

CHINA PETROLEUM & CHEMICAL CORP
Form 20-F
April 27, 2018
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended DECEMBER 31, 2017

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

For the transaction period from to

Commission file number 1-15138

CHINA PETROLEUM & CHEMICAL CORPORATION

(Exact name of Registrant as specified in its charter)

The People's Republic of China
(Jurisdiction of incorporation or organization)

22 Chaoyangmen North Street

Chaoyang District, Beijing, 100728

The People's Republic of China
(Address of principal executive offices)

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The People's Republic of China

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(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of Each Class	Name of Each Exchange On Which Registered
American Depositary Shares, each representing 100 H Shares of par value RMB 1.00 per share H Shares of par value RMB 1.00 per share	New York Stock Exchange, Inc. New York Stock Exchange, Inc.*

* Not for trading, but only in connection with the registration of American Depositary Shares.

Securities registered or to be registered pursuant to Section 12(g) of the Act.

None
(Title of Class)

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

H Shares, par value RMB 1.00 per share	25,513,438,600
A Shares, par value RMB 1.00 per share	95,557,771,046

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes No

Note: Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files)

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

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Large accelerated filer

Accelerated filer

Non-accelerated filer

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

The term new or revised financial accounting standard refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued
by the International Accounting Standards Board

Other

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. *

Yes No

* This requirement does not apply to the registrant in respect of this filing.

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CERTAIN TERMS AND CONVENTIONS

Definitions

Unless the context otherwise requires, references in this annual report to:

- Sinopec Corp. , Company , we , our and us are to China Petroleum & Chemical Corporation, a PRC joint limited company, and its subsidiaries;
- Sinopec Group Company are to our controlling shareholder, China Petrochemical Corporation, a PRC limited liability company;
- Sinopec Group are to the Sinopec Group Company and its subsidiaries other than Sinopec Corp. and its subsidiaries;
- provinces are to provinces and to provincial-level autonomous regions and municipalities in China which are directly under the supervision of the central PRC government;
- RMB are to Renminbi, the currency of the PRC;
- HK\$ are to Hong Kong dollar, the currency of the Hong Kong Special Administrative Region of the PRC; and
- US\$ are to US dollars, the currency of the United States of America.

Conversion Conventions

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Unless otherwise specified, conversion of crude oil from tonnes to barrels are made at a rate of one tonne to 7.10 barrels for crude oil we produced domestically and one tonne to 7.21, 7.20 and 7.21 barrels for the years ended December 31, 2015, 2016 and 2017, respectively for crude oil we produced overseas. Conversions of natural gas from cubic meters to cubic feet are made at a rate of one cubic meter to 35.31 cubic feet; and 6,000 cubic feet of natural gas is converted to one BOE.

Glossary of Technical Terms

Unless otherwise indicated in the context, references to:

- BOE are to barrels-of-oil equivalent.
- primary distillation capacity are to the crude oil throughput capacity of a refinery's crude oil distillation units, calculated by estimating the number of days in a year that such crude oil distillation units are expected to operate, excluding downtime for regular maintenance, and multiplying that number by the amount equal to the units' optimal daily crude oil throughput.
- rated capacity are to the output capacity of a given production unit or, where appropriate, the throughput capacity, calculated by estimating the number of days in a year that such production unit is expected to operate, excluding downtime for regular maintenance, and multiplying that number by an amount equal to the unit's optimal daily output or throughput, as the case may be.

CURRENCIES AND EXCHANGE RATES

We publish our financial statements in Renminbi. Unless otherwise indicated, all translations from Renminbi to US dollars were made at the averages of mid-point exchange rates of Renminbi as published by the PRC State Administration of Foreign Exchange (SAFE) for the past five years.

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The following table sets forth the noon buying rate for US dollars in Renminbi for the periods indicated, as provided by the H.10 statistical release of the U.S. Federal Reserve Board. We do not represent that Renminbi or US dollar amounts could be converted into US dollars or Renminbi, as the case may be, at any particular rate, the rates below or at all. On April 20, 2018, the noon buying rate was RMB 6.2945 to US\$1.00.

Period	End	Noon Buying Rate(1)		
		Average(2)	High	Low
(RMB per US\$1.00)				
2013	6.0537	6.1412	6.2438	6.0537
2014	6.2046	6.1704	6.2591	6.0402
2015	6.4778	6.2869	6.4896	6.1870
2016	6.9430	6.6549	6.9580	6.4480
2017	6.5063	6.7350	6.9575	6.4773
October 2017	6.6328	6.6254	6.6533	6.5712
November 2017	6.6090	6.6200	6.6385	6.5967
December 2017	6.5063	6.5932	6.6210	6.5063
January 2018	6.2841	6.4233	6.5263	6.2841
February 2018	6.3280	6.3183	6.3471	6.2649
March 2018	6.2726	6.3174	6.3565	6.2685
April 2018 (through April 20, 2018)	6.2945	6.2859	6.3045	6.2655

- (1) The exchange rates reflect those set forth in the H.10 statistical release of the U.S. Federal Reserve Board.
- (2) Annual averages are determined by averaging the rates on the last business day of each month during the relevant period. Monthly averages are calculated using the average of the daily rates during the relevant period.

