



PETROCHINA COMPANY LIMITED
2021 ANNUAL REPORT

(a joint stock limited company incorporated
in the People's Republic of China with limited liability)





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2021 ANNUAL REPORT



PetroChina

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IMPORTANT NOTICE

The Board of Directors (the "Board" or "Board of Directors") of PetroChina Company Limited (the "Company"), the Supervisory Committee and the Directors, Supervisors and senior management of the Company warrant the truthfulness, accuracy and completeness of the information contained in this annual report and that there are no material omissions from, or misrepresentation or misleading statements contained in this annual report, and jointly and severally accept full responsibility thereof.

The 2021 Annual Report has been approved at the fourteenth meeting of the eighth session of the Board in 2021. Mr. Liu Yuezhen, a Non-executive Director, and Mr. Huang Yongzhang, an Executive Director and President, were absent from the fourteenth meeting of the eighth session of the Board due to work arrangement, but had authorized Mr. Jiao Fangzheng, a Non-executive Director and Mr. Ren Lixin, an Executive Director and senior Vice President in writing, respectively, to attend the meeting and exercise the voting rights on their behalf. Mr. Dai Houliang, Chairman of the Company, Mr. Huang Yongzhang, Director and President of the Company, and Mr. Chai Shouping, Chief Financial Officer of the Company, warrant the truthfulness, accuracy and completeness of the financial statements in this annual report. No substantial shareholder of the Company has utilised the funds of the Company for non-operating purposes.

The financial statements of the Company and its subsidiaries (the "Group") have been prepared in accordance with China Accounting Standards ("CAS") and International Financial Reporting Standards ("IFRS"), respectively. The financial statements of the Group for 2021, which have been prepared in accordance with CAS and IFRS, have been audited by PricewaterhouseCoopers Zhong Tian LLP and PricewaterhouseCoopers, respectively. Both firms have issued unqualified opinions on the financial statements.

In overall view of the operating results, financial position and cash flow, to procure return for the shareholders, the fourteenth meeting of the eighth session of the Board recommends a final cash dividend of RMB0.09622 yuan (inclusive of applicable tax) per share for 2021 to all shareholders, based on the total share capital of the Company as at December 31, 2021, namely 183,020,977,818 shares. The total amount of the cash dividend reaches RMB17.61 billion. The proposed final dividend is subject to shareholders' review and approval at the forthcoming 2021 annual general meeting to be held on June 9, 2022.

This annual report contains certain forward-looking statements with respect to the financial position, operational results and business of the Group. These forward-looking statements are, by their names, subject to significant risk and uncertainties because they relate to events and depend on circumstances that may occur in the future and are beyond our control. The forward-looking statements reflect the Group's current views with respect of future events and are not a guarantee of future performance. Actual results may differ from information contained in the forward-looking statements.

CORPORATE PROFILE

The Company was established as a joint stock company with limited liability under the Company Law of the People's Republic of China (the "PRC" or "China") (the "Company Law") on November 5, 1999 as part of the restructuring of China National Petroleum Corporation ("CNPC"). On December 19, 2017, 中國石油天然氣集團公司, the Chinese name of CNPC was changed into 中國石油天然氣集團有限公司 ("CNPC" before and after the change of name).

The Group is the largest oil and gas producer and seller occupying a leading position in the oil and gas industry in the PRC and one of the largest companies in the PRC in terms of revenue and one of the largest oil companies in the world. The Group principally engages in, among others, the exploration, development, transmission, production and sales of crude oil and natural gas; the refining of petroleum and petroleum products; the production and sales of basic and derivative chemical products and other chemical products; the marketing and trading of refined products and non-oil products; and the transmission and sales of natural gas.

The American Depository Shares (the "ADSs"), H shares and A shares of the Company were listed on the New York Stock Exchange, the Stock Exchange of Hong Kong limited ("HKSE" or "Hong Kong Stock Exchange") and Shanghai Stock Exchange on April 6, 2000, April 7, 2000 and November 5, 2007, respectively.

Registered Chinese Name of the Company:	中國石油天然氣股份有限公司
English Name of the Company:	PetroChina Company Limited
Legal Representative of the Company:	Dai Houliang
Secretary to the Board:	Chai Shouping
Address:	No. 9 Dongzhimen North Street Dongcheng District Beijing, PRC
Telephone:	86(10) 5998 2622
Facsimile:	86(10) 6209 9557
Email Address:	zhouyupeng@petrochina.com.cn
Representative on Securities Matters:	Liang Gang
Address:	No. 9 Dongzhimen North Street Dongcheng District Beijing, PRC
Telephone:	86(10) 5998 6959
Facsimile:	86(10) 6209 9559
Email address:	liangg@petrochina.com.cn

Chief Representative of the Hong Kong	
Representative Office:	Wei Fang
Address:	Suite 3705, Tower 2, Lippo Centre 89 Queen's Way, Hong Kong
Telephone:	(852) 2899 2010
Facsimile:	(852) 2899 2390
Email Address:	hko@petrochina.com.hk
Legal Address of the Company:	16 Andelus Dongcheng District Beijing, PRC
Postal Code:	100011
Principal Place of Business:	No. 9 Dongzhimen North Street Dongcheng District Beijing, PRC
Postal Code:	100007
Registered Address of the Company:	16 Andelus Dongcheng District Beijing, PRC
Internet Website:	http://www.petrochina.com.cn
Company's Email Address:	zhouyunpeng@petrochina.com.cn
Newspapers for Information Disclosure:	A shares: China Securities Journal, Shanghai Securities, News and Securities Times and Securities Daily
Internet website publishing this annual report designated by the China Securities Regulatory Commission: http://www.sse.com.cn	
Copies of this annual report are available at:	No. 9 Dongzhimen North Street, Dongcheng District, Beijing, PRC
Places of Listing:	
A shares:	Shanghai Stock Exchange
Stock Name:	PetroChina
Stock Code:	601857
H shares:	Hong Kong Stock Exchange
Stock Name:	PETROCHINA
Stock Code:	857
ADSs:	The New York Stock Exchange
Symbol:	PTR

Other relevant information:

Names and Addresses of Auditors of the Company:

Domestic Auditors:

Name:	PricewaterhouseCoopers Zhong Tian LLP
Address:	11/F, PricewaterhouseCoopers Centre 2 Corporate Avenue 202 Hu Bin Road Huangpu District, Shanghai, PRC
Signing accountants:	Zhao Juan, CPA Li Dan, CPA

Overseas Auditors:

Name:	PricewaterhouseCoopers Public Interest Entity Auditor registered in accordance with the Financial Reporting Council Ordinance
Address:	22/F, Prince's Building Central, Hong Kong, PRC



SUMMARY OF FINANCIAL DATA AND FINANCIAL INDICATORS

1. Key Financial Data Prepared under IFRS

Unit: RMB Million

Items	As at or for the year ended December 31				
	2021	2020	2019	2018	2017
Revenue	2,614,349	1,933,836	2,516,810	2,374,934	2,032,298
Profit from operations	161,153	75,937	121,762	122,942	70,836
Profit before income tax expense	158,203	56,073	103,214	116,770	55,691
Income tax expense	(43,507)	(22,588)	(36,199)	(42,790)	(16,296)
Profit for the year	114,696	33,485	67,015	73,980	39,395
Attributable to:					
Owners of the Company	92,170	19,006	45,682	53,036	23,537
Non-controlling interest	22,526	14,479	21,333	20,944	15,858
Basic and diluted earnings per share attributable to owners of the Company (RMB) ⁽¹⁾	0.50	0.10	0.25	0.29	0.13
Total current assets	480,838	486,767	466,913	438,241	430,294
Total non-current assets	2,021,424	2,001,359	2,265,997	2,002,636	1,983,205
Total assets	2,502,262	2,488,126	2,732,910	2,440,877	2,413,499
Total current liabilities	518,158	605,418	661,419	596,430	588,551
Total non-current liabilities	575,235	516,087	627,186	435,556	446,960
Total liabilities	1,093,393	1,121,505	1,288,605	1,031,986	1,035,511
Equity					
Attributable to:					
Owners of the Company	1,263,561	1,215,158	1,230,156	1,213,783	1,192,572
Non-controlling interest	145,308	151,463	214,149	195,108	185,416
Total equity	1,408,869	1,366,621	1,444,305	1,408,891	1,377,988
Other financial data					
Capital expenditures	251,178	246,493	296,776	256,106	219,346
Net cash flows from operating activities	341,469	318,575	359,610	353,256	368,729
Net cash flows used for investing activities	(213,032)	(181,986)	(332,948)	(267,812)	(243,790)
Net cash flows used for financing activities	(107,971)	(99,400)	(27,276)	(125,703)	(96,746)
Return on net assets (%)	7.3	1.6	3.7	4.4	2.0

Note: (1) As at December 31, 2017, 2018, 2019, 2020 and 2021, respectively, basic and diluted earnings per share were calculated by dividing the net profit attributable to the owners of the Company with the number of issued shares of 183,021 million for each of these financial years.

2. Key Financial Data Prepared under CAS

(1) Key financial data and financial indicators

Items	For the year 2021	For the year 2020	Changes from the preceding year to this year		Unit: RMB million For the year 2019
Operating income	2,614,349	1,933,836		35.2%	2,516,810
Operating profit	182,180	64,783		117,397	115,520
Net profit attributable to equity holders of the Company	92,161	19,002		73,159	45,677
Net profit/(loss) after deducting non-recurring profit/loss items attributable to equity holders of the Company	99,531	(11,991)		111,522	53,485
Net cash flows from operating activities	341,469	318,575		7.2%	359,610
Weighted average returns on net assets (%)	7.4	1.6	5.8 percentage points		3.7
Total share capital at the end of the period (hundred million share)	1,830.21	1,830.21		-	1,830.21
Basic earnings per share (RMB)	0.50	0.10		0.40	0.25
Diluted earnings per share (RMB)	0.50	0.10		0.40	0.25
Items	As at the end of 2021	As at the end of 2020	Changes from the end of the preceding year to the end of this year		As at the end of 2019
Total assets	2,502,533	2,488,400		0.6%	2,733,190
Equity attributable to equity holders of the Company	1,263,815	1,215,421		4.0%	1,230,428

(2) Key financial indicators by quarter

Items	First Quarter 2021	Second Quarter 2021	Third Quarter 2021	Unit: RMB million Fourth Quarter 2021	
Operating income	551,923	644,658	683,760	734,008	
Net profit attributable to equity holders of the Company	27,719	25,317	22,086	17,039	
Net profit after deducting non-recurring profit/loss items attributable to equity holders of the Company	28,011	17,220	23,013	31,287	
Net cash flows (used in)/ generated from operating activities	(1,800)	117,834	110,713	114,722	

(3) Non-recurring profit/loss items

(4) Items to which fair value measurement is applied

Items	Balance at the beginning of the reporting period	Balance at the end of the reporting period	Changes in the reporting period	Amount affecting the profit of the reporting period	Unit: RMB million
Investments recognized in other equity instruments	910	1,176	266	17	

3. Differences between CAS and IFRS

The Group's consolidated net profit for the year under IFRS and CAS were RMB114,696 million and RMB114,687 million respectively, with a difference of RMB9 million; the consolidated shareholders' equity as at the end of the year under IFRS and CAS were RMB1,408,869 million and RMB1,409,124 million respectively, with a difference of RMB255 million. These differences under the different accounting standards were primarily due to the valuation for assets other than fixed assets and oil and gas properties in 1999.

During the restructuring in 1999, a valuation was carried out in 1999 for assets and liabilities injected by CNPC. Valuation results on assets other than fixed assets and oil and gas properties were not recognised in the financial statements prepared under IFRS.

CHANGES IN SHAREHOLDINGS AND INFORMATION ON SHAREHOLDERS

1. Changes in Shareholdings

Unit: Shares

	Pre-movement		Increase/decrease (+/-)					Post-movement	
	Numbers of shares	Percentage (%)	New Issue	Bonus Issue	Conversion from Reserves	Others	Sub-total	Numbers of shares	Percentage (%)
Shares without selling restrictions	183,020,977,818	100.00	-	-	-	-	-	183,020,977,818	100.00
1. RMB-denominated ordinary shares	161,922,077,818	88.47	-	-	-	-	-	161,922,077,818	88.47
2. Shares traded in non-RMB currencies and listed domestically	-	-	-	-	-	-	-	-	-
3. Shares listed overseas	21,098,900,000	11.53	-	-	-	-	-	21,098,900,000	11.53
4. Others	-	-	-	-	-	-	-	-	-

2. Issue and Listing of Securities

(1) Issue of securities in the reporting period

In the reporting period, there was no issue of shares.

For the issuances of bonds, please refer to the section "Relevant Information on Bonds" of this annual report.

(2) Shares held by Employees

During the reporting period, no shares for employees of the Company were in issue.

3. Number of Shareholders and Shareholdings

The number of shareholders of the Company as at December 31, 2021 was 618,008, consisting of 612,015 holders of A shares and 5,993 registered holders of H shares (including 142 holders of the ADSs). The minimum public float requirements of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and Stock Listing Rules of the Shanghai Stock Exchange (the "SSE Listing Rules") are satisfied.

The number of shareholders of the Company as at February 28, 2022 was 634,195, consisting of 628,238 holders of A shares and 5,957 registered holders of H shares (including 142 registered holders of the ADSs).

(1) Shareholdings of the top ten shareholders as at the end of the reporting period

Unit: Shares

Name of shareholders	Nature of shareholders	Percentage of shareholding (%)	Number of shares held	Increase and decrease during the reporting period (+, -)	Number of shares with selling restrictions	Number of shares pledged or subject to lock-ups
CNPC	State-owned legal person	80.25	146,882,339,136 ⁽¹⁾	0	0	0
HKSCC Nominees Limited ⁽²⁾	Overseas legal person	11.42	20,899,426,821 ⁽³⁾	-2,670,879	0	0
CNPC-CSC-17 CNPC E2 Pledge and Trust Special Account	State-owned legal person	2.09	3,819,965,034	-6,036	0	3,819,965,034
CNPC-CSC-17 CNPC EB Pledge and Trust Special Account	State-owned legal person	1.12	2,051,488,354	-249	0	2,051,488,354
China Securities Finance Corporation Limited	State-owned legal person	0.56	1,020,165,128	-118,973,576	0	0
Hong Kong Securities Clearing Company Limited ⁽⁴⁾	Overseas legal person	0.46	840,233,256	261,831,212	0	0
China Metallurgical Group Corporation	State-owned legal person	0.31	560,000,000	0	0	0
Central Huijin Asset Management Ltd.	State-owned legal person	0.11	201,695,000	-4,414,200	0	0
Bosera Fund - Ansteel Group Corporation -Bosera Fund Xin'an No.1 Single Asset Management Plan	State-owned legal person	0.10	182,729,700	-37,270,300	0	0
Huang Changfu	Domestic natural person	0.05	100,000,087	-	0	0

Notes: (1) Such figure excludes the H shares indirectly held by CNPC through Fairy King Investments Limited, an overseas wholly-owned subsidiary of CNPC.

(2) HKSCC Nominees Limited is a wholly-owned subsidiary of the Hong Kong Exchanges and Clearing Limited and it acts as a nominee on behalf of other corporate or individual shareholders to hold the H shares of the Company.

(3) 291,518,000 H shares were indirectly held by CNPC through Fairy King Investments Limited, an overseas wholly-owned subsidiary of CNPC, representing 0.16% of the total share capital of the Company. These shares were held in the name of HKSCC Nominees Limited.

(4) Hong Kong Securities Clearing Company Limited is a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited and acts as the nominee on behalf of investors of Hong Kong Stock Exchange to hold the A shares of the Company listed on Shanghai Stock Exchange.

(2) Shareholdings of top ten shareholders of shares without selling restrictions as at the end of the reporting period

Ranking	Name of shareholders	Number of shares held	Unit: Shares	Types of shares
1	CNPC	146,882,339,136 ⁽¹⁾		A Shares
2	HKSCC Nominees Limited	20,899,426,821		H Shares
3	CNPC-CSC-17 CNPC E2 Pledge and Trust Special Account	3,819,965,034		A Shares
4	CNPC-CSC-17 CNPC EB Pledge and Trust Special Account	2,051,488,354		A Shares
5	China Securities Finance Corporation Limited	1,020,165,128		A Shares
6	Hong Kong Securities Clearing Company	840,233,256		A Shares
7	China Metallurgical Group Corporation	560,000,000		A Shares
8	Central Huijin Asset Management Ltd.	201,695,000		A Shares
9	Bosera Fund - Ansteel Group Corporation - Bosera Fund Xin'an No.1 Single Asset Management Plan	182,729,700		A Shares
10	Huang Changfu	100,000,087		A Shares

Note: (1) Such figure excludes the H shares indirectly held by CNPC through Fairy King Investments Limited, an overseas wholly-owned subsidiary of CNPC, which H shares were held in the name of HKSCC Nominees Limited.

Description on the special repurchase accounts under the above-mentioned shareholders: there is no special repurchase account among the above-mentioned shareholders.

Description on the voting rights entrusted by or to, or waived by the above-mentioned shareholders: the Company is not aware of any voting rights entrusted by or to, or waived by the above-mentioned shareholders.

Statement on related parties or parties acting in concert among the above-mentioned shareholders: Except for the fact that HKSCC Nominees Limited and Hong Kong Securities Clearing Company Limited are wholly-owned subsidiaries of Hong Kong Exchanges and Clearing Limited, the Company is not aware of any connection among or between the above top ten shareholders or that they are parties acting in concert as provided for in the Measures for the Administration of Acquisitions by Listed Companies.

(3) Disclosure of Substantial Shareholders under the Securities and Futures Ordinance of Hong Kong

As at December 31, 2021, so far as the Directors are aware, persons other than a Director, Supervisor or senior management of the Company who had interests or short positions in the shares or underlying shares of the Company which are discloseable under Divisions 2 and 3 of Part XV of the Securities and Futures Ordinance are as follows:



Unit: Shares

Name of shareholders	Nature of share holding	Number of shares	Capacity	Percentage of such shares in the same class of the issued share capital (%)	Percentage of total share capital (%)
CNPC	A Shares	146,882,339,136 (L)	Beneficial Owner	90.71	80.25
	H Shares	291,518,000 (L) ⁽¹⁾	Interest of Corporation Controlled by the Substantial Shareholder	1.38	0.16
The Bank of New York Mellon Corporation ⁽²⁾	H Shares	1,267,777,801(L)	Interest of Corporation	6.01	0.69
		892,090,100 (S)	Controlled by the Substantial Shareholder /Approved Lending Agent	4.23	0.49
		345,286,695 (LP)		1.64	0.19
BlackRock, Inc. ⁽³⁾	H Shares	1,238,578,552 (L)	Interest of Corporation	5.87	0.68
		188,000(S)	Controlled by the Substantial Shareholder	0.00	0.00

(L) Long position (S) Short position (LP) Lending pool

Notes: (1) 291,518,000 H shares (long position) were held by Fairy King Investments Limited, an overseas wholly-owned subsidiary of CNPC. CNPC is deemed to be interested in the H shares held by Fairy King Investments Limited.

(2) The Bank of New York Mellon Corporation, through various subsidiaries, had an interest in the H shares of the Company, of which 1,267,777,801 H shares (long position) and 892,090,100 H shares (short position) were held in its capacity as interest of corporation controlled by the substantial shareholder, and 345,286,695 H shares (lending pool) were held in its capacity as approved lending agent.

(3) Blackrock, Inc., through various subsidiaries, had an interest in the H shares of the Company, of which 1,238,578,552 H shares (long position) and 188,000 H shares (short position) were held in its capacity as interest of corporation controlled by the substantial shareholder.

As at December 31, 2021, so far as the Directors are aware, save as disclosed above, no person (other than a Director, Supervisor or senior management of the Company) had an interest in the shares of the Company according to the register of interests in shares and short positions kept by the Company pursuant to Section 336 of the Securities and Futures Ordinance.

4. Information on Controlling Shareholder and the Ultimate Controller

There was no change in the controlling shareholder or the ultimate controller during the reporting period.

(1) Controlling shareholder

The controlling shareholder of the Company is CNPC which was established in July 1998. CNPC is a petroleum and petrochemical conglomerate that was formed in the wake of the restructuring launched by the State Council to restructure the predecessor of CNPC, China National Petroleum Company (中國石油天然氣總公司). CNPC is also a state-authorised

investment corporation and state-owned enterprise. Its legal representative is Mr. Dai Houliang. CNPC is an integrated energy corporation with businesses covering oil and gas exploration and development, refining and petrochemical, oil product marketing, oil and gas storage and transportation, oil trading, engineering and technical services and petroleum equipment manufacturing.

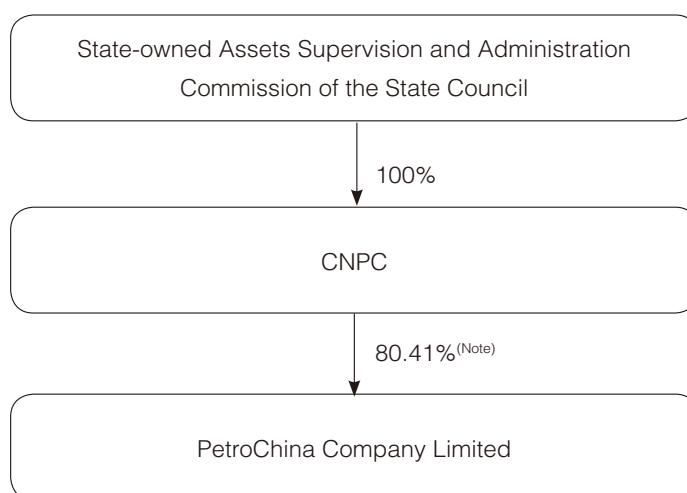
In 2021, CNPC was committed to building itself into a globally first-class integrated energy corporation with truly international standards. It earnestly observed its requirements for high-quality development, fully implement its strategies, namely, innovation, resources, markets, internationalisation, green and low carbon. CNPC made great efforts on the prevention and control of the epidemic and the resumption of work and production, optimised the production and operation, deepened reform and innovation, strengthened risk prevention and control, and further enhanced the quality and profitability. As a result of these efforts, CNPC delivered a steady production and operation under control.

(2) Except for CNPC, no other legal person holds 10% or more of the shares in the Company (excluding HKSCC Nominees Limited).

(3) Ultimate controller

State-owned Assets Supervision and Administration Commission of the State Council is the ultimate controller of the Company.

(4) Ownership and controlling relationship between the Company and the ultimate controller



Note: Such figure includes the 291,518,000 H shares held by CNPC through its overseas wholly-owned subsidiary, Fairy King Investments Limited.



Dai Houliang Chairman

CHAIRMAN'S REPORT

Dear Shareholders,

I am pleased to submit to you the annual report of the Company for the year ended December 31, 2021 for your review.

Despite the continued economic recovery throughout the world during the year of 2021, there was divergence in the development trend of different economies due to the impact from the fluctuating cases in the prevention and control of the Coronavirus Disease 2019 (the “COVID-19”) and the differences between economic policies. There was a stable recovery of the demand in the international crude oil market. The international crude oil prices continued to rebound. The macro-economy of China has been improving and developing on a continued basis. The gross domestic product (GDP) of the year in China increased by 8.1% year-on-year. The demand in refined oil market gradually recovered, basically back to the pre-COVID-19 levels. The demand in the natural gas market continued to grow at a rapid pace.

Taking advantage of the rise in the oil price in the international market, the continued and stable recovery of China's economy, vigorous demand in oil and gas market and other favourable opportunities, the Group earnestly implemented requirements on high-quality development, coordinated the advancement of, among various other work, production and operation, green and low-carbon transformation, reform

and innovation, quality and profitability enhancement, safety and environmental protection and epidemic prevention. The operation of the oil and gas business, the two industry chains, was stable with profits. The management of ESG issues continued to improve. The operating results in 2021 were the best among the last 7 years. In 2021, the Group achieved a revenue of RMB2,614,349 million, representing an increase of 35.2% as compared with last year, and the net profit attributable to equity holders of the Company was RMB92,170 million, representing an increase by RMB73,164 million as compared with last year. The structure of asset and liability was further optimized, and the financial position of the Group continued to be stable and healthy. The Group maintained robust cash flow, with free cash flow seeing a year-on-year increase of 13.8%.

In 2022, the global economy is expected to continue to recover but at a lower growth pace. Affected by the changing situation in terms of the supply of and demand for oil and gas, geopolitical turmoil and other factors, international oil and gas prices are expected to remain at high-end, while fluctuating in a wider range and more frequently. The fundamentals for the long-term improvement of Chinese economy will remain unchanged, and the natural gas market under the low-carbon strategy will maintain a relatively rapid growth. Facing various opportunities and challenges, the Group will adhere to new development concept, actively integrate itself into the new development landscape and implement the requirements for high-quality development by vigorously carrying out the five development strategies of innovation, resources, market, internationalization, green and low-carbon. The Group will endeavour to develop its principal businesses, strengthen enterprise management, carry out reform and innovation, improve quality and enhance profitability, promote green transformation, digital transformation and risk prevention, and strive to create value for shareholders.

In terms of Exploration and Production Business, the Group will adhere to high-profitability exploration, continue to stabilize oil and increase gas, increase risk exploration efforts in key areas, and strengthen the concentrated exploration activities in reserve-increasing areas such as Ordos Mesozoic conventional oil, Songliao Gulong shale oil, Tarim Bozi-Dabei and the northern slope of the central Sichuan paleo-uplift conventional gas. We also focus on exploration in Shawan New Formation of Mahu Lake Junggar, Sichuan Qixia-Maokou and other strategic replacement areas, and strive to achieve strategic discoveries and breakthroughs. The Group will strive to improve the reserve replacement rate. It will adhere to profitable development, strive to control the decline rate, improve the recovery rate, focus on optimizing the production capacity structure and layout, and build capacity on a centralized and profitability-focused basis, and construct in a high-quality manner for key capacity projects such as Mahu, Fuman, Hetao, and Sulige, striving to realise the steady increase of crude oil production and rapid increase of natural gas production. The Group will promote the construction of shale oil demonstration zones such as Qingcheng, Jimsar, and Gulong with high standards, and make every effort to organise the large-scale and stable production of shale gas in southern Sichuan. In 2022, we plan to reach the crude oil output of 898.6 million barrels and the marketable natural gas output of 4,625.1 billion cubic feet, with a total oil and natural gas equivalent output of 1,669.7 million barrels.

In terms of Refining and Chemicals Business, the Group will keep up with the change in market demands, continue to promote transformation and upgrading, coordinate to optimize resource allocation and operation organisation, flexibly control the diesel-to-gasoline ratio, promote the production increase and mutual supply of raw material for chemical, and strive to maintain high-load operation of chemical plants. The Group will increase the production and sales of high-profitability refined products, specialty products and marketable chemical products with high added value. The Group will strengthen production control and benchmarking management, keep operating on a low inventory basis, organise



enterprise maintenance to avoid peak production, strive to realise that the equipment can operate on a stable, long lasting and optimal basis, and the primary technical and economic indicators will continue to improve. The Group will actively promote the new material business, build high-end carbon material devices, deepen joint-venture-based cooperation in polycarbon and polyoxymethylene, and strive to increase the output of new materials. The Group will improve the marketing network for chemicals, actively expand overseas markets, promote the “basic + high-end” brand building, make good use of the “PetroChina e-Chemical” platform, and promote the increase in both sales volume and profit. The Group will focus on the construction of key projects. We will complete and put into operation Guangdong Petrochemical, start the construction of Jilin and Guangxi ethylene projects, accelerate the progress of the Tarim Phase II ethylene project and the preliminary work of the four ethylene transformation projects in Sichuan, Daqing, Fushun and Lanzhou. In 2022, we plan to reach the processing volume of crude oil of 1,269.4 million barrels.

In terms of Marketing Business, the Group will keep focusing on market changes, strengthen the efforts of marketing, expand the sales and improve the profitability. The Group will strengthen oil price forecast and closely monitor oil-consumption industries. The Group will strive to increase market share by keeping an eye on various new demand and enhancing customer development efforts. It will develop differentiated marketing strategies by industry, region and product, systematically promote the renovation and upgrading of existing gas stations, accelerate the improvement of integrated operation mechanisms such as “retail + wholesale and direct sales” and “sales + service”, and strive to increase sales. The Group will flexibly use asset-light methods such as joint ventures, franchises, and leases extension to develop refuelling stations for oil and gas, control the development of conventional stations, especially outside-district and high-priced stations, and speed up the construction of new energy stations such as photovoltaic stations, charging and swapping stations, and hydrogen fuelling stations (comprehensive energy service stations). The Group will promote the construction of gas station management 3.0 system and create a digital and intelligent marketing and service platform. It will innovate the business model of non-oil business, speed up the construction of e-commerce platform, strengthen the marketing of convenience stores and cross-border marketing, and strive to improve the sales revenue and gross profit of a single store. The Group will also carefully organise international trade, increase the development of high-end and high-profitability markets and cross-region markets, and improve the export profitability of refined oil and chemical products.

In terms of Natural Gas and Pipeline Business, the Group will optimize the resources and markets, and continue to maintain the advantage position in competition. The Group will selectively develop high-quality projects, deploy potential projects in advance and strengthen market development in different provinces and optimize the distribution of resources, so as to increase the share in high-profitability market and the share in the end-customer market. The Group will vigorously implement refined marketing, classify customers on a precise basis, improve customer service system, optimize resource structure according to the principle of profitability, reduce procurement costs, optimize sales flow, pipeline transportation routes and facility utilization, and allocate more resources to high-profitability market and new industrial areas, chemical parks, new districts in cities and other areas. The Group will improve the market trading system, promote market reform of natural gas prices, flexibly optimize price strategies and online transactions, and promote the decrease in marketing costs and the increase in resource value. The Group will conduct market changes scientifically, explore a specialized contract mechanism including both long-term and short-term contracts and improve marketing management.

In terms of International Business, the Group will continue to optimize the structure of overseas assets, business structure and regional layout, and continue to improve the profitability of investment. It will strengthen fine exploration in mature exploration areas, expand the discovery scale of new areas, and confirm the reserves of more large-scale oil and gas fields of high quality. It will actively promote the construction of key projects, solidly develop new projects in high-profitability core areas overseas, optimize existing assets to a greater extent, carry out on a satisfactory basis the closing and follow-up operation of the Rumaila project. The Group will arrange the extension of high-quality projects and the transfer of rights and interests of newly discovered projects, so as to achieve the optimal allocation of assets and continuous improvement of investment returns.

In terms of green and low-carbon transformation, the Group will comprehensively promote clean production, strengthen the dual control of energy consumption intensity and total volume, highlight the treatment of volatile organic compounds and methane emissions, and achieve synergy between energy saving, pollution reduction and carbon reduction. The Group will promote the construction of new energy bases in "desert, gobi, wasteland" with the integration of wind, solar, gas and storage, accelerate the development of geothermal resources in Beijing, Tianjin, Hebei, Shandong and other areas, and make efforts to provide clean and low-carbon energy.



Dai Houliang
Chairman
Beijing, the PRC
March 31, 2022



BUSINESS REVIEW

1. Market Review

(1) Crude Oil Market

In 2021, as demand for oil in global market gradually recovered and inventories decreased significantly, the supply-and-demand fundamentals in the market continued to improve. Supported by the abundant global liquidity and the larger-than-expected boost by European energy crisis by the end of this year, oil price in the international market had a sharp rise as compared with last year. The annual average spot price of North Sea Brent crude oil was US\$70.91 per barrel, representing an increase of 69.7% as compared with last year. The annual average spot price of the West Texas Intermediate ("WTI") crude oil was US\$68.12 per barrel, representing an increase of 73.4% as compared with last year.

Statistics from the National Development and Reform Commission (the "NDRC") showed that the domestic output of crude oil was 198.98 million tons in 2021, representing an increase of 2.4% as compared with last year.

(2) Refined Products Market

In 2021, the domestic macro-economy remained stable with good momentum for growth, which helped the gradual recovery of demand for refined oil. Together with the stable supply of refined oil in domestic market, the oversupply situation eased. Export quota of refined oil contracted by 36% with net exports of refined oil declining for the first time in the last decade.

Statistics from NDRC and National Bureau of Statistics of China showed that in 2021, 703.55 million tons of crude oil were processed, representing an increase of 4.3% as compared with last year; the apparent consumption of refined oil was 341.48 million tons, representing an increase of 3.2% as compared with last year, among which that of gasoline and diesel oil had an increase of 5.7% and 0.5%, respectively, as compared with last year, respectively. The price trend of domestic refined oil remained basically the same as that of oil price in the international market. The PRC adjusted the domestic prices of gasoline and diesel 21 times. The price of gasoline standard product and that of diesel standard product by RMB1,485 yuan per ton and RMB1,430 yuan per ton accumulatively.

(3) Chemical Products Market

In 2021, the price of the global energy and commodities soared significantly, which led the price of the domestic chemical market to rise as a whole; by the end of the year, as the prices of principal products, such as polyolefins, fell, the profit margin narrowed. The operation of the chemical products market improved generally, and the demand of new materials and new technologies promoted the transformation and upgrading of the industry.

(4) Natural Gas Market

In 2021, affected by the recovery of economy, the control of epidemic and the recovery of oil prices and other factors, the demand for natural gas in the global market recovered strongly. As a result, supply and demand of

natural gas market showed regional structural strain. The price of the natural gas remained at the high end. Under the effect of macro-economy, environmental policies, and the strategy of "dual carbon", the domestic demand of natural gas maintained rapid growth.

Statistics from NDRC showed that in 2021, the output of domestic natural gas was 205.3 billion cubic meters, representing an increase of 8.2% as compared with last year, the import volume of natural gas was 121.36 million tons, representing an increase of 19.9% as compared with last year, and the apparent consumption was 372.6 billion cubic meters, representing an increase of 12.7% as compared with last year.

2. Business Review

(1) Exploration and Production

Domestic Exploration and Development

In 2021, the Group adhered to innovation-driven development in the domestic exploration and development business, vigorously enhanced the exploration and development of oil and gas, and spared no efforts to promote profitable exploration and increase oil and gas reserves and output. We achieved multiple breakthroughs and important discoveries in Ordos, Tarim, Junggar, Sichuan and other key basins, implemented various large-scale reserve areas, thereby significantly improving the reserve replacement rate. We deeply promoted the stable output in the existing





oil and gas fields as well as profitable capacity construction in new fields. We continued to maintain the stable output of oil while increasing that of natural gas, as a result of which the proportion of the natural gas output continuously rose. In 2021, the domestic business achieved a crude oil output of 753.4 million barrels, representing an increase of 1.3% as compared with last year, the marketable natural gas output of 4,222.2 billion cubic feet, representing an increase of 5.7% as compared with last year, and the oil and natural gas equivalent output of 1,457.4 million barrels, representing an increase of 3.4% as compared with last year.

We actively developed new energy business, established the Shenzhen Institute for New Energy Research, actively promoted the development of new energy and new industry-related projects and continued to improve the development and utilization capacity of new energy. The Yumen photovoltaic power generation project with 200,000 KW was completed and put into operation, a breakthrough which marked the start of external clean electricity supply. The Beijing-Tianjin-Hebei geothermal heating demonstration base, and a batch of wind and photovoltaic power generation projects and CCUS projects in Jilin and Daqing progressed steadily.

Overseas Oil and Gas

In 2021, the Group's overseas oil and gas business developed steadily. Important discoveries have been made in various projects such as Niger and Chad. The exploitation of oil and gas was promoted in an orderly manner. Newly-built projects such as PSA in Chad were put into production, and partial interests in Rumaila project

was obtained. A number of low profitability projects were transferred and disposed. As a result, the structure of overseas oil and gas assets was continuously optimized. In 2021, the crude oil output from overseas operations amounted to 134.5 million barrels, representing a decrease of 24.4% as compared with last year, the output of marketable natural gas was 197.8 billion cubic feet, representing a decrease of 12.9% as compared with last year; and the output of oil and gas equivalent was 167.4 million barrels, representing a decrease of 22.4% as compared with last year, accounting for 10.3% of the total oil and natural gas equivalent output of the Group. The large decrease in overseas oil and gas production was mainly due to the impact of increase in international oil prices, the decrease in product sharing of certain overseas projects and the production restriction policies in some resource-rich countries.

In 2021, the Group's crude oil output amounted to 887.9 million barrels, representing a decrease of 3.7% as compared with last year. The marketable natural gas output reached 4,420.0 billion cubic feet, representing an increase of 4.7% as compared with last year. The oil and natural gas equivalent output amounted to 1,624.8 million barrels, generally the same with that in last year. As at the end of the reporting period, the total area to which the Group had the right of prospecting and mining of oil and natural gas (including coalbed methane) amounted to 263.4 million acres, among which the area of prospecting was 227.0 million acres and the area of mining was 36.4 million acres. The net number of wells in the process of being drilled was 615. The number of multi-completed wells during the reporting period was 7,172.

Summary of Operations of the Exploration and Production Segment

	Unit	2021	2020	Year-on-year change (%)
Crude oil output	Million barrels	887.9	921.8	(3.7)
of which: domestic	Million barrels	753.4	743.8	1.3
overseas	Million barrels	134.5	178.0	(24.4)
Marketable natural gas output	Billion cubic feet	4,420.0	4,221.0	4.7
of which: domestic	Billion cubic feet	4,222.2	3,993.8	5.7
overseas	Billion cubic feet	197.8	227.2	(12.9)
Oil and natural gas equivalent output	Million barrels	1,624.8	1,625.5	-
of which: domestic	Million barrels	1,457.4	1,409.7	3.4
overseas	Million barrels	167.4	215.8	(22.4)
Proved reserves of crude oil	Million barrels	6,064	5,206	16.5
Proved reserves of natural gas	Billion cubic feet	74,916	76,437	(2.0)
Proved developed reserves of crude oil	Million barrels	5,375	4,654	15.5
Proved developed reserves of natural gas	Billion cubic feet	42,576	42,077	1.2

Note: Figures have been converted at the rate of 1 ton of crude oil = 7.389 barrels and 1 cubic metre of natural gas = 35.315 cubic feet.

(2) Refining and Chemicals

In 2021, the Group's refining business adhered to market orientation; production and sales activities were closely connected. The Company actively promoted the reduction of refined business and increase in chemical business, further reduced the yield of refined oil, and continued to optimize the structure of refining products. The diesel-gasoline production ratio dropped to 0.98, and the output of aviation kerosene, lube base oil and paraffin was greatly increased. The Company continuously optimized the allocation of resources and insisted on allocating more crude oil resources to enterprises with good profitability. In 2021, the Group processed 1,225.0 million barrels of crude oil, representing an increase of 4.0% as compared with last year. Among that, 684.0 million barrels of crude oil were from the Group's exploration and production segment, accounting for 55.8%, which showed good synergic effects. In 2021, the Group produced 108.712 million tons of refined oil, representing an increase of 1.6% as compared with last year.

The chemical business, by closely monitoring market demand and price changes and forecasting market trends, maintained high-load operation of its chemical plants, and increased production and sales of high-value-added chemical products when appropriate. The Company actively promoted the new material business, established the Shanghai Institute for New Materials, strengthened scientific and technological innovation, launched a number of technological research and actively carried out R&D of new chemical products and new materials. The Group also proactively changed the operation philosophy, developed marketing strategies for chemical products on a region-by-region basis, promoted the online operation of "PetroChina e-Chemical", actively expanded high-end market and end-customer channel of chemical products. In 2021, the volume of chemical products of the Group increased by 6.7% as compared with last year. The output of products, such as ethylene, synthetic resin, synthetic rubber and urea, increased to some extent as compared with last year. The output of functional synthetic resin,



high-performance synthetic rubber, special fibers, high-end carbon materials and other new materials increased significantly.

The Changqing and Tarim ethane-to-ethylene projects were completed and put into operation, and the construction of Guangdong Petrochemical and other key projects was accelerated.

Summary of Production of the Refining and Chemicals Segment

	Unit	2021	2020	Year-on-year change (%)
Processed crude oil	Million barrels	1,225.0	1,177.5	4.0
Gasoline, kerosene and diesel output	'000 tons	108,712	107,042	1.6
of which: Gasoline	'000 tons	49,388	46,280	6.7
Kerosene	'000 tons	11,079	10,043	10.3
Diesel	'000 tons	48,245	50,719	(4.9)
Crude oil processing load	%	82.5	79.9	2.6 percentage points
Light products yield	%	77.0	78.4	(1.4) percentage points
Refining yield	%	93.9	93.5	0.4 percentage point
Ethylene	'000 tons	6,713	6,345	5.8
Synthetic Resin	'000 tons	10,903	10,287	6.0
Synthetic fibre materials and polymers	'000 tons	1,146	1,278	(10.3)
Synthetic rubber	'000 tons	1,044	1,001	4.3
Urea	'000 tons	2,422	2,163	12.0

Note: Figures have been converted at the rate of 1 ton of crude oil = 7.389 barrels.

(3) Marketing

Domestic Operations

In 2021, the Group's marketing business enhanced the efforts of marketing, and made every effort to expand the sales and improve the profitability based on ensuring the smooth operation of the industrial chains. It actively innovated the business model, accelerated the promotion and application of direct wholesale APP, flexibly adjusted gasoline and diesel marketing strategies, put into use the first batch of commercial intelligent fuelling robots and continued to improve the quality and efficiency of retailing business. The Group strengthened the development

of gas stations in markets where it has an advantage with high profitability. The number of gas stations in operation reached 22,800. Development of new energy business was accelerated, with the first integrated service demonstration station for oil, gas, hydrogen, electricity and non-oil business completed and put into operation in Beijing. Furthermore, a number of hydrogen refuelling stations, battery-swap stations and photovoltaic stations were put into operation. The Group intensified integration and mutual market promotion of oil and non-oil businesses, promoted the marketing of its own commodities, poverty alleviation commodities and specialty commodities, and the gross profit of non-oil business increased significantly as compared with last year.

International Trading Operations

In 2021, the international trading business of the Group focused on domestic and overseas resources and markets, deepened global integration and cooperation, optimized supply chain management, strengthened sales of oil and gas, optimized the pace of refined oil exports, and expanded overseas markets for refining

and chemical products.

In 2021, the sales volume of gasoline, kerosene and diesel of the Group achieved a total of 163.307 million tons, representing an increase of 1.3% as compared with last year, of which the domestic sales of gasoline, kerosene and diesel were 112.493 million tons, representing an increase of 6.2% as compared with last year.

Summary of Operations of the Marketing Segment

	Unit	2021	2020	Year-on-year change (%)
Sales volume of gasoline, kerosene and diesel	'000 tons	163,307	161,230	1.3
of which: Gasoline	'000 tons	65,981	66,084	(0.2)
Kerosene	'000 tons	15,598	14,350	8.7
Diesel	'000 tons	81,728	80,796	1.2
Domestic sales volume of gasoline, kerosene and diesel	'000 tons	112,493	105,896	6.2
of which: Gasoline	'000 tons	52,626	49,188	7.0
Kerosene	'000 tons	9,005	8,331	8.1
Diesel	'000 tons	50,862	48,377	5.1
Market share in domestic retail market	%	35.3	35.9	(0.6) percentage point
Sales volume per service station	Tons/day	8.05	8.48	(5.1)

	Unit	December 31, 2021	December 31, 2020	Year-on-year change (%)
Number of service stations	Units	22,800	22,619	0.8
among which: owned service stations	Units	20,734	21,042	(1.5)
Number of convenience stores	Units	20,178	20,212	(0.2)

(4) Natural Gas and Pipeline

In 2021, the Group's natural gas and pipeline business, seizing the favourable opportunities of recovery of the demand in markets, vigorously developed wholesale and retail markets as well as direct supply and sales customers, strengthened oil and gas mixing, gas-electricity integration and integration of gas-electricity and new energy, and actively carried out online bidding transactions. The Group continued to optimize the structure of the gas resources, and effectively ensured the safe and stable supply of natural gas. The construction of key projects was promoted in an orderly manner. The Tangshan LNG emergency peak management and guarantee project, the third phase of the Jiangsu LNG

terminal stations and related branch pipelines were completed and put into operation.

In 2021, the Group sold 273.974 billion cubic metres of natural gas, representing an increase of 10.1% as compared with the same period last year. Among that, 194.591 billion cubic metres were sold in domestic market, representing an increase of 12.7% as compared with the same period last year. By the end of 2021, the Group's domestic oil and gas pipelines measured a total length of 26,076 km, consisting of 17,329 km of natural gas pipelines, 7,340 km of crude oil pipelines and 1,407 km of refined oil pipelines.



Huang Yongzhang an Executive Director and President

DISCUSSION AND ANALYSIS OF OPERATIONS

The following discussion and analysis should be read in conjunction with the audited financial statements of the Group and the notes set out thereto in the Annual Report and other sections thereof.

1. The financial data set out below is extracted from the audited financial statements of the Group prepared under IFRS.

(1) Consolidated Operating Results

In 2021, the Group achieved a revenue of RMB2,614,349 million, representing an increase of 35.2% as compared with last year. Net profit attributable to equity holders of the Company was RMB92,170 million, representing an increase of 385.0% as compared with last year. Basic earnings per share were RMB0.50 yuan, representing an increase of RMB0.40 yuan as compared with last year.

Revenue The revenue of the Group was RMB2,614,349 million for 2021, representing an increase of 35.2% as compared with last year. This was primarily due to the increase in the sales volume, the sharp rise in selling prices of most of the oil and gas products of the Group, and the outstanding work results of quality and profitability enhancement. The table below sets out external sales volume and average realised prices for major products sold by the Group in 2021 and 2020 and their respective percentage of change:



	Sales Volume ('000 ton)			Average Realised Price (RMB/ton)		
	2021	2020	Percentage of Change (%)	2021	2020	Percentage of Change (%)
Crude oil*	158,342	158,266	Generally even	3,198	2,070	54.5
Natural gas (hundred million cubic metres, RMB/'000 cubic metre)**	2,739.74	2,487.45	10.1	1,729	1,170	47.8
Gasoline	65,981	66,084	(0.2)	7,018	5,561	26.2
Diesel	81,728	80,796	1.2	5,395	4,221	27.8
Kerosene	15,598	14,350	8.7	3,661	2,652	38.0
Polyethylene	5,808	5,659	2.6	7,835	6,725	16.5
Polypropylene	4,272	4,200	1.7	7,830	7,002	11.8
Lubricant	1,565	1,404	11.5	6,858	6,426	6.7

*The crude oil listed above represents all the external sales volume of crude oil of the Group.

** The natural gas listed above represents all the external sales volume of natural gas of the Group. The large increase in average realised prices was mainly due to a significant increase in overseas re-export trade prices. The domestic sales price of natural gas increased by 6.5% as compared with last year.

Operating Expenses Operating expenses for 2021 was RMB2,453,196 million, representing an increase of 32.0% as compared with last year, of which:

Purchases, Services and Other Purchases, services and other for 2021 was RMB1,770,019 million, representing an increase of 39.6% as compared with last year. This was primarily due to the increase of expenses for purchasing oil and gas products and trading expenses, along with the increase in the sales volume of the oil and gas products and the prices of the raw materials.

Employee Compensation Costs Employee compensation costs (including salaries of employees and cost of market-oriented temporary and seasonal contractors, various types of insurance, housing provident fund, training fees and other additional costs) for 2021 was RMB154,835 million, representing an increase of 4.9% as compared with last year. This was primarily due to the fact that the State introduced temporary preferential policy for social insurance in 2020 in response to the COVID-19, which expired in 2021, and that employee's compensation in 2021 changed in tandem with the Group's operating results.

Exploration Expenses Exploration expenses for 2021 was RMB24,248 million, representing an increase of 25.4% as compared with last year. This was primarily due to the fact that the Group strengthened its efforts in terms of exploration and development and vigorously promoted the increase in both reserve and production of oil and gas.

Depreciation, Depletion and Amortisation Depreciation, depletion and amortisation for 2021 was RMB231,269 million, representing an increase of 8.1% as compared with last year. This was primarily due to the combined effect of the increase in assets, the structural change in oil and gas resources and the impairment in assets.

Selling, General and Administrative Expenses Selling, general and administrative expenses for 2021 was RMB57,802 million, representing a decrease of 10.2% as compared with last year. This was primarily due to the fact that the Group further promoted the improvement of quality and profitability, and the decrease in non-production expenses.

Taxes other than Income Taxes Taxes other than income taxes for 2021 was RMB228,003 million, representing an increase of 16.4% as compared with last year, among which the consumption tax for 2021 was RMB161,623 million, representing an increase of 11.1% as compared with last year; the resource tax for 2021 was RMB23,723 million, representing an increase of 28.5% as compared with last year; and crude oil special gain levy for 2021 increased by RMB4,477 million as compared with last year to RMB4,655 million.

Other Income, net Other income, net for 2021 was RMB12,980 million, representing a decrease of 74.5% as compared with last year, primarily due to the comprehensive influence of the gains from the transaction of pipeline assets of Kunlun Energy Company Limited ("Kunlun Energy"), a subsidiary of the Group, in 2021 and the gains from the pipeline assets restructuring of the Group in 2020.

Profit from Operations The profit from operations for 2021 was RMB161,153 million, representing an increase of 112.2% as compared with last year.

Net Exchange Gain Net exchange gain for 2021 was RMB538 million, representing an increase of 398.1% as compared with last year. This was primarily due to the impact of fluctuation in exchange rate of US Dollar against Renminbi.

Net Interest Expense Net interest expense for 2021 was RMB16,755 million, representing a decrease of 28.7% as compared with last year, primarily due to the control of the scale of interest-bearing debts, optimization of debt structure, and reduction of cost of debts by the Group.

Profit Before Income Tax Expense Profit before income tax expense for 2021 was RMB158,203 million, representing an increase of 182.1% as compared with last year.

Income Tax Expense The income tax expense for 2021 was RMB43,507 million, representing an increase of 92.6% as compared with last year, which was primarily due to the sharp increase in the Group's profit before income tax expense over the same period last year.

Profit for the Year Net profit for 2021 was RMB114,696 million, representing an increase of 242.5% as compared with last year.

Profit Attributable to Non-controlling Interests Profit attributable to non-controlling interests for 2021 was RMB22,526 million, representing an increase of 55.6% as compared with last year, which was primarily due to the sharp increase of profits of subsidiaries of the Company with the rise of the prices of oil and gas over the same period last year.

Profit Attributable to Owners of the Company Profit attributable to owners of the Company for 2021 was RMB92,170 million, representing an increase of 385.0% as compared with last year.

(2) Segment Results

◆ Exploration and Production

Revenue The realised revenue of the Exploration and Production segment for 2021 was RMB688,334 million, representing an increase of 29.7% as compared with last year, which was primarily due to the increase in the prices of oil and gas products and the rise in the sales volume of natural gas. In 2021, the crude oil imported under the Exploration and Production segment of the Group amounted to 37.13 million tons, representing a decrease of 4.9% as compared with last year. The revenue from the sales was RMB119,547 million for 2021, representing an increase of 40.5% as compared with last year.



The average realised crude oil price of the Group in 2021 was US\$65.58 per barrel, representing an increase of 62.6% as compared with last year.

Operating Expenses Operating expenses of the Exploration and Production segment for 2021 was RMB619,882 million, representing an increase of 22.1% as compared with last year, which was primarily due to the increase in procurement expenses and taxes other than income taxes. In 2021, the cost from importing crude oil of the Exploration and Production segment of the Group amounted to RMB119,354 million, representing an increase of 38.2% as compared with last year.

In 2021, the unit oil and gas lifting cost of the Group was US\$12.30 per barrel, representing an increase of 10.8% as compared with last year. Excluding the impact of exchange rate of US Dollar against Renminbi, the year-on-year increase rate was 3.6%.

Profit from Operations In 2021, the Exploration and Production segment, by actively adapting to the requirements of “carbon peaking and carbon neutrality” in domestic business, steadily promoted the transformation of oil and gas business to the green and low-carbon track. It continuously optimized the structure of oil and gas products and vigorously strengthened natural gas

exploration and development, as a result, the natural gas output increased at a rapid pace with both output and profit rising. In overseas business, the Group also actively carried out follow-up evaluation of the profitability of oil and gas projects, and strived to optimize the asset structure. It continued to strengthen cost management and control and continuously enhanced its ability to create profitability. In 2021, the Exploration and Production segment realised an operating profit of RMB68,452 million, representing an increase of 196.4% as compared with last year.

◆ Refining and Chemicals

Revenue The revenue of the Refining and Chemicals segment for 2021 was RMB974,972 million, representing an increase of 25.8% as compared with last year, primarily due to the rise in the price of the refined and chemical products, and the increase in the sales volume of certain products. In particular, the operating income of the refining business was RMB736,004 million, representing an increase of 23.9% as compared with last year; the operating income of the chemical business was RMB238,968 million, representing an increase of 32.2% as compared with last year.

Operating Expenses Operating expenses of the Refining and Chemicals segment for 2021 was RMB925,232 million, representing an increase of 19.1% as compared with last year, primarily due to the increase in the procurement costs of crude oil and feedstock, as well as the increase in taxes other than income taxes.

In 2021, the cash processing cost of refineries of the Group was RMB166.65 yuan per ton, representing an increase of 1.7% as compared with last year, primarily due to the increase in the price of fuel power.

Profit from Operations In 2021, the Refining and Chemicals segment adhered to market orientation, centralised in profitability, continued optimizing production and operation and improving profitability, and vigorously strengthened its control over costs and expenses. The Refining and Chemicals

segment in 2021 realised operating profits of RMB49,740 million, increasing by RMB51,574 million from last year, which is primarily due to the increase in sales volume and gross profit of the products. Among that, the refining business recorded an operating profit of RMB37,730 million, increasing by RMB50,531 million from last year; while the chemical business realised an operating profit of RMB12,010 million, representing an increase of RMB1,043 million as compared with last year.

◆ Marketing

Revenue The revenue of the Marketing segment for 2021 was RMB2,170,062 million, representing an increase of 44.9% as compared with last year, primarily due to the increase in the price and sales volume of refined oil.

Operating Expenses Operating expenses of the Marketing segment for 2021 was RMB2,156,785 million, representing an increase of 43.7% as compared with last year, primarily due to the increase in the expenditure arising from the external purchase of refined oil.

Profit from Operations In 2021, the Marketing segment, by taking advantage of the gradual recovery of the demand for refined oil in domestic market, vigorously strengthened its efforts in targeted marketing and actively developed retail and end customers. By coordinating both domestic and international market, the Group arranged the wholesale and export of refined oil on a reasonable basis; in addition to optimizing the allocation and distribution of refined oil, the Group also endeavoured to control the marketing expenses. In 2021, the Marketing segment recorded an operating profit of RMB13,277 million, representing an increase of RMB16,183 million, as compared with last year.

◆ Natural Gas and Pipeline

Revenue The revenue of the Natural Gas and Pipeline segment amounted to RMB417,022 million for 2021, representing an increase of 12.5% as compared with

last year, primarily due to the increase in both sales volume and price of natural gas.

Operating Expenses Operating expenses of the Natural Gas and Pipeline segment amounted to RMB373,057 million for 2021, representing an increase of 25.0% as compared with last year, primarily due to the increase in the expenditure of natural gas purchase.

Profit from Operations In 2021, the Natural Gas and Pipeline segment, by taking advantage of stable growth of domestic economy and market demand recovery, actively developed direct sales and end customers, continuously improved service quality, and strived to increase sales volume. The Group vigorously strengthened control over the natural gas procurement cost and continued to improve sales profitability. The Group successfully completed the closing of the equity transfer in the pipeline assets of Kunlun Energy. The operating profit was RMB43,965 million, representing a decrease of 39.3% as compared with last year, which was primarily due to the decrease of the revenue from the pipeline asset restructuring of 2021

as compared with that of 2020. In 2021, the imported natural gas business of the Group recorded a loss of RMB7,212 million, representing a reduction in loss of RMB6,947 million as compared with last year. The Group will take effective measures to continue its efforts to control the loss of its imported natural gas business.

In 2021, the Group's international operations (^(Note)) realised a revenue of RMB987,733 million, accounting for 37.8% of the Group's total revenue. Profit before income tax expenses amounted to RMB8,836 million, accounting for 5.6% of the Group's profit before taxes. The Group's international operations maintained a stable development with continuous improvement in its abilities of international operation.

Note: The four operating segments of the Group are Exploration and Production, Refining and Chemicals, Marketing as well as Natural Gas and Pipeline. International operations do not constitute a separate operating segment of the Group. The financial data of international operations are included in the financial data of respective operating segments mentioned above.

(3) Assets, Liabilities and Equity

The following table sets out the key items in the consolidated balance sheet of the Group:

	As at December 31, 2021	As at December 31, 2020	Percentage of Change
	RMB million	RMB million	%
Total assets	2,502,262	2,488,126	0.6
Current assets	480,838	486,767	(1.2)
Non-current assets	2,021,424	2,001,359	1.0
Total liabilities	1,093,393	1,121,505	(2.5)
Current liabilities	518,158	605,418	(14.4)
Non-current liabilities	575,235	516,087	11.5
Equity attributable to owners of the Company	1,263,561	1,215,158	4.0
Share capital	183,021	183,021	-
Reserves	308,560	304,182	1.4
Retained earnings	771,980	727,955	6.0
Total equity	1,408,869	1,366,621	3.1

Total assets amounted to RMB2,502,262 million, representing an increase of 0.6% from that as at the end of 2020, of which:

Current assets amounted to RMB480,838 million, representing a decrease of 1.2% from that as at the end of 2020, primarily due to the decrease in held-for-sale assets resulting from the closing of the transfer of equity in Kunlun Energy pipeline assets.

Non-current assets amounted to RMB2,021,424 million, representing an increase of 1.0% from that as at the end of 2020, primarily due to the increase in the investment in associate companies and joint ventures.

Total liabilities amounted to RMB1,093,393 million, representing a decrease of 2.5% from that as at the end of 2020, of which:

Current liabilities amounted to RMB518,158 million, representing a decrease of 14.4% from that as at the end of 2020, primarily due to the fact that the Group continued to optimize the asset and liability structure, and the decrease in the amount of short-term borrowings.

Non-current liabilities amounted to RMB575,235 million, representing an increase of 11.5% from that as at the end of 2020, primarily due to the increase in long-term borrowings and asset disposal liabilities.

Equity attributable to owners of the Company amounted to RMB1,263,561 million, representing an increase of 4.0% from that as at the end of 2020, primarily due to the increase in retained earnings.

(4) Cash Flows

As at December 31, 2021, the primary source of funds of the Group was cash from operating activities and short-term and long-term borrowings. The funds of the Group were mainly used for operating activities, capital expenditures, repayment of short-term and long-term borrowings as well as distribution of dividends to shareholders of the Company.

The table below sets forth the net cash flows of the Group for 2021 and 2020 respectively and the amount of cash and cash equivalents as at the end of each year:

	Year ended December 31	
	2021	2020
	RMB million	RMB million
Net cash flows from operating activities	341,469	318,575
Net cash flows used for investing activities	(213,032)	(181,986)
Net cash flows used for financing activities	(107,971)	(99,400)
Translation of foreign currency	(2,308)	(4,967)
Cash and cash equivalents at end of the year	136,789	118,631

◆ Net Cash Flows from Operating Activities

The net cash flows of the Group from operating activities in 2021 amounted to RMB341,469 million, representing a year-on-year increase of 7.2%. This was mainly due to the combined impact from the change in profit and working capital during the reporting period. As at December 31, 2021, the Group had cash and cash equivalents of RMB136,789 million. The cash and cash equivalents were mainly denominated in US Dollar and Renminbi (approximately 36.7% were denominated in US Dollar, approximately 58.5% were denominated in Renminbi, approximately 3.8% were denominated in HK Dollar and approximately 1.0% were denominated in other currencies).

◆ Net Cash Flows Used for Investing Activities

The net cash flows of the Group used for investing activities in 2021 amounted to RMB213,032 million, representing an increase of 17.1% as compared with last year, which was primarily due to the combined effects of the increase in capital expenditures and pipeline assets restructuring.

◆ Net Cash Flows Used for Financing Activities

The net cash used by the Group for financing activities in 2021 was RMB107,971 million, representing an increase of 8.6% as compared with last year. This was primarily due to the optimization of the Group's debt structure and the decrease of new long-term and short-term borrowings.

The net borrowings of the Group as at December 31, 2021 and December 31, 2020, respectively, were as follows:

	As at December 31, 2021	As at December 31, 2020
	RMB million	RMB million
Short-term borrowings (including current portion of long-term borrowings)	53,275	117,542
Long-term borrowings	287,175	251,379
Total borrowings	340,450	368,921
Less: Cash and cash equivalents	136,789	118,631
Net borrowings	<u>203,661</u>	<u>250,290</u>

The following table sets out the remaining contractual maturity of borrowings as at the respective dates according to the earliest contractual maturity dates. The amounts set out below are contractual undiscounted cash flows, including principal and interest:

	As at December 31, 2021	As at December 31, 2020
	RMB million	RMB million
Within 1 year	58,923	124,777
Between 1 and 2 years	53,250	53,526
Between 2 and 5 years	226,124	188,012
After 5 years	<u>28,053</u>	<u>27,894</u>
	<u>366,350</u>	<u>394,209</u>

Of the total borrowings of the Group as at December 31, 2021, approximately 38.7% were fixed-rate borrowings and approximately 61.3% were floating-rate borrowings. Of the borrowings as at December 31, 2021, approximately 70.0% were denominated in Renminbi, approximately 27.9% were denominated in US Dollar, and approximately 2.1% were denominated in other currencies.

As at December 31, 2021, the gearing ratio of the Group (gearing ratio = interest-bearing borrowings/(interest-bearing borrowings + total equity), interest-bearing borrowings include various short-term and long-term borrowings) was 19.5% (21.3% as at December 31, 2020).

(5) Capital Expenditures

In 2021, the Group, by adhering to the principle of investing on a rigorous, precise and profitable basis, continued to improve its level of investment management, continuously optimized the investment structure and strived to improve investment profitability. In 2021, the capital expenditures of the Group amounted to RMB251,178 million, representing an increase of 1.9% as compared with last year. The table below sets out the capital expenditures of the Group for 2021 and 2020 and estimated capital expenditure of each business segment for 2022.

	2021		2020		Estimated amount for 2022	
	RMB million	%	RMB million	%	RMB million	%
Exploration and Production*	178,259	70.97	186,620	75.71	181,200	74.88
Refining and Chemicals	54,487	21.69	21,810	8.85	44,500	18.39
Marketing	10,982	4.37	16,294	6.61	7,500	3.10
Natural Gas and Pipeline	6,750	2.69	21,143	8.58	8,000	3.30
Head Office and Other	700	0.28	626	0.25	800	0.33
Total	251,178	100.00	246,493	100.00	242,000	100.00

* If investments related to geological and geophysical exploration costs are included, the capital expenditures for the Exploration and Production segment for each of 2021 and 2020 and the estimated amount for 2022 would be RMB189,951 million, RMB197,019 million and RMB193,200 million, respectively.



◆ Exploration and Production

Capital expenditures for the Exploration and Production segment for 2021 amounted to RMB178,259 million, which were primarily used for the exploration and development with scale benefit and profitability in key domestic basins such as Songliao, Ordos, Junggar, Tarim, Sichuan and Bohai Bay, devoting greater efforts in the exploration of unconventional resources such as shale gas and shale oil, promoting new energy projects such as alternative clean energy projects; and exploration, development and operation of existing projects in overseas cooperation areas such as the Middle East, Central Asia, America and the Asia Pacific region.

It is estimated that the capital expenditures for the Exploration and Production segment for 2022 will be RMB181,200 million, which will be primarily for the continuously exploration and development with scale benefit and profitability in key domestic basins such as Songliao, Ordos, Junggar, Tarim, Sichuan and Bohai Bay, devoting greater efforts in the exploration of unconventional resources such as shale gas and shale oil, promoting new energy projects including clean electricity and CCUS. In adherence to the principle of optimised development, overseas operations will continue to focus on the operation of existing projects in cooperation areas such as the Middle East, Central Asia, America and the Asia Pacific region when seeking opportunities to obtain high-quality new projects.

◆ Refining and Chemicals

Capital expenditures for the Group's Refining and Chemicals segment for 2021 amounted to RMB54,487 million, which were primarily used for Guangdong Petrochemical integration project of refining and chemicals, Changqing and Tarim ethane-to-ethylene projects, and other expansion and construction of large-scale refining and chemical projects such as ethylene, as well as transformation and upgrading projects related to refining reduction and chemical increase and new materials and new technologies.

It is estimated that the capital expenditures for the Refining and Chemicals segment for 2022 will be RMB44,500 million, which will be used primarily for Guangdong Petrochemical integration project of refining and chemicals, the construction of large-scale refining and chemical projects such as Jilin Petrochemical and Guangxi Petrochemical Ethylene projects, as well as transformation and upgrading projects related to refining reduction and chemical increase and new materials and new technologies.

◆ Marketing

Capital expenditures for the Group's Marketing segment for 2021 amounted to RMB10,982 million, which were mainly used for the network for the sales of end-products within the domestic refined oil markets, expansion of new energy projects such as hydrogen fuelling stations and the equipment construction of overseas oil and gas storage and sales.

It is estimated that the capital expenditures for the Marketing segment for 2022 will be RMB7,500 million

used primarily for the network expansion for the sales of end-products within the domestic refined oil markets, expansion of new energy projects such as hydrogen refuelling stations and the equipment construction of overseas oil and gas storage and sales.

◆ Natural Gas and Pipeline

Capital expenditures for the Group's Natural Gas and Pipeline segment for 2021 amounted to RMB6,750 million, which were mainly used for construction of LNG receiving stations, natural gas branch lines, market development projects for urban gas terminals, and new energy collaborative projects such as natural gas power generation.

It is estimated that capital expenditures for the Natural Gas and Pipeline segment for 2022 will be RMB8,000 million, which will be used primarily for construction of LNG receiving stations, natural gas branch lines, market development projects for urban gas terminals, and the integration project of natural gas power generation and new energy, etc.

◆ Head Office and Other

Capital expenditures for the Head Office and Other segment for 2021 were RMB700 million, which were primarily used for improvement of scientific research facilities and construction of the IT system.

It is estimated that the capital expenditures for the Head Office and Other segment of the Group for 2022 will be RMB800 million, which will be used primarily for improvement of research facilities and construction of the IT system.



2. The financial data set out below is extracted from the audited financial statements of the Group prepared under CAS

(1) Financial Data Prepared under CAS

	As at December 31, 2021	As at December 31, 2020	Percentage of Change
	RMB million	RMB million	%
Total assets	2,502,533	2,488,400	0.6
Current assets	480,838	486,767	(1.2)
Non-current assets	2,021,695	2,001,633	1.0
Total liabilities	1,093,409	1,121,515	(2.5)
Current liabilities	518,158	605,418	(14.4)
Non-current liabilities	575,251	516,097	11.5
Equity attributable to equity holders of the Company	1,263,815	1,215,421	4.0
Total equity	1,409,124	1,366,885	3.1



For reasons for changes, please read of the "Asset, Liabilities and Equity" part of the Discussion and Analysis of Operations section of this annual report.

