259,032)	(235,018)
Impairment losses on trade and other receivables		(2,311)	(2,066)
Other operating income/(expenses), net	8	(21,716)	(5,780)
Total operating expenses		(2,646,256)	(2,091,055)
Operating profit		94,628	13,669
Finance costs			
Interest expense	9	(15,018)	(15,198)
Interest income		5,732	4,803
Foreign currency exchange gains, net		276	885
Net finance costs		(9,010)	(9,510)
Investment income	10	298	37,744
Share of profits less losses from associates and joint ventures	21,22	23,253	6,712
Profit before taxation		109,169	48,615
Income tax expense	11	(23,318)	(6,344)
Profit for the year		85,851	42,271
Attributable to:			
Shareholders of the Company		71,975	33,443
Non-controlling interests		13,876	8,828
Profit for the year		85,851	42,271
Earnings per share:			
Basic	16	0.594	0.276
Diluted	16	0.594	0.276

The notes on pages 165 to 215 form part of these consolidated financial statements. Details of dividends payable to shareholders of the Company attributable to the profit for the year are set out in Note 14.

for the year ended 31 December 2021

(Amounts in million)

	Note	Year ended 31 De	ecember
		2021 RMB	2020 RMB
Profit for the year		85,851	42,271
Other comprehensive income:	15		
Items that may not be reclassified subsequently to profit or loss			
Equity investments at fair value through other comprehensive income		(4)	(22)
Total items that may not be reclassified subsequently to profit or loss		(4)	(22)
Items that may be reclassified subsequently to profit or loss			
Cost of hedging reserve		(220)	162
Share of other comprehensive income of associates and joint ventures		441	(2,441)
Cash flow hedges		19,018	7,073
Foreign currency translation differences		(1,728)	(4,457)
Total items that may be reclassified subsequently to profit or loss		17,511	337
Total other comprehensive income		17,507	315
Total comprehensive income for the year		103,358	42,586
Attributable to:			
Shareholders of the Company		89,549	34,837
Non-controlling interests		13,809	7,749
Total comprehensive income for the year		103,358	42,586

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2021

(A	m	oun	ts i	n	mil	li	on)
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	Note	31 December 2021	31 December 2020
		RMB	RMB
Non-current assets			
Property, plant and equipment, net	17	598,925	593,615
Construction in progress	18	155,939	125,525
Right-of-use assets	19	268,408	266,012
Goodwill	20	8,594	8,620
Interest in associates	21	148,729	136,163
Interest in joint ventures	22	60,450	52,179
Financial assets at fair value through other comprehensive income	26	767	1,525
Deferred tax assets	29	19,389	25,054
Long-term prepayments and other assets	23	70,030	74,543
Total non-current assets		1,331,231	1,283,236
Current assets			
Cash and cash equivalents		108,590	87,559
Time deposits with financial institutions		113,399	100,498
Financial assets at fair value through profit or loss			1
Derivative financial assets	24	18,371	12.528
Trade accounts receivable	25	34,861	35,439
Financial assets at fair value through other comprehensive income	26	5,939	8.735
Inventories	27	207,433	152,191
Prepaid expenses and other current assets	28	69,431	58.709
Total current assets		558,024	455,660
Current liabilities			
Short-term debts	30	35,252	23,769
Loans from Sinopec Group Company and fellow subsidiaries	30	2,873	5.264
Lease liabilities	31	15.173	15.293
Derivative financial liabilities	24	3,223	4,826
Trade accounts payable and bills payable	32	215,640	161,908
Contract liabilities	33	124,622	126,241
Other payables	34	239.688	179.108
Income tax payable		4,809	6.586
Total current liabilities		<u> </u>	522,995
Net current liabilities		83,256	67,335
Total assets less current liabilities		1.247.975	
Non-current liabilities		1,247,975	1,215,901
	30	70 200	70.027
Long-term debts Loans from Sinopec Group Company and fellow subsidiaries	30		72,037
	30		/ -
		170,233	171,740
Deferred tax liabilities	29	7,910	8,124
Provisions	35	43,525	45,552
Other long-term liabilities		19,243	18,968
Total non-current liabilities		332,901	328,199
=		915,074	887,702
Equity			
Share capital	36	121,071	121,071
Reserves		653,111	625,254
Total equity attributable to shareholders of the Company		774,182	746,325
Non-controlling interests		140,892	141,377
Total equity		915,074	887,702

Approved and authorised for issue by the board of directors on 25 March 2022.

Ma Yongsheng *Chairman (Legal representative)* **Yu Baocai** President **Shou Donghua** *Chief Financial Officer*

The notes on pages 165 to 215 form part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2020

(Amoun	ts in I	milli	on)
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	Share capital RMB	Capital reserve RMB	Share premium RMB	Statutory surplus reserve RMB	Discretionary surplus reserve RMB	Other reserves RMB	Retained earnings RMB	Total equity attributable to shareholders of the Company RMB	Non- controlling interests RMB	Total equity RMB
Balance at 31 December 2019 Adjustment for business combination of entities	121,071	29,730	55,850	90,423	117,000	1,941	322,931	738,946	138,358	877,304
under common control (Note 38)	-	4,773	-	-	-	-	-	4,773	1	4,774
Balance at 1 January 2020	121,071	34,503	55,850	90,423	117,000	1,941	322,931	743,719	138,359	882,078
Profit for the year	-	-	-	-	-	-	33,443	33,443	8,828	42,271
Other comprehensive income (Note 15)	-	-	-	-	-	1,406	(12)	1,394	(1,079)	315
Total comprehensive income for the year	-	-	-	-	-	1,406	33,431	34,837	7,749	42,586
Amounts transferred to initial carrying amount of										
hedged items	-	-	-	-	-	(47)	-	(47)	48	1
Transactions with owners, recorded directly in equity:										
Contributions by and distributions to owners:										
Final dividend for 2019 (Note 14)	-	-	-	-	-	-	(23,004)	(23,004)	-	(23,004)
Interim dividend for 2020 (Note 14)	-	-	-	-	-	-	(8,475)	(8,475)	-	(8,475)
Appropriation (Note (a))	-	-	-	1,857	-	-	(1,857)	-	-	_
Distributions to non-controlling interests	-	-	-	-	-	-	-	-	(6,726)	(6,726)
Contributions to subsidiaries from										
non-controlling interests	-	-	-	-	-	-	-	-	3,325	3,325
Distribution to SAMC in the Acquisition of										
Baling Branch of SAMC	-	(972)	-	-	-	-	-	(972)	972	-
Total contributions by and distributions to owners	-	(972)	-	1,857	-	-	(33,336)	(32,451)	(2,429)	(34,880)
Transaction with non-controlling interests		(138)						(138)	13	(125)
Total transactions with owners	-	(1,110)	-	1,857		-	(33,336)	(32,589)	(2,416)	(35,005)
Others		870				200	(665)	405	(2,363)	(1,958)
Balance at 31 December 2020	121,071	34,263	55,850	92,280	117,000	3,500	322,361	746,325	141,377	887,702

for the year ended 31 December 2021

(Amounts in million)

								Total equity		
				Statutory	Discretionary			attributable to shareholders	Non-	
	Share	Capital	Share	surplus	surplus	Other	Retained	of the	controlling	Total
	capital RMB	reserve RMB	premium RMB	reserve RMB	reserve RMB	reserves	earnings RMB	Company RMB	interests RMB	equity RMB
Balance at 1 January 2021	121,071	34,263	55,850	92,280	117,000	3,500	322,361	746,325	141,377	887,702
Profit for the year	-	-	-	-	-	-	71,975	71,975	13,876	85,851
Other comprehensive income (Note 15)	-	-	-	-	-	17,574	-	17,574	(67)	17,507
Total comprehensive income for the year	-	-	-	-	-	17,574	71,975	89,549	13,809	103,358
Amounts transferred to initial carrying amount of										
hedged items	-	-	-	-	-	(19,302)	-	(19,302)	(648)	(19,950)
Transactions with owners, recorded directly in equity:										
Contributions by and distributions to owners:										
Final dividend for 2020 (Note 14)	-	-	-	-	-	-	(15,739)	(15,739)	-	(15,739)
Interim dividend for 2021 (Note 14)	-	-	-	-	-	-	(19,371)	(19,371)	-	(19,371)
Appropriation (Note (a))	-	-	-	3,944	-	-	(3,944)	-	-	-
Distributions to non-controlling interests	-	-	-	-	-	-	-	-	(8,982)	(8,982)
Contributions to subsidiaries from										
non-controlling interests	-	-	-	-	-	-	-	-	1,973	1,973
Distribution to sellers in the business										
combination of entities under common										
control (Note 38)	-	(6,124)	-	-	-	-	-	(6,124)	-	(6,124)
Total contributions by and distributions to owners	-	(6,124)	-	3,944	-	-	(39,054)	(41,234)	(7,009)	(48,243)
Transaction with non-controlling interests		(1,396)				-	-	(1,396)	(6,796)	(8,192)
Total transactions with owners	-	(7,520)	-	3,944	-	-	(39,054)	(42,630)	(13,805)	(56,435)
Others		319	-	-		723	(802)	240	159	399
Balance at 31 December 2021	121,071	27,062	55,850	96,224	117,000	2,495	354,480	774,182	140,892	915,074

Notes:

(a) According to the PRC Company Law and the Articles of Association of the Company, the Company is required to transfer 10% of its net profit determined in accordance with the accounting policies complying with Accounting Standards for Business Enterprises ("CASs"), adopted by the Group to statutory surplus reserve. In the event that the reserve balance reaches 50% of the registered capital, no transfer is required. The transfer to this reserve must be made before distribution of a dividend to shareholders. Statutory surplus reserve can be used to make good previous years' losses, if any, and may be converted into share capital by issuing of new shares to shareholders in proportion to their existing shareholdings or by increasing the par value of the shares currently held by them, provided that the balance after such issue is not less than 25% of the registered capital.

During the year ended 31 December 2021, the Company transferred RMB3,944 million (2020: RMB1,857 million) to the statutory surplus reserve, being 10% of the current year's net profit determined in accordance with the accounting policies complying with CASs.

- (b) The usage of the discretionary surplus reserve is similar to that of statutory surplus reserve.
- (c) As at 31 December 2021, the amount of retained earnings available for distribution was RMB116,440 million (2020: RMB115,849 million), being the amount determined in accordance with CASs. According to the Articles of Association of the Company, the amount of retained earnings available for distribution to shareholders of the Company is lower of the amount determined in accordance with the accounting policies complying with CASs and the amount determined in accordance with the accounting policies complying with International Financial Reporting Standards ("IFRS").
- (d) The capital reserve represents (i) the difference between the total amount of the par value of shares issued and the amount of the net assets transferred from Sinopec Group Company in connection with the Reorganisation (Note 1); and (ii) the difference between the considerations paid over or received the amount of the net assets of entities and related operations acquired from or sold to Sinopec Group Company and non-controlling interests.
- (e) The application of the share premium account is governed by Sections 167 and 168 of the PRC Company Law.

The notes on pages 165 to 215 form part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended 31 December 2021

(Amounts in million)

	Note	Year ended 31 D	ecember
		2021	2020
		RMB	RMB
Net cash generated from operating activities	(a)	225,174	168,520
Investing activities			
Capital expenditure		(127,965)	(118,321)
Exploratory wells expenditure		(16,956)	(13,315)
Purchase of investments		(4,935)	(6,040)
Payment for financial assets at fair value through profit or loss		(8,150)	(6,700)
Proceeds from settlement of financial assets at fair value through profit or loss		8,248	10,000
Payment for acquisition of subsidiary, net of cash acquired		(1,106)	(340)
Proceeds from disposal of investments		6,769	51,520
Proceeds from disposal of property, plant, equipment and other non-current assets		1,478	2,656
Increase in time deposits with maturities over three months		(50,844)	(84,689)
Decrease in time deposits with maturities over three months		34,298	54,950
Interest received		3,372	2,305
Investment and dividend income received		10,134	11,510
Proceeds from/(payments of) other investing activities		459	(6,186)
Net cash used in investing activities		(145,198)	(102,650)
Financing activities			
Proceeds from bank and other loans		356,459	558,680
Repayments of bank and other loans		(338,232)	(540,015)
Contributions to subsidiaries from non-controlling interests		1,001	4,219
Dividends paid by the Company		(35,110)	(31,479)
Distributions by subsidiaries to non-controlling interests		(8,068)	(4,821)
Interest paid		(5,849)	(7,512)
Payments made to acquire non-controlling interests		(8,198)	(1,121)
Repayments of lease liabilities		(19,412)	(15,327)
Proceeds from other financing activities		133	700
Repayments of other financing activities		(666)	(834)
Net cash used in financing activities		(57,942)	(37,510)
Net increase in cash and cash equivalents	· · · · · · · · · · · · · · · · · · ·	22,034	28,360
Cash and cash equivalents at 1 January		87,559	60,438
Effect of foreign currency exchange rate changes		(1,003)	(1,239)
Cash and cash equivalents at 31 December		108,590	87,559

for the year ended 31 December 2021 (Amounts in million)

(a) Reconciliation from profit before taxation to net cash generated from operating activities

	Year ended 31 Dec	ember
	2021	202
	RMB	RM
erating activities		
Profit before taxation	109,169	48,61
Adjustments for:		
Depreciation, depletion and amortisation	115,680	107,46
Dry hole costs written off	7,702	5,92
Share of profits from associates and joint ventures	(23,253)	(6,71
Investment income	(298)	(37,74
Interest income	(5,732)	(4,80
Interest expense	15,018	15,19
(Gain)/loss on foreign currency exchange rate changes and derivative financial instruments	(3,723)	2,00
Loss/(gain) on disposal of property, plant, equipment and other non-current assets, net	3,062	(39
Impairment losses on assets	13,165	26,08
Impairment losses on trade and other receivables	2,311	2,06
	233,101	157,70
Net changes from:		
Accounts receivable and other current assets	(8,177)	(17,6)
Inventories	(58,372)	22,40
Accounts payable and other current liabilities	82,408	15,16
	248,960	177,66
Income tax paid	(23,786)	(9,14
cash generated from operating activities	225,174	168,52

The notes on pages 165 to 215 form part of these consolidated financial statements.

1 PRINCIPAL ACTIVITIES, ORGANISATION AND BASIS OF PREPARATION

Principal activities

China Petroleum & Chemical Corporation (the "Company") is an energy and chemical company incorporated in the People's Republic of China (the "PRC") that, through its subsidiaries (hereinafter collectively referred to as the "Group"), engages in oil and gas and chemical operations. Oil and gas operations consist of exploring for, developing and producing crude oil and natural gas; transporting crude oil and natural gas by pipelines; refining crude oil into finished petroleum products; and marketing crude oil, natural gas and refined petroleum products. Chemical operations include the manufacture and marketing of a wide range of chemicals for industrial uses.

Organisation

The Company was established in the PRC on 25 February 2000 as a joint stock limited company as part of the reorganisation (the "Reorganisation") of China Petrochemical Corporation ("Sinopec Group Company"), the ultimate holding company of the Group and a ministry-level enterprise under the direct supervision of the State Council of the PRC. Prior to the incorporation of the Company, the oil and gas and chemical operations of the Group were carried on by oil administration bureaux, petrochemical and refining production enterprises and sales and marketing companies of Sinopec Group Company.

As part of the Reorganisation, certain of Sinopec Group Company's core oil and gas and chemical operations and businesses together with the related assets and liabilities were transferred to the Company. On 25 February 2000, in consideration for Sinopec Group Company transferring such oil and gas and chemical operations and businesses and the related assets and liabilities to the Company, the Company issued 68.8 billion domestic state-owned ordinary shares with a par value of RMB1.00 each to Sinopec Group Company. The shares issued to Sinopec Group Company on 25 February 2000 represented the entire registered and issued share capital of the Company on that date. The oil and gas and chemical operations and businesses transferred to the Company were related to (i) the exploration, development and production of crude oil and natural gas, (ii) the refining, transportation, storage and marketing of crude oil and petroleum products, and (iii) the production and sales of chemicals.

Basis of preparation

The accompanying consolidated financial statements have been prepared in accordance with all applicable IFRS as issued by the International Accounting Standards Board ("IASB"). IFRS includes International Accounting Standards ("IAS") and related interpretations ("IFRIC"). These consolidated financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited. A summary of the significant accounting policies adopted by the Group are set out in Note 2.

The accounting policies adopted are consistent with those of the previous financial year, except for the adoption of new and amended standards as set out below.

(a) New and amended standards and interpretations adopted by the Group

The IASB has issued the following amendments to IFRSs that are first effective for the current accounting period of the Group:

- · Amendment to IFRS 16, COVID-19-related rent concessions
- Amendment to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16, Interest rate benchmark reform phase 2

None of these developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

(b) New and amended standards and interpretations not yet adopted by the Group

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2021 reporting periods and have not been early adopted by the Group. These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the period. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Key assumptions and estimation made by management in the application of IFRS that have significant effect on the consolidated financial statements and the major sources of estimation uncertainty are disclosed in Note 44.

2 SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of consolidation

The consolidated financial statements comprise the Company and its subsidiaries, and interest in associates and joint ventures.

(i) Subsidiaries and non-controlling interests

Subsidiaries are those entities controlled by the Group. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

The financial statements of subsidiaries are included in the consolidated financial statements from the date that control effectively commences until the date that control effectively ceases.

Non-controlling interests at the date of statement of financial position, being the portion of the net assets of subsidiaries attributable to equity interests that are not owned by the Company, whether directly or indirectly through subsidiaries, are presented in the consolidated statement of financial position and consolidated statement of changes in equity within equity, separately from equity attributable to the shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated income statement and the consolidated statement of comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the shareholders of the Company.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

If a business combination involving entities not under common control is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognised in the consolidated income statement.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (Note 2(j)) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (Note 2(a)(ii)).

In the Company's statement of financial position, investments in subsidiaries are stated at cost less impairment losses (Note 2(n)).

The particulars of the Group's principal subsidiaries are set out in Note 42.

(ii) Associates and joint ventures

An associate is an entity, not being a subsidiary, in which the Group exercises significant influence over its management. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations each investor has rather than the legal structure of the joint arrangement. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Investments in associates and joint ventures are accounted for in the consolidated and separate financial statements using the equity method from the date that significant influence or joint control commences until the date that significant influence or joint control ceases. Under the equity method, the investment is initially recorded at cost and adjusted thereafter for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (Notes 2(i) and (n)).

The Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated income statement, whereas the Group's share of the post-acquisition, post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of comprehensive income.

When the Group's share of losses exceeds its interest in the associate or the joint venture, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method, together with any other long-term interests that in substance form part of the Group's net investment in the associate or the joint venture, after applying the expected credit losses ("ECLs") model to such other long-term interests where applicable.

When the Group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see Note 2(j)) or, when appropriate, the cost on initial recognition of an investment in an associate.

(a) Basis of consolidation (Continued)

(iii)Transactions eliminated on consolidation

Inter-company balances and transactions and any unrealised gains arising from inter-company transactions are eliminated on consolidation. Unrealised gains arising from transactions with associates and joint ventures are eliminated to the extent of the Group's interest in the entity. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

(iv) Merger accounting for common control combination

The consolidated financial statements incorporate the financial statements of the combining entities or businesses in which the common control combination occurs as if they had been combined from the date when the combining entities or businesses first came under the control of the controlling party. The net assets of the combining entities or businesses are combined using the existing book values from the controlling parties' perspective. No amount is recognised as consideration for goodwill or excess of acquirers' interest in the net fair value of acquiree's identifiable assets, liabilities and contingent liabilities over cost at the time of common control combination, to the extent of the continuation of the controlling party's interest.

The consolidated income statement includes the results of each of the combining entities or businesses from the earliest date presented or since the date when the combining entities or businesses first came under the common control, where there is a shorter period, regardless of the date of the common control combination. The comparative amounts in the consolidated financial statements are presented as if the entities or businesses had been combined at the beginning of the earliest period presented or when they first came under common control, whichever is shorter.

A uniform set of accounting policies is adopted by those entities. All intra-Group transactions, balances and unrealised gains on transactions between combining entities or businesses are eliminated on consolidation. Transaction costs, including professional fees, registration fees, costs of furnishing information to shareholders, costs or losses incurred in combining operations of the previously separate businesses, etc., incurred in relation to the common control combination that is to be accounted for by using merger accounting is recognised as an expense in the period in which it is incurred.

(b) Translation of foreign currencies

The presentation currency of the Group is Renminbi. Foreign currency transactions during the year are translated into Renminbi at the applicable rates of exchange quoted by the People's Bank of China ("PBOC") prevailing on the transaction dates. Foreign currency monetary assets and liabilities are translated into Renminbi at the PBOC's rates at the date of the statement of financial position.

Exchange differences, other than those capitalised as construction in progress, are recognised as income or expense in the "finance costs" section of the consolidated income statement.

The results of foreign operations are translated into Renminbi at the applicable rates quoted by the PBOC prevailing on the transaction dates. The statement of financial position items, including goodwill arising on consolidation of foreign operations are translated into Renminbi at the closing foreign exchange rates at the date of the statement of financial position. The income and expenses of foreign operation are translated into Renminbi at the spot exchange rates or an exchange rate that approximates the spot exchange rates on the transaction dates. The resulting exchange differences are recognised in other comprehensive income and accumulated in equity in the other reserves.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to the consolidated income statement when the profit or loss on disposal is recognised.

(c) Cash and cash equivalents

Cash equivalents consist of time deposits with financial institutions with an initial term of less than three months when purchased. Cash equivalents are stated at cost, which approximates fair value.

(d) Trade, bills and other receivables

Trade, bills and other receivables are recognised initially at their transaction price, unless they contain significant financing components when they are recognised at fair value. They are subsequently measured at amortised cost using the effective interest method, less loss allowances for ECLs (Note 2(j)). Trade, bills and other receivables are derecognised if the Group's contractual rights to the cash flows from these financial assets expire or if the Group transfers these financial assets to another party without retaining control or substantially all risks and rewards of the assets.

(e) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost mainly includes the cost of purchase computed using the weighted average method and, in the case of work in progress and finished goods, direct labour and an appropriate proportion of production overheads. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

(f) Property, plant and equipment

An item of property, plant and equipment is initially recorded at cost, less accumulated depreciation and impairment losses (Note 2(n)). The cost of an asset comprises its purchase price, any directly attributable costs of bringing the asset to working condition and location for its intended use. The Group recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred, when it is probable that the future economic benefits embodied with the item will flow to the Group and the cost of the item can be measured reliably. All other expenditure is recognised as an expense in the consolidated income statement in the year in which it is incurred.