FORWARD-LOOKING STATEMENTS

This annual report includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this annual report that address activities, events or developments which we expect or anticipate will or may occur in the future are hereby identified as forward-looking statements for the purpose of the safe harbor provided by Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words such as believe, intend, expect, anticipate, project, estimate, predict, plan and similar expressions are also intended to identify forward-looking statements. These forward-looking statements address, among others, such issues as:

- amount and nature of future exploration and development,
- future prices of and demand for our products,

- future earnings and cash flow,
- development projects and drilling prospects,
- future plans and capital expenditures,
- estimates of proved oil and gas reserves,
- exploration prospects and reserves potential,
- expansion and other development trends of the petroleum and petrochemical industry,
- production forecasts of oil and gas,
- expected production or processing capacities, including expected rated capacities and primary distillation capacities, of units or facilities not yet in operation,

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- expansion and growth of our business and operations, and
- our prospective operational and financial information.

These statements are based on assumptions and analyses made by us in light of our experience and perception of historical trends, current conditions and expected future developments, as well as other factors we believe are appropriate in particular circumstances. However, whether actual results and developments will meet our expectations and predictions depends on a number of risks and uncertainties which could cause actual results to differ materially from our expectations, including the risks set forth in Item 3. Key Information Risk Factors and the following:

- fluctuations in crude oil and natural gas prices,
- fluctuations in prices of our refined oil and chemical products,
- failures or delays in achieving production from development projects,
- potential acquisitions and other business opportunities,
- general economic, market and business conditions, and
- other risks and factors beyond our control.

Consequently, all of the forward-looking statements made in this annual report are qualified by these cautionary statements and readers are cautioned not to place undue reliance on these forward-looking statements. These forward-looking statements should be considered in light of the various important factors set forth above and elsewhere in this Form 20-F. In addition, we cannot assure you that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected effect on us or our business or operations.

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Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION**A. SELECTED FINANCIAL DATA**

The selected consolidated statement of income data (except per ADS data) and consolidated cash flows data for the years ended December 31, 2015, 2016 and 2017, and the selected consolidated balance sheet data as of December 31, 2016 and 2017 are derived from, and should be read in conjunction with, the audited consolidated financial statements included elsewhere in this annual report. The selected consolidated statement of income data (except per ADS data) and consolidated cash flows data for the years ended December 31, 2013 and 2014 and the selected consolidated balance sheet data as of December 31, 2013, 2014 and 2015 are derived from our audited consolidated financial statements which are not included elsewhere in this annual report.

Moreover, the selected financial data should be read in conjunction with our consolidated financial statements and Item 5. Operating and Financial Review and Prospects included elsewhere in this annual report. Our consolidated financial statements are prepared and presented in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board.

	Year Ended December 31,				
	2013	2014	2015	2016	2017
	(RMB in millions, except per share, per ADS data and number of shares)				
Consolidated Statement of					
Income Data(1):					
Operating revenues	2,881,928	2,827,566	2,020,375	1,930,911	2,360,193
Operating expenses	(2,785,165)	(2,754,127)	(1,963,553)	(1,853,718)	(2,288,723)
Operating income	96,763	73,439	56,822	77,193	71,470
Earnings before income tax	95,444	65,818	56,411	80,151	86,697
Tax expense	(24,763)	(17,571)	(12,613)	(20,707)	(16,279)
Net income attributable to equity shareholders of the Company	66,348	46,639	32,512	46,672	51,244

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Basic earnings per share(2)	0.571	0.399	0.269	0.385	0.423
Basic earnings per ADS(2)	57.14	39.92	26.90	38.55	42.33
Diluted earnings per share(2)	0.536	0.399	0.269	0.385	0.423
Diluted earnings per ADS(2)	53.59	39.89	26.90	38.55	42.33
Cash dividends declared per share	0.240	0.200	0.150	0.249	0.500
Segment Operating Income/(Loss)					
Exploration and production	54,793	47,057	(17,418)	(36,641)	(45,944)
Refining	8,599	(1,954)	20,959	56,265	65,007
Marketing and distribution	35,143	29,449	28,855	32,153	31,569
Chemicals	846	(2,229)	19,476	20,623	26,977
Corporate and others	(3,412)	(1,063)	384	3,212	(4,484)
Elimination of inter-segment sales	794	2,179	4,566	1,581	(1,655)
Operating income	96,763	73,439	56,822	77,193	71,470
Shares					
Basic weighted average number of A and H shares	116,102,910,373	116,822,487,451	120,852,547,200	121,071,209,646	121,071,209,646
Diluted weighted average number of A and H shares	121,858,818,276	117,242,396,710	120,852,547,200	121,071,209,646	121,071,209,646

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	As of December 31,				
	2013	2014	2015	2016	2017
	(RMB in millions, except per share, per ADS data and number of shares)				
Consolidated Balance Sheet Data(1):					
Cash and cash equivalents	16,336	10,526	68,933	124,468	113,218
Total current assets	374,578	361,559	333,657	412,261	529,049
Total non-current assets	1,012,703	1,094,035	1,113,611	1,086,348	1,066,455
Total assets	1,387,281	1,455,594	1,447,268	1,498,609	1,595,504
Total current liabilities	(572,018)	(604,451)	(462,832)	(485,543)	(579,446)
Short-term debts and loans from Sinopec Group Company and its affiliates (including current portion of long-term debts)	(163,870)	(178,148)	(115,446)	(74,819)	(80,649)
Long-term debts and loans from Sinopec Group Company and its affiliates (excluding current portion of long-term debts)	(145,590)	(150,932)	(139,746)	(117,446)	(99,124)
Total equity attributable to equity shareholders of the Company	(571,087)	(595,255)	(676,197)	(710,994)	(726,120)
Total equity	(625,778)	(649,603)	(788,161)	(831,235)	(852,890)