(2) Principal operations by segment under CAS

	Income from principal operations for the year 2021	Cost of principal operations for the year 2021	Margin*	Year-on-year change in income from principal operations	Year-on-year change in cost of principal operations	Increase or decrease in margin
	RMB million	RMB million		%	%	%
Exploration and Production	669,537	490,797	21.4	30.7	22.3	4.1
Refining and Chemicals	967,723	698,114	8.9	26.3	23.2	4.4
Marketing	2,143,071	2,075,302	3.1	45.4	46.0	(0.4)
Natural Gas and Pipeline	410,226	387,041	5.6	13.1	16.9	(2.9)
Head Office and Other	300	223	-	(39.1)	(24.7)	-
Elimination	(1,639,119)	(1,646,471)	-	-	-	-
Total	2,551,738	2,005,006	12.8	36.1	35.0	2.1

* Margin = Profit from principal operations / Income from principal operations

(3) Principal operations by region under CAS

Revenue from transactions with third parties	2021	2020	Percentage of Change
	RMB million	RMB million	%
China's mainland	1,626,616	1,212,821	34.1
Other	987,733	721,015	37.0
Total	2,614,349	1,933,836	35.2

Non-current assets *	December 31, 2021	December 31, 2020	Percentage of Change
	RMB million	RMB million	%
China's mainland	1,838,768	1,789,455	2.8
Other	165,117	190,785	(13.5)
Total	2,003,885	1,980,240	1.2

* Non-current assets mainly include other non-current assets except financial instruments and deferred tax assets.

(4) Principal subsidiaries and associates of the Group under CAS

Name of company	Registered capital	Shareholding	Amount of total assets	Amount of total liabilities	Amount of total net assets/(liabilities)	Net profit/(loss)
	RMB million	%	RMB million	RMB million	RMB million	RMB million
Daqing Oilfield Company Limited	47,500	100.00	365,574	138,890	226,684	3,898
CNPC Exploration and Development Company Limited (the "CNPC E&D")	16,100	50.00	200,082	41,575	158,507	8,413
PetroChina Hong Kong Limited	HKD7,592 million	100.00	148,776	54,346	94,430	28,557
PetroChina International Investment Company Limited	31,314	100.00	74,023	146,386	(72,363)	(19,457)
PetroChina International Co., Ltd.	18,096	100.00	222,774	150,427	72,347	6,031
PetroChina Sichuan Petrochemical Co., Ltd.	10,000	90.00	29,290	4,258	25,032	3,383
China Oil & Gas Pipeline Network Corporation (the "PipeChina")	500,000	29.90	854,496	239,393	615,103	29,776
China Petroleum Finance Co., Ltd. (the "CNPC Finance")	8,331	32.00	531,904	454,765	77,139	6,304
CNPC Captive Insurance Co., Ltd.	5,000	49.00	11,718	4,759	6,959	424
China Marine Bunker (PetroChina) Co., Ltd.	1,000	50.00	12,876	10,537	2,339	(610)
Mangistau Investment B.V.	USD131 million	50.00	12,147	2,905	9,242	2,114
Trans-Asia Gas Pipeline Co., Ltd.	5,000	50.00	45,448	2,630	42,818	4,067

SIGNIFICANT EVENTS

1. Cash Dividend in the Recent Three Years

Year	Amount (inclusive of tax)	Net Profit of the Year*	Percentage of Net Profit (%)
2019	26,293	45,682	57.6
2020	32,000	19,006	168.4
2021	41,476	92,170	45.0

* Net profit means historical data of profit attributable to owners of the Company in the year as calculated in accordance with the IFRS

Formulation and implementation of the cash dividend policy of the Company

To safeguard the interests of vast shareholders, it is provided by the Company in the Articles of Association of PetroChina Company Limited ("Articles of Association") that in the premise that the net profit attributable to owners of the Company and the accumulated undistributed profit for the year are positive, and the Company's cash flow can satisfy the normal operation and sustainable development of the Company, the amount of cash dividend to be distributed shall not be less than 30% of the net profit attributable to owners of the Company realised in the relevant year. The Company distributes dividends twice a year, with the final dividend to be determined by the general meeting by ordinary resolution and the interim dividend determined by the Board of Directors as authorised by the general meeting by way of ordinary resolution.

Since its listing, the Company has strictly complied with the Articles of Association and relevant regulatory requirements, and made decision on dividend distribution adopting the principle of returns to shareholders. The steady and active dividend distribution policy of

the Company is welcomed by the shareholders. The independent directors of the Company have performed their duties faithfully and diligently, formed opinions on dividend distribution independently and objectively, and played a desirable role. The Company distributed 45% of its net profit attributable to owners of the Company as dividend.

2. Distribution Plan for the Final Dividend for 2021

After overall consideration of the Company's operating results, financial position and cash flow, etc. and in return for the shareholders, the Board recommends a final cash dividend of RMB0.09622 yuan (inclusive of applicable tax) per share for 2021 to all shareholders. The total amount of cash dividends reaches RMB17.61 billion. The proposed final dividend is subject to shareholders' review and approval at the forthcoming 2021 annual general meeting to be held on June 9, 2022. The final dividend of H shares will be paid to all shareholders of H shares whose names appear on the register of members of the Company at the close of trading on June 27, 2022. The register of members of H shares will be closed from June 22, 2022 to June 27,

2022 (both days inclusive) during which period no transfer of H shares will be registered. In order to qualify for the final dividend, holders of H shares must lodge all transfer documents together with the relevant share certificates at Hong Kong Registrars Limited at or before 4:30 p.m. on June 21, 2022. Holders of A shares whose names appear on the register of members of the Company maintained at China Securities Depository and Clearing Corporation Limited ("CSDC") at the close of trading on the Shanghai Stock Exchange in the afternoon of June 27, 2022 are eligible for the final dividend. The final dividend of A shares and H shares for 2021 will be paid on or about June 28, 2022 and July 29, 2022, respectively.

In accordance with the relevant provisions of the Articles of Association and relevant laws and regulations, dividends payable to the Company's shareholders shall be declared in Renminbi. Dividends payable to the holders of A shares shall be paid in Renminbi, and for the A shares of the Company listed on the Shanghai Stock Exchange and invested by the investors through the Hong Kong Stock Exchange, dividends shall be paid in Renminbi to the accounts of the nominal shareholders through CSDC. Save for the H shares of the Company listed on the Hong Kong Stock Exchange and invested by the investors through the Shanghai Stock Exchange and the Shenzhen Stock Exchange (the "H Shares under the Southbound Trading Link"), dividends payable to the holders of H shares shall be paid in Hong Kong Dollar. The applicable exchange rate shall be the average of the medium exchange rate for Renminbi to Hong Kong Dollar as announced by the People's Bank of China for the week prior to the declaration of the dividends at the annual general meeting to be held on June 9, 2022. Dividends payable to the holders of H Shares under the Southbound Trading Link shall be paid in Renminbi. In accordance with the Agreement on Payment of Cash Dividends on the H Shares under the Southbound Trading Link (《港股通H股股票現金紅利派發協議》) between the Company and CSDC, CSDC will receive the dividends payable by the Company to holders of the H Shares under the Southbound Trading Link as a nominal holder of the H Shares under

the Southbound Trading Link on behalf of investors and assist the payment of dividends on the H Shares under the Southbound Trading Link to investors thereof.

According to the Law on Corporate Income Tax of the People's Republic of China (《中華人民共和國企業所得稅法》) and the relevant implementing rules which came into effect on January 1, 2008, amended on February 24, 2017 and December 29, 2018, the Company is required to withhold corporate income tax at the rate of 10% before distributing dividends to non-resident enterprise shareholders whose names appear on the register of members of H shares of the Company. Any H shares registered in the name of non-individual shareholders, including HKSCC Nominees Limited, other nominees, trustees or other groups and organisations will be treated as being held by non-resident enterprise shareholders and therefore will be subject to the withholding of the corporate income tax. Should any holder of H shares wish to change their shareholder status, please consult their agent or trust institution over the relevant procedures. The Company will withhold payment of the corporate income tax strictly in accordance with the relevant laws or requirements of the relevant governmental departments and strictly based on the information registered on the Company's H share register of members on June 27, 2022.

According to the Notice on Issues Concerning the Collection and Management of Individual Income Tax after the Abolition of Guo Shui Fa [1993] No. 045 (《關於國稅發[1993]045號文件廢止後有關個人所得稅征管問題的通知》 promulgated by the State General Administration of Taxation of the PRC (Guo Shui Han [2011] No.348) (國家稅務總局國稅函[2011]348號), the Company is required to withhold and pay the individual income tax for its individual H shareholders and the individual H shareholders are entitled to certain tax preferential treatments according to the tax agreements between those countries where the individual H shareholders are residents and China and the provisions in respect of tax arrangements between the China's mainland and Hong Kong (Macau). The Company would withhold and pay the individual income tax at the tax

rate of 10% on behalf of the individual H shareholders who are Hong Kong residents, Macau residents or residents of those countries having agreements with China for individual income tax rate in respect of dividend of 10%. For individual H shareholders who are residents of those countries having agreements with China for individual income tax rates in respect of dividend of lower than 10%, the Company would make applications on their behalf to seek entitlement of the relevant agreed preferential treatments pursuant to the circular of State Administration of Taxation on Issuing Administrative Measures on Preferential Treatment Entitled by Non-residents Taxpayers under Tax Treaties (SAT Circular [2019] No.35) (《關於發布<非居民納稅人享受協定待遇管理辦法>的公告》(國家稅務總局公告2019年第35號)). For individual H shareholders who are residents of those countries having agreements with China for individual income tax rates in respect of dividend of higher than 10% but lower than 20%, the Company would withhold the individual income tax at the agreed-upon effective tax rate. For individual H shareholders who are residents of those countries without any taxation agreements with China or having agreements with China for individual income tax in respect of dividend of 20% or in other situations, the Company would withhold the individual income tax at a tax rate of 20%.

The Company will determine the country of domicile of the individual H shareholders based on the registered address as recorded in the register of members of the Company (the "Registered Address") on June 27, 2022 and will accordingly withhold and pay the individual income tax. If the country of domicile of an individual H shareholder is not the same as the Registered Address, the individual H shareholder shall notify the share registrar of the Company's H shares and provide relevant supporting documents on or before 4:30 p.m. June 21, 2022 (address: Hong Kong Registrars Limited, Shops 1712-1716, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong). If the individual H shareholder does not provide the relevant supporting documents to the share registrar of the Company's H shares within the time period stated above, the Company will determine the

country of domicile of the individual H shareholder based on the recorded Registered Address on June 27, 2022.

The Company will not entertain any claims arising from and assume no liability whatsoever in respect of any delay in, or inaccurate determination of, the status of the shareholders of the Company or any disputes over the withholding and payment of tax.

In accordance with the Notice of Ministry of Finance, the State Administration of Taxation, and the China Securities Regulatory Commission on Taxation Policies concerning the Pilot Program of an Interconnection Mechanism for Transactions in the Shanghai and Hong Kong Stock Markets (Cai Shui [2014] No.81) (《財政部、國家稅務總局、證監會關於滬港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅〔2014〕81號)) which became effective on November 17, 2014, and the Notice of the Ministry of Finance, the State Administration of Taxation, and the China Securities Regulatory Commission on Taxation Policies concerning the Pilot Program of an Interconnection Mechanism for Transactions in the Shenzhen and Hong Kong Stock Markets (Cai Shui [2016] No. 127) (《財政部、國家稅務總局、證監會關於深港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅〔2016〕127號)), which became effective on December 5, 2016, with regard to the dividends obtained by individual mainland investors from investment in the H shares of the Company listed on the Hong Kong Stock Exchange through the Shanghai-Hong Kong and Shenzhen-Hong Kong Stock Connect, the Company will withhold their individual income tax at the rate of 20% in accordance with the register of individual mainland investors provided by CSDC. As to the withholding tax having been paid abroad, an individual investor may file an application for tax credit with the competent tax authority of CSDC with an effective credit document. With respect to the dividends obtained by mainland securities investment funds from investment in the H shares of the Company listed on the Hong Kong Stock Exchange through the Shanghai-Hong Kong and Shenzhen-Hong Kong Stock Connect, the Company will

withhold tax with reference to the provisions concerning the collection of tax on individual investors. The Company will not withhold income tax on dividends obtained by mainland enterprise investors, and mainland enterprise investors shall file their income tax returns and pay tax themselves instead.

With regard to the dividends obtained by the investors (including enterprises and individuals) from investment in the A shares of the Company listed on Shanghai Stock Exchange through the Hong Kong Stock Exchange, the Company will withhold income tax at the rate of 10%, and

file tax withholding returns with the competent tax authority. Where there is any tax resident of a foreign country out of the Hong Kong investors and the rate of income tax on dividends is less than 10%, as provided for in the tax treaty between the country and the PRC, the enterprise or individual may personally, or entrust a withholding agent to, file an application for the tax treatment under the tax treaty with the competent tax authority of the Company. Upon review, the competent tax authority will refund tax based on the difference between the amount of tax having been collected and the amount of tax payable calculated at the tax rate as set out in the tax treaty.

3. Shareholding in other companies

(1) Shareholding interests in other listed companies

As at the end of the reporting period, interests in other listed securities held by the Group were as follows:

Stock code	Stock short name	Initial Investment amount	Number of shares held	Share-holding (%)	Book value as at the end of the year	Profit or loss in the reporting period	Change in equity in the reporting period	Classification in accounts		Source of shareholding	Unit: HK Dollars million
								Classification in accounts	Source of shareholding		
135	KUNLUN ENERGY ⁽¹⁾	25,802	4,708,302,133	54.38	25,802	-	-	Long-term equity investments	Acquisition and further issue of shares		

Note: (1)The Group held the shares in Kunlun Energy Limited through PetroChina Hong Kong Limited, an overseas wholly-owned subsidiary of the Company. The shares of Kunlun Energy are listed on the Hong Kong Stock Exchange.

(2) Shareholding of interests in non-listed financial institutions

Name of investment target	Initial investment amount	Number of shares held	Share-holding (%)	Book value as at the end of the year	Profit or loss in the reporting period	Change in equity in the reporting period	Classification in accounts		Source of shareholding	Unit: RMB million
							Classification in accounts	Source of shareholding		
CNPC Finance	9,917	5,246,490,000	32.00	25,033	1,823	919	Long - term equity investment	Injection of capital		
CNPC Captive Insurance Co., Ltd.	2,450	2,450,000,000	49.00	3,410	207	129	Long - term equity investment	Establishment by promotion		

4. Significant connected transactions during the reporting period

Please refer to the section "Connected Transactions" in this annual report. During the reporting period, no substantial shareholder of the Company has utilized the funds of the Company for non-operating purposes.

5. Material contracts and the performance thereof

(1) During the reporting period, there were no trusteeship, sub-contracting and leasing of properties of other companies by the Company which would contribute profit to the Company of 10% or more of its total profit for the year.

(2) As of the end of the reporting period, the Company and its subordinate companies (including the companies wholly-owned or controlled by the Company, the same below) had a guarantee balance of RMB188.192 billion, including RMB23.750 billion for credit guarantee and RMB153.785 billion for performance guarantee, RMB10.657 billion for financing guarantee, and the balance of guarantees as of the end of the reporting period accounted for approximately 13.35% of the Group's net asset. The guarantee balance of the Company as of the end of the reporting period did not exist for the guarantee provided to the controlling shareholder, the ultimate controller and its related parties.

(3) The Company did not entrust any other person on material wealth management during the reporting period.

(4) The Company had no material external entrustment loans during the reporting period.

(5) The Company had no overdue principals or interests of material bank loans during the reporting period.

(6) Save as disclosed in this annual report, during the reporting period, the Company did not enter into any material contract which requires disclosure.

6. Performance of Undertakings

In order to support the business development of the Company, consolidate the relevant quality assets and avoid industry competition, CNPC, the controlling shareholder of the Company, entered into the Agreement on Non-Competition and Pre-emptive Right to Transactions (the "Agreement") with the Company on March 10, 2000. As at the end of the reporting period, except for those already performed, the undertakings not performed by CNPC included the following: (1) due to the fact that the laws of the jurisdiction where ADSs are listed prohibit local citizens from directly or indirectly financing or investing in the oil and gas projects in certain countries, CNPC failed to inject the overseas oil and gas projects in certain countries into the Company; (2) after execution of the Agreement, CNPC obtained certain business opportunities that competed or were likely to compete with the principal business of the Company, which is not in strict compliance with the Agreement. Nevertheless, such industry competition primarily concentrated on oil and gas exploration and development operations at certain overseas countries and regions in which the resources owned by CNPC were insufficient or uncertain.

In connection with matters described above, CNPC issued a Letter of Undertaking to the Company on June 20, 2014 and made additional undertakings that: (1) within ten years from the date of the Letter of Undertaking, after taking into account of political, economic and other factors, the Company may request CNPC to sell offshore oil and gas assets which remain in possession by CNPC as at the date of the Letter of Undertaking; (2) for business opportunities relating to investment in offshore oil and gas assets after the date of the Letter of Undertaking, the relevant prior approval procedure of the Company shall be initiated strictly in accordance with the

Agreement. Subject to the applicable laws, contractual agreements and procedure requirements, CNPC will sell to the Company offshore oil and gas assets as described in items (1) and (2) above at the request of the Company.

Save for the above additional undertakings, undertakings made by CNPC in the Agreement remain unchanged.

Save for the above undertakings, there is no material undertakings given by the Company, any shareholders, ultimate controllers, purchasers, Director, Supervisor or senior management or other related parties during the reporting period.

7. Engagement and disengagement of firm of accountants

According to the relevant regulations of the Ministry of Finance of the People's Republic of China and the State-owned Assets Supervision and Administration Commission of the State Council, the Company shall rotate accounting firms that have served continuously for more than a certain number of years. KPMG Huazhen LLP (Special General Partnership) and KPMG retired and will not be re-appointed as the domestic and international auditors of the Company after the conclusion of the 2020 annual general meeting of the Company. Meanwhile, as approved at the 2020 annual general meeting, the Company engaged PricewaterhouseCoopers Zhong Tian LLP (Special General Partnership) and PricewaterhouseCoopers to serve as the domestic and international auditors, respectively, for the year of 2021. Remuneration in respect of the 2021 audit work amounted to RMB47 million, mainly for the provision of auditing services for the Company's domestic and international needs, in which the financial report auditing fee amounted to RMB39 million and the financial report internal control auditing fee amounted to RMB8 million. For details of the auditors' remuneration, please refer to Note 7 to the financial statements prepared in accordance with IFRS in this annual report.

As at the end of the reporting period, PricewaterhouseCoopers Zhong Tian LLP (Special General Partnership) and PricewaterhouseCoopers have provided audit service to the Company for one year.

8. Material litigation and arbitration

During the reporting period, the Company has no material litigations or arbitrations.

9. Penalties on the Company and its Directors, Supervisors, senior management, controlling shareholder and ultimate controller and remedies thereto

During the reporting period, none of the Company or its current Directors, Supervisors, senior management, controlling shareholder or ultimate controller of the Company was subject to any investigation by the competent authorities or enforcement by judicial or disciplinary departments, or was handed over to judicial departments or subject to criminal liability, or subject to investigation or administrative penalty by the China Securities Regulatory Commission, or any denial of participation in the securities market or was deemed unsuitable to act as directors, or was imposed on material punishment by other administrative authorities or was subject to any public criticisms made by a stock exchange.

The incumbent Directors, Supervisors and senior management of the Company and those who retired during the reporting period did not receive the punishment from the securities regulation organisations in recent three years.

10. Creditworthiness of the Company and its controlling shareholder and ultimate controller

During the reporting period, the Company and its controlling shareholder and ultimate controller, CNPC,

carried out various businesses in a continuous and steady way, adhering to the philosophy of good faith and the principle of compliance with laws and regulations, and did not incur any unperformed material court judgement that had come into force or any significant outstanding debt that had become due and payable.

11. Other Significant Matters

(1) Completion of the Closing of the Transfer of Equity Interest in Kunlun Energy Pipeline Assets

Pursuant to the Equity Transfer Agreement dated December 22, 2020 entered into between Kunlun Energy, being a subsidiary of the Company, and PipeChina, all rights, obligations, responsibilities and risks relating to 60% equity interest held by Kunlun Energy in PetroChina Beijing Gas Pipeline Co., Ltd. (the "Beijing Pipeline") and 75% equity interest in PetroChina Dalian LNG Co., Ltd. (the "Dalian LNG") have been transferred from Kunlun Energy to PipeChina. For details, please refer to the announcements published by the Company on the website of the Shanghai Stock Exchange (Announcement No. Lin 2021-008) and the announcement published on the website of the Hong Kong Stock Exchange on April 1, 2021, respectively.

This event did not affect the continuity of the business and the stability of management of the Group, and was conducive to the sustainable and healthy development of the Group and achieving sustainable and positive operating results in the long term.

(2) Participation in the Establishment of Industrial Capital Investment Company

In order to accelerate the upgrading and transformation of the Company's business and enhance its investment in strategic emerging industries, upon deliberation and approval at the ninth meeting of the eighth session of the Board of the Company on April 29, 2021, that the Company, together with CNPC and CNPC

Capital Company Limited, contributed RMB2.9 billion, RMB5.1 billion and RMB2.0 billion respectively to jointly establish CNPC Kunlun Capital Company Limited ("Kunlun Capital"). The business scope of Kunlun Capital includes: equity investment, investment management and asset management through private equity funds (subject to the registration and filing to Asset Management Association of China); private equity investment fund management and venture capital fund management services (subject to the registration and filing to Asset Management Association of China); investment activities with its own funds (non-financial investment); venture capital (limited to investment in unlisted companies); financing consulting services; financial consulting; and business management consulting (general business items can be carried out independently; the carrying out of licensed business items is subject to the relevant license or authorization) (for the items subject to approval in accordance with the laws, business activities can be carried out only after obtaining approval from relevant authorities). For details, please refer to the announcements published by the Company on the website of the Shanghai Stock Exchange (Announcement No. Lin 2021-012, Lin 2021-017) and the announcement published on the website of the Hong Kong Stock Exchange on April 29, 2021 and June 24, 2021.

This event did not affect the continuity of the business and the stability of management of the Group, and was conducive to the sustainable and healthy development of the Group and achieving sustainable and positive operating results in the long term.

(3) China Strengthened Administration on the Collection of Consumption Tax on Imported Refined Oil Products

On May 12, 2021, the Ministry of Finance, the General Administration of Customs, and the State Taxation Administration issued the "Announcement on Imposing Import Consumption Taxes on Certain Refined Products" (MOF, GAC and SAT Announcement No. 19 of 2021) (《關於對部分成品油徵收進口環節消費稅的公告》(財政部

海關總署 稅務總局公告2021年第19號)), which stipulated that from June 12, 2021, for imported products that are classified under specific tariff codes and satisfy the regulations, they will be treated respectively as naphtha and fuel oil that will be levied for import consumption tax.

This event did not affect the continuity of the business and the stability of management of the Group, and was conducive to the sustainable and healthy development of the Group and achieving sustainable and positive operating results in the long term.

(4) China Issued Import Tax Policy for Exploration, Development and Utilization of Energy Resources During the "14th Five-Year Plan" Period

On April 12, 2021, the Ministry of Finance, the General Administration of Customs, and the State Taxation Administration issued the "Notice on Import Tax Policies for the Exploration, Development and Utilization of Energy Resources during the 14th Five-Year Plan Period" (Cai Guan Shui [2021] No. 17) (《關於“十四五”期間能源資源勘探開發利用進口稅收政策的通知》(財關稅〔2021〕17號)), and on April 16, 2021, the Ministry of Finance, NDRC, the Ministry of Industry and Information Technology, the General Administration of Customs, the State Taxation Administration, and the National Energy Administration issued the "Notice on the Administrative Measures for Import Tax Policies for the Exploration, Development and Utilization of Energy Resources during the 14th Five-Year Plan Period" (Cai Guan Shui [2021] No.18) (《關於“十四五”期間能源資源勘探開發利用進口稅收政策管理辦法的通知》(財關稅〔2021〕18號)), which stipulated that from January 1, 2021 to December 31, 2025, for specific oil and natural gas exploitation and development projects, the offshore oil and gas pipeline emergency rescue projects and the coal-bed methane exploration and development projects, the import of equipment, instruments, spare parts and special purpose tools that meet the requirements shall be exempted from import tariffs and import value-added taxes; for the natural gas (including pipeline natural gas

and LNG) imported through the construction projects of cross-border natural gas pipelines and imported LNG receiving, storage and transportation equipment that have been examined and approved by the NDRC, as well as the expansion project of imported LNG receiving, storage and transportation equipment that have been approved by the provincial government, the import value-added tax will be refunded at a certain percentage. The specific refund ratios are as follows: (1) for imported natural gas under the long-term trade gas contract signed before the end of 2014 and confirmed by NDRC, the import value-added tax will be refunded at a rate of 70%; (2) for other natural gas, if the import price is higher than the reference benchmark value, the import value-added tax will be refunded according to the inverted ratio of the import price and the reference benchmark value.

This event did not affect the continuity of the business and the stability of management of the Group, and was conducive to the sustainable and healthy development of the Group and achieving sustainable and positive operating results in the long term.

(5) China Issued Policies on Natural Gas Pipeline Transportation Prices

On June 7, 2021, NDRC issued the "Notice on Printing and Distributing the 'Measures for the Administration of the Natural Gas Pipeline Transportation Prices (Interim)' and the 'Measures for the Supervision and Review of the Pricing Cost of Natural Gas Pipeline Transportation (Interim)' (NDRC Price Regulations [2021] No. 818) (《關於印發〈天然氣管道運輸價格管理辦法（暫行）〉和〈天然氣管道運輸定價成本監審辦法（暫行）〉的通知》(發改價格規〔2021〕818號)), which further improved the pricing mechanism for natural gas pipeline transportation, being "permitted cost plus reasonable profit", and standardized the supervision and review of pricing cost of natural gas pipeline transportation. The new measures was implemented on January 1, 2022 and will be valid for 8 years.

This event does not affect the continuity of the business and the stability of the management of the Group.

(6) China Continued to Deepen Oil and Gas Price Mechanism Reform

On May 18, 2021, NDRC issued the "Notice on the Action Plan for Deepening the Reform of the Price Mechanism during the 14th Five-Year Plan Period" (NDRC Price [2021] No. 689) (《關於“十四五”時期深化價格機制改革行動方案的通知》(發改價格〔2021〕689號)), which stipulated that price mechanism reform for oil and natural gas should be steadily promoted during the 14th Five-Year Plan period. In accordance with the reform direction of "controlling the middle and liberalizing the two ends", and based on independent operation of infrastructures including natural gas pipeline, diversification process of exploration and development, gas supply and sales

entities, the market-oriented reform of city gate prices of natural gas shall be steadily promoted, and the linkage mechanism between end sales prices and procurement costs shall be improved; active coordination shall be carried out to promote the fairness and openness in urban gas distribution networks, reduce gas distribution levels, strictly monitor gas distribution prices, explore marketization of end-user sales prices, and research and improve the pricing mechanism of refined products in line with domestic and foreign energy market changes and the progress of domestic institutional reform.

This event did not affect the continuity of the business and the stability of management of the Group, and was conducive to the sustainable and healthy development of the Group and achieving sustainable and positive operating results in the long term.

CONNECTED TRANSACTIONS

CNPC is the controlling shareholder of the Company and therefore transactions between the Group and CNPC constitute connected transactions of the Group under the SSE Listing Rules and the Listing Rules. China National Oil and Gas Exploration and Development Corporation ("CNODC"), a wholly-owned subsidiary of CNPC, holds 50% interest in CNPC E&D, a non-wholly-owned subsidiary of the Group. Pursuant to the Listing Rules, CNPC E&D is a connected person of the Company and transactions between the Group and CNPC E&D constitute connected transactions of the Group. Since December 28, 2006, the Group has held 67% equity interest in PetroKazakhstan Inc. ("PKZ") through CNPC E&D. Pursuant to the Listing Rules, CNPC E&D and its subsidiaries are connected persons of the Group. Therefore, transactions between the Group and PKZ constitute connected transactions of the Group.

The following connected transactions constitute the connected transactions or continuing connected transactions as defined under the SSE Listing Rules and/or the Chapter 14A of the Listing Rules and satisfy relevant disclosure requirements thereof. For details of the following connected transactions, please refer to the relevant announcements published on the websites of the Shanghai Stock Exchange or the Hong Kong Stock Exchange and the Company. Note 61 set out thereto in the financial statements of the Company prepared in accordance with the Accounting Standards for Enterprises of the PRC has properly disclosed connected transactions or continuing connected transactions pursuant to the Listing Rules.

One-off Connected Transaction

1. Assets Transaction of Kunlun Energy

On December 22, 2020, the ninth meeting of the Company's Board of Directors in 2020 reviewed and approved the "Proposal on Kunlun Energy Pipeline Asset Transaction", approving the sale of the 60% equity interest in Beijing Pipeline and the 75% equity interest in Dalian LNG held by Kunlun Energy, a subsidiary of the Company, to PipeChina. In view of the fact that the two directors despatched by the Company to PipeChina are the current director and senior management of the Company and one of them is the senior management of CNPC (the controlling shareholder of the Company), according to the SSE Listing Rules, PipeChina is a related legal person of the Company. Therefore, this transaction constitutes a related party transaction of the Company under the SSE Listing Rules. For details of the transaction, please refer to the relevant announcements published on the websites of the Shanghai Stock Exchange (Announcement No.: Lin 2020-051) and Hong Kong Stock Exchange by the Company, respectively, on December 22, 2020. Kunlun Energy and PipeChina completed equity transfer on March 31, 2021. For details, please refer to the announcements published by the Company on the website of the Shanghai Stock Exchange (Announcement No.: Lin 2021-008) and the announcement published on the website of the Hong Kong Stock Exchange on April 1, 2021.

2. Injecting Capital into CNPC Finance

On June 13, 2019, the Company considered and adopted the Proposal for Capital Increase to China Petroleum Finance Co., Ltd. at the third board meeting in 2019, approving the capital increase to CNPC Finance by the Company, CNPC and CNPC Capital Corporation respectively in proportion to their current shareholdings. In accordance with the SSE Listing Rules and the Listing Rules, each of CNPC, CNPC Capital Corporation and CNPC Finance is a connected person of the Company. Therefore, this capital increase constitutes connected transaction of the Company. For the details of the transaction, please refer to the Company's announcements published on the websites of the Shanghai Stock Exchange (Announcement No: Lin 2019-021) and Hong Kong Stock Exchange, respectively, on June 13, 2019, and the connected transaction section of the 2019 annual report published on the websites of the Hong Kong Stock Exchange and the Shanghai Stock Exchange on March 26, 2020, and the material connected transaction section of the 2020 interim report published by the Company on the websites of the Hong Kong Stock Exchange and the Shanghai Stock Exchange on August 27, 2020, the connected transaction section of the 2020 annual report published on the website of the Hong Kong Stock Exchange and the Shanghai Stock Exchange on March 25, 2021, and the material connected transaction section of the 2021 interim report published on the website of the Hong Kong Stock Exchange and the Shanghai Stock Exchange on August 26, 2021.

The registered capital of CNPC Finance has increased from 8,331.25 million to 16,395.2731 million. The registered capital was increased by RMB8,064.0231 million, which was transferred from capital reserves in proportion to the shareholding of all shareholders before the implementation of the connected transaction. After the completion of the capital increase, the shareholders' proportion of shares remains unchanged, with the Company, CNPC and CNPC Capital Corporation holding 32%, 40% and 28% of the equity interests in CNPC Finance respectively. This capital increase has completed the procedures for alteration of business registration.

This capital increase is beneficial to enhance investment returns of the Company and have a better access to the high level and high efficiency funds and financial management services of CNPC Finance.

3. Participation in the Establishment of Industrial Capital Investment Company

On June 24, 2021, the Company, CNPC and CNPC Capital entered into a joint venture agreement to establish the Kunlun Capital, with contribution of RMB2.9 billion, RMB5.1 billion and RMB2.0 billion, respectively. CNPC is the controlling shareholder of the Company, CNPC Capital is a company controlled by CNPC. According to the SSE Listing Rules and the Listing Rules, both CNPC and CNPC Capital are connected persons of the Company. As such, this transaction constitutes a connected transaction. For details, please refer to the announcements published by the Company on the website of the Shanghai Stock Exchange (Announcement No. Lin 2021-012, Lin 2021-017) and the announcement published on the website of the Hong Kong Stock Exchange on April 29, 2021 and June 24, 2021, respectively, and the 2021 interim report published on the website of Hong Kong Stock Exchange and the Shanghai Stock Exchange on August 26, 2021, and "Other Significant Matters" of the Significant Matters section of this annual report.

Kunlun Capital primarily engages in the investment of strategic emerging industries. Participation in the establishment of Kunlun Capital is beneficial to (i) the implementation of the Company's innovative strategy and green low-carbon strategy by investing in strategic emerging industries to build a multi-functional business structure; (ii) discovering the strategic investment opportunities through financial investments, playing the role of industrial capital in incubation and development, and promoting the elevation of capital and financial business, to foster the formation of new technologies and new business scenarios; and (iii) revitalizing the capital stock, realizing the rational flow of capital and maintaining and increasing the value.

Continuing Connected Transactions

(I) Continuing Connected Transactions with CNPC

The Group and CNPC continue to carry out certain existing continuing connected transactions. In relation to existing continuing connected transactions, the Company obtained the approval of the Independent Directors and the independent shareholders at the seventh meeting of the Board of Directors in the year of 2020 held on August 26 to 27, 2020 and the third extraordinary general meeting of 2020 held on November 5, 2020 for a renewal of and amendments to the existing continuing connected transactions and the new continuing connected transactions, and for the proposed new caps for existing continuing connected transactions and new continuing connected transactions from January 1, 2021 to December 31, 2023. Details of the above transactions were set out in the Company's announcements in respect of continuing connected transactions published on the website of the Shanghai Stock Exchange (Announcement No: Lin 2020-036) and Hong Kong Stock Exchange on August 27, 2020, respectively, the Company's circular in respect of continuing connected transactions published on the website of the Hong Kong Stock Exchange on September 15, 2020, and the Company's announcements in respect of passing resolutions at the extraordinary general meeting published on the website of the Shanghai Stock Exchange (Announcement No: Lin 2020-048) and Hong Kong Stock Exchange on November 5, 2020, respectively.

In 2021, the Group and CNPC carried out the continuing connected transactions referred to in the following agreements:

1. Comprehensive Products and Services Agreement

The Group and CNPC implemented the Comprehensive Products and Services Agreement (the "Comprehensive Agreement") entered into on August 27, 2020 for the provision (A) by the Group to CNPC/jointly-held entities and (B) by CNPC/jointly-held entities

to the Group, of a range of products and services. The Comprehensive Agreement entered into force on January 1, 2021 with an effective term of three years.

During the term of the Comprehensive Agreement, individual product and service implementation agreements described below may be terminated from time to time by the parties thereto by providing at least 6 months' written notice of termination in relation to any one or more categories of products or services. Further, in respect of any products or services contracted to be provided on or before the notice of termination, the notice of termination will not affect the completion of the provision of such products and services.

(A) Products and Services to be provided by the Group to CNPC/jointly-held entities

Under the Comprehensive Agreement, products and services to be provided by the Group to CNPC/jointly-held entities include: refined oil products, chemical products, natural gas, crude oil, supply of water, supply of electricity, supply of gas, supply of heating, quantifying and measuring, entrusted operation, material supply and other products and services as may be requested by CNPC/jointly-held entities for its own consumption, use or sale from time to time. In addition, the Group shall provide the jointly-held entities with financial services including entrustment loans, guarantees and other financial services.

(B) Products and Services to be provided by CNPC/jointly-held entities to the Group

More products and services are expected to be provided by CNPC/jointly-held entities to the Group, both in terms of quantity and variety, than those provided by the Group to CNPC/jointly-held entities. They have been grouped together and categorised according to the following types of products and services:

- Engineering technology services, including but not limited to exploration technology service, downhole operation service, oilfield construction service, refinery construction service and engineering design service;

- Production services, mainly associated with products and services to be provided, arising from the day-to-day operations of the Group, including but not limited to crude oil, natural gas, refined oil products, chemical products, water supply, electricity supply, gas supply and communications;

- Material supply services, mainly involving the agency services on the procurement of materials, including but not limited to purchase of materials, quality examination, storage of materials and delivery of materials, which by virtue of its nature, are not covered in the engineering technology services and production services referred to above;

- Social and living services, including but not limited to security system services, staff canteens and training centres etc.; and

- Financial services, including loans and other financial assistance, deposits services, entrusted loans, settlement services, financial leasing services and other financial services.

The Comprehensive Agreement details specific pricing principles for the products and services to be provided pursuant to the Comprehensive Agreement. If, for any reason, the specific pricing principle for a particular product or service ceases to be applicable, whether due to a change in circumstances or otherwise, such product or service must then be provided in accordance with the following general pricing principles as defined in the Comprehensive Agreement:

(a) government-prescribed prices; or

(b) where there is no government-prescribed price, then according to the relevant market prices; or

(c) where neither (a) nor (b) is applicable, then according to:

(i) the actual cost incurred; or

(ii) the agreed contractual price.

In particular, the Comprehensive Agreement stipulates, among other things, that:

(i) for the financial services provided by the Group:

- the pricing of entrusted loans shall be determined based on the relevant interest rate and standard for fees as promulgated by the People's Bank of China and with reference to market-oriented price;

- the guarantees shall be provided with reference to the market-oriented price; and

- the pricing of other financial services shall be determined based on the prices prescribed by government authorities including, among others, People's Bank of China, China Banking and Insurance Regulatory Commission, and the fee charging standards published by the aforementioned relevant regulatory authorities and with reference to the market-oriented price.

(ii) for the financial services provided by CNPC/ jointly-held entities:

- the loans and deposit services shall be provided at prices determined in accordance with the relevant interest rate and standard for fees as promulgated by the People's Bank of China. Such prices must also be no less favourable to the Group than those offered by other independent third parties;



- the guarantees shall be provided at prices not higher than the fees charged by the state policy banks in relation to the provision of guarantees. References must also be made to the relevant government-prescribed price and market-oriented price; and

- the pricing of other financial services shall be determined based on the prices prescribed by government authorities including, among others, People's Bank of China, China Banking and Insurance Regulatory Commission, and the fee charging standards published by the aforementioned relevant regulatory authorities and with reference to the market-oriented price.

2. Product and Service Implementation Agreements

According to the current arrangements, from time to time and as required, individual product and service implementation agreements may be entered into between the relevant subordinate companies and entities of CNPC/jointly-held entities or the Group providing the relevant products or services, as appropriate, and the relevant subordinate companies and entities of the Group or CNPC/jointly-held entities, requiring such products or services, as appropriate.

Each product and service implementation agreement will set out the specific products and services requested by the relevant party and any detailed technical and other specifications which may be relevant to those products or services. The product and service implementation agreements may only contain provisions which are in all material respects consistent with the binding principles and guidelines and terms and conditions in accordance with which such products and services are required to be provided as contained in the Comprehensive Agreement.

As the product and service implementation agreements are merely further elaborations on the provision of products and services as contemplated by the Comprehensive Agreement, they do not as such

constitute new categories of connected transactions.

3. Land Use Rights Leasing Contract and Supplemental Agreement

The Company and CNPC signed the Land Use Rights Leasing Contract on March 10, 2000 under which CNPC has leased land in connection with various aspects of the operations and business of the Company covering an aggregate area of approximately 1,145 million square metres, located throughout the PRC, to the Company for a term of 50 years at an annual fee of RMB2 billion. The total rent payable for the lease of all such property may, as at the expiration of 10-year term of the Land Use Rights Leasing Contract, be adjusted by agreement between the Company and CNPC to reflect market conditions prevalent at such time of adjustment, including the then prevailing marketing prices, inflation or deflation (as applicable) and such other factors considered as relevant by both parties in negotiating and agreeing to any such adjustment.

Taking into account the actual business needs of the Company and the changes in the land market in recent years, the Company entered into a supplementary agreement to the Land Use Rights Leasing Contract with CNPC on August 25, 2011, in which the area of the leased land was reconfirmed as 1,783 million square meters and the annual rent was adjusted to no more than RMB3,892 million (excluding taxes and fees). Meanwhile, the parties agreed to adjust the area of building leased and the rental fees every three years as appropriate by reference to the status of the production and operations of the Company. The supplementary agreement took effect as from January 1, 2012.

On August 27, 2020, the parties re-confirmed in a letter of confirmation as agreed that the area of the leased land was 1,142 million square meters and the annual rental was adjusted to approximately RMB5,673 million (excluding taxes and fees). The letter of confirmation took effect as from January 1, 2021.

4. Buildings Leasing Contract (Amended)

On August 24, 2017, the Company entered into a New Buildings Leasing Contract with CNPC, pursuant to which the Company agreed to lease from CNPC buildings with an aggregate gross floor area of approximately 1,152,968 square metres and the annual rental was no more than RMB730 million. Meanwhile, the parties agreed to adjust the area of building leased and the rental fees every three years as appropriate by reference to the status of the production and operations of the Company, but the adjusted rental fees shall not exceed the comparable fair market price. The contract took effect as from January 1, 2018 for a term of 20 years.

On August 27, 2020, the parties reconfirmed in a letter of confirmation that the area of the leased buildings was 1,287,486.41 square meters and the annual rental was adjusted to approximately RMB713 million. The letter of confirmation took effect as from January 1, 2021.

5. Intellectual Property Licensing Contracts

The Company and CNPC continue to implement the three intellectual property licensing contracts entered into on March 10, 2000, namely the Trademark Licensing Contract, the Patent and Know-how Licensing Contract and the Computer Software Licensing Contract. CNPC has agreed to extend the term of the Computer Software Licensing Contract to the expiry date of the statutory protection period of the relevant software or when such software enters the public domain. Pursuant to these licensing contracts, CNPC has granted the Company the exclusive right to use certain trademarks, patents, know-how and computer software of CNPC at no cost. These intellectual property rights relate to the assets and businesses of CNPC which were transferred to the Company pursuant to the restructuring.

6. Contract for the Transfer of Rights under Production Sharing Contracts

The Company and CNPC continue to implement

the Contract for the Transfer of Rights under Production Sharing Contracts dated December 23, 1999. As part of the restructuring, CNPC transferred to the Company relevant rights and obligations under 28 production sharing contracts entered into with a number of international oil and natural gas companies, except for the rights and obligations relating to CNPC's supervisory functions.

As of December 31, 2021, CNPC has been in the process of executing in aggregate 29 projects contemplated under the production sharing contracts, in respect all of which the transfer of rights under the production sharing contracts between CNPC and the Company has been completed. CNPC has assigned to the Company all of its rights and obligations under the production sharing contracts at nil consideration and subject to applicable PRC laws and regulations, except for the rights and obligations relating to CNPC's supervisory functions.

As each of the applicable percentage ratio(s) (other than the profits ratio) in respect of the Trademark Licensing Contract, the Patent and Know-how Licensing Contract, the Computer Software Licensing Contract and the Contract for the Transfer of Rights under Production Sharing Contracts is less than 0.1%, the continuing connected transactions under these contracts are exempted from the reporting, announcement and independent shareholders' approval requirements under Chapter 14A of the Listing Rules. The Directors believe that these continuing connected transactions were entered into in the normal and ordinary course of business for the benefits of the Company, and are in the interests of the shareholders as a whole.

(II) Continuing Connected Transactions with CNPC E&D

On December 28, 2006, the following continuing connected transactions arose as a result of the completion of the Company's acquisition of 67% equity interest in PKZ, which was announced by the Company on August 23, 2006:

- the provision of production services by CNPC to the Group;
- the provision of construction and technical services by CNPC to the Group;
- the provision of material supply services by CNPC to the Group.

Upon completion of the acquisition of PKZ, PKZ became a subsidiary (as defined under the Listing Rules) of CNPC E&D. As CNPC is the controlling shareholder of the Company and as each of CNPC and the Company is interested in 50% interest in CNPC E&D respectively, therefore, CNPC and CNPC E&D are connected persons of the Company under the Listing Rules. The caps for these continuing connected transactions have already been included within the caps for the continuing connected transactions between the Group and CNPC.

(III) Continuing Connected Transactions with Beijing Gas

Due to the fact that Beijing Gas was a substantial shareholder of Beijing Pipeline, a former subsidiary of the Company, and Beijing Pipeline constituted a significant subsidiary of the Group pursuant to the financial data of the Group for the year 2020, Beijing Gas was a connected person of the Company under Listing Rules. On December 22, 2020, the Company considered and passed the Proposal for Kunlun Energy's Pipeline Assets Transaction at the ninth Board meeting of 2020, approving the disposal of the 60% equity interest in Beijing Pipeline held by Kunlun Energy to PipeChina. On March 31, 2021, Kunlun Energy and PipeChina finished the closing of transfer of equity interest. Details of such transaction were published on the websites of Shanghai Stock Exchange (Announcement No. Lin 2021-008) and Hong Kong Stock Exchange on April 1, 2021, respectively. After the equity disposal closing was completed, the Group no longer holds any equity interest in Beijing Pipeline and Beijing

Gas no longer constitutes a connected person of the Company. The transactions with Beijing Gas no longer constitute connected transactions.

On August 27, 2020, the Group renewed a product and service agreement with Beijing Gas, pursuant to which the Group would provide products and services for Beijing Gas on a continuing basis, including but not limited to the provision of natural gas and related pipeline transmission services. The agreement would be effective from January 1, 2021 to December 31, 2023. The details of the transaction were published on the website of Hong Kong Stock Exchange and Shanghai Stock Exchange on August 27, 2020, and please also refer to the connected transaction sections in 2020 annual report published on Hong Kong Stock Exchange and Shanghai Stock Exchange on March 25, 2021, respectively, and the material connected transactions section in 2021 interim report published on the Hong Kong Stock Exchange and Shanghai Stock Exchange on August 26, 2021.

During the effective term of the agreement, any party to any specific agreement relating to any one or more types of products or services can terminate such specific agreement at any time by a written notice of at least six months.

(IV) Ongoing connected transactions with CNPC Finance

During the current reporting period, the beginning balance of the Group's deposits with CNPC Finance is RMB33,275 million, with cash inflow of RMB3,616,743 million and cash outflow of RMB3,619,890 million during the reporting period, and the end-of-period balance is RMB30,128 million; the interest rate range of RMB is from 0.35% to 4.26%. The beginning balance of the loans provided by CNPC Finance to the Group is RMB68,045 million, with new loans of RMB85,195 million and repaid loans of RMB82,673 million during the reporting period, and the end-of-period balance is RMB70,567 million. The interest rate range of RMB is from 3.2% to 4.28%. the

amount of issuance of acceptance bill and discounting of bills from CNPC Finance for the Group is RMB13,615 million and RMB3,671 million, respectively. According to the Listing Rules, CNPC Finance is a connected person of the Company. The relevant transaction amounts for these continuing connected transactions have been included within the caps for the continuing connected transactions between the Group and CNPC.

Caps for the Continuing Connected Transactions

The following annual caps in respect of the continuing connected transactions are set for the relevant transactions for the period from January 1, 2021 to December 31, 2023:

(A) In relation to the products and services contemplated under (a) the Comprehensive Agreement, (b) Land Use Rights Leasing Contract and its supplemental contract, (c) Buildings Leasing Contract (amended), and (d) Beijing Gas Product and Services Agreement, the total annual revenue or expenditure in respect of each category of products and services will not exceed the proposed annual caps set out in the following table:

Category of Products and Services	Proposed annual caps		
	2021	2022	2023
	RMB million		
(i) Products and services provided by the Group to the CNPC/jointly-held entities	150,000	147,200	144,600
(ii) Products and services provided by CNPC/jointly-held entities to the Group			
(a) Engineering technology services	198,200	197,500	197,000
(b) Production services	207,700	205,500	204,500
(c) Material supply services	35,300	35,300	35,300
(d) Social and living services	5,800	5,800	5,800
(e) Financial Services			
- Aggregate of the daily highest amount of deposits of the Group in CNPC and the total amount of interest received in respect of these deposits	55,000	55,000	55,000
- Insurance fees, handling charges for entrusted loans, and fees and charges for settlement services and other intermediary business	2,400	2,400	2,400
- Rents and other payments made under financial leasing	5,000	5,000	5,000
(iii) Financial services provided by the Group to the jointly-held entities	22,000	22,000	22,000
(iv) Land leases provided by CNPC to the Group*	16,578	11,019	5,685
(v) Rental for buildings provided by CNPC to the Group*	2,083	1,384	714
(vi) Products and services provided by the Group to Beijing Gas	40,000	40,000	40,000

* According to the provisions of HKEX, the upper limit of the land and property provided by CNPC to the Group for lease from 2021 to 2023 shall be determined by reference to the annual value of the right-of-use assets. Please refer to the circular, i.e. Update on Ongoing Connected Transactions of 2021 to 2023 published on the website of the Hong Kong Stock Exchange on September 15, 2020 for basis of determining the upper limit.

(B) In relation to the Trademark Licensing Contract, the Patent and Know-how Licensing Contract and the Computer Software Licensing Contract, CNPC has granted the Company the right to use certain trademarks, patents, know-how and computer software of CNPC at nil consideration.

Independent Non-Executive Directors' Confirmation

In relation to the continuing connected transactions undertaken by the Group in 2021, the Independent non-executive Directors of the Company confirm that:

- (i) the connected transactions mentioned above have been entered into during the usual course of business of the Company;
- (ii) the connected transactions mentioned above have been entered into based on normal commercial terms or better terms;
- (iii) the connected transactions mentioned above have been conducted in accordance with the agreements governing such transactions and their terms are fair and reasonable and consistent with the interests of shareholders as a whole.

Auditor's Confirmation

The auditor of the Company has audited the transactions mentioned above and has provided the Board of Directors with a letter indicating that:

- (i) all the connected transactions have been approved by the Board of Directors;
- (ii) all the connected transactions have been in accordance with the pricing policies of the Group if the transactions involve the provision of goods or services by the Group in all material respects;
- (iii) all the connected transactions have been proceeded in accordance with the terms of agreements; and
- (iv) these transactions have been entered into within the cap mentioned above, if applicable.

Save as disclosed above, none of other related-party transactions set out in the note 61 of the consolidated financial statements prepared by the Company in accordance with China Accounting Standards for Business Enterprises constitutes connected transactions or continuing connected transactions that are required to be disclosed under the Listing Rules. The Company confirms that it has complied with the requirements of Chapter 14A of the Listing Rules in relation to all connected transactions and continuing connected transactions to which the Company was a party during 2021.

The information set out in the tables below is principally extracted from the financial statements of the Group prepared in accordance with CAS:

Connected sales and purchases

	Sales of goods and provision of services to connected party		Purchase of goods and services from connected party	
	Transaction amount	Percentage of the total amount of the type of transaction	Transaction amount	Percentage of the total amount of the type of transaction
		RMB million		%
Connected parties				
CNPC and its subsidiaries	69,058	3	331,301	14
Other connected parties	54,842	2	93,108	4
Total	123,900	5	424,409	18

Connected obligatory rights and debts

	Funds provided to connected party			Funds provided to the Group by connected party		
	Connected parties	Opening balance	Occurrence amount	Closing balance	Opening balance	Occurrence amount
Connected parties						
CNPC and its subsidiaries					96,298	37,502
Other connected parties	17,527	3,565	21,092			133,800
Total	17,527	3,565	21,092	96,298	37,502	133,800

CORPORATE GOVERNANCE

1. Improvement of Corporate Governance

During the reporting period, the Company operated its business in a compliant manner strictly in accordance with domestic and overseas regulatory requirements. Pursuant to the Articles of Association, relevant laws and regulations and the securities regulatory rules of the jurisdictions in which the Company is listed, and in light of the actual conditions of the Company, the Company continuously formulated, improved and effectively implemented the various rules of procedure, and the relevant work processes for the Board of Directors and its respective committees.

During the reporting period, the actual governance of the Company complied with the requirements of regulatory documents on the corporate governance of listed companies issued by the regulatory authorities and stock exchanges of places where the Company is listed. Through the coordinated operation and effective check and balance of the general meeting of shareholders, the Board of Directors and its special committees, the Supervisory Committee and the management led by the President, besides the implementation of effective internal control and management systems, the Company further standardized its internal management operations and continuously improved its management level. In accordance with the relevant provisions of the Articles of Association, the Vice Chairman of the Board and the directors of the Company were elected, the members of the special committees of the Board were adjusted accordingly, and the President, Senior Vice President, Vice President and Chief Engineer were appointed. With the increasing emphasis on promoting the green

and low-carbon development, the Company renamed the Health, Safety and Environment Committee to the Sustainable Development Committee and enhanced ESG management and control functions at the Board level, which further improved the construction of the Board. Resolutions in respect of the financial reports, dividend distribution proposal, investment plans, financial budget reports, change in the name of the relevant committee and its functions, adjustments to the remuneration of the independent directors were reviewed and approved. Additionally, strictly in compliance with the regulatory requirements, the Company completed the review process on the change of the accounting firm, and reviewed the reports on the “14th Five-Year Plan” development plan, the performance of duties by the acquisition management group, an authorized group under the board of directors, and other material matters.

The Company always attaches importance to information disclosure, and strictly complies with various regulatory rules of the places of listing. The Company established an information disclosure management system to disclose information in a timely and compliant manner, and designated specific departments responsible for handling matters relating to the disclosure of inside information. Employees are prohibited from dealing or procuring others to deal the Company's shares using inside information. During the reporting period, the Company truly, accurately and completely disclosed various information in a timely manner, which ensured that all shareholders had equal opportunities to access to information relating to the Company, and that the transparency in the corporate governance of the Company could be enhanced continuously.

2. Improvement of Internal Control System

The Company attached great importance to internal control and risk management. By following the regulatory requirements of its places of listing, the Company established and effectively operated its internal control system.

During 2021, the Company continued to strengthen its foundations for the development of an internal control system by insisting on redressing its shortcomings, consolidating its fundamentals and revitalizing its capabilities. The Company also intensified its efforts in connection with the management and control, and also the provision of early warning, of major risks, streamlined and optimized the workflow at the head office, set up an authority manuals mechanism, and explored the channels to improve the information technology application level for internal control and supervision. As the Company continued to achieve effective internal controls, its ability to prevent and mitigate major risks was therefore further enhanced. First, by adhering to the principle of inherited innovation, the Company strived to perfect the top-level design of the internal control system in order to ensure that the design of such system is in compliance with the relevant requirements. Second, the Company undertook on a continuous assessments of major risks and prepared the relevant reports, enhanced its efforts in monitoring, and giving early warning of major risks, and strengthened its analysis and management of risk events, all of which in turn constantly improved its risk management and control capability. Third, by streamlining its business frameworks and optimizing its workflow structures, the Company was able to perfect its general process catalogue and to focus on studying and determining the types of risks and the corresponding management and control measures, which in turn allowed the Company to effectively commence business workflow and also to streamline and optimize the relevant works. Fourth, the Company further improved the efficiency in the use of the limits of authority manuals by integrating various categories of major limits of authority

and consolidating key approval matters in accordance with the principles of clear authority, compliance with laws and regulations, highlighting key issues, and streamlining and efficiency. Fifth, by taking the full advantage of shared service centres and other information technology development achievements and exploring the application of information technology in areas of internal controls and supervision, the Company could improve its efficiency in the administration and control of its information system authority. Sixth, by reasonably determining the scope of tests, emphasizing key areas of test, scientifically optimizing testing methods, proactively cooperating with external audits, and identifying exceptional matters for rectification purposes, the Company was able to further intensify its internal controls and supervision and in turn to ensure the effective implementation of its internal control system. To date, all exceptional issues detected in such tests were rectified and no major defect was found upon assessment.

The Company regularized in a timely manner and strictly implemented financial management processes based on the adjustments to the organisational structure to ensure that financial reports be true, accurate and valid. The Company also strengthened the implementation of the information disclosure management system, the identification standards and reporting procedures for major events, and the collection, compilation and disclosure procedures for disclosable matters.

The Legal and Corporate Reform Department of the Company is responsible for organising and coordinating the internal control tests both internally and externally, supervising the rectification, and organising operational evaluation of the internal control system. Members of the Audit Committee carefully reviewed the internal control report in accordance with the work arrangements during the year at meetings held on March 23, August 25 and December 27, 2021 respectively. The committee considered that the internal control system was effectively developed and operated, and in general

played an important role. The committee recommended that the internal control administration department should strengthen their communication with other supervisory departments so as to conduct in-depth analysis of typical cases with a view to further improving the development of the internal control system and also to prevent and mitigate any other major risks.

The Board is responsible for establishing and maintaining sufficient internal control systems. Upon evaluation of the internal control and risk management systems of the Company based on regulatory requirements, the Board was of the view that such systems were effective for the year ending December 31, 2021. Such internal control system aims to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable rather than absolute warranty that there will not be any material misrepresentation or loss. The Company will disclose its internal report and internal audit report separately. The Company had engaged PricewaterhouseCoopers Zhong Tian LLP (Special General Partnership) audited the effectiveness of the internal control system in relation to financial reporting of the Company and issued a standard and unqualified audit opinion.

3. Performance of Independent Directors' Duties

During the reporting period, the Independent Directors of the Company earnestly and diligently performed their duties in accordance with the relevant domestic and overseas laws and regulations and the Articles of Association. During the reporting period, they reviewed the proposals and relevant documents submitted by the Company and actively participated in the general meetings and meetings of the Board and its special committees (please refer to the Directors' Report section of this report for attendance). They expressed their views objectively and independently and protected the lawful interests of all the shareholders of the Company, in particular, those of the non-

controlling interest shareholders. Independent Directors reviewed regular reports of the Company diligently. They had discussions with external auditors for annual audit before and after their year-end auditing. Such meetings were held prior to meetings of the Board. They monitored and procured that the Company made disclosures in compliance with the relevant laws, regulations as well as rules of the Company on information disclosure, thus ensuring the truthfulness, accuracy and completeness of the Company's information disclosure. During the reporting period, the independent Directors of the Company did not raise any objection to any resolutions or other matters discussed at the meetings of the Board of the Company. Meanwhile, the Independent Directors of the Company kept themselves informed of relevant laws, regulations and regulatory rules by referring to the Update Report on topical issues prepared by the Company to understand the progress of major projects of the Company.

(1) Attendance of meetings

For proposals that need to be submitted to the Board of Directors for review, all independent Directors carefully read the relevant documents and materials in advance, took the initiative to obtain the relevant information, got a detailed understanding of the background of proposals to be fully prepared for discussion and decision-making at meetings of the Board of Directors and special committees, and put forward relevant independent opinions and review opinions. They actively attended meetings, carefully reviewed proposals in meetings, actively participated in discussion, strove to give full play to their professional advantages, and provided professional opinions and recommendations through in-depth communication with the management. They supervised the implementation after meetings and learnt about the progress to ensure effective implementation.

(2) Work Seminars, communications about investigations and research

As the Company's independent directors are from

Hong Kong, Japan and the United Kingdom, while they were not able to conduct field research in 2021 due to the continued impact brought by the COVID-19, they managed to overcome various difficulties such as the epidemic and time difference to actively understand the Company's operating status, financial performance and progress of major projects through video conferences, high-level exchanges, and correspondence. They actively made recommendations for the operation of the Board of Directors and the Company's business development, faithfully fulfilling their duty of diligence.

The independent directors of the Company remained concerned about matters such as "carbon peak" and "carbon neutrality", working capital of first quarter of the year, the establishment of Kunlun Capital and the development of new energy, new materials and new business. Such independent directors also raised questions about, and gave opinions and recommendations on, the Company's business development, financial performance and establishment of the industrial capital investment company. Mr. Dai Houliang, the Chairman, attached great importance and required the relevant business departments to study and prepare special reports, and address the concerns of the independent directors in writing. Mr. Huang Yongzhang, the Director and President of the Company, in conjunction with departments in charge of planning and finance and other integrated departments, convened special exchange meetings with independent directors to discuss matters such as the development of new energy business and the 2022 investment plan. Through in-depth discussions and exchanges, understanding and consensus were reached, and the meetings were fruitful.

(3) Day-to-day work

During the annual debriefing period, all independent Directors actively learnt about, and got familiar with, the latest policies and regulations concerning listed companies and the Company's business. They observed these policy requirements in their work and carried

out their work legally and compliantly. All independent Directors have been qualified for serving as independent Directors.

All independent Directors carefully read the Company's internal governance system, performance reminder letter, annual work plan, the "Company Status Bulletin" and other work materials to understand the Company's latest work developments, and performed their duties strictly in accordance with regulatory requirements. Through relevant meetings of the Board of Directors, they reviewed management reports at regular intervals to understand the overall situation of the Company's operation and management.

Meanwhile, all independent Directors continued to pay attention to the relevant information feedback from the regulatory authorities, investors, the media and the public, and had the management fully note and understand the demands of stakeholders. They especially paid close attention to matters such as the cap of continuing connected transactions and the investment budget plan for the upcoming year, and the demands of capital market investors.

4. Independence of the Company from the Controlling Shareholder

The Company is independent from its controlling shareholder, CNPC, generally, in respect of business, personnel, asset and finance. The Company has independent and comprehensive business operations and management capabilities in market.

5. Senior Management Evaluation and Incentive Scheme

During the reporting period, in accordance with the "Measures of Evaluation of Annual Performance of the President's Work Team", the Company evaluated

the completion of the performance targets of 2021 by the President's team with reference to the achievement of the performance targets in 2021 and the business development plan of 2022, and formulated the performance contract for the President's team for 2022. The "Report on Evaluation of the President's Operating Results for 2021 and the Formulation of President's Performance Contracts for 2022" was reviewed and approved at the fourteenth meeting of the eighth Board.

During the reporting period, the Company conducted, on the basis of the "Pilot Measures of Evaluation of Performance of the Senior Management of PetroChina Company Limited" and the "Pilot Measures of Evaluation of Economy Value Added of Senior Management", appraisals on members of the senior management from specialised companies, local companies and the science and research planning departments with respect to their achievement of the performance targets for 2021. Rewards and punishments were made on the basis of the performance evaluation. With reference to the business development plan and key tasks of the Company for 2022 as well as the positions and duties of the various management officers, the Company formulated performance contracts for 2022 and signed with the management officers under middle and above level, respectively. The Company continued to conduct follow-up evaluation of quarterly performance targets and advanced quarterly performance compensation to senior management accordingly.

6. Corporate Governance Report

(1) Compliance with the Corporate Governance Code

For the year ended December 31, 2021, the Company has complied with all the code provisions of the Corporate Governance Code ("Corporate Governance Code") set out in Appendix 14 to the Listing Rules.

(2) Compliance with the Model Code for Securities Transactions by Directors of Listed Issuers

The Company has adopted the provisions in relation to dealing in shares of the Company by Directors as set out in the Model Code for Securities Transactions by Directors of Listed Issuers contained in Appendix 10 to the Listing Rules (the "Model Code"). After specific enquiries being made to all the Directors and Supervisors, each Director and Supervisor has confirmed to the Company that each of them has complied with relevant standards set out in the Model Code in the reporting period.

(3) Board of Directors

In accordance with the provisions of the Listing Rules relating to the composition of the Board of Directors, at least one thirds of the members of the Board of Directors shall be independent non-executive Directors, and at least one of whom must possess appropriate professional qualifications or expertise in accounting or financial management. Please refer to the "Directors, Supervisors, Senior Management and Employees" section of this annual report for the basic information of the current Directors of the Company and changes during the reporting period.

Pursuant to the Articles of Association and Rules of Procedure for the Board of Directors, the Board convened 6 Board meetings, including 3 on-site and video regular meetings and 3 extraordinary meetings by written circular and passed 31 resolutions of the Board meetings in 2021. For details of the attendance rate of Directors at on-site regular meetings of the Board during the year, please refer to the section "Members of the Board and the attendance rate of Directors" in the "Directors' Report" of this annual report.

There is no relationship (including financial, business, family or other material or relevant relationship(s)) among members of the Board and between the Chairman and the President of the Company.

(4) Operations of the Board of Directors

The Company's Board is elected by the shareholders' general meeting of the Company through voting and is held accountable to the shareholders' general meeting. The primary responsibilities of the Board are to provide strategic guidance to the Company, exercise effective supervision over the management, ensure that the Company's interests are protected and are accountable to the shareholders. The powers and duties of the Board and the management have been clearly specified in the Articles of Association, with the aim to provide adequate check and balance mechanism for good corporate governance and internal control. In accordance with the Articles of Association or as authorised by the shareholders' general meeting, the Board makes decisions on certain important matters, including annual plans for principal operations development and investment; annual criteria for assessment of the performance of members of operation teams of the Company and annual remuneration plans; distribution plans in respect of interim profit; and corporate reorganisation of the Company. The remuneration of the Directors of the Company is determined by the Board as approved and authorised by the shareholders' general meetings, with a calculation based on responsibilities and performances of Directors and performance of the Group. The Directors and the Board carry out corporate governance duties in a serious and responsible manner. The Directors attend the Board meetings in a serious and responsible manner, perform their duties as Directors earnestly and diligently, make important decisions concerning the Company, appoint, dismiss and supervise the members of the operation teams of the Company. Led by the President, the management of the Company is responsible for implementing the resolutions approved by the Board and administering the Company's day-to-day operation and management.

The Company has received a confirmation of independence from each of the five independent non-executive Directors pursuant to Rule 3.13 of the Listing Rules. The Company considers that the five independent

non-executive Directors are completely independent of the Company, its substantial shareholders and its connected persons and fully comply with the requirements concerning independent non-executive Directors under the Listing Rules. Mr. Cai Jinyong, the independent non-executive Director, has appropriate accounting and financial experience as required under Rule 3.10 of the Listing Rules. Please see the section headed the Brief Biography of the Directors under the "Directors, Supervisors, Senior Management and Employees" section of this annual report for biographical details of Mr. Cai Jinyong. The five independent non-executive Directors do not hold other positions in the Company. They perform their duties seriously according to the Articles of Association and the relevant requirements under the applicable laws and regulations.

The Board has established five committees: the Nomination Committee, the Audit Committee, the Investment and Development Committee, the Examination and Remuneration Committee and the Sustainable Development Committee. The main responsibility of these committees is to provide support to the Board in decision-making. The Directors participating in these special board committees focus on particular issues according to their division of labour and make recommendations on the improvement of the corporate governance of the Company.

During this year, the Board has performed the corporate governance obligations set out below as provided in the Listing Rules: (a) to develop and review the Company's policies and practices on corporate governance and make recommendations; (b) to review and monitor the training and continuous professional development of directors and senior management; (c) to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements; (d) to review the Company's compliance with Corporate Governance Code and disclosure in this annual report.

(5) The Chairman, Vice Chairman and President

Pursuant to the Articles of Association, the primary duties and responsibilities of the Chairman are chairing the shareholders' general meetings and convening and chairing the Board meetings, inspecting the implementation of Board resolutions, signing certificates of securities issued by the Company, and other duties and power authorised by the Articles of Association and the Board. Pursuant to the Articles of Association, the primary duties and responsibilities of the Vice Chairman are when the Chairman is unable to exercise his powers, such powers shall be exercised by the Vice Chairman who has been designated by the Chairman to exercise on his behalf. The primary duties and responsibilities of the President are managing production and operation of the Company, organising the implementation of Board resolutions, organising the implementation of annual business plans and investment plans of the Company, formulating plans for the establishment of internal management institutions of the Company, devising the basic management system of the Company, formulating specific rules and regulations of the Company, advising the Board to appoint or dismiss Senior Vice Presidents, Vice Presidents, the Chief Financial Officer and other senior management personnel, appointing or dismissing management staff other than those who should be appointed or dismissed by the Board, and performing other duties and power authorised by the Articles of Association and the Board.

(6) Term of Office of Directors

Pursuant to the Articles of Association, the Directors (including non-executive Directors) shall be elected at the shareholders' general meeting and serve a term of three years. Upon the expiry of their terms of office, the Directors may be re-elected for another term.