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment, other than oil and gas properties, are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised as income or expense in the consolidated income statement on the date of retirement or disposal.

Depreciation is provided to write off the cost amount of items of property, plant and equipment, other than oil and gas properties, over its estimated useful life on a straight-line basis, after taking into account its estimated residual value, as follows:

	Estimated usage	Estimated
	period	residuals rate
Buildings	12 to 50 years	3%
Equipment, machinery and others	4 to 30 years	3%

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reassessed annually.

(g) Oil and gas properties

The Group uses the successful efforts method of accounting for its oil and gas producing activities. Under this method, costs of development wells, the related supporting equipment and proved mineral interests in properties are capitalised. The cost of exploratory wells is initially capitalised as construction in progress pending determination of whether the well has found proved reserves. The impairment of exploratory well costs occurs upon the determination that the well has not found proved reserves. The exploratory well costs are usually not carried as an asset for more than one year following completion of drilling, unless (i) the well has found a sufficient quantity of reserves to justify its completion as a producing well if the required capital expenditure is made; (ii) drilling of the additional exploratory wells is under way or firmly planned for the near future; or (iii) other activities are being undertaken to sufficiently progress the assessing of the reserves and the economic and operating viability of the project. All other exploration costs, including geological and geophysical costs, other dry hole costs and annual lease rentals to explore for or use oil and natural gas, are expensed as incurred. Capitalised costs of proved oil and gas properties are amortised on a unit-of-production method based on volumes produced and reserves.

Management estimates future dismantlement costs for oil and gas properties with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with the industry practices and the future cash flows are adjusted to reflect such risks specific to the liability, as appropriate. These estimated future dismantlement costs are discounted at pre-tax risk-free rate and are capitalised as oil and gas properties, which are subsequently amortised as part of the costs of the oil and gas properties.

(h) Construction in progress

Construction in progress represents buildings, oil and gas properties, various plant and equipment under construction and pending installation, and is stated at cost less impairment losses (Note 2(n)). Cost comprises direct costs of construction as well as interest charges, and foreign exchange differences on related borrowed funds to the extent that they are regarded as an adjustment to interest charges, during the periods of construction.

Construction in progress is transferred to property, plant and equipment when the asset is substantially ready for its intended use.

No depreciation is provided in respect of construction in progress.

(i) Goodwill

Goodwill represents amounts arising on acquisition of subsidiaries, associates or joint ventures. Goodwill represents the difference between the cost of acquisition and the fair value of the net identifiable assets acquired.

Prior to 1 January 2008, the acquisition of the non-controlling interests of a consolidated subsidiary was accounted for using the acquisition method whereby the difference between the cost of acquisition and the fair value of the net identifiable assets acquired (on a proportionate share) was recognised as goodwill. From 1 January 2008, any difference between the amount by which the non-controlling interest is adjusted (such as through an acquisition of the non-controlling interests) and the cash or other considerations paid is recognised in equity.

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash-generating units, that is expected to benefit the synergies of the combination and is tested annually for impairment (Note 2(n)). In respect of associates or joint ventures, the carrying amount of goodwill is included in the carrying amount of the interest in the associate or joint venture and the investment as a whole is tested for impairment whenever there is objective evidence of impairment (Note 2(n)).

(j) Financial assets

(i) Classification and measurement

The Group classifies financial assets into different categories depending on the business model for managing the financial assets and the contractual terms of cash flows of the financial assets: a) financial assets measured at amortised cost, b) financial assets measured at fair value through other comprehensive income ("FVOCI"), c) financial assets measured at fair value through profit or loss. A contractual cash flow characteristic which could have only a de minimis effect, or could have an effect that is more than de minimis but is not genuine, does not affect the classification of the financial asset.

Financial assets are initially recognised at fair value. For financial assets measured at fair value through profit or loss, the relevant transaction costs are recognised in profit or loss. The transaction costs for other financial assets are included in the initially recognised amount. However, trade accounts receivable and bills receivable arising from sale of goods or rendering services, without significant financing component, are initially recognised based on the transaction price expected to be entitled by the Group.

Debt instruments

Debt instruments held by the Group mainly includes cash and cash equivalents, time deposits with financial institutions, receivables. These financial assets are measured at amortised cost and FVOCI.

- Amortised cost: The business model for managing such financial assets by the Group are held for collection of contractual cash flows. The
 contractual cash flow characteristics are to give rise on specified dates to cash flows that are solely payments of principal and interest on
 the principal amount outstanding. Interest income from these financial assets is recognised using the effective interest rate method.
- FVOCI: The business model for managing such financial assets by the Group are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest on the principal amount outstanding. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment gains or losses, foreign exchange gains and losses and interest income calculated using the effective interest rate method, which are recognised in profit or loss.

Equity instruments

Equity instruments that the Group has no power to control, jointly control or exercise significant influence over, are measured at fair value through profit or loss and presented in financial assets at fair value through profit or loss.

In addition, the Group designates some equity instruments that are not held for trading as financial assets at FVOCI, are presented in financial assets at FVOCI. The relevant dividends of these financial assets are recognised in profit or loss. When derecognised, the cumulative gain or loss previously recognised in other comprehensive income is transferred to retained earnings.

(ii) Impairment

The Group recognises a loss allowance for ECLs on a financial asset that is measured at amortised cost and a debt instrument that is measured at FVOCI.

The Group measures and recognises ECLs, considering reasonable and supportable information about the relevant past events, current conditions and forecasts of future economic conditions.

The Group measures the ECLs of financial instruments on different stages at each the date of the statement of financial position. For financial instruments that have no significant increase in credit risk since the initial recognition, on first stage, the Group measures the loss allowance at an amount equal to 12-month ECLs. If there has been a significant increase in credit risk since the initial recognition of a financial instrument but credit impairment has not occurred, on second stage, the Group recognises a loss allowance at an amount equal to lifetime ECLs. If credit impairment has occurred since the initial recognition of a financial instrument, on third stage, the Group recognises a loss allowance at an amount equal to lifetime ECLs.

For financial instruments that have low credit risk at the date of the statement of financial position, the Group assumes that there is no significant increase in credit risk since the initial recognition, and measures the loss allowance at an amount equal to 12-month ECLs.

For financial instruments on the first stage and the second stage, and that have low credit risk, the Group calculates interest income according to carrying amount without deducting the impairment allowance and effective interest rate. For financial instruments on the third stage, interest income is calculated according to the carrying amount minus amortised cost after the provision of impairment allowance and effective interest rate.

For trade accounts receivable and bills receivable and financial assets at FVOCI related to revenue, the Group measures the loss allowance at an amount equal to lifetime ECLs.

The Group recognises the loss allowance accrued or written back in profit or loss.

(j) Financial assets (Continued)

(iii)Derecognition

The Group derecognises a financial asset when: a) the contractual right to receive cash flows from the financial asset expires; b) the Group transfers the financial asset and substantially all the risks and rewards of ownership of the financial asset; c) the financial asset has been transferred and the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, but the Group has not retained control.

On derecognition of equity instruments at FVOCI, the amount accumulated in the fair value reserve is transferred to retained earnings. It is not recycled through profit or loss. While on derecognition of other financial assets, this difference is recognised in profit or loss.

(iv) Financial guarantees issued

Financial guarantees are contracts that require the issuer (i.e. the guarantor) to make specified payments to reimburse the beneficiary of the guarantee (the "holder") for a loss the holder incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument.

Financial guarantees issued are initially recognised at fair value, which is determined by reference to fees charged in an arm's length transaction for similar services, when such information is obtainable, or to interest rate differentials, by comparing the actual rates charged by lenders when the guarantee is made available with the estimated rates that lenders would have charged, had the guarantees not been available, where reliable estimates of such information can be made. Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognised in accordance with the Group's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognised in profit or loss.

Subsequent to initial recognition, the amount initially recognised as deferred income is amortised in profit or loss over the term of the guarantee as income from financial guarantees issued.

The Group monitors the risk that the specified debtor will default on the contract and recognises a provision when ECLs on the financial guarantees are determined to be higher than the carrying amount in respect of the guarantees (i.e. the amount initially recognised, less accumulated amortisation).

(k) Financial liabilities

The Group, at initial recognition, classifies financial liabilities as either financial liabilities subsequently measured at amortised cost or financial liabilities at fair value through profit or loss.

The Group's financial liabilities are mainly financial liabilities measured at amortised cost, including trade accounts payable and bills payable, other payables, and loans, etc. These financial liabilities are initially measured at the amount of their fair value after deducting transaction costs and use the effective interest rate method for subsequent measurement.

Where the present obligations of financial liabilities are completely or partially discharged, the Group derecognises these financial liabilities or discharged parts of obligations. The differences between the carrying amounts and the consideration received are recognised in profit or loss.

(I) Determination of fair value for financial instruments

If there is an active market for financial instruments, the quoted price in the active market is used to measure fair values of the financial instruments. If no active market exists for financial instruments, valuation techniques are used to measure fair values. In valuation, the Group adopts valuation techniques that are applicable in the current situation and have sufficient available data and other information to support it, and selects input values that are consistent with the asset or liability characteristics considered by market participants in the transaction of relevant assets or liabilities, and gives priority to relevant observable input values. Use of unobservable input values where relevant observable input values cannot be obtained or are not practicable.

(m)Derivative financial instruments and hedge accounting

Derivative financial instruments are recognised initially at fair value. At each date of the statement of financial position, the fair value is remeasured. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss, except where the derivatives qualify for hedge accounting.

Hedge accounting is a method which recognises the offsetting effects on profit or loss (or other comprehensive income) of changes in the fair values of the hedging instrument and the hedged item in the same accounting period, to represent the effect of risk management activities.

Hedged items are the items that expose the Group to risks of changes in future cash flows and that are designated as being hedged and that must be reliably measurable. The Group's hedged items include a forecast transaction that is settled with an undetermined future market price and exposes the Group to risk of variability in cash flows, etc.

A hedging instrument is a designated derivative whose changes in cash flows are expected to offset changes in cash flows of the hedged item.

The hedging relationship meets all of the following hedge effectiveness requirements:

- (i) There is an economic relationship between the hedged item and the hedging instrument, which shares a risk and that gives rise to opposite changes in fair value that tend to offset each other.
- (ii) The effect of credit risk does not dominate the value changes that result from that economic relationship.
- (iii) The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item. However, that designation does not reflect an imbalance between the weightings of the hedged item and the hedging instrument.

Cash flow hedges

Cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognised asset or liability (such as all or some future interest payments on variable-rate debt) or a highly probable forecast transaction, and could affect profit or loss. Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument.

As long as a cash flow hedge meets the qualifying criteria for hedge accounting, the separate component of equity associated with the hedged item (cash flow hedge reserve) is adjusted to the lower of the following (in absolute amounts):

- (i) The cumulative gain or loss on the hedging instrument from inception of the hedge; and
- (ii) The cumulative change in fair value (present value) of the hedged item (i.e. the present value of the cumulative change in the hedged expected future cash flows) from inception of the hedge.

The gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in other comprehensive income.

The portion of the gain or loss on the hedging instrument that is determined to be an ineffective hedge is recognised in profit or loss.

If a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability, or a hedged forecast transaction for a non-financial asset or a non-financial liability becomes a firm commitment for which fair value hedge accounting is applied, the entity removes that amount from the cash flow hedge reserve and include it directly in the initial cost or other carrying amount of the asset or the liability. This is not a reclassification adjustment and hence it does not affect other comprehensive income.

For cash flow hedges, other than those covered by the preceding policy statements, that amount is reclassified from the cash flow hedge reserve to profit or loss as a reclassification adjustment in the same period or periods during which the hedged expected future cash flows affect profit or loss.

If the amount that has been accumulated in the cash flow hedge reserve is a loss and the Group expects that all or a portion of that loss will not be recovered in one or more future periods, the Group immediately reclassifies the amount that is not expected to be recovered into profit or loss.

When the hedging relationship no longer meets the risk management objective on the basis of which it qualified for hedge accounting (i.e. the entity no longer pursues that risk management objective), or when a hedging instrument expires or is sold, terminated, exercised, or there is no longer an economic relationship between the hedged item and the hedging instrument or the effect of credit risk starts to dominate the value changes that result from that economic relationship or no longer meets the criteria for hedge accounting, the Group discontinues prospectively the hedge accounting treatments. If the hedged future cash flows are still expected to occur, that amount remains in the cash flow hedge reserve and is accounted for as cash flow hedges. If the hedged future cash flows are no longer expected to occur, that amount is immediately probable to occur may still be expected to occur, if the hedged future cash flows are still expected to occur, that amount remains in the cash flow hedges.

(m)Derivative financial instruments and hedge accounting (Continued)

Fair value hedges

A fair value hedge is a hedge of the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment, or a portion of such an asset, liability or firm commitment.

The gain or loss from remeasuring the hedging instrument is recognised in profit or loss. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the recognised hedged item not measured at fair value and is recognised in profit or loss.

Any adjustment to the carrying amount of a hedged item is amortised to profit or loss if the hedged item is a financial instrument (or a component thereof) measured at amortised cost. The amortisation is based on a recalculated effective interest rate at the date that amortisation begins.

(n) Impairment of assets

The carrying amounts of assets, including property, plant and equipment, construction in progress, right-of-use assets and other assets, are reviewed at each date of the statement of financial position to identify indicators that the assets may be impaired. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to the recoverable amount. For goodwill, the recoverable amount is estimated at each date of the statement of financial position.

The recoverable amount is the greater of the fair value less costs to disposal and the value in use. In determining the value in use, expected future cash flows generated by the asset are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

The amount of the reduction is recognised as an expense in the consolidated income statement. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit and then, to reduce the carrying amount of the other assets in the unit on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs to disposal, or value in use, if determinable.

Management assesses at each date of the statement of financial position whether there is any indication that an impairment loss recognised for an asset, except in the case of goodwill, in prior years may no longer exist. An impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount. A subsequent increase in the recoverable amount of an asset, when the circumstances and events that led to the write-down or write-off cease to exist, is recognised as an income. The reversal is reduced by the amount that would have been recognised as depreciation had the write-down or write-off not occurred. An impairment loss in respect of goodwill is not reversed.

(o) Trade, bills and other payables

Trade, bills and other payables generally are financial liabilities and are initially recognised at fair value and thereafter stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at invoice amounts.

(p) Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interestbearing borrowings are stated at amortised cost with any difference between cost and redemption value being recognised in the consolidated income statement over the period of borrowings using the effective interest method.

(q) Provisions and contingent liability

A provision is recognised for liability of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, when it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made.

When it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

Provisions for future dismantlement costs are initially recognised based on the present value of the future costs expected to be incurred in respect of the Group's expected dismantlement and abandonment costs at the end of related oil and gas exploration and development activities. Any subsequent change in the present value of the estimated costs, other than the change due to passage of time which is regarded as interest cost, is reflected as an adjustment to the provision and oil and gas properties.

(r) Revenue recognition

Revenue arises in the course of the Group's ordinary activities, and increases in economic benefits in the form of inflows that result in an increase in equity, other than those relating to contributions from equity participants.

The Group sells crude oil, natural gas, petroleum and chemical products, etc. Revenue is recognised according to the expected consideration amount, when a customer obtains control over the relevant goods or services. To determine whether a customer obtains control of a promised asset, the Group shall consider indicators of the transfer of control, which include, but are not limited to, the Group has a present right to payment for the asset; the Group has transferred physical possession of the asset to the customer; the customer has the significant risks and rewards of ownership of the asset; the customer has accepted the asset.

Sales of goods

Sales are recognised when control of the goods have transferred. Obtaining control of relevant goods means that a customer can direct the use of the goods and obtain almost all the economic benefits from it. Advance from customers but goods not yet delivered is recorded as contract liabilities and is recognised as revenues when a customer obtains control over the relevant goods.

(s) Government grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred income and are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

(t) Borrowing costs

Borrowing costs are expensed in the consolidated income statement in the period in which they are incurred, except to the extent that they are capitalised as being attributable to the construction of an asset which necessarily takes a period of time to get ready for its intended use.

(u) Repairs and maintenance expenditure

Repairs and maintenance expenditure is expensed as incurred.

(v) Environmental expenditures

Environmental expenditures that relate to current ongoing operations or to conditions caused by past operations are expensed as incurred.

Liabilities related to future remediation costs are recorded when environmental assessments and/or cleanups are probable and the costs can be reliably estimated. As facts concerning environmental contingencies become known to the Group, the Group reassesses its position both with respect to accrued liabilities and other potential exposures.

(w) Research and development expense

Research and development expenditures that cannot be capitalised are expensed in the period in which they are incurred. Research and development expense amounted to RMB11,481 million for the year ended 31 December 2021 (2020: RMB10,087 million).

(x) Leases

A lease is a contract that a lessor transfers the right to use an identified asset for a period of time to a lessee in exchange for consideration.

(i) As lessee

The Group recognises a right-of-use asset at the date at which the leased asset is available for use by the Group, and recognises a lease liability measured at the present value of the remaining lease payments. The lease payments include fixed payments, the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and payments of penalties for terminating the lease if the lease term reflects the Group exercising that option, etc. Variable payments that are based on a percentage of sales are not included in the lease payments, and should be recognised in profit or loss when incurred. Lease liabilities to be paid within one year (including one year) from the date of the statement of financial position is presented in current liabilities.

Right-of-use assets of the Group mainly comprise land. Right-of-use assets are measured at cost which comprises the amount of the initial measurement of the lease liability, any lease payments made at or before the commencement date, any initial direct costs incurred by the lessee, less any lease incentives received. The Group depreciates the right-of-use assets over the shorter of the asset's useful life and the lease term on a straight-line basis. When the recoverable amount of a right-of-use asset is less than its carrying amount, the carrying amount is reduced to the recoverable amount.

Payments associated with short-term leases with lease terms within 12 months and all leases of low-value assets are recognised on a straight-line basis over the lease term as an expense in profit or loss or as cost of relevant assets, instead of recognising right-of-use assets and lease liabilities.

A lessee shall account for a lease modification as a separate lease if both: (1) the modification increases the scope of the lease by adding the right to use one or more underlying assets; and (2) the consideration for the lease increases by an amount commensurate with the standalone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the articular contract.

For a lease modification that is not accounted for as a separate lease, except for the practical expedient which applies only to rent concessions occurring as a direct consequence of the COVID-19 pandemic, the Group determine the lease term of the modified lease at the effective date of the modification, and remeasure the lease liability by discounting the revised lease payments using a revised discount rate. The Group decrease the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease for lease modifications that decrease the scope or shorten the term of the lease, and shall recognise in profit or loss any gain or loss relating to the partial or full termination of the lease. The Group make a corresponding adjustment to the right-of-use asset for all other lease modifications.

(ii) As lessor

A lease that transfers substantially all the risks and rewards incidental to ownership of an asset is a finance lease. An operating lease is a lease other than a finance lease.

When the Group leases self-owned plants and buildings, equipment and machinery, lease income from an operating lease is recognised on a straight-line basis over the period of the lease. The Group recognises variable lease income which is based on a certain percentage of sales as rental income when occurred.

(y) Employee benefits

The contributions payable under the Group's retirement plans are recognised as an expense in the consolidated income statement as incurred and according to the contribution determined by the plans. Further information is set out in Note 40.

Termination benefits, such as employee reduction expenses, are recognised when, and only when, the Group demonstrably commits itself to terminate employment or to provide benefits as a result of voluntary redundancy by having a detailed formal plan which is without realistic possibility of withdrawal.

(z) Income tax

Income tax comprises current and deferred tax. Current tax is calculated on taxable income by applying the applicable tax rates. Deferred tax is provided using the statement of financial position liability method on all temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes only to the extent that it is probable that future taxable income will be available against which the assets can be utilised. Deferred tax is calculated on the basis of the enacted tax rates or substantially enacted tax rates that are expected to apply in the period when the asset is realised or the liability is settled. The effect on deferred tax of any changes in tax rates is charged or credited to the consolidated income statement, except for the effect of a change in tax rate on the carrying amount of deferred tax assets and liabilities which were previously charged or credited to other comprehensive income or directly in equity.

The tax value of losses expected to be available for utilisation against future taxable income is set off against the deferred tax liability within the same legal tax unit and jurisdiction to the extent appropriate, and is not available for set off against the taxable profit of another legal tax unit. The carrying amount of a deferred tax asset is reviewed at each date of statement of financial position and is reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(aa) Dividends

Dividends and distributions of profits proposed in the profit appropriation plan which will be authorised and declared after the date of statement of financial position, are not recognised as a liability at the date of statement of financial position and are separately disclosed in the notes to the financial statements. Dividends are recognised as a liability in the period in which they are declared.

(bb) Segment reporting

Operating segments, and the amounts of each segment item reported in the consolidated financial statements, are identified from the financial information provided regularly to the Group's chief operating decision maker for the purposes of allocating resources to, and assessing the performance of the Group's various lines of business.

3 REVENUE FROM PRIMARY BUSINESS

Revenue from primary business mainly represents revenue from the sales of refined petroleum products, chemical products, crude oil and natural gas, which are recognised at a point in time.

	2021	2020
	RMB million	RMB million
Gasoline	726,057	557,605
Diesel	542,260	422,566
Crude oil	429,038	351,707
Basic chemical feedstock	242,532	155,397
Synthetic resin	149,208	122,368
Kerosene	112,519	72,385
Natural gas	68,443	48,099
Synthetic fiber monomers and polymers	45,464	42,388
Others (i)	363,979	276,139
	2,679,500	2,048,654

Note:

(i) Others are primarily liquefied petroleum gas and other refinery and chemical byproducts and joint products.

4 OTHER OPERATING REVENUES

	2021	2020
	RMB million	RMB million
Sale of materials and others	59,990	54,986
Rental income	1,394	1,084
	61,384	56,070

5 SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

The following items are included in selling, general and administrative expenses:

	2021	2020
	RMB million	RMB million
Variable lease payments, low-value and short-term lease payment	2,393	2,683
Auditor's remuneration:		
– Audit services	59	73
– Others	8	8

6 PERSONNEL EXPENSES

	2021	2020
	RMB million	RMB million
Salaries, wages and other benefits	91,560	78,542
Contributions to retirement schemes (Note 40)	11,932	8,983
	103,492	87,525

7 TAXES OTHER THAN INCOME TAX

	2021 RMB million	2020 RMB million
Consumption tax (i)	213,894	197,542
City construction tax (ii)	18,044	15,710
Education surcharge (ii)	13,409	11,678
Resources tax	6,432	4,572
Others	7,253	5,516
	259,032	235,018

Notes:

(i) Consumption tax was levied based on sales quantities of taxable products, tax rate of products is presented as below:

Products	RMB/Ton
Gasoline	2,109.76
Diesel	1,411.20
Naphtha	2,105.20
Solvent oil	1,948.64
Lubricant oil	1,711.52
Fuel oil	1,218.00
Jet fuel oil	1,495.20

(ii) City construction tax and education surcharge is levied on an entity based on its paid amount of value-added tax and consumption tax.