	Year Ended December 31,				
	2013	2014	2015	2016	2017
	(RMB in millions, except per share, per ADS data and number of shares)				
Statement of Cash Flow and Other Financial Data(1):					
Net cash generated from operating activities	151,470	148,019	165,740	214,543	190,935
Net cash generated from/(used in) financing activities	31,146	(21,524)	9,093	(93,047)	(56,509)
Net cash used in investing activities	(178,322)	(132,321)	(116,719)	(66,217)	(145,323)
Capital expenditure Exploration and production	105,311	80,196	54,710	32,187	31,344
Refining	26,064	27,957	15,132	14,347	21,075
Marketing and distribution	29,486	26,989	22,115	18,493	21,539
Chemicals	19,263	15,944	17,634	8,849	23,028
Corporate and others	5,076	3,648	2,821	2,580	2,398
Total	185,200	154,734	112,412	76,456	99,384

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(1) The acquisition of 55% equity interest of Shanghai Gaoqiao Petrochemical Co., Ltd. (Gaoqiao) in 2016 from Sinopec Group Company were considered as combination of entities under common control and accounted in a manner of predecessor value accounting. Accordingly, the acquired assets and liabilities have been accounted for at historical cost and the consolidated financial statements for periods prior to the combinations have been restated to include the financial condition and results of operation of these acquired business on a combined basis.

(2) Basic earnings per share have been computed by dividing net income attributable to equity shareholders of our company by the weighted average number of shares in issue. Basic and diluted earnings per ADS have been computed as if all of our issued and authorized ordinary shares, including domestic shares and H shares, are represented by ADSs during each of the years presented. Each ADS represents 100 shares.

(3) On October 26, 2017, Gaoqiao purchased 50% equity interest in Shanghai SECCO from BP Chemicals East China Investment Limited with a cash consideration of RMB 10,135 million. Before the acquisition, we and one of our subsidiaries held 30% and 20% equity interest in Shanghai SECCO, respectively. Upon completion of the acquisition, we, together with our subsidiaries, hold 100% equity interest of Shanghai SECCO, which became a subsidiary of us.

B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

D. RISK FACTORS

Risks Relating to Our Business Operation

We are exposed to risks associated with price fluctuations of crude oil and refined oil products and petrochemical products.

We consume a large amount of crude oil to produce our refined oil products and petrochemical products. Increases in crude oil prices may result in cost inflation, and high prices may also reduce demand for our products which might adversely affect our profitability. Decreases in prices of crude oil, refined oil products and petrochemical products may cause us to incur impairment to our investment and assets. A prolonged period of low oil prices may impact our profit and ability to maintain our long-term investment projects. In addition, while we try to adjust the sale prices of our products to reflect international crude oil price fluctuations, our ability to pass on the increased cost resulting from crude oil price increases to our customers may be limited, and is dependent on international and domestic market conditions as well as the PRC government's price control policies over refined oil products. For instance, the PRC government could exercise price control over refined oil products when international crude oil prices experience a sustained rise or become significantly volatile. As a result, our results of operations and financial condition may be materially affected by the fluctuation of prices of crude oil, refined oil products and petrochemical products.

Our continued business success depends in part on our ability to replace reserves and develop newly discovered reserves.

Our ability to achieve our growth objectives is dependent in part on our level of success in discovering or acquiring additional oil and natural gas reserves. Our exploration and development activities for additional reserves also expose us to inherent risks associated with drilling, including the risk that no proved oil or natural gas reservoirs might be discovered. Exploring for, developing and acquiring reserves is highly risky and capital intensive. The fluctuation in the prices of crude oil and natural gas will impact the amount of our proved oil or natural gas reserves. In the low oil price environment, only large scale, high quality reserves meet our development criteria. Some exploration projects are not viable at the current crude oil price level and cannot be carried forward, potentially leading to failure in supplementing our oil and natural gas reserves with additional reserves through future exploration. Without reserve additions through further exploration and development or acquisition activities, or if the prices of crude oil and natural gas fall sharply, our reserves and production will decline over time, which may materially and adversely affect our results of operations and financial condition.

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We rely heavily on outside suppliers for crude oil and other raw materials, and we may even experience disruption of our ability to obtain crude oil and other raw materials.

We purchase a significant portion of crude oil and other feedstock from outside suppliers located in different countries and regions in the world, of which an insignificant amount of the crude oil processed by our refinery business was sourced from countries or regions that are on the sanction list published and administered by the Office of Foreign Assets Control, or OFAC, of the US Department of Treasury, including Iran and Sudan. In addition, our business growth requires us to source an increasing amount of crude oil from outside suppliers. While we purposely source our crude oil from a diversified portfolio of outside suppliers to avoid any potential disruptions to our normal business operations, we are subject to the political, geographical and economic risks associated with these countries and areas. If our contractual relationships with one or more outside suppliers were terminated or disrupted due to any natural disasters or political events, it is possible that we would not be able to find sufficient alternative sources of supply in a timely manner or on commercially reasonable terms. As a result, our business and financial condition would be materially and adversely affected.

Our business faces operation risks and natural disasters that may cause significant property damages, personal injuries and interruption of operations, and we may not have sufficient insurance coverage for all the financial losses incurred by us.