(7) Training Attended by Directors and Secretary to the Board

The Directors and the Secretary to the Board continued participating in professional development programmes to develop and update their knowledge and skills, with view to contributing to the Board with sufficient information and up to its requests. In 2021, affected by restrictions due to the COVID-19, the independent Directors of the Company were not able to attend the training and research on-site for most of them were abroad. They actively learned the operating status, financial performance and the situation of major projects of the Company through video conference, high-level exchanges and correspondence, and overcame difficulties of epidemic and time differences, etc. to actively give advice and suggestions concerning the operation of the Board and the development of the business, through which to fulfil their fiduciary duties.

Details of trainings attended by the current Directors and the Secretary to the Board are set out as below:

Names	Positions	Updates on corporate governance/legislations, rules and regulations		Accounting/finance/business management and productions and operations of the Company	
		Reading relevant materials	Attending training and seminars	Reading relevant materials	Research
Dai Houliang	Chairman	√	√	√	√
Hou Qijun	Vice Chairman	√	√	√	√
Duan Liangwei	Non-executive Director	√	√	√	√
Liu Yuezhen	Non-executive Director	√	√	√	√
Jiao Fangzheng	Non-executive Director	√	√	√	√
Huang Yongzhang	Executive Director and President	√	√	√	√
Ren Lixin	Executive Director and Senior Vice President	√	√	√	√
Elsie Leung Oi-sie	Independent non-executive Director	√	√	√	√
Tokuchi Tatsuhito	Independent non-executive Director	√	√	√	√
Simon Henry	Independent non-executive Director	√	√	√	√
Cai Jinyong	Independent non-executive Director	√	√	√	√
Jiang, Simon X.	Independent non-executive Director	√	√	√	√
Chai Shouping	the Secretary to the Board	√	√	√	√

(8) Nomination Committee

As of December 31, 2021, the Nomination Committee of the Company comprises three Directors, including two independent non-executive Directors, with Mr. Dai Houliang, the Chairman, as the chairman of the committee, and Mr. Cai Jinyong and Mr. Jiang, Simon X., the independent non-executive Directors, as members.

The main duties of the Nomination Committee of the Company are as follows: regularly examining and discussing the structure, number of members and composition of the Board and making recommendations on the change of the Board in compliance with the strategy of the Company; researching the standards and procedures for the selection of Directors, President and other senior management personnel and making

recommendations thereon to the Board; researching the Board diversity policy and the training system of the Directors and the management; selecting qualified candidates for Directors and senior management personnel, examining the candidates for Directors and the President and making recommendations thereon; accepting the candidate proposals made by persons entitled to nominate such candidates in accordance with the Articles of Association; reviewing the independence of independent non-executive Directors and providing an assessment opinion; appointing representatives to attend the general meeting to answer inquiries of investors about the work of the Nomination Committee; and other duties as required by relevant laws and regulations or listing rules of places where the Company is listed and any such other matters as authorised by the Board.

The Company has established a nomination policy for Directors, setting out the selection criteria and nomination procedures of Directors. The Nomination Committee, when nominating candidates for Directors, mainly considers whether he or she has qualifications for Directors, whether he or she complies with laws, administrative regulations, rules and the Articles of Association, and also assesses his or her reputation, achievement and experience, time and energy available, and Director diversity policy. The Nomination Committee will summarize the nominees before the meeting for consideration by the members of the committee. After receiving the nomination proposal and the candidate's personal data, the Nomination Committee evaluates the candidate based on the above criteria to determine whether the candidate is eligible to serve as a Director.

The Board diversity policy of the Company specifies our position in upholding the diversity of the Board, and the approaches adopted by us to achieve such diversity. We acknowledged and appreciated the benefits brought from diversity of the Board, and regards the diversity of the Board as a critical factor in achieving our strategic goals, maintaining our competitive strengths and achieving our sustainable development. We considered the diversity of the Board from various aspects, including talents, skills, industry experience, cultural and education background, gender, age and other factors, when deciding the composition of the Board. All appointments of Directors shall be decided after taking into consideration of talents, skills and experience required for the overall operation of the Board.

At present, the Company's male Directors accounted for 91.7% and female Directors accounted for 8.3%. The nationalities of the Company's Directors include PRC (including Hong Kong), Japan and the United Kingdom. Directors aged between 51 and 60 years old accounted for 58.3%, aged between 61 and 70 years old accounted for 33.3%, aged above 71 years old accounted for 8.3%. 58.3% of the Directors of the Company have a professional

background in petrochemical industry, 16.7% of Directors have economic background, 16.7% of Directors have financial professional background, and 8.3% of Directors have legal professional background.

The Nomination Committee convened five meetings during the reporting period:

On March 23, 2021, the Nomination Committee met by way of written circular to review the Appraisal of Performance of the Board of Directors of the Company in 2020 and the Proposal for the Appointment of the President of the Company and passed the resolutions thereon;

On April 28, 2021, the Nomination Committee met by way of written circular to review the Appointment of the Chief Engineer of the Company, and passed the resolution thereon;

On July 19, 2021, the Nomination Committee met by way of written circular to review and adopt the Report on the Appointment of the Senior Management of the Company, and passed the resolution thereon;

On August 24, 2021, the Nomination Committee met by way of written circular to consider and adopt the Proposal for the Election of Directors of the Company and the Proposal for the Appointment of the Senior Vice President of the Company, and passed the relevant resolutions thereon;

On October 27, 2021, the Nomination Committee met by way of written circular to review and adopt the Proposal for Electing the Vice Chairman of the Company and the Proposal for Adjusting the Composition of the Board Committees of the Company, and passed resolutions thereon.

All members of the Nomination Committee attended all the meetings of the committee.

(9) Audit Committee

As of December 31, 2021, the Audit Committee of the Company comprises two independent non-executive Directors, with Mr. Cai Jinyong as the chairman, Mr. Jiang, Simon X. as a member, and a non-executive Director, Mr. Liu Yuezhen as a member.

Under the Rules of Procedures of the Audit Committee of the Company, the chairman of the committee must be an independent non-executive Director and all resolutions of the committee shall be approved by the independent non-executive Directors.

The major responsibilities of the Audit Committee of the Company are: reviewing and ensuring the completeness of annual reports, interim reports and quarterly reports and related financial statements and accounts, and reviewing any material opinion contained in the aforesaid statements and reports in respect of financial reporting; reporting to the Board in writing on the financial reports of the Company (including annual reports, interim reports and quarterly reports) and related information; reviewing and supervising the work conducted by the internal audit department in accordance with the applicable PRC and international rules; monitoring the financial reporting system and internal control procedures of the Company, as well as checking and assessing matters relating to, among others, the financial operations, internal control and risk management of the Company; reviewing and supervising the engagement of external auditors and their performance; receiving, keeping and dealing with complaints or anonymous reports regarding accounting, internal accounting control or audit matters and ensuring the confidentiality of such complaints or reports; liaising with the Board, the senior management and external accountants on a regular basis; meeting with external accountants and the Company's own legal counsel at least once a year; and reporting regularly to the Board in respect of any significant matters which may affect the financial position and business operations of the Company and in respect of the self-evaluation of the committee on

the performance of their duties.

During the reporting period, the Audit Committee held five meetings, of which four meetings were conducted by way of written circular and one meeting was held onsite and by video conference. All resolutions adopted by the Audit Committee have been submitted to all directors for review at Board meetings.

On March 23, 2021, the Audit Committee met by way of written circular to consider 6 proposals including the Annual Financial Report of the Company for 2020, the Profit Distribution Proposal for 2020, the Report on the Company's Continuing Connected Transactions in 2020, the Report on Internal Controls of the Company in 2020, the Report on Audit Work of the Company in 2020, and the Proposal for Changing the Domestic and Overseas Accounting Firms of the Company for 2021, and review the Report of KPMG Addressed to the Audit Committee and passed resolutions thereon.

On April 28, 2021, the Audit Committee convened a meeting by way of written circular to review the First Quarterly Report of the Company for 2021 and the Proposal for Proposed Participation in the Establishment of Industrial Investment Company, and passed resolutions thereon.

On August 25, 2021, the Audit Committee met onsite and by video conference to review 6 proposals including the Interim Financial Report of the Company for 2021, the Interim Profit Distribution Proposal of the Company for 2021, the Interim Report on the Continuing Connected Transactions of the Company in 2021, the Report on Internal Controls, the Report on the Audit Work of the Company, the Proposal for Payment of the Audit Fees of the Auditors for 2021, and listened to the Report of PricewaterhouseCoopers Zhong Tian LLP Addressed to the Audit Committee and passed resolutions thereon.

On October 27, 2021, the Audit Committee convened

a meeting by way of written circular to review the Third Quarterly Report of the Company in 2021 and passed the resolution thereon.

On December 20, 2021, the Audit Committee convened a meeting by way of written circular to review 2 proposals including the Report on Internal Controls and the Report on the Audit Work of the Company, and review the Report of PricewaterhouseCoopers Zhong Tian LLP Addressed to the Audit Committee, and passed resolutions thereon.

In addition, the Audit Committee carried out the independence check and the business approval procedure regarding the non-audit project conducted by PricewaterhouseCoopers Zhong Tian LLP (Special General Partnership).

All the resolutions or opinions on reviewing and considering were submitted to the Board and, if applicable, put into action. All members of the Audit Committee attended all the meetings of the committee.

(10) Examination and Remuneration Committee

As of December 31, 2021, the Examination and Remuneration Committee of the Company consists of two independent non-executive Directors and one non-executive Director, with Ms. Elsie Leung Oi-sie as the chairman of the committee, and Mr. Tokuchi Tatsuhito and Mr. Liu Yuezhen as members.

The main duties and responsibilities of the Examination and Remuneration Committee are: considering the performance assessment criteria of Directors and management, conducting performance assessment and making relevant recommendations; considering and reviewing remuneration policies and schemes in respect of Directors and senior management (including compensations to Directors and senior management for loss of office or retirement); organising the performance assessment on the

President and reporting to the Board, and monitoring the performance assessments to be conducted by the President on Senior Vice Presidents, Vice Presidents, the Chief Financial Officer and other senior managers; considering the Company's incentive programme and remuneration system; monitoring and appraising the effectiveness of their implementation, and providing recommendations for reform and improvement; and other duties as required by relevant laws and regulations or listing rules of place where the Company is listed and any such other matters as authorised by the Board.

During the reporting period, the Examination and Remuneration Committee convened one meeting. On March 23, 2021, the Examination and Remuneration Committee met by way of written circular to review the Report on Assessment of the Results of Operations by the President's Work Team for 2020 and the Formulation of President's Performance Contract for 2021 and the Proposal for Adjusting the Remuneration of Independent Directors and passed resolutions thereon. All members of the Examination and Remuneration Committee attended all the meetings of the committee.

(11) Investment and Development Committee

The Investment and Development Committee of the Company consists of three Directors, with Mr. Hou Qijun as the chairman of the committee, and Mr. Duan Liangwei and Mr. Simon Henry as members.

The main duties and responsibilities of the Investment and Development Committee are: conducting research on the Company's long-term development strategy proposed by the President and making recommendations to the Board; conducting research on the annual investment plan and adjustment of investment plan proposed by the President, and making recommendations to the Board; reviewing feasibility study report and pre-feasibility study report of the major investment and financing plan, major capital operation, asset management project that require the decision of the Board, and making recommendations

to the Board; conducting research and making recommendations on other major issues affecting the Company's development; relevant laws, regulations and listing rules of jurisdictions where Company's shares are listed and other matters authorized by the Board.

During the reporting period, the Investment and Development Committee convened one meeting. On December 20, 2021, the Investment and Development Committee convened a meeting by way of written circular, at which the committee reviewed the Business Development and Investment Plan of the Company for 2022 and passed a resolution thereon. All members of the Investment and Development Committee attended all the meetings of the committee.

(12) Sustainable Development Committee

The Sustainable Development Committee of the Company consists of three Directors, with Mr. Huang Yongzhang as the chairman of the committee, and Mr. Jiao Fangzheng and Mr. Ren Lixin as the members.

The main duties and responsibilities of the Sustainable Development Committee are: supervising and studying the sustainable development (including but not limited to environment, society and governance) matters of the Company, identifying and assessing major risks and impacts on the sustainable development of the Company, strengthening risk management in respect of environment, society and corporate governance and making proposals to the Board of Directors; supervising the Company's commitments and performance on key issues such as responding to climate change, safeguarding health and safety and fulfilling social responsibilities and making proposals to the Board of Directors; reviewing the relevant guidelines, strategies, objectives, measures and relevant important issues in relation to the sustainable development of the Company, and supervising and reviewing the implementation of the sustainable development objectives of the Company based on the relevant sustainable development objectives that have

been set up; reviewing the Company's annual report on environment, society and governance and the report on quality, safety and environmental protection and making proposals to the Board of Directors; paying attention to the important information of sustainable development matters related to the Company's business, and making proposals to the Board of Directors when it is estimated that the environmental, society and governance matters may have a significant impact on the stakeholders; other matters authorized by the Board of Directors. .

During the reporting period, the Sustainable Development Committee convened one meeting. On March 24, 2021, the Sustainable Development Committee convened its committee meeting by way of written circular, at which the Health, Safety and Environmental Protection Report of the Company for 2021 was reviewed and a resolution was passed thereon. All members of the Sustainable Development Committee attended all the meetings of the committee.

(13) Shareholders and Shareholders' General Meetings

For details of shareholders and shareholder's general meetings, please refer to the section entitled "Shareholders' Rights and Shareholders' Meetings" in this annual report.

(14) Supervisors and the Supervisory Committee

The Supervisory Committee of the Company now comprises eight members, including five Supervisors representing shareholders (including one Chairman of the Supervisory Committee) and three Supervisors representing employees. The Supervisory Committee of the Company reports to the shareholder's general meeting and exercises the following functions according to law: to review and propose written review opinion on the regular reports of the Company drafted by the Board; to review the financials of the Company; to supervise the conducts of the Directors, President, Senior Vice Presidents, Vice

Presidents, Chief Financial Officer and other senior management officers carrying out Company duties, and to propose removal suggestions of the aforesaid officers if they violate laws, administrative regulations, the Articles of Association or resolutions of the shareholders' general meetings; to ask the Directors, President, Senior Vice Presidents, Vice Presidents, Chief Financial Officer and other senior management officers to rectify if their conducts violate the interest of the Company; to verify the financial materials including financial reports, operation reports and profit distribution plans to be proposed by the Board to the shareholders' general meeting, and, if there is any doubt, appoint Certified Public Accountants and practicing auditors to review in the name of the Company; to propose extraordinary shareholders' meeting and to convene and chair shareholders' general meetings when the Board fails to perform its duty under the Company Law to convene and chair shareholders' general meetings; to make proposals for the shareholders' general meetings; to represent the Company to negotiate with Directors or to bring litigation claims against the Directors, President, Senior Vice Presidents, Vice Presidents, Chief Financial Officer and other senior management officers in accordance with Article 152 of the Company Law; to conduct investigation in the event of abnormal operation of the Company; to conduct annual review of external auditors regarding their performance together with the Audit Committee of the Board of Directors and to make suggestions regarding engagement, renewal of engagement and dismissal of external audits and their audit service fees to the shareholders' general meetings; to supervise the compliance of the connected transactions. During the reporting period, the Supervisory Committee conducted four meetings, including two on-site meetings and two meetings by written circular, conducted review of the 2020 Annual Report, the First Quarterly Report, Interim Report, and the Third Quarterly Report of 2021 of the Company; attended two Board meetings, issued five opinions of the Supervisory Committee; attended the shareholders' general meetings twice and proposed two proposals to the shareholders' general meetings.

The Supervisory Committee of the Company discharged its duties diligently in accordance with the Articles of Association, including convening Supervisory Committee meetings, attending all Board meetings and persistently reporting their work to the shareholders' general meeting, submitting the Supervisory Committee Report and related proposals. In line with the spirit of accountability to all shareholders, the Supervisory Committee monitored the financial affairs of the Company and the performance of duties and responsibilities by the Directors, President and other senior management personnel of the Company to ensure that they have performed their duties in compliance with applicable laws and regulations. The Supervisory Committee has made good recommendations to major matters of the Company including production, operation and investment projects.

(15) Directors' Responsibility in Preparing Financial Statements

The Directors are charged with the responsibility to prepare the financial statements in each financial year with support from the accounting departments, and to ensure that the relevant accounting practices and policies are observed and IFRS and CAS are complied with in the compilation of such financial statements in order to report the financial position of the Company in a factual and unbiased manner.

(16) Going Concern

The Directors, having made appropriate enquiries, consider that the Company has adequate resources to continue in operational existence for the foreseeable future and that, for this reason, it is appropriate to adopt the going concern basis in preparing the financial statements.

(17) Remuneration of the Auditors

For information relating to the remuneration received by the auditors for their auditing services to the Company, please refer to the section of "Significant Events" for the

part entitled “Engagement and disengagement of firm of accountants” in this annual report.

(18) Risk Management and Internal Control

For information relating to the risk management and internal control of the Company, please refer to the sections of the Improvement of Corporate Governance and Improvement of Internal Control System.

(19) Others

Relevant information on corporate governance, mechanisms for assessment of performance and performance incentives and restrictions of the Company, information disclosure and transparency, the relationship between CNPC and the Company, performance of duty by independent non-executive Directors, professional and ethical code for senior management personnel, code of

conduct for staff and workers, and significant differences on corporate governance regulations pursuant to the requirements under section 303A.11 of the New York Stock Exchange Listed Company Manual can be found on the Company's website (www.petrochina.com.cn). You may access to such information by following these steps:

1. From our main web page, click “Investor Relations”;
2. Next, click “Corporate Governance Structure”;
3. Finally, click on the information you are looking for.

The Board will review such rules in accordance with the relevant regulatory requirements and the actual circumstances of the Company on an annual basis.

SHAREHOLDERS' RIGHTS AND SHAREHOLDERS' MEETINGS

1. Shareholders' rights

(1) Shareholders' procedures to propose to convene an extraordinary general meeting

To ensure that all shareholders of the Company enjoy equal rights and exercise their rights effectively, the Articles of Association of the Company provides that an extraordinary general meeting or class meeting may be called upon by shareholders according to the following procedures: one or more shareholders holding in aggregate 10% or above of the shares of the Company with voting rights is/are entitled to request the Board to convene an extraordinary general meeting or class meeting in writing. The Board shall, within ten days upon receipt of the request, make available their written comments on their agreeing or disagreeing with the convening of such extraordinary general meeting or class meeting.

If the Board agrees to convene such extraordinary general meeting or class meeting, it shall, within five days upon passing the Board resolution, serve a notice of the meeting. Consent of the relevant shareholder(s) shall be sought for any variation to the original request.

If the Board disagrees to convene such extraordinary general meeting or class meeting, or fails to respond within ten days upon receipt of the request, the individual or the shareholders holding in aggregate 10% or above of the shares of the Company with voting rights is/ are entitled to recommend in writing to the Supervisory Committee to convene such extraordinary general meeting or class meeting.

If the Supervisory Committee agrees to convene such extraordinary general meeting or class meeting, it shall, within five days upon receipt of such request, serve a notice of meeting. Consent of the relevant shareholder(s) shall be sought for any variation to the original request.

If the Supervisory Committee fails to serve the notice of shareholders' meeting within the period as provided, it shall be deemed as the Supervisory Committee not convening and presiding over the meeting. One or more shareholders holding in aggregate 10% or above of the shares of the Company with voting rights for 90 consecutive days or above is/ are entitled to convene and preside over such meeting on its/their own.

(2) Procedures for putting proposals to a general meeting

Pursuant to the Articles of Association in respect of convening an annual general meeting, any shareholder(s) holding 3% or above of the total number of shares of the Company with voting rights may put forward any provisional proposal(s) in writing to the convenor ten days prior to the general meeting. The convenor shall, within two days upon receipt of the proposal(s), serve a supplemental notice of general meeting, announcing the contents of such provisional proposals. The contents of any such proposals shall fall within the purview of the general meeting, with clear and definite issues for consideration and substantive matters for resolution and in compliance with laws, administrative rules and the Articles of Association.

Should any shareholder wish to make a proposal in accordance with the Articles of Association, both the annual report of the Company and the "Investors Relations" section of the Company's website provide specific contact information.

(3) Procedures for enquiries of shareholders made with the Board of Directors

Any shareholder may make any written enquiry with the Board at any time. The administrative measures of the Company in respect of management of investors' relations provide for clear and definite procedures for enquiries. Definite guidelines in respect of contact details are also set out in the annual report of the Company and the "Investors Relations" section on the website of the Company.

A question-and-answer session is in place in any general meeting of the Company. Questions from any shareholder will be answered by the Chairman, Vice Chairman, President and Independent Directors or intermediary. Forms for written questions are available to any shareholders who are not able to ask any questions due to time limitation. Such written questions will be answered in detail by the Investors' Relations Department of the Company. Shareholders may also make more frequent use of the mailbox of the Secretary to the Board on the website of the Company. Issues of concern to shareholders are answered by the Company in a prompt manner.

2. Shareholders' meetings

The Company convened two shareholders' general meeting pursuant to its Articles of Association:

On June 10, 2021, the annual general meeting for 2020 of the Company was held at V-Continent Wuzhou

Hotel. Seven ordinary resolutions were reviewed and adopted at the meeting by more than half of the affirmative votes, which included the Report of Board of Directors for the year 2020, Report of the Supervisory Committee for the year 2020, Financial Report for the year 2020, the Profit Distribution Proposal for the year 2020, Resolution of Authorisation to the Board of Directors to decide on 2021 Interim Profit Distribution Plan, Resolution of Changing Domestic and International Accounting Firms of the Company for the year 2021, Resolution on Guarantee Matters of the Company for the year 2021. One special resolution was reviewed and adopted at the meeting by more than two thirds of the affirmative votes, which was the Resolution on Granting General Mandate to the Board of Directors in Relation to Issuance of Debt Financing Instruments. None of the independent Directors of the Company raised any oppositions at the general meeting.

Please refer to the announcements published by the Company on the website of Hong Kong Stock Exchange and Shanghai Stock Exchange, for resolutions passed at the annual general meeting and details.

On October 21, 2021, the first extraordinary general meeting of 2021 was convened in Beijing Soluxe Heyi Hotel Tarim. One ordinary resolution, i.e. the Resolution on the Election of Additional Directors of the Company, was reviewed and adopted at the meeting by more than half of the affirmative votes. None of the independent Directors of the Company raised any oppositions at the general meeting.

Please refer to the announcements published by the Company on the website of the Hong Kong Stock Exchange and the Shanghai Stock Exchange, for the resolution passed at the extraordinary general meeting and details.



DIRECTORS' REPORT

The Board of the Company is pleased to present its Directors' report for perusal.

1. Review of results of operations and the business prospect of the Company during the reporting period

Please refer to the sections headed "Business Review", "Discussion and Analysis of Operations" and "Chairman's Report" in this annual report.

2. Risk Factors

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

(1) Industry Regulations and Tax Policies Risk

The PRC government exercises supervision and regulation over the domestic oil and natural gas industry. These regulatory measures include the obtaining of exploration and production licences, the payment of industry-specific taxes and levies, and the implementation of environmental protection policies and safety standards. They affect the Group's operating activities. Any future changes in the PRC governmental policies in respect of the oil and natural gas industry may also affect the Group's business operations.

Taxes and levies are one of the major external factors affecting the operations of the Group. The PRC government has been actively implementing taxation reforms, which may lead to future changes in the taxes and levies relating to the operations of the Group, thereby affecting the operating results of the Group.

(2) Price Fluctuations of Crude Oil and Refined Products Risk

The Group is engaged in a wide range of oil and gas products-related activities and part of its oil and gas products demands are met through external purchases in international market. The prices of crude oil, refined products and natural gas in the international market are affected by various factors such as changes in global and regional politics and economy, demand and supply of oil and gas, as well as unexpected events and disputes with international repercussions. The domestic crude oil price is determined by reference to international price of crude oil and the prices of domestic refined products are adjusted by PRC government to reflect the price changes in international crude oil market. Domestic natural gas prices are prescribed by PRC government.

(3) Foreign Exchange Rate Risk

The Group conducts its business primarily in Renminbi in the PRC, but it keeps certain foreign currencies to pay for the imported crude oil, equipment and other raw materials as well as to repay financial liabilities denominated in

foreign currencies. Currently, the PRC government has implemented a regulated floating exchange rate regime based on market supply and demand with reference to a basket of currencies. However, Renminbi is still regulated in capital projects. The exchange rates of Renminbi are affected by domestic and international economic and political changes, and demand and supply for Renminbi. Future exchange rates of Renminbi against other currencies may vary significantly from the current exchange rates, which in turn would affect the operating results and financial position of the Group.

(4) Market Competition Risk

The Group has distinctive advantages in resources, and is in a leading position in the oil and gas industry in the PRC. At present, major competitors of the Group are other large domestic oil and petrochemical producers and distributors. With the gradual opening up of the domestic oil and petrochemical market, large foreign oil and petrochemical companies have become competitors of the Group in certain regions and segments. The Group has been in a leading position in the exploration and production business and natural gas business in China, but the Group is facing relatively keen competition in refining, chemicals and marketing of refined products businesses.

(5) Uncertainty of the Oil and Gas Reserves Risk

According to industry characteristics and international practices, both the crude oil and natural gas reserve data disclosed by the Group are estimates only. The Group has engaged internationally recognised valuers to evaluate the crude oil and natural gas reserves of the Group on a regular basis. However, the reliability of reserves estimates depends on a number of factors, assumptions and variables, such as the quality and quantity of technical and economic data, the prevailing oil and gas prices of the Group etc., many of which are beyond the control of the Group and may be adjusted over time. Results of drilling, testing and exploration after

the date of the evaluation may also result in revision of the reserves data of the Group to a certain extent.

(6) Overseas Operations Risk

As the Group operates in a number of countries around the world, it is subject to the influences of different political, legal and regulatory factors prevailing in the countries of operation, including countries which are not very stable and are greatly different from developed countries in certain material aspects. The risks involved principally include instability as to political environment, taxation policies and regulatory requirements, as well as import and export restrictions.

(7) Risk Relating to Climate Change

The oil industry has been facing ever increasing challenges posed by global climate change in recent years. A number of international, domestic and regional agreements restricting greenhouse gas emission have been signed and become effective. If China or other countries in which the Company operates take more stringent measures to reduce greenhouse gas emission, the revenue and profits earned by the Group may reduce as a result of substantial capital expenditures and taxation expenditures and increases in operating costs incurred and even the strategic investments of the Group may be subject to the unfavourable impact posed by the related laws, regulations and regulatory requirements.

(8) Hidden Hazards and Force Majeure Risk

Oil and gas exploration, development, storage and transportation and the production, storage and transportation of refined products and petrochemical products involve certain risks, which may cause unexpected or dangerous events such as personal injuries or death, property damage, environmental damage and disruption to operations, etc. With the expansion in the scale and area of operations, the hazard risks faced by the Group also increase accordingly. Further, new



regulations promulgated by the State in recent years set out higher standard for production safety. The Group has implemented a strict HSE management system and used its best endeavours to avoid the occurrence of accidents. However, the Group cannot completely avoid potential financial losses caused by such contingent incidents. The Group has adopted strict implementation of laws and regulations of the State, and effectively controlled the major safety and environmental hazards found. In addition, natural disasters such as earthquake, typhoon, tsunami and emergency public health events (such as the outbreak of COVID-19) may cause losses to properties and personnel of the Group, and may affect the normal operations of the Group.

3. Contingent Liabilities

(1) Bank and other guarantees

As at December 31, 2020 and 2021, the Group did not provide material guarantees to loans to other companies nor have any other material guarantee matters.

(2) Environmental liabilities

China has issued extensive environmental laws and regulations that affect the operation of the oil and gas.

Under the existing laws and regulations, management of the Group believes that there are no probable environmental liabilities, except for the amounts which have already been reflected in the consolidated financial statements, that will have a material adverse effect on the financial position of the Group.

(3) Legal contingencies

During the reporting period, the Company has complied with laws, regulations and supervision provisions domestic and abroad. The management of the Group believes that any liabilities resulting from insignificant lawsuits as well as other proceedings arising in ordinary course of business of the Group will not have a material adverse effect on the financial position of the Group.

(4) Group insurance

The Group carries limited insurance coverage for certain assets subject to significant operating risks, and has purchased third-party liability insurance against claims relating to personal injury, property and environmental damages arising from accidents and employer's liability insurance. The effect of non-coverage on future incidents on the Company's liability cannot be reasonably assessed at present.

4. Projects not Funded by Proceeds from Fund Raising

Name of project	Total project amount	Cumulative investment	Progress of project	Unit: RMB million
				Project return
The integration project of refining and chemicals of Guangdong Petrochemical	65,430	52,344	Construction Phase	Evaluations show that the projects meet the Company's return benchmarks. As it is currently under the construction phase, the actual efficiency generated from this project is still subject to verification.
The project of 600,000 tons/year ABS and its supporting projects at Jieyang, Guangdong	6,494	2,948	Construction Phase	Evaluations show that the projects meet the Company's return benchmarks. As it is currently under the construction phase, the actual efficiency generated from this project is still subject to verification.
The project of ethane recovery in Tarim Oilfield	1,620	1,250	Completion and Production Phase	Evaluations show that the projects meet the Company's return benchmarks. As it is currently under the initial production phase, the actual efficiency generated from this project is still subject to verification.

5. Operations of the Board of Directors

(1) The convening of Board meetings and the issues resolved

During the reporting period, the Board convened three on-site Board meetings and video conferences and three extraordinary Board meetings by way of written circular, and passed 31 Board resolutions. The specific information is set out as below:

No.	Title	Date	Method
1	Eighth meeting of the 8 th Session of the Board of Directors	March 24 to 25, 2021	On-site meeting and video conference
2	Ninth meeting of the 8 th Session of the Board of Directors	April 29, 2021	By circulation
3	Tenth meeting of the 8 th Session of the Board of Directors	July 20, 2021	By circulation
4	Eleventh meeting of the 8 th Session of the Board of Directors	August 25 to 26, 2021	On-site meeting and video conference
5	Twelfth meeting of the 8 th Session of the Board of Directors	October 28, 2021	By circulation
6	Thirteenth meeting of the 8 th Session of the Board of Directors	December 21, 2021	On-site meeting and video conference

For specific information on meetings and the relevant resolutions of the Board meetings, please refer to the announcements uploaded on the websites of Hong Kong Stock Exchange and Shanghai Stock Exchange after each Board meeting.

(2) Composition of the Current Board and attendance rate of the Board Meetings in 2021

Position	Name	Number of Required Meetings	Attendance in person (times)	Attendance by proxy (times)
Chairman	Dai Houliang	6	6	0
Vice Chairman	Hou Qijun	2	2	0
Non-executive Director	Duan Liangwei	6	6	0
Non-executive Director	Liu Yuezhen	6	6	0
Non-executive Director	Jiao Fangzheng	6	5	1
Executive Director and President	Huang Yongzhang	6	6	0
Executive Director and Senior Vice President	Ren Lixin	2	2	0
Independent non-executive Director	Elsie Leung Oi-sie	6	6	0
Independent non-executive Director	Tokuchi Tatsuhito	6	6	0
Independent non-executive Director	Simon Henry	6	3	3
Independent non-executive Director	Cai Jinyong	6	5	1
Independent non-executive Director	Jiang, Simon X.	6	6	0

Note:

- On March 25, 2021, Mr. Duan Liangwei resigned as the President of the Company and was re-designated from Executive Director to Non-executive Director; Mr. Huang Yongzhang was appointed as the President and Executive Director of the Company.
- On May 10, 2021, Mr. Li Fanrong resigned as the Vice Chairman and Non-executive Director of the Company.
- On August 26, 2021, Mr. Ren Lixin was appointed as the Senior Vice President of the Company.
- On October 21, 2021, Mr. Hou Qijun and Mr. Ren Lixin were appointed as the Directors of the Company.
- On October 28, 2021, Mr. Hou Qijun was appointed as the Vice Chairman and Non-executive Director of the Company.

(3) Attendance of the Current Directors at General Meetings for the Year 2021

Position	Name	Number of Required Meetings	Attendance in Person (times)
Chairman	Dai Houliang	2	1
Vice Chairman	Hou Qijun	0	0
Non-executive Director	Duan Liangwei	2	2
Non-executive Director	Liu Yuezhen	2	1
Non-executive Director	Jiao Fangzheng	2	0
Executive Director and President	Huang Yongzhang	2	1
Executive Director and Senior Vice President	Ren Lixin	1	0
Independent non-executive Director	Elsie Leung Oi-sie	2	2
Independent non-executive Director	Tokuchi Tatsuhito	2	1
Independent non-executive Director	Simon Henry	2	1
Independent non-executive Director	Cai Jinyong	2	2
Independent non-executive Director	Jiang, Simon X.	2	2

(4) The implementation of AGM resolutions by the Board of Directors

All members of the Board have conscientiously and tirelessly performed their duties, implemented the resolutions passed at the AGM and accomplished all tasks as authorized by the AGM according to the relevant laws, regulations and rules of the respective jurisdictions where Company's shares are listed and the provisions as set out in the Company's Articles of Association.

(5) Work of the special committees of the Board of Directors

During the reporting period, for the convening and attendance of meetings of the Nomination Committee, the Audit Committee, the Investment and Development Committee, the Examination and Remuneration Committee and Sustainable Development Committee of the Company, reference can be made to the relevant parts under the Corporate Governance Section of this annual report.

6. Five-Years Financial Summary

For the summary of the results and of the assets and liabilities of the Group for the last five financial years, please read the sub-section "Key Financial Data Prepared under IFRS" under the section "Summary of Financial Data and Financial Indicators" of this annual report.

7. Bank Loans and Other Borrowings

Details of bank loans and other borrowings of the Company and the Group as at December 31, 2021 are set out in Note 29 to the financial statements prepared in accordance with IFRS in this annual report.

8. Interest Capitalisation

Interest capitalised by the Group for the year ended December 31, 2021 was RMB1.008 billion.

9. Fixed Assets

Changes to the fixed assets of the Company and the Group during the year are summarised in Note 16 to the financial statements prepared in accordance with IFRS in this annual report.

10. Land Value Appreciation Tax

There was no substantial land value appreciation tax payable by the Group during the year.

11. Reserves

Details of changes to the reserves of the Company and the Group for the year ended December 31, 2021 are set out in Note 31 to the financial statements prepared in accordance with IFRS in this annual report.

12. Distributable Reserves

As at December 31, 2021, the reserves of the Company that can be distributed as dividends were RMB654,956 million.

13. Management Contract

During the reporting period, the Company did not enter into any management contracts concerning the management or administration of its overall business or any of its material business, nor did any such management contract exist.



14. Major Suppliers and Customers

The aggregate purchase attributable to the five largest suppliers of the Group accounted for approximately 26% of the Group's total purchase in 2021, among which the purchase attributable to the largest supplier of the Group accounted for approximately 16% of Group's total purchase. The aggregate revenue derived from the major customers is set out in Note 37 to the financial statements prepared in accordance with IFRS in this annual report. The aggregate revenue derived from the five largest customers accounted for approximately 11% of the Group's total sales.

During the reporting period, all the five largest suppliers and the five largest customers of the Company, except for CNPC, are our independent third parties.

15. Repurchase, Sale or Redemption of Securities

The Group did not sell any securities of the Group, nor did it repurchase or redeem any of the securities of the Group during the twelve months ended December 31, 2021.

16. Trust Deposits and Irrecoverable Overdue Time Deposits

As at December 31, 2021, the Company did not have trust deposits or irrecoverable overdue time deposits.

17. Pre-emptive Rights

There is no provision regarding pre-emptive rights under the Articles of Association or the PRC laws.

18. Sufficiency of Public Float

Based on the information that is publicly available to the Company and within the knowledge of the Directors, the Directors confirm that the Company has maintained the amount of public float as required under the Listing Rules during the last practicable date prior to the publication of this annual report.

19. Performance of Social Responsibilities

The Company actively fulfilled our social responsibility, incorporated green and low-carbon into our development strategies, strictly abided by the Environmental Protection Law of the People's Republic of China and other relevant regulations, prevented and controlled pollution, strengthened ecological protection and strived to become a good global corporate citizen. Some of our subsidiaries were classified as the key pollutant discharge units announced by the national environmental protection authority. Such subsidiaries have comprehensively disclosed the environmental information on the websites of local environmental protection authorities in accordance with the relevant provisions of the Ministry of Ecology and Environment of the People's Republic of China and the requirements of local environmental protection authorities. For subsidiaries that were not classified as key pollutant discharge units, the information on administrative penalties imposed due to environmental issues has been disclosed on the websites of local competent environmental protection authorities in strict accordance with the requirements of the State and local governments. Please see specific disclosures on the relevant websites.

The Company always adheres to the concept of "development with protection, protection with development,

and giving priority to environmental protection", deeply promotes clean production, energy saving and emission reduction, achieves stable operation of the "three wastes" pollution prevention and control facilities, stable and standard discharge of waste water and gas pollutants, compliant disposal of solid waste in accordance with the law, and comprehensive reduction of the total amount of wastes. The Company continuously promoted the construction of green mines, and implemented the improvement and transformation of VOCs control. The Company strengthened the environmental protection management of construction projects, strictly implemented the environmental protection of "three simultaneous" and the post-pollution permit management system; continuously improved the environmental risk prevention and control measures, with no major or above environmental pollution and ecological damage events occurring during the reporting period. The Company strengthened staff health management and focused on normalized epidemic prevention and control, the vaccination covering rate of all employees exceeded 90%.

The Company actively implemented the overall work arrangements of the State for "carbon peak and carbon neutrality", organised the preparation of an action plan for the target of "double carbon", continued to recycle vented natural gas, sped up the implementation of new energy projects, actively explored the construction of carbon storage bases, intensified the research of CO₂ recycling and transport technologies, promoted the pilot program of "rooftop photovoltaic", and planned the transformation of "zero carbon" reservoirs.

Details of the performance of social responsibilities by the Company are set forth in the 2021 Environmental, Social and Governance Report published on the website of Hong Kong Stock Exchange and Shanghai Stock Exchange.

20. Poverty Alleviation and Rural Revitalization

In 2021, after the end of poverty alleviation in 2020, the Company followed the mindset of "adjusting measures to local conditions, scientific planning, classified guidance, guide according to the situation" to continue to promote rural revitalization. We combined the natural endowments and development demands of the aided areas, gave full play to resource advantages, and relied on the "Tmall Flagship Store" in uSmile and other online and offline platforms to promote the integration of the products and services of poverty-stricken areas into the national market and support the revitalization of the industry; trained grass-roots cadres, leaders for rural revitalization, and professional and technical personnel to support the revitalization of personnel; integrated traditional villages and modern homestays to create characteristic brands and assisted in the construction of hope primary schools and intelligent campuses to support the revitalization of culture; and assisted in the construction of national reserve forests and economic forests to improve the rural health conditions and support the revitalization of ecology. We contributed to the strength of enterprises to effectively consolidated and expanded the achievement of poverty alleviation and rural revitalization, producing a good social effect.

In 2022, the Company will make further use of its resources and market advantages, focus on improving people's livelihood, build a happy, harmonious and beautiful countryside, and strive to become a national model for national rural revitalization, aiming at making further contributions to consolidate the achievements of poverty alleviation and achieve rural revitalization.

21. Donations

During the reporting period, the Company's donations amounted to approximately RMB626 million.

22. Technological Innovation

We take innovation as the first strategy of the Company's development, adhere to the orientation of technology development of "developing the cause and giving priority to science and technology, supporting the present and leading the future", and energetically strengthen the construction of the technology innovation system. We have made new breakthrough in the independent innovation, obtained and promoted a batch of new important technology achievements, which further enhanced the capability of independent innovation and core competitiveness, and strongly supported and led the development of our main business.

In 2021, the Group invested RMB23,731 million in research and development, which represents an increase of 3.5% as compared with last year and represents 0.9% of the operating income of the Company. The ratio of research and development input capitalization was 29.5%. The Company obtained 1,983 Chinese patents. As at December 31, 2021, the Company owned a total of approximately 19,145 patents obtained in China and overseas.

By Order of the Board
Dai Houliang
Chairman
Beijing, the PRC
March 31, 2022



Lv Bo Chairman of the Supervisory Committee

REPORT OF THE SUPERVISORY COMMITTEE

Dear Shareholders,

During the year of 2021, the Supervisory Committee has performed and discharged its duties and responsibilities conscientiously in accordance with the relevant provisions of the Company Law of the People's Republic of China and the Articles of Association.

1. Meetings of the Supervisory Committee

During the reporting period, the Company held four meetings of the Supervisory Committee, and successfully completed the review of the 2020 Annual Report, the First Quarterly Report, Interim Report and the Third Quarterly Report of 2021 of the Company, and disclosed relevant information as required by regulators.

On March 23, 2021, the Supervisory Committee convened the sixth meeting of the eighth session of the Supervisory Committee by way of on-site meeting. The meeting was chaired by Mr. Lv Bo, the Chairman of the Supervisory Committee. At this meeting, eight proposals, including the Review Opinion of

the Supervisory Committee on Financial Report of 2020, the Review Opinion of the Supervisory Committee on the Draft Profit Distribution Plan of 2020, the Opinion of the Supervisory Committee on Assessment of the Results of Operations by the President for 2020, the Proposal of the Supervisory Committee for Changing Accounting Firms of the Company, the Supervisory Committee's Report of the Company for 2020, the Supervisory Committee's Work Summary for 2020 and Working Plan for 2021, the Environment, Society and Governance Report of the Company for 2020 and the Annual Report and Annual Results Announcement of the Company for 2020, were reviewed and approved.

On April 29, 2021, the Supervisory Committee convened the seventh meeting of the eighth session of the Supervisory Committee by way of written circulation. The First Quarterly Report of 2021 was reviewed and approved at the meeting.

On August 24, 2021, the Supervisory Committee convened the eighth meeting of the eighth session of the Supervisory Committee by way of on-site meeting. The meeting was chaired by Mr. Lv Bo, the Chairman of the Supervisory Committee. At the meeting, three proposals, including the Review Opinion of the Supervisory Committee on the Interim Financial Report of 2021, the Review Opinion of the Supervisory Committee on the Interim Profit Distribution Plan of 2021 and the Review Opinion of the Supervisory Committee on the Interim Report and Interim Results Announcement of 2021, were reviewed and approved.

On October 28, 2021, the Supervisory Committee convened the ninth meeting of the eighth session of the Supervisory Committee by way of written circulation. At the meeting, the Third Quarterly Report of 2021 of the Company was reviewed and approved.

2. Supervisory Committee's presence at other meetings and performance of other works

In 2021, the Supervisory Committee attended two shareholders' general meetings, at which the Supervisory Committee submitted two proposals, including the Supervisory Committee's Report of the Company for 2020 and the Proposal for Changing Overseas and Domestic Accounting Firms for the Company. Such proposals were reviewed and approved by the shareholders' general meeting.

The Supervisory Committee attended three meetings of the Board and heard the Board's review of the proposals in relation to the Annual Report of 2020 and the Interim Report of 2021 and their summaries, profit distribution, connected transactions, 2022 investment plan and budget, and other relevant proposals. The Supervisory Committee presented five opinions to the Board in respect of, inter alia, its review of the financial statements of the Company, profit distribution plan (draft plan), and the performance assessment of the President. The Supervisory Committee also put forward recommendations on the issues such as accelerating business development in new energy, improving the construction of the Company's corporate governance capacity, continuously improving the quality and profitability of the Company and the management of loss-making enterprises.

Further, the Supervisory Committee made effort to promote the ability and level of duty performance of its members by means of participating in activities organised by China Association for Public Companies and communicating with peers.

3. Supervisory Committee's opinion on the works of the Company

The Supervisory Committee believed that, in 2021, the Company seized favorable opportunities such as the rising international oil prices, the continuous stable recovery of China's economy, and high demand in the oil and gas market, earnestly implemented the resolutions and deployments of the shareholders' general meeting and the Board of Directors, promote business development, reform and innovation, enhancement of quality and profitability, safety and environmental protection, epidemic prevention and control and other work in an overall manner, maintained the smooth operation of the oil and gas industry chains, made solid progress in the green and low-carbon transformation, and achieved the best operating results in seven years for the same period. The Supervisory Committee was satisfied with the results achieved by the Company.

4. Other matters reviewed or concerned by the Supervisory Committee

(1) Opinion of the Supervisory Committee on the lawful operation of the Company

In 2021, the Company conscientiously complied with the provisions of the relevant laws and regulations of China and places of listing and carried out its activities accordingly. The convening procedures for, voting methods applicable to and meeting resolutions adopted at shareholders' general meetings and Board meetings were legally valid, and the information was disclosed to the public in a timely, accurate and complete manner. No director or senior management personnel of the Company was found violating laws, regulations or the Articles of Association or involved in any act to harm the interests of the Company and the shareholders in the performance of his/her duties.

(2) Opinion of the Supervisory Committee on inspection of the financial status of the Company

In 2021, the Company achieved record highs in revenue, and the total profit and net profit reached the record highs in the last few years respectively. The interest-bearing debt balance and the capital-to-liability ratio were the lowest in the past more than ten years, and the cost of financing was the lowest since listing. Free cash flow increased significantly year-on-year, and the financial position continued to maintain stable.

The annual financial reports of the Company have been prepared in accordance with CAS and IFRS, respectively. The financial reports of the Company audited by PricewaterhouseCoopers Zhong Tian LLP (Special General Partnership) and PricewaterhouseCoopers give a true and fair view on the financial positions, operating results and cash flows of the Company. The standard unqualified audit reports issued by them are objective and fair.

(3) Opinion of the Supervisory Committee on connected transactions of the Company

The Company strictly complied with laws and regulations of China, conscientiously performed the regulatory requirements of the places of listing regarding connected transactions, fully performed various agreements and contracts with connected persons, and conducted such connected transactions in a regularized manner. All types of the connected transactions of the Company were conducted within the approved caps.

(4) Opinion of the Supervisory Committee on the operation of the internal control system of the Company and on the self-assessment report on the internal control of the Company

In 2021, in accordance with the requirements and arrangements of the Board, the internal control of the

Company made solid progress in the construction of the internal control system and supervision on various work by adhering to redressing its shortcomings, consolidating its fundamentals and revitalizing its capabilities, which effectively made use of function of strengthening the basis and consolidating the foundation of the internal control system, with exceptional matters identified by the management being rectified completely and no material defect being found in the internal control.

(5) Opinion of the Supervisory Committee on the Company's Environmental, Social and Governance Report

In 2021, the Company, strictly complying with the regulations, initiatively responded to the concerns of the investors, further improved the quality of the report, actively transmitted the Company's ESG management ideas, objectives and various measures, and fully manifested the new achievements such as the Company's governance,

energy transformation, environmental protection, employee development and social contribution. The Supervisory Committee has approved the Company's Environment, Society and Governance Report.

In 2022, the Supervisory Committee will continue to conscientiously perform its duties, and diligently perform various work in strict compliance with the Company Law, the Articles of Association and other relevant regulations.

By Order of the Supervisory Committee

Lv Bo

Chairman of the Supervisory Committee

Beijing, the PRC

March 31, 2022

DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

1. Information on the Directors, Supervisors and Senior Management

(1) Directors

Information on the current Directors is set out below:

Name	Gender	Age	Position	Term	Remuneration before tax received from the Company in 2021 (RMB'000)	Whether received remuneration from offices held in CNPC	Number of Shares held in the Company	
							As at December 31, 2020	As at December 31, 2021
Dai Houliang	M	58	Chairman	2020.03-2023.03	-	Yes	0	0
Hou Qijun	M	55	Vice Chairman	2021.10-2023.03	-	Yes	0	0
Duan Liangwei	M	54	Non-executive Director	2017.06-2023.06	237	Yes	0	0
Liu Yuezhen	M	60	Non-executive Director	2014.05-2023.06	-	Yes	0	0
Jiao Fangzheng	M	59	Non-executive Director	2019.06-2022.06	-	Yes	0	0
Huang Yongzhang	M	55	Executive Director, President	2020.09-2023.09	629	No	0	0
Ren Lixin	M	54	Executive Director, Senior Vice President	2021.10-2023.03	195	No	0	0
Elsie Leung Oi-sie	F	82	Independent non-executive Director	2017.06-2023.06	556	No	0	0
Tokuchi Tatsuhito	M	69	Independent non-executive Director	2017.06-2023.06	527	No	0	0
Simon Henry	M	60	Independent non-executive Director	2017.06-2023.06	499	No	0	0
Cai Jinyong	M	62	Independent non-executive Director	2020.06-2023.06	575	No	0	0
Jiang, Simon X.	M	68	Independent non-executive Director	2020.06-2023.06	575	No	0	0

Note:

Mr. Duan Liangwei resigned from the office of President of the Company in March 2021, and was redesignated from Executive Director to Non-executive Director with no further remuneration being received from the Company.

Mr. Huang Yongzhang is remunerated by the Company from April 2021.

Mr. Ren Lixin is remunerated by the Company from September 2021.

The above remunerations are pre-tax amounts paid on a calendar year basis, including salaries, allowance, other benefits, contributions to retirement benefit schemes etc.

Brief Biography of Directors:

Dai Houliang, aged 58, is the Chairman of the Company, concurrently serving as the Party Secretary and Chairman of CNPC. Mr. Dai is a professor-level senior engineer with a doctorate degree and is an alternate member of the 19th Central Committee of the Communist Party of China. He is an academician of the Chinese Academy of Engineering and has substantial working experience in China's petroleum and petrochemical industry. In December 1997, he was appointed as vice president of Yangzi Petrochemical Corporation, and served as director and vice president of Yangzi Petrochemical Co., Ltd. In April 1998. From July 2002, he became vice chairman, president and a member of the standing Party committee of Yangzi Petrochemical Co., Ltd., and director of Yangzi Petrochemical Corporation. In December 2003, he served as the chairman, president and a member of the standing Party committee of Yangzi Petrochemical Co., Ltd. and concurrently as chairman of Yangzi Petrochemical Corporation, and from November 2004, concurrently as chairman of BASF-YPC Company Limited. From September 2005, he served as deputy chief financial officer of China Petroleum & Chemical Corporation ("Sinopec Corp."), vice president and deputy chief financial officer of Sinopec Corp. in November 2005, and as director, senior vice president and chief financial officer of Sinopec Corp from May 2006. In June 2008, he was concurrently appointed as a member of the Party committee of China Petrochemical Corporation ("Sinopec Group"). From May 2016, he served as the president, director and the deputy Party secretary of Sinopec Group, and served as vice chairman and the president of Sinopec Corp. in August 2016, as the chairman and the president of Sinopec Corp. from May 2018. In July 2018, he concurrently served as the Chairman and the Party secretariat of Sinopec Group. Mr. Dai was appointed as the Chairman and the Party Secretary of CNPC in January 2020. Since March 2020, he has been appointed as a Director, and also concurrently serving as Chairman of the Company.

Hou Qijun, aged 55, is the Vice Chairman of the Company and serves concurrently as a Director, President and Deputy Secretary of the Party committee of CNPC. Mr. Hou is a professor-level senior engineer with a doctorate degree, who has rich working experience in China's petroleum and natural gas industry. Mr. Hou was appointed as director and vice president of Daqing Oilfield in October 2002, and as president and deputy secretary of the Party committee of Jilin Oilfield Branch in October 2004. He was appointed as secretary of the Party committee and vice president of PetroChina Natural Gas and Pipeline Company in September 2011, and concurrently as director-general and deputy secretary of the Party committee of PetroChina Oil & Gas Control Centre in March 2012. He was appointed as the general manager of the planning department of the Company in November 2013 and as the Vice President of CNPC in March 2017, and concurrently as deputy secretary of the Party committee and president of the Company's Exploration and Production Branch in April 2017. Mr. Hou was appointed as the Director and Vice President of the Company in June 2017, and as the President of the Company in March 2019. He was appointed as director, president and deputy secretary of the Party committee of PipeChina in October 2019, and as a Director, President and Deputy Secretary of the Party committee of CNPC in July 2021. In October 2021, he was appointed as the Director and Vice Chairman of the Company.

Duan Liangwei, aged 54, is a Director of the Company, and serves concurrently as a Director, Deputy Secretary of the Party committee, and Head Office Secretary of the Party committee of CNPC. Mr. Duan is a professor-level senior engineer and holds a doctor's degree. He has extensive working experience in China's oil and petrochemical industry. Mr. Duan worked as the deputy general manager, safety director, and member of the Party committee of Jilin Petrochemical Branch from February 2006, and concurrently as secretary of the Party committee and general manager of Jilin Fuel Ethanol Co., Ltd. from March 2010. He served as general manager and deputy secretary of the Party committee of Dagang

Petrochemical Branch from September 2011. He served as general manager and deputy secretary of the Party committee of Dalian Petrochemical Branch, manager of Dalian Petrochemical Company, and the director of the Enterprise Coordination Committee of Dalian Area from July 2013. He served as Vice President of CNPC from March 2017, and concurrently as Safety Director of CNPC from April 2017. Mr. Duan was appointed as a Director of the Company from June 2017, and concurrently became a member of the Party committee of CNPC from September 2019. Mr. Duan was appointed as the President of the Company in March 2020, and the Director and Deputy Secretary of the Party committee of CNPC in September 2020. Since October 2020, Mr. Duan concurrently served as the Head Office Secretary of the Party committee of CNPC.

Liu Yuezhen, aged 60, is a Director of the Company. Mr. Liu is a professor-level senior accountant, holds a master's degree, and has extensive working experience in accounting industry. He served as the deputy general manager and chief accountant of AVIC Jianghan Aviation Life-saving Appliance Corporation from March 1996, the general manager of Jianghan Aviation Life-saving Appliance Corporation and concurrently a director of 610 Research Institute from February 2000, the chairman and general manager of AVIC Beijing Qingyun Aviation Instruments Co., Ltd. from May 2003, the chief accountant of CASIC (Group) Company from November 2006, and a member of the Party committee and chief accountant of CASIC (Group) Company from December 2007. He has served as a member of the Party committee and Chief Accountant of CNPC since December 2013. From May 2014, Mr. Liu has been appointed as a Director of the Company.

Jiao Fangzheng, aged 59, is a Director of the Company and member of the Party committee and Vice President of CNPC. Mr. Jiao is a professor-level senior engineer with a doctorate degree and has substantial working experience in China's petroleum

and petrochemical industry. In January 1999, he was appointed as chief geologist in Zhongyuan Petroleum Exploration Bureau of China Petrochemical Corporation. In February 2000, he was appointed as vice president and chief geologist of Sinopec Zhongyuan Oilfield Company. In July 2000, he was appointed as deputy director general and member of the Party committee of Sinopec Petroleum Exploration & Development Research Institute. In March 2001, he was appointed as deputy director general of Sinopec Oilfield Exploration & Production Department. In June 2004, he was appointed as director general and deputy secretary to the Party Committee of Northwest Petroleum Bureau of China Petrochemical Corporation, and president of Sinopec Northwest Branch Company. In October 2006, he was appointed as vice president of Sinopec Corp. In July 2010, he concurrently served as the director general of Sinopec Exploration & Production Department. In July 2014, he was appointed as member of the Party committee and vice president of China Petrochemical Corporation. In September 2014, he concurrently served as chairman of the board of directors of Sinopec Oilfield Service Corporation. In May 2015, he concurrently elected as director and senior vice president of Sinopec Corp. In June 2018, he served as a member of the Party committee and Vice President of CNPC. In June 2019, he was appointed as Director of the Company.

Huang Yongzhang, aged 55, is a Director and President of the Company and serves concurrently as a member of the Party committee, Vice President and Safety Director of CNPC. Mr. Huang is a professor-level senior engineer and holds a doctor's degree. He has rich working experience in China's petroleum and natural gas industry. He served as, inter alia, Vice President of CNPC International (Nile) Ltd., Vice President and concurrently as safety director of China National Oil Exploration and Development Corporation, and the Executive Vice President of CNPC Middle East Corporation. He served as leader of the coordination group of CNPC Middle East and General Manager of CNPC Middle East Corporation from January 2018. He was appointed as a member of the Party committee, Vice President of China National Petroleum



Corporation in April 2020, Director of the Company in September 2020 and President of the Company in March 2021.

Ren Lixin, aged 54, is a Director and the senior Vice President of the Company and concurrently serves as a member of the Party committee and Vice President of CNPC. Mr. Ren is a professor-level senior engineer with a bachelor's degree, who has rich working experience in China's petroleum and petrochemical industry. Mr. Ren was appointed as a member of the Party committee and the vice president of Dushanzi Petrochemical Branch Company in September 2005, and was then appointed as president, deputy secretary of the Party committee and safety director of Dushanzi Petrochemical Branch Company in October 2018, and concurrently as the executive director and president of Xinjiang Dushanzi Petrochemical Co., Ltd. Mr. Ren was appointed as president and deputy secretary of the Party committee of the Refinery and Chemical Branch of the Company in March 2021. He was appointed as a member of the Party committee and a Vice President of CNPC in June 2021. In August 2021, he was appointed as the senior Vice President of the Company and in October 2021, he was appointed as the Director of the Company.

Elsie Leung Oi-sie, aged 82, is an Independent Non-executive Director of the Company, a consultant of Iu, Lai & Li Solicitors & Notaries, and an independent non-executive director of China Life Insurance Company Limited and China Resources Power Holdings Co., Ltd. Ms. Leung obtained her LLM degree from the University of Hong Kong, and is an academician of College of International Marriage Law. She holds the practicing qualifications for attorney of Hong Kong and Britain. Ms. Leung was the first Secretary for Justice of the Hong Kong Special Administrative Region and a member of Executive Council of HKSAR. Ms. Leung was appointed as a Justice of the Peace, a Notary Public, and a China-Appointed Attesting Officer, and was awarded a Grand Bauhinia Medal. Ms. Leung was appointed as an Independent

Non-executive Director of the Company from June 2017.

Tokuchi Tatsuhito, aged 69, is an Independent Non-executive Director of the Company. He is also an independent director of Daiwa Securities (China) Co., Ltd. and an executive director and research fellow of the Center for Industrial Development and Environment Governance (CIDEG), Tsinghua University, a senior fellow of Rebuild Japan Initiative Foundation. Mr. Tokuchi graduated from the Department of Chinese Language and Literature, Peking University, and received his master degree (East Asian Economy) from the Center for East Asian Studies of Stanford University. He has held the positions including a member & experts adviser to the Foreign Advisory Committee of State Administration of Foreign Experts Affairs, the PRC, the general manager of Investment Banking Division of Daiwa Securities SMBC Co., Ltd., the president of Daiwa Securities Singapore Limited, the Executive Vice President of Daiwa Securities (Hong Kong) Inc., the vice president of Daiwa Securities (America) Inc., the vice chairman of Singapore Investment Banking Association, the vice president, managing director and the chairman of the Investment Banking Committee of CITIC Securities Co., Ltd., and the chairman of board of the CITIC Securities International Co., Ltd. In 2009, Mr. Tokuchi was awarded the China Friendship Award, China's award for foreigners. Mr. Tokuchi was appointed as an Independent Non-executive Director of the Company from June 2017.

Simon Henry, aged 60, is an Independent Non-executive Director of the Company and also a fellow of the UK Chartered Institute of Management Accountants, who has experience in areas such as finance management, strategic planning, marketing and investor relations. Mr. Simon Henry obtained a first class Bachelor's degree in mathematics from Cambridge University in 1982 and was awarded a Master's degree in 1986 from Cambridge. He joined Royal Dutch Shell in 1982. He acted for 8 years until March 2017 as executive director of the board and chief finance officer of Royal Dutch Shell. He now serves as a non-executive director and chairman of the audit

committee of the board of Rio Tinto plc. He is also a member of the Defense Council for the UK Government, serving as the chairman of audit and risk management currently. Mr. Simon Henry was appointed as an Independent Non-executive Director of the Company from June 2017.

Cai Jinyong, aged 62, is the Independent Non-executive Director of the Company. Mr. Cai is a partner of Global Infrastructure Partners (GIP) and concurrently a board member of Aon Corporation. Mr. Cai received bachelor's degree in science from Peking University and doctoral degree of economics from Boston University. Mr. Cai has over 30 years working experience in finance service industry, before joining GIP in 2019, he has working experience in TPG Group, World Bank Group, Goldman Sachs Group, Inc. and Morgan Stanley. Mr. Cai worked at Central Europe Bureau of the Head Office of the World Bank in charge of energy sectors from 1990 to 1994. From 1994 to 2000, he served in Morgan Stanley and was a team member which established China International Capital Corporation Limited (the first domestic joint venture investment bank in the PRC). From 2000 to 2012, he worked in Goldman Sachs Group, Inc., where he was in charge of the PRC Investment Banking Business. From 2012 to 2016, he served as CEO of International Finance Corporation of the World Bank Group. From 2016 to 2018, he led infrastructure business in emerging economies

at TPG. From June 2020, Mr. Cai was appointed as the Independent Non-executive Director of the Company.

Jiang, Simon X., aged 68, is currently an Independent Non-executive Director of the Company. Mr. Jiang has been an independent non-executive director of COSCO SHIPPING International (Hong Kong) Co., Ltd. since April 2007. He is chairman of Cyber City International Limited. Mr. Jiang is also a director of China Foundation for Disabled Persons, and a senior associate at the Judge Business School of Cambridge University of England. He is currently a member of the United Nations Investments Committee. Mr. Jiang received his bachelor's degree from Beijing Foreign Studies University, master's degree from Australian National University and Ph.D degree in Economics from Cambridge University of England. Mr. Jiang has investment management experience. Mr. Jiang was the deputy chief of United Nations Joint Staff Pension Fund Investment Management and work as a member of its Investment Committee till now. He was a member of the 11th and 12th Sessions of the National Committee of the Chinese People's Political Consultative Conference, an independent director of China Oilfield Services Limited ("COSL"), an independent director of Greenland Hong Kong Holdings Limited, Nokia Corporation, and Sinopec Corp. From June 2020, Mr. Jiang was appointed as the Independent Non-executive Director of the Company.

(2) Supervisors

Information on the current Supervisors is set out below:

Name	Gender	Age	Position	Term	Remuneration before tax received from the Company in 2021 (RMB'000)	Whether received remuneration from offices held in CNPC	Number of Shares held in the Company	
							As at December 31, 2020	As at December 31, 2021
Lv Bo	M	59	Chairman of Supervisory Committee	2020.11-2023.11	-	Yes	0	0
Zhang Fengshan	M	60	Supervisor	2014.05-2023.06	-	Yes	0	0
Jiang Lifu	M	58	Supervisor	2014.10-2023.06	-	Yes	0	0
Lu Yaozhong	M	56	Supervisor	2017.06-2023.06	-	Yes	0	0
Wang Liang	M	59	Supervisor	2017.10-2023.06	-	Yes	0	0
Fu Suotang	M	59	Supervisor appointed by employees' representatives	2017.06-2023.06	1,433	No	0	0
Li Jiamin	M	58	Supervisor appointed by employees' representatives	2014.05-2023.06	1,255	No	0	0
Liu Xianhua	M	58	Supervisor appointed by employees' representatives	2016.05-2023.06	945	No	0	0

Note: The above remunerations are pre-tax amounts paid on a calendar year basis, including salaries, allowance, other benefits, contributions to retirement benefit schemes etc.

Brief Biography of the Supervisors:

Lv Bo, aged 59, is currently the Chairman of the Supervisory Committee of the Company. Mr. Lv is a senior economist with a master's degree and has extensive work experience in China's oil and gas industry. In January 2002, Mr. Lv was appointed as director-general of Human Resources Department of China National Offshore Oil Corporation ("CNOOC"). He served as the assistant president of CNOOC in November 2006, a member of the Party committee of CNOOC in November 2007, and concurrently as the Head Office Secretary of the Party committee of CNOOC in October 2008. From April 2010, he served as a member of the Party committee and vice president of CNOOC, and from December 2012, concurrently as the chairman of CNOOC Energy Technology & Services Limited, from May 2015, concurrently as the president of CNOOC Party School, and from December 2016, concurrently as the chairman of Offshore Oil Engineering Co., Ltd. and COSL. Mr. Lv served as a member of the Party committee and Vice President of CNPC in November 2019. From March 2020 to October 2020, he served as a Director of the Company. Since November 2020, he has been appointed as the Supervisor and Chairman of the Supervisory Committee of the Company. In September 2021, he has been appointed as the full-time external director of central enterprise.

Zhang Fengshan, aged 60, is a Supervisor of the Company. Mr. Zhang is a professor-level senior engineer and holds a master's degree. He has rich working experience in China's oil and gas industry. Mr. Zhang was the deputy director and member of the standing Party committee of Liaohe Oil Exploration Bureau from July 2000 and concurrently the safety director of Liaohe Oil Exploration Bureau from May 2002, director and deputy secretary of the Party committee of Liaohe Petroleum Exploration Bureau from August 2004, general manager and deputy secretary of the Party committee of Great Wall Drilling and Exploration Company Limited from February

2008 and its executive director from July 2008. Mr. Zhang has been the General Manager of Safety, Environment and Energy Conservation Department of the Company and the General Manager of Safety, Environment and Energy Conservation Department of CNPC since June 2012. In May 2014, he was appointed as a Supervisor of the Company. From July 2014, Mr. Zhang has been the Safety Director of the Company and Deputy Safety Director of CNPC. From December 2015, Mr. Zhang was appointed as the Director of Safety, Environment Supervision Center of CNPC concurrently. From December 2016 to June 2021, he has concurrently been serving as the General Manager of the Quality, Safety and Environmental Department of the Company and concurrently the General Manager of the Quality, Safety and Environmental Department of CNPC.

Jiang Lifu, aged 58, is a Supervisor of the Company, and concurrently served as the assistant to the General Manager of CNPC. Mr. Jiang is a professor-level senior economist and holds a doctorate degree. He has rich working experience in China's oil and gas industry. He had worked as Deputy General Manager of Capital Operation Department of the Company since August 2003, Deputy Director of the Planning Department of CNPC from May 2005, Deputy General Manager of the Planning Department of the Company from June 2007 and concurrently Deputy Director of the Planning Department of CNPC. He has been the General Manager of the Enterprise Management Department (Internal Control and Risk Management Department) of the Company and the General Manager of the Enterprise Management Department (Internal Control and Risk Management Department) of CNPC since April 2014. In October 2014, Mr. Jiang was appointed as a Supervisor of the Company. In April 2015, he was appointed as the General Manager of the Reform and Corporate Management Department of the Company and concurrently the General Manager of the Reform and Corporate Management Department of CNPC. In April 2021, he was appointed as the assistant to the General Manager of CNPC.



Lu Yaozhong, aged 56, is a Supervisor of the Company, and concurrently served as the General Manager of Kunlun Capital. Mr. Lu is a professor-level senior accountant and holds a master's degree. He has rich working experience in China's oil and gas industry. Mr. Lu assumed the position of the chief accountant and member of the Party committee of the Kazakhstan branch from December 2009, and the chief accountant and member of the Party committee of the overseas exploration and development branch (China National Oil and Gas Exploration and Development Corporation) from August 2013, and the General Manager of the Capital Operation Department of the Company, and concurrently the General Manager of the Capital Operation Department of CNPC from April 2017. In June 2017, Mr. Lu was appointed as a Supervisor of the Company. In October 2021, he was appointed as the General Manager of Kunlun Capital.