8 OTHER OPERATING INCOME/(EXPENSES), NET

	2021 RMB million	2020 RMB million
Government grants (i)	6,706	8,776
Ineffective portion of change in fair value of cash flow hedges	694	3,052
Net realised and unrealised loss on derivative financial instruments not qualified as hedging	(14,873)	(1,252)
Impairment losses on long-lived assets (ii)	(10,035)	(14,629)
(Loss)/gain on disposal of property, plant, equipment and other non-current assets, net	(3,062)	398
Fines, penalties and compensations	(220)	(43)
Donations	(165)	(301)
Others	(761)	(1,781)
	(21,716)	(5,780)

Notes:

- (i) Government grants for the years ended 31 December 2021 and 2020 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.
- (ii) Impairment losses on long-lived assets for the year ended 31 December 2021 primarily represent impairment losses recognised in the exploration and production ("E&P") segment of RMB2,467 million (2020: RMB8,495 million), the chemicals segment of RMB5,332 million (2020: RMB3,675 million), the refining segment of RMB860 million (2020: RMB1,923 million), and the marketing and distribution segment of RMB1,211 million (2020: RMB536 million). The impairment losses in the E&P segment were mainly the impairment losses of properties, plant and equipment relating to oil and gas producing activities. The primary factors resulting in the E&P segment impairment loss were low oil price outlook in the long term and downward revision of oil and gas reserve in certain fields. E&P segment determines recoverable amounts of properties, plant and equipment relating to oil and gas producing activities, which include significant judgments and assumptions. The recoverable amounts were determined based on the present values of the expected future cash flows of the assets using a pre-tax discount rate 10.47% (2020: 10.47%). Further future downward revisions to the Group's oil or nature gas price outlook would lead to further impairments which, in aggregate, are likely to be material. It is estimated that a general decrease of 5% in oil price, with all other variables held constant, would result in additional impairment loss on the Group's properties, plant and equipment relating to oil and nature gas producing activities by approximately RMB3,628 million (2020: RMB4,548 million). It is estimated that a general increase of 5% in operating cost, with all other variables held constant, would result in additional impairment loss on the Group's properties, plant and equipment relating to oil and gas producing activities by approximately RMB2,400 million (2020: RMB2,836 million). It is estimated that a general increase of 5% in discount rate, with all other variables held constant, would result in additional impairment loss on the Group's properties, plant and equipment relating to oil and gas producing activities by approximately RMB180 million (2020: RMB287 million). Impairment losses recognised in the chemical segment and refining segment relate to certain refinery and chemical production facilities and are not individually significant. The impairment losses were mainly due to the suspension of operations of certain production facilities, and evidence that indicate the economic performance of certain production facilities continuously was lower than the expectation, thus the carrying amounts of these facilities were written down to their recoverable amounts, which were determined based on the present values of forecasted future cash flows of the cash generating units using pre-tax discount rates ranging from 10.50% to 13.9% (2020: 9.87% to 11.60%).

9 INTEREST EXPENSE

	2021 RMB million	2020 RMB million
Interest expense incurred	5,679	6,517
Less: Interest expense capitalised*	(996)	(2,011)
	4,683	4,506
Interest expense on lease liabilities	9,200	9,349
Accretion expenses (Note 35)	1,135	1,343
Interest expense	15,018	15,198
* Interest rates per annum at which borrowing costs were capitalised for construction in progress	1.84% to 4.35%	2.60% to 4.66%

10 INVESTMENT INCOME

	2021	2020
	RMB million	RMB million
Investment income from disposal of business and long-term equity investments (i)	82	37,525
Dividend income from holding of other equity instrument investments	34	156
Others	182	63
	298	37,744

Note:

(i) The Company and Sinomart KTS Development Limited, Sinopec Natural Gas Limited Company and Sinopec Marketing Company Limited ("Marketing Company"), the subsidiaries of the Company entered into the Agreement on Cash Payment to Purchase Equity in Sinopec Yu Ji Pipeline Company Limited, the Agreement on Additional Issuance of Equity and Cash Payment to Purchase Assets, the Agreement on Cash Payment to Purchase Assets and the Agreement on Additional Issuance of Equity and Cash Payment to Purchase Assets, the Agreement on Cash Payment to Purchase Assets and the Agreement on Additional Issuance of Equity to Purchase Assets with China Oil & Gas Pipeline Network Corporation ("PipeChina"), on 21 July 2020 and on 23 July 2020 respectively, pursuant to which the Company and its subsidiaries proposed to dispose target business, including equity interests in the relevant companies, oil and gas pipeline and ancillary facilities, to PipeChina. The above transactions were considered and approved by the 15th Session of 7th Directorate Meeting on 23 July 2020 and the second Extraordinary General Meeting on 28 September 2020. The transaction consideration was mainly additional issuance of equity and/or cash payment by PipeChina and the gain on above transactions was RMB37,731 million in 2020.

11 INCOME TAX EXPENSE

Income tax expense in the consolidated income statement represents:

	2021 RMB million	2020 RMB million
Current tax		
– Provision for the year	17,522	14,334
 Adjustment of prior years 	(462)	(117)
Deferred taxation (Note 29)	6,258	(7,873)
	23,318	6,344

Reconciliation between actual income tax expense and the expected income tax expense at applicable statutory tax rates is as follows:

	2021 RMB million	2020 RMB million
Profit before taxation	109,169	48,615
Expected PRC income tax expense at a statutory tax rate of 25%	27,292	12,154
Tax effect of non-deductible expenses	5,948	3,281
Tax effect of non-taxable income	(8,096)	(8,330)
Tax effect of preferential tax rate (i)	(2,766)	(1,011)
Effect of income taxes at foreign operations	(222)	(730)
Tax effect of utilisation of previously unrecognised tax losses and temporary differences	(701)	(65)
Tax effect of tax losses not recognised and temporary differences	1,391	1,087
Write-down of deferred tax assets	934	75
Adjustment of prior years	(462)	(117)
Actual income tax expense	23,318	6,344

Notes:

(i) The provision for PRC current income tax is based on a statutory income tax rate of 25% of the assessable income of the Group as determined in accordance with the relevant income tax rules and regulations of the PRC, except for certain entities of the Group in western regions in the PRC are taxed at preferential income tax rate of 15% through the year 2021. According to Announcement [2020] No. 23 of the MOF "Announcement of the MOF, the State Taxation Administration and the National Development and Reform Commission on continuation of the income tax policy of western development enterprises", the preferential tax rate of 15% extends from 1 January 2021 to 31 December 2030.

12 DIRECTORS' AND SUPERVISORS' EMOLUMENTS

(a) Directors' and supervisors' emoluments

The emoluments of every director and supervisor is set out below:

	Emoluments pai director's other the management or its su	Emoluments paid or receivable in respect of a person's services as a director, whether of the Company or its subsidiary undertaking			
	Salaries,		Retirement		
	allowances and		scheme	Directors'/	
	benefits in kind	Bonuses	contributions	Supervisors' fee	Total
Name	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Directors	001		100		
Ma Yongsheng	291	322	102	-	715
Zhao Dong (i)		-	-	-	-
Yu Baocai	24	409	9	-	442
Ling Yiqun	-	-	-	-	
Li Yonglin (ii)	-	-	-	-	
Liu Hongbin Zhang Yuzhuo (iii)					
	-				
Independent non-executive directors Cai Hongbin				417	417
Johnny Karling Ng				417	417
Shi Dan (iv)			-	300	300
Bi Mingjian (iv)				300	300
Tang Min (v)				117	117
Supervisors				11/	
Zhang Shaofeng (vi)	_				
Jiang Zhenying		_	_	_	_
Zhang Zhiguo (vii)					
Yin Zhaolin (vii)					
Guo Hongjin (vii)	202	140	61		403
Li Defang	154	100	44		298
Lv Dapeng (viii)	216	140	61	_	417
Chen Yaohuan (viii)	371	692	102		1,165
Zou Huiping (ix)	-			_	
Sun Huanquan (x)	-	_	-	-	-
Yu Renming (x)	_	-	-	-	-
Total	1,258	1,803	379	1,551	4,991

12 DIRECTORS' AND SUPERVISORS' EMOLUMENTS (Continued)

(a) Directors' and supervisors' emoluments (Continued)

The emoluments of every director and supervisor is set out below: (Continued)

				Emoluments paid	
				or receivable	
				in respect of a	
				person's services	
				as a director,	
	Emoluments pai	whether of the			
	director's other	Company or			
	the management		its subsidiary		
	or its su	bsidiary undertak	undertaking		
	Salaries,		Retirement		
	allowances and		scheme	Directors'/	
	benefits in kind	Bonuses	contributions	Supervisors' fee	Total
Name	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Directors					
Zhang Yuzhuo (iii)	_	_	-	_	
Ma Yongsheng	299	620	94	-	1,013
Yu Baocai	_	_	-	_	
Liu Hongbin	-	-	-	-	-
Ling Yiqun	_	_	-	_	_
Zhang Shaofeng (vi)	-	_	-	-	-
Dai Houliang (xi)	_	_	-	-	-
Li Yunpeng (xii)	-	-	-	-	-
Li Yong (xiii)	-	-	-	-	-
Independent non-executive directors					
Tang Min (v)	-	-	-	350	350
Cai Hongbin	-	-	-	350	350
Johnny Karling Ng	-	-	-	350	350
Fan Gang (xiv)	-	-	-	-	-
Supervisors					
Zhao Dong (i)	-	-	-	-	-
Jiang Zhenying	366	710	83	-	1,159
Zou Huiping (ix)	272	555	59	-	886
Sun Huanquan (x)	247	160	60	-	467
Yu Renming (x)	-	-	-	-	-
Li Defang	-	-	-	-	-
Yu Xizhi (xv)	125	613	23	-	761
Zhou Hengyou (xv)	125	611	23	-	759
Yang Changjiang (xvi)	-	-	-	-	-
Zhang Baolong (xvi)			_		
Total	1.434	3.269	342	1,050	6,095

Notes :

(i) Mr. Zhao Dong ceased being chairman of the Board of Supervisors from 25 May 2021, and was elected to be non-executive director from 25 May 2021.

(ii) Mr. Li Yonglin was elected to be director from 25 May 2021.

(iii) Due to change of working arrangement, Mr. Zhang Yuzhuo has tendered his resignation as chairman, non-executive director, chairman of Strategy Committee, and Sustainable Development Committee of the Board, member of Nomination Committee of the Board from 2 August 2021.

(iv) Ms. Shi Dan was elected to be independent non-executive director from 25 May 2021; Mr. Bi Mingjian was elected to be independent non-executive director from 25 May 2021.

(v) Mr. Tang Min ceased being independent non-executive director from 25 May 2021.

(vi) Mr. Zhang Shaofeng ceased being non-executive director from 25 May 2021, and was elected to be chairman of the Board of Supervisors from 25 May 2021.

(vii) Mr. Zhang Zhiguo was elected to be supervisor from 25 May 2021; Mr. Yin Zhaolin was elected to be supervisor from 25 May 2021; Mr. Guo Hongjin was elected to be supervisor from 25 May 2021

(viii) Mr. Lv Dapeng was elected to be supervisor from 11 January 2021; Mr. Chen Yaohuan was elected to be supervisor from 11 January 2021.

(ix) Mr. Zou Huiping ceased being supervisor from 28 January 2021.

(x) Mr. Sun Huanquan ceased being supervisor from 11 January 2021; Mr. Yu Renming ceased being supervisor from 11 January 2021.

(xi) Mr. Dai Houliang ceased being chairman and non-executive director from 19 January 2020.

(xii) Mr. Li Yunpeng ceased being non-executive director from 24 March 2020.

(xiii) Mr. Li Yong ceased being non-executive director from 22 September 2020.

(xiv) Mr. Fan Gang ceased being independent non-executive director from 28 August 2020.

(xv) Mr. Yu Xizhi ceased being supervisor from 18 May 2020; Mr. Zhou Hengyou ceased being supervisor from 18 May 2020.

(xvi) Mr. Yang Changjiang ceased being supervisor from 9 September 2020; Mr. Zhang Baolong ceased being supervisor from 9 September 2020.

13 SENIOR MANAGEMENT'S EMOLUMENTS

For the year ended 31 December 2021, the five highest paid individuals in the Company included five senior management. The emolument paid to each of five senior management was above RMB1,000 thousand. The total salaries, wages and other benefits was RMB7,100 thousand, and the total amount of their retirement scheme contributions was RMB510 thousand. For the year ended 31 December 2020, the five highest paid individuals in the Company included one supervisor and four senior management.

	Number of in	dividuals
	2021	2020
Emoluments		
HKD1,000,001 to HKD1,500,000	-	3
HKD1,500,001 to HKD2,000,000	5	2

During 2021 and 2020, the Company did not incur any emoluments paid or receivable in respect of a person accepting office as a director, or any payments to any director for loss of office.

14 DIVIDENDS

Dividends payable to shareholders of the Company attributable to the year represent:

	2021	2020
	RMB million	RMB million
Dividends declared and paid during the year of RMB0.16 per share (2020: RMB0.07 per share)	19,371	8,475
Dividends declared after the date of the statement of financial position of RMB0.31 per share (2020: RMB0.13 per share)	37,532	15,739
	56,903	24,214

Pursuant to the shareholders' approval at the General Meeting on 27 August 2021, the interim dividends for the year ended 31 December 2021 of RMB0.16 (2020: RMB0.07) per share totaling RMB19,371 million (2020: RMB8,475 million) were approved. Dividends were paid on 17 September 2021.

Pursuant to a resolution passed at the director's meeting on 25 March 2022, final dividends in respect of the year ended 31 December 2021 of RMB0.31 (2020: RMB0.13) per share totaling RMB37,532 million (2020: RMB15,739 million) were proposed for shareholders' approval at the Annual General Meeting. Final cash dividend proposed after the date of the statement of financial position has not been recognised as a liability at the date of the statement of financial position.

Dividends payable to shareholders of the Company attributable to the previous financial year, approved during the year represent:

	2021	2020
	RMB million	RMB million
Final cash dividends in respect of the previous financial year, approved during the year of		
RMB0.13 per share (2020: RMB0.19 per share)	15,739	23,004

Pursuant to the shareholders' approval at the Annual General Meeting on 25 May 2021, a final dividend of RMB0.13 per share totaling RMB15,739 million according to total shares on 16 June 2021 was approved. All dividends have been paid in the year ended 31 December 2021.

Pursuant to the shareholders' approval at the Annual General Meeting on 19 May 2020, a final dividend of RMB0.19 per share totaling RMB23,004 million according to total shares on 9 June 2020 was approved. All dividends have been paid in the year ended 31 December 2020.

15 OTHER COMPREHENSIVE INCOME

		2021			2020	
	Before tax	Tax	Net of tax	Before tax	Тах	Net of tax
	amount	effect	amount	amount	effect	amount
	RMB million					
Cash flow hedges:						
Effective portion of changes in fair value of hedging						
instruments recognised during the year	15,659	(3,881)	11,778	9,207	(2,295)	6,912
Reclassification adjustments for amounts						
transferred to the consolidated income statement	8,858	(1,618)	7,240	198	(37)	161
Net movement during the year recognised						
in other comprehensive income (i)	24,517	(5,499)	19,018	9,405	(2,332)	7,073
Changes in the fair value of instruments at						
fair value through other comprehensive income	(6)	2	(4)	(6)	(4)	(10)
Transfer of loss on disposal of equity investments at						
fair value through other comprehensive income to						
retained earnings	-	-	-	(12)	-	(12)
Net movement during the year recognised						
in other comprehensive income	(6)	2	(4)	(18)	(4)	(22)
Cost of hedging reserve	(220)	-	(220)	162	-	162
Share of other comprehensive income of associates						
and joint ventures	441	-	441	(2,441)	-	(2,441)
Foreign currency translation differences	(1,728)	-	(1,728)	(4,457)	-	(4,457)
Other comprehensive income	23,004	(5,497)	17,507	2,651	(2,336)	315

Note:

(i) As at 31 December 2021, cash flow hedge reserve amounted to a gain of RMB7,244 million (31 December 2020: a gain of RMB8,176 million), of which a gain of RMB7,214 million was attributable to shareholders of the Company (31 December 2020: a gain of RMB7,805 million).

16 BASIC AND DILUTED EARNINGS PER SHARE

The calculation of basic earnings per share for the year ended 31 December 2021 is based on the profit attributable to ordinary shareholders of the Company of RMB71,975 million (2020: RMB33,443 million) and the weighted average number of shares of 121,071,209,646 (2020: 121,071,209,646) during the year.

There are no potential dilutive ordinary shares, and diluted earnings per share are equal to the basic earning per share.

17 PROPERTY, PLANT AND EQUIPMENT

	Plants and buildings RMB million	Oil and gas, properties RMB million	Equipment, machinery and others RMB million	Total RMB million
Cost:				
Balance at 1 January 2020	132,327	727,552	1,027,324	1,887,203
Additions	390	1,563	5,163	7,116
Transferred from construction in progress	10,965	32,214	98,427	141,606
Reclassifications	1,443	(125)	(1,318)	_
Invest into the joint ventures and associated companies	_	-	(115)	(115)
Reclassification to other long-term assets	(38)	-	(1,052)	(1,090)
Disposals	(6,396)	(806)	(131,501)	(138,703)
Exchange adjustments	(141)	(2,806)	(226)	(3,173)
Balance at 31 December 2020	138,550	757,592	996,702	1,892,844
Balance at 1 January 2021	138,550	757,592	996,702	1,892,844
Additions	509	2,192	5,177	7,878
Transferred from construction in progress	5,487	40,357	65,182	111,026
Reclassifications	646	(617)	(29)	_
Invest into the joint ventures and associated companies	(8)	-	(188)	(196)
Reclassification to other long-term assets	(665)	(22)	(1,027)	(1,714)
Disposals	(1,297)	(5,517)	(17,495)	(24,309)
Exchange adjustments	(57)	(940)	(95)	(1,092)
Balance at 31 December 2021	143,165	793,045	1,048,227	1,984,437
Accumulated depreciation and impairment losses:				
Balance at 1 January 2020	61,069	587,192	608,622	1,256,883
Depreciation for the year	4,680	32,054	48,760	85,494
Impairment losses for the year	684	4,739	6,360	11,783
Reclassifications	393	(98)	(295)	-
Invest into the joint ventures and associated companies	_	-	(54)	(54)
Reclassification to other long-term assets	(8)	-	(161)	(169)
Written back on disposals	(3,229)	(464)	(48,125)	(51,818)
Exchange adjustments	(49)	(2,703)	(138)	(2,890)
Balance at 31 December 2020	63,540	620,720	614,969	1,299,229
Balance at 1 January 2021	63,540	620,720	614,969	1,299,229
Depreciation for the year	4,586	39,670	48,568	92,824
Impairment losses for the year	742	1,904	6,774	9,420
Reclassifications	185	(410)	225	-
Invest into the joint ventures and associated companies	(5)	-	(133)	(138)
Reclassification to other long-term assets	(82)	(7)	(170)	(259)
Written back on disposals	(771)	(135)	(13,668)	(14,574)
Exchange adjustments	(29)	(904)	(57)	(990)
Balance at 31 December 2021	68,166	660,838	656,508	1,385,512
Net book value:				
Balance at 1 January 2020	71,258	140,360	418,702	630,320
Balance at 31 December 2020	75,010	136,872	381,733	593,615
Balance at 31 December 2021	74,999	132,207	391,719	598,925

The Group compares the carrying amount of individual cash-generating units which were grouped for the property, plant and equipment related to oil and gas producing activities with its value in use, using a discounted cash flow forecast prepared based on the future production profiles included in the oil and gas reserve reports, and recorded impairment losses amounting to RMB2,467 million for the year ended 31 December 2021 (2020: RMB8,435 million).

The addition to oil and gas properties of the Group for the year ended 31 December 2021 included RMB2,163 million (2020: RMB1,563 million) of estimated dismantlement costs for site restoration.

At 31 December 2021 and 31 December 2020, the Group had no individual significant property, plant and equipment which had been pledged.

At 31 December 2021 and 31 December 2020, the Group had no individual significant property, plant and equipment which were temporarily idle or pending for disposal.

At 31 December 2021 and 31 December 2020, the Group had no individual significant fully depreciated property, plant and equipment which were still in use.

18 CONSTRUCTION IN PROGRESS

	2021 RMB million	2020 RMB million
Balance at 1 January	125,525	176,119
Additions	159,729	131,099
Dry hole costs written off	(7,702)	(5,928)
Transferred to property, plant and equipment	(111,026)	(141,606)
Reclassification to other long-term assets	(10,302)	(11,464)
Impairment losses for the year	(144)	(844)
Disposals and others	(107)	(21,798)
Exchange adjustments	(34)	(53)
Balance at 31 December	155,939	125,525

As at 31 December 2021, the amount of capitalised cost of exploratory wells included in construction in progress related to the exploration and production segment was RMB12,255 million (2020: RMB11,129 million). The geological and geophysical costs paid during the year ended 31 December 2021 were RMB4,174 million (2020: RMB3,166 million).

19 RIGHT-OF-USE ASSETS

	Land	Others	Total
	RMB million	RMB million	RMB million
Cost			
Balance at 1 January 2020	248,775	34,188	282,963
Additions	14,370	9,653	24,023
Decreases	(9,790)	(3,140)	(12,930)
Balance at 31 December 2020	253,355	40,701	294,056
Balance at 1 January 2021	253,355	40,701	294,056
Additions	13,263	9,650	22,913
Decreases	(2,862)	(3,430)	(6,292)
Balance at 31 December 2021	263,756	46,921	310,677
Accumulated depreciation			
Balance at 1 January 2020	9,101	5,702	14,803
Additions	9,358	6,354	15,712
Decreases	(896)	(1,575)	(2,471)
Balance at 31 December 2020	17,563	10,481	28,044
Balance at 1 January 2021	17,563	10,481	28,044
Additions	9,966	6,863	16,829
Decreases	(407)	(2,197)	(2,604)
Balance at 31 December 2021	27,122	15,147	42,269
Net book value			
Balance at 1 January 2020	239,674	28,486	268,160
Balance at 31 December 2020	235,792	30,220	266,012
Balance at 31 December 2021	236,634	31,774	268,408

20 GOODWILL

	31 December 2021	31 December 2020
	RMB million	RMB million
Cost	16,455	16,481
Less: Accumulated impairment losses	(7,861)	(7,861)
	8,594	8,620

Impairment tests for cash-generating units containing goodwill

Goodwill is allocated to the following Group's cash-generating units:

	Principal activities	31 December 2021 RMB million	31 December 2020 RMB million
Sinopec Zhenhai Refining and Chemical Branch	Manufacturing of intermediate petrochemical		
	products and petroleum products	4,043	4,043
Shanghai SECCO Petrochemical Company Limited	Production and sale of petrochemical products	·	
("Shanghai SECCO")		2,541	2,541
Sinopec Beijing Yanshan Petrochemical Branch	Manufacturing of intermediate petrochemical		
	products and petroleum products	1,004	1,004
Other units without individually significant goodwill		1,006	1,032
		8,594	8,620

Goodwill represents the excess of the cost of purchase over the fair value of the underlying assets and liabilities. The recoverable amounts of the above cash generating units are determined based on value in use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a one-year period and pre-tax discount rates primarily ranging from 11.4% to 11.7% (2020: 11.4% to 13.4%). Cash flows beyond the one-year period are maintained constant. Based on the estimated recoverable amount, no major impairment loss was recognized for the year ended 31 December, 2021.