Exploring for, producing and transporting crude oil and natural gas and producing and transporting refined oil products and petrochemical products involves a number of operating hazards. Our operations are subject to significant hazards and risks inherent in refining operations and in transporting and storing crude oil, intermediate products, refined oil products and chemical products. These hazards and risks include, but are not limited to, natural disasters, fires, explosions, pipeline ruptures and spills, third-party interference and mechanical failure of equipment at our or third-party facilities, any of which could result in production and distribution difficulties and disruptions, environmental pollution, personal injury or wrongful death claims and other damage to our properties and the property of others. There is also risk of mechanical failure and equipment shutdowns both in general and following unforeseen events. In certain situations, undamaged refinery processing units may be dependent on or interact with damaged process units and, accordingly, are also subject to being shut down. Even though we have a strong institutional focus on the safety of our operations and have implemented health, safety and environment (HSE) management system within our company with the view to preventing accidents, and reducing personal injuries, property losses and environment pollution, our preventative measures may not be effective. We also maintain insurance coverage on our property, plant, equipment, inventory and potential third party liability, but our insurance coverage may not be sufficient to cover all the financial losses caused by the operation risks and natural disasters. Significant operating hazards and natural disasters may cause interruption to our operations, property or environmental damages as well as personal injuries, and each of these incidents could have a material adverse effect on our financial condition and results of operations.

The oil and natural gas reserves data in this annual report are only estimates, and our actual production, revenues and expenditures with respect to our reserves may differ materially from these estimates.

There are numerous uncertainties inherent in estimating quantities of proved oil and natural gas reserves, and in the timing of development expenditures and the projection of future rates of production. Adverse changes in economic conditions, such as a prolonged period of low oil prices, may render it uneconomical to develop certain reserves and lead to downward revisions in our reserves. Our actual production, revenues, taxes and fees payable and development and operating expenditures with respect to our reserves may likely vary from these estimates.

The estimate of reserves is influenced by, among other things:

- the quality and quantity of technical and economic data;
- the prevailing oil and gas prices applicable to our production;
- the production performance of the reservoirs; and
- the production plans and etc.

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In addition, new drilling, testing and production results following the estimates may cause substantial upward or downward revisions in the estimates.

Oilfield exploration and drilling involves numerous risks, including risks that no commercially productive crude oil or natural gas reserves can be discovered and risks of failure to acquire or retain reserves.

Our oil and gas business is currently involved in exploration activities in various regions, including in some areas where natural conditions may be challenging and where the costs of such exploration activities may be high. As a result, our oil and gas business may incur cost overruns or may be required to curtail, delay or cancel drilling operations because of many factors, including, but not limited to, the following:

- unexpected conditions in drilling projects;
- irregularities in geological formations pressure;
- equipment failures;
- oil well blowouts;
- adverse weather conditions or natural disasters;
- compliance with existing or enhanced environmental regulations;
- governmental requirements and standards; or
- delays in the availability of drilling rigs and delivery and maintenance of equipment.

The future production of our oil and gas business depends significantly upon our success in finding or acquiring additional reserves and retaining and developing such reserves. If our oil and gas business fails to conduct successful exploration activities or to acquire or retain assets holding

proved reserves, it may not meet its production or growth targets, and its proved reserves will decline as it extracts crude oil and natural gas from the existing reservoirs, which could adversely affect our business, financial condition and results of operations.

We have been actively pursuing business opportunities outside China to supplement our domestic resources. However, there can be no assurance that we can successfully locate sufficient alternative sources of crude oil supply or at all due to the complexity of the international political, economic and other conditions. If we fail to obtain sufficient alternative sources of crude oil supply, our results of operations and financial condition may be adversely affected.

Our exploration, development and production activities and our refining and petrochemical business require substantial expenditure and investments and our plans for and ability to make such expenditures and investments are subject to various risks.

Exploring, developing and producing crude oil and natural gas fields are capital-intensive activities involving a high degree of risk. Our ability to undertake exploration, development and production activities and make the necessary capital expenditures and investments is subject to many risks, contingencies and other uncertainties, which may prevent our oil and gas business from achieving the desired results, or which may significantly increase the expenditures and investments that our oil and gas business makes, including, but not limited to, the following:

- ability to generate sufficient cash flows from operations to finance its expenditures, investments and other requirements, which are affected by changes in crude oil and natural gas prices and sales volumes, and other factors;
- availability and terms of external financing;

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- mix of exploration and development activities conducted on an independent basis and those conducted jointly with other partners;
- extent to which its ability to influence or adjust plans for exploration and development related expenditures is limited under joint operating agreements for those projects in which it has partners;
- government approvals required for exploration and development-related expenditures and investments in jurisdictions in which it conducts business; and
- economic, political and other conditions in jurisdictions in which it conducts business.

From time to time, we may construct new and/or revamp existing refining and petrochemical facilities, which require substantial capital expenditures and investments. There can be no assurance that the cash generated by our operations will be sufficient to fund these development plans or that our actual future capital expenditures and investments will not significantly exceed our current planned amounts. Our inability to obtain sufficient funding for development plans could adversely affect our business, financial condition and results of operations.

Our development projects and production activities involve many uncertainties and operating risks that can prevent us from realizing profits and cause substantial losses.