Wang Liang, aged 59, is a Supervisor of the Company and the General Manager of Audit Department of the Company and concurrently served as the General Manager of Audit Department, Director and Deputy Secretary of the Party committee of Audit Service Center of CNPC. Mr. Wang is a professor-level senior accountant and holds a bachelor's degree. He has rich working experience in China's oil and gas industry. He had worked as a director, chief accountant and member of the Party committee in China National Petroleum Offshore Engineering Co., Ltd. from January 2005, a member of the Party committee and deputy director of Liaoning Provincial Finance Department from April 2006, the chairman of Generali China Insurance Co., Ltd. from April 2007, the chief accountant and member of the Party committee of CNPC Chuanqing Drilling Engineering Company Limited from February 2008, the general manager and deputy secretary of the Party committee of CNPC Assets Management Co., Ltd. from October 2009, the chairman, general manager and deputy secretary of the Party committee of Kunlun Trust Co., Ltd. from March 2014, the chairman, secretary of the Party committee, secretary

of the disciplinary committee and president of the trade union of CNPC Assets Management Co., Ltd. from July 2014, the secretary of the Party committee, secretary of the disciplinary committee, president of the trade union and deputy general manager of CNPC Finance from July 2016. He has been the General Manager of Audit Department of the Company and concurrently the General Manager of Audit Department, Director and Secretary of the Party committee of Audit Service Center of CNPC from May 2017. Mr. Wang was appointed as a Supervisor of the Company from October 2017. From November 2017, he served as the General Manager of the Audit Department of the Company, and concurrently the General Manager of the Audit Department, Director and Deputy Secretary of the Party committee of the Audit Service Center of CNPC.

Fu Suotang, aged 59, is a Supervisor of the Company appointed by its employees' representatives. Mr. Fu is a professor-level senior engineer and holds a doctorate degree, with rich working experience in China's oil and natural gas industry. Mr. Fu acted as the chief geologist and member of the Party committee of Qinghai Oilfield Branch from April 2007, the general manager and vice Party secretariat of Qinghai Oilfield Branch and concurrently the director of Qinghai Petroleum Administration Bureau from April 2014, the general manager and vice Party secretariat of Changqing Oilfield Branch and concurrently the director of Changqing Petroleum Exploration Bureau from April 2017. In June 2017, he was appointed as a Supervisor representing employees of the Company. From April 2018, he served as the Party secretariat and general manager of Changqing Oilfield Branch and the executive director and general manager of Changqing Petroleum Exploration Bureau Co., Ltd. From October 2020, Mr. Fu has served as executive director and Party secretary of Changqing Oilfield Branch, and executive director and general manager of Changqing Petroleum Exploration Bureau. In June 2021, Mr. Fu served as the standing vice director of the consultation centre of CNPC.

Li Jiamin, aged 58, is a Supervisor of the Company appointed by its employees' representatives and concurrently serves as the Director of the Party and Masses' affairs Department of the Company. Mr. Li concurrently serves as the Director of the Party and Masses' affairs Department, the Head Office Executive Deputy Secretary of the Party committee, and the Deputy Director of the Party Organisation Department of CNPC. Mr. Li is a professor-level senior engineer with a master's degree and has extensive work experience in China's petrochemical industry. He has been the deputy general manager and chief security officer and member of the Party committee of Lanzhou Petrochemical Branch Company from August 2004. He was appointed as the general manager and vice Party secretariat of Lanzhou Petrochemical Branch Company and the general manager of Lanzhou Petroleum & Chemical Company in March 2012. He was appointed as a Supervisor representing employees of the Company in May 2014. From November 2017, he served as the Party secretariat and general manager of Lanzhou Petrochemical Branch Company and the executive director and general manager of Lanzhou Petroleum & Chemical Co., Ltd. From August 2020, Mr. Li served as the General Manager of the corporate culture department and concurrently the General Manager (Minister, Director) of the CNPC's ideological and political work department (party group propaganda department, corporate culture department, press office). From December 2020, Mr. Li

has served as the Director of the Party and Masses' affairs Department, concurrently as the Director of the Party and Masses' affairs Department, the Head Office Executive Deputy Secretary of the Party committee, and the Deputy Director of the Party Organisation Department of CNPC.

Liu Xianhua, aged 58, is a Supervisor of the Company appointed by its employees' representatives and concurrently serves as the chairman of PetroChina Xinjiang Sales Company Limited. Mr. Liu is a professor-level senior economist and holds a master's degree. He has rich working experience in China's oil and petrochemical industry. He served as the general manager and vice Party secretariat of Shandong Sales Branch from May 2005. He served as the general manager and vice Party secretariat of North-eastern Sales Branch from March 2012. He has been serving as the general manager and vice Party secretariat of Liaoning Sales Branch, and concurrently as the general manager of Liaoning Petroleum Corporation from December 2015. Mr. Liu was appointed as a Supervisor representing employees of the Company in May 2016. From November 2017, Mr. Liu served as general manager and the vice Party secretariat of Liaoning Sales Branch and the executive director and concurrently served as the general manager of Liaoning Petroleum Sales Branch. In November 2021, he was appointed the chairman of PetroChina Xinjiang Sales Company Limited.



(3) Senior Management

Information on current members of the senior management is set out below:

Name	Gender	Age	Position	Term	Remuneration before tax received from the Company in 2021 (RMB'000)	Whether received remuneration from offices held in CNPC	Number of Shares held in the Company	
							As at December 31, 2020	As at December 31, 2021
Sun Longde	M	59	Vice President and Chief Geologist	2007.06-	1,697	No	0	0
Li Luguang	M	59	Vice President	2018.06-	1,378	No	0	0
Tian Jinghui	M	59	Vice President	2015.11-	1,474	No	0	0
Chai Shouping	M	60	Chief Financial Officer, Secretary to the Board	2017.01-	1,472	No	0	0
Yang Jigang	M	58	Vice President and Chief Engineer	2017.12-	1,422	No	0	0
Zhang Minglu	M	58	Safety Director	2021.07-	854	No	0	0
Zhu Guowen	M	55	Vice President	2021.07-	852	No	0	0

Note: The above remunerations are pre-tax amounts paid on a calendar year basis, including salaries, allowance, other benefits, contributions to retirement benefit schemes etc.

Brief Biography of the Senior Management:

Sun Longde, aged 59, is a Vice President of the Company, and concurrently the Chief Geologist of the Company. Mr. Sun is a professor-level senior engineer and holds a doctorate degree. He is an academician of the Chinese Academy of Engineering. He has rich working experience in China's oil and geological industry. He served as the manager of Exploration & Development Company of Shengli Petroleum Administration Bureau from September 1997, chief geologist and member of the Party committee of Tarim Petroleum Exploration & Development Headquarters from November 1997, deputy general manager and member of the Party committee of Tarim Oilfield Company from September 1999 and the general manager and Party secretariat of Tarim Oilfield Company from July 2002. Mr. Sun was appointed as a Vice President of the Company since June 2007. He was elected as an academician of the Chinese Academy of Engineering in December 2011. He concurrently served as the director of CNPC Consulting Centre from April

2014. Mr. Sun was appointed as the general manager of Science and Technology Management Department of the Company and the general manager of Science and Technology Management Department of CNPC in July 2015. From March 2016, he has concurrently served as the executive director and general manager of Daqing Oilfield Co., Ltd., director of Daqing Petroleum Administration Bureau and vice Party secretariat of Daqing Oilfield. From October 2018, he concurrently served as the executive director of Daqing Oilfield Co., Ltd., the Party secretariat of Daqing Oilfield, and the executive director of Daqing Petroleum Administration Bureau Co., Ltd. He ceased to hold the above three positions from June 2021. From July 2021, he has concurrently served as the Chief Geologist of the Company.

Li Luguang, aged 59, is a Vice President of the Company. As a professor-level senior engineer and a doctorate degree holder, Mr. Li has rich working experience in China petroleum industry. He served as the deputy general manager and Party member of Southwest Oil

and Gas Field Branch from September 1999, the general manager and vice Party secretariat of Southwest Oil and Gas Field Branch from September 2003, the general manager and Party secretariat of Southwest Oil and Gas Field Branch from November 2005, assistant to the general manager of CNPC from April 2014, concurrently as the general manager and vice secretariat of the Party committee of Tarim Oilfield Branch from October 2016, and the general manager and secretariat of the Party committee of Tarim Oilfield Branch from April 2017, the general manager and vice Party secretariat of Exploration and Production Branch from April 2018 and the vice president of the Company from June 2018. From October 2020, Mr. Li concurrently served as the executive director and secretary of the Party committee of the Exploration and Production Branch.

Tian Jinghui, aged 59, is a Vice President of the Company, and concurrently the Party secretariat and executive director of PetroChina International Co., Ltd., and the Chairman of China National United Oil Corporation. Mr. Tian is a professor-level senior economist with a master's degree of business administration. He has rich experience in the oil and gas industry of the PRC. From May 1998, he was appointed as the leader of the Preparatory Group of Northwest Sales Company. He worked as the deputy general manager and member of the Party committee of Refining & Marketing Branch from December 1999, the deputy general manager, chief safety officer and member of the Party committee of Marketing Branch from November 2007. From June 2009, he assumed the position as the Party secretariat and deputy general manager of Marketing Branch. From August 2013, he has been the general manager and Party secretariat of Marketing Branch. Mr. Tian was appointed as Vice President of the Company in November 2015. From April 2017, Mr. Tian served concurrently as the general manager and vice Party secretariat of PetroChina Marketing Branch, the Party secretariat and executive director of PetroChina International Co., Ltd., and the chairman of China National United Oil Corporation.

Chai Shouping, aged 60, is currently the Chief Financial Officer and Secretary to the Board of the Company. Mr. Chai is a professor-level senior accountant and holds a master's degree. He has rich financial, operating, and managerial experience in the oil and gas industry of the PRC. From April 2002, he worked as the deputy general manager of the Finance Department of the Company. From September 2012, he served as the chief accountant and member of the Party committee of CNPC E&D (Overseas Exploration and Development branch), the deputy general manager and chief financial officer of CNPC E&D, the chief financial officer of PetroChina International Investment Company Limited. From March 2013, he served as the general manager of the Finance Department of the Company. Mr. Chai was appointed as the Chief Financial Officer of the Company in January 2017. From August 2020, Mr. Chai concurrently served as the director of the Secretariat of the Board. Since October 2020, Mr. Chai concurrently served as the Secretary of the Board of the Company.

Yang Jigang, aged 58, is a Vice President and Chief Engineer of the Company. Mr. Yang is a professor-level senior engineer and holds a master's degree. He has rich working experience in China's petroleum and petrochemical industry. He worked as the deputy general manager of Lanzhou Chemical Industry Company from August 1997, the chief engineer of CNPC Refining and Chemical Department from November 1998, member of the preparatory committee of Refining and Sales Branch from September 1999, the chief engineer and member of the Party committee of Refining and Sales Branch from December 1999, the deputy general manager, chief engineer and member of the Party committee of Chemical and Sales Branch from August 2000, the general manager and vice Party secretariat of Daqing Petrochemical Branch from May 2005, the Party secretariat and deputy general manager of Refining & Chemical Branch from December 2009, and the Party secretariat and general manager of Refining & Chemical Branch from November 2017. From March 2021, he serves as the executive director of the Refining and Chemical Branch. Mr. Yang was appointed



as a Vice President of the Company from December 2017. From April 2021, he concurrently served as the Chief Engineer of the Company.

Zhang Minglu, aged 58, is the Chief Safety Director of the Company and concurrently serves as the deputy safety director of CNPC, the general manager of the Quality, Health, Safety and Environment Department of the Company and concurrently as the general manager of the Quality, Health, Safety and Environment Department of CNPC. Mr. Zhang is a professor-level senior engineer with a doctorate degree, and has extensive experience in the oil and gas industry in the PRC. In June 2008, he was appointed as the chief geologist of Changqing Oilfield Branch. In July 2014, he was appointed as the deputy general manager of Changqing Oilfield Branch, and concurrently served as safety director of the Changqing Oilfield Branch in January 2015. In January 2019, he was appointed as general manager of Qinghai Oilfield Branch, and the executive director and general manager of Qinghai Petroleum Administration Bureau Co., Ltd. In March 2021, he was appointed as the general manager of the Quality, Health, Safety and Environmental Department of the Company and concurrently served as the general manager of the Quality, Health, Safety and Environmental Department of CNPC. In June 2021, he was appointed as deputy safety director of CNPC. In July 2021, he was appointed as Safety Director of the Company.

Zhu Guowen, aged 55, is the Vice President of the Company, and concurrently serves as the executive director of Daqing Oilfield Co., Ltd., and executive director of Daqing Petroleum Administration Bureau Co., Ltd. Mr. Zhu is a professor-level senior engineer with a doctorate degree, and has extensive experience in the oil and gas industry in the PRC. In March 2010, he was appointed as the plant manager of the First Production Plant of Daqing Oilfield Co., Ltd. In April 2013, he was appointed as the deputy general manager of Daqing Oilfield Co., Ltd. and deputy director of Daqing Petroleum Administration Bureau. In October 2018, he was appointed as the general manager of Zhejiang Oilfield Branch. In October 2020, he

was appointed as the General Manager of Daqing Oilfield Co., Ltd. and concurrently served as the general manager of Daqing Petroleum Administration Bureau Co., Ltd. In June 2021, he was appointed as the executive director of Daqing Oilfield Co., Ltd. and concurrently served as the executive director of Daqing Petroleum Administration Bureau Co., Ltd. In July 2021, he was appointed as the Vice President of the Company.

2. Change in Directors, Supervisors and the Senior Management

On March 25, 2021, the Company held the eighth meeting of the eighth session of Board of Directors. Mr. Huang Yongzhang was appointed as the President and re-designated to be an Executive Director of the Company; Mr. Duan Liangwei ceased to serve as the President and re-designated to be a Non-executive Director of the Company.

On April 29, 2021, the Company held the ninth meeting of the eighth session of Board of Directors and appointed Mr. Yang Jigang as the Chief Engineer (concurrently) of the Company.

On May 10, 2021, Mr. Li Fanrong resigned from the position of Non-executive Director and Vice Chairman of the Company and chairman of the Investment and Development Committee due to work arrangement.

On May 28, 2021, Mr. Li Wendong resigned from his position as an employee representative Supervisor of the Company due to work arrangement.

On July 20, 2021, the Company held the tenth meeting of the eighth session of Board of Directors and appointed Mr. Sun Longde as the Chief Geologist (concurrently), Mr. Zhang Minglu as the Safety Director and Mr. Zhu Guowen as the Vice President of the Company.

On August 25 to 26, 2021, the Company held the eleventh meeting of the eighth session of Board of Directors and appointed Mr. Ren Lixin as the Senior Vice President of the Company.

On September 3, 2021, Mr. Ling Xiao resigned from his position as Vice President of the Company due to personal reasons.

On October 21, 2021, the Company held the first extraordinary shareholders' meeting of 2021 and elected Mr. Hou Qijun and Mr. Ren Lixin as Directors of the Company.

On October 28, 2021, the Company held the twelfth meeting of the eighth session of Board of Directors

and elected Mr. Hou Qijun as the Vice Chairman of the Company.

3. Interests of Directors, Supervisors and chief executive in the Share Capital of the Company

As at December 31, 2021, none of the Directors, Supervisors or chief executive had any interest and short positions in any shares, underlying shares or debentures of the Company or any associated corporation within the meaning of Part XV of the SFO required to be recorded in the register mentioned under Section 352 of the SFO or as otherwise notifiable to the Company and the Hong Kong Stock Exchange by the Directors, Supervisors and chief executive pursuant to the Model Code.



4. Service Contracts of Directors and Supervisors

No Director or Supervisor has entered into any service contract with the Company which is not terminable by the Company within one year without payment of compensation other than statutory compensation.

5. Interests of Directors and Supervisors in Contracts

None of the Directors, Supervisors or any entity related to the Directors and Supervisors had any material interest, either directly or indirectly, in any transaction, arrangement and contract of significance to which the Company or any of its subsidiaries was a party to during the year.

6. Permitted Indemnity Provisions

During the reporting period, the permitted indemnity provisions to the benefit of the Directors continued to be

effective and the Company has arranged appropriate liability insurance for Directors, Supervisors and the senior management.

7. Remuneration Policy of the Senior Management

Each member of the senior management of the Company has entered into a performance agreement with the Company. The Company's senior management remuneration policy links financial interests of the senior management with the Group's operating results.

8. Employees of the Group

As at December 31, 2021, the Group had 417,173 employees (excluding 248,405 temporary and seasonal staff) and 287,406 retired staff.

The number of employees for each of the segment as of December 31, 2021 is set out below:

	Number of Employees	Percentage of total no. of employees (%)
Exploration and Production	241,692	57.94
Refining and Chemicals	128,785	30.87
Marketing	37,134	8.90
Natural Gas and Pipeline	3,928	0.94
Other*	5,634	1.35
Total	417,173	100.00

* includes staff of the Company's headquarters, specialised subsidiaries, Exploration & Development Research Institute, Planning & Engineering Institute, Petrochemical Research Institute and other units.

The employee structure by profession as at December 31, 2021 is set out below:

	Number of Employees	Percentage of total no. of employees (%)
Administration	120,480	28.88
Technology	61,032	14.63
Technical operation	235,661	56.49
Total	417,173	100.00

The education levels of employees as at December 31, 2021 is set out below:

	Number of Employees	Percentage of total no. of employees (%)
Master and above	18,972	4.55
University	150,202	36.00
Polytechnic college	94,137	22.57
Technical secondary and below	153,862	36.88
Total	417,173	100.00

9. Employee Remuneration Policy

The Company has in place various equitable and competitive remuneration systems to cater for different positions. At regional companies, an annual salary system is adopted for the management, a positional wage system for supervisory, professional and technical positions and a positional skill-based wage system for operators and workers. In addition, subsidies are offered to those who possess more sophisticated technical and working skills. Each employee is remunerated according to the level of their job position, individual competence and contribution, and with changes in the relevant factors, such remuneration will also be adjusted in a timely manner.

10. Employee Welfare Plans

Details on employee welfare plans of the Company are set out in Note 34 to the financial statements prepared in accordance with IFRS in this annual report.

11. Employee Training

The Company has been consistently focused on employee training as an important means of achieving

a robust company strategy based on talent. It serves to increase the calibre of its staff and its competitiveness and helps to build a harmonious enterprise. Employee training of the Company covers basic concepts, policies and regulations, knowledge required for a job position, safety awareness, cultural knowledge and technical skills as a fundamental basis. In practice, training revolves around four comprehensive programmes, namely, competences-building directed at the management, technical innovation at professional and technical staff, skill enhancement at operators and workers and internationalisation of talent. These training efforts are multi-dimensional and diversified in approaches, which can better cater to the Company's development requirements and its needs for building high-calibre working teams.

12. Core Technical Teams and Key Technical Staff

No material changes occurred during the reporting period to the core technical teams and key technical staff of the Company (i.e. those other than Directors, Supervisors and Senior Management).

RELEVANT INFORMATION ON CORPORATE BONDS

1. Information on Bonds Issued but Not Yet Overdue of the Company

Bond Name	Abbreviation	Code	Issue Date	Value Date	Due Date	Bond Balance (RMB 100 million)	Rate (%)	Mode of Repayment	Stock Exchange for Listing
2012 Corporate Bond (First Tranche) (10-year term)	12 PetroChina 02	122210.SH	November 22, 2012	November 22, 2012	November 22, 2022	20	4.90	Annual payment of interests, and one lump sum repayment of principal at maturity	Shanghai Stock Exchange
2012 Corporate Bond (First Tranche) (15-year term)	12 PetroChina 03	122211.SH	November 22, 2012	November 22, 2012	November 22, 2027	20	5.04	Annual payment of interests, and one lump sum repayment of principal at maturity	Shanghai Stock Exchange
2013 Corporate Bond (First Tranche) (10-year term)	13 PetroChina 02	122240.SH	March 15, 2013	March 15, 2013	March 15, 2023	40	4.88	Annual payment of interests, and one lump sum repayment of principal at maturity	Shanghai Stock Exchange
2016 Corporate Bond (First Tranche) (10-year term)	16 PetroChina 02	136165.SH	January 18, 2016	January 19, 2016	January 19, 2026	47	3.50	Annual payment of interests, and one lump sum repayment of principal at maturity	Shanghai Stock Exchange
2016 Corporate Bond (Second Tranche) (10-year term)	16 PetroChina 04	136254.SH	March 1, 2016	March 3, 2016	March 3, 2026	23	3.70	Annual payment of interests, and one lump sum repayment of principal at maturity	Shanghai Stock Exchange
2016 Corporate Bond (Third Tranche) (10-year term)	16 PetroChina 06	136319.SH	March 22, 2016	March 24, 2016	March 24, 2026	20	3.60	Annual payment of interests, and one lump sum repayment of principal at maturity	Shanghai Stock Exchange
2019 First Tranche Medium-term Notes (MTN)	19 PetroChina MTN001	101900113.IB	January 22, 2019	January 24, 2019	January 24, 2024	100	3.45	Annual payment of interests, and one lump sum repayment of principal at maturity	National Inter-bank Bond Market

Bond Name	Abbreviation	Code	Issue Date	Value Date	Due Date	Bond Balance (RMB 100 million)	Rate (%)	Mode of Repayment	Stock Exchange for Listing
2019 Second Tranche MTN	19 PetroChina MTN002	101900114. IB	January 22, 2019	January 24, 2019	January 24, 2024	100	3.45	Annual payment of interests, and one lump sum repayment of principal at maturity	National Inter-bank Bond Market
2019 Third Tranche MTN	19 PetroChina MTN003	101900222. IB	February 21, 2019	February 22, 2019	February 22, 2024	100	3.66	Annual payment of interests, and one lump sum repayment of principal at maturity	National Inter-bank Bond Market
2019 Fourth Tranche MTN	19 PetroChina MTN004	101900221. IB	February 21, 2019	February 22, 2019	February 22, 2024	100	3.66	Annual payment of interests, and one lump sum repayment of principal at maturity	National Inter-bank Bond Market
2019 Fifth Tranche MTN	19 PetroChina MTN005	101900586. IB	April 22, 2019	April 23, 2019	April 23, 2024	100	3.96	Annual payment of interests, and one lump sum repayment of principal at maturity	National Inter-bank Bond Market
2020 First Tranche MTN	20 PetroChina MTN001	102000621. IB	April 8, 2020	April 9, 2020	April 9, 2023	100	2.42	Annual payment of interests, and one lump sum repayment of principal at maturity	National Inter-bank Bond Market
2020 Second Tranche MTN	20 PetroChina MTN002	102000622. IB	April 8, 2020	April 9, 2020	April 9, 2023	100	2.42	Annual payment of interests, and one lump sum repayment of principal at maturity	National Inter-bank Bond Market

Notes:

1. Trading venue: the trading venue for 12 PetroChina 02, 12 PetroChina 03, 13 PetroChina 02, 16 PetroChina 02, 16 PetroChina 04 and 16 PetroChina 06 is the Shanghai Stock Exchange, and the trading venue for 19 PetroChina MTN001, 19 PetroChina MTN002, 19 PetroChina MTN003, 19 PetroChina MTN004, 19 PetroChina MTN005, 20 PetroChina MTN001 and 20 PetroChina MTN002 is the national inter-bank bond market.
2. Repayment of principal and payment of interest: for 12 PetroChina 02, 12 PetroChina 03, 13 PetroChina 02, 16 PetroChina 02, 16 PetroChina 04, 16 PetroChina 06, 19 PetroChina MTN001, 19 PetroChina MTN002, 19 PetroChina MTN003, 19 PetroChina MTN004, 19 PetroChina MTN005, 20 PetroChina MTN001 and 20 PetroChina MTN002, payment of interests shall be made annually, and one lump sum repayment of principal shall be made at maturity.
3. Investor suitability arrangements: 12 PetroChina 02, 12 PetroChina 03 and 13 PetroChina 02 are offered and traded publicly to public investors (ordinary investors); 16 PetroChina 02, 16 PetroChina 04 and 16 PetroChina 06 are offered and traded publicly to qualified investors (professional investors); 19 PetroChina MTN001, 19 PetroChina MTN002, 19 PetroChina MTN003, 19 PetroChina MTN004, 19 PetroChina MTN005, 20 PetroChina MTN001 and 20 PetroChina MTN002 are offered and traded publicly to institutional investors in the national inter-bank bond market.

4. Applicable trading mechanisms: auction trading and block trading at Shanghai Stock Exchange are applicable to 12 PetroChina 02, 12 PetroChina 03, 13 PetroChina 02, 16 PetroChina 02, 16 PetroChina 04 and 16 PetroChina 06. Circulation and transfer in the national inter-bank bond market are applicable to 19 PetroChina MTN001, 19 PetroChina MTN002, 19 PetroChina MTN003, 19 PetroChina MTN004, 19 PetroChina MTN005, 20 PetroChina MTN001 and 20 PetroChina MTN002.
5. Interest Payment and Redemption: The principal and interest of 21 PetroChina SCP001, 21 PetroChina SCP002, 16 PetroChina MTN001, 16 PetroChina 01, 16 PetroChina 03, 16 PetroChina 05 were duly paid. The interest of 20 PetroChina MTN001, 20 PetroChina MTN002, 19 PetroChina MTN001, 19 PetroChina MTN002, 19 PetroChina MTN003, 19 PetroChina MTN004, 19 PetroChina MTN005, 16 PetroChina 02, 16 PetroChina 04, 16 PetroChina 06, 13 PetroChina 02, 12 PetroChina 02, 12 PetroChina 03 was duly paid.
6. There are no overdue bonds issued by the Company, and there is no risk of termination of listing and trading of the bonds issued by the Company.
7. Triggering and implementation of special clauses: 19 PetroChina MTN001 and 19 PetroChina MTN002 are attached with the option of the issuer to adjust the coupon rate and the put option of the investors by the end of the third year. Relevant clauses have not been triggered during the reporting period.

2. Agencies Providing Services on the Issuance and the Duration of Bonds

(1) Lead underwriters, trustees, duration management institutions, law firms and rating agencies

Name	Address	Contact	Telephone
CSC Financial Co., Ltd.	2/F, Towers B and E, Kaiheng Center, 2 Chaonei Street, Dongcheng District, Beijing	Li Wenjie	010-86451097
Bank of Ningbo Co., Ltd.	Block B, 6 Jianguomenwai Street, Chaoyang District, Beijing	Zhang Pengfei	010-53266150
Industrial and Commercial Bank of China Limited	55 Fuxingmennei Street, Xicheng District, Beijing	Zhang Jian	010-81011847
China Minsheng Bank Corp., Ltd	2 Fuxingmennei Street, Xicheng District, Beijing	Lian Jie	010-86603645
Bank of China Limited	1 Fuxingmennei Street, Xicheng District, Beijing	Xun Yamei	010-66592749
Postal Savings Bank of China Co., Ltd	China Orient Asset Building, 410 Fuchengmennei Street, Xicheng District, Beijing	Zheng Yarong	010-68857446
China Galaxy Securities Company Limited	11/F, Qinghai Finance Building, Building 1, 8 Xiying Street, Fengtai District, Beijing	Zhang Fan	010-80927272
CITIC Securities Company Limited	CITIC Securities Tower, 48 Liangmaqiao Road, Chaoyang District, Beijing	Sun Xiaobo	010-60834068
China International Capital Corporation Limited	27/F & 28/F, China World Tower 2, 1 Jianguomenwai Street, Chaoyang District, Beijing	Xu Xian	010-65051166
China Merchants Securities Co., Ltd.	17/F, Merchants Bank Building, Building 3, 1 Yuetaan South Street, Xicheng District, Beijing	Zhao Xin	010-60840890
BOC International (China) Co., Ltd.	39/F, Bank of China Tower, 200 Yincheng Middle Road, Pudong New Area, Shanghai	Chen Zhili	010-66229000
China Development Bank Securities Co., Ltd	1-9/F, 29 Fuchengmenwai Street, Xicheng District, Beijing	Zhao Liang	010-88300901
Junhe Law Office	20/F, Huarun Tower, 8 Jianguomen North Street, Dongcheng District, Beijing	Lei Tianxiao	010-85191300
China Chengxin International Credit Rating Co.	Building 5, Yinhe SOHO, 2 Nanzhugan Alley, Chaoyangmennei Street, Dongcheng District, Beijing	Li Xuewei	010-66428877
China Lianhe Credit Rating Co., Ltd.	17/F, PICC Building, 2 Jianguomenwai Street, Chaoyang District, Beijing	Luo Yi	010-85679696

(2) Accounting firms

Name	Address	Signing Accountant	Contact	Telephone
PricewaterhouseCoopers Zhong Tian LLP (Special General Partnership)	11/F, PricewaterhouseCoopers Center 2 Corporate Avenue, 202 Hu Bin Road, Huangpu District, Shanghai	Zhao Juan, Li Dan	Hu Yang	010-65333602
KPMG Huazhen LLP (Special General Partnership)	8/F, KPMG Tower, Oriental Plaza, 1 East Chang An Avenue, Beijing	Yang Jie, He Shu	Liu Yang	010-85085264

(3) Change of agencies during the reporting period

Name	Reason to change	Procedure	Effect to the equity of the bond investor
PricewaterhouseCoopers Zhong Tian LLP (Special General Partnership) and PricewaterhouseCoopers	The Company has hired KPMG Huazhen LLP (Special General Partnership) and KPMG as auditors for financial and internal control since 2013 and they have reached the maximum years of audit services that an accounting firm can continuously provide. Hence, the Company proposed to engage PricewaterhouseCoopers Zhong Tian LLP (Special General Partnership) and PricewaterhouseCoopers as the Company's auditors for financial and internal control for the year of 2021.	From 24 to 25 March 2021, the Company convened the eighth meeting of the eighth session of the Board and passed the resolution "To change the domestic and international auditors of the Company for the year 2021". On 10 June 2021, the Company convened the 2020 annual general meeting and passed the resolution "To change the domestic and overseas auditor of the Company for the year of 2021".	The change of the accounting firm falls within the scope of the ordinary business activities of the Company and abided by the laws and regulations, and Articles of Association of the Company. Such change will not have a significant adverse effect on the daily operation and the solvency of the Company.

3. Use of Funds Raised by Issuing Bonds

As at the end of the current reporting period, the use of all funds raised via bonds is basically consistent with the purpose, use plan and other matters as undertaken in the offering circular, and such funds have been used up.

Collection of funds raised by issuing bonds and payment of principals and interests are made through the payment collection account or special account, and all accounts are under normal operation. Meanwhile, the Company formulated a plan for the use of funds raised via bonds and funds raised by issuing corporate bonds are used in accordance with the internal procedures on fund utilization and applicable agreements. Relevant business departments carried out strict inspections over the use of such funds to effectively ensure that all funds are used for their designated purposes, guarantee the smooth operation of the investment, use and audit of funds raised and ensure that the funds raised via bonds are used in accordance with the resolution of the Shareholders' General Meeting and the purpose as disclosed in the offering circular.



Unit: 100 million Currency: RMB

Bond Name	Total amount raised	Utilized amount	Unutilized amount	Operation of the specific account for proceeds (if any)	Rectification of the irregular use of proceeds (if any)	Whether the utilization is in accordance with the purposes, plans and other matters as undertaken in the offering circular
2012 Corporate Bond (First Tranche) (10-year term)	20	20	-	Normal, Comply with relevant undertakings	N/A	Yes
2012 Corporate Bond (First Tranche) (15-year term)	20	20	-	Normal, Comply with relevant undertakings	N/A	Yes
2013 Corporate Bond (First Tranche) (10-year term)	40	40	-	Normal, Comply with relevant undertakings	N/A	Yes
2016 Corporate Bond (First Tranche) (10-year term)	47	47	-	Normal, Comply with relevant undertakings	N/A	Yes
2016 Corporate Bond (Second Tranche) (10-year term)	23	23	-	Normal, Comply with relevant undertakings	N/A	Yes
2016 Corporate Bond (Third Tranche) (10-year term)	20	20	-	Normal, Comply with relevant undertakings	N/A	Yes
2019 First Tranche MTN	100	100	-	Normal, Comply with relevant undertakings	N/A	Yes
2019 Second Tranche MTN	100	100	-	Normal, Comply with relevant undertakings	N/A	Yes
2019 Third Tranche MTN	100	100	-	Normal, Comply with relevant undertakings	N/A	Yes
2019 Fourth Tranche MTN	100	100	-	Normal, Comply with relevant undertakings	N/A	Yes
2019 Fifth Tranche MTN	100	100	-	Normal, Comply with relevant undertakings	N/A	Yes
2020 First Tranche MTN	100	100	-	Normal, Comply with relevant undertakings	N/A	Yes
2020 Second Tranche MTN	100	100	-	Normal, Comply with relevant undertakings	N/A	Yes

The aforementioned proceeds raised by issuing bonds were not used in project construction, and the use of the proceeds remained unchanged during the reporting period.

4. Information on Follow-up Credit Rating of Bonds

During the reporting period, no adjustment was made by the credit rating agencies to the credit rating of the Company or bonds.

5. Credit Enhancement Mechanism, Debt Repayment Plan and Safeguard Measures for Debt Repayment

During the reporting period, the credit enhancement mechanism, debt repayment plan and the safeguard measures for debt repayment are consistent with the provisions and relevant undertakings set out in the offering circular, without any change made thereto.

6. Mortgage, Pledge, Seizure, Freezing, Conditional Realisation, Impossible Realisation, Impossible Use to Offset Debts of Assets and Other Situations and Arrangements under which Rights are Restricted

As at the end of the reporting period, there was no material restriction on the Company's assets.

7. Overdue Payment of Interest-bearing Debts (Excluding Bonds) at the End of the Reporting Period

As at the end of the reporting period, the Company has no overdue payment of interest-bearing debts.

8. Violation of the Laws and Regulations, the Articles of Association, the Management Rules of the Information Disclosure and the Promises or Commitments of the Offering Circular Which Affects the Interests of the Bond Investors.

As at the end of the reporting period, the Company does not have the aforementioned circumstances.

9. Major Accounting Data and Financial Indicators Relating to Corporate Bonds

Item	2021	2020
Earnings before interest, tax, depreciation and amortization (EBITDA) (RMB million)	382,676	281,108
Net cash flow from investing activities (RMB million)	(213,032)	(181,986)
Net cash flow from financing activities (RMB million)	(107,971)	(99,400)
Year-end balance of cash and cash equivalents (RMB million)	136,789	118,631
Liquidity ratio	0.93	0.80
Quick ratio	0.65	0.59
Asset-liability ratio (%)	43.69	45.07
EBITDA-debt ratio	1.12	0.76
Debt service coverage ratio	16.76	5.16
Cash debt service coverage ratio	29.70	21.22
EBITDA interest coverage ratio	36.05	17.55
Loan repayment ratio (%)	100	100
Interest coverage ratio (%)	100	100

Note: EBITDA increased by 36.1% and interest coverage ratio increased by 11.60 compared with the same period of last year, mainly due to the significant year-on-year increase of sales revenue and total profit.

INFORMATION ON CRUDE OIL AND NATURAL GAS RESERVES

The following table sets forth the Company's estimated proved reserves and proved developed reserves as at December 31, 2019, 2020 and 2021, among which approximately 57% of the proved reserve as at December 31 2021, 54% of the proved reserve as at December 31 2020 and 54% of the proved reserves as at December 31 2019 are formulated on the basis of the self-assessment results prepared by the Company, and the remaining reserves as at December 31, 2019, 2020 and 2021 are formulated on the basis of assessment results prepared by DeGolyer and MacNaughton, McDaniel & Associates, Ryder Scott and GLJ, each an independent engineering consultancy company.

	Crude Oil and Condensate (million barrels)	Natural Gas (billion cubic feet)	Combined (million barrels of oil equivalent)
Proved Developed and Undeveloped Reserves			
The group			
Reserves as of December 31, 2019 (the basis date)	7,253.3	76,236.0	19,959.3
Revisions of previous estimates	(1,553.1)	(595.3)	(1,652.2)
Extensions and discoveries	385.2	4,976.1	1,214.6
Improved recovery	107.7	-	107.7
Purchased	15.0	106.9	32.8
Sold	(80.2)	(65.6)	(91.1)
Production for the year	(921.8)	(4,221.0)	(1,625.5)
Reserves as of December 31, 2020 (the basis date)	5,206.1	76,437.1	17,945.6
Revisions of previous estimates	1,159.1	(2,011.6)	824.1
Extensions and discoveries	472.3	4,885.3	1,286.5
Improved recovery	116.7	27.0	121.2
Purchased	0.0	0.0	0.0
Sold	(2.5)	(1.9)	(2.8)
Production for the year	(887.9)	(4,420.0)	(1,624.8)
Reserves as of December 31, 2021 (the basis date)	6,063.8	74,915.9	18,549.8
Proved Developed Reserves			
As of December 31, 2019 (the basis date)	5,473.8	39,869.6	12,118.7
Including: Domestic	4,840.0	38,376.3	11,236.0
Overseas	633.8	1,493.3	882.7
As of December 31, 2020 (the basis date)	4,653.6	42,076.7	11,666.4
Including: Domestic	3,987.0	40,732.3	10,775.8
Overseas	666.6	1,344.4	890.6
As of December 31, 2021 (the basis date)	5,374.8	42,575.6	12,470.7
Including: Domestic	4,799.6	41,343.5	11,690.2
Overseas	575.2	1,232.1	780.5
Proved Undeveloped Reserves			
As of December 31, 2019 (the basis date)	1,779.5	36,366.4	7,840.6
Including: Domestic	1,659.8	36,156.8	7,686.0
Overseas	119.7	209.6	154.6
As of December 31, 2020 (the basis date)	552.5	34,360.4	6,279.2
Including: Domestic	387.9	34,062.0	6,064.9
Overseas	164.6	298.4	214.3
As of December 31, 2021 (the basis date)	689.0	32,340.3	6,079.1
Including: Domestic	486.0	32,116.5	5,838.8
Overseas	203.0	223.8	240.3
Investment calculated by the equity method			
Share of proved developed and undeveloped reserves of affiliates and joint ventures			
December 31, 2019	287.1	393.6	352.7
December 31, 2020	195.5	362.7	256.0
December 31, 2021	208.5	511.4	293.7

Note: Crude oil and condensate reserves contained 278.9 million barrels of Natural Gas Liquids ("NGL") in 2021.

As at December 31, 2021, the aggregate of proved developed and undeveloped reserves of the Group and its affiliate companies and joint ventures calculated by the equity method is 18.844 billion barrels of oil equivalent (as at December 31, 2020: 18.202 billion barrels of oil equivalent), of which crude oil and condensate are 6.272 billion barrels (as at December 31, 2020: 5.402 billion barrels), natural gas is 75,427.3 billion cubic feet (as at December 31, 2020: 76,799.8 billion cubic feet).

The number of wells drilled or participated in drilling during the specified period the results of the drilling are set out as follow:

Year		Daqing	Xinjiang	Changqing	Other domestic ⁽¹⁾	Overseas aggregate	Total
2019	The net number of new exploration wells ⁽²⁾	211	157	584	627	34.6	1,613.6
	Crude oil	195	148	359	381	23.5	1,106.5
	Natural gas	2	9	49	109	1.8	170.8
	Dry well ⁽³⁾	14	-	176	137	9.3	336.3
	The net number of new development wells ⁽²⁾	3,008	1,274	5,948	4,273	478.8	14,981.8
	Crude oil	2,990	1,270	4,319	3,243	469.2	12,291.2
	Natural gas	12	4	1,586	1,007	9.6	2,618.6
	Dry well ⁽³⁾	6	-	43	23	-	72.0
2020	The net number of new exploration wells ⁽²⁾	166	151	661	561	24.0	1,563.0
	Crude oil	142	120	380	356	17.9	1,015.9
	Natural gas	9	9	53	73	1.8	145.8
	Dry well ⁽³⁾	15	22	228	132	4.3	401.3
	The net number of new development wells ⁽²⁾	3,264	1,048	4,630	3,121	210.5	12,273.5
	Crude oil	3,240	1,040	3,082	2,406	209.5	9,977.5
	Natural gas	11	8	1,512	701	1.0	2,233.0
	Dry well ⁽³⁾	13	-	36	14	-	63.0
2021	The net number of new exploration wells ⁽²⁾	207	149	604	496	23.3	1,479.3
	Crude oil	160	86	371	280	15.6	912.6
	Natural gas	17	17	43	98	1.1	176.1
	Dry well ⁽³⁾	30	46	190	118	6.6	390.6
	The net number of new development wells ⁽²⁾	3,387	736	4,034	3,199	266.4	11,622.4
	Crude oil	3,370	732	2,483	2,539	262.2	9,386.2
	Natural gas	6	4	1,518	650	4.2	2,182.2
	Dry well ⁽³⁾	11	-	33	10	-	54.0

Notes:

(1) represents Liaohe, Jilin, North China, Dagang, Sichuan, Tarim, Turpan Hami, Qinghai, Jidong, Yumen, Zhejiang and southern oil region, etc.

(2) "net well" means wells which have deducted the interests of other parties.

(3) "dry well" means wells which are not sufficient for commercial production.

Internal Control over the Estimates of Reserves

The Company has set up the Oil and Gas Reserves Management Committee, the chairman of which is the President of the Company.

The Company promoted the qualification certification management of oil and gas reserve evaluation and audit personnel, and has set up a team of reserve valuers and auditors covering the headquarters and companies in various regions which is responsible for reserve valuing and auditing for the Company. Meanwhile, a specialised Reserve Administration Department is set up under the Exploration and Production segment of the Company. The managerial personnel and staff of such department possess on average more than 20 years of professional technical experience and a considerable number of years of experience in conducting reserve estimation U.S. Securities and Exchange Commission ("SEC") Standards in the oil industry, and all of them are qualified as the national certified professionals specialising in handling reserves matters. Reserve Management Committees and multi-disciplinary Reserve Research Institutes have been set up at various regional companies. Technical professional in charge of the reserve evaluation of the Company is Mr. Duan Xiaowen, member of the Reserve Administration Department of the Exploration and

Production segment. Mr. Duan holds a bachelor's degree in petroleum geology and an MBA degree. He has more than 25 years of working experience in the field of the exploration and development of oil and gas and has been engaging in the reserve evaluation and management for a long period of time. Since 2008, he has been involved in the technical supervision of reserves evaluation and, since 2016, has been the key technical professional in charge of monitoring the preparations for conducting reserve evaluation of the Company and of handling the technical and management works regarding evaluation of the oil and gas reserves. Reserve Research Institutes in various regions are responsible for calculating the newly discovered reserves and updating the estimates of the existing reserves. The evaluation results are subject to a two-level review by the regional companies and the Exploration and Production branches, and will be finally determined by the Reserve Evaluation Leading Group of the Company.

At the same time, the Company retains a third party independent evaluator who will, in accordance with the SEC Standards prescribed, conduct an independent evaluation or audit of the proved reserves derived from the annual evaluation conducted by the Company. The proved reserves evaluated or audited by the third party will be disclosed in accordance with the SEC requirements.

AUDITOR'S REPORT

PwC ZT Shen Zi (2022) No. 10001
(Page 1 of 6)

To the Shareholders of PetroChina Company Limited,

Opinion

What we have audited

We have audited the accompanying financial statements of PetroChina Company Limited ("the Company"), which comprise:

- the consolidated and company balance sheets as at 31 December 2021;
- the consolidated and company income statements for the year then ended;
- the consolidated and company cash flow statements for the year then ended;
- the consolidated and company statements of changes in shareholders' equity for the year then ended; and
- notes to the financial statements.

Our opinion

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated and company's financial position of the Company as at 31 December 2021, and their financial performance and cash flows for the year then ended in accordance with the requirements of Accounting Standards for Business Enterprises ("CASs").

Basis for Opinion

We conducted our audit in accordance with China Standards on Auditing ("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 believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Company in accordance with the Code of Ethics for Professional Accountants of the Chinese Institute of Certified Public Accountants ("CICPA Code"), and we have fulfilled our other ethical responsibilities in accordance with the CICPA Code.

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AUDITOR'S REPORT (continued)

PwC ZT Shen Zi (2022) No. 10001

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Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements 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.

Key audit matter identified in our audit is “Recoverability of the carrying amount of oil and gas properties”.

Key Audit Matter	How our audit addressed the Key Audit Matter
<p>Recoverability of the carrying amount of oil and gas properties</p> <p>Refer to Note 4(31) “Critical accounting estimates and judgements” and Note 17 “Oil and gas properties” to the consolidated financial statements, with the net book value of oil and gas properties amounted to RMB 816,788 million at 31 December 2021, and impairment loss of RMB 19,463 million was recorded for the year ended 31 December 2021.</p> <p>Uncertainty in future oil prices, future production costs, changes in operating conditions and the economic outlook gave rise to possible indicators that the carrying amount of the oil and gas properties as at December 31, 2021 might be impaired.</p> <p>An impairment loss is recognised for the amount by which the carrying amount of oil and gas properties exceeds the higher of its fair value less costs to sell and its value in use. The Group’s determination of the recoverable amounts for oil and gas properties involved key estimates and assumptions, including:</p> <ul style="list-style-type: none"> – Future oil prices; – Future costs; – Future production volumes; and – Discount rates. 	<p>In addressing this matter, we performed the following key audit procedures:</p> <ul style="list-style-type: none"> • Obtained an understanding of the management’s internal control and assessment process of impairment of oil and gas properties and assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and level of other inherent risk factors such as complexity, subjectivity, changes and susceptibility to management bias or fraud; • Evaluated and tested the key controls relating to the determination of recoverable amounts of oil and gas properties; • For certain projects which management has decided not to further develop, corroborated evidence of future development plans and capital allocation decisions; • Assessed the appropriateness of the method used to determine recoverable amounts, including the methodology adopted in the discounted cash flow projections, tested mathematical accuracy of the projections, and the completeness, accuracy, and relevance of underlying data used in the projections; • Compared estimates of future crude oil prices adopted by the Group against a range of published crude oil price forecasts; • Compared the future cost profiles against historical costs or relevant budgets of the Group or relevant external data;

AUDITOR'S REPORT (continued)

PwC ZT Shen Zi (2022) No. 10001
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Key Audit Matters (Cont'd)

Key Audit Matter	How our audit addressed the Key Audit Matter
Because of the significance of the carrying amount of the oil and gas properties as at December 31, 2021, together with the significant estimates and judgements by management in the use of key estimates or assumptions in determining recoverable amounts for oil and gas properties, we had placed our audit emphasis on this matter.	<ul style="list-style-type: none"> Compared the future production profiles against the oil and gas reserve estimation report approved by the management. Evaluated the competence, capability and objectivity of the management's experts engaged in estimating the oil and gas reserves. Assessed key estimations or assumptions used in the reserve estimation, by reference to historical data, management plans and/or relevant external data; Used professionals with specialized skill and knowledge to assist in the evaluation of the appropriateness of discount rates adopted by the management. <p>Based on our work, we found the key estimations and assumptions and input data adopted by management in determining the recoverable amounts were supported by the evidence we obtained.</p>

Other Information

Management of the Company is responsible for the other information. The other information comprises all of 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.

AUDITOR'S REPORT (continued)

PwC ZT Shen Zi (2022) No. 10001
(Page 4 of 6)

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management of the Company is responsible for the preparation and fair presentation of these financial statements in accordance with the CASs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing these 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 these 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 judgment 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.

AUDITOR'S REPORT (continued)

PwC ZT Shen Zi (2022) No. 10001
(Page 5 of 6)

Auditor's Responsibilities for the Audit of the Financial Statements (Cont'd)

- 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 these 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 (including the disclosures), structure and content of the financial statements, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- 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 those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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



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AUDITOR'S REPORT (continued)

PwC ZT Shen Zi (2022) No. 10001
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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.

PricewaterhouseCoopers Zhong Tian LLP

Signing CPA Zhao Juan

Shanghai, the People's Republic of China

(Engagement Partner)

31 March 2022

Signing CPA Li Dan

**PETROCHINA COMPANY LIMITED
CONSOLIDATED AND COMPANY BALANCE SHEETS
AS OF DECEMBER 31, 2021**

(All amounts in RMB millions unless otherwise stated)

ASSETS	Notes	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
		The Group	The Group	The Company	The Company
Current assets					
Cash at bank and on hand	7	163,536	145,950	35,505	42,787
Accounts receivable	8	56,659	52,325	7,429	8,412
Receivables financing	9	3,975	8,076	3,598	2,830
Advances to suppliers	10	14,598	21,626	6,273	8,861
Other receivables	11	39,554	26,834	4,327	14,738
Inventories	12	143,848	128,539	95,828	77,813
Assets held for sale		-	42,615	-	-
Other current assets	13	58,668	60,802	44,442	44,614
Total current assets		480,838	486,767	197,402	200,055
Non-current assets					
Investments in other equity instruments	14	1,176	910	388	427
Long-term equity investments	15	265,884	250,698	461,462	451,677
Fixed assets	16	418,837	415,988	259,790	264,241
Oil and gas properties	17	816,788	813,888	622,093	598,665
Construction in progress	18	223,671	222,215	150,829	142,470
Right-of-use assets	19	139,359	144,338	61,889	66,765
Intangible assets	20	90,587	86,101	68,884	65,841
Goodwill	21	7,987	8,125	43	30
Long-term prepaid expenses	22	11,391	11,869	8,384	8,980
Deferred tax assets	36	12,161	11,364	-	2,008
Other non-current assets	23	33,854	36,137	12,786	13,524
Total non-current assets		2,021,695	2,001,633	1,646,548	1,614,628
TOTAL ASSETS		2,502,533	2,488,400	1,843,950	1,814,683

The accompanying notes form an integral part of these financial statements.

Chairman
Dai Houliang

Director and President
Huang Yongzhang

Chief Financial Officer
Chai Shouping

**PETROCHINA COMPANY LIMITED
CONSOLIDATED AND COMPANY BALANCE SHEETS
AS OF DECEMBER 31, 2021 (CONTINUED)**

(All amounts in RMB millions unless otherwise stated)

LIABILITIES AND SHAREHOLDERS' EQUITY	Notes	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
		The Group	The Group	The Company	The Company
Current liabilities					
Short-term borrowings	25	40,010	41,354	23,328	25,923
Notes payable	26	20,089	19,313	19,369	18,203
Accounts payable	27	237,102	220,318	90,968	99,276
Contracts liabilities	28	78,481	91,477	57,698	59,877
Employee compensation payable	29	8,975	8,649	6,669	6,559
Taxes payable	30	76,774	63,724	51,615	45,769
Other payables	31	28,493	56,250	72,324	74,496
Liabilities held for sale		-	9,956	-	-
Current portion of non-current liabilities	32	19,893	81,769	8,644	64,745
Other current liabilities		8,341	12,608	5,918	1,791
Total current liabilities		518,158	605,418	336,533	396,639
Non-current liabilities					
Long-term borrowings	33	198,005	160,140	99,767	68,829
Debentures payable	34	89,170	91,239	85,000	87,000
Lease liabilities	19	123,222	122,644	47,976	47,983
Provisions	35	129,405	114,819	90,941	81,941
Deferred tax liabilities	36	26,654	16,390	7,914	-
Other non-current liabilities		8,795	10,865	4,678	5,496
Total non-current liabilities		575,251	516,097	336,276	291,249
Total liabilities		1,093,409	1,121,515	672,809	687,888
Shareholders' equity					
Share capital	37	183,021	183,021	183,021	183,021
Capital surplus	38	127,375	127,222	127,207	127,044
Special reserve		9,231	10,810	4,829	4,708
Other comprehensive income	56	(34,737)	(32,128)	250	455
Surplus reserves	39	211,970	203,557	200,878	192,465
Undistributed profits	40	766,955	722,939	654,956	619,102
Equity attributable to equity holders of the Company		1,263,815	1,215,421	1,171,141	1,126,795
Non-controlling interests	41	145,309	151,464	-	-
Total shareholders' equity		1,409,124	1,366,885	1,171,141	1,126,795
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		2,502,533	2,488,400	1,843,950	1,814,683

The accompanying notes form an integral part of these financial statements.

Chairman Dai Houliang	Director and President Huang Yongzhang	Chief Financial Officer Chai Shouping
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PETROCHINA COMPANY LIMITED
CONSOLIDATED AND COMPANY INCOME STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2021

(All amounts in RMB millions unless otherwise stated)

Items	Notes	2021	2020	2021	2020
		The Group	The Group	The Company	The Company
Operating income	42	2,614,349	1,933,836	1,413,409	1,097,522
Less: Cost of sales	42	(2,071,504)	(1,546,604)	(1,036,399)	(858,403)
Taxes and surcharges	43	(226,664)	(194,904)	(175,883)	(153,214)
Selling expenses	44	(71,295)	(71,476)	(48,777)	(49,707)
General and administrative expenses	45	(51,701)	(55,315)	(30,481)	(33,558)
Research and development expenses	46	(16,729)	(15,746)	(12,613)	(11,748)
Finance expenses	47	(17,043)	(24,304)	(14,972)	(20,781)
Including: Interest expenses		(19,739)	(26,528)	(15,162)	(20,484)
Interest income		2,984	3,023	765	558
Add: Other income	48	14,251	9,889	12,274	6,976
Investment income	49	35,389	51,845	26,044	114,412
Including: Income from investment in associates and joint ventures		13,267	3,533	10,604	5,314
Credit losses	50	(353)	(341)	(905)	(143)
Asset impairment losses	51	(27,611)	(23,520)	(6,761)	(13,110)
Gains on asset disposal	52	1,091	1,423	931	1,302
Operating profit		182,180	64,783	125,867	79,548
Add: Non-operating income	53(a)	2,983	4,109	2,192	3,206
Less: Non-operating expenses	53(b)	(26,969)	(12,823)	(21,887)	(7,526)
Profit before taxation		158,194	56,069	106,172	75,228
Less: Taxation	54	(43,507)	(22,588)	(22,039)	(12,483)
Net profit		114,687	33,481	84,133	62,745
Classified by continuity of operations:					
Net profit from continuous operation		114,687	33,481	84,133	62,745
Net profit from discontinued operation		-	-	-	-
Classified by ownership:					
Shareholders of the Company		92,161	19,002	84,133	62,745
Non-controlling interests		22,526	14,479	-	-
Other comprehensive income, net of tax	56	(4,501)	(11,130)	(205)	(524)
Other comprehensive income (net of tax) attributable to equity holders of the Company		(2,609)	(4,372)	(205)	(524)
(1) Item that will not be reclassified to profit or loss:					
Changes in fair value of investments in other equity instruments		79	(22)	(30)	(10)
(2) Items that may be reclassified to profit or loss:					
Other comprehensive income recognised under equity method		(4)	(441)	(175)	(514)
Translation differences arising from translation of foreign currency financial statements		(2,684)	(3,909)	-	-
Other comprehensive income (net of tax) attributable to non-controlling interests		(1,892)	(6,758)	-	-
Total comprehensive income		110,186	22,351	83,928	62,221
Attributable to:					
Equity holders of the Company		89,552	14,630	83,928	62,221
Non-controlling interests		20,634	7,721	-	-
Earnings per share					
Basic earnings per share (RMB Yuan)	55	0.50	0.10	0.46	0.34
Diluted earnings per share (RMB Yuan)	55	<u>0.50</u>	<u>0.10</u>	<u>0.46</u>	<u>0.34</u>

The accompanying notes form an integral part of these financial statements.

Chairman

Dai Houliang

Director and President

Huang Yongzhang

Chief Financial Officer

Chai Shouping

PETROCHINA COMPANY LIMITED
CONSOLIDATED AND COMPANY CASH FLOW STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2021

(All amounts in RMB millions unless otherwise stated)

Items	Notes	2021		2020	
		The Group	The Group	The Company	The Company
Cash flows from operating activities					
Cash received from sales of goods and rendering of services		2,575,909	2,193,695	1,585,380	1,232,032
Cash received relating to other operating activities		132,521	15,376	13,466	11,293
Sub-total of cash inflows		2,708,430	2,209,071	1,598,846	1,243,325
Cash paid for goods and services		(1,722,631)	(1,414,729)	(972,088)	(704,419)
Cash paid to and on behalf of employees		(154,384)	(150,474)	(113,521)	(109,365)
Payments of various taxes		(310,416)	(269,761)	(233,375)	(190,333)
Cash paid relating to other operating activities		(179,530)	(55,532)	(39,092)	(47,658)
Sub-total of cash outflows		(2,366,961)	(1,890,496)	(1,358,076)	(1,051,775)
Net cash flows from operating activities	58(a)	341,469	318,575	240,770	191,550
Cash flows from investing activities					
Cash received from disposal of investments		37,345	3,633	5,689	16,936
Cash received from returns on investments		15,110	7,310	41,802	21,246
Net cash received from disposal of fixed assets, oil and gas properties, intangible assets and other long-term assets		3,780	1,269	2,798	726
Net cash received from disposal of subsidiaries and other business units		32,057	82,767	-	80,588
Sub-total of cash inflows		88,292	94,979	50,289	119,496
Cash paid to acquire fixed assets, oil and gas properties, intangible assets and other long-term assets		(265,563)	(256,727)	(193,939)	(167,375)
Cash paid to acquire investments		(35,761)	(20,238)	(9,977)	(19,932)
Sub-total of cash outflows		(301,324)	(276,965)	(203,916)	(187,307)
Net cash flows used for investing activities		(213,032)	(181,986)	(153,627)	(67,811)
Cash flows from financing activities					
Cash received from capital contributions		673	613	-	-
Including: Cash received from non-controlling interests' capital contributions to subsidiaries		673	613	-	-
Cash received from borrowings		810,092	989,492	172,284	306,501
Sub-total of cash inflows		810,765	990,105	172,284	306,501
Cash repayments of borrowings		(836,434)	(1,017,662)	(201,472)	(344,847)
Cash payments for interest expenses and distribution of dividends or profits		(69,195)	(59,042)	(60,933)	(41,744)
Including: Subsidiaries' cash payments for distribution of dividends or profits to non-controlling interests		(16,508)	(14,264)	-	-
Capital reduction of subsidiaries		(69)	(5)	-	-
Cash payments relating to other financing activities		(13,038)	(12,796)	(5,854)	(7,498)
Sub-total of cash outflows		(918,736)	(1,089,505)	(268,259)	(394,089)
Net cash flows used for financing activities		(107,971)	(99,400)	(95,975)	(87,588)
Effect of foreign exchange rate changes on cash and cash equivalents					
Net Increase/(decrease) in cash and cash equivalents	58(b)	(2,308)	(4,967)	-	-
Add: Cash and cash equivalents at the beginning of the period		18,158	32,222	(8,832)	36,151
Cash and cash equivalents at the end of the period	58(c)	118,631	86,409	40,787	4,636
		136,789	118,631	31,955	40,787

The accompanying notes form an integral part of these financial statements.

Chairman
Dai Houliang

Director and President
Huang Yongzhang

Chief Financial Officer
Chai Shouping

**PETROCHINA COMPANY LIMITED
CONSOLIDATED STATEMENT OF
CHANGES IN SHAREHOLDERS' EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2021**

(All amounts in RMB millions unless otherwise stated)

Items	Shareholders' equity attributable to the Company							Non-controlling interests	Total shareholders' equity
	Share capital	Capital surplus	Special reserve	comprehensive income	Surplus reserves	Undistributed profits	Sub-total		
Balance at January 1, 2020	183,021	127,314	12,443	(27,756)	197,282	738,124	1,230,428	214,150	1,444,578
Changes in the year of 2020									
Total comprehensive income	-	-	-	(4,372)	-	19,002	14,630	7,721	22,351
Special reserve-safety fund reserve									
Appropriation	-	-	5,952	-	-	-	5,952	343	6,295
Utilisation	-	-	(7,585)	-	-	-	(7,585)	(215)	(7,800)
Profit distribution									
Appropriation to surplus reserves	-	-	-	-	6,275	(6,275)	-	-	-
Distribution to shareholders	-	-	-	-	-	(28,078)	(28,078)	(14,827)	(42,905)
Other equity movement									
Equity transaction with non-controlling interests	-	-	-	-	-	-	-	(2)	(2)
Capital contribution from non-controlling interests	-	2	-	-	-	-	2	823	825
Acquisition of subsidiaries	-	1	-	-	-	-	1	1,186	1,187
Disposal of subsidiaries	-	-	-	-	-	-	-	(57,914)	(57,914)
Other	-	(95)	-	-	-	166	71	199	270
Balance at December 31, 2020	183,021	127,222	10,810	(32,128)	203,557	722,939	1,215,421	151,464	1,366,885

The accompanying notes form an integral part of these financial statements.

Chairman
Dai Houliang

Director and President
Huang Yongzhang

Chief Financial Officer
Chai Shouping

**PETROCHINA COMPANY LIMITED
CONSOLIDATED STATEMENT OF
CHANGES IN SHAREHOLDERS' EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2021 (CONTINUED)**

(All amounts in RMB millions unless otherwise stated)

Items	Shareholders' equity attributable to the Company								Non-controlling interests	Total shareholders' equity
	Share capital	Capital surplus	Special reserve	Other comprehensive income	Surplus reserves	Undistributed profits	Sub-total			
Balance at January 1, 2021	183,021	127,222	10,810	(32,128)	203,557	722,939	1,215,421	151,464	1,366,885	
Changes in the year of 2021										
Total comprehensive income	-	-	-	(2,609)	-	92,161	89,552	20,634	110,186	
Special reserve-safety fund reserve										
Appropriation	-	-	5,612	-	-	-	5,612	10	5,622	
Utilisation	-	-	(7,191)	-	-	-	(7,191)	(181)	(7,372)	
Profit distribution										
Appropriation to surplus reserves	-	-	-	-	8,413	(8,413)	-	-	-	
Distribution to shareholders	-	-	-	-	-	(39,866)	(39,866)	(15,975)	(55,841)	
Other equity movement										
Equity transaction with non-controlling interests	-	(15)	-	-	-	-	(15)	(19)	(34)	
Capital contribution from non-controlling interests	-	-	-	-	-	-	-	1,059	1,059	
Acquisition of subsidiaries	-	-	-	-	-	-	-	769	769	
Disposal of subsidiaries	-	-	-	-	-	-	-	(12,380)	(12,380)	
Other	-	168	-	-	-	134	302	(72)	230	
Balance at December 31, 2021	183,021	127,375	9,231	(34,737)	211,970	766,955	1,263,815	145,309	1,409,124	

The accompanying notes form an integral part of these financial statements.

Chairman
Dai Houliang

Director and President
Huang Yongzhang

Chief Financial Officer
Chai Shouping

**PETROCHINA COMPANY LIMITED
COMPANY STATEMENT OF
CHANGES IN SHAREHOLDERS' EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2021**

(All amounts in RMB millions unless otherwise stated)

Items	Share capital	Capital surplus	Special reserve	Other comprehensive income	Surplus reserves	Undistributed profits	Total share-holders' equity
Balance at January 1, 2020	183,021	127,845	6,513	979	186,190	590,727	1,095,275
Changes in the year of 2020							
Total comprehensive income	-	-	-	(524)	-	62,745	62,221
Special reserve-safety fund reserve	-	-	-	-	-	-	-
Appropriation	-	-	2,006	-	-	-	2,006
Utilisation	-	-	(3,811)	-	-	-	(3,811)
Profit distribution	-	-	-	-	-	-	-
Appropriation to surplus reserves	-	-	-	-	6,275	(6,275)	-
Distribution to shareholders	-	-	-	-	-	(28,078)	(28,078)
Other	-	(801)	-	-	-	(17)	(818)
Balance at December 31, 2020	183,021	127,044	4,708	455	192,465	619,102	1,126,795
Balance at January 1, 2021	183,021	127,044	4,708	455	192,465	619,102	1,126,795
Changes in the year of 2021							
Total comprehensive income	-	-	-	(205)	-	84,133	83,928
Special reserve-safety fund reserve	-	-	-	-	-	-	-
Appropriation	-	-	3,558	-	-	-	3,558
Utilisation	-	-	(3,437)	-	-	-	(3,437)
Profit distribution	-	-	-	-	-	-	-
Appropriation to surplus reserves	-	-	-	-	8,413	(8,413)	-
Distribution to shareholders	-	-	-	-	-	(39,866)	(39,866)
Other	-	163	-	-	-	-	163
Balance at December 31, 2021	183,021	127,207	4,829	250	200,878	654,956	1,171,141

The accompanying notes form an integral part of these financial statements.

Chairman
Dai Houliang

Director and President
Huang Yongzhang

Chief Financial Officer
Chai Shouping

1 COMPANY BACKGROUND

PetroChina Company Limited (the "Company") was established as a joint stock company with limited liability on November 5, 1999 by 中國石油天然氣集團公司 (China National Petroleum Corporation ("CNPC")) as the sole proprietor in accordance with the approval Guo Jing Mao Qi Gai [1999] No. 1024 "Reply on the approval of the establishment of PetroChina Company Limited" from the former State Economic and Trade Commission of the People's Republic of China ("China" or "PRC"). CNPC restructured ("the Restructuring") and injected its core business and the related assets and liabilities into the Company. 中國石油天然氣集團公司 was renamed 中國石油天然氣集團有限公司 ("CNPC" before and after the change of name) on December 19, 2017. CNPC is a wholly state-owned company registered in China. The Company and its subsidiaries are collectively referred to as the "Group".

The Group is principally engaged in (i) the exploration, development, transportation and production and marketing of crude oil and natural gas; (ii) the refining of crude oil and petroleum products, production and marketing of primary petrochemical products, derivative petrochemical products and other chemical products; (iii) the marketing of refined products and non-oil products, and trading business; and (iv) the transportation of natural gas and the sale of natural gas. The principal subsidiaries of the Group are listed in Note 6(1).

The financial statements were approved by the Board of Directors on March 31, 2022.

2 BASIS OF PREPARATION

The financial statements of the Group are prepared in accordance with Accounting Standards for Business Enterprises issued by the Ministry of Finance (the "MOF") and other regulations issued thereafter (hereafter referred to as the "Accounting Standard for Business Enterprises", "China Accounting Standards" or "CAS"). The financial statements have been prepared on the going concern basis.

These financial statements also comply with the disclosure requirements of the financial statements and notes of "Regulation on the Preparation of Information Disclosures by Companies Issuing Securities, No.15: General Requirements for Financial Reports" as revised by the China Securities Regulatory Commission ("CSRC") in 2014.

3 STATEMENT OF COMPLIANCE WITH THE ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES

The consolidated and the Company's financial statements for the year ended December 31, 2021 truly and completely present the financial position of the Group and the Company as of December 31, 2021 and their financial performance and their cash flows for the year then ended in compliance with the Accounting Standards for Business Enterprises.

4 PRINCIPAL ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

(1) Accounting Period

The accounting period of the Group starts on January 1 and ends on December 31.

(2) Operating Cycle

The Company takes the period from the exploration or acquisition of the crude oil, natural gas and other assets for exploring, transporting and processing and etc. to their realisation in cash and cash equivalent as a normal operating cycle.

(3) Recording Currency

The recording currency of the Company and most of its subsidiaries is Renminbi ("RMB"). The Group's consolidated financial statements are presented in RMB.

(4) Measurement Properties

Generally are measured at historical cost unless otherwise stated at fair value, net realisable value or present value.

(5) Foreign Currency Translation

(a) Foreign currency transactions

Foreign currency transactions are translated into RMB at the exchange rates prevailing at the date of the transactions.

Monetary items denominated in foreign currencies at the balance sheet date are translated into RMB at the exchange rates prevailing at the balance sheet date. Exchange differences arising from these translations are recognised in profit or loss except for those arising from foreign currency specific borrowings for the acquisition, construction of qualifying assets in connection with capitalisation of borrowing costs. Non-monetary items denominated in foreign currencies measured at historical cost are translated into RMB at the historical exchange rates prevailing at the date of the transactions at the balance sheet date. The effect of exchange rate changes on cash is presented separately in the cash flow statement.

(b) Translation of financial statements represented in foreign currency

Assets and liabilities of each balance sheet of the foreign operations are translated into RMB at the closing rates at the balance sheet date, while the equity items are translated into RMB at the exchange rates at the date of the transactions, except for the retained earnings and the translation differences in other comprehensive income. Income and expenses for each income statement of the foreign operations are translated into RMB at the approximate exchange rates at the date of the transactions. The currency translation differences resulted from the above-mentioned translations are recognised as other comprehensive income. The cash flows of overseas operations are translated into RMB at the approximate exchange rates at the date of the transactions. The effect of exchange rate changes on cash is presented separately in the cash flow statement.