Key assumptions used for cash flow forecasts for these cash generating units are the gross margin and sales volume. Management determined the budgeted gross margin based on the gross margin achieved in the period immediately before the budget period and management's expectation on the future trend of the prices of crude oil and petrochemical products. The sales volume was based on the production capacity and/or the sales volume in the period immediately before the budget period.

21 INTEREST IN ASSOCIATES

The Group's investments in associates are with companies primarily engaged in the oil and gas, petrochemical, and marketing and distribution operations in the PRC.

The Group's principal associates are as follows:

Name of company	% of ownership interests	Principal activities	Measurement method	Country of incorporation	Principal place of business
PipeChina (i)	14.00	Operation of oil and natural gas pipeline and auxiliary facilities	Equity method	PRC	PRC
Sinopec Finance Company Limited ("Sinopec Finance")	49.00	Provision of non-banking financial services	Equity method	PRC	PRC
Sinopec Capital Company Limited ("Sinopec Capital")	49.00	Project and equity investment, investment management, investment consulting,self-owned equity management	Equity method	PRC	PRC
Zhongtian Synergetic Energy Company Limited ("Zhongtian Synergetic Energy")	38.75	Mining coal and manufacturing of coal-chemical products	Equity method	PRC	PRC
Caspian Investments Resources Ltd. ("CIR")	50.00	Crude oil and natural gas extraction	Equity method	British Virgin Islands	The Republic of Kazakhstan

21 INTEREST IN ASSOCIATES (Continued)

Summarised financial information and reconciliation to their carrying amounts in respect of the Group's principal associates:

	Pipe	PipeChina		Sinopec Finance		Sinopec Capital		Zhongtian Synergetic Energy		CIR	
	31	31	31	31	31	31	31	31	31	31	
	December	December	December	December	December	December	December	December	December	December	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	
Current assets	86,335	74,012	194,458	175,139	13,140	11,871	3,532	3,721	576	2,402	
Non-current assets	768,161	655,982	55,086	53,008	102	106	51,331	53,124	870	903	
Current liabilities	(136,150)	(55,562)	(217,987)	(197,872)	(28)	(18)	(8,577)	(8,315)	(822)	(699)	
Non-current liabilities	(103,243)	(104,150)	(602)	(514)	(676)	(411)	(22,216)	(28,422)	(144)	(286)	
Net assets	615,103	570,282	30,955	29,761	12,538	11,548	24,070	20,108	480	2,320	
Net assets attributable to											
owners of the Company	526,241	505,336	30,955	29,761	12,538	11,548	24,070	20,108	480	2,320	
Net assets attributable to											
non-controlling interests	88,862	64,946	-	-	-	-	-	-	-	-	
Share of net assets from											
associates	73,674	70,747	15,168	14,583	6,144	5,659	9,327	7,792	240	1,160	
Carrying Amounts	73,674	70,747	15,168	14,583	6,144	5,659	9,327	7,792	240	1,160	

Summarised statement of comprehensive income

Year ended 31 December	PipeChina (ii)		Sinopec Finance		Sinopec Capital		Zhongtian Synergetic Energy		CIR	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Revenue	101,572	22,766	5,177	4,742	2	2	16,959	11,707	1,826	1,252
Profit for the year	29,776	6,444	2,168	2,027	990	1,278	4,184	551	461	181
Other comprehensive income	2	-	26	(372)	-	-	-	-	3	(308)
Total comprehensive income	29,778	6,444	2,194	1,655	990	1,278	4,184	551	464	(127)
Dividends declared by										
associates	442	-	490	-	-	-	86	284	1,152	2,517
Share of profit from associates	3,205	709	1,062	993	485	626	1,621	214	231	91
Share of other comprehensive										
income from associates (iii)	-	-	13	(182)	-	-	-	-	2	(154)

The share of profit and other comprehensive income for the year ended 31 December 2021 in all individually immaterial associates accounted for using equity method in aggregate was RMB7,283 million (2020: RMB3,444 million) and RMB271 million (2020: loss of RMB1,101 million) respectively. As at 31 December 2021, the carrying amount of all individually immaterial associates accounted for using equity method in aggregate was RMB44,176 million (2020: RMB36,222 million).

Notes:

- (i) The Group has a member in the Board of Directors of PipeChina. According to the structure and the resolution mechanism of the Board of Directors, the Group can exercise significant influence on PipeChina.
- (ii) The summarised statement of comprehensive income for the year 2020 presents the operating results from the date when the Group can exercise significant influence on PipeChina to 31 December 2020.

(iii) Including foreign currency translation differences.

22 INTEREST IN JOINT VENTURES

The Group's principal interests in joint ventures are as follows:

	% of ownership		Measurement	Country of	Principal place
Name of entity	interests	Principal activities	method	incorporation	of business
Fujian Refining & Petrochemical	50.00	Manufacturing refining oil products	Equity method	PRC	PRC
Company Limited ("FREP")					
BASF-YPC Company Limited	40.00	Manufacturing and distribution	Equity method	PRC	PRC
("BASF·YPC")		of petrochemical products			
Taihu Limited ("Taihu")	49.00	Crude oil and natural gas extraction	Equity method	Cyprus	Russia
Yanbu Aramco Sinopec Refining	37.50	Petroleum refining and processing	Equity method	Saudi Arabia	Saudi Arabia
Company Ltd. ("YASREF")		business			
Sinopec SABIC Tianjin Petrochemical	50.00	Manufacturing and distribution of	Equity method	PRC	PRC
Company Limited ("Sinopec SABIC		petrochemical products			
Tianjin")					

Summarised statement of financial position and reconciliation to their carrying amounts in respect of the Group's principal joint ventures:

	F	REP	BAS	F-YPC	T	aihu	YA	SREF	Sinopec S	ABIC Tianjin
	31 December									
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million									
Current assets										
Cash and cash equivalents	6,562	7,448	5,375	1,838	1,258	1,280	5,441	1,408	4,820	5,259
Other current assets	9,217	7,492	6,953	4,777	2,188	1,223	12,404	7,516	3,437	2,665
Total current assets	15,779	14,940	12,328	6,615	3,446	2,503	17,845	8,924	8,257	7,924
Non-current assets	13,744	15,237	9,336	9,993	14,032	12,531	41,947	45,413	18,835	18,258
Current liabilities										
Current financial liabilities	(1,177)	(1,203)	(77)	(456)	(32)	(38)	(9,549)	(9,520)	(597)	(998)
Other current liabilities	(5,008)	(5,147)	(2,546)	(2,190)	(1,931)	(1,043)	(15,844)	(8,644)	(3,547)	(3,052)
Total current liabilities	(6,185)	(6,350)	(2,623)	(2,646)	(1,963)	(1,081)	(25,393)	(18,164)	(4,144)	(4,050)
Non-current liabilities										
Non-current financial liabilities	(6,857)	(8,761)	-	-	(85)	(85)	(30,903)	(29,650)	(7,599)	(6,773)
Other non-current liabilities	(242)	(235)	(92)	(42)	(1,439)	(2,017)	(1,723)	(2,008)	(382)	(378)
Total non-current liabilities	(7,099)	(8,996)	(92)	(42)	(1,524)	(2,102)	(32,626)	(31,658)	(7,981)	(7,151)
Net assets	16,239	14,831	18,949	13,920	13,991	11,851	1,773	4,515	14,967	14,981
Net assets attributable to owners of the company	16,239	14,831	18,949	13,920	13,523	11,439	1,773	4,515	14,967	14,981
Net assets attributable to non-controlling interests	-	-	-	-	468	412	-	-	-	-
Share of net assets from joint ventures	8,120	7,416	7,580	5,568	6,626	5,605	-	-	7,484	7,491
Carrying Amounts	8,120	7,416	7,580	5,568	6,626	5,605	-	-	7,484	7,491

Summarised statement of comprehensive income

Year ended 31 December	FR	EP	BASI	YPC	Ta	iihu	YAS	SREF	Sinopec SA	ABIC Tianjin
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million									
Revenue	47,224	38,691	27,499	15,701	15,190	9,528	68,548	37,337	24,631	14,881
Depreciation, depletion and amortisation	(2,789)	(2,222)	(1,467)	(1,244)	(667)	(541)	(3,224)	(3,140)	(1,164)	(1,085)
Interest income	147	118	52	27	451	291	6	17	209	183
Interest expense	(411)	(535)	(5)	(16)	(107)	(20)	(945)	(1,136)	(89)	(131)
Profit/(loss) before taxation	2,261	520	8,218	1,518	2,864	2,304	(2,868)	(7,193)	1,393	954
Tax expense	(597)	(87)	(2,054)	(379)	(601)	(378)	332	1,057	(407)	(236)
Profit/(loss) for the year	1,664	433	6,164	1,139	2,263	1,926	(2,536)	(6,136)	986	718
Other comprehensive income	-	-	-	-	(123)	(3,368)	(206)	(584)	-	-
Total comprehensive income	1,664	433	6,164	1,139	2,140	(1,442)	(2,742)	(6,720)	986	718
Dividends declared by joint ventures	128	300	454	691	-	-	-	-	500	-
Share of net profit/(loss) from joint ventures	832	217	2,466	456	1,081	911	-	(2,301)	493	359
Share of other comprehensive loss from joint ventures (i)	-	-	-	-	(60)	(1,593)	-	(219)	-	-

The share of profit and other comprehensive income for the year ended 31 December 2021 in all individually immaterial joint ventures accounted for using equity method in aggregate was RMB4,494 million (2020: RMB993 million) and RMB215 million (2020: RMB808 million) respectively. As at 31 December 2021, the carrying amount of all individually immaterial joint ventures accounted for using equity method in aggregate was RMB30,640 million (2020: RMB26,099 million).

Note:

(i) Including foreign currency translation differences.

23 LONG-TERM PREPAYMENTS AND OTHER ASSETS

	31 December 2021 RMB million	31 December 2020 RMB million
Operating rights of service stations	29,714	31,856
Long term receivables from and prepayment to Sinopec Group Company and fellow subsidiaries	1,520	2,801
Prepayments for construction projects to third parties	7,470	5,861
Others (i)	31,326	34,025
	70,030	74,543

Note:

(i) Others mainly comprise time deposits with terms of three years, catalyst expenditures and improvement expenditures of property, plant and equipment.

The cost of operating rights of service stations is charged to expense on a straight-line basis over the respective periods of the rights. The movement of operating rights of service stations is as follows:

	2021	2020
	RMB million	RMB million
Operating rights of service stations		
Cost:		
Balance at 1 January	53,567	53,549
Additions	912	493
Decreases	(688)	(475)
Balance at 31 December	53,791	53,567
Accumulated amortisation:		
Balance at 1 January	21,711	19,536
Additions	2,699	2,365
Decreases	(333)	(190)
Balance at 31 December	24,077	21,711
Net book value at 31 December	29,714	31,856

24 DERIVATIVE FINANCIAL ASSETS AND DERIVATIVE FINANCIAL LIABILITIES

Derivative financial assets and derivative financial liabilities of the Group are primarily commodity futures and swaps contracts. See Note 43.

25 TRADE ACCOUNTS RECEIVABLE

	31 December 2021 RMB million	31 December 2020 RMB million
Amounts due from third parties	30,159	22,473
Amounts due from Sinopec Group Company and fellow subsidiaries	2,199	12,045
Amounts due from associates and joint ventures	6,536	4,781
	38,894	39,299
Less: Loss allowance for expected credit losses	(4,033)	(3,860)
	34,861	35,439

The ageing analysis of trade accounts receivable (net of loss allowance for expected credit losses) is as follows:

	31 December 2021 RMB million	31 December 2020 RMB million
Within one year	34,180	34,361
Between one and two years	442	931
Between two and three years	221	64
Over three years	18	83
	34.861	35.439

Loss allowance for expected credit losses are analysed as follows:

	2021	2020
	RMB million	RMB million
Balance at 1 January	3,860	1,848
Provision for the year	436	2,173
Written back for the year	(127)	(68)
Written off for the year	(30)	(23)
Others	(106)	(70)
Balance at 31 December	4,033	3,860

Sales are generally on a cash term. Credit is generally only available for major customers with well-established trading records. Amounts due from Sinopec Group Company and fellow subsidiaries are repayable under the same terms.

These receivables relate to a wide range of customers for whom there is no recent history of default.

Information about the impairment of trade accounts receivable and the Group's exposure to credit risk can be found in Note 43.

26 FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	31 December 2021 RMB million	31 December 2020 RMB million
Non-current assets		
Unlisted equity instruments	588	1,376
Listed equity instruments	179	149
Current assets		
Trade accounts receivable and bills receivable (i)	5,939	8,735
	6,706	10,260

Note:

(i) As at 31 December 2021 and 2020, bills receivable and certain trade accounts receivable were classified as financial assets at FVOCI, as the Group's business model is achieved both by collecting contractual cash flows and selling of these assets.

27 INVENTORIES

	31 December 2021 RMB million	31 December 2020 RMB million
Crude oil and other raw materials	109,940	60,379
Work in progress	15,701	13,066
Finished goods	84,174	78,481
Spare parts and consumables	2,515	3,372
	212,330	155,298
Less: Allowance for diminution in value of inventories	(4,897)	(3,107)
	207,433	152,191

The cost of inventories recognised as an expense in the consolidated income statement amounted to RMB2,177,141 million for the year ended 31 December 2021 (2020: RMB1,657,227 million). It includes the write-down of inventories of RMB3,148 million mainly related to finished goods (2020: RMB11,689 million mainly related to finished goods).

28 PREPAID EXPENSES AND OTHER CURRENT ASSETS

	31 December 2021	31 December 2020
	RMB million	RMB million
Receivables	35,918	35,096
Advances to suppliers	9,267	4,857
Value-added input tax to be deducted	19,137	18,625
Prepaid income tax	5,109	131
	69,431	58,709

29 DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets and liabilities before offset are attributable to the items detailed in the table below:

	Deferred tax assets		Deferred tax	liabilities
	31 December 2021 RMB million	31 December 2020 RMB million	31 December 2021 RMB million	31 December 2020 RMB million
Receivables and inventories	3,763	2,411	-	-
Payables	2,858	1,286	-	-
Cash flow hedges	258	1,790	(2,709)	(4,420)
Property, plant and equipment	16,777	15,793	(15,037)	(13,415)
Tax losses carried forward	4,749	13,322	-	-
Financial assets at fair value through other comprehensive income	127	127	(9)	(11)
Intangible assets	1,008	869	(492)	(517)
Others	1,056	371	(870)	(676)
Deferred tax assets/(liabilities)	30,596	35,969	(19,117)	(19,039)

The consolidated elimination amount between deferred tax assets and liabilities are as follows:

	31 December	31 December
	2021	2020
	RMB million	RMB million
Deferred tax assets	11,207	10,915
Deferred tax liabilities	11,207	10,915

Deferred tax assets and liabilities after the consolidated elimination adjustments are as follows:

	31 December	31 December
	2021	2020
	RMB million	RMB million
Deferred tax assets	19,389	25,054
Deferred tax liabilities	7,910	8,124

As at 31 December 2021, certain subsidiaries of the Company did not recognise deferred tax of deductible loss carried forward of RMB18,342 million (2020: RMB17,718 million), of which RMB5,564 million (2020: RMB4,349 million) was incurred for the year ended 31 December 2021, because it was not probable that the future taxable profits will be available. These deductible losses carried forward of RMB4,135 million, RMB2,308 million, RMB1,986 million, RMB4,349 million and RMB5,564 million will expire in 2022, 2023, 2024, 2025, 2026 and after, respectively.

Periodically, management performed assessment on the probability that future taxable profit will be available over the period which the deferred tax assets can be realised or utilised. In assessing the probability, both positive and negative evidence was considered, including whether it is probable that the operations will have sufficient future taxable profits over the periods which the deferred tax assets are deductible or utilised and whether the tax losses result from identifiable causes which are unlikely to recur.

29 DEFERRED TAX ASSETS AND LIABILITIES (Continued)

Movements in the deferred tax assets and liabilities are as follows:

	Balance at 1 January 2020 RMB million	Recognised in consolidated income statement RMB million	Recognised in other comprehensive income RMB million	Others RMB million	Transferred from reserve RMB million	Balance at 31 December 2020 RMB million
Receivables and inventories	2,546	(122)	(12)	(1)	_	2,411
Payables	1,142	144	_	_	-	1,286
Cash flow hedges	(268)	(42)	(2,316)	-	(4)	(2,630)
Property, plant and equipment	4,146	(2,244)	127	349	-	2,378
Tax losses carried forward	3,594	9,960	(84)	(148)	-	13,322
Financial assets at fair value through						
other comprehensive income	124	(4)	(4)	-	-	116
Intangible assets	87	19	-	246	-	352
Others	(564)	162	24	73	-	(305)
Net deferred tax assets/(liabilities)	10,807	7,873	(2,265)	519	(4)	16,930

	Balance at 1 January 2021 RMB million	Recognised in consolidated income statement RMB million	Recognised in other comprehensive income RMB million	Others RMB million	Transferred from reserve RMB million	Balance at 31 December 2021 RMB million
Receivables and inventories	2,411	1,378	(26)	_	-	3,763
Payables	1,286	1,572	-	_	_	2,858
Cash flow hedges	(2,630)	(203)	(5,499)	-	5,881	(2,451)
Property, plant and equipment	2,378	(1,004)	41	325	-	1,740
Tax losses carried forward	13,322	(8,554)	(19)	-	-	4,749
Financial assets at fair value through						
other comprehensive income	116	-	2	-	-	118
Intangible assets	352	63	-	101	-	516
Others	(305)	490	(3)	4	-	186
Net deferred tax assets/(liabilities)	16,930	(6,258)	(5,504)	430	5,881	11,479

30 SHORT-TERM AND LONG-TERM DEBTS AND LOANS FROM SINOPEC GROUP COMPANY AND FELLOW SUBSIDIARIES

Short-term debts represent:

	31 December	31 December
	2021 RMB million	2020 RMB million
Third parties' debts		
Short-term bank loans	24,959	16,111
RMB denominated	24,959	16,111
Short-term other loans	-	3
RMB denominated	-	3
Current portion of long-term bank loans	3,293	4,637
RMB denominated	3,281	4,613
USD denominated	12	24
Current portion of long-term corporate bonds	7,000	-
RMB denominated	7,000	-
Corporate bonds	-	3,018
RMB denominated	-	3,018
	35,252	23,769
Loans from Sinopec Group Company and fellow subsidiaries		
Short-term loans	2,407	4,642
RMB denominated	1,320	1,141
USD denominated	934	3,298
Hong Kong Dollar ("HKD") denominated	-	31
European Dollar ("EUR") denominated	153	172
Current portion of long-term loans	466	622
RMB denominated	466	622
	2,873	5,264
	38,125	29,033

The Group's weighted average interest rates on short-term loans were 2.72% (2020: 2.53%) per annum at 31 December 2021. The above borrowings are unsecured.

30 SHORT-TERM AND LONG-TERM DEBTS AND LOANS FROM SINOPEC GROUP COMPANY AND FELLOW SUBSIDIARIES (Continued)

Long-term debts represent:

	Interest rate and final maturity	31 December 2021 RMB million	31 December 2020 RMB million
hird parties' debts			
ong-term bank loans			
RMB denominated	Interest rates ranging from 1.08% to 4.00%	38,880	38,226
	per annum at 31 December 2021		
	with maturities through 2039		
USD denominated	Interest rates at 1.55% per annum	64	92
	at 31 December 2021 with maturities		
	through 2038		
		38,944	38,318
orporate bonds (i)			
RMB denominated	Fixed interest rates ranging from 2.20% to	38,522	26,977
	4.90% per annum at 31 December 2021		
	with maturities through 2026		
USD denominated	Fixed interest rates ranging from 3.13% to	11,127	11,379
	4.25% per annum at 31 December 2021		
	with maturities through 2043		
		49,649	38,356
otal third parties' long-term debts		88,593	76,674
Less: Current portion		(10,293)	(4,637)
		78,300	72,037
ong-term loans from Sinopec Grou	p Company and fellow subsidiaries		
RMB denominated	Interest rates ranging from 1.08% to	12,988	11,013
	5.23% per annum at 31 December 2021		
	with maturities through 2037		
USD denominated	Interest rates at 1.65% per annum at 31 December 2021		
	with maturities in 2027	1,168	1,387
Less: Current portion		(466)	(622)
		13,690	11,778
		91,990	83,815

Short-term and long-term bank loans, short-term other loans and loans from Sinopec Group Company and fellow subsidiaries are primarily unsecured and carried at amortised cost.

Notes:

(i) The Company issued corporate bonds with a maturity of five years on 26 July 2021 at par value of RMB100. The total issued amount of the corporate bonds is RMB5 billion. The corporate bonds adopt a simple interest rate on an annual basis with a fixed rate at 3.20% per annum and the interest is paid once a year.

The Company issued corporate bonds with a maturity of three years on 5 August 2021 at par value of RMB100. The total issued amount of the corporate bonds is RMB2 billion. The corporate bonds adopt a simple interest rate on an annual basis with a fixed rate at 2.95% per annum and the interest is paid once a year.

The Company issued corporate bonds with a maturity of two years on 6 August 2021 at par value of RMB100. The total issued amount of the corporate bonds is RMB2 billion. The corporate bonds adopt a simple interest rate on an annual basis with a fixed rate at 2.80% per annum and the interest is paid once a year.