Our development projects and production activities may be curtailed, delayed or cancelled for many reasons, including equipment shortages or failures, natural hazards, unexpected drilling conditions or reservoir characteristics, pressure or irregularities in geological formations, accidents, mechanical and technical difficulties and industrial action. These projects and activities, which include projects focused on non-conventional oil and gas exploration and development, will also often require the use of new and advanced technologies that may be expensive to develop, purchase and implement, and may not function as expected. There is a risk that any development projects that we undertake may not yield adequate returns. In addition, our development projects and production activities, particularly those in remote areas, could become less profitable, or unprofitable, if we experience a prolonged period of low oil or gas prices or cost overruns.

Our business may be adversely affected by actions and regulations prompted by global climate changes.

As many nations in the world have reached consensus on the importance and urgency of addressing climate change, the oil and gas industry in which we operate is drawing increasing concerns about global climate change in recent years. A number of international, national and regional measures to limit greenhouse gas emissions have been enacted. The Paris Agreement on climate change adopted by 195 nations in December 2015 has placed binding commitments on nations that have ratified it since November 2016, which may lead to more stringent national and regional measures in the near future. It could result in our substantial capital expenditure from compliance with these measures, and our revenue generation and strategic growth opportunities could also be adversely impacted. In addition, China has undertaken to peak the CO₂

emissions by 2030 or earlier, if possible, and to increase the non-fossil fuel share of all energy to around 20 percent by 2030. China has also implemented a national carbon emissions trading scheme in 2017, power generation industry has been included initially, and will gradually expand the industry coverage after the market matures. We are recognized as an emission-control enterprise as are most of the Chinese enterprises, which could have adverse effect on our business, financial condition and results of operations.

Our overseas businesses may be adversely affected by changes of overseas government policies and business environment.

We have operations and assets and may seek new opportunities in various countries and regions, including countries in Africa, South America and Central Asia and certain other regions, some of which are deemed to be subject to a high degree of political risk. These countries have experienced and/or may experience in future political instability, changes to the regulatory environment, changes in taxation and foreign exchange controls, disease outbreaks, deterioration in social security and environmental risks. Any of these conditions occurring could disrupt or curtail our operations or development activities. These events may also cause our production to decline, limit our ability to pursue new opportunities, affect the recoverability of our assets or cause us to incur additional costs, particularly due to the long-term nature of many of our projects and the significant capital expenditure required.

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We may be classified as a passive foreign investment company for United States federal income tax purposes, which could result in adverse United States federal income tax consequences to United States investors in the H shares or ADSs.

Depending upon the value of our assets, which may be determined based, in part, on the market price of our H shares or ADSs, and the nature of our assets and income over time, we could be classified as a passive foreign investment company, or PFIC, for United States federal income tax purposes. Based on our income and assets and the market price of our H shares or ADSs, we do not believe that we were a PFIC for the taxable year ended December 31, 2017 and do not anticipate becoming a PFIC or in the foreseeable future. Because PFIC status is a factual determination made annually after the close of each taxable year on the basis of the composition of our income and the value of our active versus passive assets for that year, there can be no assurance that we will not be a PFIC for any future taxable year. The overall level of our passive assets will be affected by how, and how quickly, we expend our liquid assets. Under circumstances where gross income from activities that produce passive income significantly increase relative to our gross income from activities that produce non-passive income or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming classified as a PFIC may substantially increase. If we were to be or become classified as a PFIC, a US Holder (as defined in Item 10. Additional Information E. Taxation United States Federal Income Tax Considerations) may incur significantly increased United States income tax on gain recognized on the sale or other disposition of the H shares or ADSs and on the receipt of distributions on the H shares or ADSs to the extent such gain or distribution is treated as an excess distribution under the United States federal income tax rules. For more information see Item 10. Additional Information E. Taxation United States Federal Income Tax Considerations.

Our operations may be adversely affected by cyber-attacks or similar disruptions.

We devote significant resources to protecting our digital infrastructure and data against cyber-attacks, if our systems against cyber-security risk prove to be ineffective, we could be adversely affected by, among other things, disruptions to our business operations, and loss of proprietary information, including intellectual property, financial information and employer and customer data, injury to people, property, environment and reputation. As cyber-security attacks continue to evolve, we may be required to expend additional resources to enhance our protective measures against cyber-security breaches.

Risks Relating to Our Industry

Our operations may be adversely affected by the global and domestic economic conditions.

Our results of operations are materially affected by economic conditions in China and elsewhere around the world. There are some uncertainty and instability in the current global economic recovery. The Chinese economy has entered the new normal stage with stable and favorable economic growth and is moving forward with high quality development. Our operations may also be adversely affected by factors such as foreign countries trade protection policies and regional trade agreements which may adversely affect our export and import activities.

Our operations may be adversely affected by the cyclical nature of the market.

Most of our revenues are attributable to sales of refined oil products and petrochemical products, and certain of these businesses and related products have historically been cyclical and sensitive to a number of factors that are beyond our control. These factors include the availability and prices of feedstock and general economic conditions, such as changes in industry capacity and output levels, cyclical changes in regional and global economic conditions, prices and availability of substitute products and fluctuation in prices and demands of natural gas, refined oil products and chemical products. Although we are an integrated company with upstream, midstream and downstream businesses, we have limited ability to mitigate the adverse influence of the cyclicity of global markets.

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We face strong competition from domestic and foreign competitors.