(6) Cash and Cash Equivalents

Cash and cash equivalents refer to all cash on hand and deposit held at call with banks, short-term highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(7) Financial Instrument

Financial instruments include cash at bank and on hand, equity securities other than those classified as long-term equity investments, accounts receivables, accounts payables, borrowings, debentures payable and share capital, etc.

(a) Recognition and initial measurement of financial assets and financial liabilities

A financial asset or financial liability is recognised in the balance sheet when the Group becomes a party to the contractual provisions of a financial instrument.

A financial asset (unless it is an accounts receivable without a significant financing component) and financial liability is measured initially at fair value. For financial assets and financial liabilities at fair value through profit or loss, any related directly attributable transaction costs are charged to profit or loss; for other categories of financial assets and financial liabilities, any related directly attributable transaction costs are included in their initial costs. A trade receivable, without significant financing component or practical expedient applied for one year or less contracts is initially measured at the transaction price according to Note 4(22).

(b) Classification and subsequent measurement of financial assets

(i) Classification of the financial assets held by the Group

The classification of financial assets is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. On initial recognition, a financial asset is classified as measured at amortised cost, at fair value through other comprehensive income ("FVOCI"), or at fair value through profit or loss ("FVTPL").

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to collect contractual cash flows;
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A financial asset is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets;
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to designate it as a financial assets at FVOCI. This election is made on an investment-by-investment basis, and from the perspective of the issuer, related investment is in line with the definition of equity instruments.

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL.

The business model in which a financial asset is managed refers to how the Group manages its financial assets in order to generate cash flows. That is, the Group's business model determines whether cash flows will result from collecting contractual cash flows, selling financial assets, or both. The Group determines the business model for managing financial assets according to the facts and based on the specific business objectives for the managing the financial assets determined by the Group's key management personnel.

In assessing whether the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, the Group considers the contractual cash flow characteristics of the instrument. For the purposes of this assessment, "principal" is defined as the fair value of the financial assets at initial recognition. "Interest" is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs, as well as a profit margin. The Group also assesses whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition.

(ii) Subsequent measurement of the financial assets

- Financial assets at FVTPL:

These financial assets are subsequently measured at fair value. Gains and losses, including any interest or dividend income, are recognised in profit or loss, unless the financial assets are a part of hedging relationship.

- Financial assets measured at amortised cost:

These assets are subsequently measured at amortised cost using the effective interest method. Gains or losses on financial assets that are measured at amortised cost and are not a part of any hedging relationship shall be recognised in profit or loss when the financial asset is derecognised, reclassified, through the amortisation process or in order to recognise impairment gains or losses.

- Debt investments at FVOCI:

These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, impairment and foreign exchange gains and losses are recognised in profit or loss. Other gains and losses are recognised in other comprehensive income. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to profit or loss.

- Equity investments at FVOCI:

These assets are subsequently measured at fair value. Dividends are recognised in profit or loss. Other gains and losses are recognised in other comprehensive income. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to retained earnings.

(c) Classification and subsequent measurement of financial liabilities

Financial liabilities are classified as measured at FVTPL or amortised cost.

- Financial liabilities at FVTPL:

A financial liability is classified as at FVTPL if it is classified as held-for-trading (including derivative financial liability) or it is designated as such on initial recognition.

Financial liabilities at FVTPL are subsequently measured at fair value and gains and losses, including any interest expense, are recognised in profit or loss, unless the financial liabilities are part of a hedging relationship.

- Financial liabilities at amortised cost:

Other financial liabilities are subsequently measured at amortised cost using the effective interest method.

(d) Offsetting

Financial assets and financial liabilities are generally presented separately in the balance sheet, and are not offset. However, a financial asset and a financial liability are offset and the net amount is presented in the balance sheet when both of the following conditions are satisfied:

- the Group currently has a legally enforceable right to set off the recognised amounts;
- the Group intends either to settle on a net basis, or to realise the financial asset and settle the financial liability simultaneously.

(e) Derecognition of financial assets and financial liabilities

Financial asset is derecognised when one of the following conditions is met:

- the Group's contractual rights to the cash flows from the financial asset expire;
- the financial asset has been transferred and the Group transfers substantially all of the risks and rewards of ownership of the financial asset; or
- the financial asset has been transferred, although the Group neither transfers nor retains substantially all of the risks and rewards of ownership of the financial asset, it does not retain control over the transferred asset.

Where a transfer of a financial asset in its entirety meets the criteria for derecognition, the difference between the two amounts below is recognised in profit or loss:

- the carrying amount of the financial asset transferred measured at the date of derecognition;
- the sum of the consideration received from the transfer and, when the transferred financial asset is a debt investment at FVOCI, any cumulative gain or loss that has been recognised directly in other comprehensive income for the part derecognised.

The Group derecognises a financial liability (or part of it) only when its contractual obligation (or part of it) is extinguished.

(f) Impairment

The Group recognises loss allowances for expected credit loss ("ECL") on financial assets measured at amortised cost, contract assets and debt investments measured at FVOCI.

Financial assets measured at fair value, including debt investments or equity investments at FVTPL, equity investments designated at FVOCI and derivative financial assets, are not subject to the ECL assessment.

(i) Measurement of ECLs

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 maximum period considered when estimating ECLs is the maximum contractual period (including extension options) over which the group is exposed to credit risk.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the balance sheet date (or a shorter period if the expected life of the instrument is less than 12 months).

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECL. ECLs on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the balance sheet date.

Except for trade receivables and contract assets, the Group measures loss allowance at an amount equal to 12-month ECL for the following financial instruments that have low credit risk for which credit risk has not increased significantly since initial recognition, and at an amount equal to lifetime ECL for trade receivables and contract assets.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort, including forward-looking information.

(ii) Financial instruments that have low credit risk

The credit risk on a financial instrument is considered low if the financial instrument has a low risk of default, the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations.

(iii) Significant increases in credit risk

In assessing whether the credit risk of a financial instrument has increased significantly since initial recognition, the Group compares the risk of default occurring on the financial instrument assessed at the balance sheet date with that assessed at the date of initial recognition.

(iv) Credit-impaired financial assets

At each balance sheet date, the Group assesses whether financial assets carried at amortised cost and debt investments at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract, such as a default or delinquency in interest or principal payments;
- for economic or contractual reasons relating to the borrower's financial difficulty, the Group having granted to the borrower a concession that would not otherwise consider;
- it is probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for that financial asset because of financial difficulties.

(v) Presentation of allowance for ECL

ECLs are remeasured at each balance sheet date to reflect changes in the financial instrument's credit risk since initial recognition. Any change in the ECL amount is recognised as an impairment gain or loss in profit or loss. The Group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for debt investments that are measured at FVOCI, for which the loss allowance is recognised in other comprehensive income.

(vi) Write-off

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. A write-off constitutes a derecognition event. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, according to the Group's procedures for recovery of amounts due, financial assets that are written off could still be subject to enforcement activities.

Subsequent recoveries of an asset that was previously written off are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

(g) Determination of financial instruments' fair value

Regarding financial instruments, for which there is an active market, fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. If there is no active market for a financial instrument, valuation techniques shall be adopted to determine the fair value.

When measuring fair value, the Group takes into account the characteristics of the particular asset or liability (including the condition and location of the asset and restrictions, if any, on the sale or use of the asset) that market participants would consider when pricing the asset or liability at the measurement date, and uses valuation techniques that are appropriate in the circumstances and for which sufficient data and other information are available to measure fair value. Valuation techniques mainly include the market approach, the income approach and the cost approach.

(8) Inventories

Inventories include crude oil and other raw materials, work in progress, finished goods and spare parts and consumables, and are measured at the lower of cost and net realisable value.

Inventories are initially measured at cost. Cost of inventories comprises all costs of purchase, costs of conversion and other expenditure incurred in bringing the inventories to their present location and condition. In addition to the purchase cost of raw materials, work in progress and finished goods include direct labour costs and an appropriate allocation of production overheads.

Cost of inventories is determined primarily using the weighted average method. The cost of finished goods and work in progress comprises cost of crude oil, other raw materials, direct labour and production overheads allocated based on normal operating capacity. Spare parts and consumables include low cost consumables and packaging materials. Low cost consumables are amortised with graded amortisation method and packaging materials are expensed off in full.

Provision for decline in the value of inventories is measured as the excess of the carrying value of the inventories over their net realisable value. 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 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 inventory held to satisfy sales or service contracts is measured based on the contract price, to the extent of the quantities specified in sales contracts, and the excess portion of inventories is measured based on general selling prices.

The Group adopts perpetual inventory system.

(9) Long-term Equity Investments and Joint Operations

Long-term equity investments comprise the Company's equity investments in subsidiaries, and the Group's equity investments in joint ventures and associates.

Long-term equity investments acquired through business combinations: For a long-term equity investment acquired through a business combination under common control, the proportionate share of the carrying value of shareholders' equity of the combined entity in the consolidated financial statements of the ultimate controlling party shall be treated as initial cost of the investment on the acquisition date. For a long-term equity investment obtained through a business combination not involving entities under common control, the initial cost comprises the aggregate of the fair value of assets transferred, liabilities incurred or assumed, and equity securities issued by the Company, in exchange for control of the acquiree.

Long-term equity investments acquired through other than business combinations: For an acquisition settled in cash, the initial cost of investment shall be the actual cash consideration paid. For an acquisition settled by the issuance of equity securities, the initial cost of investment shall be the fair value of equity securities issued.

(a) Subsidiaries

Investments in subsidiaries are accounted for at cost in the financial statements of the Company and are consolidated after being adjusted by the equity method accounting in consolidated financial statements.

Long-term equity investments accounted for at cost are measured at the initial investment cost unless the investment is classified as held for sale. The cash dividends or profit distributions declared by the investees are recognised as investment income in the income statement.

A listing of the Group's principal subsidiaries is set out in Note 6(1).

(b) Joint ventures and associates

Joint ventures are arrangements whereby the Group and other parties have joint control and rights to the net assets of the arrangements. Associates are those in which the Group has significant influence over the financial and operating policies.

The term “joint control” refers to the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities (activities with significant impact on the returns of the arrangement) require the unanimous consent of the parties sharing control.

The term “significant influence” refers to the power to participate in the formulation of financial and operating policies of an enterprise, but not the power to control, or jointly control, the formulation of such policies with other parties.

The investments in joint ventures and associates are accounted for using the equity method accounting. The excess of the initial cost of the investment over the share of the fair value of the investee's net identifiable assets is included in the initial cost of the investment. While the excess of the share of the fair value of the investee's net identifiable assets over the cost of the investment is instead recognised in profit or loss in the period in which the investment is acquired and the cost of the long-term equity investment is adjusted accordingly.

Under the equity method accounting, the Group's share of its investees' post-acquisition profits or losses and other comprehensive income is recognised as investment income or losses and other comprehensive income respectively. When the Group's share of losses of an investee equals or exceeds the carrying amount of the long-term equity investment and other long-term interests which substantively form the net investment in the investee, the Group does not recognise further losses as provisions, unless it has obligations to bear extra losses which meet the criteria of recognition for liabilities according to the related standards for contingencies. Movements in the investee owner's equity other than profit or loss, other comprehensive income and profit distribution should be proportionately recognised in the Group's equity, provided that the share interest of the investee remained unchanged. The share of the investee's profit distribution or cash dividends declared is accounted for as a reduction of the carrying amount of the investment upon declaration. The profits or losses arising from the intra-Group transactions between the Group and its investees are eliminated to the extent of the Group's interests in the investees, on the basis of which the investment income or losses are recognised. The unrealised loss on the intra-Group transaction between the Group and its investees, of which nature is asset impairment, is recognised in full amount, and the relevant unrealised loss is not allowed to be eliminated. If the Group invests a business to investee as a long-term equity investment but not obtain control, the fair value of the invested business shall be used as the initial investment cost of the long-term equity investment. The difference between the carrying amount of the initial cost of the investment and the invested business is recognised in profit or loss.

(c) Impairment of long-term equity investments

For investments in subsidiaries, joint ventures and associates, if the recoverable amount is lower than its carrying amount, the carrying amount shall be written down to the recoverable amount (Note 4(16)). After an impairment loss has been recognised, it shall not be reversed in future accounting periods for the part whose value has been recovered.

(d) Joint Operations

A joint operation is an arrangement whereby the Group and other joint operators have joint control and the Group has rights to the assets and obligation for the liabilities, relating to the arrangement.

The Group recognises items related to its interest in a joint operation as follows:

- its solely-held assets, and its share of any assets held jointly;
- its solely-assumed liabilities, and its share of any liabilities incurred jointly;
- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation;
- its solely-incurred expenses, and its share of any expenses incurred jointly.

(10) Fixed Assets

Fixed assets comprise buildings, equipment and machinery, motor vehicles and other. Fixed assets purchased or constructed are initially recorded at cost. The fixed assets injected by the state-owned shareholder during the Restructuring were initially recorded at the valued amount approved by the relevant authorities managing state-owned assets.

Subsequent expenditures for fixed assets are included in the cost of fixed assets only when it is probable that in future economic benefits associated with the items will flow to the Group and the cost of the items can be measured reliably. The carrying amount of the replaced part is derecognised. All other subsequent expenditures are charged to profit or loss during the financial period in which they are incurred.

Fixed assets are depreciated using the straight-line method based on the balance of their costs less estimated residual values over their estimated useful lives. For those fixed assets being provided for impairment loss, the related depreciation charge is determined based on the net value lessening the impairment recognised over their remaining useful lives.

The estimated useful lives, estimated residual value ratios and annual depreciation rates of the fixed assets are as follows:

	Estimated useful lives	Estimated residual value %	Annual depreciation rate %
Buildings	8 to 40 years	5	2.4 to 11.9
Equipment and Machinery	4 to 30 years	3 to 5	3.2 to 24.3
Motor Vehicles	4 to 14 years	5	6.8 to 23.8
Other	5 to 12 years	5	7.9 to 19.0

The estimated useful lives, estimated residual values and depreciation method of the fixed assets are reviewed, and adjusted if appropriate, at year end.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its recoverable amount (Note 4(16)).

The carrying amounts of fixed assets are derecognised when the fixed assets are disposed or no future economic benefits are expected from their use or disposal. When fixed assets are sold, transferred, disposed or damaged, gains or losses on disposal are determined by comparing the proceeds with the carrying amounts of the assets, adjusted by related taxes and expenses, and are recorded in profit or loss in the disposal period.

(11) Oil and Gas Properties

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

The costs of obtaining the mineral interests in properties are capitalised when they are incurred and are initially recognised at acquisition costs. Exploration license fee, production license fee, rent and other costs for retaining the mineral interests in properties, subsequent to the acquisition of the mineral interests in properties, are charged to profit or loss.

The Ministry of Natural Resources in China issues production licenses to applicants on the basis of the reserve reports approved by relevant authorities.

The oil and gas properties are amortised at the field level based on the unit of production method except for the mineral interests in unproved properties which are not subjected to depletion. Unit of production rates are based on oil and gas reserves estimated to be recoverable from existing facilities based on the current terms of production licenses.

The carrying amount of oil and gas properties is reduced to the recoverable amount when their recoverable amount is lower than their carrying amount. The recoverable amount is the higher of an asset's fair value less costs to sell and the present value of the estimated future cash flow expected to be derived from the asset (or asset group, the same below) (Note 4(16)).

(12) Construction in Progress

Construction in progress is recognised at actual cost. The actual cost comprises construction costs, other necessary costs incurred and the borrowing costs eligible for capitalisation to prepare the asset for its intended use. Construction in progress is transferred to fixed assets when the assets are ready for their intended use, and depreciation begins from the following month.

Oil and gas exploration costs include drilling exploration costs and the non-drilling exploration costs, the successful efforts method is used for the capitalisation of the drilling exploration costs. Drilling exploration costs included in the oil and gas exploration costs are capitalised as wells and related facilities when the wells are completed and economically proved reserves are found. Drilling exploration costs related to the wells without economically proved reserves less the net residual value are recorded in profit or loss. The related drilling exploration costs for the sections of wells with economically proved reserves are capitalised as wells and related facilities, and the costs of other sections are recorded in profit or loss. Drilling exploration costs are temporarily capitalised pending the determination of whether economically proved reserves can be found within one year of the completion of the wells. For wells that are still pending determination of whether economically proved reserves can be found after one year of completion, the related drilling exploration costs remain temporarily capitalised only if sufficient reserves are found in those wells and further exploration activities are required to determine whether they are economically proved reserves or not, and further exploration activities are under way or firmly planned and are about to be implemented. Otherwise the related costs are recorded in profit or loss. If proved reserves are discovered in a well, for which the drilling exploration costs have been expensed previously, no adjustment should be made to the drilling exploration costs that were expensed, while the subsequent drilling exploration costs and costs for completion of the well are capitalised. The non-drilling exploration costs are recorded in profit or loss when incurred. Oil and gas development costs are capitalised as the respective costs of wells and related facilities for oil and gas development based on their intended use. The economically proved reserves are the estimated quantities of crude oil and natural 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 supervision regulation before the time at which 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.

(13) Intangible Assets and Goodwill

Intangible assets include land use rights and patents, etc., and are initially recorded at cost. The intangible assets injected by the state-owned shareholder during the Restructuring were initially recorded at the valued amount approved by the relevant authorities managing the state-owned assets.

Land use rights are amortised using the straight-line method over 30 to 50 years. If it is impracticable to allocate the amount paid for the purchase of land use rights and buildings between the land use rights and the buildings on a reasonable basis, the entire amount is accounted for as fixed assets.

The franchise is initially recorded at actual cost, and amortised using the straight-line method over estimated useful lives of gas station.

Patent and other intangible assets are initially recorded at actual cost, and amortised using the straight-line method over their estimated useful lives.

The carrying amount of intangible assets is written down to its recoverable amount when the recoverable amount is lower than the carrying amount (Note 4(16)). The estimated useful years and amortisation method of the intangible assets with finite useful life are reviewed, and adjusted if appropriate, at each financial year-end.

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 a business combination not involving entities under common control.

Goodwill is not amortised and is stated in the balance sheet at cost less accumulated impairment losses (Note 4(16)). On disposal of an asset group or a set of asset groups, any attributable goodwill is written off and included in the calculation of the profit or loss on disposal.

(14) Research and Development

Research expenditure incurred is recognised as an expense. Costs incurred on development projects shall not be capitalised unless they satisfy the following conditions simultaneously:

- In respect of the technology, it is feasible to finish the intangible asset for use or sale;
- It is intended by management to finish and use or sell the intangible asset;
- It is able to prove that the intangible asset is to generate economic benefits;
- With the support of sufficient technologies, financial resources and other resources, it is able to finish the development of the intangible asset, and it is able to use or sell the intangible asset; and
- The costs attributable to the development of the intangible asset can be reliably measured.

Costs incurred on development projects not satisfying the above conditions shall be recorded in profit or loss of the current period. Costs incurred on development recorded in profit or loss in previous accounting periods shall not be re-recognised as asset in future accounting periods. Costs incurred on development already capitalised shall be listed as development expenditure in the balance sheet, which shall be transferred to intangible asset from the date when the expected purposes of use are realised.

(15) Long-term Prepaid Expenses

Long-term prepaid expenses are the expenses that should be borne by current and subsequent periods and should be amortised over more than one year. Long-term prepaid expenses are amortised using the straight-line method over the expected beneficial periods and are presented at cost less accumulated amortisation.

(16) Impairment of Non-current Assets

Fixed assets, oil and gas properties except for mineral interests in unproved properties, construction in progress, intangible assets with finite useful life, long-term equity investments, long-term prepaid expenses and right-of-use assets are tested for impairment if there is any indication that an asset may be impaired at the balance sheet date. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount if the impairment test indicates that the recoverable amount is less than its carrying amount. The recoverable amount is the higher of an asset's fair value less costs to sell and the present value of the estimated future cash flow expected to be derived from the asset. Impairment should be assessed and recognised for each individual asset. If it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of the group of assets to which the asset belongs is determined. A group of assets is the smallest group of assets that is able to generate independent cash flow.

The goodwill, presented separately in financial statements, is allocated to each asset group or set of asset groups, which is expected to benefit from the synergies of the combination for the purpose of impairment testing, and should be subject to impairment assessment at least on an annual basis regardless whether there exists any indicators of impairment. Where the impairment assessment indicates that, for the cash-generating unit (that includes the allocated goodwill), the recoverable amount is lower than the carrying value, then an impairment loss will be recorded.

The mineral interests in unproved properties are tested annually for impairment. If the cost incurred to obtain a single property is significant, the impairment test is performed and the impairment loss is determined on the basis of the single property. If the cost incurred to obtain a single property is not significant and the geological structure features or reserve layer conditions are identical or similar to those of other adjacent properties, impairment tests are performed on the basis of a group of properties that consist of several adjacent mining areas with identical or similar geological structure features or reserve layer conditions.

Once an impairment loss of these assets is recognised, it is not allowed to be reversed even if the value can be recovered in subsequent period.

(17) Borrowing Costs

Borrowing costs incurred that are directly attributable to the acquisition and construction of fixed assets and oil and gas properties, which require a substantial period of time for acquisition and construction activities to get ready for their intended use, are capitalised as part of the cost of the assets when capital expenditures and borrowing costs have already incurred and the activities of acquisition and construction necessary to prepare the assets to be ready for their intended use have commenced. The capitalisation of borrowing costs ceases when the assets are ready for their intended use. Borrowing costs incurred thereafter are recognised as financial expense. Capitalisation of borrowing costs should be suspended during periods in which the acquisition or construction of a fixed asset is interrupted abnormally, and the interruption lasts for more than 3 months, until the acquisition or construction is resumed.

For a borrowing taken specifically for the acquisition or construction activities for preparing fixed asset and oil and gas property eligible for capitalisation, the to-be-capitalised amount of interests shall be determined according to the actual costs incurred less any income earned on the unused borrowing fund as a deposit in the bank or as a temporary investment.

Where a general borrowing is used for the acquisition or construction of fixed asset and oil and gas property eligible for capitalisation, the Group shall calculate and determine the to-be-capitalised amount of interests on the general borrowing by multiplying the part of the accumulative asset disbursements in excess of the weighted average asset disbursement for the specifically borrowed fund by the weighted average actual rate of the general borrowing used. The actual rate is the rate used to discount the future cash flow of the borrowing during the expected existing period or the applicable shorter period to the originally recognised amount of the borrowing.

(18) Employee Compensation

(a) Short-term benefits

Employee wages or salaries, bonuses, social security contributions such as medical insurance, work injury insurance, maternity insurance and housing fund, measured at the amount incurred or at the applicable benchmarks and rates, are recognised as a liability as the employee provides services, with a corresponding charge to profit or loss or included in the cost of assets where appropriate.

(b) Post-employment benefits-Defined Contribution Plans

Pursuant to the relevant laws and regulations of the People's Republic of China, the Group participated in a defined contribution basic pension insurance in the social insurance system established and managed by government organisations. The Group has similar defined contribution plans for its employees in its overseas operations. The Group makes contributions to basic pension insurance plans based on the applicable benchmarks and rates stipulated by the government. Basic pension insurance contributions are recognised as part of the cost of assets or charged to profit or loss as the related services are rendered by the employees.

In addition, the Group joined the corporate annuity plan approved by relevant PRC authorities. Contribution to the annuity plan is charged to expense as incurred.

The Group has no other material obligation for the payment of pension benefits associated with schemes beyond the contributions described above.

(19) Government grants

Government grants are non-reciprocal transfers of monetary or non-monetary assets from the government to the Group except for capital contributions from the government in the capacity as an investor in the Group.

A government grant is recognised when there is reasonable assurance that the grant will be received and that the Group will comply with the conditions attaching to the grant.

If a government grant is in the form of a transfer of a monetary asset, it is measured at the amount received or receivable. If a government grant is in the form of a transfer of a non-monetary asset, it is measured at fair value.

Government grants related to assets are grants whose primary condition is that the Group qualifying for them should purchase, construct or otherwise acquire long-term assets. Government grants related to income are grants other than those related to assets. A government grant related to an asset is recognised initially as deferred income and amortised to profit or loss in a reasonable and systematic manner within the useful life of the relevant assets. A grant that compensates the Group for expenses or losses to be incurred in the future is recognised initially as deferred income, and recognised in profit or loss or released to relevant cost in the period in which the expenses or losses are recognised. A grant that compensates the Group for expenses or losses already incurred is recognised to profit or loss or released to related cost immediately.

Government grants related to daily activities are recognised in other income or written down the related cost and expenses according to the nature of business activities. Government grants related to non-daily activities are recognised in non-operating income or expenses.

(20) Provisions

Provisions for product guarantee, quality onerous contracts etc. are recognised when the Group has present obligations, and it is probable that an outflow of economic benefits will be required to settle the obligations, and the amounts can be reliably estimated.

Provisions are measured at the best estimate of the expenditures expected to be required to settle the present obligation. Factors surrounding the contingencies such as the risks, uncertainties and the time value of money shall be taken into account as a whole in reaching the best estimate of provisions. Where the effect of the time value of money is material, the best estimate is determined by discounting the related future cash flows. The increase in the discounted amount of the provision arising from the passage of time is recognised as interest expense.

Asset retirement obligations which meet the criteria of provisions are recognised as provisions and the amount recognised is the present value of the estimated future expenditure determined in accordance with local conditions and requirements, while a corresponding addition to the related oil and gas properties of an amount equivalent to the provision is also created. This is subsequently depleted as part of the costs of the oil and gas properties. Interest expenses from the assets retirement obligations for each period are recognised with the effective interest method during the useful life of the related oil and gas properties. Due to technological progress, legal requirements or changes in the market environment, changes in the provisions caused by changes in the amount of expenditure, estimated time of retirement obligations, discount rate, etc., may occur in fulfilling the retirement obligation. For an increase in provisions, the cost of oil and gas properties will be increased accordingly; for a decrease in provisions, the cost of oil and gas properties will be deducted within the limit of the carrying amount of assets related to decommissioning expenses. If a decrease in the provision exceeds the carrying amount of the oil and gas properties recognised corresponding to the provision, the excess shall be recognised immediately in profit or loss.

If the conditions for the recognition of the provisions are not met, the expenditures for the decommissioning, removal and site cleaning will be expensed in profit or loss when occurred.

(21) Income tax

Current and deferred taxes are recognised in profit or loss, except for income tax arising from business combination or transactions or events which are directly included in owners' equity (including other comprehensive income).

Current tax is the expected tax payable on the taxable income for the year, using tax rates stipulated by the tax law, and any adjustment to tax payable in respect of previous years.

At the balance sheet date, current tax assets are offset against current tax liabilities if the Group has a legal right to settle on a net basis and intends to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Deferred tax assets and deferred tax liabilities are calculated and recognised based on the differences (temporary differences) arising between the tax bases of assets and liabilities and their carrying amounts. The deductible losses, which can be utilised against the future taxable profit in accordance with tax law, are regarded as temporary differences and a deferred tax asset is recognised accordingly. The deferred tax assets and deferred tax liabilities are not accounted for the temporary differences resulting from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profits (or deductible loss). Deferred tax assets and deferred tax liabilities are determined using tax rates that are expected to apply to the period when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets of the Group are recognised for deductible temporary differences and deductible losses and tax credits to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences, deductible losses and tax credits can be utilised.

Deferred tax liabilities are recognised for taxable temporary differences arising from investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets are recognised for deductible temporary differences arising from investments in subsidiaries, associates and joint ventures, to the extent that, and only to the extent that, it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

Deferred tax assets and liabilities which meet the following conditions shall be presented on a net basis:

- Deferred tax assets and liabilities are related to the income tax of the same entity within the Group levied by the same authority;
- This entity is legally allowed to settle its current tax assets and liabilities on a net basis.

(22) Revenue Recognition

Revenue is the gross inflow of economic benefits arising in the course of the Group's ordinary activities when the inflows result in increase in shareholders' equity, other than increase relating to contributions from shareholders.

Revenue is recognised when the Group satisfies the performance obligation in the contract by transferring the control over relevant goods or services to the customers.

Where a contract has two or more performance obligations, the Group determines the stand-alone selling price at contract inception of the distinct good or service underlying each performance obligation in the contract and allocates the transaction price in proportion to those stand-alone selling prices. The Group recognises as revenue the amount of the transaction price that is allocated to each performance obligation. The stand-alone selling price is the price at which the Group would sell a promised good or service separately to a customer. If a stand-alone selling price is not directly observable, the Group considers all information that is reasonably available to the entity, maximises the use of observable inputs to estimate the stand-alone selling price.

For the contract which the Group grants a customer the option to acquire additional goods or services (such as loyalty points), the Group assesses whether the option provides a material right to the customer. If the option provides a material right, the Group recognises the option as a performance obligation, and recognises revenue when those future goods or services are transferred or when the option expires. If the stand-alone selling price for a customer's option to acquire additional goods or services is not directly observable, the Group estimates it, taking into account all relevant information, including the difference in the discount that the customer would receive when exercising the option or without exercising the option, and the likelihood that the option will be exercised.

The transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties. The Group recognises the transaction price only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved. To determine the transaction price for contracts in which a customer promises consideration in a form other than cash, the Group measures the non-cash consideration at fair value. If the Group cannot reasonably estimate the fair value of the non-cash consideration, the Group measures the consideration indirectly by reference to the stand-alone selling price of the goods or services promised to the customer in exchange for the consideration. The consideration which the Group expects to refund to the customer is recognised as refund liabilities and excluded from transaction price. Where the contract contains a significant financing component, the Group recognises the transaction price at an amount that reflects the price that a customer would have paid for the promised goods or services if the customer had paid cash for those goods or services when (or as) they transfer to the customer. The difference between the amount of promised consideration and the cash selling price is amortised using an effective interest method over the contract term. The Group does not adjust the consideration for any effects of a significant financing component if it expects, at contract inception, that the period between when the Group transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

The Group satisfies a performance obligation over time if one of the following criteria is met; or otherwise, a performance obligation is satisfied at a point in time:

- The customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- The customer can control the asset created or enhanced during the Group's performance;
- The Group's performance does not create an asset with an alternative use to it and the Group has an enforceable right to payment for performance completed to date.

For performance obligation satisfied over time, the Group recognises revenue over time by measuring the progress towards complete satisfaction of that performance obligation. When the outcome of that performance obligation cannot be measured reasonably, but the Group expects to recover the costs incurred in satisfying the performance obligation, the Group recognises revenue only to the extent of the costs incurred until such time that it can reasonably measure the outcome of the performance obligation.

For performance obligation satisfied at a point in time, the Group recognises revenue at the point in time at which the customer obtains control of relevant goods or services. To determine whether a customer has obtained control of goods or services, the Group considers the following indicators:

- The Group has a present right to payment for the product or service;
- The Group has transferred physical possession of the goods to the customer;
- The Group has transferred the legal title of the goods or the significant risks and rewards of ownership of the goods to the customer; and
- The customer has accepted the goods or services.

The Group determines whether it is a principal or an agent, depending on whether it obtains control of the specified good or service before that good or service is transferred to a customer. The Group is a principal if it controls the specified good or service before that good or service is transferred to a customer, and recognises revenue in the gross amount of consideration to which it has received (or receivable). Otherwise, the Group is an agent, and recognises revenue in the amount of any fee or commission to which it expects to be entitled. The fee or commission is the net amount of consideration that the Group retains after paying the other party the consideration, or is the established amount or proportion.

A contract asset is the Group's right to consideration in exchange for goods or services that it has transferred to a customer when that right is conditional on something other than the passage of time. The Group recognises loss allowances for expected credit loss on contract assets (Note 4(7)(f)). Accounts receivable is the Group's right to consideration that is unconditional (only the passage of time is required). A contract liability is the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

The following is the description of accounting policies regarding revenue from the Group's principal activities:

(a) Sales of goods

The Group shall recognise revenue when (or as) the customer obtains control of relevant product. Obtaining control of relevant product means that a customer can dominate the use of the product and obtain almost all the economic benefits from it.

(b) Rendering of services

The Group recognises its revenue from rendering of services on performance progress. Customers simultaneously receive the service as the Group performs its obligation over time and consume the benefits arising from the Group's performance. Otherwise, a performance obligation is satisfied at a point in time, the Group shall recognise revenue when (or as) the customer obtains control of revenue service.

(c) Loyalty points

Under its customer loyalty programme, the Group allocates a portion of the transaction price received to loyalty points that are redeemable against any future purchases of the Group's goods or services. This allocation is based on the relative stand-alone selling prices. The amount allocated to the loyalty programme is deferred, and is recognised as revenue when loyalty points are redeemed or expire.

(23) Contract Costs

Contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer.

Incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained. The Group recognises as an asset the incremental costs of obtaining a contract with a customer if it expects to recover those costs, unless the expected amortisation period is one year or less from the date of initial recognition of the asset, in which case the costs are expensed when incurred. Other costs of obtaining a contract are expensed when incurred.

If the costs to fulfil a contract with a customer are not within the scope of inventories or other accounting standards, the Group recognises an asset from the costs incurred to fulfil a contract only if those costs meet all of the following criteria:

- The costs relate directly to an existing contract or to a specifically identifiable anticipated contract, including direct labour, direct materials, allocations of overheads (or similar costs), costs that are explicitly chargeable to the customer and other costs that are incurred only because the Group entered into the contract;
- The costs generate or enhance resources of the Group that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and
- The costs are expected to be recovered.

Assets recognised for the incremental costs of obtaining a contract and assets recognised for the costs to fulfil a contract (the “assets related to contract costs”) are amortised on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the assets relate and recognised in profit or loss for the current period. The Group recognises the incremental costs of obtaining a contract as an expense when incurred if the amortisation period of the asset that the entity otherwise would have recognised is one year or less.

The Group recognises an impairment loss in profit or loss to the extent that the carrying amount of an asset related to contract costs exceeds:

- Remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates; less
- The costs that relate directly to providing those goods or services that have not yet been recognised as expenses.

(24) Leases

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

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether:

- The contract involves the use of an identified asset. An identified asset may be specified explicitly or implicitly specified in a contract and should be physically distinct, or capacity portion or other portion of an asset that is not physically distinct but it represents substantially all of the capacity of the asset and thereby provides the customer with the right to obtain substantially all of the economic benefits from the use of the asset. If the supplier has a substantive substitution right throughout the period of use, then the asset is not identified;
- The lessee has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use;
- The lessee has the right to direct the use of the asset.

For a contract that contains more separate lease components, the lessee and the lessor separate lease components and account for each lease component as a lease separately. For a contract that contains lease and non-lease components, the lessee and the lessor separate lease components from non-lease components. For a contract that contains lease and non-lease components, the lessee allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components. The lessor allocates the consideration in the contract in accordance with the accounting policy in Note 4(22).

(a) The Group as a lessee

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability, any lease payments made at or before the commencement date (less any lease incentives received), any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease.

The right-of-use asset is depreciated using the straight-line method. If the lessee is reasonably certain to exercise a purchase option by the end of the lease term, the right-of-use asset is depreciated over the remaining useful lives of the underlying asset. Otherwise, the right-of-use asset is depreciated from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. Impairment losses of right-of-use assets are accounted for in accordance with the accounting policy described in Note 4(16).

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate.

A constant periodic rate is used to calculate the interest on the lease liability in each period during the lease term with a corresponding charge to profit or loss or included in the cost of assets where appropriate. Variable lease payments not included in the measurement of the lease liability is charged to profit or loss or included in the cost of assets where appropriate as incurred.

Under the following circumstances after the commencement date, the Group remeasures lease liabilities based on the present value of revised lease payments:

- There is a change in the amounts expected to be payable under a residual value guarantee;
- There is a change in future lease payments resulting from a change in an index or a rate used to determine those payments;
- There is a change in the assessment of whether the Group will exercise a purchase, extension or termination option, or there is a change in the exercise of the extension or termination option.

When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group has elected not to recognise right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The Group recognises the lease payments associated with these leases in profit or loss or as the cost of the assets where appropriate using the straight-line method over the lease term.

(b) The Group as a lessor

The Group determines at lease inception whether each lease is a finance lease or an operating lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset irrespective of whether the legal title to the asset is eventually transferred. An operating lease is a lease other than a finance lease. There are no significant finance leases for the Group.

Lease receipts from operating leases is recognised as income using the straight-line method over the lease term. The initial direct costs incurred in respect of the operating lease are initially capitalised and subsequently amortised in profit or loss over the lease term on the same basis as the lease income. Variable lease payments not included in lease receipts are recognised as income as they are earned.

(25) Held for Sale and Discontinued Operations

(a) Held for Sale

When the Group recovers the book value of a non-current asset or disposal group mainly through the sale rather than through continuing use, non-current assets or disposal groups are classified as held for sale.

Disposal groups refer to a group of assets that are disposed of by sale or other means as a whole in a transaction, as well as the liabilities directly related to such assets transferred in the transaction.

The Group classifies non-current assets or disposal groups meeting the following conditions into held for sale simultaneously:

- According to the practice of sale such assets or disposal groups in similar transactions, the non-current assets or disposal groups can be disposed immediately under current conditions;
- It is highly probable that the sale happens, that is, the Group has made a decision on a sale plan and has signed a legally binding purchase agreement with other parties, and it is expected that the sale will be completed within one year.

The non-current assets held for sale (excluding financial assets, deferred income tax assets) or the disposal groups are generally measured at the lower of their carrying amount and fair value less costs to sell in initial and subsequent measurement, and the difference between the carrying amount and fair value less costs to sell is recognised as asset impairment loss in profit and loss.

(b) Discontinued Operations

The Group classifies a separate component as a discontinued operation either upon disposal of the operation or when the operation meets the criteria to be classified as held for sale if it is separately identifiable and satisfies one of the following conditions:

- It represents a separate major line of business or a separate geographical area of operations;
- It is part of a single co-ordinated plan to dispose of a separate major line of business or a separate geographical area of operations;
- It is a subsidiary acquired exclusively with a view to resale.

Where an operation is classified as discontinued in the current period, profit or loss from continuing operations and profit or loss from discontinued operations are separately presented in the income statement for the current period. Profit or loss from continuing operation in the comparative income statement is re-presented as if the operation had been discontinued from the start of the comparative year.

(26) Dividend Distribution

Dividend distribution is recognised as a liability in the period in which it is approved by a resolution of shareholders' general meeting.

(27) Business Combination

Accounting treatments for business combinations involving entities under common control and not under common control.

A transaction constitutes a business combination when the Group obtains control of one or more entities (or a group of assets or net assets). Business combination is classified as either business combinations involving enterprises under common control or business combinations not involving enterprises under common control.

For a transaction not involving enterprises under common control, the acquirer determines whether acquired set of assets constitute a business. The Group may elect to apply the simplified assessment method, the concentration test, to determine whether an acquired set of assets is not a business. If the concentration test is met and the set of assets is determined not to be a business, no further assessment is needed. If the concentration test is not met, the Group shall perform the assessment according to the guidance on the determination of a business.

When the set of assets the group acquired does not constitute a business, acquisition costs should be allocated to each identifiable assets and liabilities at their acquisition-date fair values. It is not required to apply the accounting of business combination described as below.

(a) Business combination under common control

A business combination involving entities under common control is a business combination in which all of the combining entities are ultimately controlled by the same party or parties both before and after the business combination, and that control is not transitory. The net assets obtained by the acquirer are measured based on their carrying value in the consolidated financial statement of the ultimate controlling party at the combination date. The difference between the carrying value of the net assets obtained and the carrying value of the consideration is adjusted against the capital surplus. If the capital surplus is not sufficient to be offset, the remaining balance is adjusted against retained earnings.

Costs incurred directly attributable to the business combination are recorded in profit or loss when incurred. The transaction costs of the equity securities or debt securities issued which are attributable to the business combination are recorded in the initial recognition costs when acquired. The combination date is the date on which one combining entity obtains control of other combining entities.

(b) Business combination not under common control

A business combination involving entities not under common control is a business combination in which all of the combining entities are not ultimately controlled by the same party or parties both before and after the business combination. The acquisition costs paid and the acquiree's identifiable asset, liabilities and contingent liabilities, if the recognition criteria are met, are measured at their fair value at the acquisition date. Where the cost of combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised as goodwill. Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised directly in profit or loss.

Costs which are directly attributable to the business combination are recorded in profit or loss when incurred. The transaction costs of the equity securities or debt securities issued which are attributable to the business combination are recorded in the initial recognition costs when acquired. The acquisition date is the date on which the acquirer obtains control of the acquiree.

(28) Basis of Preparation of Consolidated Financial Statements

The scope of consolidated financial statements includes the Company and its subsidiaries controlled by the Company. Control exists when the Group has all the following: power over the investees; exposure, or rights to variable returns from its involvement with the investees and has the ability to affect those returns through its power over the investee. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases. Where a subsidiary was acquired, through a business combination involving entities under common control, the financial statements of the subsidiary are included in the consolidated financial statements based on the carrying amounts of the assets and liabilities of the subsidiary in the financial statements of the ultimate controlling party as if the combination had occurred at the date that the ultimate controlling party first obtained control. The opening balances and the comparative figures of the consolidated financial statements are also restated. And their net profit earned before the combination date shall be presented separately in the consolidated income statement.

When the accounting policies and accounting periods of subsidiaries are not consistent with those of the Company, the Company will make necessary adjustments to the financial statements of the subsidiaries in accordance with the Company's accounting policies and accounting periods. Where a subsidiary was acquired during the reporting period, through a business combination involving entities not under common control, the identifiable assets and liabilities of the acquired subsidiaries are included in the scope of consolidation from the date that control commences, based on the fair value of those identifiable assets and liabilities at the acquisition date.

All material intercompany balances, transactions and unrealised gains within the Group are eliminated upon consolidation. The portion of the shareholders' equity or net profit of the subsidiaries that is not attributable to the Company is treated as non-controlling interests and total comprehensive income and presented separately within shareholders' equity in the consolidated balance sheet or within net profit and total comprehensive income in the consolidated income statement.

(29) Segment Reporting

The Group determines its operating segments based on its organisational structure, management requirements and internal reporting system. On the basis of these operating segments, the Group determines the reporting and disclosure of segmental information.

An operating segment refers to a component of the Group that simultaneously meet the following criteria: (1) the component can generate revenue and incur expenses in ordinary activities; (2) the component's operating results can be regularly reviewed by the Group's management to make decisions about resource allocation to the component and assess its performance; (3) the Group can obtain financial information relating to the financial position, operating results and cash flows, etc. of the component. When two or more operating segments exhibit similar economic characteristics and meet certain requirements, the Group may aggregate these operating segments into a single operating segment.

The Group also discloses total external revenue derived from other regions outside China's mainland and the total non-current assets located in other regions outside China's mainland.

(30) Related Party

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 or joint control from another party, they are considered to be related parties. Related parties may be individuals or enterprises. Enterprises with which the Company is under common control only from the State and that have no other related party relationships are not regarded as 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.

(31) Critical Accounting Estimates and Judgements

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The critical accounting estimates and key assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below:

(a) Estimation of oil and natural gas reserves

Estimates of oil and natural gas reserves are key elements in the Group's investment decision-making process. They are also important elements in testing for impairment related to oil and gas production activities. Changes in proved oil and natural gas reserves, particularly proved developed reserves, will affect unit-of-production depreciation, depletion and amortisation recorded in the income statements for property, plant and equipment related to oil and gas production activities. An increase/reduction in proved developed reserves will decrease/increase depreciation, depletion and amortisation charges. Proved reserve estimates are subject to revision, either upward or downward, based on new information, such as from development drilling and production activities or from changes in economic factors, including product prices, contract terms, evolution of technology or development plans, etc.

(b) Estimation of impairment of fixed assets and oil and gas properties

Fixed assets and oil and gas properties are reviewed for possible impairments when events or changes in circumstances indicate that the carrying amount may not be recoverable. Determination as to whether and how much an asset is impaired involves management estimates and judgements such as future price of crude oil and natural gas, refined and chemical products, the production costs, the product mix, production volumes, production profile and the oil and gas reserves. However, the impairment reviews and calculations are based on assumptions that are consistent with the Group's business plans taking into account current economic conditions. Favourable changes to some assumptions, or not updating assumptions previously made, may allow the Group to avoid the need to impair any assets, whereas unfavourable changes may cause the assets to become impaired. For example, when the assumed future price and production profile of crude oil used for the expected future cash flows are different from the actual price and production profile of crude oil respectively experienced in the future, the Group may either over or under recognise the impairment losses for certain assets.

(c) Estimation of asset retirement obligations

Provision is recognised for the future decommissioning and restoration of oil and gas properties. The amounts of the provision recognised are the present values of the estimated future expenditures. The estimation of the future expenditures is based on current local conditions and requirements, including legal requirements, technology, price level, etc. In addition to these factors, the present values of these estimated future expenditures are also impacted by the management plan for the decommissioning of oil and gas properties, the estimation of the economic lives of oil and gas properties and estimates of discount rates. Changes in any of these estimates will impact the operating results and the financial position of the Group over the remaining economic lives of the oil and gas properties.

According to changes in the internal and external environment, accounting standards and company asset retirement expense measures and other relevant regulations, oil and gas field companies recalculate their asset retirement obligations of oil and gas properties based on the latest parameters to more objectively reflect the actual situation of the Company's asset retirement obligation of oil and gas properties.

5 TAXATION

The principal taxes and related tax rates of the Group are presented as below:

Types 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	Based on quantities	Based on sales quantities of taxable products. RMB 1.52 per litre for unleaded gasoline, naphtha, solvent oil and lubricant. RMB 1.2 per litre for diesel and fuel oil.
Corporate Income Tax	5% to 82%	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 Construction Tax	1%, 5% or 7%	Based on the actual VAT and consumption tax paid.
Educational surcharge	2% or 3%	Based on the actual VAT and consumption tax paid.
City maintenance and construction tax	RMB 0.9~30	Based on the actual land area occupied in each provinces, autonomous regions and municipalities.

According to "Notice Concerning Import Tax Policies Related to Exploration, Development and Utilization of Energy Resources During the 14th Five-Year Plan Period"(Caishui [2021] No.17) jointly issued by Ministry of Finance, State Taxation Administration and General Administration of Customs, for the period from January 1, 2021 to December 31, 2025, the import value-added tax (VAT) of the import link shall be returned in proportion to the projects of cross-border natural gas pipelines and imported liquefied natural gas (LNG) receiving storage and transportation units approved by National Development and Reform Commission. This also includes natural gas imported from the expansion project of the import LNG receiving storage and transportation plant approved by the provincial governments. The import duties of equipment, instruments, zero accessories and special tools shall be exempted to the self-employed projects carrying out oil (natural gas) exploration and development operations in particular areas within the territory of China. The import duties and import value-added tax (VAT) of equipment, instruments, zero accessories and special tools shall be exempted to the Sino-foreign cooperation project carrying out oil (natural gas) exploration and development operations within the winning block of onshore oil (natural gas) approved by the State, projects carrying out oil (natural gas) exploration and development operations in China's oceans, emergency rescue projects for offshore oil and gas pipelines, and projects carrying out coal seam gas exploration and development operations in China.

Ministry of Finance and State Taxation Administration jointly issued the “Notice on Reduction of Resource Tax Assessed on Shale Gas” (Cai Shui [2018] No.26) on March 29, 2018. Pursuant to such notice, in order to promote the development and utilization of shale gas and effectively increase natural gas supply, from April 1, 2018 to March 31, 2021, a reduction of 30% will apply to the resource tax assessed on shale gas (at the prescribed tax rate of 6%). On March 15, 2021, Ministry of Finance and State Taxation Administration jointly issued “Notice on Extending the Implementation Period of Some Preferential Tax Policies” (Caishui [2021] No.6) to announce the implementation period of that preferential tax policies would be extended to December 31, 2023.

Pursuant to the Notice from Ministry of Finance on the “Increase of the Threshold of the Crude Oil Special Gain Levy” (Cai Shui [2014] No. 115), the threshold of the crude oil special gain levy shall be USD 65 per barrel, which has 5 levels and is calculated and charged according to the progressive and valorem rates on the excess amounts from January 1, 2015.

In accordance with the Circular jointly issued by Ministry of Finance, the General Administration of Customs of the PRC and State Taxation Administration on Issues Concerning Tax Policies for In-depth Implementation of Western Development Strategy (Cai Shui [2011] No.58), the corporate income tax for the enterprises engaging in the encouraged industries in the Western China Region is charged at a preferential corporate income tax rate of 15% from January 1, 2011 to December 31, 2020. Certain branches and subsidiaries of the Company in the Western China Region obtained the approval for the use of the preferential corporate income tax rate of 15%. Ministry of Finance, State Taxation Administration and the NDRC issued the Announcement on Continuing the Income Tax Policy for Western Development (Notice No.23 of 2020 of MOF), the corporate income tax for the enterprises engaging in the encouraged industries in the Western China Region is charged at a preferential corporate income tax rate of 15% from January 1, 2021 to December 31, 2030.

According to “Notice Concerning Levy of Import Consumption Tax on Certain Refined Oil Products”(Notice 2021 No.19 issued by Ministry of Finance, General Administration of Customs and State Taxation Administration), which takes effect on 12 June 2021, for imported goods under HS code 27075000 and whose aromatic hydrocarbon mixtures lower than 95% by volume distils below 200 degrees Celsius, the import consumption tax shall be levied at the unit tax rate of 1.52 RMB/liter for naphtha; Import consumption tax on naphtha shall be levied at the unit tax rate of 1.52 yuan/liter for imported products classified into HS code 27079990 and 27101299. For the imported products which are classified into HS code 27150000 and the mineral oil distilled below 440 degrees Celsius is more than 5% by volume, it shall be regarded as fuel oil, and the import consumption tax shall be levied at the unit tax of 1.2 yuan/liter.

6 BUSINESS COMBINATION AND CONSOLIDATED FINANCIAL STATEMENTS

(1) Principal subsidiaries

Company name	Acquisition method	Country of incorporation	Registered capital	Principal activities	Type of legal entity	Legal representative	Closing effective investment cost	Attributable equity interest %	Attributable voting rights %	Consolidated or not
Daqing Oilfield Company Limited	Established	PRC	47,500	Exploration, production and sale of crude oil and natural gas	Limited liability company	Zhu Guowen	66,720	100.00	100.00	Yes
CNPC Exploration and Development Company Limited (i)	Business combination under common control	PRC	16,100	Exploration, production and sale of crude oil and natural gas outside the PRC	Limited liability company	Ye Xiandeng	23,778	50.00	57.14	Yes
PetroChina Hong Kong Limited	Established	HK	HK Dollar ("HKD") 7,592 million	Investment holding. The principal activities of its subsidiaries, associates and joint ventures are the exploration, production and sale of crude oil in and outside the PRC as well as natural gas sale and transmission in the PRC	Limited liability company	N/A	25,590	100.00	100.00	Yes
PetroChina International Investment Company Limited	Established	PRC	31,314	Investment holding. The principal activities of its subsidiaries, associates and joint ventures are the exploration, development and production of crude oil, natural gas, oilsands and coalbed methane outside the PRC	Limited liability company	Ye Xiandeng	31,314	100.00	100.00	Yes
PetroChina International Company Limited	Established	PRC	18,096	Marketing of refined products and trading of crude oil and petrochemical products, storage, investment in refining, chemical engineering, storage facilities, service station, and transportation facilities and related business in and outside the PRC	Limited liability company	Tian Jinghui	18,953	100.00	100.00	Yes
PetroChina Sichuan Petrochemical Company Limited	Established	PRC	10,000	Engaged in oil refining, petrochemical, chemical products production, sales, chemical technology development, technical transfer and services	Limited liability company	Wang Bin	21,600	90.00	90.00	Yes
KunLun Energy Company Limited (ii)	Business combination under common control	Bermuda	HK Dollar ("HKD") 160 million	Investment holding. The principal activities of its principal subsidiaries, associates and joint ventures are the sales of natural gas, sales of liquefied petroleum gas and liquefied natural gas processing and terminal business in the PRC and the exploration and production of crude oil and natural gas in the PRC, the Republic of Kazakhstan, the Sultanate of Oman, the Republic of Peru, the Kingdom of Thailand and the Republic of Azerbaijan.	Limited liability company	Fu Bin	HK Dollar ("HKD") 87 million	54.38	54.38	Yes

(i) The Company 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.

(ii) Kunlun Energy Co., Ltd. is a company listed on The Stock Exchange of Hong Kong Limited.

(2) Exchange rates of international operations' major financial statement items

Company name	Assets and liabilities	
	December 31, 2021	December 31, 2020
PetroKazakhstan Inc.	USD 1=6.3757 yuan	USD 1=6.5249 yuan
PetroChina Hong Kong Limited	HKD 1=0.8176 yuan	HKD 1=0.8416 yuan
Singapore Petroleum Company Limited	USD 1=6.3757 yuan	USD 1=6.5249 yuan

Revenue, expense, cash flows items and equity items except for the retained earnings are translated into RMB at the exchange rates at the date of the transactions or the approximate exchange rates at that date.

7 CASH AT BANK AND ON HAND

	December 31, 2021	December 31, 2020
Cash on hand	18	28
Cash at bank	162,814	145,208
Other cash balances	704	714
	163,536	145,950

The Group's cash at bank and on hand included the following foreign currencies as of December 31, 2021:

	Foreign currency	Exchange rate	RMB equivalent
USD	10,691	6.3757	68,163
HKD	9,173	0.8176	7,500
EUR	338	7.2197	2,440
Other			845
			78,948

The Group's cash at bank and on hand included the following foreign currencies as of December 31, 2020:

	Foreign currency	Exchange rate	RMB equivalent
USD	10,017	6.5249	65,360
HKD	9,103	0.8416	7,661
EUR	182	8.0250	1,461
Other			1,216
			75,698

The Group's cash at bank and on hand in foreign currencies mainly comprise cash at bank.

8 ACCOUNTS RECEIVABLE

	The Group		The Company	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Accounts receivable	58,073	53,465	7,785	8,687
Less: Provision for bad debts	(1,414)	(1,140)	(356)	(275)
	<u>56,659</u>	<u>52,325</u>	<u>7,429</u>	<u>8,412</u>

The aging of accounts receivable and related provision for bad debts are analysed as follows:

	The Group			December 31, 2020		
	Amount	Percentage of total balance %	Provision for bad debts	Amount	Percentage of total balance %	Provision for bad debts
				December 31, 2021	December 31, 2020	December 31, 2020
Within 1 year	55,579	95	(133)	51,848	96	(207)
1 to 2 years	1,092	2	(276)	461	1	(87)
2 to 3 years	376	1	(182)	230	1	(21)
Over 3 years	1,026	2	(823)	926	2	(825)
	<u>58,073</u>	<u>100</u>	<u>(1,414)</u>	<u>53,465</u>	<u>100</u>	<u>(1,140)</u>

	The Company			December 31, 2020		
	Amount	Percentage of total balance %	Provision for bad debts	Amount	Percentage of total balance %	Provision for bad debts
				December 31, 2021	December 31, 2020	December 31, 2020
Within 1 year	7,298	94	(29)	8,356	96	(22)
1 to 2 years	214	3	(98)	111	1	(67)
2 to 3 years	72	-	(62)	1	-	-
Over 3 years	201	3	(167)	219	3	(186)
	<u>7,785</u>	<u>100</u>	<u>(356)</u>	<u>8,687</u>	<u>100</u>	<u>(275)</u>

The aging is counted starting from the date when accounts receivable are recognised.

The Group measures loss allowance for accounts receivable at an amount equal to lifetime ECLs. The ECLs were calculated by reference to the 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 geography.

December 31, 2021	Gross carrying amount	Impairment provision on individual basis	Impairment provision on provision matrix basis		
			Weighted-average loss rate	Impairment provision	Loss allowance
Current (not past due)	53,098	-	0.1%	55	55
Within one year past due	3,153	26	1.6%	50	76
One-two years past due	648	153	25.5%	126	279
Two-three years past due	329	67	45.0%	118	185
Over three years past due	845	352	94.7%	467	819
	<u>58,073</u>	<u>598</u>		<u>816</u>	<u>1,414</u>

December 31, 2020	Gross carrying amount	Impairment provision on individual basis	Impairment provision on provision matrix basis		
			Weighted-average loss rate	Impairment provision	Loss allowance
Current (not past due)	46,849	-	0.1%	34	34
Within one year past due	5,326	154	0.4%	19	173
One-two years past due	386	65	6.9%	22	87
Two-three years past due	50	11	25.6%	10	21
Over three years past due	854	342	94.3%	483	825
	<u>53,465</u>	<u>572</u>		<u>568</u>	<u>1,140</u>

As of December 31, 2021, the top five debtors of accounts receivable of the Group amounted to RMB 16,728, representing 29% of total accounts receivable, and there is no provision for bad and doubtful debts (As of December 31, 2020, the top five debtors of accounts receivable of the Group amounted to RMB 31,005, representing 58% of total accounts receivable, and the corresponding balance of provision for bad and doubtful debts is RMB 5).

As of December 31, 2021, accounts receivable included derivative financial assets, which were generated by hedges, of RMB 3,913 (2020:RMB 1,411).

During the year ended December 31, 2021 and December 31, 2020, the Group had no significant write-off of accounts receivable.

9 RECEIVABLES FINANCING

Receivables financing mainly represents bills of acceptance issued by banks for the sale of goods and rendering of services.

The Group's business model of financial assets at fair value through other comprehensive income is achieved both by collecting contractual cash flows and selling of these assets.

On December 31, 2021 and December 31, 2020, all receivables financing of the Group are due within one year.

10 ADVANCES TO SUPPLIERS

	December 31, 2021	December 31, 2020
Advances to suppliers	14,900	22,330
Less: Provision for bad debts	(302)	(704)
	<u>14,598</u>	<u>21,626</u>

As of December 31, 2021 and 2020, advances to suppliers of the Group are mainly aged within one year.

As of December 31, 2021, the top five debtors of advances to suppliers of the Group amounted to RMB 6,930, representing 47% of total advances to suppliers (As of December 31, 2020, the top five debtors of advances to suppliers of the Group amounted to RMB12,840, representing 58% of total advances to suppliers).

11 OTHER RECEIVABLES

	The Group		The Company	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Interest receivable	513	329	8	8
Dividends receivable	741	8,051	261	9,748
Other receivables (a)	<u>38,300</u>	<u>18,454</u>	<u>4,058</u>	<u>4,982</u>
Total	<u>39,554</u>	<u>26,834</u>	<u>4,327</u>	<u>14,738</u>

(a) The aging analysis of other receivables and the related provision for bad debts are analysed as follows:

	The Group			The Company		
	December 31, 2021		December 31, 2020			
	Amount	Percentage of total balance %	Provision for bad debts	Amount	Percentage of total balance %	Provision for bad debts
Within 1 year	33,862	83	(190)	10,812	51	(44)
1 to 2 years	1,332	3	(33)	5,365	25	(45)
2 to 3 years	1,620	4	(38)	726	3	(12)
Over 3 years	<u>4,169</u>	<u>10</u>	<u>(2,422)</u>	<u>4,225</u>	<u>21</u>	<u>(2,573)</u>
	<u>40,983</u>	<u>100</u>	<u>(2,683)</u>	<u>21,128</u>	<u>100</u>	<u>(2,674)</u>

The Company						
	December 31, 2021			December 31, 2020		
	Amount	Percentage of total balance %	Provision for bad debts	Amount	Percentage of total balance %	Provision for bad debts
Within 1 year	2,959	53	(953)	2,479	44	(24)
1 to 2 years	646	12	(14)	1,887	33	(8)
2 to 3 years	1,078	20	(29)	155	3	(1)
Over 3 years	813	15	(442)	1,126	20	(632)
	<u>5,496</u>	<u>100</u>	<u>(1,438)</u>	<u>5,647</u>	<u>100</u>	<u>(665)</u>

The aging is counted starting from the date when other receivables are recognised.

As of December 31, 2021, the top five debtors of other receivables of the Group amounted to RMB 18,742, representing 46% of total other receivables, and there is no provision for bad and doubtful debts (As of December 31, 2020 the top five debtors of other receivables of the Group amounted to RMB 6,218, representing 29% of total other receivables, and the corresponding balance of provision for bad and doubtful debts is RMB 509).

As of 31 December 2021 and 31 December 2020, the Group's other receivables are mainly in the first stage.

During the year ended December 31, 2021 and December 31, 2020, the Group had no significant write-off of other receivables.

12 INVENTORIES

	December 31, 2021	December 31, 2020
Cost		
Crude oil and other raw materials	40,334	35,855
Work in progress	15,393	12,387
Finished goods	88,811	80,739
Spare parts and consumables	91	75
	144,629	129,056
Less: Write down in inventories	(781)	(517)
Net book value	<u>143,848</u>	<u>128,539</u>

13 OTHER CURRENT ASSETS

The balance of other current assets mainly consists of value-added tax recoverable and prepaid income tax.

14 INVESTMENT IN OTHER EQUITY INSTRUMENTS

	December 31, 2021	December 31, 2020
Chengdu Huaqihoupu Holding Co., Ltd.	534	228
China Pacific. Insurance (Group) Co., Ltd.	133	188
Other items	509	494
	<u>1,176</u>	<u>910</u>

15 LONG-TERM EQUITY INVESTMENTS

	The Group			
	December 31, 2020	Additions	Reduction	December 31, 2021
Associates and joint ventures (a)	250,864	20,831	(5,206)	266,489
Less : Provision for impairment (b)	<u>(166)</u>	<u>(443)</u>	<u>4</u>	<u>(605)</u>
	<u>250,698</u>			<u>265,884</u>

	The Company			
	December 31, 2020	Additions	Reduction	December 31, 2021
Subsidiaries (c)	256,165	994	(1,743)	255,416
Associates and joint ventures	195,739	13,972	(3,425)	206,286
Less : Provision for impairment	<u>(227)</u>	<u>(13)</u>	<u>-</u>	<u>(240)</u>
	<u>451,677</u>			<u>461,462</u>

As of December 31, 2021, the above-mentioned investments are not subject to restriction on conversion into cash or remittance of investment income.

(a) Principal associates and joint ventures of the Group

Company name	Country of incorporation	Principal activities	Registered capital	Interest held%		Voting rights %	Accounting method	Strategic decisions relating to the Group's activities
				Direct	Indirect			
China Oil & Gas Piping Network Corporation ("PipeChina")	PRC	Pipeline transport, storage service, import of equipment, import and export of techniques, science and technology research, research and application of informatization, technology consulting, technology service, technology transfer, promotion of technology	500,000	29.90	-	29.90	Equity method	Yes
China Petroleum Finance Co., Ltd. ("CP Finance")	PRC	Deposits, loans, settlement, lending, bills acceptance discounting, guarantee and other banking business	8,331	32.00	-	32.00	Equity method	No
CNPC Captive Insurance Co., Ltd.	PRC	Property loss insurance, liability insurance, credit insurance and deposit insurance; as well as the application of the above insurance reinsurance and insurance capital business	5,000	49.00	-	49.00	Equity method	No
China Marine Bunker (PetroChina) Co., Ltd.	PRC	Oil import and export trade and transportation, sale and storage	1,000	-	50.00	50.00	Equity method	No
Mangistau Investment B.V.	Netherlands	Engaged in investment activities, the principle activities of its main subsidiaries are exploration, development and sale of oil and gas	USD 131 million	-	50.00	50.00	Equity method	No
Trans-Asia Gas Pipeline Co., Ltd.	PRC	Main contractor, investment holding, investment management, investment consulting, enterprise management advisory, technology development, promotion and technology consulting	5,000	-	50.00	50.00	Equity method	No

Investments in principal associates and joint ventures are listed below:

	Invest- ment cost	December 31, 2020	Investment income recognised under equity method	Other comprehen- sive income/ (loss)	Cash dividend declared	Other	December 31, 2021
PipeChina	149,500	151,135	6,845	1	(943)	308	157,346
CP Finance	10,223	24,114	2,017	(194)	(904)	-	25,033
CNPC Captive Insurance Co., Ltd.	2,450	3,281	207	-	(78)	-	3,410
China Marine Bunker (PetroChina) Co., Ltd.	740	1,336	(311)	(33)	(29)	13	976
Mangistau Investment B.V.	176	3,917	1,057	(120)	(233)	-	4,621
Trans-Asia Gas Pipeline Co., Ltd.	14,527	20,065	2,034	(280)	(410)	-	21,409

Interest in associates

Summarised financial information in respect of the Group's principal associates and reconciliation to carrying amount is as follows:

	PipeChina		CP Finance		CNPC Captive Insurance Co., Ltd.	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Percentage ownership interest (%)	29.90	29.90	32.00	32.00	49.00	49.00
Current assets	86,335	74,012	415,139	313,741	9,100	11,267
Non-current assets	768,161	655,982	116,765	177,344	2,618	2,956
Current liabilities	136,150	55,562	446,369	404,201	859	4,752
Non-current liabilities	103,243	104,150	8,396	12,617	3,900	2,776
Net assets	615,103	570,282	77,139	74,267	6,959	6,695
Group's share of net assets	157,346	151,135	24,684	23,765	3,410	3,281
Goodwill	-	-	349	349	-	-
Carrying amount of interest in associates	157,346	151,135	25,033	24,114	3,410	3,281

Summarised statement of comprehensive income and dividends received by the Group is as follows:

	PipeChina		CP Finance		CNPC Captive Insurance Co., Ltd.	
	2021	From Oct 01, 2020 to Dec 31, 2020	2021	2020	2021	2020
Operating income	101,572	22,766	12,691	7,954	1,510	735
Net profit	29,776	6,444	6,304	7,819	424	389
Other comprehensive income/(loss)	2	-	(606)	(1,603)	-	-
Total comprehensive income	29,778	6,444	5,698	6,216	424	389
Group's share of total comprehensive income	6,846	1,532	1,823	1,989	207	191
Dividends received by the Group	943	-	904	677	78	74

Interest in joint ventures

Summarised balance sheet as included in their own financial statements, adjusted for fair value adjustments and differences in accounting policies in respect of the Group's principal joint ventures and reconciliation to carrying amount is as follows:

	China Marine Bunker (PetroChina) Co., Ltd.		Mangistau Investment B.V.		Trans-Asia Gas Pipeline Co., Ltd.	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Percentage ownership interest (%)	50.00	50.00	50.00	50.00	50.00	50.00
Non-current assets	1,571	1,685	9,927	10,586	44,011	39,809
Current assets	11,305	7,319	2,220	830	1,437	2,886
Including: cash and cash equivalents	2,292	1,343	1,631	74	1,411	739
Non-current liabilities	540	158	2,033	3,008	2,147	2,330
Current liabilities	9,997	5,927	872	575	483	235
Net assets	2,339	2,919	9,242	7,833	42,818	40,130
Net assets attributable to owners of the Company	1,952	2,672	9,242	7,833	42,818	40,130
Group's share of net assets	976	1,336	4,621	3,917	21,409	20,065
Carrying amount of interest in joint ventures	976	1,336	4,621	3,917	21,409	20,065

The comprehensive income and dividends received by the group are listed as follows:

	China Marine Bunker (PetroChina) Co., Ltd.		Mangistau Investment B.V.		Trans-Asia Gas Pipeline Co., Ltd.	
	2021	2020	2021	2020	2021	2020
Operating income	58,210	36,695	11,543	8,152	17	18
Finance expenses	(71)	(81)	(102)	(92)	(75)	(2)
Including: Interest income	11	16	3	4	31	42
Interest expense	(72)	(60)	(141)	(160)	(56)	(58)
Taxation	(56)	(57)	(846)	(293)	-	1
Net (loss)/profit	(610)	185	2,114	362	4,067	3,060
Other comprehensive loss	(81)	(45)	(240)	(1,012)	(559)	(6,067)
Total comprehensive (loss)/income	(691)	140	1,874	(650)	3,508	(3,007)
Group's share of total comprehensive (loss)/income	(344)	46	937	(325)	1,754	(1,504)
Dividends received by the group	29	-	233	539	410	-

(b) Provision for impairment

	December 31, 2021	December 31, 2020
Associates and joint ventures		
PetroChina Shouqi Sales Company Limited	(60)	(60)
PetroChina Beiqi Sales Company Limited	(49)	(49)
Other	(496)	(57)
	(605)	(166)

(c) Subsidiaries

Investment in subsidiaries:

	Investment cost	December 31, 2020	Additions	Deduction	December 31, 2021
Daqing Oilfield Company Limited	66,720	66,720	-	-	66,720
CNPC Exploration and Development Company Limited	23,778	23,778	-	-	23,778
PetroChina Hong Kong Limited	25,590	25,590	-	-	25,590
PetroChina International Investment Company Limited	31,314	31,314	-	-	31,314
PetroChina International Company Limited	18,953	18,953	-	-	18,953
PetroChina Sichuan Petrochemical Company Limited	21,600	21,600	-	-	21,600
Other	68,210	994	(1,743)	67,461	
Total	256,165	994	(1,743)	255,416	

Summarised financial information in respect of the Group's principal subsidiaries with significant non-controlling interest is as follows:

Summarised balance sheet is as follows:

	CNPC Exploration and Development Company Limited		PetroChina Sichuan Petrochemical Company Limited	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Percentage ownership interest (%)	50.00	50.00	90.00	90.00
Current assets	15,596	16,046	3,973	4,278
Non-current assets	184,486	182,392	25,317	26,371
Current liabilities	11,282	21,820	3,876	5,382
Non-current liabilities	30,293	22,566	382	486
Net assets	158,507	154,052	25,032	24,781

Summarised statement of comprehensive income is as follows:

	CNPC Exploration and Development Company Limited		PetroChina Sichuan Petrochemical Company Limited	
	2021	2020	2021	2020
Operating income	42,730	33,312	48,493	35,319
Net profit	8,413	6,006	3,383	520
Total comprehensive income/(loss)	5,231	(6,972)	3,383	520
Profit attributable to non-controlling interests	4,837	3,311	338	52
Dividends paid to non-controlling interests	1,485	1,498	307	12

Summarised statement of cash flow is as follows:

	CNPC Exploration and Development Company Limited		PetroChina Sichuan Petrochemical Company Limited	
	2021	2020	2021	2020
Net cash inflows from operating activities	13,320	5,681	2,666	5,119

16 FIXED ASSETS

	December 31, 2020	Additions	Reduction	December 31, 2021
Cost				
Buildings	248,948	15,918	(6,008)	258,858
Equipment and Machinery	746,404	43,978	(12,379)	778,003
Motor Vehicles	22,857	645	(1,599)	21,903
Other	46,155	3,583	(2,463)	47,275
Total	1,064,364	64,124	(22,449)	1,106,039
Accumulated depreciation				
Buildings	(105,617)	(12,228)	3,043	(114,802)
Equipment and Machinery	(443,018)	(35,247)	8,579	(469,686)
Motor Vehicles	(17,341)	(1,053)	1,488	(16,906)
Other	(24,063)	(2,818)	1,584	(25,297)
Total	(590,039)	(51,346)	14,694	(626,691)
Fixed assets, net				
Buildings	143,331			144,056
Equipment and Machinery	303,386			308,317
Motor Vehicles	5,516			4,997
Other	22,092			21,978
Total	474,325			479,348
Provision for impairment				
Buildings	(5,282)	(516)	183	(5,615)
Equipment and Machinery	(45,091)	(2,723)	851	(46,963)
Motor Vehicles	(90)	-	5	(85)
Other	(7,874)	(121)	147	(7,848)
Total	(58,337)	(3,360)	1,186	(60,511)
Net book value				
Buildings	138,049			138,441
Equipment and Machinery	258,295			261,354
Motor Vehicles	5,426			4,912
Other	14,218			14,130
Total	415,988			418,837

Depreciation charged to profit or loss provided on fixed assets for the year ended December 31, 2021 was RMB 46,399(2020: RMB 59,535). Cost transferred from construction in progress to fixed assets was RMB 54,754(2020: RMB 52,614).