The Company issued corporate bonds with a maturity of three years on 27 December 2021 at par value of RMB100. The total issued amount of the corporate bonds is RMB2.55 billion. The corporate bonds adopt a simple interest rate on an annual basis with a fixed rate at 2.50% per annum and the interest is paid once a year.

These corporate bonds are carried at amortised cost.

31 LEASE LIABILITIES

	31 December 2021 RMB million	31 December 2020 RMB million
Lease liabilities		
Current	15,173	15,293
Non-current	170,233	171,740
	185.406	187.033

32 TRADE ACCOUNTS PAYABLE AND BILLS PAYABLE

	31 December 2021 RMB million	31 December 2020 RMB million
Amounts due to third parties	193,547	132,256
Amounts due to Sinopec Group Company and fellow subsidiaries	4,227	11,512
Amounts due to associates and joint ventures	6,145	7,746
	203,919	151,514
Bills payable	11,721	10,394
Trade accounts payable and bills payable measured at amortised cost	215,640	161,908

The ageing analysis of trade accounts payable and bills payable is as follows:

	31 December 2021 RMB million	31 December 2020 RMB million
Within 1 month or on demand	138,741	146,415
Between 1 month and 6 months	25,280	9,793
Over 6 months	51,619	5,700
	215,640	161,908

33 CONTRACT LIABILITIES

As at 31 December 2021 and 2020, the Group's contract liabilities primarily represent advances from customers. Related performance obligations are expected to be satisfied and revenue is recognised within one year.

34 OTHER PAYABLES

	31 December 2021 RMB million	31 December 2020 RMB million
Salaries and welfare payable	14,048	7,129
Interest payable	822	667
Payables for constructions	54,596	42,027
Other payables	93,764	59,023
Taxes other than income tax	76,458	70,262
	239,688	179,108

35 PROVISIONS

Provisions primarily represent provision for future dismantlement costs of oil and gas properties. The Group has mainly committed to the PRC government to establish certain standardised measures for the dismantlement of its oil and gas properties by making reference to the industry practices and is thereafter constructively obligated to take dismantlement measures of its oil and gas properties.

Movement of provision of the Group's obligations for the dismantlement of its oil and gas properties is as follow:

	2021	2020
	RMB million	RMB million
Balance at 1 January	43,713	42,438
Provision for the year	2,163	1,563
Accretion expenses	1,135	1,343
Decrease for the year	(6,435)	(1,490)
Exchange adjustments	(81)	(141)
Balance at 31 December	40,495	43,713

36 SHARE CAPITAL

	31 December 2021 RMB million	31 December 2020 RMB million
Registered, issued and fully paid		
95,557,771,046 listed A shares (2020: 95,557,771,046) of RMB1.00 each	95,558	95,558
25,513,438,600 listed H shares (2020: 25,513,438,600) of RMB1.00 each	25,513	25,513
	121,071	121,071

The Company was established on 25 February 2000 with a registered capital of 68.8 billion domestic state-owned shares with a par value of RMB1.00 each. Such shares were issued to Sinopec Group Company in consideration for the assets and liabilities transferred to the Company (Note 1).

Pursuant to the resolutions passed at an Extraordinary General Meeting held on 25 July 2000 and approvals from relevant government authorities, the Company is authorised to increase its share capital to a maximum of 88.3 billion shares with a par value of RMB1.00 each and offer not more than 19.5 billion shares with a par value of RMB1.00 each to investors outside the PRC. Sinopec Group Company is authorised to offer not more than 3.5 billion shares of its shareholdings in the Company to investors outside the PRC. The shares sold by Sinopec Group Company to investors outside the PRC would be converted into H shares.

In October 2000, the Company issued 15,102,439,000 H shares with a par value of RMB1.00 each, representing 12,521,864,000 H shares and 25,805,750 American Depositary Shares ("ADSs", each representing 100 H shares), at prices of HKD1.59 per H share and USD20.645 per ADS, respectively, by way of a global initial public offering to Hong Kong and overseas investors. As part of the global initial public offering, 1,678,049,000 state-owned ordinary shares of RMB1.00 each owned by Sinopec Group Company were converted into H shares and sold to Hong Kong and overseas investors.

In July 2001, the Company issued 2.8 billion listed A shares with a par value of RMB1.00 each at RMB4.22 by way of a public offering to natural persons and institutional investors in the PRC.

During the year ended 31 December 2010, the Company issued 88,774 listed A shares with a par value of RMB1.00 each, as a result of exercise of 188,292 warrants entitled to the Bonds with Warrants.

During the year ended 31 December 2011, the Company issued 34,662 listed A shares with a par value of RMB1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

During the year ended 31 December 2012, the Company issued 117,724,450 listed A shares with a par value of RMB1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

On 14 February 2013, the Company issued 2,845,234,000 listed H shares ("the Placing") with a par value of RMB1.00 each at the Placing Price of HKD8.45 per share. The aggregate gross proceeds from the Placing amounted to approximately HKD24,042,227,300.00 and the aggregate net proceeds (after deduction of the commissions and estimated expenses) amounted to approximately HKD23,970,100,618.00.

In June 2013, the Company issued 21,011,962,225 listed A shares and 5,887,716,600 listed H shares as a result of bonus issues of 2 shares converted from the retained earnings, and 1 share transferred from the share premium for every 10 existing shares.

During the year ended 31 December 2013, the Company issued 114,076 listed A shares with a par value of RMB1.00 each, as a result of exercise of conversion by the holders of the 2011 Convertible Bonds.

During the year ended 31 December 2014, the Company issued 1,715,081,853 listed A shares with a par value of RMB1.00 each, as a result of exercise of conversion by the holders of the 2011 Convertible Bonds.

During the year ended 31 December 2015, the Company issued 2,790,814,006 listed A shares with a par value of RMB1.00 each, as a result of exercise of conversion by the holders of the 2011 Convertible Bonds.

All A shares and H shares rank pari passu in all material aspects.

Capital management

Management optimises the structure of the Group's capital, which comprises of equity, debts and bonds. In order to maintain or adjust the capital structure of the Group, management may cause the Group to issue new shares, adjust the capital expenditure plan, sell assets to reduce debt, or adjust the proportion of short-term and long-term loans and bonds. Management monitors capital on the basis of the debt-to-capital ratio, which is calculated by dividing long-term loans (excluding current portion) and debentures payable, including long-term loans (excluding current portion) and debentures payable, including long-term loans (excluding current portion) and debentures payable, including long-term loans (excluding current portion) and debentures payable, and liability-to-asset ratio, which is calculated by dividing total liabilities by total assets. Management's strategy is to make appropriate adjustments according to the Group's operating and investment needs and the changes of market conditions, and to maintain the debt-to-capital ratio and the liability-to-asset ratio of the Group at a range considered reasonable. As at 31 December 2021, the debt-to-capital ratio and the liability-to-asset ratio of the Group at a range considered reasonable. As at 31 December 2021, the debt-to-capital ratio and the liability-to-asset ratio of the Group at a range considered reasonable. As at 31 December 2021, the debt-to-capital ratio and the liability-to-asset ratio of the Group were 10.6% (2020: 10.1%) and 51.6% (2020: 49.0%), respectively.

The schedule of the contractual maturities of loans and commitments are disclosed in Notes 30 and 37, respectively.

There were no changes in the management's approach to capital management of the Group during the year. Neither the Company nor any of its subsidiaries is subject to externally imposed capital requirements.

37 COMMITMENTS AND CONTINGENT LIABILITIES

Capital commitments

At 31 December 2021 and 2020, capital commitments of the Group are as follows:

	31 December	31 December
	2021	2020
	RMB million	RMB million
Authorised and contracted for (i)	184,430	171,597
Authorised but not contracted for	90,227	33,997
	274,657	205,594

These capital commitments relate to oil and gas exploration and development, refining and petrochemical production capacity expansion projects, the construction of service stations and oil depots and investment commitments.

Note:

(i) The investment commitments of the Group is RMB3,648 million (2020: RMB13,172 million).

Commitments to joint ventures

Pursuant to certain of the joint venture agreements entered into by the Group, the Group is obliged to purchase products from the joint ventures based on market prices.

Exploration and production licenses

Exploration licenses for exploration activities are registered with the Ministry of Natural Resources. The maximum term of the Group's exploration licenses is 7 years, and may be renewed twice within 30 days prior to expiration of the original term with each renewal being for a two-year term. The Group is obligated to make progressive annual minimum exploration investment relating to the exploration blocks in respect of which the license is issued. The Ministry of Natural Resources also issues production licenses to the Group on the basis of the reserve reports approved by relevant authorities. The maximum term of a full production license is 30 years unless a special dispensation is given by the State Council. The maximum term of production license is renewable upon application by the Group 30 days prior to expiration.

The Group is required to make payments of exploration license fees and production right usage fees to the Ministry of Natural Resources annually which are expensed. Expenses recognised were approximately RMB181 million for the year ended 31 December 2021 (2020: RMB231 million).

Estimated future annual payments are as follows:

	31 December 2021 RMB million	31 December 2020 RMB million
Within one year	301	390
Between one and two years	112	99
Between two and three years	110	66
Between three and four years	102	63
Between four and five years	64	56
Thereafter	846	824
	1,535	1,498

Contingent liabilities

At 31 December 2021 and 2020, the guarantees by the Group in respect of facilities granted to the parties below are as follows:

	31 December	31 December
	2021	2020
	RMB million	RMB million
Joint ventures (ii)	9,117	6,390
Associates (iii)	5,746	8,450
	14,863	14,840

37 COMMITMENTS AND CONTINGENT LIABILITIES (Continued)

Contingent liabilities (Continued)

Management monitors the risk that the specified debtor will default on the contract and recognises a provision when ECLs on the financial guarantees are determined to be higher than the carrying amount in respect of the guarantees. At 31 December 2021 and 2020, the Group estimates that there is no material liability has been accrued for ECLs related to the Group's obligation under these guarantee arrangements.

Notes:

(ii) The Group provided a guarantee in respect to standby credit facilities granted to Zhongan United Coal Chemical Co., Ltd. ("Zhongan United") by banks amount to RMB7,100 million. As at 31 December 2021, the amount withdrawn (The portion corresponding to the shareholding ratio of the Group) by Zhongan United from banks and guaranteed by the Group was RMB5,680 million (31 December 2020: RMB6,390 million). The Group provided a guarantee in respect to standby credit facilities granted to Amur Gas Chemical Complex Limited Liability Company ("Amur Gas") by banks amount to RMB23,208 million. As at 31 December 2021, the amount withdrawn (The portion corresponding to the shareholding ratio of the Group) by Amur Gas from banks and guaranteed by the Group was RMB3,264 million (31 December 2020: Nil).

The Group provided a guarantee in respect to payment obligation under the raw material supply agreement of Amur Gas amount to RMB15,493 million. As at 31 December 2021, Amur Gas has not yet incurred the relevant payment obligations and therefore the Group has no guarantee amount (31 December 2020: Nil).

The Group provided a guarantee in respect the engineering services agreement of Amur Gas amount to RMB3,012 million. As at 31 December 2021, the relevant payables for constructions of Amur Gas (The portion corresponding to the shareholding ratio of the Group) and guaranteed by the Group was RMB173 million (31 December 2020: Nil).

(iii) The Group provided a guarantee in respect to standby credit facilities granted to Zhongtian Synergetic Energy by banks amount to RMB17,050 million. As at 31 December 2021, the amount withdrawn (The portion corresponding to the shareholding ratio of the Group) by Zhongtian Synergetic Energy and guaranteed by the Group was RMB5,746 million (2020: RMB8,450 million).

Environmental contingencies

Under existing legislation, management believes that there are no probable liabilities that will have a material adverse effect on the financial position or operating results of the Group. The PRC government, however, has moved, and may move further towards more rigorous enforcement of applicable laws, and towards the adoption of more stringent environmental standards. Environmental liabilities are subject to considerable uncertainties which affect management's ability to estimate the ultimate cost of remediation efforts. These uncertainties include (i) the exact nature and extent of the contamination at various sites including, but not limited to refineries, oil fields, service stations, terminals and land development areas, whether operating, closed or sold, (ii) the extent of required cleanup efforts, (iii) varying costs of alternative remediation strategies, (iv) changes in environmental remediation requirements, and (v) the identification of new remediation sites. The amount of such future cost is indeterminable due to such factors as the unknown magnitude of possible contamination and the unknown timing and extent of the corrective actions that may be required. Accordingly, the outcome of environmental liabilities under proposed or future environmental legislation cannot reasonably be estimated at present, and could be material.

The Group paid normal routine pollutant discharge fees of approximately RMB10,968 million in the consolidated financial statements for the year ended 31 December 2021 (2020: RMB11,368 million).

Legal contingencies

The Group is defendant in certain lawsuits as well as the named party in other proceedings arising in the ordinary course of business. Management has assessed the likelihood of an unfavourable outcome of such contingencies, lawsuits or other proceedings and believes that any resulting liabilities will not have a material adverse effect on the financial position, operating results or cash flows of the Group.

38 BUSINESS COMBINATION

Pursuant to resolution passed at the Director's meeting on 26 March 2021, the Company entered into agreements with Sinopec Assets Management Corporation ("SAMC") and Beijing Orient Petrochemical Industry Co., Ltd. ("BJOPI"), and its subsidiary, Sinopec Beihai Refining and Chemical Limited Liability Company entered into an agreement with Beihai Petrochemical Limited Liability Company of Sinopec Group ("BHP"). According to the relevant agreements, the Company proposed to acquire non equity assets such as the polypropylene devices and utility business assets of Cangzhou Branch held by SAMC, organic plant business held by BJOPI, and the pier operation platform held by BHP.

Pursuant to the resolution passed at the Directors' meeting on 29 November 2021, the Company entered into agreements with SAMC, and Sinopec Beijing Yanshan Petrochemical Co., Ltd. ("SBJYSP"), and its subsidiary, Sinopec Yizheng Chemical Fibre Company Limited entered into an agreement with SAMC. According to the relevant agreements, the Group proposed to acquire non equity assets such as thermal power, water and other business, PBT resin and other business of Yizheng Branch held by SAMC, and thermal power and other businesses held by SBJYSP.

The consideration of the transaction amount to RMB6,124 million.

As the Company, SAMC, BJOPI, BHP and SBJYSP are all under the control of Sinopec Group Company, the transaction described above has been accounted as business combination under common control. Accordingly, the equity and assets acquired from Sinopec Group Company have been accounted for at historical cost, and the consolidated financial statements of the Group prior to these acquisitions have been restated to include the results of operation and the assets and liabilities of Sinopec Group Company on a combined basis.

The transactions under the after-mentioned agreements will further improve the integrated operation level of the Group, optimise the allocation of resources, reduce connected transactions on the whole, so as to enhance the comprehensive competitiveness of the Group in its business locations.

38 BUSINESS COMBINATION (Continued)

The financial condition as at 31 December 2020 and the results of operation for the year ended 31 December 2020 previously reported by the Group have been restated, as set out below:

	The Group, as previously reported RMB million	Acquired assets and liabilities of Sinopec Group Company RMB million	Elimination and Adjustment RMB million	The Group, as restated RMB million
Summarised consolidated income statement				
for the year ended 31 December 2020:				
Revenue	2,105,984	12,233	(13,493)	2,104,724
Profit attributable to shareholders of the Company	33,096	347	-	33,443
Profit attributable to non-controlling interests	8,828	-	-	8,828
Basic earnings per share (RMB)	0.273	0.003	-	0.276
Diluted earnings per share (RMB)	0.273	0.003	-	0.276
Summarised consolidated statement of financial position				
as at 31 December 2020:				
Current assets	455,395	480	(215)	455,660
Total assets	1,733,805	5,875	(784)	1,738,896
Current liabilities	522,190	1,020	(215)	522,995
Total liabilities	850,947	1,031	(784)	851,194
Total equity attributable to shareholders of the Company	741,494	4,831	-	746,325
Non-controlling interests	141,364	13	-	141,377
Summarised consolidated statement of cash flows				
for the year ended 31 December 2020:				
Net cash generated from operating activities	167,518	1,002	-	168,520
Net cash used in investing activities	(102,203)	(447)	-	(102,650)
Net cash used in financing activities	(36,955)	(555)	-	(37,510)
Net increase in cash and cash equivalents	28,360	-	-	28,360

39 RELATED PARTY TRANSACTIONS

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

(a) Transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures

The Group is part of a larger group of companies under Sinopec Group Company, which is controlled by the PRC government, and has significant transactions and relationships with Sinopec Group Company and fellow subsidiaries. Because of these relationships, it is possible that the terms of these transactions are not the same as those that would result from transactions among wholly unrelated parties.

The principal related party transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures, which were carried out in the ordinary course of business are as follows:

	Note	2021 RMB million	2020 RMB million
Sales of goods	(i)	297,381	228,307
Purchases	(ii)	191,888	151,300
Transportation and storage	(iii)	19,443	8,734
Exploration and development services	(iv)	33,930	31,444
Production related services	(v)	44,405	31,915
Ancillary and social services	(vi)	1,730	2,952
Agency commission income	(vii)	194	160
Interest income	(viii)	715	704
Interest expense	(ix)	385	919
Net deposits placed with related parties	(viii)	(8,265)	(17,585)
Net funds obtained from/(repaid to) related parties	(X)	30,305	(31,144)

The amounts set out in the table above in respect of the year ended 31 December 2021 and 2020 represent the relevant costs and income as determined by the corresponding contracts with the related parties.

39 RELATED PARTY TRANSACTIONS (Continued)

(a) Transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures (Continued)

Included in the transactions disclosed above, for the year ended 31 December 2021 are: a) purchases by the Group from Sinopec Group Company and fellow subsidiaries amounting to RMB173,718 million (2020: RMB149,560 million) comprising purchases of products and services (i.e. procurement, transportation and storage, exploration and development services and production related services) of RMB160,048 million (2020: RMB133,827 million), ancillary and social services provided by Sinopec Group Company and fellow subsidiaries of RMB1,730 million (2020: RMB2,952 million), lease charges for land, buildings and others paid by the Group of RMB10,831 million, RMB565 million and RMB159 million (2020: RMB11,086 million, RMB565 million and RMB211 million), respectively and interest expenses of RMB385 million (2020: RMB919 million); and b) sales by the Group to Sinopec Group Company and fellow subsidiaries amounting to RMB54,453 million (2020: RMB69,470 million), comprising RMB53,671 million (2020: RMB68,683 million) for sales of goods, RMB715 million (2020: RMB704 million) for interest income and RMB67 million (2020: RMB83 million) for agency commission income.

For the year ended 31 December 2021, no individually significant right-of-use assets were leased from Sinopec Group Company and fellow subsidiaries, associates and joint ventures by the Group. The interest expense recognised for the year ended 31 December 2021 on lease liabilities in respect of amounts due to Sinopec Group Company and fellow subsidiaries, associates and joint ventures was RMB7,863 million (2020: RMB8,160 million).

For the year ended 31 December 2021, the amount of rental the Group paid to Sinopec Group Company and fellow subsidiaries, associates and joint ventures for land, buildings and others are RMB10,834 million, RMB572 million and RMB269 million (2020: RMB11,090 million, RMB571 million and RMB330 million).

As at 31 December 2021 and 2020, there was no guarantee given to banks by the Group in respect of banking facilities to Sinopec Group Company and fellow subsidiaries, associates and joint ventures, except for the guarantees disclosed in Note 37. Guarantees given to banks by the Group in respect of banking facilities to associates and joint ventures are disclosed in Note 37.

The directors of the Company are of the opinion that the above transactions with related parties were conducted in the ordinary course of business and on normal commercial terms or in accordance with the agreements governing such transactions, and this has been confirmed by the independent non-executive directors.

Notes:

- (i) Sales of goods represent the sale of crude oil, intermediate petrochemical products, petroleum products and ancillary materials.
- (ii) Purchases represent the purchase of materials and utility supplies directly related to the Group's operations such as the procurement of raw and ancillary materials and related services, supply of water, electricity and gas.
- (iii) Transportation and storage represent the cost for the use of railway, road and marine transportation services, pipelines, loading, unloading and storage facilities.
- (iv) Exploration and development services comprise direct costs incurred in the exploration and development such as geophysical, drilling, well testing and well measurement services.
- (v) Production related services represent ancillary services rendered in relation to the Group's operations such as equipment repair and general maintenance, insurance premium, technical research, communications, firefighting, security, product quality testing and analysis, information technology, design and engineering, construction of oilfield ground facilities, refineries and chemical plants, manufacture of replacement parts and machinery, installation, project management, environmental protection and management services.
- (vi) Ancillary and social services represent expenditures for social welfare and support services such as educational facilities, media communication services, sanitation, accommodation, canteens, and property maintenance.
- (vii) Agency commission income represents commission earned for acting as an agent in respect of sales of products and purchase of materials for certain entities owned by Sinopec Group Company.
- (viii) Interest income represents interest received from deposits placed with Sinopec Finance and Sinopec Century Bright Capital Investment Limited, finance companies controlled by Sinopec Group Company. The applicable interest rate is determined in accordance with the prevailing saving deposit rate. The balance of deposits at 31 December 2021 was RMB61,682 million (2020: RMB53,417 million).
- (ix) Interest expense represents interest charges on the loans obtained from Sinopec Group Company and fellow subsidiaries.
- (x) The Group obtained loans, discounted bills and issued the acceptance bills from Sinopec Group Company and fellow subsidiaries.

39 RELATED PARTY TRANSACTIONS (Continued)

(a) Transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures (Continued)

In connection with the Reorganisation, the Company and Sinopec Group Company entered into a number of agreements under which 1) Sinopec Group Company will provide goods and products and a range of ancillary, social and supporting services to the Group and 2) the Group will sell certain goods to Sinopec Group Company. These agreements impacted the operating results of the Group for the year ended 31 December 2021. The terms of these agreements are summarised as follows:

- The Company has entered into a non-exclusive "Agreement for Mutual Provision of Products and Ancillary Services" ("Mutual Provision Agreement") with Sinopec Group Company effective from 1 January 2000 in which Sinopec Group Company has agreed to provide the Group with certain ancillary production services, construction services, information advisory services, supply services and other services and products. While each of Sinopec Group Company has agreed not to terminate the agreement if the Group is unable to obtain comparable services from a third party. The pricing policy for these services and products provided by Sinopec Group Company to the Group is as follows:
 - (1) the government-prescribed price;
 - (2) where there is no government-prescribed price, the government-guidance price;
 - (3) where there is neither a government-prescribed price nor a government-guidance price, the market price; or
 - (4) where none of the above is applicable, the price to be agreed between the parties, which shall be based on a reasonable cost incurred in providing such services plus a profit margin not exceeding 6%.
- The Company has entered into a non-exclusive "Agreement for Provision of Cultural and Educational, Health Care and Community Services" with Sinopec Group Company effective from 1 January 2000 in which Sinopec Group Company has agreed to provide the Group with certain cultural, educational, health care and community services on the same pricing terms and termination conditions as described in the above Mutual Provision Agreement.
- The Company has entered into a series of lease agreements with Sinopec Group Company to lease certain lands and buildings effective on 1 January 2000. The lease term is 40 or 50 years for lands and 20 years for buildings, respectively. The Company and Sinopec Group Company can renegotiate the rental amount every three years for land. The Company and Sinopec Group Company can renegotiate the rental amount for buildings every year. However such amount cannot exceed the market price as determined by an independent third party.
- The Company has entered into agreements with Sinopec Group Company effective from 1 January 2000 under which the Group has been granted the right to use certain trademarks, patents, technology and computer software developed by Sinopec Group Company.
- The Company has entered into a service stations franchise agreement with Sinopec Group Company effective from 1 January 2000 under which its service stations and retail stores would exclusively sell the refined products supplied by the Group.
- On the basis of a series of continuing connected transaction agreements signed in 2000, the Company and Sinopec Group Company have signed the Sixth Supplementary Agreement on 27 August 2021, which took effect on 1 January 2022 and made adjustment to "Mutual Supply Agreement" and "Buildings Leasing Contract", etc.