Among our competitors, some are major integrated petroleum and petrochemical companies within and outside China, which have recently become more significant participants in the petroleum and petrochemical industry in China. The PRC government has gradually eased the restrictions on the right to use imported crude oil and relaxed control over the right to import refined oil products. This development may lead to refining overcapacity in China and intensify competition among local refineries. The relaxation of import control may drive up cost of crude oil imports and reduce the prices of refined oil products, thus adversely impact our refining margin. The Chinese crude oil and refined oil product markets are becoming increasingly dynamic and internationalized with implementation of tariff concessions and relaxation of market access as part of China's commitment for its accession to the WTO. The potential trade conflict and increased trade protection measures implemented by several countries may adversely affect the production, trade or demand in petroleum and petrochemical industries, and may have a significant impact on our results of operations. In the wholesale market of refined oil products previously dominated by PetroChina and us, we are facing stronger competition with new players and imported products entering the market. Our market share of chemical products is also under stronger competitive pressure due to the increasingly active participation of diversified new market players including multinational petroleum and petrochemical companies and domestic private enterprises. In addition, we also expect to face competition in both domestic and international petrochemical product market as a result of our domestic and international competitors' increasing production capacity. Increased competition may have a material adverse effect on our financial condition and results of operations.

Risks Relating to Our Controlling Shareholder

We engage in related party transactions with Sinopec Group from time to time which may create potential conflict of interest.

We have engaged from time to time and will continue to engage in a variety of transactions with Sinopec Group, which provides us with a number of services, including, but not limited to, ancillary supply, engineering, maintenance, transport, lease of land use right, lease of buildings, as well as educational and community services. The nature of our transactions with Sinopec Group is governed by a number of service and other contracts between Sinopec Group and us. We have established various schemes in those agreements so that these transactions, when entered into, are under terms that are at arm's length. However, we cannot assure you that Sinopec Group Company or any of its members would not take actions that may favor its interests or its other subsidiaries' interests over ours.

We are controlled by Sinopec Group Company, our ultimate controlling shareholder, whose interest in certain businesses compete or are likely to compete with our business.

Sinopec Group Company has interests in certain businesses, such as oil refining, petrochemical producing and overseas exploration and development, which compete or are likely to compete, either directly or indirectly, with our businesses. To avoid the adverse effects brought by the competition between us and Sinopec Group Company to the maximum extent possible, we and Sinopec Group Company have entered into a non-competition agreement. In 2012, we received from Sinopec Group Company an undertaking to avoid its competition with us. For details, please refer to the descriptions under Item 7. Major Shareholders and Related Party Transactions - A. Major Shareholders. Notwithstanding the foregoing contractual arrangements, because Sinopec Group Company is our controlling shareholder, Sinopec Group Company may take actions that may conflict with our own interests.

It is possible that the current or future activities of our ultimate controlling shareholder, Sinopec Group Company, or its affiliates in or with certain countries that are the subject of economic sanctions under relevant U.S. laws could result in negative media and investor attention to us and possible imposition of sanctions on Sinopec Group Company, which could materially and adversely affect our shareholders value and operations.

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Sinopec Group Company undertakes, from time to time and without our involvement, overseas investments and operations in the oil and gas industry, including exploration and production of oil and gas, refining and Liquefied Natural Gas or LNG, oilfield services and refining engineering projects. Sinopec Group Company's overseas asset portfolio includes a limited number of projects in countries that are subject to U.S. sanctions administered by OFAC and by the U.S. Department of State. We currently do not believe that our investments will result in any direct sanctions imposed by OFAC. However, further trade restrictions and other sanctions could adversely impact our investments. In addition, the United States may expand its sanctions regime to include other countries or regions where Sinopec Group Company or its affiliates, including us, may have assets or operations, or may unilaterally reinstate its sanction regime in Iran, where most U.S. secondary sanctions (i.e., those covering non-U.S. persons) have been suspended since January 16, 2016 pursuant to the terms of the Joint Comprehensive Plan of Action (the JCPOA), in the event of a dispute over Iran's compliance with its nuclear commitments under the JCPOA. We cannot predict the interpretation or implementation of government policy at the U.S. federal, state or local levels with respect to any current or future activities by Sinopec Group Company or its affiliates, including us, in countries or with individuals or entities that are the subject of U.S. sanctions. Similarly, we cannot predict whether U.S. sanctions will be further tightened or reinstated in the case of Iran, or the impact that such actions may have on Sinopec Group Company and us. Certain U.S. state and local governments and colleges have restrictions on the investment of public funds or endowment funds, respectively, in companies that are members of corporate groups with activities in certain countries that are the subject of U.S. sanctions. These investors may not wish to invest, and may divest their investment, in us because of our relationship with Sinopec Group Company and its investments and activities in those OFAC sanctioned countries. It is possible that, as a result of activities by Sinopec Group Company or its affiliates in countries that are the subject of U.S. sanctions, we may be subject to negative media or investor attention, which may distract management, consume internal resources and affect investors' perception of our company. Furthermore, if the most extreme sanction measures under U.S. sanctions laws were applied to the properties of Sinopec Group Company and its controlled subsidiaries, Sinopec Group Company could be prohibited from engaging in business activities in the United States or with U.S. individuals or entities, and U.S. transactions in our securities and distributions to U.S. individuals and entities with respect to our securities could also be prohibited.

Risks Relating to the PRC

Government regulations may limit our activities and affect our business operations.