In 2021, the provision for impairment of the group's fixed assets affecting profit and loss is RMB 3,360(2020: RMB 1,164), which is mainly related to the assets of refining and chemicals sector (2020: is mainly related to the assets of exploration and production sector). After the provision for impairment of these assets is made, the book value is written down to the recoverable amount. In 2021, the post-tax discount rate adopted by the group ranged from 7.6% to 12.0%(2020: 5.9% to 12.0%) per annum.

As of December 31, 2021, the Group's fixed assets under operating leases are mainly equipment and machinery, the net book value of which amounted to RMB 1,829(2020: RMB 1,772).

As of December 31, 2021, Fixed assets with a book value of RMB 823 are used as collateral for long-term borrowings of RMB 1,091 (Note 33).

17 OIL AND GAS PROPERTIES

	December 31, 2020	Additions	Reduction	December 31, 2021
Cost				
Mineral interests	65,124	7,610	(2,323)	70,411
Wells and related facilities	2,291,023	173,780	(82,589)	2,382,214
Total	2,356,147	181,390	(84,912)	2,452,625
Accumulated depletion				
Mineral interests	(15,628)	(8,974)	1,437	(23,165)
Wells and related facilities	(1,452,874)	(129,795)	59,034	(1,523,635)
Total	(1,468,502)	(138,769)	60,471	(1,546,800)
Oil and gas properties, net				
Mineral interests	49,496			47,246
Wells and related facilities	838,149			858,579
Total	887,645			905,825
Provision for impairment				
Mineral interests	(14,300)	(18,239)	1,012	(31,527)
Wells and related facilities	(59,457)	(1,224)	3,171	(57,510)
Total	(73,757)	(19,463)	4,183	(89,037)
Net book value				
Mineral interests	35,196			15,719
Wells and related facilities	778,692			801,069
Total	813,888			816,788

Depletion charged to profit or loss provided on oil and gas properties for the year ended December 31, 2021 was RMB 138,237(2020: RMB 135,362). Cost transferred from construction in progress to oil and gas properties was RMB 160,810(2020: RMB 152,389).

The Group's exploration and production segment determines whether there are any indicators of impairment for the oil fields or blocks and performs the impairment tests on those oil fields or blocks with indications of impairment, and reports the results to the Group's internal professional team (including exploration and finance expert) for further overall assessment and evaluation. The final results of the impairment tests have been submitted to the Group's management for review and approval. The Group recorded impairment losses amounting to RMB 19,463 related to oil and gas properties under the exploration and production segment for the year ended December 31, 2021 (2020: RMB 13,908) due to decline in oil and gas reserves in certain oilfield as well as no further development plans for certain other projects. The carrying amount of those impaired oil and gas properties was written down to their respective recoverable amounts, which were primarily determined using the discounted cash flow model. The Group referred to the weighted average cost of capital of the oil and gas industry when determining discount rate, and made relevant adjustments according to specific risks in different countries or regions. In 2021, the after-tax discount rates adopted by most oil fields or blocks of the Group ranged from 7.6% to 15.0% (2020: 5.9% to 12.0%) per annum.

As of December 31, 2021, the asset retirement obligations capitalised in the cost of oil and gas properties amounted to RMB 114,489(December 31, 2020: RMB 96,657). Related depletion charge for the year ended December 31, 2021 was RMB 2,944 (2020: RMB 4,766).

18 CONSTRUCTION IN PROGRESS

Project Name	Budget	December 31, 2020	Additions	Transferred to fixed assets or oil and gas properties	Other Reduction	December 31, 2021	Proportion of construction compared to budget	Capitalised interest expense	Including: capitalised interest expense	Source for current year	Source of fund
Guangdong Petrochemical Integration of Refining and Chemical Industry	65,430	13,443	27,343	(206)	-	40,580	80%	1,675	615	Self& loan	
Tarim Ethylene Production by Ethane Project	1,620	712	538	(1,045)	-	205	77%	1	1	Self& loan	
600,000 tons/year ABS and its supporting projects in Jieyang, Guangdong	6,494	394	2,554	-	-	2,948	45%	30	30	Self& loan	
Other	213,192	211,408	(214,313)	(21,738)	188,549			1,945	362		
	227,741	241,843	(215,564)	(21,738)	232,282			3,651	1,008		
Less:											
Provision for impairment		(5,526)	(3,648)	-	563	(8,611)					
		222,215				223,671					

For the year ended December 31, 2021, the capitalised interest expense amounted to RMB 1,008(2020: RMB 895). The average annual interest rates used to determine the capitalised amount in 2021 are 4.19% (2020: 4.19%).

19 LEASES

The leases where the Group is a lessee

Right-of-use assets

	December 31, 2020	Additions	Reduction	December 31, 2021
Cost				
Land	101,849	2,077	(343)	103,583
Buildings	57,337	5,120	(5,567)	56,890
Equipment and Machinery	2,641	2,614	(781)	4,474
Other	2,195	186	(563)	1,818
Total	164,022	9,997	(7,254)	166,765
Accumulated depreciation				
Land	(6,967)	(3,787)	107	(10,647)
Buildings	(10,839)	(6,326)	2,748	(14,417)
Equipment and Machinery	(1,166)	(1,096)	685	(1,577)
Other	(712)	(313)	268	(757)
Total	(19,684)	(11,522)	3,808	(27,398)
Provision for impairment				
Buildings	-	(8)	-	(8)
Total	-	(8)	-	(8)
Net book value				
Land	94,882			92,936
Buildings	46,498			42,465
Equipment and Machinery	1,475			2,897
Other	1,483			1,061
Total	144,338			139,359

The Group's use of right assets mainly include leased land, buildings, equipment and machinery. The leases underlying assets classified as buildings are mainly the leased gas filling stations, oil storages and office buildings. The leases underlying assets classified as equipment and machinery are mainly drilling equipment, production equipment and other movable equipment.

Depreciation charged to profit or loss provided on right-of-use assets for the year ended December 31, 2021 was RMB 11,196(2020: RMB 11,272).

Lease Liabilities

	December 31, 2021	December 31, 2020
Lease liabilities	129,848	129,223
Less: Lease liabilities due within one year (Note 32)	(6,626)	(6,579)
	<u>123,222</u>	<u>122,644</u>

Analysis of the undiscounted cash flow of the lease liabilities is as follows:

	December 31, 2021	December 31, 2020
Within 1 year	12,495	11,824
Between 1 to 2 years	11,181	10,236
Between 2 to 5 years	30,541	29,862
Over 5 years	154,636	153,967
	<u>208,853</u>	<u>205,889</u>

20 INTANGIBLE ASSETS

	December 31, 2020	Additions	Reduction	December 31, 2021
Cost				
Land use rights	88,365	7,254	(329)	95,290
Franchise	22,469	1,298	(65)	23,702
Patents	4,626	355	(4)	4,977
Other	19,403	1,459	(977)	19,885
Total	<u>134,863</u>	<u>10,366</u>	<u>(1,375)</u>	<u>143,854</u>
Accumulated amortisation				
Land use rights	(22,456)	(3,373)	109	(25,720)
Franchise	(8,415)	(867)	37	(9,245)
Patents	(3,845)	(156)	7	(3,994)
Other	(13,297)	(1,147)	928	(13,516)
Total	<u>(48,013)</u>	<u>(5,543)</u>	<u>1,081</u>	<u>(52,475)</u>
Intangible assets, net				
Land use rights	65,909			69,570
Franchise	14,054			14,457
Patents	781			983
Other	6,106			6,369
Total	<u>86,850</u>			<u>91,379</u>
Provision for impairment	<u>(749)</u>	<u>(47)</u>	<u>4</u>	<u>(792)</u>
Net book value	<u>86,101</u>			<u>90,587</u>

Amortisation charged to profit or loss provided on intangible assets for the year ended December 31, 2021 was RMB 5,483(2020: RMB 5,078).

21 GOODWILL

	December 31, 2021	December 31, 2020
Cost		
Petrolneos Trading Limited	4,312	4,413
Singapore Petroleum Company	2,807	2,873
Other	904	875
Total	<u>8,023</u>	<u>8,161</u>
Provision for impairment	<u>(36)</u>	<u>(36)</u>
Net book value	<u>7,987</u>	<u>8,125</u>

Goodwill primarily relates to the acquisition of Singapore Petroleum Company and Petrolneos Trading Limited, subsidiaries in the marketing segment, completed in 2009 and 2011, respectively.

The impairment of goodwill shall be tested in combination with its related asset groups. The recoverable amount of all cash-generating units has been determined based on the higher of fair value less costs to sell and value in use. These calculations use cash flow projections based on financial budgets prepared by management. The discount rates reflect specific risks relating to the cash-generating unit.

For impairment test of the goodwill, the post-tax discount rates ranged 8.5% to 14.7% (2020: 4.9% to 10.5%) were used by the management, and no impairment loss was charged for the goodwill for the year ended December 31, 2021 (2020: nil).

22 LONG-TERM PREPAID EXPENSES

	December 31, 2020	Additions	Reduction	December 31, 2021
Catalyst	4,994	1,776	(1,584)	5,186
Lease asset improvement expenses	2,007	1,955	(1,804)	2,158
Other	<u>4,868</u>	<u>2,850</u>	<u>(3,671)</u>	<u>4,047</u>
Total	<u>11,869</u>	<u>6,581</u>	<u>(7,059)</u>	<u>11,391</u>

23 OTHER NON-CURRENT ASSETS

Other non-current assets consist primarily of long-term accounts receivables, time deposits over one year, prepayments for construction project and equipment.

24 PROVISION FOR ASSETS

	December 31, 2020	Additions	Reversal	Write-off and others	December 31, 2021
Bad debts provision	4,518	714	(321)	(512)	4,399
Including:					
Bad debts provision for accounts receivable	1,140	396	(110)	(12)	1,414
Bad debts provision for other receivables	2,674	256	(211)	(36)	2,683
Bad debts provision for advances to suppliers	704	62	-	(464)	302
Provision for declines in the value of inventories	517	656	(76)	(316)	781
Provision for impairment of long-term equity investments	166	443	-	(4)	605
Provision for impairment of fixed assets	58,337	3,360	-	(1,186)	60,511
Provision for impairment of oil and gas properties	73,757	19,463	-	(4,183)	89,037
Provision for impairment of construction in progress	5,526	3,648	-	(563)	8,611
Provision for impairment of intangible assets	749	47	-	(4)	792
Provision for impairment of goodwill	36	-	-	-	36
Provision for impairment of right-of-use assets	-	8	-	-	8
Provision for impairment of other non-current assets	263	61	(39)	(67)	218
Total	<u>143,869</u>	<u>28,400</u>	<u>(436)</u>	<u>(6,835)</u>	<u>164,998</u>

25 SHORT-TERM BORROWINGS

	December 31, 2021	December 31, 2020
Impawn - RMB	105	-
Guarantee - RMB	85	-
Mortgage-RMB	94	-
Unsecured - RMB	9,013	10,862
Unsecured - USD	26,982	26,542
Unsecured - JPY	2,241	3,316
Unsecured - Other	1,490	634
	<u>40,010</u>	<u>41,354</u>

As of December 31, 2021, the above guaranteed RMB borrowings were mainly guaranteed by minority shareholders of relevant non-wholly-owned subsidiaries.

The weighted average interest rate for short-term borrowings as of December 31, 2021 is 0.99% per annum (December 31, 2020: 1.17%).

26 NOTES PAYABLE

As of December 31, 2021 and December 31, 2020, notes payable mainly represented commercial acceptance. All notes payable are matured within one year.

27 ACCOUNTS PAYABLE

The aging of accounts payable are analysed as follows:

	The Group			
	December 31, 2021		December 31, 2020	
	Amount	Percentage of total balance %	Amount	Percentage of total balance %
Within 1 year	208,032	88	192,416	87
1 to 2 years	11,398	5	11,549	5
2 to 3 years	4,932	2	5,966	3
Over 3 years	12,740	5	10,387	5
	237,102	100	220,318	100

As of December 31, 2021, accounts payable aged over one year amounted to RMB 29,070(December 31, 2020: RMB 27,902), and mainly comprised of unsettled payables to suppliers.

As of December 31, 2021, accounts payable included derivative financial liabilities, which were generated by hedges, of RMB 3,881 (2020: RMB 3,709).

28 CONTRACT LIABILITIES

Contract liabilities mainly represented advances from customers related to the sales of crude oil, natural gas and refined oil, etc. As of December 31, 2021, the contract liabilities aged over one year amounted to RMB 4,505 (December 31, 2020: RMB 3,501). The majority of related obligations were expected to be performed with corresponding revenue recognised within one year. Substantially all of contract liabilities at the beginning of the year has been recognised as revenue for the year ended December 31,2021.

29 EMPLOYEE COMPENSATION PAYABLE

(1) Employee compensation payable listed as below

	December 31, 2020	Additions	Reduction	December 31, 2021
Short-term employee benefits	8,599	136,358	(136,037)	8,920
Post-employment benefits - defined contribution plans	46	20,986	(20,983)	49
Termination benefits	4	145	(143)	6
	8,649	157,489	(157,163)	8,975

The employee compensation payable includes the salary of employees and marketized temporary and seasonal workers, various insurance, housing fund, training expenses and other surcharges.

(2) Short-term employee benefits

	December 31, 2020	Additions	Reduction	December 31, 2021
Wages, salaries and allowances	2,821	102,265	(102,044)	3,042
Staff welfare	-	9,840	(9,840)	-
Social security contributions	537	10,748	(10,738)	547
Including:				
Medical insurance	515	9,806	(9,792)	529
Work-related injury insurance	18	833	(837)	14
Maternity insurance	4	109	(109)	4
Housing provident funds	7	10,185	(10,186)	6
Labour union funds and employee education funds	5,181	3,182	(3,090)	5,273
Other	53	138	(139)	52
	<u>8,599</u>	<u>136,358</u>	<u>(136,037)</u>	<u>8,920</u>

(3) Post-employment benefits-defined contribution plans

	December 31, 2020	Additions	Reduction	December 31, 2021
Basic pension insurance	35	13,630	(13,622)	43
Unemployment insurance	1	480	(480)	1
Annuity	10	6,876	(6,881)	5
	<u>46</u>	<u>20,986</u>	<u>(20,983)</u>	<u>49</u>

As of December 31, 2021, employee benefits payable did not contain any balance in arrears.

30 TAXES PAYABLE

	December 31, 2021	December 31, 2020
Value added tax payable	7,046	5,565
Income tax payable	9,915	3,730
Consumption tax payable	43,803	43,470
Other	16,010	10,959
	<u>76,774</u>	<u>63,724</u>

31 OTHER PAYABLES

As of December 31, 2021, other payables mainly comprised dividends payable, interests payable, deposit, earnest money, caution money and insurance payables. Other payables aged over one year amounted to RMB 4,331 (December 31, 2020: RMB 8,362).

32 CURRENT PORTION OF NON-CURRENT LIABILITIES

	December 31, 2021	December 31, 2020
Long-term borrowings due within one year		
Guarantee - RMB	960	461
Guarantee - USD	14	1,290
Guarantee - Other	1	5
Impawn - RMB	20	3
Mortgage - RMB	4	-
Unsecured - RMB	9,687	16,867
Unsecured - USD	576	10,558
Unsecured - Other	3	4
	11,265	29,188
Debentures payable due within one year	2,000	46,000
Long-term payables due within one year	2	2
Lease liabilities due within one year	6,626	6,579
	19,893	81,769

The guaranteed borrowings were mainly guaranteed by CNPC and its subsidiaries, and the impawn borrowings were mainly impawned by the right to charge for natural gas.

33 LONG-TERM BORROWINGS

	December 31, 2021	December 31, 2020
Guarantee - RMB	1,700	4,009
Guarantee - USD	3,772	1,420
Guarantee - Other	1	6
Impawn - RMB	2,073	1,203
Impawn - USD	2,869	2,284
Mortgage - RMB	1,091	785
Unsecured - RMB	136,200	110,599
Unsecured - USD	58,011	65,068
Unsecured - Other	3,553	3,954
	209,270	189,328
Less: Long-term borrowings due within one year (Note 32)	(11,265)	(29,188)
	198,005	160,140

As of December 31, 2021, the above-mentioned guaranteed borrowings were mainly guaranteed by CNPC and its subsidiaries. The RMB impawn borrowings were mainly impawned by the right to charge for natural gas. The US dollar impawn borrowings were impawned by the deposit of RMB 3,286 (December 31, 2020: RMB 2,586). And the secured liabilities are secured by fixed assets with a book value of RMB 823; Constructions in progress with a book value of RMB 283 and intangible assets with a book value of RMB 54 (December 31, 2020: fixed assets with a book value of RMB 1,303).

The maturities of long-term borrowings at the dates indicated are analysed as follows:

	December 31, 2021	December 31, 2020
Between one and two years	43,308	45,051
Between two and five years	139,644	100,746
After five years	15,053	14,343
	<u>198,005</u>	<u>160,140</u>

The weighted average interest rate for long-term borrowings as of December 31, 2021 is 2.62% (December 31, 2020: 2.88%).

The fair value of long-term borrowings (including long-term borrowings due within one year) amounted to RMB 204,752 (December 31, 2020: RMB 188,071). The fair value are based on discounted cash flows using applicable discount rates based upon the prevailing market rates as at balance sheet date of the Group's availability of financial instruments (terms and characteristics similar to the above-mentioned borrowings).

34 DEBENTURES PAYABLE

Debentures' Name	Issue date	Annual			December 31, 2020	Additions	Reduction	December 31, 2021
		Term of interest	Debentures	rate%				
2012 PetroChina Company Limited Corporate Debentures first tranche - 10 years	November 22,2012	10 - year	4,90	2,000	-	-	-	2,000
2012 PetroChina Company Limited Corporate Debentures first tranche - 15 years	November 22,2012	15 - year	5.04	2,000	-	-	-	2,000
2013 PetroChina Company Limited Corporate Debentures first tranche - 10 years	March 15,2013	10 - year	4.88	4,000	-	-	-	4,000
Kunlun Energy Company Limited priority notes - 10 years	May 13,2015	10 - year	3.75	3,239	-	(69)	-	3,170
2016 PetroChina Company Limited Corporate Debentures first tranche - 5 years	January 19,2016	5 - year	3.03	8,800	-	(8,800)	-	-
2016 PetroChina Company Limited Corporate Debentures first tranche - 10 years	January 19,2016	10 - year	3.50	4,700	-	-	-	4,700
2016 PetroChina Company Limited Corporate Debentures second tranche - 5 years	March 3,2016	5 - year	3.15	12,700	-	(12,700)	-	-
2016 PetroChina Company Limited Corporate Debentures second tranche - 10 years	March 3,2016	10 - year	3.70	2,300	-	-	-	2,300
2016 PetroChina Company Limited Corporate Debentures third tranche - 5 years	March 24,2016	5 - year	3.08	9,500	-	(9,500)	-	-
2016 PetroChina Company Limited Corporate Debentures third tranche - 10 years	March 24,2016	10 - year	3.60	2,000	-	-	-	2,000
2016 PetroChina Company Limited first tranche medium-term notes	May 11,2016	5 - year	3.45	15,000	-	(15,000)	-	-
2019 PetroChina Company Limited first tranche medium-term notes - 5 years	January 24,2019	5 - year	3.45	10,000	-	-	-	10,000
2019 PetroChina Company Limited second tranche medium-term notes - 5 years	January 24,2019	5 - year	3.45	10,000	-	-	-	10,000
2019 PetroChina Company Limited third tranche medium-term notes - 5 years	February 22,2019	5 - year	3.66	10,000	-	-	-	10,000
2019 PetroChina Company Limited fourth tranche medium-term notes - 5 years	February 22,2019	5 - year	3.66	10,000	-	-	-	10,000
2019 PetroChina Company Limited fifth tranche medium-term notes - 5 years	April 23,2019	5 - year	3.96	10,000	-	-	-	10,000
2020 PetroChina Company Limited first tranche medium-term notes - 3 years	April 9,2020	3 - year	2.42	10,000	-	-	-	10,000
2020 PetroChina Company Limited second tranche medium-term notes - 3 years	April 9,2020	3 - year	2.42	10,000	-	-	-	10,000
2020 PetroChina Kunlun Gas Company Limited first tranche medium-term notes - 3 years	April 27,2020	3 - year	2.43	1,000	-	-	-	1,000
Less: Debentures Payable due within one year (Note 32)					(46,000)			(2,000)
					137,239		(46,069)	91,170
						91,239		89,170

The above-mentioned debentures were issued at the par value, without premium or discount.

As of December 31, 2021, the above-mentioned debentures which were guaranteed by CNPC and its subsidiaries amounted to RMB 8,000 (December 31, 2020: RMB 8,000).

The fair value of the debentures amounted to RMB 86,176 (December 31, 2020: RMB 132,323). The fair value are based on discounted cash flows using an applicable discount rate based upon the prevailing market rates as at the balance sheet date of the Group's availability of financial instruments (terms and characteristics similar to the above-mentioned debentures payable).

35 PROVISIONS

	December 31, 2020	Additions	Reduction	December 31, 2021
Asset retirement obligations	114,819	20,769	(6,183)	129,405

Asset retirement obligations are related to oil and gas properties.

36 DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets and liabilities before offset are listed as below:

(a) Deferred tax assets

	December 31, 2021		December 31, 2020	
	Deferred tax assets	Deductible temporary differences	Deferred tax assets	Deductible temporary differences
Impairment, depreciation and depletion of assets	9,157	40,204	7,418	40,836
Wages and welfare	1,405	7,413	1,258	6,072
Carry forward of losses	1,892	7,569	24,646	215,844
Other	14,709	81,534	8,995	50,603
	27,163	136,720	42,317	313,355

At 31 December 2021, certain subsidiaries of the Company did not recognise deferred tax asset of deductible tax losses carried forward of RMB 109,752 (2020: RMB 99,997), of which RMB 13,866 (2020: RMB 10,973) was incurred for the year ended 31 December 2021, because it was not probable that the related tax benefit will be realised. These deductible tax losses carried forward of RMB 525, RMB 400, RMB 585, RMB 3,669 and RMB 104,573 will expire in 2022, 2023, 2024, 2025, 2026 and thereafter, respectively.

(b) Deferred tax liabilities

	December 31, 2021	December 31, 2020	
	Deferred tax liabilities	Taxable temporary differences	Deferred tax liabilities
	Deferred tax liabilities	Taxable temporary differences	Deferred tax liabilities
Depreciation and depletion of assets	16,023	75,204	24,147
Other	25,633	102,670	23,196
	<u>41,656</u>	<u>177,874</u>	<u>47,343</u>
			<u>180,006</u>

Deferred tax assets and liabilities after offset are listed as below:

	December 31, 2021	December 31, 2020
Deferred tax assets	12,161	11,364
Deferred tax liabilities	26,654	16,390

37 SHARE CAPITAL

	December 31, 2021	December 31, 2020
H shares	21,099	21,099
A shares	161,922	161,922
	<u>183,021</u>	<u>183,021</u>

The assets and liabilities injected by CNPC in 1999 had been valued by China Enterprise Appraisal Co., Ltd.. The net assets injected by CNPC had been exchanged for 160 billion state-owned shares of the Company with a par value of RMB 1.00 yuan per share. The excess of the value of the net assets injected over the par value of the state-owned shares had been recorded as capital surplus.

Pursuant to the approval of CSRC, on April 7, 2000, the Company issued 17,582,418,000 foreign capital stock with a par value of RMB 1.00 yuan per share, in which 1,758,242,000 shares were converted from the prior state-owned shares of the Company owned by CNPC.

The above-mentioned foreign capital stock represented by 13,447,897,000 H shares and 41,345,210 ADS (each representing 100 H shares), were listed on the Stock Exchange of Hong Kong Limited and the New York Stock Exchange Inc. on April 7, 2000 and April 6, 2000, respectively.

The Company issued an additional 3,196,801,818 new H shares with a par value of RMB 1.00 yuan per share on September 1, 2005. CNPC also converted 319,680,182 state-owned shares it held into H shares and sold them concurrently with PetroChina's issuance of new H shares.

The Company issued 4,000,000,000 A shares with a par value of RMB 1.00 yuan per share on October 31, 2007. The A shares were listed on the Shanghai Stock Exchange on November 5, 2007.

Following the issuance of the A shares, all the existing state-owned shares issued before November 5, 2007 held by CNPC have been registered with the China Securities Depository and Clearing Corporation Limited as A shares.

38 CAPITAL SURPLUS

	December 31, 2020	Additions	Reduction	December 31, 2021
Capital premium	84,340	-	(15)	84,325
Other capital surplus				
Capital surplus under the old CAS	40,955	-	-	40,955
Other	1,927	168	-	2,095
	<u>127,222</u>	<u>168</u>	<u>(15)</u>	<u>127,375</u>

39 SURPLUS RESERVES

	December 31, 2020	Additions	Reduction	December 31, 2021
Statutory Surplus Reserves	203,517	8,413	-	211,930
Discretionary Surplus Reserves	40	-	-	40
	<u>203,557</u>	<u>8,413</u>	<u>-</u>	<u>211,970</u>

Pursuant to the Company Law of PRC, the Company's Articles of Association and the resolution of Board of Directors, the Company is required to transfer 10% of its net profit to a Statutory Surplus Reserves. Appropriation to the Statutory Surplus Reserves may be ceased when the fund aggregates to 50% of the Company's registered capital. The Statutory Surplus Reserves may be used to make good previous years' losses or to increase the capital of the Company upon approval.

The Discretionary Surplus Reserves is approved by a resolution of shareholders' general meeting after Board of Directors' proposal. The Company may convert its Discretionary Surplus Reserves to make good previous years' losses or to increase the capital of the Company upon approval. The Company has not extracted Discretionary Surplus Reserves for the year ended December 31, 2021 (2020: None).

40 UNDISTRIBUTED PROFITS

	For the year ended December 31, 2021
Undistributed profits at beginning of the period	722,939
Add: Net profit attributable to equity holders of the Company	92,161
Less: Appropriation to statutory surplus reserves	(8,413)
Dividends payable to ordinary shares	(39,866)
Others	134
Undistributed profits at end of the period	<u>766,955</u>

At the 14th meeting of the 8th Board, the Board of Directors proposed final dividends attributable to equity holders of the Company in respect of 2021 of RMB 0.09622 yuan (inclusive of applicable tax) per share, amounting to a total of RMB 17,610 according to the issued 183,021 million shares. The above proposal is subject to the approval of the shareholders' meeting and is not recognised as liabilities as at December 31, 2021.

41 NON-CONTROLLING INTERESTS

Non-controlling interests attributable to non-controlling interests of subsidiaries:

	Percentage of shares held by non-controlling interests %	Profit or loss attributable to non-controlling interests	Dividends declared to non-controlling interests	Balance of non-controlling interests
CNPC Exploration and Development Company Limited	50.00	4,825	1,478	79,481
KunLun Energy Company Limited	45.62	13,821	13,108	45,259
PetroChina Sichuan Petrochemical Company Limited	10.00	338	307	2,503
PetroKazakhstan Inc.	33.00	12	7	1,088
Others				16,978
				145,309

42 OPERATING INCOME AND COST OF SALES

	The Group			
	2021		2020	
	Income	Cost	Income	Cost
Principal operations (b)	2,551,738	2,005,006	1,875,016	1,485,062
Other operations (c)	62,611	66,498	58,820	61,542
Total	2,614,349	2,071,504	1,933,836	1,546,604
Including: Revenue from contracts with customers (a)	2,613,142		1,932,753	
Other revenue	1,207		1,083	
The Company				
	2021		2020	
	Income	Cost	Income	Cost
	1,365,077	986,637	1,053,947	812,770
Principal operations (b)	48,332	49,762	43,575	45,633
Other operations (c)	1,413,409	1,036,399	1,097,522	858,403
Total	1,412,268		1,096,898	
Including: Revenue from contracts with customers (a)	1,141		624	
Other revenue				

(a) Revenue from contracts with customers

2021 Type of contract	Exploration and Production	Refining and Chemicals	Marketing	Natural Gas and Pipeline	Head Office and Other	Total
Type of goods and services						
Crude oil	464,298	-	685,743	-	-	1,150,041
Natural gas	133,148	-	344,196	381,370	-	858,714
Refined products	-	759,912	1,064,890	-	-	1,824,802
Chemical products	-	207,810	48,240	-	-	256,050
Pipeline transportation business	-	-	-	3,360	-	3,360
Non-oil sales in gas stations	-	-	25,148	-	-	25,148
Others	90,539	7,072	1,272	32,208	3,871	134,962
Intersegment elimination	(571,705)	(650,018)	(397,485)	(19,526)	(1,201)	(1,639,935)
Total	116,280	324,776	1,772,004	397,412	2,670	2,613,142
Geographical Region						
China's mainland	68,327	324,776	832,229	397,412	2,670	1,625,414
Others	47,953	-	939,775	-	-	987,728
Total	116,280	324,776	1,772,004	397,412	2,670	2,613,142
2020 Type of contract	Exploration and Production	Refining and Chemicals	Marketing	Natural Gas and Pipeline	Head Office and Other	Total
Type of goods and services						
Crude oil	333,557	-	447,384	-	-	780,941
Natural gas	118,388	-	173,696	294,297	-	586,381
Refined products	-	616,063	822,192	-	-	1,438,255
Chemical products	-	150,296	30,344	-	-	180,640
Pipeline transportation business	-	-	-	52,273	-	52,273
Non-oil sales in gas stations	-	-	22,360	-	-	22,360
Others	78,631	8,254	1,300	23,800	3,515	115,500
Intersegment elimination	(437,670)	(492,667)	(276,503)	(35,437)	(1,320)	(1,243,597)
Total	92,906	281,946	1,220,773	334,933	2,195	1,932,753
Geographical Region						
China's mainland	27,028	281,946	554,620	334,933	2,195	1,200,722
Others	65,878	-	666,153	-	-	732,031
Total	92,906	281,946	1,220,773	334,933	2,195	1,932,753

Type of contract	The Company	
	2021	2020
Type of goods and services		
Crude oil	369,032	258,520
Natural gas	472,398	412,096
Refined products	1,300,678	995,669
Chemical products	198,608	149,677
Pipeline transportation business	-	7,148
Non-oil sales in gas stations	21,838	19,098
Others	66,918	51,526
Intersegment elimination	(1,017,204)	(796,836)
Total	<u>1,412,268</u>	<u>1,096,898</u>

Revenue from contracts with customers is mainly recognised at a point in time.

(b) Income and cost of sales from principal operations

	The Group			
	2021		2020	
	Income	Cost	Income	Cost
Exploration and Production	669,537	490,797	512,349	401,189
Refining and Chemicals	967,723	698,114	766,358	566,858
Marketing	2,143,071	2,075,302	1,473,620	1,420,966
Natural Gas and Pipeline	410,226	387,041	362,559	331,063
Head Office and Other	300	223	493	296
Intersegment elimination	(1,639,119)	(1,646,471)	(1,240,363)	(1,235,310)
Total	<u>2,551,738</u>	<u>2,005,006</u>	<u>1,875,016</u>	<u>1,485,062</u>

	The Company			
	2021		2020	
	Income	Cost	Income	Cost
Exploration and Production	531,690	422,015	394,614	337,664
Refining and Chemicals	777,939	557,165	572,593	405,607
Marketing	725,472	685,693	572,754	550,102
Natural Gas and Pipeline	346,880	341,770	308,217	311,528
Head Office and Other	300	789	493	296
Intersegment elimination	(1,017,204)	(1,020,795)	(794,724)	(792,427)
Total	<u>1,365,077</u>	<u>986,637</u>	<u>1,053,947</u>	<u>812,770</u>

(c) Income and cost of sales from other operations

	The Group			
	2021		2020	
	Income	Cost	Income	Cost
Sale of materials	9,802	9,428	9,634	9,454
Non-oil sales in gas stations	25,148	23,083	22,360	20,537
Other	27,661	33,987	26,826	31,551
Total	62,611	66,498	58,820	61,542

	The Company			
	2021		2020	
	Income	Cost	Income	Cost
Sale of materials	8,423	7,967	9,230	8,905
Non-oil sales in gas stations	21,838	20,070	19,098	17,632
Other	18,071	21,725	15,247	19,096
Total	48,332	49,762	43,575	45,633

43 TAXES AND SURCHARGES

	2021	2020
Consumption tax	161,623	145,525
Resource tax	23,723	18,468
City maintenance and construction tax	16,078	13,647
Educational surcharge	11,660	9,882
Urban and township land use tax	3,572	3,588
Crude oil special gain levy	4,655	178
Others	5,353	3,616
	226,664	194,904

44 SELLING EXPENSES

	2021	2020
Employee compensation costs	24,105	22,775
Depreciation, depletion and amortisation	15,490	15,220
Transportation expenses	14,101	15,618
Lease, packing, warehouse storage expenses	3,411	3,463
Others	14,188	14,400
	71,295	71,476

45 GENERAL AND ADMINISTRATIVE EXPENSES

	2021	2020
Employee compensation costs	31,902	28,905
Depreciation, depletion and amortisation	6,913	6,953
Lease, packing, warehouse storage expenses	754	972
Safety fund	5,239	4,457
Technology service expense	1,368	1,271
Other taxes	921	459
Others	4,604	12,298
	<u>51,701</u>	<u>55,315</u>

46 RESEARCH AND DEVELOPMENT EXPENSES

	2021	2020
Employee compensation costs	8,030	6,989
Depreciation, depletion and amortisation	1,478	1,472
Fuel and material consumption	798	941
Others	6,423	6,344
	<u>16,729</u>	<u>15,746</u>

47 FINANCE EXPENSES

	2021	2020
Interest expenses	20,747	27,423
Include: Interest expenditure on lease liabilities	5,419	6,297
Less: Capitalized interest	(1,008)	(895)
Less: Interest income	(2,984)	(3,023)
Exchange losses	12,839	14,279
Less: Exchange gains	(13,377)	(14,387)
Others	826	907
	<u>17,043</u>	<u>24,304</u>

48 OTHER INCOME

	2021	2020
Refund of import value-added tax, relating to the import of natural gas	8,606	3,570
Refund of value-added tax, relating to the change from business tax to value-added tax	153	1,976
Others	5,492	4,343
	<u>14,251</u>	<u>9,889</u>

49 INVESTMENT INCOME

	The Group	
	2021	2020
Share of profit of associates and joint ventures	13,267	3,533
Gain on Pipeline restructuring	18,320	46,946
Gains on disposal of other subsidiaries	3,575	1,242
Gains on investments in other equity instruments	17	25
Other investment income	210	99
	35,389	51,845

	The Company	
	2021	2020
Dividends declared by subsidiaries	15,082	25,664
Share of profit of associates and joint ventures	10,604	5,314
Gains on disposal of subsidiaries	335	83,425
Gains on investments in other equity instruments	15	15
Other investment income/(loss)	8	(6)
	26,044	114,412

50 CREDIT LOSSES

	2021	2020
Accounts receivable	286	350
Other receivables	45	(9)
Others	22	-
	353	341

51 ASSET IMPAIRMENT LOSSES

	2021	2020
Impairment losses for bad debts provision	62	2
Impairment losses for declines in the value of inventories	580	8,151
Impairment losses for fixed assets and oil and gas properties	22,823	15,072
Impairment losses for construction in progress	3,648	295
Impairment losses for other non-current assets	498	-
	27,611	23,520

52 GAINS FROM ASSET DISPOSALS

	2021	2020	Amount recognised in non-recurring profit or loss in 2021
Gains from disposal of fixed assets and oil and gas properties	685	276	685
Losses from disposal of construction in progress	(25)	(1)	(25)
Gains from disposal of intangible assets	146	131	146
Gains from disposal of other long-term assets	285	1,017	285
	1,091	1,423	1,091

53 NON-OPERATING INCOME AND EXPENSES

(a) Non-operating income

	2021	2020	Amount recognised in non-recurring profit or loss in 2021
Government grants	837	1,347	837
Other	2,146	2,762	2,146
	2,983	4,109	2,983

(b) Non-operating expenses

	2021	2020	Amount recognised in non-recurring profit or loss in 2021
Fines	346	30	346
Donation	626	398	626
Extraordinary loss	1,239	815	1,239
Damage or scrapping of non-current assets	20,637	5,674	20,637
Other	4,121	5,906	4,121
	26,969	12,823	26,969

54 TAXATION

	2021	2020
Income taxes	33,822	14,922
Deferred taxes	9,685	7,666
	43,507	22,588

The tax on the Group's profit before taxation differs from the theoretical amount that would arise using the corporate income tax rate in the PRC applicable to the Group as follows:

	2021	2020
Profit before taxation	158,194	56,069
Tax calculated at a tax rate of 25%	39,549	14,017
Tax return true-up	(256)	256
Effect of income taxes from international operations different from taxes at the PRC statutory tax rate	2,692	1,522
Effect of preferential tax rate	(8,603)	(1,312)
Tax effect of income not subject to tax	(10,303)	(3,612)
Tax effect of expenses not deductible for tax purposes	15,789	5,455
Tax effect of temporary differences and losses not recognised as deferred tax assets	4,639	6,262
Taxation	<u>43,507</u>	<u>22,588</u>

55 EARNINGS PER SHARE

Basic and diluted earnings per share for the year ended December 31, 2021 and 2020 have been computed by dividing profit attributable to owners of the Company by the 183,021 million shares issued and outstanding during the period.

There are no potential dilutive ordinary shares, and the diluted earnings per share are equal to the basic earnings per share.

56 OTHER COMPREHENSIVE INCOME

Other comprehensive income attributable to equity holders of the Company	December 31, 2020	Additions	Reduction	December 31, 2021
Items that will not be reclassified to profit or loss				
Including: Changes in fair value of investments in other equity instruments	301	135	(56)	380
Items that may be reclassified to profit or loss				
Including: Other comprehensive income recognized under equity method	462	195	(199)	458
Translation differences arising from translation of foreign currency financial statements	(32,848)	630	(3,314)	(35,532)
Others	(43)	-	-	(43)
Total	<u>(32,128)</u>	<u>960</u>	<u>(3,569)</u>	<u>(34,737)</u>

57 SUPPLEMENT TO INCOME STATEMENT

Expenses are analysed by nature:

	2021	2020
Operating income	2,614,349	1,933,836
Less: Changes in inventories of finished goods and work in progress	(11,078)	(33,454)
Raw materials and consumables used	(1,758,941)	(1,234,343)
Employee benefits expenses	(154,835)	(147,604)
Depreciation, depletion and amortisation expenses	(204,743)	(198,511)
Loss of credit losses	(353)	(341)
Assets impairment losses	(27,611)	(23,520)
Lease expenses	(2,645)	(3,362)
Finance expenses	(17,043)	(24,304)
Other expenses	(254,920)	(203,614)
Operating profit	<u>182,180</u>	<u>64,783</u>

58 NOTES TO CONSOLIDATED AND COMPANY CASH FLOWS

(a) Reconciliation from the net profit to the cash flows from operating activities

	The Group		The Company	
	2021	2020	2021	2020
Net profit	114,687	33,481	84,133	62,745
Add: Asset impairment losses	27,611	23,520	6,761	13,110
Credit losses	353	341	905	143
Depreciation and depletion of fixed asset and oil and gas properties	184,636	178,648	124,072	116,450
Depreciation and depletion of right-of-use assets	11,196	11,272	6,278	6,630
Amortisation of intangible assets	5,483	5,078	4,394	4,130
Amortisation of long-term prepaid expenses	3,428	3,513	2,844	2,652
Gains on disposal of fixed assets, oil and gas properties, intangible assets and other long-term assets	(1,091)	(1,423)	(931)	(1,302)
Damage or scrapping of fixed assets and oil and gas properties	20,637	5,674	16,515	1,416
Capitalised exploratory costs charged to expense	12,557	8,934	8,515	8,456
Safety fund reserve	(1,750)	(1,505)	121	(1,805)
Finance expenses	17,043	23,505	14,972	19,926
Investment income	(35,389)	(51,845)	(26,044)	(114,412)
Changes in deferred taxation	9,685	7,666	9,911	12,714
(Acrease) / Decrease in inventories	(15,889)	43,645	(18,223)	39,272
(Acrease) / Decrease in operating receivables	(8,265)	14,751	(2,348)	554
(Dcrease) / Increase in operating payables	(3,463)	13,320	8,895	20,871
Net cash flows from operating activities	<u>341,469</u>	<u>318,575</u>	<u>240,770</u>	<u>191,550</u>

(b) Net increase/(decrease) in cash and cash equivalents

	The Group		The Company	
	2021	2020	2021	2020
Cash at the end of the period	136,789	118,631	31,955	40,787
Less: Cash at the beginning of the period	(118,631)	(86,409)	(40,787)	(4,636)
Add: Cash equivalents at the end of the period	-	-	-	-
Less: Cash equivalents at the beginning of the period	-	-	-	-
Increase /(decrease) in cash and cash equivalents	<u>18,158</u>	<u>32,222</u>	<u>(8,832)</u>	<u>36,151</u>

(c) Cash and cash equivalents

	The Group		The Company	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Cash at bank and on hand	163,536	145,950	35,505	42,787
Less: Time deposits with maturities over 3 months	(26,747)	(27,319)	(3,550)	(2,000)
Cash and cash equivalents at the end of the period	<u>136,789</u>	<u>118,631</u>	<u>31,955</u>	<u>40,787</u>

59 SEGMENT REPORTING

The Group is principally engaged in a broad range of petroleum related products, services and activities. The Group's operating segments comprise: Exploration and Production, Refining and Chemicals, Marketing, and Natural Gas and Pipeline. On the basis of these operating segments, the management of the Company assesses the segmental operating results and allocates resources. Sales between operating segments are conducted principally at market prices. Additionally, the Group has presented geographical information based on entities located in regions with similar risk profile.

The Exploration and Production segment is engaged in the exploration, development, transportation, production and marketing of crude oil and natural gas.

The Refining and Chemicals segment is engaged in the refining of crude oil and petroleum products, production and marketing of primary petrochemical products, and derivative petrochemical products and other chemical products.

The Marketing segment is engaged in the marketing of refined products and non-oil products, and trading business.

The Natural Gas and Pipeline segment is engaged in the transportation and sale of natural gas.

The Head Office and Other segment relates to cash management and financing activities, the corporate center, research and development, and other business services supporting the other operating business segments of the Group.

The accounting policies of the operating segments are the same as those described in Note 4 - "Principal Accounting Policies and Accounting Estimates".

(1) Operating segments

(a) Segment information as of and for the year ended December 31, 2021 is as follows:

	Exploration and Production	Refining and Chemicals	Marketing	Natural Gas and Pipeline	Head Office and Other	Total
Revenue	688,334	974,972	2,170,062	417,022	3,894	4,254,284
Less: Intersegment revenue	(571,705)	(650,018)	(397,485)	(19,526)	(1,201)	(1,639,935)
Revenue from external customers	116,629	324,954	1,772,577	397,496	2,693	2,614,349
Segment expenses (i)	(450,703)	(356,129)	(1,496,597)	(102,802)	(17,411)	(2,423,642)
Segment result	108,092	56,697	15,864	23,597	(13,543)	190,707
Unallocated income and expenses					(8,527)	
Operating profit						182,180
Depreciation, depletion and amortisation	155,111	23,784	18,889	5,111	1,848	204,743
Asset impairment losses	20,670	4,999	1,728	214	-	27,611
Credit losses	(188)	28	482	28	3	353
Capital expenditures	178,259	54,487	10,982	6,750	700	251,178
December 31, 2021						
Segment assets	1,435,629	459,930	539,966	334,545	1,604,801	4,374,871
Other assets						17,014
Elimination of intersegment balances (ii)					(1,889,352)	
Total assets						2,502,533
Segment liabilities	550,365	199,159	349,609	128,490	566,602	1,794,225
Other liabilities						103,428
Elimination of intersegment balances (ii)					(804,244)	
Total liabilities						1,093,409

(b) Segment information as of and for the year ended December 31, 2020 is as follows:

	Exploration and Production	Refining and Chemicals	Marketing	Natural Gas and Pipeline	Head Office and Other	Total
Revenue	530,807	774,775	1,497,533	370,771	3,547	3,177,433
Less: Intersegment revenue	(437,670)	(492,667)	(276,503)	(35,437)	(1,320)	(1,243,597)
Revenue from external customers	93,137	282,108	1,221,030	335,334	2,227	1,933,836
Segment expenses (i)	(372,918)	(401,901)	(981,540)	(96,718)	(17,283)	(1,870,360)
Segment result	47,591	(426)	826	30,132	(14,647)	63,476
Unallocated income and expenses						1,307
Operating profit						64,783
Depreciation, depletion and amortisation	151,722	23,906	17,829	19,478	1,825	214,760
Asset impairment losses	19,551	252	3,709	8	-	23,520
Credit losses	18	42	171	110	-	341
Capital expenditures	186,620	21,810	16,294	21,143	626	246,493
December 31, 2020						
Segment assets	1,494,229	433,364	508,232	356,082	1,660,460	4,452,367
Other assets						17,361
Elimination of intersegment balances (ii)						(1,981,328)
Total assets						2,488,400
Segment liabilities	658,521	186,332	321,460	192,456	573,340	1,932,109
Other liabilities						80,114
Elimination of intersegment balances (ii)						(890,708)
Total liabilities						1,121,515

(i) Segment expenses include cost of sales, taxes and surcharges, selling expenses, general and administrative expenses, research and development expenses, other income.

(ii) Elimination of intersegment balances represents elimination of intersegment accounts and investments.

(2) Geographical information

Revenue from external customers	2021	2020
China's mainland	1,626,616	1,212,821
Other	987,733	721,015
	<u>2,614,349</u>	<u>1,933,836</u>

Non-current assets (i)	December 31, 2021	December 31, 2020
China's mainland	1,838,768	1,789,455
Other	165,117	190,785
	<u>2,003,885</u>	<u>1,980,240</u>

(i) Non-current assets mainly include non-current assets other than financial instruments and deferred tax assets.

60 FINANCIAL RISK MANAGEMENT

1. Financial risk

The Group's activities expose it to a variety of financial risks, including market risk, credit risk and liquidity risk.

(1) Market risk

Market risk is the possibility that changes in foreign exchange rates, interest rates and the prices of crude oil and gas products will adversely affect the value of assets, liabilities and expected future cash flows.

(a) Foreign exchange risk

The Group conducts its domestic business primarily in RMB, but maintains a portion of its assets in other currencies to pay for imported crude oil, natural gas, imported equipment and other materials and to meet foreign currency financial liabilities. The Group is exposed to currency risks arising from fluctuations in various foreign currency exchange rates against the RMB. The RMB is not a freely convertible currency and is regulated by the PRC government. Limitations on foreign exchange transactions imposed by the PRC government could cause future exchange rates to vary significantly from current or historical exchange rates.

Additionally, the Group operates internationally and foreign exchange risk arises from future acquisitions and commercial transactions, recognised assets and liabilities and net investments in foreign operations. Certain entities in the Group might use currency derivatives to manage such foreign exchange risk.

(b) Interest rate risk

The Group has no significant interest rate risk on interest-bearing assets. The Group's exposure to interest rate risk arises from its borrowings(including debentures payable). The Group's borrowings at floating rates expose the Group to cash flow interest rate risk and its borrowings at fixed rates expose the Group to fair value interest rate risk. However, the exposure to interest rate risk is not material to the Group. A detailed analysis of the Group's borrowings and debentures payable, together with their respective interest rates and maturity dates, is included in Note 33 and 34.

(c) Price risk

The Group is engaged in a wide range of oil and gas products-related activities. Prices of oil and gas products are affected by a wide range of global and domestic factors which are beyond the control of the Group. The fluctuations in such prices may have favourable or unfavourable impacts on the Group.

The Group uses derivative financial instruments, including commodity futures, commodity swaps and commodity options, to hedge some price risks efficiently.

As at 31 December 2021, the Group had certain commodity contracts of crude oil, refined oil products and chemical products designated as hedges. As at 31 December 2021, the fair value of such derivative hedging financial instruments is derivative financial assets of RMB 3,913 (2020: RMB 1,411) and derivative financial liabilities of RMB 3,881 (2020: RMB 3,709).

As at 31 December 2021, it is estimated that a general increase/decrease of USD 10 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 profit for the year by approximately RMB 2,104 (2020: decrease/increase RMB 2,578), there is no effect on the Group's other reserves (2020:Nil). 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.

(2) Credit risk

Credit risk arises from cash at bank and on hand and credit exposure to customers with outstanding receivable balances.

A substantial portion of the Group's cash at bank and on hand are placed with the major state-owned banks and financial institutions in China and management believes that the credit risk is low.

The Group performs ongoing assessment of the credit quality of its customers, and sets appropriate credit limits taking into account the financial position and past history of defaults of customers. The aging analysis of accounts receivable and related provision for bad debts are presented in Note 8.

The carrying amounts of cash at bank and on hand, accounts receivable, other receivables and receivables financing included in the consolidated balance sheet represent the Group's maximum exposure to credit risk. No other financial assets carry a significant exposure to credit risk.

The Group has no significant concentration of credit risk.

(3) Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting obligations associated with financial liabilities.

In managing its liquidity risk, the Group has access to funding at market rates through equity and debt markets, including using undrawn committed borrowing facilities to meet foreseeable borrowing requirements.

Given the low level of gearing and continued access to funding, the Group believes that its liquidity risk is not material.

Analysis of the Group's long-term borrowings, debentures payable and lease liabilities based on the remaining period at the balance sheet date to the contractual maturity dates are presented in Note 33, 34 and 19.

2. Capital management

The Group's objectives when managing capital are to safeguard its ability to continue as a going concern, optimise returns for equity holders and to minimise its cost of capital. In meeting its objectives of managing capital, the Group may issue new shares, adjust its debt levels or the mix between short-term and long-term borrowings.

The Group monitors capital on the basis of the gearing ratio which is calculated as interest-bearing borrowings/(interest-bearing borrowings + total equity), interest-bearing borrowings include short-term and long-term borrowings, debentures payable and ultra short-term financing bond. The gearing ratio at December 31, 2021 is 19.46% (December 31, 2020: 21.30%).

3. Fair value estimation

The methods and assumptions applied in determining the fair value of each class of financial assets and financial liabilities of the Group at December 31, 2021 and 2020 are disclosed in the respective accounting policies.

The carrying amounts of the following financial assets and financial liabilities approximate their fair value as all of them are short-term in nature: cash at bank and on hand, accounts receivable, other receivables, receivable financing, accounts payable, other payables and short-term borrowings. The fair values of fixed rate long-term borrowings are likely to be different from their respective carrying amounts. Analysis of the fair values and carrying amounts of long-term borrowings and debentures payable are presented in Note 33 and Note 34, respectively.

The Group's investments in derivative financial instruments, receivables financing and other equity instruments are measured at fair value on the balance sheet date. The fair value of derivative financial instruments are mainly categorised into Level 1 and Level 2 of the fair value hierarchy, which are based on the unadjusted quoted prices in active markets for identical assets or liabilities as inputs used in the valuation techniques, or the inputs other than quoted prices included within Level 1 that are observable either directly or indirectly. Receivables financing are mainly categorised into Level 3 of the fair value hierarchy, which are based on that Receivables financing are mainly short-term bills of acceptance issued by banks, their fair values approximate the face values of the bills. The investments in other equity instruments are measured at fair value at the end of the reporting period. The investments in other equity instruments are mainly categorised into Level 1 of the fair value hierarchy, which are based on the unadjusted quoted prices in active markets for identical assets or liabilities as inputs used in the valuation techniques.

As of December 31, 2021, financial assets continuing to be measured at fair value are listed in three levels as follows:

	Level 1 RMB	Level 2 RMB	Level 3 RMB	Total RMB
Financial assets				
Derivative financial assets—				
Derivative financial assets	2,625	1,288	-	3,913
Receivables financing—				
Receivables financing	-	-	3,975	3,975
Investments in other equity instruments—				
other equity instruments	905	-	271	1,176
Total	3,530	1,288	4,246	9,064

As of December 31, 2021, financial liabilities continuing to be measured at fair value are listed in three levels as follows:

	Level 1 RMB	Level 2 RMB	Level 3 RMB	Total RMB
Financial liabilities				
Derivative financial liabilities—				
Derivative financial liabilities	726	3,155	-	3,881

As of December 31, 2020, financial assets continuing to be measured at fair value are listed in three levels as follows:

	Level 1 RMB	Level 2 RMB	Level 3 RMB	Total RMB
Financial assets				
Derivative financial assets—				
Derivative financial assets	238	1,173	-	1,411
Receivables financing—				
Receivables financing	-	-	8,076	8,076
Investments in other equity instruments—				
other equity instruments	653	-	257	910
Total	891	1,173	8,333	10,397

As of December 31, 2020, financial liabilities continuing to be measured at fair value are listed in three levels as follows:

	Level 1 RMB	Level 2 RMB	Level 3 RMB	Total RMB
Financial liabilities				
Derivative financial liabilities—				
Derivative financial liabilities	2,813	896	-	3,709

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 bills receivable classified as Level 3 financial assets.

61 RELATED PARTIES AND RELATED PARTY TRANSACTIONS

(1) Parent Company

(a) General information of parent company

CNPC, the immediate parent of the Company, is a limited liability company directly controlled by the PRC government.

Type of Legal Entity	Place of incorporation	Legal representative	Principal activities
China National Petroleum Corporation	Limited liability company (wholly state-owned)	PRC Dai Houliang	Oil and gas exploration and development, refining and petrochemical, oil product marketing, oil and gas storage and transportation, oil trading, construction and technical services and petroleum equipment manufacturing etc.

(b) Equity interest and voting rights of parent company

	December 31, 2021		December 31, 2020	
	Equity interest %	Voting rights %	Equity interest %	Voting rights %
China National Petroleum Corporation	80.41	80.41	80.41	80.41

(2) Subsidiaries

Details about subsidiaries and related information are disclosed in Note 6(1).

(3) Nature of related parties that are not controlled by the Company

Names of related parties	Relationship with the Company
China Oil & Gas Piping Network Corporation	Associate
China Petroleum Finance Co., Ltd.	Associate
CNPC Captive Insurance Co., Ltd.	Associate
China National Aviation Fuel Group Limited	Associate
China Marine Bunker (PetroChina) Co., Ltd.	Joint venture
Mangistau Investment B.V.	Joint venture
Trans-Asia Gas Pipeline Co., Ltd.	Joint venture
CNPC Bohai Drilling Engineering Co., Ltd.	Fellow subsidiary of CNPC
CNPC Oriental Geophysical Exploration Co., Ltd.	Fellow subsidiary of CNPC
CNPC Chuanqing Drilling Engineering Co., Ltd.	Fellow subsidiary of CNPC
Daqing Petroleum Administrative Bureau Co., Ltd.	Fellow subsidiary of CNPC
Liaohai Petroleum Exploration Bureau Co., Ltd.	Fellow subsidiary of CNPC
China Petroleum Pipeline Bureau Co., Ltd.	Fellow subsidiary of CNPC
CNPC Transportation Co., Ltd.	Fellow subsidiary of CNPC
CNPC Material Company Co., Ltd.	Fellow subsidiary of CNPC
China National Oil and Gas Exploration and Development Corporation Co., Ltd.	Fellow subsidiary of CNPC
China National United Oil Co., Ltd.	Fellow subsidiary of CNPC
CNPC Shared Operation Co. LTD	Fellow subsidiary of CNPC

(4) Summary of significant related party transactions

(a) Related party transactions with CNPC and its subsidiaries:

The Company and CNPC entered into a new Comprehensive Products and Services Agreement on August 27, 2020 for a period of three years effective from January 1, 2021. The Comprehensive Products and Services Agreement provides for a range of products and services which may be required and requested by either party. The products and services to be provided by CNPC and its fellow subsidiaries to the Group under the Comprehensive Products and Services Agreement include construction and technical services, production services, supply of material services, social services, ancillary services and financial services. The products and services required and requested by either party are provided in accordance with (1) government-prescribed prices; or (2) where there is no government-prescribed price, with reference to relevant market prices; or (3) where neither (1) nor (2) is applicable, then actual cost incurred or the agreed contractual prices are used.

On August 25, 2011, based on the Land Use Rights Leasing Contract signed for a period of 50 years from 2000, the Company and CNPC entered into a supplemental agreement to the Land Use Rights Leasing Contract which took effect on January 1, 2012. The expiry date of the supplemental agreement is the same as the Land Use Rights Leasing Contract, which is in 2050. The Company and CNPC may adjust area and rental payable for the leased land parcels every three years taking into consideration of production and operations of the Company and the prevailing market price. On August 27, 2020, the Company and CNPC each issued a confirmation letter to the Land Use Rights Leasing Contract, which adjusted the rental payable and the area for the leased land parcels with effect from January 1, 2021. The Company agreed to rent from CNPC and its fellow subsidiaries parcels of land with an aggregate area of approximately 1,142 million square metres with annual rental payable (exclusive of tax and government charges) approximately RMB 5,673 based on the area of leased land parcels and the current market conditions. Apart from the annual rental payable and area for the leased parcels, the other terms in the Land Use Rights Leasing Contract and supplemental agreement remained.

On August 24, 2017, the Company entered into a new Buildings Leasing Contract with CNPC, which took effect on January 1, 2018 for a period of 20 years. The Company and CNPC may adjust the area of buildings leased and the rental fees every three years as appropriate by reference to the production and operations of the Company and the prevailing market prices, but the adjusted rental shall not exceed the comparable fair market prices. On August 27, 2020, the Company and CNPC issued a confirmation letter to the Buildings Leasing Contract, which adjusted the annual rental payable and the area for the leased which took effect on January 1, 2021. Buildings covering an aggregate area of 1,287,486 square meters were leased at annual rental payable approximately RMB 713 in accordance with the confirmed rental area and the current property market conditions. Apart from the annual rental payable and area of the leased building, the other terms in the Building Leasing Contract remains unchanged.

	Notes	2021	2020
Sales of goods and services rendered to CNPC and its subsidiaries	(1)	69,058	63,623
Purchase of goods and services from CNPC and its subsidiaries:			
Fees paid for construction and technical services	(2)	162,773	140,241
Fees for production services	(3)	129,264	110,078
Social services charges	(4)	1,965	1,791
Ancillary services charges	(5)	1,649	1,350
Material supply services	(6)	27,802	29,059
Interest income	(7)	270	381
Interest expense	(8)	3,490	7,165
Other financial service expense	(9)	1,388	886
Rental and other expenses paid to CNPC and its fellow subsidiaries	(10)	6,797	8,294
Purchases of assets from CNPC and its subsidiaries	(11)	1,051	767

Notes:

- (1) Primarily crude oil, natural gas, refined products, chemical products and the supply of water, electricity, gas, heat, measurement, quality inspection, etc.
- (2) Construction and technical services comprise geophysical survey, drilling, well cementing, logging, well testing, oil testing, oilfield construction, refineries and chemical plants construction, engineering design and supervision, repair of equipment, etc.
- (3) Production services comprise the repair of machinery and equipment, supply of water, electricity and gas, provision of services such as communications, transportation, fire fighting, asset leasing, environmental protection and sanitation, maintenance of roads, manufacture of replacement parts and machinery, etc.
- (4) Social services comprise mainly security service, education, hospitals, preschool, etc.
- (5) Ancillary services comprise mainly property management and provision of training centres, guesthouses, canteens, public shower rooms, etc.
- (6) Material supply services comprise mainly purchase of materials, quality control, storage of materials and delivery of materials, etc.
- (7) The bank deposits in CNPC and its fellow subsidiaries as of December 31, 2021 were RMB 36,489(December 31, 2020: RMB 40,377).
- (8) The loans from CNPC and its fellow subsidiaries including long-term borrowings, long-term borrowings due within one year and short-term borrowings as of December 31, 2021 were RMB 133,800(December 31, 2020: RMB 96,298).
- (9) Other financial service expense primarily refers to expense of insurance and other services.
- (10) Rental and other expenses paid to CNPC and its subsidiaries refer to: 1) Rental was calculated and paid in accordance with the Building and Land Use Rights leasing contract between the Group and CNPC. 2) Rents and other payments (including all rents, leasing service fees and prices for exercising purchase options) were paid according to other lease agreements entered into by the Group and CNPC and its fellow subsidiaries.
- (11) Purchases of assets principally represent the purchases of manufacturing equipment, office equipment and transportation equipment.

(b) Related party transactions with associates and joint ventures:

The transactions between the Group and its associates and joint ventures are conducted at government-prescribed prices or market prices.

	2021	2020
(a) Sales of goods		
- Crude Oil	16,824	19,302
- Refined products	27,540	20,264
- Chemical products	760	1,169
- Natural Gas	9,475	9,729
(b) Sales of services	243	41
(c) Purchases of goods	20,688	19,554
(d) Purchases of services	72,420	19,785

(5) Commissioned loans

The Company with its subsidiaries, the Group with CNPC and its subsidiaries, commissioned CP Finance and other financial institutions to provide loans to each other, charging interest in accordance with the prevailing interest rates. Loans between the Company and its subsidiaries have been eliminated in the consolidated financial statements. As of December 31, 2021, the eliminated commissioned loans include the loans provided by the Company to its subsidiaries amounted to RMB 150(December 31, 2020: RMB 655) and the loans provided to the Company by its subsidiaries amounted to RMB 18,306(December 31, 2020: RMB 19,185).

(6) Guarantees

CNPC and its subsidiaries provided guarantees of part of loans and debentures for the Group, see Note 32, Note 33 and Note 34.

(7) Receivables and payables with related parties

(a) Receivables from related parties

	December 31, 2021	December 31, 2020
CNPC and its subsidiaries		
Accounts receivable	5,832	7,814
Receivables financing	1,850	-
Advances to suppliers	5,285	11,497
Other receivables	2,551	4,380
Other non-current assets	7,343	8,670
Associates and joint ventures		
Accounts receivable	1,568	842
Advances to suppliers	248	314
Other receivables	10,096	7,926
Other current assets	7,245	10,946
Other non-current assets	8,353	6,581

As of December 31, 2021, the provisions for bad debts of the receivables from related parties amounted to RMB 505 (December 31, 2020: RMB 5).

As of December 31, 2021, the receivables from related parties represented 35% (December 31, 2020: 42%) of total receivables.

(b) Payables to related parties

	December 31, 2021	December 31, 2020
CNPC and its subsidiaries		
Notes payable	348	992
Accounts payable	44,183	48,967
Other payables	2,746	11,159
Contract liabilities	581	2,671
Lease liabilities (including lease liabilities due within one year)	101,453	99,725
Associates and joint ventures		
Accounts payable	2,042	2,930
Other payables	207	3,214
Contract liabilities	32	21

As of December 31, 2021, the payables to related parties represented 31% (December 31, 2020: 33%) of total payables.

(8) Key management personnel compensation

	2021 RMB'000	2020 RMB'000
Key management personnel compensation	16,711	17,936

62 CONTINGENT LIABILITIES

(1) Bank and other guarantees

At December 31, 2021 and 2020, the Group did not guarantee related parties or third parties any significant borrowings or others.

(2) Environmental liabilities

The PRC has enacted comprehensive environmental laws and regulations that affect the operation of the oil and gas industry. Management believes that there are no probable liabilities under existing legislation, except for the amounts which have already been reflected in the consolidated financial statements, which may have a material adverse effect on the financial position of the Group.