Amounts due from/to Sinopec Group Company and fellow subsidiaries, associates and joint ventures included in the following accounts captions are summarised as follows:

	31 December 2021 RMB million	31 December 2020 RMB million
Trade accounts receivable	8,655	16,777
Financial assets at fair value through other comprehensive income	186	760
Prepaid expenses and other current assets	14,537	19,422
Long-term prepayments and other assets	3,116	6,435
Total	26,494	43,394
Trade accounts payable and bills payable	14,170	22,792
Contract liabilities	4,677	5,937
Other payables	50,649	12,759
Other long-term liabilities	2,779	3,010
Short-term loans and current portion of long-term loans from Sinopec Group Company and fellow subsidiaries	2,873	5,264
Long-term loans excluding current portion from Sinopec Group Company and fellow subsidiaries	13,690	11,778
Lease liabilities (including to be paid within one year)	158,761	162,048
Total	247,599	223,588

39 RELATED PARTY TRANSACTIONS (Continued)

(a) Transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures (Continued)

Amounts due from/to Sinopec Group Company and fellow subsidiaries, associates and joint ventures, other than short-term loans and long-term loans, bear no interest, are unsecured and are repayable in accordance with normal commercial terms. The terms and conditions associated with short-term loans and long-term loans payable to Sinopec Group Company and fellow subsidiaries are set out in Note 30.

As at and for the year ended 31 December 2021, and as at and for the year ended 31 December 2020, no individually significant loss allowance for expected credit losses were recognised in respect of amounts due from Sinopec Group Company and fellow subsidiaries, associates and joint ventures.

(b) Key management personnel emoluments

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including directors and supervisors of the Group. The key management personnel compensation is as follows:

	2021	2020
	RMB'000	RMB'000
Short-term employee benefits	4,612	5,753
Retirement scheme contributions	379	342
	4,991	6,095

(c) Contributions to defined contribution retirement plans

The Group participates in various defined contribution retirement plans organised by municipal and provincial governments for its staff. The details of the Group's employee benefits plan are disclosed in Note 40. As at 31 December 2021 and 2020, the accrual for the contribution to post-employment benefit plans was not material.

(d) Transactions with other state-controlled entities in the PRC

The Group is a state-controlled energy and chemical enterprise and operates in an economic regime currently dominated by entities directly or indirectly controlled by the PRC government through its government authorities, agencies, affiliations and other organisations (collectively referred as "state-controlled entities").

Apart from transactions with Sinopec Group Company and fellow subsidiaries, the Group has transactions with other state-controlled entities, include but not limited to the followings:

- sales and purchases of goods and ancillary materials;
- · rendering and receiving services;
- lease of assets;
- · depositing and borrowing money; and
- uses of public utilities.

These transactions are conducted in the ordinary course of the Group's business on terms comparable to those with other entities that are not state-controlled.

40 EMPLOYEE BENEFITS PLAN

As stipulated by the regulations of the PRC, the Group participates in various defined contribution retirement plans organised by municipal and provincial governments for its staff. The Group is required to make contributions to the retirement plans at rates ranging from 13.0% to 16.0% of the salaries, bonuses and certain allowances of its staff. In addition, the Group provides a supplementary retirement plan for its staff at rates not exceeding 8% of the salaries. The Group has no other material obligation for the payment of pension benefits associated with these plans beyond the annual contributions described above. The Group's contributions for the year ended 31 December 2021 were RMB11,932 million (2020: RMB8,983 million).

41 SEGMENT REPORTING

Segment information is presented in respect of the Group's business segments. The format is based on the Group's management and internal reporting structure.

In a manner consistent with the way in which information is reported internally to the Group's chief operating decision maker for the purposes of resource allocation and performance assessment, the Group has identified the following five reportable segments. No operating segments have been aggregated to form the following reportable segments.

- (i) Exploration and production, which explores and develops oil fields, produces crude oil and natural gas and sells such products to the refining segment of the Group and external customers.
- (ii) Refining, which processes and purifies crude oil, that is sourced from the exploration and production segment of the Group and external suppliers, and manufactures and sells petroleum products to the chemicals and marketing and distribution segments of the Group and external customers.
- (iii) Marketing and distribution, which owns and operates oil depots and service stations in the PRC, and distributes and sells refined petroleum products (mainly gasoline and diesel) in the PRC through wholesale and retail sales networks.
- (iv) Chemicals, which manufactures and sells petrochemical products, derivative petrochemical products and other chemical products mainly to external customers.
- (v) Corporate and others, which largely comprises the trading activities of the import and export companies of the Group and research and development undertaken by other subsidiaries.

The segments were determined primarily because the Group manages its exploration and production, refining, marketing and distribution, chemicals, and corporate and others businesses separately. The reportable segments are each managed separately because they manufacture and/ or distribute distinct products with different production processes and due to their distinct operating and gross margin characteristics.

41 SEGMENT REPORTING (Continued)

(1) Information of reportable segmental revenues, profits or losses, assets and liabilities

The Group's chief operating decision maker evaluates the performance and allocates resources to its operating segments on an operating profit basis, without considering the effects of finance costs or investment income. Inter-segment transfer pricing is based on the market price or cost plus an appropriate margin, as specified by the Group's policy.

Assets and liabilities dedicated to a particular segment's operations are included in that segment's total assets and liabilities. Segment assets include all tangible and intangible assets, except for interest in associates and joint ventures, investments, deferred tax assets, cash and cash equivalents, time deposits with financial institutions and other unallocated assets. Segment liabilities exclude short-term debts, income tax payable, long-term debts, loans from Sinopec Group Company and fellow subsidiaries, deferred tax liabilities and other unallocated liabilities.

Information of the Group's reportable segments is as follows:

	2021 RMB million	2020 RMB million
Revenue from primary business		
Exploration and production		
External sales	156,026	104,524
Inter-segment sales	87,298	57,513
	243,324	162,037
Refining		
External sales	167,948	113,214
Inter-segment sales	1,212,455	826,219
	1,380,403	939,433
Marketing and distribution		
External sales	1,367,605	1,062,447
Inter-segment sales	7,075	4,854
	1,374,680	1,067,301
Chemicals		
External sales	424,774	322,169
Inter-segment sales	70,242	40,702
	495,016	362,871
Corporate and others		
External sales	563,147	458,154
Inter-segment sales	732,356	430,073
	1,295,503	888,227
Elimination of Inter-segment sales	(2,109,426)	(1,371,215)
Revenue from primary business Other operating revenues	2,679,500	2,048,654
Exploration and production	6,674	5,718
Refining	5.161	4.633
Marketing and distribution	36,864	34,905
Chemicals	10,487	8,758
Corporate and others	2.198	2.056
Other operating revenues	61.384	56.070
Revenue	2,740,884	2,104,724

41 SEGMENT REPORTING (Continued)

(1) Information of reportable segmental revenues, profits or losses, assets and liabilities (Continued)

	2021 RMB million	2020 RMB million
Result		
Operating profit/(loss)		
By segment		
 Exploration and production 	4,685	(16,476
– Refining	65,279	(5,525
 Marketing and distribution 	21,204	20,828
– Chemicals	11,106	10,818
– Corporate and others	(3,225)	(393
– Elimination	(4,421)	4,417
Total segment operating profit	94,628	13,669
Share of profit/(loss) from associates and joint ventures		
– Exploration and production	2,783	2,117
– Refining	662	(2,516
- Marketing and distribution	3,731	2,200
- Chemicals	11,323	1,723
- Corporate and others	4,754	3,188
Aggregate share of profits from associates and joint ventures	23,253	6,712
- Exploration and production		10 1 1
	55	13,118
- Refining	(10)	14,943
 Marketing and distribution Chemicals 	3	8,980
	(54)	(6)
- Corporate and others Aggregate investment income	304 298	760 37,744
Net finance costs Profit before taxation	(9,010)	(9,510
	109,169	48,61
	31 December	31 Decembe
	31 December 2021	31 December 2020
Assets	2021	2020
	2021	2020
	2021	2020 RMB million
Segment assets	2021 RMB million	2020 RMB million 354,024
Segment assets – Exploration and production	2021 RMB million 371,100	2020 RMB million 354,024 270,760
Segment assets – Exploration and production – Refining	2021 RMB million 371,100 304,785	2020 RMB million 354,024 270,766 373,430
Segment assets – Exploration and production – Refining – Marketing and distribution	2021 RMB million 371,100 304,785 377,499	2020 RMB million 354,024 270,766 373,430 190,789
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others	2021 RMB million 371,100 304,785 377,499 222,803	202(RMB millio 354,024 270,766 373,430 190,789 118,458
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets	2021 RMB million 371,100 304,785 377,499 222,803 133,961	2020 RMB million 354,024 270,766 373,430 190,789 118,458 1,307,46
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148	2020 RMB million 354,024 270,766 373,430 190,789 118,458 1,307,46 188,342
Segment assets – Exploration and production – Refining – Marketing and distribution – Chemicals	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179	2020 RMB million 354,024 270,766 373,430 190,789 118,458 1,307,46 188,342 1,529
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389	2020 RMB million 354,024 270,766 373,430 190,789 118,458 1,307,46 188,342 1,529 25,054
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989	2020 RMB million 354,024 270,766 373,430 190,789 118,458 1,307,467 188,342 1,529 25,054 188,057
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389	2020 RMB million 354,024 270,766 373,430 190,789 118,458 1,307,46 188,342 1,529
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783	2020 RMB million 354,024 270,766 373,430 190,789 118,458 1,307,467 188,342 1,529 25,054 188,057 28,455
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783	2020 RMB million 354,024 270,766 373,430 190,789 118,458 1,307,467 188,342 1,529 25,054 188,057 28,455
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783	2024 RMB million 354,024 270,766 373,436 190,785 118,456 1,307,466 188,342 1,522 25,054 188,05 28,45 1,738,896
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities Segment liabilities - Exploration and production - Refining	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 221,989 27,783 1,889,255	2020 RMB million 354,024 270,766 373,430 190,785 118,458 1,307,467 188,342 1,525 25,054 188,057 28,457 1,738,890 163,588
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities Segment liabilities - Exploration and production - Refining	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 221,989 27,783 1,889,255	2020 RMB million 354,024 270,766 373,433 190,785 118,458 1,307,465 1,307,465 188,342 1,525 25,054 188,055 28,455 1,738,896 1 63,588 136,980
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities Segment liabilities - Exploration and production	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 221,989 27,783 1,889,255	2024 RMB million 354,024 270,766 373,436 190,783 118,456 1188,345 1,307,466 188,345 1,525 25,056 188,055 28,45 1,738,899 163,588 136,986 234,305
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities Segment liabilities – Exploration and production – Refining – Marketing and distribution	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783 1,889,255 166,486 146,763 228,826	2020 RMB million 354,024 270,766 373,430 190,785 118,458 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,307,465 1,738,896 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986 1,36,986
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities Segment liabilities - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783 1,889,255 166,486 146,763 228,826 69,977	2024 RMB million 354,024 270,766 373,430 190,783 118,453 1,307,463 188,343 1,522 25,054 188,055 28,455 1,738,899 163,583 136,980 234,309 49,623 119,213
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Dther unallocated assets Liabilities Segment liabilities - Exploration and production - Refining - Marketing and distribution - Corporate and others	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783 1,889,255 166,486 146,763 228,826 69,977 198,828	202 RMB millio 354,02 270,76 373,43 190,78 118,455 1,307,46 188,34 1,52 25,05 188,05 28,45 1,738,89 163,58 136,98 234,30 49,62 119,21 703,71
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Liabilities Segment liabilities - Exploration and production - Refining - Asketing and distribution - Corporate and others Total assets Liabilities Segment liabilities - Exploration and production - Refining - Marketing and distribution - Corporate and others Total segment liabilities	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783 1,889,255 1,889,255 166,486 146,763 228,826 69,977 198,828 810,880 35,252	2024 RMB million 354,024 270,766 373,433 190,786 118,455 1,307,466 188,342 1,522 25,054 188,05 28,455 1,738,899 163,588 136,986 234,309 49,622 119,212 703,712 23,765
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities Segment liabilities - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783 1,889,255 166,486 146,763 228,826 69,977 198,828 810,880 35,252 4,809	2024 RMB million 354,024 270,766 373,433 190,786 118,455 1,307,46 188,342 1,522 25,054 188,05 28,45 1,738,899 163,588 136,986 234,309 49,622 119,212 703,71 23,765 6,586
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities Segment liabilities - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Segment liabilities Segment liabilities Segment liabilities Segment liabilities - Corporate and distribution - Chemicals - Corporate and others Total segment liabilities Short-term debts Income tax payable Long-term debts	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783 1,889,255 1,889,255 1,889,255 1,66,486 146,763 228,826 69,977 198,828 810,880 35,252 4,809 78,300	2020 RMB million 354,024 270,766 373,433 190,785 118,458 1,307,466 188,342 1,529 25,054 188,055 28,455 1,738,890 163,588 136,980 234,309 49,629 119,219 703,71 23,769 6,586 72,033
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Total assets Liabilities Segment liabilities - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783 1,889,255 1,889,255 166,486 146,763 228,826 69,977 198,828 810,880 35,252 4,809 78,300 16,563	2020 RMB million 354,024 270,766 373,433 190,785 118,458 1,307,466 188,342 1,522 25,054 188,055 28,455 1,738,890 163,588 136,980 234,309 49,622 119,215 703,71 23,769 6,586 72,033 17,042
Segment assets - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment assets Interest in associates and joint ventures Financial assets at fair value through other comprehensive income Deferred tax assets Cash and cash equivalents, time deposits with financial institutions Other unallocated assets Fotal assets Liabilities Segment liabilities - Exploration and production - Refining - Marketing and distribution - Chemicals - Corporate and others Total segment liabilities Segment liabilities - Exploration and production - Refining - Corporate and others Total segment liabilities - Corporate and others Short-term debts ncome tax payable .ong-term debts .ong-term debts .ong-term debts	2021 RMB million 371,100 304,785 377,499 222,803 133,961 1,410,148 209,179 767 19,389 221,989 27,783 1,889,255 1,889,255 1,889,255 1,66,486 146,763 228,826 69,977 198,828 810,880 35,252 4,809 78,300	2024 RMB million 354,024 270,766 373,433 190,786 118,455 1,307,46 188,342 1,522 25,054 188,05 28,45 1,738,899 163,588 136,986 234,309 49,622 119,212 703,71 23,765 6,586 72,03

41 SEGMENT REPORTING (Continued)

(1) Information of reportable segmental revenues, profits or losses, assets and liabilities (Continued)

	2021	2020
	RMB million	RMB million
Capital expenditure		
Exploration and production	68,148	56,416
Refining	22,469	24,756
Marketing and distribution	21,897	25,403
Chemicals	51,648	28,217
Corporate and others	3,786	2,312
	167,948	137,104
Depreciation, depletion and amortisation		
Exploration and production	52,880	46,273
Refining	20,743	20,090
Marketing and distribution	23,071	23,196
Chemicals	16,093	14,830
Corporate and others	2,893	3,072
	115,680	107,461
Impairment losses on long-lived assets		
Exploration and production	2,467	8,495
Refining	860	1,923
Marketing and distribution	1,211	536
Chemicals	5,332	3,675
Corporate and others	165	_
	10,035	14,629

(2) Geographical information

The following tables set out information about the geographical information of the Group's external sales and the Group's non-current assets, excluding financial instruments and deferred tax assets. In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers, and segment assets are based on the geographical location of the assets.

	2021	2020
	RMB million	RMB million
External sales		
Mainland China	2,166,040	1,720,695
Singapore	278,024	215,846
Others	296,820	168,183
	2,740,884	2,104,724

	31 December	31 December
	2021	2020
	RMB million	RMB million
Non-current assets		
Mainland China	1,268,814	1,216,267
Others	40,551	36,782
	1,309,365	1,253,049

42 PRINCIPAL SUBSIDIARIES

As at 31 December 2021, the following list contains the particulars of subsidiaries which principally affected the results, assets and liabilities of the Group.

			Interests	
	Particulars of	Interests held by the	held by non-controlling	
	issued capital	Company	interests	
Name of company	(million)	%	% %	Principal activities
Sinopec Great Wall Energy & Chemical	RMB22,761	100.00		Coal chemical industry investment
Company Limited	10022,701	100.00		management, production and sale of
······································				coal chemical products
Sinopec Yangzi Petrochemical Company Limited	RMB15,651	100.00	_	Manufacturing of intermediate petrochemical
				products and petroleum products
Sinopec Overseas Investment Holding	USD3,009	100.00	-	Investment holding of overseas business
Limited ("SOIH")				
Sinopec International Petroleum Exploration and	RMB8,250	100.00	-	Investment in exploration, production and
Production Limited ("SIPL")		100.00		sale of petroleum and natural gas
Sinopec Yizheng Chemical Fibre Limited Liability Company	RMB4,000	100.00	-	Production and sale of polyester chips and polyester fibres
Sinopec Lubricant Company Limited	RMB3,374	100.00		Production and sale of refined petroleum
		100100		products, lubricant base oil, and
				petrochemical materials
China International United Petroleum and	RMB5,000	100.00	-	Trading of crude oil and petrochemical
Chemical Company Limited				products
Sinopec Qingdao Petrochemical Company Limited	RMB1,595	100.00	-	Manufacturing of intermediate petrochemical
				products and petroleum products
Sinopec Catalyst Company Limited	RMB1,500	100.00	-	Production and sale of catalyst products
China Petrochemical International Company Limited	RMB1,400	100.00	_	Trading of petrochemical products
Sinopec Chemical Sales Company Limited	RMB1,000	100.00	-	Marketing and distribution of petrochemical products
Sinopec Hainan Refining and Chemical	RMB9,606	100.00	-	Manufacturing of intermediate petrochemical
Company Limited				products and petroleum products
Sinopec Beihai Refining and Chemical Limited	RMB5,294	98.98	1.02	Import and processing of crude oil,
Liability Company				production, storage and sale of petroleum
Zhangka (Quangdang) Definance Potrachamical	DMDC 207	90.30	0.70	products and petrochemical products
ZhongKe (Guangdong) Refinery & Petrochemical Company Limited	RMB6,397	90.30	9.70	Crude oil processing and petroleum products manufacturing
Sinopec Qingdao Refining and Chemical Company	RMB5,000	85.00	15.00	Manufacturing of intermediate petrochemical
Limited	111120,000	00.00	10.00	products and petroleum products
Marketing Company	RMB28,403	70.42	29.58	Marketing and distribution of refined
				petroleum products
Shanghai SECCO	RMB500	67.59	32.41	Production and sale of petrochemical
				products
Sinopec Kantons Holdings Limited	HKD248	60.33	39.67	Provision of crude oil jetty services and
("Sinopec Kantons")	DMD7 100	50.00	41.00	natural gas pipeline transmission services
Sinopec-SK (Wuhan) Petrochemical Company	RMB7,193	59.00	41.00	Production, sale, research and development
Limited ("Sinopec-SK")				of petrochemical products, ethylene and downstream byproducts
Gaogiao Petrochemical Company Limited	RMB10,000	55.00	45.00	Manufacturing of intermediate petrochemical
	100010,000	55.00	40.00	products and petroleum products
Sinopec Baling Petrochemical Co.Ltd.	RMB3,000	55.00	45.00	Crude oil processing and petroleum products
("Baling Petrochemical")	-,			manufacturing
Sinopec Shanghai Petrochemical Company	RMB10,824	50.44	49.56	Manufacturing of synthetic fibres, resin
Limited ("Shanghai Petrochemical")				and plastics, intermediate petrochemical
				products and petroleum products
Fujian Petrochemical Company Limited	RMB10,492	50.00	50.00	Manufacturing of plastics, intermediate
("Fujian Petrochemical") (i)				petrochemical products and petroleum
				products

Except for Sinopec Kantons and SOIH, which are incorporated in Bermuda and Hong Kong SAR respectively, all of the above principal subsidiaries are incorporated and operate their businesses principally in the PRC. All of the above principal subsidiaries are limited companies.

Notes:

(i) The Group consolidated the financial statements of the entity because it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

42 PRINCIPAL SUBSIDIARIES (Continued)

Summarised financial information on subsidiaries with material non-controlling interests

Set out below are the summarised financial information which the amount before inter-company eliminations for each subsidiary that has noncontrolling interests that are material to the Group.