The PRC government, though gradually liberalizing its regulations on entry into the petroleum and petrochemical industry, continues to exercise certain controls over the petroleum and petrochemical industry in China. These control mechanisms include granting the licenses to explore and produce crude oil and natural gas, granting the licenses to market and distribute crude oil and refined oil products, regulating the upper limit of the retail prices for gasoline and diesel; collecting special oil income levies, deciding import and export quotas and procedures, setting safety, environmental and quality standards, and formulating policies to save energy and reduce emission; meanwhile, there could be potential changes to macroeconomic and industry policies such as reforming of the oil and gas industry, further improvement of pricing mechanism of refined oil products, reforming and improvement of pricing mechanism of natural gas, and reforming in resource tax and environmental tax, which could impact our production and operations. Such control mechanisms may have material effects on our operations and profitability.

The PRC governmental authorities, from time to time, audit or inspect our ultimate controlling shareholder. We cannot predict the impact if any, of their outcome on our reputation, business and financial condition as well as the trading prices of our ADSs and H shares.

The PRC governmental authorities, from time to time, perform audits, inspections, inquiries or similar actions on state-owned companies, such as Sinopec Group Company, our ultimate controlling shareholder. Such inspections are not conducted on a regular basis with specific targets, and therefore we cannot predict the outcome of these governmental activities. If, as a result of such audits, inspections or inquiries, (i) material irregularities are found within Sinopec Group Company or us or our employees or (ii) Sinopec Group Company or we become the target of any negative publicity, our reputation, business and financial condition as well as the trading prices of our ADSs and H shares may be materially and negatively impacted.

Our business operations may be adversely affected by present or future environmental regulations.

As an integrated petroleum and petrochemical company, we are subject to extensive environmental protection laws and regulations in China. These laws and regulations permit:

- the imposition of environmental tax for the discharge of waste substances;
- the government, in accordance with law, to order correction, suspend production and impose fines for unlicensed or uncertified pollution discharge;

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- the government, at its discretion, to seal up or close down any facility which has cause or may cause severe environmental damage and require it to correct or stop operations causing environmental damage; and
- litigations and liabilities arising from pollutions and damages to the environment and public interests.

Our production activities produce substantial amounts of liquid, gas and solid waste materials. We have established a system to treat waste materials to prevent and reduce pollution. However, the PRC government has moved, and may move further, toward more rigorous enforcement of applicable laws, and toward the adoption of more stringent environmental standards, which, in turn, would require us to incur additional expenditures on environmental matters.

In recent years, we have commenced exploration and production of unconventional oil and gas resources, such as shale oil and gas and coal bed methane, through the application of relatively advanced technologies. As a result, our unconventional oil and gas operations are subject to the limitations of unproven technology and expose us to higher environmental compliance standards and requirements. In the event of any failure to comply with such standards and requirements, we may be subject to public concerns about our unconventional oil and gas operations, which may also harm our corporate reputation.

Some of our development plans require compliance with state policies and governmental regulation.

We are currently engaged in a number of construction, renovation and expansion projects. Some of our large construction, renovation and expansion projects are subject to governmental confirmation and registration. The timing and cost of completion of these projects will depend on numerous factors, including when we can receive the required confirmation and registration from relevant PRC government authorities and the general economic condition in China. If any of our key projects required for our future growth are not confirmed or registered, or not confirmed or registered in a timely manner, our results of operations and financial condition could be adversely impacted.

Government control of currency conversion and exchange rate fluctuation may adversely affect our operations and financial results.

We receive a significant majority of our revenues in Renminbi. A portion of such revenues will need to be converted into other currencies to meet our foreign currency needs, which include, among other things:

- import of crude oil and other materials;
- debt service on foreign currency-denominated debt;

- purchases of imported equipment;
- payment of the principals and interests of bonds issued overseas; and
- payment of any cash dividends declared in respect of the H shares (including ADS).

The existing foreign exchange regulations have significantly reduced government foreign exchange controls for transactions under the current account, including trade and service related foreign exchange transactions and payment of dividends. Foreign exchange transactions under the capital account, including principal payments in respect of foreign currency-denominated obligations, continue to be subject to significant foreign exchange controls and require the approval of the State Administration of Foreign Exchange. These limitations could affect our ability to obtain foreign exchange through debt or equity financing, or to obtain foreign exchange. The PRC government has stated publicly that it intends to make the Renminbi freely convertible in the future. However, we cannot predict whether the PRC government will continue its existing foreign exchange policy and when the PRC government will allow free conversion of Renminbi.

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The exchange rate of the Renminbi against the U.S. dollar and other foreign currencies fluctuates and is affected by, among other things, the changes in the PRC's and international political and economic conditions. On July 21, 2005, the PRC government introduced a floating exchange rate system to allow the value of the Renminbi to fluctuate within a regulated band based on market supply and demand and by reference to a basket of foreign currencies. On June 19, 2010 and August 11, 2015, respectively, the People's Bank of China (PBOC) decided to further promote the reform of exchange rate regime and enhance the flexibility of Renminbi exchange rate. Prices of refined oil products are guided by the PRC Government and are pegged to the exchange rate of the Renminbi against the U.S. dollar. Therefore the impact of Renminbi exchange rate fluctuation on the purchase cost of crude oil could largely be offset by the corresponding fluctuation in the prices of domestic refined oil products and chemical products.

Risks relating to enforcement of shareholder rights; Mandatory arbitration.