As of December 31, 2021, the amounts of asset retirement obligations which have already been reflected in the consolidated financial statements relating to environmental liability were RMB 129,405 (Note 35).

(3) Legal contingencies

During the reporting period, the Group has complied with domestic and overseas laws and regulatory requirements. Notwithstanding certain insignificant lawsuits as well as other proceedings outstanding of the group, management believes that any resulting liabilities will not have a material adverse effect on the financial position of the Group.

(4) Group insurance

The Group has insurance coverage for certain assets that are subject to significant operating risks, third-party liability insurance against claims relating to personal injury, property and environmental damages that result from accidents, and employer liabilities insurance. The potential effect on the financial position of the Group of any liabilities resulting from future uninsured incidents cannot be estimated by the Group at present.

63 COMMITMENTS

(1) Capital commitments

At December 31, 2021, the Group's capital commitments contracted but not provided for, mainly relating to property, plant and equipment, were RMB 882 (December 31, 2020: RMB 714).

These capital commitments are transactions mainly with CNPC and its fellow subsidiaries.

(2) Exploration and production licenses

The Company is obligated to make annual payments with respect to its exploration and production licenses to the Ministry of Natural Resources. Payments incurred were RMB 744 for the year ended December 31, 2021 (2020: RMB 700).

According to the current policy, estimated annual payments for the next five years are as follows:

	December 31, 2021	December 31, 2020
Within one year	500	800
Between one and two years	500	800
Between two and three years	500	800
Between three and four years	500	800
Between four and five years	500	800

FINANCIAL STATEMENTS SUPPLEMENTARY INFORMATION

1 NON-RECURRING PROFIT/LOSS ITEMS

	2021	2020
Losses on disposal of non-current assets	(19,546)	(4,251)
Government grants recognised in the income statement	837	1,347
Reversal of provisions for bad debts against receivables	321	95
Net gains arising from the disposal of associates and joint ventures	(4)	(5)
Gain on Pipeline restructuring	18,320	46,946
Gains on disposal of other subsidiaries	3,575	1,242
Other non-operating income and expenses	(4,186)	(4,387)
	<hr style="border-top: 1px solid black;"/>	<hr style="border-top: 1px solid black;"/>
(683)	40,987	
Tax impact of non-recurring profit/loss items	1,226	(9,959)
Impact of non-controlling interests	(7,913)	(35)
Total	<hr style="border-top: 3px double black;"/>	<hr style="border-top: 3px double black;"/>
	(7,370)	30,993

2 SIGNIFICANT DIFFERENCES BETWEEN IFRS AND CAS

The consolidated net profit for the year under IFRS and CAS were RMB 114,696 and RMB 114,687, respectively, with a difference of RMB 9; the consolidated shareholders' equity for the year under IFRS and CAS were RMB 1,408,869 and RMB 1,409,124, respectively, with a difference of RMB 255. These differences under the different accounting standards were primarily due to the revaluation for assets other than fixed assets and oil and gas properties revalued in 1999.

During the Restructuring in 1999, a valuation was carried out in 1999 for assets and liabilities injected by CNPC. Valuation results other than fixed assets and oil and gas properties were not recognised in the financial statements prepared under IFRS.

INDEPENDENT AUDITOR'S REPORT

TO THE SHAREHOLDERS OF PETROCHINA COMPANY LIMITED (incorporated in the People's Republic of China with limited liability)

Opinion

What we have audited

The consolidated financial statements of PetroChina Company Limited (the "Company") and its subsidiaries (the "Group"), which are set out on pages 213 to 277, comprise:

- the consolidated statement of financial position as at December 31, 2021;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated cash flow statement for the year then ended; and
- the notes to the consolidated financial statements, which include significant accounting policies and other explanatory information.

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at December 31, 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") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

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INDEPENDENT AUDITOR'S REPORT

TO THE SHAREHOLDERS OF PETROCHINA COMPANY LIMITED (CONTINUED)
(incorporated in the People's Republic of China with limited liability)

Basis for opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the 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 believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

Key audit matters

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

Key audit matter identified in our audit is related to "Recoverability of the carrying amount of oil and gas properties".

INDEPENDENT AUDITOR'S REPORT

TO THE SHAREHOLDERS OF PETROCHINA COMPANY LIMITED (CONTINUED) (incorporated in the People's Republic of China with limited liability)

Key audit matters (continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
<p>Recoverability of the carrying amount of oil and gas properties</p> <p>Refer to Note 5 (a) "Critical accounting estimates and judgements" and the oil and gas properties as included in Note 16 "Property, plant and equipment" to the consolidated financial statements, with the net book value of oil and gas properties amounted to RMB 816,788 million at December 31, 2021, and impairment loss of RMB 19,463 million was recorded for the year ended December 31, 2021.</p> <p>Uncertainty in future oil prices, future production costs, changes in operating conditions and the economic outlook gave rise to possible indicators that the carrying amount of the oil and gas properties as at December 31, 2021 might be impaired.</p> <p>An impairment loss is recognised for the amount by which the carrying amount of oil and gas properties exceeds the higher of its fair value less costs to sell and its value in use. The Group's determination of the recoverable amounts for oil and gas properties involved key estimates and assumptions, including:</p> <ul style="list-style-type: none"> – Future oil prices; – Future costs; – Future production volumes; and – Discount rates. <p>Because of the significance of the carrying amount of the oil and gas properties as at December 31, 2021, together with the significant estimates and judgements by management in the use of key estimates and assumptions in determining recoverable amounts for oil and gas properties, we had placed our audit emphasis on this matter.</p>	<p>In addressing this matter, we performed the following key audit procedures:</p> <ul style="list-style-type: none"> • Obtained an understanding of the management's internal control and assessment process of impairment of oil and gas properties and assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and level of other inherent risk factors such as complexity, subjectivity, changes and susceptibility to management bias or fraud; • Evaluated and tested the key controls relating to the determination of recoverable amounts of oil and gas properties; • For certain projects which management has decided not to further develop, corroborated evidence of future development plans and capital allocation decisions; • Assessed the appropriateness of the method used to determine recoverable amounts, including the methodology adopted in the discounted cash flow projections, tested mathematical accuracy of the projections, and the completeness, accuracy, and relevance of underlying data used in the projections; • Compared estimates of future crude oil prices adopted by the Group against a range of published crude oil price forecasts; • Compared the future cost profiles against historical costs or relevant budgets of the Group or relevant external data; • Compared the future production profiles against the oil and gas reserve estimation report approved by the management. Evaluated the competence, capability and objectivity of the management's experts engaged in estimating the oil and gas reserves. Assessed key estimations or assumptions used in the reserve estimation, by reference to historical data, management plans and/or relevant external data; • Used professionals with specialized skill and knowledge to assist in the evaluation of the appropriateness of discount rates adopted by the management. <p>Based on our work, we found the key estimations and assumptions and input data adopted by management in determining the recoverable amounts were supported by the evidence we obtained.</p>

INDEPENDENT AUDITOR'S REPORT

TO THE SHAREHOLDERS OF PETROCHINA COMPANY LIMITED (CONTINUED)
(incorporated in the People's Republic of China with limited liability)

Other Information

The directors of the Company are responsible for the other information. The other information comprises all of 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 and the audit committee for the consolidated financial statements

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

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

The Audit Committee is responsible for overseeing the Group's financial reporting process.

INDEPENDENT AUDITOR'S REPORT

TO THE SHAREHOLDERS OF PETROCHINA COMPANY LIMITED (CONTINUED) (incorporated in the People's Republic of China with limited liability)

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. We report our opinion 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 judgment 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.

INDEPENDENT AUDITOR'S REPORT

TO THE SHAREHOLDERS OF PETROCHINA COMPANY LIMITED (CONTINUED)
(incorporated in the People's Republic of China with limited liability)

Auditor's responsibilities for the audit of the consolidated financial statements (continued)

- 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 directors 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 directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.



羅兵咸永道

INDEPENDENT AUDITOR'S REPORT

TO THE SHAREHOLDERS OF PETROCHINA COMPANY LIMITED (CONTINUED) (incorporated in the People's Republic of China with limited liability)

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

The engagement partner on the audit resulting in this independent auditor's report is HON CHONG HENG.

PricewaterhouseCoopers
Certified Public Accountants
Hong Kong, March 31, 2022

PETROCHINA COMPANY LIMITED
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
For the year ended December 31, 2021

(All amounts in RMB millions unless otherwise stated)

	Notes	2021 RMB	2020 RMB
REVENUE	6	2,614,349	1,933,836
OPERATING EXPENSES			
Purchases, services and other		(1,770,019)	(1,267,797)
Employee compensation costs	8	(154,835)	(147,604)
Exploration expenses, including exploratory dry holes		(24,248)	(19,333)
Depreciation, depletion and amortisation		(231,269)	(213,875)
Selling, general and administrative expenses		(57,802)	(64,345)
Taxes other than income taxes	9	(228,003)	(195,850)
Other income, net		12,980	50,905
TOTAL OPERATING EXPENSES		<u>(2,453,196)</u>	<u>(1,857,899)</u>
PROFIT FROM OPERATIONS		<u>161,153</u>	<u>75,937</u>
FINANCE COSTS			
Exchange gain		13,377	14,387
Exchange loss		(12,839)	(14,279)
Interest income		2,984	3,023
Interest expense	10	(19,739)	(26,528)
TOTAL NET FINANCE COSTS		<u>(16,217)</u>	<u>(23,397)</u>
SHARE OF PROFIT OF ASSOCIATES AND JOINT VENTURES		<u>13,267</u>	<u>3,533</u>
PROFIT BEFORE INCOME TAX EXPENSE	7	<u>158,203</u>	<u>56,073</u>
INCOME TAX EXPENSE	12	<u>(43,507)</u>	<u>(22,588)</u>
PROFIT FOR THE YEAR		<u>114,696</u>	<u>33,485</u>
OTHER COMPREHENSIVE INCOME			
Item that will not be reclassified to profit or loss			
Fair value changes in equity investment measured at fair value through other comprehensive income		232	113
Items that are or may be reclassified subsequently to profit or loss			
Currency translation differences		(4,729)	(10,802)
Share of the other comprehensive income of associates and joint ventures accounted for using the equity method		(4)	(441)
OTHER COMPREHENSIVE INCOME, NET OF TAX		<u>(4,501)</u>	<u>(11,130)</u>
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		<u>110,195</u>	<u>22,355</u>
PROFIT FOR THE YEAR ATTRIBUTABLE TO:			
Owners of the Company	13	92,170	19,006
Non-controlling interests		22,526	14,479
		<u>114,696</u>	<u>33,485</u>
TOTAL COMPREHENSIVE INCOME FOR THE YEAR ATTRIBUTABLE TO:			
Owners of the Company		89,561	14,634
Non-controlling interests		20,634	7,721
		<u>110,195</u>	<u>22,355</u>
BASIC AND DILUTED EARNINGS PER SHARE ATTRIBUTABLE TO OWNERS OF THE COMPANY (RMB)	14	<u>0.50</u>	<u>0.10</u>

The accompanying notes are an integral part of these financial statements.

PETROCHINA COMPANY LIMITED
CONSOLIDATED STATEMENT OF FINANCIAL POSITION
As of December 31, 2021

(All amounts in RMB millions unless otherwise stated)

	Notes	December 31, 2021 RMB	December 31, 2020 RMB
NON-CURRENT ASSETS			
Property, plant and equipment	16	1,459,296	1,452,091
Investments in associates and joint ventures	17	265,785	250,603
Equity investments measured at fair value through other comprehensive income	18	1,168	902
Right-of-use assets	20	208,606	209,786
Intangible and other non-current assets	21	66,344	67,494
Deferred tax assets	32	12,161	11,364
Time deposits with maturities over one year		8,064	9,119
TOTAL NON-CURRENT ASSETS		<u>2,021,424</u>	<u>2,001,359</u>
CURRENT ASSETS			
Inventories	22	143,848	128,539
Accounts receivable	23	56,659	52,325
Prepayments and other current assets	24	112,820	109,262
Financial assets at fair value through other comprehensive income	25	3,975	8,076
Time deposits with maturities over three months but within one year		26,747	27,319
Cash and cash equivalents	26	136,789	118,631
Assets held for sale		-	42,615
TOTAL CURRENT ASSETS		<u>480,838</u>	<u>486,767</u>
CURRENT LIABILITIES			
Accounts payable and accrued liabilities	27	303,002	316,140
Contract liabilities	28	78,481	91,477
Income taxes payable		9,915	3,730
Other taxes payable		66,859	59,994
Short-term borrowings	29	53,275	117,542
Lease liabilities	20	6,626	6,579
Liabilities directly associated with the assets held for sale		-	9,956
TOTAL CURRENT LIABILITIES		<u>518,158</u>	<u>605,418</u>
NET CURRENT LIABILITIES		<u>(37,320)</u>	<u>(118,651)</u>
TOTAL ASSETS LESS CURRENT LIABILITIES		<u>1,984,104</u>	<u>1,882,708</u>
EQUITY			
EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY:			
Share capital	30	183,021	183,021
Retained earnings		771,980	727,955
Reserves	31	308,560	304,182
TOTAL EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY		<u>1,263,561</u>	<u>1,215,158</u>
NON-CONTROLLING INTERESTS		<u>145,308</u>	<u>151,463</u>
TOTAL EQUITY		<u>1,408,869</u>	<u>1,366,621</u>
NON-CURRENT LIABILITIES			
Long-term borrowings	29	287,175	251,379
Asset retirement obligations	33	129,405	114,819
Lease liabilities	20	123,222	122,644
Deferred tax liabilities	32	26,638	16,380
Other long-term obligations		8,795	10,865
TOTAL NON-CURRENT LIABILITIES		<u>575,235</u>	<u>516,087</u>
TOTAL EQUITY AND NON-CURRENT LIABILITIES		<u>1,984,104</u>	<u>1,882,708</u>

The accompanying notes are an integral part of these financial statements.

Chairman
Dai Houliang

Director and President
Huang Yongzhang

Chief Financial Officer
Chai Shouping

PETROCHINA COMPANY LIMITED
CONSOLIDATED STATEMENT OF CASH FLOWS
For the Year Ended December 31, 2021
(All amounts in RMB millions unless otherwise stated)

	2021	2020
	RMB	RMB
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit for the year	114,696	33,485
Adjustments for:		
Income tax expense	43,507	22,588
Depreciation, depletion and amortisation	231,269	213,875
Capitalised exploratory costs charged to expense	12,557	8,934
Safety fund reserve	(1,750)	(1,505)
Share of profit of associates and joint ventures	(13,267)	(3,533)
Accrual of provision for impairment of receivables, net	415	343
Write down in inventories, net	580	8,151
Impairment of other non-current assets	465	-
Loss on disposal and scrap of property, plant and equipment	18,959	5,398
Loss/(gain) on disposal and scrap of other non-current assets	587	(1,142)
Gain on disposal of subsidiaries	(3,575)	(1,242)
Gain on Pipeline restructuring	(18,320)	(46,946)
Dividend income	(17)	(25)
Interest income	(2,984)	(3,023)
Interest expense	19,739	26,528
Changes in working capital:		
Accounts receivable, prepayments and other current assets	(8,265)	14,751
Inventories	(15,889)	43,645
Accounts payable and accrued liabilities	2,251	8,410
Contract liabilities	(12,996)	8,987
CASH FLOWS GENERATED FROM OPERATIONS		
Income taxes paid	(26,493)	(19,104)
NET CASH FLOWS FROM OPERATING ACTIVITIES	341,469	318,575

The accompanying notes are an integral part of these financial statements.

PETROCHINA COMPANY LIMITED
CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)
For the Year Ended December 31, 2021

(All amounts in RMB millions unless otherwise stated)

	2021	2020
	RMB	RMB
CASH FLOWS FROM INVESTING ACTIVITIES		
Capital expenditures	(261,617)	(248,376)
Acquisition of investments in associates and joint ventures	(387)	(2,599)
Prepayments on long-term leases	-	(3,048)
Acquisition of intangible assets and other non-current assets	(3,946)	(5,303)
Acquisition of subsidiaries	(1,822)	(1,947)
Proceeds from disposal of property, plant and equipment	2,746	1,195
Proceeds from disposal of other non-current assets	4,183	2,224
Proceeds from Pipeline restructuring	31,074	80,621
Interest received	2,836	2,532
Dividends received	12,274	4,778
Decrease/(increase) in time deposits with maturities over three months	1,627	(12,063)
NET CASH FLOWS USED FOR INVESTING ACTIVITIES	(213,032)	(181,986)
CASH FLOWS FROM FINANCING ACTIVITIES		
Repayments of short-term borrowings	(758,307)	(797,892)
Increase in short-term borrowings	681,258	751,157
Repayments of long-term borrowings	(78,127)	(219,770)
Increase in long-term borrowings	128,834	238,335
Repayments of lease liabilities	(13,016)	(12,794)
Interest paid	(12,821)	(16,700)
Dividends paid to non-controlling interests	(16,508)	(14,264)
Dividends paid to owners of the Company	(39,866)	(28,078)
Cash paid to acquire non-controlling interests	(22)	(2)
Cash contribution from non-controlling interests	673	613
Capital reduction in subsidiaries paid to non-controlling interests	(69)	(5)
NET CASH FLOWS USED FOR FINANCING ACTIVITIES	(107,971)	(99,400)
TRANSLATION OF FOREIGN CURRENCY		
Increase in cash and cash equivalents	(2,308)	(4,967)
Cash and cash equivalents at beginning of the year	18,158	32,222
Cash and cash equivalents at end of the year	118,631	86,409
	136,789	118,631

The accompanying notes are an integral part of these financial statements.

PETROCHINA COMPANY LIMITED
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
For the Year Ended December 31, 2021

(All amounts in RMB millions unless otherwise stated)

	Attributable to owners of the Company				Non-controlling Interests	Total Equity
	Share Capital RMB	Retained Earnings RMB	Reserves RMB	Subtotal RMB		
Balance at January 1, 2020	183,021	743,124	304,011	1,230,156	214,149	1,444,305
Profit for the year ended December 31, 2020	-	19,006	-	19,006	14,479	33,485
Other comprehensive income for the year ended December 31, 2020	-	-	(4,372)	(4,372)	(6,758)	(11,130)
Special reserve-safety fund reserve	-	-	(1,633)	(1,633)	128	(1,505)
Transfer to reserves	-	(6,275)	6,275	-	-	-
Dividends	-	(28,078)	-	(28,078)	(14,827)	(42,905)
Transaction with non-controlling interests in subsidiaries	-	-	-	-	(2)	(2)
Capital contribution from non-controlling interests	-	-	2	2	823	825
Pipeline restructuring	-	-	-	-	(57,425)	(57,425)
Acquisition of subsidiaries	-	-	1	1	1,186	1,187
Disposal of subsidiaries	-	-	-	-	(489)	(489)
Other	-	178	(102)	76	199	275
Balance at December 31, 2020	<u>183,021</u>	<u>727,955</u>	<u>304,182</u>	<u>1,215,158</u>	<u>151,463</u>	<u>1,366,621</u>
Balance at January 1, 2021	183,021	727,955	304,182	1,215,158	151,463	1,366,621
Profit for the year ended December 31, 2021	-	92,170	-	92,170	22,526	114,696
Other comprehensive income for the year ended December 31, 2021	-	-	(2,609)	(2,609)	(1,892)	(4,501)
Special reserve-safety fund reserve	-	-	(1,579)	(1,579)	(171)	(1,750)
Transfer to reserves	-	(8,413)	8,413	-	-	-
Dividends	-	(39,866)	-	(39,866)	(15,975)	(55,841)
Transaction with non-controlling interests in subsidiaries	-	-	(15)	(15)	(19)	(34)
Capital contribution from non-controlling interests	-	-	-	-	1,059	1,059
Acquisition of subsidiaries	-	-	-	-	769	769
Disposal of subsidiaries	-	-	-	-	(12,380)	(12,380)
Other	-	134	168	302	(72)	230
Balance at December 31, 2021	<u>183,021</u>	<u>771,980</u>	<u>308,560</u>	<u>1,263,561</u>	<u>145,308</u>	<u>1,408,869</u>

The accompanying notes are an integral part of these financial statements.

1 ORGANISATION AND PRINCIPAL ACTIVITIES

PetroChina Company Limited (the "Company") was established as a joint stock company with limited liability on November 5, 1999 by 中國石油天然氣集團公司 (China National Petroleum Corporation ("CNPC")) as the sole proprietor in accordance with the approval Guo Jing Mao Qi Gai [1999] No. 1024 "Reply on the approval of the establishment of PetroChina Company Limited" from the former State Economic and Trade Commission of the People's Republic of China ("China" or "PRC"). CNPC restructured ("the Restructuring") and injected its core business and the related assets and liabilities into the Company. 中國石油天然氣集團公司 was renamed 中國石油天然氣集團有限公司 (CNPC before and after the change of name) on December 19, 2017. CNPC is a wholly state-owned company registered in China. The Company and its subsidiaries are collectively referred to as the "Group".

The Group is principally engaged in (i) the exploration, development, transportation and production and marketing of crude oil and natural gas; (ii) the refining of crude oil and petroleum products, production and marketing of primary petrochemical products, derivative petrochemical products and other chemical products; (iii) the marketing of refined products and non-oil products, and trading business; and (iv) the transportation and the sale of natural gas (Note 39).

2 BASIS OF PREPARATION

The consolidated financial statements of the Group have been prepared in accordance with the International Financial Reporting Standards ("IFRSs") as issued by the International Accounting Standards Board ("IASB"). These financial statements also comply with the disclosure requirements of the Hong Kong Companies Ordinance and the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. A number of new or amended standards became applicable for the current reporting period. The Group did not have to change its accounting policies or make retrospective adjustments as a result of adopting these new or amended standards. The consolidated financial statements and the statement of financial position of the Company have been prepared under the historical cost convention except as disclosed in the accounting policies below.

The preparation of financial statements in conformity with IFRSs requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the statement of financial position and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on management's best knowledge of current events and actions, actual results may ultimately differ from those estimates. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 5.

(a) New and amended standards and interpretations adopted by the Group

On August 27, 2020, the IASB published amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16-Interest rate benchmark (IBOR) reform-Phase 2. These amendments should be applied for annual periods beginning on or after January 1, 2021, which have no material impact on the Group for the December 31, 2021 reporting period.

(b) New and amended standards and interpretations not yet adopted by the Group

Certain new accounting standards, amendments to accounting standards and interpretations have been published that are not mandatory for the December 31, 2021 reporting period and have not been early adopted by the Group. These standards, amendments or interpretations are not expected to have a material impact on the Group in the current or future reporting periods and on foreseeable future transactions.

3 SUMMARY OF PRINCIPAL ACCOUNTING POLICIES

(a) Basis of consolidation

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has right to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

A subsidiary is consolidated from the date on which control is transferred to the Group and is no longer consolidated from the date that control ceases. The Group accounts for business combinations (except for business combination under common control) using the acquisition method when the acquired set of activities and assets meets the definition of a business and control is transferred to the Group. In determining whether a particular set of activities and assets is a business, the Group assesses whether the set of assets and activities acquired includes, at a minimum, an input and substantive process and whether the acquired set has the ability to produce outputs. The Group has an option to apply a 'concentration test' that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The optional concentration test is met if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. Contingent liabilities assumed in a business combination are recognised in the acquisition accounting if they are present obligations and their fair value can be measured reliably. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interests in the acquiree either at fair value or at the non-controlling interests' proportionate share of the acquiree's net assets.

The excess of the consideration transferred, the amount of any non-controlling interests in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in the consolidated statement of comprehensive income.

An acquisition of a business which is a business combination under common control is accounted for in a manner similar to a uniting of interests whereby the assets and liabilities acquired are accounted for at carryover predecessor values to the other party to the business combination with all periods presented as if the operations of the Group and the business acquired have always been combined. The difference between the consideration paid by the Group and the net assets or liabilities of the business acquired is adjusted against equity.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment. Where necessary, accounting policies of subsidiaries have been changed to ensure consistency with the policies adopted by the Group.

For purpose of the presentation of the Company's statement of financial position, investments in subsidiaries are accounted for at cost less impairment.

A listing of the Group's principal subsidiaries is set out in Note 19.

(b) Investments in associates

Associates are entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for by the equity method of accounting in the consolidated financial statements of the Group and are initially recognised at cost.

Under this method of accounting, the Group's share of the post-acquisition profits or losses of associates is recognised in profit or loss and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amounts of the investments. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment loss and is tested for impairment as part of the overall balance. Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the fair value of net identifiable assets of the acquired associate at the date of acquisition. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group. The gain or loss resulting from a downstream transaction involving assets that constitute a business, as defined in IFRS 3, between the Group and its associate or joint venture is recognised in full in the consolidated financial statement.

A listing of the Group's principal associates is shown in Note 17.

(c) Investments in joint ventures

Joint ventures are arrangements in which the Group with one or more parties have joint control, whereby the Group has rights to the net assets of the arrangements, rather than rights to their assets and obligations for their liabilities. The Group's interests in joint ventures are accounted for by the equity method of accounting (Note 3(b)) in the consolidated financial statements.

A listing of the Group's principal joint ventures is shown in Note 17.

(d) Transactions with non-controlling interests

Transactions with non-controlling interests are treated as transactions with owners in their capacity as owners of the Group. Gains and losses resulting from disposals to non-controlling interests are recorded in equity. The differences between any consideration paid and the relevant share of the carrying value of net assets of the subsidiary acquired resulting from the purchase of non-controlling interests, are recorded in equity.

When the Group ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. The amounts previously recognised in other comprehensive income are reclassified to profit or loss.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to profit or loss where appropriate.

(e) Foreign currencies

Items included in the financial statements of each entity in the Group are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). Most assets and operations of the Group are located in the PRC (Note 39), and the functional currency of the Company and most of the consolidated subsidiaries is the Renminbi ("RMB"). The consolidated financial statements are presented in the presentation currency of RMB.

Foreign currency transactions of the Group are accounted for at the exchange rates prevailing at the respective dates of the transactions; monetary assets and liabilities denominated in foreign currencies are translated at exchange rates at the date of the statement of financial position; gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities are recognised in profit or loss.

For the Group entities that have a functional currency different from the Group's presentation currency, assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of the statement of financial position. Income and expenses for each statement of comprehensive income presented are translated at the average exchange rates for each period and the resulting exchange differences are recognised in other comprehensive income.

(f) Discontinued operation

A discontinued operation is a component of the Group's business, the operation and cash flows of which can be clearly distinguished from the rest of the Group and which:

- represents a separate major line of business or geographic area of operations;
- is part of a single co-ordinated plan to dispose of a separate major line of business or geographic area of operations; or
- is a subsidiary acquired exclusively with a view to resale.

Classification as a discontinued operation occurs at the earlier of disposal or when the operation meets the criteria to be classified as held-for-sale.

When an operation is classified as a discontinued operation, the comprehensive statement of profit or loss and other comprehensive income ("OCI") is re-presented as if the operation had been discontinued from the start of the comparative year.

(g) Property, plant and equipment

Property, plant and equipment, including oil and gas properties (Note 3(h)), are initially recorded in the consolidated statement of financial position at cost if it is probable that they will generate future economic benefits. Cost represents the purchase price of the asset and other costs incurred to bring the asset into intended use. Subsequent to their initial recognition, property, plant and equipment are carried at cost less accumulated depreciation, depletion and amortisation (including any impairment).

Depreciation, to write off the cost of each asset, other than oil and gas properties (Note 3(h)), to their residual values over their estimated useful lives is calculated using the straight-line method.

The Group uses the following estimated useful lives, estimated residual value ratios and annual depreciation rates for depreciation purposes:

	Estimated useful lives	Estimated residual value ratio %	Annual depreciation rate %
Buildings	8 to 40 years	5	2.4 to 11.9
Equipment and Machinery	4 to 30 years	3 to 5	3.2 to 24.3
Motor Vehicles	4 to 14 years	5	6.8 to 23.8
Other	5 to 12 years	5	7.9 to 19.0

No depreciation is provided on construction in progress until the assets are completed and ready for use.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

Property, plant and equipment, including oil and gas properties (Note 3(h)) and right-of-use assets (Note 3(m)), are reviewed for possible impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount of a cash-generating unit exceeds the higher of its fair value less costs to sell and its value in use. Value in use is the estimated net present value of future cash flows to be derived from the cash-generating unit.

Gains and losses on disposals of property, plant and equipment are determined by reference to their carrying amounts and are recorded in profit or loss.

Interest and other costs on borrowings to finance the construction of property, plant and equipment, including oil and gas properties (Note 3(h)), are capitalised during the period of time that is required to complete and prepare the asset for its intended use. Costs for repairs and maintenance activities are expensed as incurred except for costs of components that result in improvements or betterments which are capitalised as part of property, plant and equipment and depreciated over their useful lives.

(h) Oil and gas properties

The successful efforts method of accounting is used for oil and gas exploration and production activities. Under this method, all costs for development wells, support equipment and facilities, and proved mineral interests in oil and gas properties are capitalised. Geological and geophysical costs are expensed when incurred. Costs of exploratory wells are capitalised pending determination of whether the wells find proved oil and gas reserves. Proved oil and gas reserves are the estimated quantities of crude oil and natural 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 the time at which 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. Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the average price during the 12-month period before the ending date of the period covered by the proved oil and gas reserve report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. The costs shall be that prevailing at the end of the period.

Exploratory wells in areas not requiring major capital expenditures are evaluated for economic viability within one year of completion of drilling. The related well costs are expensed as dry holes if it is determined that such economic viability is not attained. Otherwise, the related well costs are reclassified to oil and gas properties and are subject to impairment review (Note 3(g)). For exploratory wells that are found to have economically viable reserves in areas where major capital expenditure will be required before production can commence, the related well costs remain capitalised only if additional drilling is underway or firmly planned. Otherwise the related well costs are expensed as dry holes. The Group does not have any significant costs of unproved properties capitalised in oil and gas properties.

The Ministry of Natural Resources in China issues production licenses to applicants on the basis of the reserve reports approved by relevant authorities.

The cost of oil and gas properties is amortised at the field level based on the units of production method. Units of production rates are based on oil and gas reserves estimated to be recoverable from existing facilities based on the current terms of the Group's production licenses.

(i) Intangible assets and goodwill

Expenditures on acquired patents, trademarks, technical know-how and licenses are capitalised at historical cost and amortised using the straight-line method over their estimated useful lives. Intangible assets are not subsequently revalued. The carrying amount of each intangible asset is reviewed and adjusted for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised whenever the carrying amount of an intangible asset exceeds its recoverable amount and is recognised in profit or loss. The recoverable amount is measured as the higher of fair value less costs to sell and value in use. Value in use is the estimated net present value of future cash flows to be derived from the asset.

Goodwill arises on the acquisition of subsidiaries and represents the excess of the consideration transferred over the net fair value of identifiable assets, liabilities and contingent liabilities of the acquiree and the amount of any non-controlling interests in the acquiree.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. An impairment loss is recognised if the carrying amount of the cash-generating unit containing goodwill exceeds its recoverable amount. Impairment losses are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit, and then to reduce the carrying amounts of the other assets in the cash-generating unit on a pro rata basis. Any impairment is recognised immediately as an expense and is not subsequently reversed.

(j) Assets held for sale

Non-current assets, or disposal groups comprising assets and liabilities, are classified as held-for-sale if it is highly probable that they will be recovered primarily through sale rather than through continuing use.

Such assets, or disposal groups, are generally measured at the lower of their carrying amount and fair value less costs to sell. Any impairment loss on a disposal group is allocated first to goodwill, and then to the remaining assets and liabilities on a pro rata basis, except that no loss is allocated to inventories, financial assets, deferred tax assets, employee benefit assets, investment property or biological assets, which continue to be measured in accordance with the Group's other accounting policies. Impairment losses on initial classification as held-for-sale and subsequent gains and losses on remeasurement are recognized in profit or loss.

Once classified as held-for-sale, intangible assets and property, plant and equipment are no longer amortised or depreciated, and any equity-accounted investee is no longer equity accounted.

(k) Financial instruments

(a) Recognition and initial measurement

Accounts receivable and debt securities issued are initially recognised when they are originated. All other financial assets and financial liabilities are initially recognised when the Group becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a accounts receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at Fair value through profit or loss ("FVTPL"), transaction costs that are directly attributable to its acquisition or issue. An accounts receivable without a significant financing component is initially measured at the transaction price.

(b) Classification and subsequent measurement

On initial recognition, a financial asset is classified as measured at: amortised cost; Fair value through other comprehensive income ("FVOCI") – debt investment; FVOCI – equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cashflows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets.

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management.

For the purposes of this assessment whether contractual cash flows are solely payments of principal and interest, "principal" is defined as the fair value of the financial asset on initial recognition. "Interest" is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition.

Detailed accounting policies for subsequent measurement of financial assets are set out below:

Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.
Financial assets at amortised cost	These assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss.

(c) Derecognition

Financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognised in its consolidated statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognised.

Financial liabilities

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in profit or loss.

(d) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the consolidated statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

(I) Impairment for financial assets

The Group recognises loss allowances for expected credit losses ("ECLs") on:

- financial assets measured at amortised cost;
- debt investments measured at FVOCI; and
- contract assets.

The Group measures loss allowances at an amount equal to lifetime ECLs, except for the financial assets for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition, which are measured as 12-month ECLs. When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort.

Loss allowances for accounts receivable are always measured at an amount equal to lifetime ECLs. The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

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 Group in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

At each reporting date, the Group assesses whether financial assets carried at amortised cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. Impairment losses on trade and other receivables are presented under ‘Selling, general and administrative expenses’, similar to the presentation under IAS 39.

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. For customers, the Group individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group’s procedures for recovery of amounts due.

(m) Leases

(a) As a lessee

At commencement or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group’s incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, if the Group changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group present right-of-use assets and lease liabilities separately in the statement of financial position.

The Group has elected not to recognise right-of-use assets and lease liabilities for leases of low-value assets and short-term leases. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

Payments made to the Ministry of Natural Resources to secure land use rights (excluding mineral properties) are treated as leases.

(b) As a lessor

At inception or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices.

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Group makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease. As part of this assessment, the Group considers certain indicators such as whether the lease is for the major part of the economic life of the asset. There are no significant finance lease for the Group.

If an arrangement contains lease and non-lease components, then the Group applies IFRS 15 to allocate the consideration in the contract.

The Group recognises lease payments received under operating leases as income on a straight-line basis over the lease term as part of "other revenue".

(n) Inventories

Inventories include oil products, chemical products and crude oil and other raw materials and supplies which are stated at the lower of cost and net realisable value. Cost is primarily determined by the weighted average cost method. The cost of finished goods comprises raw materials, direct labour, other direct costs and related production overheads, but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less the cost of completion and directly attributable marketing and distribution costs.

(o) Contract costs

Contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer which are not capitalised as inventory (Note 3(n)), property, plant and equipment (Note 3(g)), oil and gas properties (Note 3(h)) or intangible assets (Note 3(i)).

Incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained. Incremental costs of obtaining a contract are capitalised when incurred if the costs relate to revenue which will be recognised in a future reporting period and the costs are expected to be recovered, unless the expected amortisation period is one year or less from the date of initial recognition of the asset, in which case the costs are expensed when incurred. Other costs of obtaining a contract are expensed when incurred.

Costs to fulfil a contract are capitalised if the costs relate directly to an existing contract or to a specifically identifiable anticipated contract; generate or enhance resources that will be used to provide goods or services in the future; and are expected to be recovered.

Capitalised contract costs are stated at cost less accumulated amortisation and impairment losses. Impairment losses are recognised to the extent that the carrying amount of the contract cost asset exceeds the net of (i) remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates, less (ii) any costs that relate directly to providing those goods or services that have not yet been recognised as expenses.

Amortisation of capitalised contract costs is charged to profit or loss when the revenue to which the asset relates is recognised.

(p) Contract assets and contract liabilities

A contract asset is recognised when the Group recognises revenue before being unconditionally entitled to the consideration under the payment terms set out in the contract. Contract assets are assessed for ECLs in accordance with the policy set out in Note 3(l) and are reclassified to receivables when the right to the consideration has become unconditional (Note 3(q)).

A contract liability is recognised when the customer pays consideration before the Group recognises the related revenue. A contract liability would also be recognised if the Group has an unconditional right to receive consideration before the Group recognises the related revenue. In such cases, a corresponding receivable would also be recognised (Note 3(q)).

When the contract includes a significant financing component, the contract balance includes interest accrued under the effective interest method (Note 3(v)).

(q) Accounts receivable

Accounts receivable are recognised when the Group has an unconditional right to receive consideration. A right to receive consideration is unconditional if only the passage of time is required before payment of that consideration is due (Note 3(p)).

Receivables are stated at amortised cost using the effective interest method less allowance for credit losses (Note 3(l)).

(r) Cash and cash equivalents

Cash and cash equivalents comprise cash in hand, deposits held with banks and highly liquid investments with original maturities of three months or less from the time of purchase.

(s) Accounts payable

Accounts payable are recognised initially at fair value and subsequently measured at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

(t) Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. In subsequent periods, borrowings are stated at amortised cost using the effective interest method.

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

Borrowings are classified as current liabilities unless the Group has unconditional rights to defer settlements of the liabilities for at least 12 months after the reporting period.

(u) Share capital

Incremental costs directly attributable to the issue of ordinary shares are recognised as a deduction from equity. Income tax relating to transaction costs of an equity transaction is accounted for in accordance with IAS 12 "Income Taxes".

(v) Interest income and interest expense

Interest income or expense is recognised using the effective interest method.

The "effective interest rate" is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to:

- the gross carrying amount of the financial asset; or
- the amortised cost of the financial liability.

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

(w) Taxation

Income tax expense comprises current and deferred tax. It is recognised in profit or loss except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

The Group has determined that interest and penalties related to income taxes, including uncertain tax treatments, do not meet the definition of income taxes, and therefore accounted for them under IAS 37 "Provisions, Contingent Liabilities and Contingent Assets".

(a) Current tax

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payable or receivable is the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date. Current tax also includes any tax arising from dividends.

Current tax assets and liabilities are offset only if certain criteria are met.

(b) Deferred tax

Deferred tax is provided in full, using the liability method, for temporary differences arising between the tax bases of assets and liabilities and their carrying values in the financial statements. However, deferred tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax is determined using tax rates that have been enacted or substantively enacted by the date of the statement of financial position and are expected to apply to the period when the related deferred tax asset is realised or deferred tax liability is settled, and reflects uncertainty related to income taxes, if any.

The principal temporary differences arise from depreciation on oil and gas properties and equipment and provision for impairment of receivables, inventories, investments and property, plant and equipment. Deferred tax assets relating to the carry forward of unused tax losses and deductible temporary differences are recognised to the extent that it is probable that future taxable income will be available against which they can be used.

(c) Taxes other than income tax

The Group also incurs various other taxes and levies that are not income taxes. "Taxes other than income taxes", which form part of operating expenses, primarily comprise consumption tax (Note 9), resource tax (Note 9), crude oil special gain levy (Note 9), urban construction tax and education surcharges.

(x) Revenue recognition

Income is classified by the Group as revenue when it arises from the sale of crude oil, natural gas, refined products, chemical products, non-oil products, etc., and the provision of services in the ordinary course of the Group's business.

Revenue is recognised when control over a product or service is transferred to the customer at the amount of promised consideration to which the Group is expected to be entitled, excluding those amounts collected on behalf of third parties. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts.

Where the contract contains a financing component more than 12 months, interest income is accrued or interest expense is accrued separately under the effective interest method. The Group does not adjust the consideration for any effects of a significant financing component if the period of financing is 12 months or less.

(y) Provisions

Provisions are recognised when the Group has present legal or constructive obligations as a result of past events, it is probable that an outflow of resources will be required to settle the obligations, and reliable estimates of the amounts can be made.

Provision for future decommissioning and restoration is recognised in full on the installation of oil and gas properties. The amount recognised is the present value of the estimated future expenditure determined in accordance with local conditions and requirements. A corresponding addition to the related oil and gas properties of an amount equivalent to the provision is also created. This is subsequently depreciated as part of the costs of the oil and gas properties. Any change in the present value of the estimated expenditure other than due to passage of time which is regarded as interest expense, is reflected as an adjustment to the provision and oil and gas properties. Due to technological progress, legal requirements or changes in the market environment, changes in the provisions caused by changes in the amount of expenditure, estimated time of retirement obligations, discount rate, etc., may occur in fulfilling the retirement obligation. For an increase in provisions, the cost of oil and gas properties will be increased accordingly; for a decrease in provisions, the cost of oil and gas properties will be deducted within the limit of the carrying amount of assets related to decommissioning expenses. If a decrease in the provision exceeds the carrying amount of the oil and gas properties recognised corresponding to the provision, the excess shall be recognised immediately in profit or loss.

Provision for onerous contracts is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Group recognises any impairment loss on the assets associated with that contract.

(z) Research and development

Research expenditure incurred is recognised as an expense. Costs incurred on development projects are recognised as intangible assets to the extent that such expenditure is expected to generate future economic benefits.

(aa) Retirement benefit plans

The Group contributes to various employee retirement benefit plans organised by PRC municipal and provincial governments under which it is required to make monthly contributions to these plans at prescribed rates for its employees in China. The relevant PRC municipal and provincial governments undertake to assume the retirement benefit obligations of existing and future retired employees of the Group in China. The Group has similar retirement benefit plans for its employees in its overseas operations. Contributions to these PRC and overseas plans ("defined contribution plan") are charged to expense as incurred. In addition, the Group joined the corporate annuity plan approved by relevant PRC authorities. Contribution to the annuity plan is charged to expense as incurred. The Group currently has no additional material obligations outstanding for the payment of retirement and other post-retirement benefits of employees in the PRC or overseas other than what described above.

(ab) Related parties

(a) A person, or a close member of that person's family, is related to the Group if that person:

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

(b) An entity is related to the Group if any of the following conditions applies:

- (i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).
- (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
- (iii) Both entities are joint ventures of the same third party.
- (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
- (v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.
- (vi) The entity is controlled or jointly controlled by a person identified in (a).

(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

(viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the Group's parent.

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

4 FINANCIAL RISK AND CAPITAL MANAGEMENT

4.1 Financial risk factors

The Group's activities expose it to a variety of financial risks, including market risk, credit risk and liquidity risk.

(a) Market risk

Market risk is the possibility that changes in foreign exchange rates, interest rates and the prices of oil and gas products will adversely affect the value of assets, liabilities and expected future cash flows.

(i) Foreign exchange risk

The Group conducts its domestic business primarily in RMB, but maintains a portion of its assets in other currencies to pay for imported crude oil, natural gas, imported equipment and other materials and to meet foreign currency financial liabilities. The Group is exposed to currency risks arising from fluctuations in various foreign currency exchange rates against the RMB. The RMB is not a freely convertible currency and is regulated by the PRC government. Limitations on foreign exchange transactions imposed by the PRC government could cause future exchange rates to vary significantly from current or historical exchange rates.

Additionally, the Group operates internationally and foreign exchange risk arises from future acquisitions and commercial transactions, recognised assets and liabilities and net investments in foreign operations. Certain entities in the Group might use currency derivatives to manage such foreign exchange risk.

(ii) Interest rate risk

The Group has no significant interest rate risk on interest-bearing assets. The Group's exposure to interest rate risk arises from its borrowings. The Group's borrowings at floating rates expose the Group to cash flow interest rate risk and its borrowings at fixed rates expose the Group to fair value interest rate risk. However, the exposure to interest rate risk is not material to the Group. A detailed analysis of the Group's borrowings, together with their respective interest rates and maturity dates, is included in Note 29.

(iii) Price risk

The Group is engaged in a wide range of oil and gas products-related activities. Prices of oil and gas products are affected by a wide range of global and domestic factors which are beyond the control of the Group. The fluctuations in such prices may have favourable or unfavourable impacts on the Group.

The Group uses derivative financial instruments, including commodity futures, commodity swaps and commodity options, to hedge some price risks efficiently.

As at 31 December 2021, the Group had certain commodity contracts of crude oil, refined oil products and chemical products designated as hedges. As at 31 December 2021, the fair value of such derivative hedging financial instruments is derivative financial assets of RMB 3,913 (2020: RMB 1,411) and derivative financial liabilities of RMB 3,881 (2020: RMB 3,709).

As at 31 December 2021, it is estimated that a general increase/decrease of USD 10 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 profit for the year by approximately RMB 2,104 (2020: decrease/increase RMB 2,578), there is no effect on the Group's other reserves (2020: Nil). 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.

(b) Credit risk

Credit risk arises from cash and cash equivalents, time deposits with banks, accounts receivable, prepayments and other current assets and intangible and other non-current assets.

A substantial portion of the Group's cash at bank and time deposits are placed with the major state-owned banks and financial institutions in China and management believes that the credit risk is low.

The Group performs ongoing assessment of the credit quality of its customers and sets appropriate credit limits taking into account the financial position and past history of defaults of customers. The aging analysis of accounts receivable (net of impairment of accounts receivable) is presented in Note 23.

The carrying amounts of cash and cash equivalents, time deposits placed with banks, accounts receivable, prepayments and other current assets and financial assets at fair value through other comprehensive income included in the consolidated statement of financial position represent the Group's maximum exposure to credit risk. No other financial assets carry a significant exposure to credit risk.

The Group has no significant concentration of credit risk.

(c) Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting obligations associated with financial liabilities.

In managing its liquidity risk, the Group has access to funding at market rates through equity and debt markets, including using undrawn committed borrowing facilities to meet foreseeable borrowing requirements.

Given the low level of gearing and continued access to funding, the Group believes that its liquidity risk is not material.

Analysis of the Group's borrowings and lease liabilities based on the remaining period at the date of the statement of financial position to the contractual maturity dates is presented in Note 29 and Note 20.

4.2 Capital management

The Group's objectives when managing capital are to safeguard its ability to continue as a going concern, optimise returns for owners and to minimise its cost of capital. In meeting its objectives of managing capital, the Group may issue new shares, adjust its debt levels or the mix between short-term and long-term borrowings.

The Group monitors capital on the basis of the gearing ratio which is calculated as interest-bearing borrowings / (interest-bearing borrowings + total equity), interest-bearing borrowings include short-term and long-term borrowings. The gearing ratio at December 31, 2021 is 19.5% (2020: 21.3%).

4.3 Fair value estimation

The methods and assumptions applied in determining the fair value of each class of financial assets and financial liabilities of the Group at December 31, 2021 and 2020 are disclosed in the respective accounting policies.

The carrying amounts of the following financial assets and financial liabilities approximate their fair value as all of them are short-term in nature: cash and cash equivalents, time deposits with maturities over three months but within one year, accounts receivable, other receivables, trade payables, other payables and short-term borrowings. The fair values of fixed rate long-term borrowings are likely to be different from their respective carrying amounts. Analysis of the fair values and carrying amounts of long-term borrowings is presented in Note 29.

The Group's investments in derivative financial instruments and FVOCI are measured at fair value on the balance sheet date. The fair value of derivative financial instruments are mainly categorised into Level 1 and Level 2 of the fair value hierarchy, which are based on the unadjusted quoted prices in active markets for identical assets or liabilities as inputs used in the valuation techniques, or the inputs other than quoted prices included within Level 1 that are observable either directly or indirectly. Trade accounts receivable and bills receivable in FVOCI are mainly categorised into Level 3 of the fair value hierarchy, which are based on that trade accounts receivable and bills receivable are mainly short-term bills of acceptance issued by banks, their fair values approximate the face values of the bills. The equity investments in FVOCI that are not held for trading are measured at fair value at the end of the reporting period. The fair value of such equity investments are mainly categorised into Level 1 of the fair value hierarchy, which are based on the unadjusted quoted prices in active markets for identical assets or liabilities as inputs used in the valuation techniques.

As of December 31, 2021, financial assets and financial liabilities continuing to be measured at fair value are listed as follows in three levels:

	Level1 RMB	Level2 RMB	Level3 RMB	Total RMB
Assets				
Accounts receivable:				
– Derivative financial assets	2,625	1,288	-	3,913
Financial assets at fair value through other comprehensive income:				
– Bills receivable	-	-	3,975	3,975
– Other investments	905	-	263	1,168
	<u>3,530</u>	<u>1,288</u>	<u>4,238</u>	<u>9,056</u>
Liabilities				
Accounts payable and accrued liabilities:				
– Derivative financial liabilities	726	3,155	-	3,881
	<u>726</u>	<u>3,155</u>	<u>-</u>	<u>3,881</u>

As of December 31, 2020, financial assets and financial liabilities continuing to be measured at fair value are listed as follows in three levels:

	Level 1 RMB	Level 2 RMB	Level 3 RMB	Total RMB
Assets				
Accounts receivable:				
– Derivative financial assets	238	1,173	-	1,411
Financial assets at fair value through other comprehensive income:				
– Bills receivable	-	-	8,076	8,076
– Other investments	653	-	249	902
	<u>891</u>	<u>1,173</u>	<u>8,325</u>	<u>10,389</u>
Liabilities				
Accounts payable and accrued liabilities:				
– Derivative financial liabilities	2,813	896	-	3,709
	<u>2,813</u>	<u>896</u>	<u>-</u>	<u>3,709</u>

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 bills receivable classified as Level 3 financial assets.

5 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Estimates and judgements are regularly evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The matters described below are considered to be the most critical in understanding the estimates and judgements that are involved in preparing the Group's consolidated financial statements.

(a) Estimation of oil and gas reserves

Estimates of oil and natural gas reserves are key elements in the Group's investment decision-making process. They are also important elements in testing impairment of property, plant and equipment (Note 5(b)). Changes in proved oil and gas reserves, particularly proved developed reserves, will affect unit-of-production depreciation, depletion and amortisation recorded in the consolidated financial statements for property, plant and equipment relating to oil and gas production activities. An increase/reduction in proved developed reserves will decrease/increase depreciation, depletion and amortisation charges. Proved oil and gas reserves estimates are subject to revision, either upward or downward, based on new information, such as from development drilling and production activities or from changes in economic factors, including product prices, contract terms, evolution of technology or development plans, etc.

(b) Estimation of impairment of property, plant and equipment

Property, plant and equipment, including oil and gas properties, are reviewed for possible impairments when events or changes in circumstances indicate that the carrying amount may not be recoverable. Determination as to whether and how much an asset is impaired involves management estimates and judgements such as the future price of crude oil, natural gas, refined and chemical products, the operation costs, the product mix, production volumes, production profile and the oil and gas reserves. The impairment reviews and calculations are based on assumptions that are consistent with the Group's business plans taking into account current economic conditions. Favourable changes to some assumptions, may allow the Group to avoid the need to impair any assets or make it necessary to reverse an impairment loss recognised in prior periods, whereas unfavourable changes may cause the assets to become impaired. For example, when the assumed future price and production profile of crude oil used for the expected future cash flows are different from the actual price and production profile of crude oil respectively experienced in future, the Group may either over or under recognise the impairment losses for certain assets.

(c) Estimation of asset retirement obligations

Provision is recognised for the future decommissioning and restoration of oil and gas properties. The amount of the provision recognised is the present values of the estimated future expenditures. The estimation of the future expenditures is based on current local conditions and requirements, including legal requirements, technology, price levels, etc. In addition to these factors, the present values of these estimated future expenditures are also impacted by the management plan for the decommissioning of oil and gas properties, the estimation of the economic lives of oil and gas properties and estimates of discount rates. The estimations 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 period. Changes in any of these estimates will impact the operating results and the financial position of the Group over the remaining economic lives of the oil and gas properties.

According to changes in the internal and external environment, accounting standards and company asset retirement expense measures and other relevant regulations, oil and gas field companies recalculate their asset retirement obligations of oil and gas properties based on the latest parameters to more objectively reflect the actual situation of the Company's asset retirement obligation of oil and gas properties.

6 REVENUE

Revenue represents revenues from the sale of crude oil, natural gas, refined products, chemical products, non-oil products, etc., and from the transportation of crude oil, refined products and natural gas. Revenue from contracts with customers is mainly recognised at a point in time. The revenue information for the year ended December 31, 2021 and 2020 are as follows:

2021 Type of contract	Exploration and Production	Refining and Chemicals	Marketing	Natural Gas and Pipeline	Head Office and Other	Total
Type of goods and services						
Crude oil	464,298	-	685,743	-	-	1,150,041
Natural gas	133,148	-	344,196	381,370	-	858,714
Refined products	-	759,912	1,064,890	-	-	1,824,802
Chemical products	-	207,810	48,240	-	-	256,050
Pipeline transportation business	-	-	-	3,360	-	3,360
Non-oil sales in gas stations	-	-	25,148	-	-	25,148
Others	90,539	7,072	1,272	32,208	3,871	134,962
Intersegment elimination	(571,705)	(650,018)	(397,485)	(19,526)	(1,201)	(1,639,935)
Revenue from contracts with customers	116,280	324,776	1,772,004	397,412	2,670	2,613,142
Other revenue	349	178	573	84	23	1,207
Total	116,629	324,954	1,772,577	397,496	2,693	2,614,349
Geographical Region						
China's mainland	68,327	324,776	832,229	397,412	2,670	1,625,414
Others	47,953	-	939,775	-	-	987,728
Revenue from contracts with customers	116,280	324,776	1,772,004	397,412	2,670	2,613,142
Other revenue	349	178	573	84	23	1,207
Total	116,629	324,954	1,772,577	397,496	2,693	2,614,349

2020 Type of contract	Exploration and Production	Refining and Chemicals	Marketing	Natural Gas and Pipeline	Head Office and Other	Total
Type of goods and services						
Crude oil	333,557	-	447,384	-	-	780,941
Natural gas	118,388	-	173,696	294,297	-	586,381
Refined products	-	616,063	822,192	-	-	1,438,255
Chemical products	-	150,296	30,344	-	-	180,640
Pipeline transportation business	-	-	-	52,273	-	52,273
Non-oil sales in gas stations	-	-	22,360	-	-	22,360
Others	78,631	8,254	1,300	23,800	3,515	115,500
Intersegment elimination	(437,670)	(492,667)	(276,503)	(35,437)	(1,320)	(1,243,597)
Revenue from contracts with customers	92,906	281,946	1,220,773	334,933	2,195	1,932,753
Other revenue	231	162	257	401	32	1,083
Total	93,137	282,108	1,221,030	335,334	2,227	1,933,836
Geographical Region						
China's mainland	27,028	281,946	554,620	334,933	2,195	1,200,722
Others	65,878	-	666,153	-	-	732,031
Revenue from contracts with customers	92,906	281,946	1,220,773	334,933	2,195	1,932,753
Other revenue	231	162	257	401	32	1,083
Total	93,137	282,108	1,221,030	335,334	2,227	1,933,836

7 PROFIT BEFORE INCOME TAX EXPENSE

	2021	2020
	RMB	RMB
Items credited and charged in arriving at the profit before income tax expense include:		
<u>Credited</u>		
Dividend income from equity investments measured at fair value through other comprehensive income (i)	17	25
Reversal of provision for impairment of receivables	360	95
Reversal of write down in inventories	76	186
Gain on disposal of investment in subsidiaries (i)	3,575	1,242
Gain on Pipeline restructuring (i)	18,320	46,946
<u>Charged</u>		
Amortisation of intangible and other assets	5,774	5,944
Depreciation and impairment losses:		
Owned property, plant and equipment	211,107	194,015
Right-of-use assets	14,388	13,916
Auditors' remuneration (ii)	47	49
Cost of inventories recognised as expense	2,047,256	1,527,271
Provision for impairment of receivables	775	438
Loss on disposal and scrap of property, plant and equipment (i)	18,959	5,398
Variable lease payments, low-value and short-term lease payment not included in the measurement of lease liabilities	2,645	3,362
Research and development expenses	16,729	15,746
Write down in inventories	656	8,337

(i) Other income, net primarily includes dividend income from equity investments measured at fair value through other comprehensive income, gain on Pipeline restructuring and disposal of investment in subsidiaries, loss on disposal of property, plant and equipment and government grants.

(ii) The auditors' remuneration above represents the annual audit fees paid by the Company. This remuneration does not include fees of RMB 41 (2020: RMB 62) paid by subsidiaries to the Company's current auditor and its network firms which primarily relates to audit, tax compliance and other advisory services.

8 EMPLOYEE COMPENSATION COSTS

	2021	2020
	RMB	RMB
Wages, salaries and allowances	100,971	98,832
Social security costs	53,864	48,772
	<u>154,835</u>	<u>147,604</u>

Social security costs mainly represent contributions to plans for staff welfare organised by the PRC municipal and provincial governments and others, including contributions to the retirement benefit plans (Note 34).

9 TAXES OTHER THAN INCOME TAXES

	2021	2020
	RMB	RMB
Consumption tax	161,623	145,525
Resource tax	23,723	18,468
City maintenance and construction tax	16,078	13,647
Educational surcharge	11,660	9,882
Crude oil special gain levy	4,655	178
Urban and township land use tax	3,572	3,588
Other	6,692	4,562
	<u>228,003</u>	<u>195,850</u>

10 INTEREST EXPENSE

	2021	2020
	RMB	RMB
Interest on		
Bank loans	2,540	1,677
Other loans	8,092	14,342
Lease liabilities	5,419	6,297
Accretion expense (Note 33)	4,696	5,107
	<u>20,747</u>	<u>27,423</u>
Less: Amounts capitalised	(1,008)	(895)
	<u>19,739</u>	<u>26,528</u>

Amounts capitalised are borrowing costs that are attributable to the construction of qualifying assets. The average interest rate used to capitalise such general borrowing cost was 4.19% per annum for the year ended December 31, 2021 (2020: 4.23% per annum).

11 EMOLUMENTS OF DIRECTORS AND SUPERVISORS

Details of the emoluments of directors and supervisors for the years ended December 31, 2021 and 2020 are as follows:

Name	2021			2020	
	Fee for directors and supervisors RMB'000	Salaries, allowances and other benefits RMB'000	Contribution to retirement benefit scheme RMB'000	Total RMB'000	Total RMB'000
Chairmen:					
Mr. Dai Houliang (i)	-	-	-	-	-
Mr. Wang Yilin (i)	-	-	-	-	-
Vice chairmen:					
Mr. Hou Qijun (ii)	-	-	-	-	-
Mr. Li Fanrong (i)	-	-	-	-	-
Executive directors:					
Mr. Huang Yongzhang (iii)	-	505	124	629	-
Mr. Ren Lixin (ii)	-	139	56	195	-
	-	644	180	824	-
Non-executive directors:					
Mr. Duan Liangwei (iii)	-	196	41	237	735
Mr. Liu Yuezhen	-	-	-	-	-
Mr. Jiao Fangzheng	-	-	-	-	-
Mr. Lin Boqiang	-	-	-	-	388
Mr. Zhang Biyi	-	-	-	-	398
Ms. Elsie Leung Oi-sie	556	-	-	556	331
Mr. Tokuchi Tatsuhito	527	-	-	527	331
Mr. Simon Henry	499	-	-	499	320
Mr. Cai Jinyong (iv)	575	-	-	575	-
Mr. Jiang Xiaoming (iv)	575	-	-	575	-
	2,732	196	41	2,969	2,503
Supervisors:					
Mr. Lv Bo (v)	-	-	-	-	-
Mr. Xu Wenrong (v)	-	-	-	-	-
Mr. Zhang Fengshan	-	-	-	-	-
Mr. Jiang Lifu	-	-	-	-	-
Mr. Lu Yaozhong	-	-	-	-	-
Mr. Wang Liang	-	-	-	-	-
Mr. Fu Suotang	-	1,325	108	1,433	1,367
Mr. Li Jiamin	-	1,109	146	1,255	1,006
Mr. Li Wendong (vi)	-	102	35	137	1,193
Mr. Liu Xianhua	-	847	98	945	1,011
	-	3,383	387	3,770	4,577
	2,732	4,223	608	7,563	7,080

- (i) Mr. Wang Yilin ceased being the chairman from January 19, 2020. Mr. Dai Houliang was elected as the chairman and Mr. Li Fanrong was elected as the vice chairman from March 25, 2020. Mr. Li Fanrong ceased being the vice chairman and the director from May 10, 2021.
- (ii) Mr. Hou Qijun and Mr. Ren Lixin was appointed as director from October 21, 2021; and Mr. Hou Qijun was appointed as Vice chairman from October 28, 2021.
- (iii) Mr. Duan Liangwei was appointed as the president and executive director from March 9, 2020; On March 25, 2021, Mr. Duan Liangwei resigned as the Company's president and was transferred from an executive director to a non-executive director, and no longer received remuneration from the Company; Mr. Huang Yongzhang was appointed as the Company's president and the executive director.
- (iv) Mr. Cai Jinyong and Mr. Jiang Xiaoming were elected as independent non-executive directors from June 11, 2020, and began to perform their duties. The remuneration had not been paid at the end of December 31, 2020. Mr. Zhang Biyi and Mr. Lin Boqiang ceased being the independent non-executive director from June 11, 2020.
- (v) Mr. Xu Wenrong ceased being the Chairman of the Supervisory Committee and supervisor and Mr. Lv Bo ceased being the non-executive director from October 20, 2020. Mr. Lv Bo was elected as the Chairman of the Supervisory Committee and supervisor from November 5, 2020.
- (vi) On May 28, 2021, Mr. Li Wendong resigned as the employee representative supervisor of the Company.
- (vii) The emoluments above are all pre-tax amounts.

None of the directors and supervisors has waived their remuneration during the years ended December 31, 2021 and 2020.

The five highest paid individuals in the Company for the year ended December 31, 2021 included one supervisor whose emolument is reflected in the analysis shown above and the note; and four senior management whose allowances and other benefits were RMB 1.533, RMB 1.310, RMB 1.308 and RMB 1.257, respectively, and whose contribution to retirement benefit scheme were RMB 0.164, RMB 0.164, RMB 0.164 and RMB 0.164, respectively. The five highest paid individuals in the Company for the year ended December 31, 2020 included one supervisor whose emolument is reflected in the analysis shown above and the note; and four senior management whose allowances and other benefits were RMB 1.550, RMB 1.310, RMB 1.292 and RMB 1.270, respectively, and whose contribution to retirement benefit scheme were RMB 0.116, RMB 0.116, RMB 0.116 and RMB 0.116, respectively.

During the years ended December 31, 2021 and 2020, the Company did not incur any severance payment to any director for loss of office or any payment as inducement to any director to join the Company.

12 INCOME TAX EXPENSE

	2021	2020
	RMB	RMB
Current taxes	33,822	14,922
Deferred taxes (Note 32)	9,685	7,666
	<hr/> 43,507	<hr/> 22,588

In accordance with the relevant PRC income tax rules and regulations, the PRC corporate income tax rate applicable to the Group is principally 25%. In accordance with the Circular jointly issued by the Ministry of Finance ("MOF"), the General Administration of Customs of the PRC and the State Administration of Taxation ("SAT") on Issues Concerning Tax Policies for In-depth Implementation of Western Development Strategy (Cai Shui [2011] No.58) and the Notice on Continuing the Income Tax Policy for Western Development (Notice No.23 of 2020 of the MOF, the SAT, the NDRC), the corporate income tax for the enterprises engaging in the encouraged industries in the Western China Region is charged at a preferential corporate income tax rate of 15% from January 1, 2011 to December 31, 2030. Certain branches and subsidiaries of the Company in the Western China Region obtained the approval for the use of the preferential corporate income tax rate of 15%.

The tax on the Group's profit before taxation differs from the theoretical amount that would arise using the corporate income tax rate in the PRC applicable to the Group as follows:

	2021	2020
	RMB	RMB
Profit before income tax expense	158,203	56,073
Tax calculated at a tax rate of 25%	39,551	14,018
Tax return true-up	(256)	256
Effect of income taxes from international operations different from taxes at the PRC statutory tax rate	2,692	1,522
Effect of preferential tax rate	(8,603)	(1,312)
Tax effect of income not subject to tax	(10,305)	(3,612)
Tax effect of expenses not deductible for tax purposes	15,789	5,455
Tax effect of temporary differences and losses not recognised as deferred tax assets	4,639	6,261
Income tax expense	<hr/> 43,507	<hr/> 22,588

13 PROFIT ATTRIBUTABLE TO OWNERS OF THE COMPANY

The profit attributable to owners of the Company in the consolidated financial statements of the Group is RMB 92,170 for the year ended December 31, 2021 (2020: RMB 19,006).

14 BASIC AND DILUTED EARNINGS PER SHARE

Basic and diluted earnings per share for the years ended December 31, 2021 and 2020 have been computed by dividing profit for the year attributable to owners of the Company by 183,021 million shares issued and outstanding for the year.

There are no potentially dilutive ordinary shares.

15 DIVIDENDS

	2021	2020
	RMB	RMB
Interim dividends attributable to owners of the Company for 2021 (a)	23,866	-
Proposed final dividends attributable to owners of the Company for 2021 (b)	17,610	-
Interim dividends attributable to owners of the Company for 2020 (c)	-	16,000
Final dividends attributable to owners of the Company for 2020 (d)	-	16,000
	41,476	32,000

(a) Interim dividends attributable to owners of the Company in respect of 2021 of RMB 0.13040 yuan (inclusive of applicable tax) per share, amounting to a total of RMB 23,866. The dividends were paid on September 17, 2021 (A shares) and October 29, 2021 (H shares).

(b) At the 14th meeting of the 8th Board, the Board of Directors proposed final dividends attributable to owners of the Company in respect of 2021 of RMB 0.09622 yuan (inclusive of applicable tax) per share amounting to a total of RMB 17,610. These consolidated financial statements do not reflect this dividend payable as the final dividends were proposed after the reporting period and will be accounted for in equity as an appropriation of retained earnings during the year ended December 31, 2022 when approved at the forthcoming 2021 Annual General Meeting.

(c) Interim dividends attributable to owners of the Company in respect of 2020 of RMB 0.08742 yuan (inclusive of applicable tax) per share, amounting to a total of RMB 16,000. The dividends were paid on September 22, 2020 (A shares) and November 13, 2020 (H shares).

(d) Final dividends attributable to owners of the Company in respect of 2020 of RMB 0.08742 yuan (inclusive of applicable tax) per share, amounting to a total of RMB 16,000. The dividends approved at the 2020 Annual General Meeting held on June 10, 2021, and were paid on June 29, 2021 (A shares) and July 30, 2021 (H shares).