Summarised consolidated statement of financial position

	Marketin	g Company	S	IPL*	Shanghai F	Petrochemical	Fujian Pe	trochemical	Sinope	c Kantons	Shangh	ai SECCO	Sino	pec-SK
	At	At	At	At	At	At	At	At	At	At	At	At	At	At
	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December	31 December					
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million					
Current assets	159,599	172,352	22,759	22,620	20,932	17,305	1,464	1,582	4,761	4,373	6,066	10,431	6,791	3,639
Current liabilities	(193,315)	(201,678)	(1,430)	(475)	(15,796)	(15,232)	(142)	(458)	(196)	(924)	(5,434)	(2,783)	(8,122)	(6,377)
Net current														
(liabilities)/assets	(33,716)	(29,326)	21,329	22,145	5,136	2,073	1,322	1,124	4,565	3,449	632	7,648	(1,331)	(2,738)
Non-current assets	326,437	323,571	8,954	8,951	25,988	27,314	13,208	12,568	8,195	9,106	11,402	12,177	20,650	22,187
Non-current liabilities	(59,604)	(59,554)	(17,823)	(18,270)	(747)	(52)	(700)	(693)	(170)	(170)	(1,418)	(1,553)	(7,512)	(8,509)
Net non-current														
assets/(liabilities)	266,833	264,017	(8,869)	(9,319)	25,241	27,262	12,508	11,875	8,025	8,936	9,984	10,624	13,138	13,678
Net assets	233,117	234,691	12,460	12,826	30,377	29,335	13,830	12,999	12,590	12,385	10,616	18,272	11,807	10,940
Attributable to owners														
of the Company	157,557	159,205	6,341	5,876	15,254	14,727	6,915	6,499	7,579	7,454	7,175	12,352	6,966	6,455
Attributable to														
non-controlling interests	75,560	75,486	6,119	6,950	15,123	14,608	6,915	6,500	5,011	4,931	3,441	5,920	4,841	4,485

Summarised consolidated statement of comprehensive income

Year ended 31 December	Marketin	g Company	SI	PL*	Shanghai P	etrochemical	Fujian Pe	trochemical	Sinope	: Kantons	Shangh	ai SECCO	Sino	pec∙SK
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million					
Revenue	1,408,523	1,099,680	2,166	2,017	89,198	74,624	5,549	4,871	528	1,064	29,723	21,626	50,208	28,702
Profit/(loss) for the year	18,582	22,415	1,429	1,160	2,077	656	951	243	871	2,047	2,817	2,132	1,606	(920)
Total comprehensive														
income	18,439	21,149	1,045	(720)	2,218	645	951	243	677	1,814	2,817	2,132	1,606	(920)
Comprehensive income														
attributable to non-														
controlling interests	6,822	7,205	579	(287)	1,101	325	476	121	268	707	2,390	691	659	(377)
Dividends paid to non-														
controlling interests	7,064	2,766	-	316	541	649	64	150	164	175	1,028	767	-	-

Summarised statement of cash flows

Year ended 31 December	Marketin	g Company	SI	PL*	Shanghai P	etrochemical	Fujian Pe	trochemical	Sinope	: Kantons	Shangh	ai SECCO	Sino	pec•SK
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million					
Net cash generated from/														
(used in) operating														
activities	28,923	54,139	690	281	3,950	1,680	(292)	(244)	133	586	3,447	3,119	5,476	(363)
Net cash generated from/														
(used in) investing														
activities	2,420	(40,010)	15	(2,659)	(2,359)	(3,888)	420	(649)	1,276	3,846	1,534	(4,335)	(1,789)	(2,340)
Net cash (used in)/generated														
from financing activities	(31,081)	(12,402)	(1,172)	1,683	(3,393)	1,682	(142)	882	(1,066)	(1,250)	(7,828)	(2,879)	(653)	2,176
Net increase/(decrease) in														
cash and cash equivalents	262	1,727	(467)	(695)	(1,802)	(526)	(14)	(11)	343	3,182	(2,847)	(4,095)	3,034	(527)
Cash and cash equivalents														
at 1 January	8,642	6,901	7,699	8,833	6,916	7,450	68	79	3,182	117	5,181	9,278	1,066	1,593
Effect of foreign currency														
exchange rate changes	95	14	(164)	(439)	(2)	(8)	-	-	(93)	(117)	(1)	(2)	-	-
Cash and cash equivalents														
at 31 December	8,999	8,642	7,068	7,699	5,112	6,916	54	68	3,432	3,182	2,333	5,181	4,100	1,066

* The non-controlling interests of subsidiaries which the Group holds 100% of equity interests at the end of the year are the non-controlling interests of their subsidiaries.

43 FINANCIAL RISK MANAGEMENT AND FAIR VALUES

Overview

Financial assets of the Group include cash and cash equivalents, time deposits with financial institutions, financial assets at fair value through profit or loss, derivative financial assets, trade accounts receivable, amounts due from Sinopec Group Company and fellow subsidiaries, amounts due from associates and joint ventures, financial assets at FVOCI and other receivables. Financial liabilities of the Group include short-term debts, loans from Sinopec Group Company and fellow subsidiaries, derivative financial liabilities, trade accounts payable and bills payable, amounts due to Sinopec Group Company and fellow subsidiaries, amounts due to associates and joint ventures, other payables, long-term debts and lease liabilities.

The Group has exposure to the following risks from its uses of financial instruments:

- credit risk;
- · liquidity risk; and
- market risk.

The Board of Directors has overall responsibility for the establishment, oversight of the Group's risk management framework, and developing and monitoring the Group's risk management policies.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, and set appropriate risk limits and controls to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management controls and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations. Internal audit department undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Group's audit committee.

Credit risk

(i) Risk management

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's deposits placed with financial institutions (including structured deposits) and receivables from customers. To limit exposure to credit risk relating to deposits, the Group primarily places cash deposits only with large financial institutions in the PRC with acceptable credit ratings. The majority of the Group's trade accounts receivable relate to sales of petroleum and chemical products to related parties and third parties operating in the petroleum and chemical industries. No single customer accounted for greater than 10% of total trade accounts receivable at 31 December 2021, except the amounts due from Sinopec Group Company and fellow subsidiaries. Management performs ongoing credit evaluations of the Group's customers' financial condition and generally does not require collateral on trade accounts receivable. The Group maintains a loss allowance for expected credit losses and actual losses have been within management's expectations.

The carrying amounts of cash and cash equivalents, time deposits with financial institutions, financial assets at fair value through profit or loss, derivative financial assets, trade accounts receivable, financial assets at FVOCI and other receivables, represent the Group's maximum exposure to credit risk in relation to financial assets.

(ii) Impairment of financial assets

The Group's primary type of financial assets that are subject to the expected credit loss model is trade accounts receivable, financial assets at FVOCI and other receivables.

The Group's cash deposits are placed only with large financial institutions with acceptable credit ratings, and there is no material impairment loss identified.

For trade accounts receivable and financial assets at FVOCI, the Group applies the IFRS 9 simplified approach to measuring ECLs which uses a lifetime expected loss allowance for all trade accounts receivable and financial assets at FVOCI.

To measure the ECLs, trade accounts receivable and financial assets at FVOCI have been grouped based on shared credit risk characteristics and the days past due.

The ECLs were calculated based on historical actual credit loss experience. The rates were considered the differences between economic conditions during the period over which the historical data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables. The Group performed the calculation of ECL rates by the operating segment.

Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

The following table provides information about the exposure to credit risk and ECLs for accounts receivable as at December 31, 2021 and 2020.

		Impairment individua		Impairment provision m		
31 December 2021	Gross carrying amount RMB million	Carrying amount RMB million	Impairment provision on individual basis RMB million	Weighted- average loss rate %	Impairment provision RMB million	Loss allowance RMB million
Current and within 1 year past due	34,263	4,280	26	0.2%	57	83
1 to 2 years past due	623	500	137	35.8%	44	181
2 to 3 years past due	3,411	3,324	3,146	50.6%	44	3,190
Over 3 years past due	597	208	190	100.0%	389	579
Total	38,894	8,312	3,499		534	4,033

		Impairment p individua		Impairment p provision ma		
31 December 2020	Gross carrying amount RMB million	Carrying amount RMB million	Impairment provision on individual basis RMB million	Weighted- average loss rate %	Impairment provision RMB million	Loss allowance RMB million
Current and within 1 year past due	34,478	5,023	117	0.0%	-	117
1 to 2 years past due	4,062	3,637	3,024	25.2%	107	3,131
2 to 3 years past due	149	27	18	54.9%	67	85
Over 3 years past due	610	218	182	88.0%	345	527
Total	39,299	8,905	3,341		519	3,860

All of the entity's other receivables are considered to have low credit risk, and the loss allowance recognised during the period was therefore limited to 12 months expected losses. The Group considers there was no significant increase in credit risk for other receivables by taking into account of their past history of making payments when due and current ability to pay, and thus the impairment provision recognised during the period was limited to 12 months expected losses.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation. Management prepares monthly cash flow budget to ensure that the Group will always have sufficient liquidity to meet its financial obligations as they fall due. The Group arranges and negotiates financing with financial institutions and maintains a certain level of standby credit facilities to reduce the Group's liquidity risk.

As at 31 December 2021, the Group has standby credit facilities with several PRC financial institutions which provide borrowings up to RMB441,559 million (2020: RMB443,966 million) on an unsecured basis, at a weighted average interest rate of 2.81% per annum (2020: 2.85%). As at 31 December 2021, the Group's outstanding borrowings under these facilities were RMB11,700 million (2020: RMB4,041 million) and were included in debts.

Liquidity risk (Continued)

The following table sets out the remaining contractual maturities at the date of the statement of financial position of the Group's financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on prevailing rates current at the date of the statement of financial position) and the earliest date the Group would be required to repay:

			31 Decem	ber 2021		
	Carrying amount RMB million	Total contractual undiscounted cash flow RMB million	Within 1 year or on demand RMB million	More than 1 year but less than 2 years RMB million	More than 2 years but less than 5 years RMB million	More than 5 years RMB million
Short-term debts	35,252	35,871	35,871	-	-	-
Long-term debts	78,300	85,718	2,169	49,390	27,518	6,641
Loans from Sinopec Group Company and						
fellow subsidiaries	16,563	18,457	3,174	604	10,712	3,967
Lease liabilities	185,406	296,485	15,833	12,031	35,411	233,210
Derivative financial liabilities	3,223	3,223	3,223	-	-	-
Trade accounts payable and bills payable	215,640	215,640	215,640	-	-	-
Other payables	131,468	131,468	131,468	-	-	-
	665,852	786,862	407,378	62,025	73,641	243,818

			31 Decem	ber 2020		
	Carrying amount RMB million	Total contractual undiscounted cash flow RMB million	Within 1 year or on demand RMB million	More than 1 year but less than 2 years RMB million	More than 2 years but less than 5 years RMB million	More than 5 years RMB million
Short-term debts	23,769	25,280	25,280	-	-	-
Long-term debts	72,037	80,562	1,339	11,753	60,414	7,056
Loans from Sinopec Group Company						
and fellow subsidiaries	17,042	17,978	5,512	929	10,109	1,428
Lease liabilities	187,033	328,501	15,957	15,456	43,513	253,575
Derivative financial liabilities	4,826	4,826	4,826	-	-	-
Trade accounts payable and bills payable	161,908	161,908	161,908	-	-	-
Other payables	94,083	94,083	94,083	-	-	-
	560,698	713,138	308,905	28,138	114,036	262,059

Management believes that the Group's current cash on hand, expected cash flows from operations and available standby credit facilities from financial institutions will be sufficient to meet the Group's short-term and long-term capital requirements.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk.

(a) Currency risk

Currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured.

The Group does not have significant financial instruments that are denominated in foreign currencies other than the functional currencies of respective entities as at 31 December, and consequently does not have significant exposure to foreign currency risk.

(b) Interest rate risk

The Group's interest rate risk exposure arises primarily from its short-term and long-term debts and loans from Sinopec Group Company and fellow subsidiaries. Debts bearing interest at variable rates and at fixed rates expose the Group to cash flow interest rate risk and fair value interest rate risk respectively. The interest rates and terms of repayment of short-term and long-term debts, and loans from Sinopec Group Company and fellow subsidiaries of the Group are disclosed in Note 30.

As at 31 December 2021, it is estimated that a general increase/decrease of 100 basis points in variable interest rates, with all other variables held constant, would decrease/increase the Group's profit for the year by approximately RMB254 million (2020: decrease/increase by approximately RMB245 million). This sensitivity analysis has been determined assuming that the change of interest rates was applied to the Group's debts outstanding at the date of the statement of financial position with exposure to cash flow interest rate risk. The analysis is performed on the same basis for 2020.

(c) Commodity price risk

The Group engages in oil and gas operations and is exposed to commodity price risk related to price volatility of crude oil, refined oil products and chemical products. The fluctuations in prices of crude oil, refined oil products and chemical products could have significant impact on the Group. The Group uses derivative financial instruments, including commodity futures and swaps contracts, to manage a portion of this risk.

Based on the dynamic study and judging of the market, combined with the resource demand and production and operation plan, the Group evaluate and monitor the market risk exposure caused by transaction positions, and continuously manage and hedge the risk of commodity price fluctuation caused by market changes.

As at 31 December 2021, the Group had certain commodity contracts of crude oil, refined oil products and chemical products designated as qualified cash flow hedges and economic hedges. As at 31 December 2021, the fair value of such derivative hedging financial instruments is derivative financial assets of RMB18,359 million (2020: RMB12,353 million) and derivative financial liabilities of RMB3,214 million (2020: RMB4,808 million).

As at 31 December 2021, it is estimated that a general increase/decrease of USD10 per barrel in basic price of derivative financial instruments, with all other variables held constant, would impact the fair value of derivative financial instruments, which would decrease/increase the Group's profit for the year by approximately RMB2,996 million (2020: increase/decrease RMB3,592 million), and decrease/increase the Group's other reserves by approximately RMB1,160 million (2020: increase/decrease RMB10,379 million). This sensitivity analysis has been determined assuming that the change in prices had occurred at the date of the statement of financial position and the change was applied to the Group's derivative financial instruments at that date with exposure to commodity price risk. The analysis is performed on the same basis for 2020.

Fair values

(i) Financial instruments carried at fair value

The following table presents the carrying value of financial instruments measured at fair value at the date of the statement of financial position across the three levels of the fair value hierarchy defined in IFRS 7, 'Financial Instruments: Disclosures', with the fair value of each financial instrument categorised in its entirety based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

- Level 1 (highest level): fair values measured using quoted prices (unadjusted) in active markets for identical financial instruments.
- Level 2: fair values measured using quoted prices in active markets for similar financial instruments, or using valuation techniques in which all significant inputs are directly or indirectly based on observable market data.
- Level 3 (lowest level): fair values measured using valuation techniques in which any significant input is not based on observable market data.

At 31 December 2021

	Level 1 RMB million	Level 2 RMB million	Level 3 RMB million	Total RMB million
Assets				
Derivative financial assets:				
– Derivative financial assets	5,883	12,488	_	18,371
Financial assets at fair value through other comprehensive income:				
– Equity instruments	179	-	588	767
 Trade accounts receivable and bills receivable 	_	-	5,939	5,939
	6,062	12,488	6,527	25,077
Liabilities				
Derivative financial liabilities:				
– Derivative financial liabilities	804	2,419	_	3,223
	804	2,419	-	3,223

At 31 December 2020

	Level 1 RMB million	Level 2 RMB million	Level 3 RMB million	Total RMB million
Assets				
Financial assets at fair value through profit or loss:				
 Equity investments, listed and at quoted market price 	1	-	-	1
Derivative financial assets:				
 Derivative financial assets 	9,628	2,900	-	12,528
Financial assets at fair value through other comprehensive income:				
– Equity instruments	149	-	1,376	1,525
 Trade accounts receivable and bills receivable 	-	-	8,735	8,735
	9,778	2,900	10,111	22,789
Liabilities				
Derivative financial liabilities:				
– Derivative financial liabilities	2,471	2,355	-	4,826
	2,471	2,355	-	4,826

During the years ended 31 December 2021 and 2020, there was no transfer between instruments in Level 1 and Level 2.

Management of the Group uses discounted cash flow model with inputted interest rate and commodity index, which were influenced by historical fluctuation and the probability of market fluctuation, to evaluate the fair value of the structured deposits and trade accounts receivable and bills receivable classified as Level 3 financial assets.

Fair values (Continued)

(ii) Fair values of financial instruments carried at other than fair value

The disclosures of the fair value estimates, and their methods and assumptions of the Group's financial instruments, are made to comply with the requirements of IFRS 7 and IFRS 9 and should be read in conjunction with the Group's consolidated financial statements and related notes. The estimated fair value amounts have been determined by the Group using market information and valuation methodologies considered appropriate. However, considerable judgement is required to interpret market data to develop the estimates of fair value. Accordingly, the estimates presented herein are not necessarily indicative of the amounts the Group could realise in a current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

The fair values of the Group's financial instruments carried at other than fair value (other than long-term indebtedness and investments in unquoted equity securities) approximate their carrying amounts due to the short-term maturity of these instruments. The fair values of long-term indebtedness are estimated by discounting future cash flows using current market interest rates offered to the Group for debt with substantially the same characteristic and maturities range from 0.30% to 4.65% (2020: 0.77% to 4.65%). The following table presents the carrying amount and fair value of the Group's long-term indebtedness other than loans from Sinopec Group Company and fellow subsidiaries at 31 December 2021 and 2020:

	31 December	31 December
	2021	2020
	RMB million	RMB million
Carrying amount	88,593	76,674
Fair value	85,610	74,282

The Group has not developed an internal valuation model necessary to estimate the fair values of loans from Sinopec Group Company and fellow subsidiaries as it is not considered practicable to estimate their fair values because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive based on the Reorganisation of the Group, the Group's existing capital structure and the terms of the borrowings.

Except for the above items, the financial assets and liabilities of the Group are carried at amounts not materially different from their fair values at 31 December 2021 and 2020.

44 ACCOUNTING ESTIMATES AND JUDGEMENTS

The Group's financial condition and results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of the consolidated financial statements. Management bases the assumptions and estimates on historical experience and on various other assumptions that it believes to be reasonable and which form the basis for making judgements about matters that are not readily apparent from other sources. On an ongoing basis, management evaluates its estimates. Actual results may differ from those estimates as facts, circumstances and conditions change.

The selection of critical accounting policies, the judgements and other uncertainties affecting application of such policies and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered when reviewing the consolidated financial statements. The significant accounting policies are set forth in Note 2. Management believes the following critical accounting policies involve the most significant judgements and estimates used in the preparation of the consolidated financial statements.

Oil and gas properties and reserves

The accounting for the exploration and production's oil and gas activities is subject to accounting rules that are unique to the oil and gas industry. There are two methods to account for oil and gas business activities, the successful efforts method and the full cost method. The Group has elected to use the successful efforts method. The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense as they are incurred. These costs primarily include dry hole costs, seismic costs and other exploratory costs. Under the full cost method, these costs are capitalised and written-off or depreciated over time.

Engineering estimates of the Group's oil and gas reserves are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information. There are authoritative guidelines regarding the engineering criteria that have to be met before estimated oil and gas reserves can be designated as "proved". Proved and proved developed reserves estimates are updated at least annually and take into account recent production and technical information about each field. In addition, as prices and cost levels change from year to year, the estimates of proved and proved developed reserves also change. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in relation to depreciation rates. Oil and gas reserves have a direct impact on the assessment of the recoverability of the carrying amounts of oil and gas properties reported in the financial statements. If proved reserves estimates are revised downwards, earnings could be affected by changes in depreciation expense or an immediate write-down of the property's carrying amount.

Future dismantlement costs for oil and gas properties are estimated with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with industry practices in similar geographic area, including estimation of economic life of oil and gas properties, technology and price level. The present values of these estimated future dismantlement costs are capitalised as oil and gas properties with equivalent amounts recognised as provisions for dismantlement costs.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation expense, impairment loss and future dismantlement costs. Capitalised costs of proved oil and gas properties are amortised on a unit-of-production method based on volumes produced and reserves.

44 ACCOUNTING ESTIMATES AND JUDGEMENTS (Continued)

Impairment for long-lived assets

If circumstances indicate that the net book value of a long-lived asset, may not be recoverable, the asset may be considered "impaired", and an impairment loss may be recognised in accordance with IAS 36 "Impairment of Assets". The carrying amounts of long-lived assets are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. These assets are tested for impairment whenever events or changes in circumstances, including environmental protection and energy structure transition variables, indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to recoverable amount. For goodwill, the recoverable amount is estimated annually. The recoverable amount is the greater of the net selling price and the value in use. It is difficult to precisely estimate selling price because quoted market prices for the Group's assets or cash-generating units are not readily available. In determining the value in use, expected cash flows generated by the asset or the cash-generating units are discounted to their present value, which requires significant judgement relating to future selling prices of crude oil, natural gas, refined and chemical products, the production costs, the product mix, production volumes, production profiles, the oil and gas reserves and discount rate. Management uses all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of sale volume, selling price, amount of operating costs and discount rate.

Depreciation

Property, plant and equipment, other than oil and gas properties, are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. Management reviews the estimated useful lives of the assets at least annually in order to determine the amount of depreciation expense to be recorded during any reporting period. The useful lives are based on the Group's historical experience with similar assets and take into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

Measurement of expected credit losses

The Group measures and recognises ECLs using readiness matrix, considering reasonable and supportable information about the relevant past events, current conditions and forecasts of future economic conditions. The Group regularly monitors and reviews the assumptions used for estimating ECLs.

Allowance for diminution in value of inventories

If the costs of inventories become higher than their net realisable values, an allowance for diminution in value of inventories is recognised. Net realisable value represents the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. Management bases the estimates on all available information, including the current market prices of the finished goods and raw materials, and historical operating costs. If the actual selling prices were to be lower or the costs of completion were to be higher than estimated, the actual allowance for diminution in value of inventories could be higher than estimated.

45 PARENT AND ULTIMATE HOLDING COMPANY

The directors consider the parent and ultimate holding company of the Group as at 31 December 2021 is Sinopec Group Company, a state-owned enterprise established in the PRC. This entity does not produce financial statements available for public use.