16 PROPERTY, PLANT AND EQUIPMENT

Year Ended December 31, 2021	Oil and Gas Properties		Equipment and Machinery	Motor Vehicles	Other	Construc- tion in Progress	Total RMB
	Buildings RMB	RMB	RMB	RMB	RMB	RMB	
Cost							
At beginning of the year	248,948	2,355,925	746,404	22,857	45,014	228,882	3,648,030
Additions	1,561	18,556	5,305	645	1,880	241,843	269,790
Transfers	13,736	160,810	38,649	-	2,369	(215,564)	-
Disposals or write offs	(5,101)	(75,411)	(12,010)	(1,588)	(1,675)	(22,175)	(117,960)
Currency translation differences	(286)	(7,255)	(345)	(11)	(313)	(704)	(8,914)
At end of the year	258,858	2,452,625	778,003	21,903	47,275	232,282	3,790,946
Accumulated depreciation and impairment							
At beginning of the year	(110,899)	(1,542,037)	(488,109)	(17,431)	(31,937)	(5,526)	(2,195,939)
Charge for the year and others	(11,057)	(138,251)	(33,404)	(992)	(2,485)	-	(186,189)
Impairment charge	(516)	(19,463)	(2,723)	-	(121)	(3,648)	(26,471)
Disposals or write offs or transfers	1,952	58,312	7,429	1,421	997	396	70,507
Currency translation differences	103	5,602	158	11	401	167	6,442
At end of the year	(120,417)	(1,635,837)	(516,649)	(16,991)	(33,145)	(8,611)	(2,331,650)
Net book value							
At end of the year	138,441	816,788	261,354	4,912	14,130	223,671	1,459,296

Year Ended December 31, 2020	Oil and Gas Properties		Equipment and Machinery	Motor Vehicles	Other	Construc- tion in Progress	Total RMB
	Buildings RMB	RMB	RMB	RMB	RMB	RMB	
Cost							
At beginning of the year	252,174	2,261,203	1,153,616	27,148	36,155	255,302	3,985,598
Additions	3,620	1,044	8,425	1,419	776	188,591	203,875
Transfers	16,827	152,389	23,618	-	12,169	(205,003)	-
Disposals or write offs	(22,910)	(39,497)	(438,169)	(5,661)	(3,340)	(8,934)	(518,511)
Currency translation differences	(763)	(19,214)	(1,086)	(49)	(746)	(1,074)	(22,932)
At end of the year	248,948	2,355,925	746,404	22,857	45,014	228,882	3,648,030
Accumulated depreciation and impairment							
At beginning of the year	(107,943)	(1,429,389)	(615,770)	(19,947)	(23,092)	(6,233)	(2,202,374)
Charge for the year and others	(11,005)	(136,433)	(45,912)	(1,260)	(10,573)	-	(205,183)
Impairment charge	(214)	(13,908)	(113)	-	(837)	(295)	(15,367)
Disposals or write offs or transfers	7,948	24,234	173,196	3,739	2,031	1,012	212,160
Currency translation differences	315	13,459	490	37	534	(10)	14,825
At end of the year	(110,899)	(1,542,037)	(488,109)	(17,431)	(31,937)	(5,526)	(2,195,939)
Net book value							
At end of the year	138,049	813,888	258,295	5,426	13,077	223,356	1,452,091

The Group's exploration and production segment determines whether there are any indicators of impairment for the oil fields or blocks and performs the impairment tests on those oil fields or blocks with indications of impairment, and reports the results to the Group's internal professional team (including exploration and finance expert) for further overall assessment and evaluation. The final results of the impairment tests have been submitted to the Group's management for review and approval. The Group recorded impairment losses amounting to RMB 19,463 related to oil and gas properties under the exploration and production segment for the year ended December 31, 2021 (2020: RMB 13,908) due to decline in oil and gas reserves in certain oilfield as well as no further development plans for certain other projects. The carrying amount of those impaired oil and gas properties was written down to their respective recoverable amounts, which were primarily determined using the discounted cash flow model. The Group referred to the weighted average cost of capital of the oil and gas industry when determining discount rate, and made relevant adjustments according to specific risks in different countries or regions. In 2021, the after-tax discount rates adopted by most oil fields or blocks of the Group ranged from 7.6% to 15.0% (2020: 5.9% to 12.0%) per annum.

The following table indicates the changes to the Group's exploratory well costs, which are included in construction in progress, for the years ended December 31, 2021 and 2020.

	2021	2020
	RMB	RMB
At beginning of the year	38,807	36,101
Additions to capitalised exploratory well costs pending the determination of proved reserves	30,338	30,104
Reclassified to wells, facilities, and equipment based on the determination of proved reserves	(27,201)	(18,464)
Capitalised exploratory well costs charged to expense	(12,557)	(8,934)
At end of the year	<u>29,387</u>	<u>38,807</u>

The following table provides an aging of capitalised exploratory well costs based on the date the drilling was completed.

	December 31, 2021	December 31, 2020
	RMB	RMB
One year or less	19,354	23,428
Over one year	10,033	15,379
Balance at December 31	<u>29,387</u>	<u>38,807</u>

Capitalised exploratory well costs over one year are principally related to the wells that are under further evaluation of drilling results or pending completion of development planning to ascertain economic viability.

17 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

The summarised financial information of the Group's principal associates and joint ventures, including the aggregated amounts of assets, liabilities, revenue, profit or loss and the interest held by the Group were as follows:

Name	Country of Incorporation	Registered Capital	Principal Activities	Interest Held	
				Direct %	Indirect %
China Oil & Gas Piping Network Corporation ("PipeChina")	PRC	500,000	Pipeline transport, storage service, import of equipment, import and export of techniques, science and technology research, research and application of informatization, technology consulting, technology service, technology transfer, promotion of technology	29.90	-
China Petroleum Finance Co., Ltd. ("CP Finance")	PRC	8,331	Deposits, loans, settlement, lending, bills acceptance discounting, guarantee and other banking business	32.00	-
CNPC Captive Insurance Co., Ltd.	PRC	5,000	Property loss insurance, liability insurance, credit insurance and deposit insurance; as well as the application of the above insurance reinsurance and insurance capital business	49.00	-
China Marine Bunker (PetroChina) Co., Ltd.	PRC	1,000	Oil import and export trade and transportation, sale and storage	-	50.00
Mangistau Investment B.V.	Netherlands	USD 131 million	Engages in investing activities, the principle activities of its main subsidiaries are exploration, development and sale of oil and gas	-	50.00
Trans-Asia Gas Pipeline Co., Ltd.	PRC	5,000	Main contractor, investment holding, investment management, investment consulting, enterprise management advisory, technology development, promotion and technology consulting	-	50.00

Interest in Associates

Summarised financial information in respect of the Group's principal associates and reconciliation to carrying amount is as follows:

	PipeChina		CP Finance		CNPC Captive Insurance Co., Ltd.	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
	RMB	RMB	RMB	RMB	RMB	RMB
Percentage ownership interest (%)	29.90	29.90	32.00	32.00	49.00	49.00
Current assets	86,335	74,012	415,139	313,741	9,100	11,267
Non-current assets	768,161	655,982	116,765	177,344	2,618	2,956
Current liabilities	136,150	55,562	446,369	404,201	859	4,752
Non-current liabilities	103,243	104,150	8,396	12,617	3,900	2,776
Net assets	615,103	570,282	77,139	74,267	6,959	6,695
Group's share of net assets	157,346	151,135	24,684	23,765	3,410	3,281
Goodwill	-	-	349	349	-	-
Carrying amount of interest in associates	157,346	151,135	25,033	24,114	3,410	3,281

Summarised statement of comprehensive income and dividends received by the Group are as follow:

	PipeChina		CP Finance		CNPC Captive Insurance Co., Ltd.	
	From Oct 01, 2020 to Dec 31, 2020		2021	2020	2021	2020
	2021	RMB	RMB	RMB	RMB	RMB
Revenue	101,572	22,766	12,691	7,954	1,510	735
Profit for the year	29,776	6,444	6,304	7,819	424	389
Other comprehensive income/(loss)	2	-	(606)	(1,603)	-	-
Total comprehensive income	29,778	6,444	5,698	6,216	424	389
Group's share of total comprehensive income	6,846	1,532	1,823	1,989	207	191
Dividends received by the Group	943	-	904	677	78	74

Interest in Joint Ventures

Summarised statement of financial position as included in their own financial statements, adjusted for fair value adjustments and differences in accounting policies in respect of the Group's principal joint ventures and reconciliation to carrying amount is as follows:

	China Marine Bunker (PetroChina) Co., Ltd.		Mangistau Investment B.V.		Trans-Asia Gas Pipeline Co., Ltd.	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
	RMB	RMB	RMB	RMB	RMB	RMB
Percentage ownership interest (%)	50.00	50.00	50.00	50.00	50.00	50.00
Non-current assets	1,571	1,685	9,927	10,586	44,011	39,809
Current assets	11,305	7,319	2,220	830	1,437	2,886
Including: cash and cash equivalents	2,292	1,343	1,631	74	1,411	739
Non-current liabilities	540	158	2,033	3,008	2,147	2,330
Including: Non-current financial liabilities	-	1	-	848	2,101	2,330
Current liabilities	9,997	5,927	872	575	483	235
Including: Current financial liabilities excluding trade and other payables	5,810	3,267	-	-	-	-
Net assets	2,339	2,919	9,242	7,833	42,818	40,130
Net assets attributable to owners of the Company	1,952	2,672	9,242	7,833	42,818	40,130
Group's share of net assets	976	1,336	4,621	3,917	21,409	20,065
Carrying amount of interest in joint ventures	976	1,336	4,621	3,917	21,409	20,065

Summarised statement of comprehensive income as included in their own financial statements, adjusted for fair value adjustments and differences in accounting policies and dividends received by the Group is as follows:

	China Marine Bunker (PetroChina) Co., Ltd.		Mangistau Investment B.V.		Trans-Asia Gas Pipeline Co., Ltd.	
	2021	2020	2021	2020	2021	2020
	RMB	RMB	RMB	RMB	RMB	RMB
Revenue	58,210	36,695	11,543	8,152	17	18
Depreciation, depletion and amortisation	(190)	(195)	(1,002)	(1,048)	(57)	(38)
Interest income	11	16	3	4	31	42
Interest expense	(72)	(60)	(141)	(160)	(56)	(58)
Income tax expense	(56)	(57)	(846)	(293)	-	1
Net (loss)/profit	(610)	185	2,114	362	4,067	3,060
Total comprehensive (loss)/income	(691)	140	1,874	(650)	3,508	(3,007)
Group's share of total comprehensive (loss)/income	(344)	46	937	(325)	1,754	(1,504)
Dividends received by the Group	29	-	233	539	410	-

Dividends received or receivable from associates and joint ventures were RMB 4,715 in 2021 (2020: RMB 4,517).

In 2021, investments in associates and joint ventures of RMB 489 (2020: RMB 1,687) were disposed, resulting in a loss of RMB 4 (2020: RMB 5) which was included in other income.

In 2021, the share of profit and other comprehensive income in all individually immaterial associates and joint ventures accounted for using equity method in aggregate was RMB 1,418 (2020: a loss of RMB 2,468) and RMB 622 (2020: RMB 3,631), respectively.

18 EQUITY INVESTMENTS MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	December 31, 2021	December 31, 2020
	RMB	RMB
Chengdu Huaqi Houpu Holding Co., Ltd.	534	228
China Pacific Insurance (Group) Co., Ltd.	133	188
Other items	501	486
	1,168	902

Dividends amounting to RMB 17 were received on these investments during the year ended December 31, 2021 (2020: RMB 25).

19 SUBSIDIARIES

The principal subsidiaries of the Group are:

Company Name	Country of Incorporation	Registered Capital	Type of Legal Entity	Attributable Equity Interest%	Voting Rights%	Principal Activities
Daqing Oilfield Company Limited	PRC	47,500	Limited liability company	100.00	100.00	Exploration, production and sale of crude oil and natural gas
CNPC Exploration and Development Company Limited (i)	PRC	16,100	Limited liability company	50.00	57.14	Exploration, production and sale of crude oil and natural gas outside the PRC
PetroChina Hong Kong Limited	Hong Kong	HKD 7,592 million	Limited liability company	100.00	100.00	Investment holding. The principal activities of its subsidiaries, associates and joint ventures are the exploration, production and sale of crude oil in and outside the PRC as well as natural gas sale and transmission in the PRC
PetroChina International Investment Company Limited	PRC	31,314	Limited liability company	100.00	100.00	Investment holding. The principal activities of its subsidiaries associates and joint ventures are the exploration, development and production of crude oil, natural gas, oil sands and coalbed methane outside the PRC
PetroChina International Company Limited	PRC	18,096	Limited liability company	100.00	100.00	Marketing of refined products and trading of crude oil and petrochemical products, storage, investment in refining, chemical engineering, storage facilities, service station, and transportation facilities and related business in and outside the PRC
PetroChina Sichuan Petrochemical Company Limited	PRC	10,000	Limited liability company	90.00	90.00	Engaged in oil refining, petrochemical, chemical products production, sales, chemical technology development, technical transfer and services
KunLun Energy Company Limited (ii)	Bermuda	HKD 160 million	Limited liability company	54.38	54.38	Investment holding. The principal activities of its principal subsidiaries, associates and joint ventures are the sales of natural gas, sales of liquefied petroleum gas and liquefied natural gas processing and terminal business in the PRC and the exploration and production of crude oil and natural gas in the PRC, the Republic of Kazakhstan, the Sultanate of Oman, the Republic of Peru, the Kingdom of Thailand and the Republic of Azerbaijan.

(i) The Company 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.

(ii) Kunlun Energy Co., Ltd. is a company listed on The Stock Exchange of Hong Kong Limited.

Summarised financial information in respect of the Group's principal subsidiaries with significant non-controlling interests as follows:

	CNPC Exploration and Development Company Limited		PetroChina Sichuan Petrochemical Company Limited	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
	RMB	RMB	RMB	RMB
Percentage ownership interest (%)	50.00	50.00	90.00	90.00
Current assets	15,596	16,046	3,973	4,278
Non-current assets	184,486	182,392	25,317	26,371
Current liabilities	11,282	21,820	3,876	5,382
Non-current liabilities	30,293	22,566	382	486
Net assets	158,507	154,052	25,032	24,781

Summarised statement of comprehensive income is as follows:

	CNPC Exploration and Development Company Limited		PetroChina Sichuan Petrochemical Company Limited	
	2021	2020	2021	2020
	RMB	RMB	RMB	RMB
Revenue	42,730	33,312	48,493	35,319
Net profit	8,413	6,006	3,383	520
Total comprehensive income/(loss)	5,231	(6,972)	3,383	520
Profit attributable to non-controlling interests	4,837	3,311	338	52
Dividends paid to non-controlling interests	1,485	1,498	307	12

Summarised statement of cash flows is as follows:

	CNPC Exploration and Development Company Limited		PetroChina Sichuan Petrochemical Company Limited	
	2021	2020	2021	2020
	RMB	RMB	RMB	RMB
Net cash inflow from operating activities	13,320	5,681	2,666	5,119
Net cash outflow from investing activities	(5,191)	(16,187)	(231)	(380)
Net cash (outflow)/inflow from financing activities	(8,531)	7,410	(3,995)	(3,186)
Effect of foreign exchange rate changes on cash and cash equivalents	(15)	(776)	-	-
Net (decrease)/increase in cash and cash equivalents	(417)	(3,872)	(1,560)	1,553
Cash and cash equivalents at the beginning of the year	9,202	13,074	1,561	8
Cash and cash equivalents at the end of the year	8,785	9,202	1	1,561

20 LEASES

The leases where the Group is a lessee.

(a) Right-of-use assets

	December 31, 2020	Additions	Reduction	December 31, 2021
Cost				
Land	171,941	9,331	(672)	180,600
Buildings	57,337	5,120	(5,567)	56,890
Equipment and Machinery	2,641	2,614	(781)	4,474
Other	2,195	186	(563)	1,818
Total	234,114	17,251	(7,583)	243,782
Accumulated depreciation				
Land	(11,611)	(7,022)	216	(18,417)
Buildings	(10,839)	(6,334)	2,748	(14,425)
Equipment and Machinery	(1,166)	(1,096)	685	(1,577)
Other	(712)	(313)	268	(757)
Total	(24,328)	(14,765)	3,917	(35,176)
Net book value				
Land	160,330			162,183
Buildings	46,498			42,465
Equipment and Machinery	1,475			2,897
Other	1,483			1,061
Total	209,786			208,606
	December 31, 2019	Additions	Reduction	December 31, 2020
Cost				
Land	172,897	19,547	(20,503)	171,941
Buildings	91,920	6,020	(40,603)	57,337
Equipment and Machinery	2,934	29	(322)	2,641
Other	2,068	723	(596)	2,195
Total	269,819	26,319	(62,024)	234,114
Accumulated depreciation				
Land	(6,595)	(7,344)	2,328	(11,611)
Buildings	(7,369)	(6,601)	3,131	(10,839)
Equipment and Machinery	(718)	(703)	255	(1,166)
Other	(401)	(426)	115	(712)
Total	(15,083)	(15,074)	5,829	(24,328)
Net book value				
Land	166,302			160,330
Buildings	84,551			46,498
Equipment and Machinery	2,216			1,475
Other	1,667			1,483
Total	254,736			209,786

The Group's use of right assets mainly include leased land, buildings, equipment and machinery. The leases underlying assets classified as buildings are mainly the leased gas filling stations, oil storages and office buildings. The leases underlying assets classified as equipment and machinery are mainly drilling equipment, production equipment and other movable equipment.

(b) Lease liabilities

	December 31, 2021	December 31, 2020
	RMB	RMB
Lease liabilities	129,848	129,223
Less: Lease liabilities due within one year	(6,626)	(6,579)
	<u>123,222</u>	<u>122,644</u>

Depreciation charged to profit or loss provided on right-of-use assets for the year ended December 31, 2021 was RMB 14,388 (2020:RMB 13,916).

Analysis of the undiscounted cash flow of the lease liabilities is as follows:

	December 31, 2021	December 31, 2020
	RMB	RMB
Within 1 year	12,495	11,824
Between 1 and 2 years	11,181	10,236
Between 2 and 5 years	30,541	29,862
Over 5 years	154,636	153,967
	<u>208,853</u>	<u>205,889</u>

21 INTANGIBLE AND OTHER NON-CURRENT ASSETS

	December 31, 2021			December 31, 2020		
	Cost	Accumulated amortization, including impairment losses	Net	Cost	Accumulated amortisation, including impairment losses	Net
	RMB	RMB	RMB	RMB	RMB	RMB
Patents and technical know-how	8,213	(6,905)	1,308	7,846	(6,657)	1,189
Computer software	13,016	(9,751)	3,265	12,517	(9,528)	2,989
Goodwill (i)	8,023	(36)	7,987	8,161	(36)	8,125
Other	27,335	(10,889)	16,446	26,135	(9,797)	16,338
Intangible assets	56,587	(27,581)	29,006	54,659	(26,018)	28,641
Other assets			37,338			38,853
			66,344			67,494

(i) Goodwill primarily relates to the acquisition of Singapore Petroleum Company and Petrolneos Trading Limited, subsidiaries in the Marketing segment, completed in 2009 and 2011, respectively.

The impairment of goodwill shall be tested in combination with its related asset groups. The recoverable amount of all cash-generating units has been determined based on the higher of fair value less costs to sell and value in use. These calculations use post-tax cash flow projections based on financial budgets prepared by management. The post-tax discount rates reflect specific risks relating to the cash-generating unit.

For impairment test of the goodwill, the post-tax discount rates ranged 8.5% to 14.7% (2020: 4.9% to 10.5%) were used by the management, and no impairment loss was charged for the goodwill for the year ended December 31, 2021 (2020: nil).

22 INVENTORIES

	December 31, 2021		December 31, 2020	
		RMB		RMB
Crude oil and other raw materials		40,334		35,855
Work in progress		15,393		12,387
Finished goods		88,811		80,739
Spare parts and consumables		91		75
		144,629		129,056
Less: Write down in inventories		(781)		(517)
		143,848		128,539

23 ACCOUNTS RECEIVABLE

	December 31, 2021	December 31, 2020
	RMB	RMB
Accounts receivable	58,073	53,465
Less: Provision for impairment of receivables	(1,414)	(1,140)
	<u>56,659</u>	<u>52,325</u>

As of December 31, 2021, accounts receivable of the Group included derivative financial assets, which were generated by hedges, of RMB 3,913 (2020: RMB 1,411).

The aging analysis of accounts receivable (net of impairment of accounts receivable) based on the invoice date (or date of revenue recognition, if earlier), at December 31, 2021 and 2020 is as follows:

	December 31, 2021	December 31, 2020
	RMB	RMB
Within 1 year	55,446	51,641
Between 1 and 2 years	816	374
Between 2 and 3 years	194	209
Over 3 years	203	101
	<u>56,659</u>	<u>52,325</u>

The Group offers its customers credit terms up to 180 days.

Movements in the provision for impairment of accounts receivable are as follows:

	2021	2020
	RMB	RMB
At beginning of the year	1,140	2,431
Provision for impairment of accounts receivable	396	426
Reversal of provision for impairment of accounts receivable	(110)	(76)
Receivables written off as uncollectible	(12)	(1,641)
At end of the year	<u>1,414</u>	<u>1,140</u>

The Group measures loss allowance for accounts receivable at an amount equal to lifetime ECLs. The ECLs were calculated by reference to the 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 geography.

	Gross carrying amount	Impairment provision on individual basis	Impairment provision on provision matrix basis		
			Weighted-average loss rate	Impairment provision	Loss allowance
December 31, 2021	RMB	RMB	%	RMB	RMB
Current (not past due)	53,098	-	0.1%	55	55
Within 1 year past due	3,153	26	1.6%	50	76
1 to 2 years past due	648	153	25.5%	126	279
2 to 3 years past due	329	67	45.0%	118	185
Over 3 years past due	845	352	94.7%	467	819
Total	58,073	598		816	1,414

	Gross carrying amount	Impairment provision on individual basis	Impairment provision on provision matrix basis		
			Weighted-average loss rate	Impairment provision	Loss allowance
December 31, 2020	RMB	RMB	%	RMB	RMB
Current (not past due)	46,849	-	0.1%	34	34
Within 1 year past due	5,326	154	0.4%	19	173
1 to 2 years past due	386	65	6.9%	22	87
2 to 3 years past due	50	11	25.6%	10	21
Over 3 years past due	854	342	94.3%	483	825
Total	53,465	572		568	1,140

24 PREPAYMENTS AND OTHER CURRENT ASSETS

	December 31, 2021		December 31, 2020	
		RMB		RMB
Other receivables(i)		40,983		21,128
Advances to suppliers		14,900		22,330
		55,883		43,458
Less: Provision for impairment		(2,986)		(3,378)
		52,897		40,080
Value-added tax recoverable		42,644		44,514
Prepaid expenses		505		373
Prepaid income taxes		4,853		5,997
Other current assets(ii)		11,921		18,298
		112,820		109,262

(i) As of December 31, 2021 and December 31, 2020, the Group's other receivables are mainly in the first stage.

(ii) Other current assets consist primarily of receivables from associates, dividends receivables, interests receivables, etc.

25 FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Financial assets at fair value through other comprehensive income represent mainly bills of acceptance issued by banks. The Group's business model of financial assets at fair value through other comprehensive income is achieved both by collecting contractual cash flows and selling of these assets. All financial assets at fair value through other comprehensive income are due within one year, and their fair values approximate the face values of the bills.

26 CASH AND CASH EQUIVALENTS

The weighted average effective interest rate on bank deposits was 1.68% per annum for the year ended December 31, 2021 (2020: 1.69% per annum).

27 ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	December 31, 2021	December 31, 2020
	RMB	RMB
Trade payables	144,419	113,119
Salaries and welfare payable	8,975	8,649
Dividends payable by subsidiaries to non-controlling shareholders	419	952
Interests payable	2,672	4,034
Construction fee and equipment cost payables	92,683	107,199
Other (i)	53,834	82,187
	<u>303,002</u>	<u>316,140</u>

(i) Other consists primarily of notes payables, insurance payable, etc.

As of December 31, 2021, trade payables included derivative financial liabilities, which were generated by hedges, of RMB 3,881 (2020: RMB 3,709).

The aging analysis of trade payables at December 31, 2021 and 2020 is as follows:

	December 31, 2021	December 31, 2020
	RMB	RMB
Within 1 year	134,744	104,812
Between 1 and 2 years	2,767	1,696
Between 2 and 3 years	948	2,342
Over 3 years	5,960	4,269
	<u>144,419</u>	<u>113,119</u>

28 CONTRACT LIABILITIES

As of December 31, 2021 and December 31, 2020, contract liabilities mainly represented advances from customers related to the sales of crude oil, natural gas and refined oil, etc. The majority of related obligations were expected to be performed with corresponding revenue recognised within one year. Substantially all of contract liabilities at the beginning of the year has been recognised as revenue for the year ended December 31, 2021.

29 BORROWINGS

	December 31, 2021	December 31, 2020
	RMB	RMB
Short-term borrowings excluding current portion of long-term borrowings	40,010	42,354
Current portion of long-term borrowings	13,265	75,188
	53,275	117,542
Long-term borrowings	287,175	251,379
	<u>340,450</u>	<u>368,921</u>

	December 31, 2021	December 31, 2020
	RMB	RMB
Bank loans	114,469	80,345
Corporate debentures	20,170	51,239
Medium-term notes	71,000	86,000
Other loans	134,811	151,337
	<u>340,450</u>	<u>368,921</u>

Borrowings of the Group of RMB 13,558 were guaranteed by CNPC and its fellow subsidiaries and non-controlling interests of the subsidiaries of the Group at December 31, 2021 (2020: RMB 13,726).

The Group's borrowings include mortgage loans totaling RMB 1,185 at December 31, 2021 (2020: RMB 3,486), which were secured by property, plant and equipment with net book value of RMB 1,287 and intangible and other non-current assets with net book value of RMB 117.

	December 31, 2021	December 31, 2020
	RMB	RMB
Total borrowings:		
- interest free	101	110
- at fixed rates	131,705	192,079
- at floating rates	208,644	176,732
	<u>340,450</u>	<u>368,921</u>
Weighted average effective interest rates:		
- bank loans	2.18%	2.20%
- corporate debentures	4.14%	3.49%
- medium-term notes	3.28%	3.32%
- other loans	2.51%	3.47%

The borrowings by major currency at December 31, 2021 and 2020 are as follows:

	December 31, 2021	December 31, 2020
	RMB	RMB
RMB	238,361	262,458
US Dollar	94,803	98,553
Other currencies	7,286	7,910
	<u>340,450</u>	<u>368,921</u>

The fair values of the Group's long-term borrowings including the current portion of long-term borrowings are RMB 290,937 at December 31, 2021 (2020: RMB 323,809). The carrying amounts of short-term borrowings approximate their fair values. The fair values are based on discounted cash flows using applicable discount rates based upon the prevailing market rates of interest available to the Group for financial instruments with substantially the same terms and characteristics at the dates of the consolidated statement of financial position. Such discount rates ranged from 0.10% to 5.14% per annum as of December 31, 2021 (2020: -0.49% to 4.65%) depending on the type of the borrowings.

The following table sets out the borrowings' remaining contractual maturities at the date of the consolidated statement of financial position, which are based on contractual undiscounted cash flows including principal and interest, and the earliest contractual maturity date:

	December 31, 2021	December 31, 2020
	RMB	RMB
Within 1 year	58,923	124,777
Between 1 and 2 years	53,250	53,526
Between 2 and 5 years	226,124	188,012
After 5 years	28,053	27,894
	<u>366,350</u>	<u>394,209</u>

Reconciliation of movements of borrowings to cash flows arising from financing activities:

	2021	2020
	RMB	RMB
At beginning of the year	368,921	466,722
Changes from financing cash flows:		
Increase in borrowings	810,092	989,492
Repayments of borrowings	(836,434)	(1,017,662)
Total changes from financing cash flows	(26,342)	(28,170)
Exchange adjustments	(2,129)	(6,282)
Pipeline restructuring	-	(56,849)
Reclassified as liabilities held for sale	-	(6,500)
At end of the year	<u>340,450</u>	<u>368,921</u>

30 SHARE CAPITAL

	December 31, 2021	December 31, 2020
	RMB	RMB
Registered, issued and fully paid:		
A shares	161,922	161,922
H shares	21,099	21,099
	<hr/> 183,021	<hr/> 183,021
	<hr/> <hr/>	<hr/> <hr/>

In accordance with the Restructuring Agreement between CNPC and the Company effective as of November 5, 1999, the Company issued 160 billion state-owned shares in exchange for the assets and liabilities transferred to the Company by CNPC. The 160 billion state-owned shares were the initial registered capital of the Company with a par value of RMB 1.00 yuan per share.

On April 7, 2000, the Company issued 17,582,418,000 shares, represented by 13,447,897,000 H shares and 41,345,210 ADSs (each representing 100 H shares) in a global initial public offering (“Global Offering”) and the trading of the H shares and the ADSs on The Stock Exchange of Hong Kong Limited and the New York Stock Exchange commenced on April 7, 2000 and April 6, 2000, respectively. Pursuant to the approval of the China Securities Regulatory Commission, 1,758,242,000 state-owned shares of the Company owned by CNPC were converted into H shares for sale in the Global Offering. The H shares and ADSs were issued at prices of HK\$ 1.28 per H share and US\$ 16.44 per ADS respectively for which the net proceeds to the Company were approximately RMB 20 billion. The shares issued pursuant to the Global Offering rank equally with existing shares.

On September 1, 2005, the Company issued an additional 3,196,801,818 new H shares at HK\$ 6.00 per share and net proceeds to the Company amounted to approximately RMB 19,692. CNPC also sold 319,680,182 state-owned shares it held concurrently with PetroChina’s sale of new H shares in September 2005.

On October 31, 2007, the Company issued 4,000,000,000 new A shares at RMB 16.70 yuan per share and net proceeds to the Company amounted to approximately RMB 66,243 and the listing and trading of the A shares on the Shanghai Stock Exchange commenced on November 5, 2007.

Following the issuance of the A shares, all the existing state-owned shares issued before November 5, 2007 held by CNPC have been registered with the China Securities Depository and Clearing Corporation Limited as A shares.

Shareholders’ rights are governed by the Company Law of the PRC that requires an increase in registered capital to be approved by the shareholders in shareholders’ general meetings and the relevant PRC regulatory authorities.

31 RESERVES AND RETAINED EARNINGS

(a) Reserves

	The Group		The Company	
	2021	2020	2021	2020
	RMB	RMB	RMB	RMB
Capital Reserve				
Beginning balance	133,308	133,308	130,681	130,681
Ending balance	133,308	133,308	130,681	130,681
Statutory Common Reserve Fund (a)				
Beginning balance	203,557	197,282	192,465	186,190
Transfer from retained earnings	8,413	6,275	8,413	6,275
Ending balance	211,970	203,557	200,878	192,465
Special Reserve-Safety Fund Reserve				
Beginning balance	10,810	12,443	4,708	6,513
Safety fund reserve	(1,579)	(1,633)	121	(1,805)
Ending balance	9,231	10,810	4,829	4,708
Currency Translation Differences (b)				
Beginning balance	(32,848)	(28,939)	-	-
Currency translation differences	(2,684)	(3,909)	-	-
Ending balance	(35,532)	(32,848)	-	-
Other Reserves				
Beginning balance	(10,645)	(10,083)	(7,076)	(5,739)
Transaction with non-controlling interests	(15)	-	-	-
Fair value changes in equity investments measured at fair value through other comprehensive income	79	(22)	(30)	(10)
Share of the other comprehensive income of associates and joint ventures accounted for using the equity method	(4)	(441)	(175)	(514)
Other	168	(99)	163	(813)
Ending balance	(10,417)	(10,645)	(7,118)	(7,076)
	308,560	304,182	329,270	320,778

(a) Pursuant to the PRC regulations and the Company's Articles of Association, the Company is required to transfer 10% of its net profit, as determined under the PRC accounting regulations, to a Statutory Common Reserve Fund ("Reserve Fund"). Appropriation to the Reserve Fund may cease when the fund aggregates to 50% of the Company's registered capital. The transfer to this reserve must be made before distribution of dividends to shareholders.

The Reserve Fund shall only be used to make good previous years' losses, to expand the Company's production operations, or to increase the capital of the Company. Upon approval of a resolution of shareholders' in a general meeting, the Company may convert its Reserve Fund into share capital and issue bonus shares to existing shareholders in proportion to their original shareholdings or to increase the nominal value of each share currently held by them, provided that the balance of the Reserve Fund after such issuance is not less than 25% of the Company's registered capital.

(b) The translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

(b) The Company's retained earnings

	2021	2020
	RMB	RMB
At beginning of the year	628,226	599,833
Total comprehensive income for the year	84,143	62,751
Transfer to reserves	(8,413)	(6,275)
Dividends	(39,866)	(28,078)
Other	-	(5)
At end of the year	<u>664,090</u>	<u>628,226</u>

According to the relevant PRC regulations, the distributable reserve is the lower of the retained earnings computed under PRC accounting regulations and IFRS. As of December 31, 2021, the Company's distributable reserve amounted to RMB 654,956 (2020: RMB 619,102).

32 DEFERRED TAXATION

The movements in the deferred taxation account are as follows:

	2021	2020
	RMB	RMB
At beginning of the year	(5,016)	2,848
Transfer to profit and loss (Note 12)	(9,685)	(7,666)
Credit/(debit) to other comprehensive income	224	(198)
At end of the year	<u>(14,477)</u>	<u>(5,016)</u>

Deferred tax balances before offset are attributable to the following items:

	December 31, 2021	December 31, 2020
	RMB	RMB
Deferred tax assets:		
Receivables and inventories	9,124	4,740
Tax losses	1,892	24,646
Impairment, depreciation and depletion of long-term assets	8,250	6,309
Other	7,897	6,622
Total deferred tax assets	<u>27,163</u>	<u>42,317</u>
Deferred tax liabilities:		
Accelerated tax depreciation	16,023	24,147
Other	25,617	23,186
Total deferred tax liabilities	<u>41,640</u>	<u>47,333</u>
Net deferred tax liabilities	<u>(14,477)</u>	<u>(5,016)</u>

Deferred tax balances after offset are listed as follows:

	December 31, 2021	December 31, 2020
	RMB	RMB
Deferred tax assets	12,161	11,364
Deferred tax liabilities	26,638	16,380

At December 31, 2021, certain subsidiaries of the Company did not recognise deferred tax asset of deductible tax losses carried forward of RMB 109,752 (2020: RMB 99,997), of which RMB 13,866 (2020: RMB 10,973) was incurred for the year ended December 31, 2021, because it was not probable that the related tax benefit will be realised. These deductible tax losses carried forward of RMB 525, RMB 400, RMB 585, RMB 3,669 and RMB 104,573 will expire in 2022, 2023, 2024, 2025, 2026 and thereafter, respectively.

33 ASSET RETIREMENT OBLIGATIONS

	2021	2020
	RMB	RMB
At beginning of the year	114,819	137,935
Net liabilities incurred, including reassessment	16,057	(24,059)
Liabilities settled	(5,969)	(3,510)
Accretion expense (Note 10)	4,696	5,107
Currency translation differences	(198)	(654)
At end of the year	<u>129,405</u>	<u>114,819</u>

Asset retirement obligations relate to oil and gas properties (Note 16).

34 PENSIONS

The Group participates in various employee retirement benefit plans (Note 3(aa)). Expenses incurred by the Group in connection with the retirement benefit plans for the year ended December 31, 2021 amounted to RMB 19,939 (2020: RMB 16,833).

For the years ended December 31, 2021 and 2020, the Group had no forfeited in the defined contribution plans available for the Group used to reduce the existing contribution level.

35 CONTINGENT LIABILITIES

(a) Bank and other guarantees

At December 31, 2021 and 2020, the Group did not guarantee related parties or third parties any significant borrowings or others.

(b) Environmental liabilities

The PRC has enacted comprehensive environmental laws and regulations that affect the operation of the oil and gas industry. Management believes that there are no probable liabilities under existing legislation, except for the amounts which have already been reflected in the consolidated financial statements, which may have a material adverse effect on the financial position of the Group.

As of December 31, 2021, the amounts of asset retirement obligations which have already been reflected in the consolidated financial statements relating to environmental liability were RMB 129,405 (Note 33).

(c) Legal contingencies

During the reporting period, the Group has complied with domestic and overseas laws and regulatory requirements. Notwithstanding certain insignificant lawsuits as well as other proceedings outstanding, management believes that any resulting liabilities will not have a material adverse effect on the financial position of the Group.

(d) Group insurance

The Group has insurance coverage for certain assets that are subject to significant operating risks, third-party liability insurance against claims relating to personal injury, property and environmental damages that result from accidents and employer liabilities insurance. The potential effect on the financial position of the Group of any liabilities resulting from future uninsured incidents cannot be estimated by the Group at present.

36 COMMITMENTS

(a) Capital commitments

At December 31, 2021, the Group's capital commitments contracted but not provided for, mainly relating to property, plant and equipment, were RMB 882 (2020: RMB 714). These capital commitments are transactions mainly with CNPC and its fellow subsidiaries.

(b) Exploration and production licenses

The Company is obligated to make annual payments with respect to its exploration and production licenses to the Ministry of Natural Resources. Payments incurred were RMB 744 for the year ended December 31, 2021 (2020: RMB 700).

According to the current policy, estimated annual payments for the next five years are as follows:

	December 31, 2021	December 31, 2020
	RMB	RMB
Within one year	500	800
Between one and two years	500	800
Between two and three years	500	800
Between three and four years	500	800
Between four and five years	500	800

37 MAJOR CUSTOMERS

The Group's major customers are as follows:

	2021		2020	
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue
	RMB	%	RMB	%
China Petrochemical Corporation and its fellow subsidiaries	136,500	5	98,636	5
CNPC and its fellow subsidiaries	69,058	3	63,623	3
	<u>205,558</u>	<u>8</u>	<u>162,259</u>	<u>8</u>

38 RELATED PARTY TRANSACTIONS

CNPC, the immediate parent of the Company, is a limited liability company incorporated in PRC and directly controlled by the PRC government. Equity interest and voting rights of CNPC in the Company in 2021 was 80.41% (2020: 80.41%).

Related parties include CNPC and its fellow subsidiaries, their associates and joint ventures, other state-owned enterprises and their subsidiaries which the PRC government has control, joint control or significant influence over, and enterprises which the Group is able to control, jointly control or exercise significant influence over, key management personnel of the Company and CNPC and their close family members.

(a) Transactions with CNPC and its fellow subsidiaries, associates and joint ventures

The Group has extensive transactions with other companies in CNPC and its fellow subsidiaries, associates and joint ventures. Due to the relationships, it is possible that the terms of the transactions between the Group and other members of CNPC and its fellow subsidiaries, associates and joint ventures are not the same as those that would result from transactions with other related parties or wholly unrelated parties.

The principal related party transactions with CNPC and its fellow subsidiaries, associates and joint ventures, which were carried out in the ordinary course of business, are as follows:

The Company and CNPC entered into a new Comprehensive Products and Services Agreement on August 27, 2020 for a period of three years effective from January 1, 2021. The Comprehensive Products and Services Agreement provides for a range of products and services which may be required and requested by either party. The products and services to be provided by CNPC and its fellow subsidiaries to the Group under the Comprehensive Products and Services Agreement include construction and technical services, production services, supply of material services, social services, ancillary services and financial services. The products and services required and requested by either party are provided in accordance with (1) government-prescribed prices; or (2) where there is no government-prescribed price, with reference to relevant market prices; or (3) where neither (1) nor (2) is applicable, then the actual cost incurred or the agreed contractual prices are used.

On August 25, 2011, based on the Land Use Rights Leasing Contract signed for a period of 50 years from 2000, the Company and CNPC entered into a supplemental agreement to the Land Use Rights Leasing Contract which took effect on January 1, 2012. The expiry date of the supplemental agreement is the same as the Land Use Rights Leasing Contract, which is in 2050. The Company and CNPC may adjust area and rental payable for the leased land parcels every three years taking into consideration of production and operations of the Company and the prevailing market price. On August 27, 2020, the Company and CNPC each issued a confirmation letter to the Land Use Rights Leasing Contract, which adjusted the rental payable and the area for the leased land parcels with effect from January 1, 2021. The Company agreed to rent from CNPC and its fellow subsidiaries parcels of land with an aggregate area of approximately 1,142 million square metres with annual rental payable (exclusive of tax and government charges) approximately RMB 5,673 based on the area of leased land parcels and the current market conditions. Apart from the annual rental payable and are for the leased parcels, the other terms in the Land Use Rights Leasing Contract and supplemental agreement remained.

On August 24, 2017, the Company entered into a new Buildings Leasing Contract with CNPC, which took effect on January 1, 2018 for a period of 20 years. The Company and CNPC may adjust the area of buildings leased and the rental fees every three years as appropriate by reference to the production and operations of the Company and the prevailing market prices, but the adjusted rental shall not exceed the comparable fair market prices. On August 27, 2020, the Company and CNPC issued a confirmation letter to the Buildings Leasing Contract, which adjusted the annual rental payable and the area for the leased which took effect on January 1, 2021. Buildings covering an aggregate area of 1,287,486 square meters were leased at annual rental payable approximately RMB 713 in accordance with the confirmed rental area and the current property market conditions. Apart from the annual rental payable and area of the leased building, the other terms in the Building Leasing Contract remains unchanged.

Transactions with CNPC and its fellow subsidiaries, associates and joint ventures are summarised as follows:

- Sales of goods represent the sale of crude oil, refined products, chemical products and natural gas, etc. The total amount of these transactions amounted to RMB 115,587 for the year ended December 31, 2021 (2020: RMB 105,535).
- Sales of services principally represent the provision of services in connection with the transportation of crude oil and natural gas, etc. The total amount of these transactions amounted to RMB 8,313 for the year ended December 31, 2021 (2020: RMB 8,593).
- Purchases of goods and services principally represent construction and technical services, production services, social services, ancillary services and material supply services, etc. The total amount of these transactions amounted to RMB 416,561 for the year ended December 31, 2021 (2020: RMB 321,858).
- Purchases of assets principally represent the purchases of manufacturing equipment, office equipment and transportation equipment, etc. The total amount of these transactions amounted to RMB 1,051 for the year ended December 31, 2021 (2020: RMB 767).
- Interest income represents interests from deposits placed with CNPC and its fellow subsidiaries. The total interest income amounted to RMB 270 for the year ended December 31, 2021 (2020: RMB 381). The balance of deposits at December 31, 2021 was RMB 36,489 (2020: RMB 40,377).
- Interest expense and other financial service expense, principally represents interest charged on the loans from CNPC and its fellow subsidiaries, insurance fee charged on the insurance services from CNPC and its fellow subsidiaries, etc. The total amount of these transactions amounted to RMB 4,878 for the year ended December 31, 2021 (2020: RMB 8,051).
- The borrowings from CNPC and its fellow subsidiaries at December 31, 2021 were RMB 133,800 (2020: RMB 96,298).
- Rents and other payments paid to CNPC and its fellow subsidiaries including (1) the rental expense paid by the Group according to Land Use Rights Leasing Contract and Buildings Leasing Contract between the Group and CNPC; (2) the payable by the Group (including all rents, leasing service fees and prices for exercising purchase options) for the period according to the leasing agreements entered into by the Group and CNPC and its fellow subsidiaries. The total rents and other payments amounted to RMB 6,797 for the year ended December 31, 2021 (2020: RMB 8,294).

Amounts due from and to CNPC and its fellow subsidiaries, associates and joint ventures included in the following accounts captions are summarised as follows:

	December 31, 2021	December 31, 2020
	RMB	RMB
Accounts receivable	7,395	8,651
Prepayments and other current assets	24,925	35,063
Financial assets at fair value through other comprehensive income	1,850	-
Intangible and other non-current assets	15,696	15,251
Accounts payable and accrued liabilities	49,526	67,262
Contract liabilities	613	2,692
Lease liabilities	101,453	99,725

(b) Key management compensation

	2021	2020
	RMB'000	RMB'000
Emoluments and other benefits	15,143	16,598
Contribution to retirement benefit scheme	1,568	1,338
	<u>16,711</u>	<u>17,936</u>

(c) Transactions with other state-controlled entities in the PRC

Apart from the transactions with CNPC and its fellow subsidiaries, associates and joint ventures, the Group's transactions with other state-controlled entities include but are not limited to the following:

- Sales and purchases of goods and services;
- Purchases of assets;
- Lease of assets; and
- Bank deposits and borrowings

These transactions are conducted in the ordinary course of the Group's business.

39 SEGMENT INFORMATION

The Group is principally engaged in a broad range of petroleum related products, services and activities. The Group's operating segments comprise: Exploration and Production, Refining and Chemicals, Marketing, and Natural Gas and Pipeline. On the basis of these operating segments, the management of the Company assesses the segmental operating results and allocates resources. Sales between operating segments are conducted principally at market prices. Additionally, the Group presents geographical information based on entities located in regions with a similar risk profile.

The Exploration and Production segment is engaged in the exploration, development, transportation, production and marketing of crude oil and natural gas.

The Refining and Chemicals segment is engaged in the refining of crude oil and petroleum products, production and marketing of primary petrochemical products, derivative petrochemical products and other chemical products.

The Marketing segment is engaged in the marketing of refined products and non-oil products, and the trading business.

The Natural Gas and Pipeline segment is engaged in the transportation and sale of natural gas.

The Head Office and Other segment relates to cash management and financing activities, the corporate center, research and development, and other business services supporting the other operating business segments of the Group.

The accounting policies of the operating segments are the same as those described in Note 3 - "Summary of Principal Accounting Policies".

The segment information for the operating segments for the years ended December 31, 2021 and 2020 are as follows:

Year Ended December 31, 2021	Exploration and Production RMB	Refining and Chemicals RMB	Marketing RMB	Natural Gas and Pipeline RMB	Head Office and Other RMB	Total RMB
Revenue	688,334	974,972	2,170,062	417,022	3,894	4,254,284
Less: Intersegment sales	(571,705)	(650,018)	(397,485)	(19,526)	(1,201)	(1,639,935)
Revenue from external customers	116,629	324,954	1,772,577	397,496	2,693	2,614,349
Depreciation, depletion and amortisation	(175,329)	(28,466)	(20,338)	(5,288)	(1,848)	(231,269)
Including: Impairment losses of property, plant and equipment	(20,218)	(4,681)	(1,396)	(176)	-	(26,471)
Profit/(loss) from operations	68,452	49,740	13,277	43,965	(14,281)	161,153
Finance costs:						
Exchange gain						13,377
Exchange loss						(12,839)
Interest income						2,984
Interest expense						(19,739)
Total net finance costs						(16,217)
Share of profit of associates and joint ventures	2,633	68	680	7,570	2,316	13,267
Profit before income tax expense						158,203
Income tax expense						(43,507)
Profit for the year						114,696
Segment assets	1,391,129	457,914	520,938	164,934	1,573,900	4,108,815
Other assets						17,014
Investments in associates and joint ventures	44,289	1,966	19,020	169,611	30,899	265,785
Elimination of intersegment balances (a)						(1,889,352)
Total assets						2,502,262
Capital expenditures	178,259	54,487	10,982	6,750	700	251,178
Segment liabilities	550,365	199,159	349,609	128,490	566,602	1,794,225
Other liabilities						103,412
Elimination of intersegment balances (a)						(804,244)
Total liabilities						1,093,393

Year Ended December 31, 2020	Exploration and Production	Refining and Chemicals	Marketing	Natural Gas and Pipeline	Head Office and Other	Total
	RMB	RMB	RMB	RMB	RMB	RMB
Revenue	530,807	774,775	1,497,533	370,771	3,547	3,177,433
Less: Intersegment sales	(437,670)	(492,667)	(276,503)	(35,437)	(1,320)	(1,243,597)
Revenue from external customers	93,137	282,108	1,221,030	335,334	2,227	1,933,836
Depreciation, depletion and amortisation	(150,849)	(23,893)	(17,833)	(19,475)	(1,825)	(213,875)
Including: Impairment losses of property, plant and equipment	(15,364)	-	(3)	-	-	(15,367)
Profit/(loss) from operations	23,092	(1,834)	(2,906)	72,410	(14,825)	75,937
Finance costs:						
Exchange gain						14,387
Exchange loss						(14,279)
Interest income						3,023
Interest expense						(26,528)
Total net finance costs						<u>(23,397)</u>
Share of (loss)/profit of associates and joint ventures	(616)	(24)	(728)	2,128	2,773	3,533
Profit before income tax expense						56,073
Income tax expense						<u>(22,588)</u>
Profit for the year						<u>33,485</u>
Segment assets	1,452,554	432,022	489,984	195,353	1,631,577	4,201,490
Other assets						17,361
Investments in associates and joint ventures	41,461	1,289	18,239	160,730	28,884	250,603
Elimination of intersegment balances (a)						<u>(1,981,328)</u>
Total assets						<u>2,488,126</u>
Capital expenditures	186,620	21,810	16,294	21,143	626	246,493
Segment liabilities	658,521	186,332	321,460	192,456	573,340	1,932,109
Other liabilities						80,104
Elimination of intersegment balances (a)						<u>(890,708)</u>
Total liabilities						<u>1,121,505</u>

Geographical information

	Revenue		Non-current assets (b)	
	2021	2020	December 31, 2021	December 31, 2020
	RMB	RMB	RMB	RMB
China's mainland	1,626,616	1,212,821	1,838,505	1,789,349
Other	987,733	721,015	165,117	190,625
	<u>2,614,349</u>	<u>1,933,836</u>	<u>2,003,622</u>	<u>1,979,974</u>

(a) Elimination of intersegment balances represents elimination of intersegment accounts and investments.

(b) Non-current assets mainly include non-current assets other than financial instruments and deferred tax assets.

40 COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION

	Notes	December 31, 2021	December 31, 2020
		RMB	RMB
NON-CURRENT ASSETS			
Property, plant and equipment		1,032,712	1,005,376
Investments in associates and joint ventures		205,963	195,490
Equity investments measured at fair value through other comprehensive income		380	419
Subsidiaries		260,759	261,449
Right-of-use assets		115,152	117,309
Intangible and other non-current assets		35,305	34,746
Deferred tax assets		-	2,019
Time deposits with maturities over one year		1,500	3,050
TOTAL NON-CURRENT ASSETS		1,651,771	1,619,858
CURRENT ASSETS			
Inventories		95,828	77,813
Accounts receivable		7,429	8,412
Prepaid expenses and other current assets		55,042	68,213
Financial assets at fair value through other comprehensive income		3,598	2,830
Time deposits with maturities over three months but within one year		3,550	2,000
Cash and cash equivalents		31,955	40,787
TOTAL CURRENT ASSETS		197,402	200,055
CURRENT LIABILITIES			
Accounts payable and accrued liabilities		195,250	200,325
Contract liabilities		57,698	59,877
Other taxes payable		51,615	45,769
Short-term borrowings		28,833	86,962
Lease liabilities		3,137	3,706
TOTAL CURRENT LIABILITIES		336,533	396,639
NET CURRENT LIABILITIES		(139,131)	(196,584)
TOTAL ASSETS LESS CURRENT LIABILITIES		1,512,640	1,423,274
EQUITY			
EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY:			
Share capital		183,021	183,021
Retained earnings	31 (b)	664,090	628,226
Reserves	31 (a)	329,270	320,778
TOTAL EQUITY		1,176,381	1,132,025
NON-CURRENT LIABILITIES			
Long-term borrowings		184,767	155,829
Lease liabilities		47,976	47,983
Asset retirement obligations		90,941	81,941
Deferred tax liabilities		7,897	-
Other long-term obligations		4,678	5,496
TOTAL NON-CURRENT LIABILITIES		336,259	291,249
TOTAL EQUITY AND NON-CURRENT LIABILITIES		1,512,640	1,423,274

41 APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved by the Board of Directors on March 31, 2022 and will be submitted to shareholders for approval at the annual general meeting to be held on June 9, 2022.

In accordance with the Accounting Standards Update 2010-03 Extractive Activities – Oil and Gas (Topic 932): Oil and Gas Reserve Estimation and Disclosures (an update of Accounting Standards Codification Topic 932 Extractive Activities – Oil and Gas or “ASC 932”) issued by the Financial Accounting Standards Board and corresponding disclosure requirements of the U.S. Securities and Exchange Commission, this section provides supplemental information on oil and gas exploration and development; and results of operation related to oil and gas producing activities of the Company and its subsidiaries (the “Group”) and also the Group’s investments that are accounted for using the equity method of accounting.

The supplemental information presented below covers the Group’s proved oil and gas reserves estimates, historical cost information pertaining to capitalised costs, costs incurred for property acquisitions, exploration and development activities, result of operations for oil and gas producing activities, standardised measure of estimated discounted future net cash flows and changes in estimated discounted future net cash flows.

The “Other” geographic area includes oil and gas producing activities principally in countries such as Kazakhstan, Australia and Indonesia. As the Group does not have significant reserves held through its investments accounted for using the equity method, information presented in relation to these equity method investments is presented in the aggregate.

Proved Oil and Gas Reserve Estimates

Proved oil and gas reserves cannot be measured exactly. Reserve estimates are based on many factors related to reservoir performance that require evaluation by the engineers interpreting the available data, as well as price and other economic factors. The reliability of these estimates at any point in time depends on both the quality and quantity of the technical and economic data, and the production performance of the reservoirs as well as engineering judgement. Consequently, reserve estimates are subject to revision as additional data become available during the producing life of a reservoir. When a commercial reservoir is discovered, proved reserves are initially determined based on limited data from the first well or wells. Subsequent data may better define the extent of the reservoir and additional production performance, well tests and engineering studies will likely improve the reliability of the reserve estimate. The evolution of technology may also result in the application of improved recovery techniques such as supplemental or enhanced recovery projects, or both, which have the potential to increase reserves.

Proved oil and gas reserves are the estimated quantities of crude oil and natural 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 the time at which 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.

Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the average price during the 12-month period before the ending date of the period covered by this report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. The costs shall be that prevailing at the end of the period.

Proved developed oil and gas reserves are proved reserves that can be expected to be recovered:

- a. 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.
- b. Through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.

Proved undeveloped oil and gas reserves are proved reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.

The taxes, fees and royalty in China are domestic tax schemes and are paid in cash to PRC authorities. The proved reserves includes quantities that are ultimately produced and sold to pay these taxes, fees and royalty.

Proved reserve estimates as of December 31, 2021 and 2020 were based on reports prepared by DeGolyer and MacNaughton, McDaniel & Associates, Ryder Scott and GLJ independent engineering consultants.

Estimated quantities of net proved crude oil and condensate and natural gas reserves and of changes in net quantities of proved developed and undeveloped reserves for each of the periods indicated are as follows:

	Crude Oil and Condensate (million barrels)	Natural Gas (billion cubic feet)	Total – All products (million barrels of oil equivalent)
Proved developed and undeveloped reserves			
The Group			
Reserves at December 31, 2019	7,253	76,236	19,959
Changes resulting from:			
Purchase	15	107	33
Revisions of previous estimates	(1,553)	(595)	(1,652)
Improved recovery	108	-	108
Extensions and discoveries	385	4,976	1,215
Sales	(80)	(66)	(91)
Production	(922)	(4,221)	(1,626)
Reserves at December 31, 2020	<u>5,206</u>	<u>76,437</u>	<u>17,946</u>
Changes resulting from:			
Purchase	-	-	-
Revisions of previous estimates	1,160	(2,011)	825
Improved recovery	117	27	121
Extensions and discoveries	472	4,885	1,286
Sales	(3)	(2)	(3)
Production	(888)	(4,420)	(1,625)
Reserves at December 31, 2021	<u>6,064</u>	<u>74,916</u>	<u>18,550</u>
Proved developed reserves at:			
December 31, 2020	4,654	42,077	11,667
December 31, 2021	5,375	42,576	12,471
Proved undeveloped reserves at:			
December 31, 2020	552	34,360	6,279
December 31, 2021	689	32,340	6,079
Equity method investments			
Share of proved developed and undeveloped reserves of associates and joint ventures			
December 31, 2020	196	363	256
December 31, 2021	208	511	294

At December 31, 2021, total proved developed and undeveloped reserves of the Group and equity method investments is 18,844 million barrels of oil equivalent (2020: 18,202 million barrels of oil equivalent), comprising 6,272 million barrels of crude oil and condensate (2020: 5,402 million barrels) and 75,427.3 billions of cubic feet of natural gas (2020: 76,800 billions of cubic feet).

At December 31, 2021, 5,286 million barrels (2020: 4,375 million barrels) of crude oil and condensate and 73,459.9 billion cubic feet (2020: 74,794 billion cubic feet) of natural gas proved developed and undeveloped reserves of the Group are located within China's mainland and 778 million barrels (2020: 831 million barrels) of crude oil and condensate and 1,455.9 billion cubic feet (2020: 1,643 billion cubic feet) of natural gas proved developed and undeveloped reserves of the Group are located overseas.

Capitalised Costs

	December 31, 2021	December 31, 2020
	RMB	RMB
The Group		
Property costs and producing assets	1,969,409	1,890,903
Support facilities	483,216	465,022
Construction-in-progress	119,583	150,535
Total capitalised costs	2,572,208	2,506,460
Accumulated depreciation, depletion and amortisation	(1,635,837)	(1,542,037)
Net capitalised costs	936,371	964,423
Equity method investments		
Share of net capitalised costs of associates and joint ventures	19,056	20,465

Costs Incurred for Property Acquisitions, Exploration and Development Activities

	2021		
	China's mainland	Other	Total
	RMB	RMB	RMB
The Group			
Property acquisition costs	-	7,610	7,610
Exploration costs	37,351	879	38,230
Development costs	132,829	12,084	144,913
Total	170,180	20,573	190,753
Equity method investments			
Share of costs of property acquisition, exploration and development of associates and joint ventures	-	2,110	2,110

	2020		
	China's mainland	Other	Total
	RMB	RMB	RMB
The Group			
Property acquisition costs	-	3,712	3,712
Exploration costs	35,862	1,051	36,913
Development costs	129,738	16,420	146,158
Total	165,600	21,183	186,783
Equity method investments			
Share of costs of property acquisition, exploration and development of associates and joint ventures	-	1,462	1,462

Results of Operations for Oil and Gas Producing Activities

The results of operations for oil and gas producing activities for the years ended December 31, 2021 and 2020 are presented below. "Revenue" includes sales to third parties and inter-segment sales (at arm's-length prices), net of value-added taxes. Resource tax, crude oil special gain levy and other taxes are included in "taxes other than income taxes". Income taxes are computed using the applicable statutory tax rate, reflecting tax deductions and tax credits for the respective years ended.

	2021		
	China's mainland	Other	Total
	RMB	RMB	RMB
The Group			
Revenue			
Sales to third parties	82,654	40,695	123,349
Inter-segment sales	388,611	25,149	413,760
	471,265	65,844	537,109
Production costs excluding taxes	(126,916)	(12,177)	(139,093)
Exploration expenses	(23,418)	(830)	(24,248)
Depreciation, depletion and amortisation	(128,297)	(29,417)	(157,714)
Taxes other than income taxes	(28,611)	(5,810)	(34,421)
Accretion expense	(4,557)	(139)	(4,696)
Income taxes	(22,084)	(11,210)	(33,294)
Results of operations from producing activities	137,382	6,261	143,643
Equity method investments			
Share of profit for producing activities of associates and joint ventures	-	1,904	1,904
Total of the Group and equity method investments results of operations for producing activities	137,382	8,165	145,547

	2020		
	China's mainland	Other	Total
	RMB	RMB	RMB
The Group			
Revenue			
Sales to third parties	32,662	30,855	63,517
Inter-segment sales	306,623	12,408	319,031
	339,285	43,263	382,548
Production costs excluding taxes	(124,154)	(9,605)	(133,759)
Exploration expenses	(18,851)	(482)	(19,333)
Depreciation, depletion and amortisation	(134,007)	(15,953)	(149,960)
Taxes other than income taxes	(18,865)	(2,690)	(21,555)
Accretion expense	(4,905)	(202)	(5,107)
Income taxes	(9,369)	(5,340)	(14,709)
Results of operations from producing activities	29,134	8,991	38,125
Equity method investments			
Share of profit for producing activities of associates and joint ventures	-	(76)	(76)
Total of the Group and equity method investments results of operations for producing activities	29,134	8,915	38,049

Standardised Measure of Discounted Future Net Cash Flows

The standardised measure of discounted future net cash flows related to proved oil and gas reserves at December 31, 2021 and 2020 is based on the prices used in estimating the Group's proved oil and gas reserves, year-end costs, currently enacted tax rates related to existing proved oil and gas reserves and a 10% annual discount factor. "Future cash inflows" are net of value-added taxes. Corporate income taxes are included in "future income tax expense". Other taxes are included in "future production costs" as production taxes.

The standardised measure of discounted future net cash flows related to proved oil and gas reserves at December 31, 2021 and 2020 is as follows:

	RMB
The Group	
At December 31, 2021	
Future cash inflows	5,244,811
Future production costs	(1,723,220)
Future development costs	(462,411)
Future income tax expense	(549,495)
Future net cash flows	2,509,685
Discount at 10% for estimated timing of cash flows	(1,108,580)
Standardised measure of discounted future net cash flows	1,401,105

RMB**The Group**

At December 31, 2020	
Future cash inflows	4,366,906
Future production costs	(1,470,460)
Future development costs	(445,462)
Future income tax expense	(441,668)
Future net cash flows	2,009,316
Discount at 10% for estimated timing of cash flows	(947,035)
Standardised measure of discounted future net cash flows	1,062,281

At December 31, 2021, RMB 1,336,419 (2020: RMB 1,028,640) of standardised measure of discounted future net cash flows related to proved oil and gas reserves located within China's mainland and RMB 64,686 (2020: RMB 33,641) of standardised measure of discounted future net cash flows related to proved oil and gas reserves located overseas.

Share of standardised measure of discounted future net cash flows of associates and joint ventures:

December 31, 2021	14,788
December 31, 2020	8,573

Changes in Standardised Measure of Discounted Future Net Cash Flows

Changes in the standardised measure of discounted net cash flows for the Group for each of the years ended December 31, 2021 and 2020 are as follows:

	2021	2020
	RMB	RMB
The Group		
Beginning of the year	1,062,281	1,325,069
Sales and transfers of oil and gas produced, net of production costs	(344,643)	(215,390)
Net changes in prices and production costs and other	407,882	(358,008)
Extensions, discoveries and improved recovery	150,979	112,834
Development costs incurred	23,675	39,238
Revisions of previous quantity estimates	88,332	(138,772)
Accretion of discount	86,172	146,137
Net change in income taxes	(73,272)	156,122
Net change due to purchases and sales of minerals in place	(301)	(4,949)
End of the year	1,401,105	1,062,281

CORPORATE INFORMATION

Board of Directors

Chairman:	Dai Houliang		
Vice Chairman:	Hou Qijun		
Non-executive Directors:	Duan Liangwei	Liu Yuezhen	Jiao Fangzheng
Executive Director and President:	Huang Yongzhang		
Executive Director and Senior Vice President:	Ren Lixin		
Independent Non-executive Directors:	Elsie Leung Oi-sie	Tokuchi Tatsuhito	Simon Henry
	Cai Jinyong	Jiang, Simon X.	
Secretary to the Board of Directors:	Chai Shouping		

Supervisory Committee

Chairman:	Lv Bo		
Supervisors:	Zhang Fengshan	Jiang Lifu	Lu Yaozhong
	Wang Liang	Fu Suotang	Li Jiamin
	Liu Xianhua		

Other Senior Management

Sun Longde	Li Luguang	Tian Jinghui
Chai Shouping	Yang Jigang	Zhang Minglu
Zhu Guowen		

Authorised Representatives

Liu Yuezhen	Chai Shouping
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Auditors

Overseas Auditors

PricewaterhouseCoopers

Public Interest Entity Auditor registered
in accordance with the Financial
Reporting Council Ordinance

22/F, Prince's Building
Central, Hong Kong, PRC

Domestic Auditors

PricewaterhouseCoopers Zhong Tian LLP

11/F, PricewaterhouseCoopers Center,
2 Corporate Avenue, 202 Hu Bin Road, Huangpu
District, Shanghai, PRC

Legal Advisers to the Company

as to Hong Kong law:

Freshfields Bruckhaus Deringer
3705 China World Office Two
1 Jianguomenwai Avenue
Beijing

as to PRC law:

King & Wood Mallesons
18/F, East Tower, World Financial Center
No.1 East 3rd Ring Middle Road
Chaoyang District
Beijing 100020
PRC

as to United States law:

Shearman & Sterling
12/F, Gloucester Tower
The Landmark
15 Queen's Road
Central, Hong Kong

Hong Kong Representative Office

Unit 3705
Tower 2 Lippo Centre
89 Queensway
Hong Kong

Hong Kong Share Registrar and Transfer Office

Hong Kong Registrars Limited
Shops 1712-16, 17th Floor,
Hopewell Centre, 183 Queen's Road East
Hong Kong

Principal Bankers

Industrial and Commercial Bank of China,
Head Office
55 Fuxingmennei Avenue
Xicheng District
Beijing, PRC

China Construction Bank
25 Finance Street
Xicheng District
Beijing, PRC

Bank of Communications, Beijing Branch
Tongtai Mansion, 33 Finance Street
Xicheng District
Beijing, PRC

Agricultural Bank of China Limited,
Head Office
23 Fuxingmennei Avenue
Xicheng District
Beijing, PRC

Bank of China, Head Office
1 Fuxingmennei Avenue
Xicheng District
Beijing, PRC

China Development Bank Corporation Limited
16 Taipingqiao Avenue
Xicheng District
Beijing, PRC

CITIC Bank Corporation Limited,
Sales Department of Head Office
A27 Finance Street
Xicheng District
Beijing, PRC

Depository

BNY Mellon Shareowner Services
PO BOX 505000
Louisville, KY 40233-5000
UNITED STATES

Publications

As required by the Securities Law of the United States, the Company will file an annual report on Form 20-F with the U.S. Securities and Exchange Commission ("SEC") on or before April 30, 2022. The annual report on Form 20-F contains a detailed description of the Company's businesses, operating results and financial conditions. Copies of the annual report and the Form 20-F submitted to the SEC will be made available at the following addresses:

PRC PetroChina Company Limited
 No. 9 Dongzhimen North Street, Dongcheng District
 Beijing 100007
 PRC
 Tel: 86(10) 5998 6270
 Fax: 86(10) 6209 9557

Hong Kong PetroChina Company Limited
 Unit 3705
 Tower 2 Lippo Centre
 89 Queensway
 Hong Kong
 Tel: (852) 2899 2010
 Fax: (852) 2899 2390

USA BNY Mellon Shareowner Services
 PO BOX 505000
 Louisville, KY 40233-5000
 UNITED STATES

Overnight correspondence should be sent to:
BNY Mellon Shareowner Services
462 South 4th Street Suite 1600
Louisville, KY 40202
UNITED STATES
Calling from within the US and Canada (toll-free): 1 888 269 2377
International call: 1-201-680-6825
Email: shrrelations@cpushareownerservices.com

Shareholders may also browse or download the annual report of the Company and the Form 20-F filed with the SEC from the official website of the Company at www.petrochina.com.cn.

Investment Information for Reference

Please contact our Hong Kong Representative Office for other information about the Company.

DOCUMENTS AVAILABLE FOR INSPECTION

The following documents will be available for inspection at the headquarters of the Company in Beijing and Shanghai Stock Exchange upon request by the relevant regulatory authorities and shareholders in accordance with the laws and regulations of the PRC and the Articles of Association:

1. The original of the annual report for 2021 signed by the Chairman of the Company.
2. The financial statements under the hand and seal of Mr. Dai Houliang, Chairman of the Company, Mr. Huang Yongzhang, Director and President of the Company, and Mr. Chai Shouping, Chief Financial Officer of the Company.
3. The original of the Financial Report of the Company under the seal of the Auditors and under the hand of Certified Public Accountants.
4. The original copies of the documents and announcement of the Company published in the newspaper stipulated by the China Securities Regulatory Commission during the reporting period.
5. The original copies of all Chinese and English announcements of the Company published on the websites of the Hong Kong Stock Exchange and the Company during the period of the annual report.
6. The annual report published in other stock markets.

CONFIRMATION FROM THE DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

According to the relevant provisions and requirements of the Securities Law of the People's Republic of China and Measures for Information Disclosure of Companies Offering Shares to the Public promulgated by the China Securities Regulatory Commission, as the Board of Directors, Supervisors and senior management of PetroChina Company Limited, we have carefully reviewed the annual report for 2021 and concluded that this annual report truly, objectively and completely represents the business performance of the Company, it contains no false representations, misleading statements or material omissions and its formulation and review comply with laws, regulations and the requirements of the China Securities Regulatory Commission.

Signatures of the Directors, Supervisors and senior management:

Dai Houliang

Hou Qijun

Duan Liangwei

Liu Yuezhen

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