46 STATEMENT OF FINANCIAL POSITION AND RESERVE MOVEMENT OF THE COMPANY

STATEMENT OF FINANCIAL POSITION OF THE COMPANY (Amounts in million)	Note	31 December 2021 RMB	31 December 2020 RMB
Non-current assets			
Property, plant and equipment, net		284,618	283,691
Construction in progress		66,146	59,880
Right-of-use assets		113,304	115,992
Investment in subsidiaries		269,456	259,087
Interest in associates		73,782	69,508
Interest in joint ventures		17,609	14,761
Financial assets at fair value through other comprehensive income		201	428
Deferred tax assets		8,715	12,661
Long-term prepayments and other assets		38,848	30,855
Total non-current assets		872,679	846,863
Current assets			
Cash and cash equivalents		34,575	28,081
Time deposits with financial institutions		76,116	71,107
Derivative financial assets		4,503	7,776
Trade accounts receivable		21,146	21,763
Financial assets at fair value through other comprehensive income		227	707
Dividends receivable		971	796
Inventories		63,661	39,034
Prepaid expenses and other current assets		73,906	53,816
Total current assets		275,105	223,080
Current liabilities			
Short-term debts		24,387	21,571
Loans from Sinopec Group Company and fellow subsidiaries		867	3,271
Lease liabilities		7,085	7,190
Derivative financial liabilities		1,121	362
Trade accounts payable and bills payable		91,365	71,840
Contract liabilities		7,505	5,840
Other payables		280,560	234,844
Total current liabilities		412,890	344,918
Net current liabilities		137,785	121,838
Total assets less current liabilities		734,894	725,025
Non-current liabilities			
Long-term debts		56,765	49,311
Loans from Sinopec Group Company and fellow subsidiaries		9.015	8.079
Lease liabilities		104,426	105,691
Provisions		35,271	36,089
Other long-term liabilities		3,955	4,472
Total non-current liabilities		209,432	203,642
		525,462	521,383
Equity			,-20
Share capital		121,071	121,071
Reserves	(a)	404,391	400,312
Total equity	(~/	525,462	521,383

46 STATEMENT OF FINANCIAL POSITION AND RESERVE MOVEMENT OF THE COMPANY (Continued)

(a) RESERVES MOVEMENT OF THE COMPANY

The reconciliation between the opening and closing balances of each component of the Group's consolidated reserves is set out in the consolidated statement of changes in equity. Details of the change in the Company's individual component of reserves between the beginning and the end of the year are as follows:

	The Company	
	2021	2020
	RMB million	RMB million
Capital reserve		
Balance at 1 January	9,382	9,247
Others	(1,079)	135
Balance at 31 December	8,303	9,382
Share premium		
Balance at 1 January	55,850	55,850
Balance at 31 December	55,850	55,850
Statutory surplus reserve		
Balance at 1 January	92,280	90,423
Appropriation	3,944	1,857
Balance at 31 December	96,224	92,280
Discretionary surplus reserve		
Balance at 1 January	117,000	117,000
Balance at 31 December	117,000	117,000
Other reserves		
Balance at 1 January	8,881	3,912
Share of other comprehensive income of associates and joint ventures, net of deferred tax	12	(182)
Cash flow hedges, net of deferred tax	102	4,911
Special reserve	469	240
Balance at 31 December	9,464	8,881
Retained earnings		
Balance at 1 January	116,919	131,674
Profit for the year	39,950	18,821
Distribution to owners (Note 14)	(35,110)	(31,479)
Appropriation	(3,944)	(1,857)
Special reserve	(469)	(240)
Others	204	_
Balance at 31 December	117,550	116,919
	404,391	400,312

(C) DIFFERENCES BETWEEN CONSOLIDATED FINANCIAL STATEMENTS PREPARED IN ACCORDANCE WITH THE ACCOUNTING POLICIES COMPLYING WITH CASS AND IFRS (UNAUDITED)

Other than the differences in the classifications of certain financial statements captions and the accounting for the items described below, there are no material differences between the Group's consolidated financial statements prepared in accordance with the accounting policies complying with CASs and IFRS. The reconciliation presented below is included as supplemental information, is not required as part of the basic financial statements and does not include differences related to classification, presentation or disclosures. Such information has not been subject to independent audit or review. The major differences are:

(i) GOVERNMENT GRANTS

Under CASs, grants from the government are credited to capital reserve if required by relevant governmental regulations. Under IFRS, government grants relating to the purchase of fixed assets are recognised as deferred income and are transferred to the income statement over the useful life of these assets.

(ii) SAFETY PRODUCTION FUND

Under CASs, safety production fund should be recognised in profit or loss with a corresponding increase in reserve according to PRC regulations. Such reserve is reduced for expenses incurred for safety production purposes or, when safety production related fixed assets are purchased, is reduced by the purchased cost with a corresponding increase in the accumulated depreciation. Such fixed assets are not depreciated thereafter. Under IFRS, payments are expensed as incurred, or capitalised as fixed assets and depreciated according to applicable depreciation methods.

Effects of major differences between the shareholders' equity under CASs and the total equity under IFRS are analysed as follows:

	Note	31 December	31 December
		2021	2020
		RMB million	RMB million
Shareholders' equity under CASs		916,041	888,720
Adjustments:			
Government grants	(i)	(967)	(1,018)
Total equity under IFRS*		915,074	887,702

Effects of major differences between the net profit under CASs and the profit for the year under IFRS are analysed as follows:

	Note	2021 RMB million	2020 RMB million
Net profit under CASs		85,030	42,097
Adjustments:			
Government grants	(i)	51	52
Safety production fund	(ii)	775	237
Others		(5)	(115)
Profit for the year under IFRS*		85,851	42,271

* The figures are extracted from the consolidated financial statements prepared in accordance with the accounting policies complying with IFRS during the year ended 31 December 2020 and 2021which have been audited by PricewaterhouseCoopers and KPMG, respectively. In accordance with "Accounting Standards Codification (ASC) Topic 932 Extractive Activities – Oil and Gas", issued by the Financial Accounting Standards Board of the United States, "Rule 4-10 of Regulation S-X", issued by Securities and Exchange Commission (SEC), and in accordance with "Industrial Information Disclosure Guidelines for Public Company – No.8 Oil and Gas Exploitation", issued by Shanghai Stock Exchange, this section provides supplemental information on oil and gas exploration and producing activities of the Group and its equity method investments at 31 December 2021 and 2020, and for the years then ended in the following six separate tables. Tables I through III provide historical cost information under IFRS pertaining to capitalised costs related to oil and gas producing activities; costs incurred in oil and gas exploration and development; and results of operation related to oil and gas producing activities. Tables IV through VI present information on the Group's and its equity method investments' estimated net proved reserve quantities; standardised measure of discounted future net cash flows; and changes in the standardised measure of discounted cash flows.

Tables I to VI of supplemental information on oil and gas producing activities set out below represent information of the Company and its consolidated subsidiaries and equity method investments.

Table I: Capitalised costs related to oil and gas producing activities

			2021 RMB million Other			2020 RMB million Other
	Total	China	countries	Total	China	countries
The Group						
Property cost, wells and related equipments						
and facilities	793,045	752,352	40,693	757,592	716,683	40,909
Supporting equipments and facilities	188,766	188,742	24	184,638	184,621	17
Uncompleted wells, equipments and facilities	43,349	43,236	113	37,445	37,439	6
Total capitalised costs	1,025,160	984,330	40,830	979,675	938,743	40,932
Accumulated depreciation, depletion, amortisation						
and impairment losses	(787,623)	(748,705)	(38,918)	(742,195)	(702,829)	(39,366)
Net capitalised costs	237,537	235,625	1,912	237,480	235,914	1,566
Equity method investments						
Share of net capitalised costs of associates and						
joint ventures	3,521	-	3,521	5,843	-	5,843
Total of the Group's and its equity method investments'						
net capitalised costs	241,058	235,625	5,433	243,323	235,914	7,409

Table II: Costs incurred in oil and gas exploration and development

			2021 RMB million Other			2020 RMB million Other
	Total	China	countries	Total	China	countries
The Group						
Exploration	21,762	21,762	_	16,752	16,752	-
Development	46,147	45,590	557	38,241	37,636	605
Total costs incurred	67,909	67,352	557	54,993	54,388	605
Equity method investments						
Share of costs of exploration and development of						
associates and joint ventures	442	-	442	100	-	100
Total of the Group's and its equity method investments'						
exploration and development costs	68,351	67,352	999	55,093	54,388	705

Table III: Results of operations related to oil and gas producing activities

			2021			2020
			RMB million Other			RMB million
	Total	China	countries	Total	China	Other countries
e Group	Total					
Revenues						
Sales	72,953	72,953	-	52,354	52,354	_
Transfers	86,650	84,484	2,166	58,069	56,052	2,017
	159,603	157,437	2,166	110,423	108,406	2,017
Production costs excluding taxes	(49,649)	(48,674)	(975)	(44,595)	(43,487)	(1,108)
Exploration expenses	(12,382)	(12,382)	-	(9,716)	(9,716)	-
Depreciation, depletion, amortisation and						
impairment losses	(54,104)	(53,644)	(460)	(52,608)	(51,754)	(854
Taxes other than income tax	(11,249)	(11,249)	-	(7,379)	(7,379)	_
Profit before taxation	32,219	31,488	731	(3,875)	(3,930)	55
Income tax expense	(8,225)	(7,872)	(353)	188		188
Results of operation from producing activities	23,994	23,616	378	(3,687)	(3,930)	243
ity method investments				• • •	.	
Revenues						
Sales	8,812	-	8,812	4,913	-	4,913
	8,812	-	8,812	4,913	-	4,913
Production costs excluding taxes	(2,246)	-	(2,246)	(998)	-	(998)
Exploration expenses	-	-	-	-	-	-
Depreciation, depletion, amortisation and						
impairment losses	(533)	-	(533)	(940)	-	(940)
Taxes other than income tax	(4,391)	-	(4,391)	(1,930)	-	(1,930)
Profit before taxation	1,642	-	1,642	1,045	-	1,045
Income tax expense	(355)	-	(355)	(303)	_	(303)
Share of profit for producing activities of associates						
and joint ventures	1,287	-	1,287	742	-	742
al of the Group's and its equity method investments'						
esults of operations for producing activities	25,281	23,616	1,665	(2,945)	(3,930)	985

The results of operations for producing activities for the years ended 31 December 2021 and 2020 are shown above. Revenues include sales to unaffiliated parties and transfers (essentially at third-party sales prices) to other segments of the Group. Income taxes are based on statutory tax rates, reflecting allowable deductions and tax credits. General corporate overhead and interest income and expense are excluded from the results of operations.

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Table IV: Reserve quantities information

The Group's and its equity method investments' estimated net proved underground oil and gas reserves and changes thereto for the years ended 31 December 2021 and 2020 are shown in the following table.

Proved oil and gas reserves are those quantities of oil and gas, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulation before contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether the estimate is a deterministic estimate or probabilistic estimate. Due to the inherent uncertainties and the limited nature of reservoir data, estimates of underground reserves are subject to change as additional information becomes available.

Proved developed oil and gas reserves are proved reserves that can be expected to be recovered through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared with the cost of a new well.

"Net" reserves exclude royalties and interests owned by others and reflect contractual arrangements and obligation of rental fee in effect at the time of the estimate.

		2021			2020	
	Other		Other			Other
	Total	China	countries	Total	China	countries
le Group						
Proved developed and undeveloped reserves (oil)						
(million barrels)						
Beginning of year	1,252	1,232	20	1,450	1,433	17
Revisions of previous estimates	194	185	9	(161)	(171)	10
Improved recovery	141	141	-	109	109	-
Extensions and discoveries	101	101	-	111	111	_
Production	(248)	(243)	(5)	(257)	(250)	(7)
End of year	1,440	1,416	24	1,252	1,232	20
Non-controlling interest in proved developed and						
undeveloped reserves at the end of year	8	-	8	5	-	5
Proved developed reserves						
Beginning of year	1,145	1,130	15	1,343	1,326	17
End of year	1,315	1,291	24	1,145	1,130	15
Proved undeveloped reserves						
Beginning of year	107	102	5	107	107	-
End of year	125	125	-	107	102	5
Proved developed and undeveloped reserves (gas)						
(billion cubic feet)						
Beginning of year	8,181	8,181	-	7,216	7,216	_
Revisions of previous estimates	32	32	-	171	171	-
Improved recovery	666	666	-	692	692	-
Extensions and discoveries	678	678	-	1,171	1,171	-
Production	(1,108)	(1,108)	-	(1,069)	(1,069)	-
End of year	8,449	8,449	-	8,181	8,181	-
Proved developed reserves						
Beginning of year	6,357	6,357	-	6,026	6,026	-
End of year	6,734	6,734	-	6,357	6,357	-
Proved undeveloped reserves						
Beginning of year	1,824	1,824	_	1,190	1,190	-
End of year	1,715	1,715	-	1,824	1,824	-

Table IV: Reserve quantities information (Continued)

	2021 Other			2020		
	Total	China	Other countries	Total	China	Other countries
quity method investments						
Proved developed and undeveloped reserves of						
associates and joint ventures (oil) (million barrels)						
Beginning of year	290	-	290	290	-	290
Revisions of previous estimates	8	-	8	13	-	13
Improved recovery	1	_	1	_	_	-
Extensions and discoveries	35	-	35	11	-	11
Production	(25)	_	(25)	(24)	_	(24
End of year	309	_	309	290	-	290
Proved developed reserves						
Beginning of year	244	_	244	245	_	245
End of year	263	_	263	244	-	244
Proved undeveloped reserves						
Beginning of year	46	_	46	45	_	45
End of year	46	-	46	46	-	46
Proved developed and undeveloped reserves of associates and joint ventures (gas) (billion cubic feet)						
Beginning of year	10	-	10	9	-	ç
Revisions of previous estimates	1	-	1	4	-	Ĺ
Improved recovery	-	-	-	-	-	-
Extensions and discoveries	-	-	-	-	-	-
Production	(4)	-	(4)	(3)	-	(3
End of year	7	-	7	10	-	10
Proved developed reserves						
Beginning of year	8	-	8	9	-	ç
End of year	6	-	6	8	-	8
Proved undeveloped reserves						
Beginning of year	2	-	2	-	-	-
End of year	1	-	1	2	-	2
otal of the Group and its equity method investments						
Proved developed and undeveloped reserves (oil) (million barrels)						
Beginning of year	1,542	1,232	310	1,740	1,433	307
End of year	1,749	1,416	333	1,542	1,232	310
Proved developed and undeveloped reserves (gas) (billion cubic feet)						
Beginning of year	8,191	8,181	10	7,225	7,216	ç
End of year	8,456	8,449	7	8,191	8,181	10

Table V: Standardised measure of discounted future net cash flows

The standardized measure of discounted future net cash flows, related to the above proved oil and gas reserves, is calculated in accordance with the requirements of "ASC Topic 932 Extractive Activities – Oil and Gas", "SEC Rule 4-10 of Regulation S-X", and "Industrial Information Disclosure Guidelines for Public Company – No.8 Oil and Gas Exploitation". Estimated future cash inflows from production are computed by applying the average, first-day-of-the-month price adjusted for differential for oil and gas during the twelve-month period before the ending date of the period covered by the report to year-end quantities of estimated net proved reserves. Future price changes are limited to those provided by contractual arrangements in existence at the end of each reporting year. Future development and production costs are those estimated future expenditures necessary to develop and produce year-end estimated proved reserves based on year-end cost indices, assuming continuation of year-end economic conditions. Estimated future income taxes are calculated by applying appropriate year-end statutory tax rates to estimated future pre-tax net cash flows, less the tax basis of related assets. Discounted future net cash flows are calculated using 10% discount factors. This discounting requires a year-by-year estimate of when the future expenditure will be incurred and when the reserves will be produced.

The information provided does not represent management's estimate of the Group's and its equity method investments' expected future cash flows or value of proved oil and gas reserves. Estimates of proved reserve quantities are imprecise and change over time as new information becomes available. Moreover, probable and possible reserves, which may become proved in the future, are excluded from the calculations. The arbitrary valuation requires assumptions as to the timing and amount of future development and production costs. The calculations are made for the years ended 31 December 2021 and 2020 and should not be relied upon as an indication of the Group's and its equity method investments' future cash flows or value of its oil and gas reserves.

	2021 RMB million		2020 (Revised) ^{Note} RMB million			
			Other			Other
	Total	China	countries	Total	China	countries
The Group						
Future cash flows	941,015	930,302	10,713	595,159	589,659	5,500
Future production costs	(413,006)	(407,903)	(5,103)	(275,409)	(271,824)	(3,585)
Future development costs	(79,562)	(77,687)	(1,875)	(80,785)	(77,659)	(3,126)
Future income tax expenses	(113,598)	(111,178)	(2,420)	(11,758)	(10,521)	(1,237)
Undiscounted future net cash flows	334,849	333,534	1,315	227,207	229,655	(2,448)
10% annual discount for estimated timing of cash flows	(93,354)	(93,164)	(190)	(54,158)	(52,706)	(1,452)
Standardised measure of discounted future net cash flows	241,495	240,370	1,125	173,049	176,949	(3,900)
Discounted future net cash flows attributable to						
non-controlling interests	370	-	370	(1,284)	-	(1,284)
Equity method investments						
Future cash flows	49,217	-	49,217	31,259	-	31,259
Future production costs	(18,026)	-	(18,026)	(13,050)	-	(13,050)
Future development costs	(6,328)	-	(6,328)	(5,712)	-	(5,712)
Future income tax expenses	(4,513)	-	(4,513)	(1,740)	-	(1,740)
Undiscounted future net cash flows	20,350	-	20,350	10,757	-	10,757
10% annual discount for estimated timing of cash flows	(10,201)	-	(10,201)	(4,828)	_	(4,828)
Standardised measure of discounted future net cash flows	10,149	-	10,149	5,929	-	5,929
Total of the Group's and its equity method investments' results						
of standardised measure of discounted future net cash flows	251,644	240,370	11,274	178,978	176,949	2,029

Note: Pursuant to Amendments to the XBRL Taxonomy, Accounting Standards Update No. 2010-03 Extractive Activities-Oil and Gas (Topic 932), the Company has revised the future development cost attributable to China for the year ended 31 December 2020 in Table V and Table VI to include future cash flows related to the settlement of asset retirement obligations.

Table VI: Changes in the standardised measure of discounted cash flows

	2021 RMB million	2020 (Revised) RMB million
The Group		
Sales and transfers of oil and gas produced, net of production costs	(98,705)	(58,449)
Net changes in prices and production costs	135,697	(122,641)
Net changes in estimated future development cost	(7,413)	(11,628)
Net changes due to extensions, discoveries and improved recoveries	62,449	44,602
Revisions of previous quantity estimates	26,613	(11,211)
Previously estimated development costs incurred during the year	5,475	6,684
Accretion of discount	16,448	31,940
Net changes in income taxes	(72,118)	19,375
Net changes for the year	68,446	(101,328)
Equity method investments		
Sales and transfers of oil and gas produced, net of production costs	(2,174)	(1,984)
Net changes in prices and production costs	4,967	(5,190)
Net changes in estimated future development cost	(752)	(299)
Net changes due to extensions, discoveries and improved recoveries	1,760	369
Revisions of previous quantity estimates	402	437
Previously estimated development costs incurred during the year	287	232
Accretion of discount	1,022	979
Net changes in income taxes	(1,292)	1,180
Net changes for the year	4,220	(4,276)
Total of the Group's and its equity method investments' results of net changes for the year	72,666	(105,604)

STATUTORY NAME 中国石油化工股份有限公司

ENGLISH NAME China Petroleum & Chemical Corporation

CHINESE ABBREVIATION 中国石化

ENGLISH ABBREVIATION Sinopec Corp.

LEGAL REPRESENTATIVE Mr. Ma Yongsheng

AUTHORISED REPRESENTATIVES

Mr. Yu Baocai Mr. Huang Wensheng

SECRETARY TO THE BOARD Mr. Huang Wensheng

REPRESENTATIVE ON SECURITIES MATTERS Mr. Zhang Zheng

REGISTERED ADDRESS AND PLACE OF BUSINESS

No.22 Chaoyangmen North Street, Chaoyang District Beijing, PRC Postcode : 100728 Tel. : 86-10-59960028 Fax : 86-10-59960386 Website : http://www.sinopec.com E-mail addresses : ir@sinopec.com

REGISTERED ADDRESS CHANGE INFORMATION

No change during the reporting period

PLACE OF BUSINESS IN HONG KONG

20th Floor, Office Tower Convention Plaza 1 Harbour Road Wanchai Hong Kong

CHANGES IN THE PLACES FOR INFORMATION DISCLOSURE AND THE PROVISION OF REPORTS

No change during the reporting period

LEGAL ADVISORS

People's Republic of China: Haiwen & Partners 20th Floor, Fortune Financial Centre No.5, Dong San Huan Central Road Chaoyang District Beijing PRC Postcode: 100020 Hong Kong: Herbert Smith Freehills 23rd Floor, Gloucester Tower 15 Queen's Road Central, Hong Kong

U.S.A.: Skadden, Arps, Slate, Meagher & Flom LLP 30/F, China World Office 2 No.1, Jian Guo Men Wai Avenue, Beijing, PRC

REGISTRARS

A Shares:

China Securities Registration and Clearing Company Limited Shanghai Branch Company 188 Yanggao South Road Shanghai Pilot Free Trade Zone, PRC

H Shares:

Hong Kong Registrars Limited R1712-1716, 17th Floor, Hopewell Centre 183 Queen's Road East Hong Kong

DEPOSITARY FOR ADRS

The US: Citibank, N.A. 388 Greenwich St., 14th Floor New York NY 10013 United States of America

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The UK: Citibank, N.A. Citigroup Centre Canada Square, Canary Wharf London E14 5LB, U.K.

PLACES OF LISTING OF SHARES, STOCK NAMES AND STOCK CODES

A Shares: Shanghai Stock Exchange Stock name : SINOPEC CORP Stock code : 600028

H Shares: Hong Kong Stock Exchange Stock code : 00386

ADRs: New York Stock Exchange Stock code : SNP

London Stock Exchange Stock code : SNP

NAMES AND ADDRESSES OF AUDITORS OF SINOPEC CORP.

Domestic	: KPMG Huazhen LLP
Auditors	Certified Public Accountants in
	China
Address	: 8th Floor
	KPMG Tower
	Oriental Plaza
	1 East Chang An Avenue,
	Beijing, PRC
Postcode	: 100738
Overseas	: KPMG
Auditors	Public Interest Entity
	Auditor registered in accordance
	with the Financial Reporting
	Council Ordinance
Address	: 8th Floor, Prince's Building
	10 Chater Road Central,
	Hong Kong

The Company's 2021 annual report is disclosed on the website of the Shanghai Stock Exchange (http://www.sse.com.cn) and the Company's designated information disclosure media "China Securities News", "Shanghai Securities News" and "Securities Times". The following documents will be available for inspection during normal business hours after 25 March 2022 at the registered address of Sinopec Corp. upon requests by the relevant regulatory authorities and shareholders in accordance with the Articles of Association and the laws and regulations of PRC:

- a) The original copies of the 2021 annual report signed by Mr. Ma Yongsheng, the Chairman;
- b) The original copies of financial statements and consolidated financial statements as of 31 December 2021 prepared under IFRS and CASs, signed by Mr. Ma Yongsheng, the Chairman, Mr. Yu Baocai, the President, Ms. Shou Donghua, the Chief Financial Officer and head of the financial department of Sinopec Corp.;
- c) The original auditors' reports signed by the auditors; and
- d) Copies of the documents and announcements that Sinopec Corp. has published in the newspapers designated by the CSRC during the reporting period.

By Order of the Board **Ma Yongsheng** *Chairman*

Beijing, PRC, 25 March 2022

If there is any inconsistency between the Chinese and English versions of this annual report, the Chinese version shall prevail.

中國北京市朝陽區朝陽門北大街 22 號 22 Chaoyangmen North Street, Chaoyang District, Beijing, China www.sinopec.com

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