Currently, the primary sources of shareholder rights are our articles of association, the PRC Company Law and the Listing Rules of the Hong Kong Stock Exchange, which, among other things, impose certain standards of conduct, fairness and disclosure on us, our directors and our controlling shareholder. In general, their provisions for protection of shareholder's rights and access to information are different from those applicable to companies incorporated in the United States, the United Kingdom and other Western countries. In addition, the mechanism for enforcement of rights under the corporate framework to which we are subject may also be relatively undeveloped and untested. To our knowledge, there has not been any published report of judicial enforcement in the PRC by H share shareholders of their rights under constituent documents of joint stock limited companies or the PRC Company Law or in the application or interpretation of the PRC or Hong Kong regulatory provisions applicable to PRC joint stock limited companies. We cannot guarantee that our shareholders will enjoy protections that they may be entitled in other jurisdictions.

China does not have treaties providing for the reciprocal recognition and enforcement of judgments of courts with the United States, the United Kingdom or most other Western countries, and therefore recognition and enforcement in China of judgments of a court in any of these jurisdictions in relation to any matter not subject to a binding arbitration provision may not be assured. Our articles of association as well as the Listing Rules of the Hong Kong Stock Exchange provide that most disputes between holders of H shares and us, our directors, supervisors, officers or holders of domestic shares, arising out of the articles of association or the PRC Company Law concerning the affairs of our company, are to be resolved through arbitration, at the election of the claimant, by arbitration organizations in Hong Kong or the PRC, rather than through a court of law. On June 18, 1999, an arrangement was made between Hong Kong and the PRC for the mutual enforcement of arbitral awards. This new arrangement was approved by the Supreme People's Court of the PRC and the Hong Kong Legislative Council, and became effective on February 1, 2000. We are uncertain as to the outcome of any action brought in China to enforce an arbitral award granted to shareholders.

Our auditor, like other independent registered public accounting firms operating in China, is not permitted to be subject to inspection by Public Company Accounting Oversight Board, and as such, investors may be deprived of the benefits of such inspection.

Our independent registered public accounting firm that issues the audit reports included in our annual reports filed with the SEC, as an auditor of companies that are traded publicly in the United States and a firm registered with the Public Company Accounting Oversight Board, or PCAOB, is required by the laws of the United States to undergo regular inspections by PCAOB to assess its compliance with the laws of the United States and professional standards. Because our auditor is located in China, a jurisdiction where PCAOB is currently unable to conduct inspections without the approval of the PRC authorities, our auditor, like other independent registered public accounting firms, is currently not inspected by PCAOB.

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Inspections of other firms that PCAOB has conducted outside of China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The lack of PCAOB inspections in China may prevent PCAOB from regularly evaluating our auditor's audits and quality control procedures. The inability of PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our auditor's audit procedures or quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections.

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Additional remedial measures imposed on certain PRC-based accounting firms, including our independent registered public accounting firm, in proceedings brought by the SEC alleging the firms' failure to meet specific criteria, could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act.

In December 2012, the SEC brought administrative proceedings against the Big Four accounting firms in China, including our independent registered public accounting firm, alleging that these firms had refused to produce audit work papers and other documents related to certain other China-based companies whose securities are publicly traded in the United States. On January 22, 2014, an initial administrative law decision was issued, censuring these accounting firms and barring these firms from practicing before the SEC for a period of six months. The decision is neither final nor legally effective unless and until it is endorsed by the SEC. In February 2015, each of the four PRC-based accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The settlement requires the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms' audit documents via the China Securities Regulatory Commission (CSRC) in response to future document requests by the SEC made through the CSRC. If the firms fail to comply with the documentation production procedures that set forth in the settlement agreement or if these required information fails to be provided to the SEC by the CSRC for reasons out of these firms' control, the SEC could impose penalties such as suspensions, or it could restart the administrative proceedings.

In the event that the SEC restarts the administrative proceedings, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act, including possible delisting. Moreover, any negative news about the proceedings against these audit firms may cause investor uncertainty regarding China-based, United States-listed companies and the market price of our ADSs may be adversely affected.

If our independent registered public accounting firm was denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined not to be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to the delay or abandonment of this offering, delisting of our ADSs from the New York Stock Exchange (NYSE) or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of our ADSs in the United States.

ITEM 4. INFORMATION ON THE COMPANY

A. HISTORY AND DEVELOPMENT OF THE COMPANY

Our legal and commercial name is China Petroleum & Chemical Corporation. Our head office is located at 22 Chaoyangmen North Street, Chaoyang District, Beijing 100728, the People's Republic of China, our telephone number is (8610) 5996-0028 and our fax number is (8610) 5996-0386. We have appointed our representative office in the United States, located at 515 Madison Avenue, Suite 27 West, New York, NY 10022, USA (telephone number: (212) 759-5085; fax number: (212) 759-6882) as our agent for service of processes for actions brought under the U.S. securities laws.

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We were established as a joint stock limited company on February 25, 2000 under the Company Law of the PRC with Sinopec Group Company as the sole shareholder at our inception. Our principal businesses consist of petroleum and petrochemical businesses transferred to us by Sinopec Group Company pursuant to a reorganization agreement. Such businesses include:

- exploration for, development, production and marketing of crude oil and natural gas;
- refining of crude oil and marketing and distribution of refined oil products, including transportation, storage, trading, import and export of petroleum products; and
- production and sales of petrochemical products.

Sinopec Group's continuing activities primarily consist, among other things, of:

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- exploring and developing oil and gas reserves overseas;
- operating certain petrochemical facilities;
- providing geophysical exploration, and well drilling, survey, logging and downhole operational services;
- manufacturing production equipment and providing equipment maintenance services;
- providing construction services;
- providing utilities, such as electricity and water; and
- providing other operational services including transportation services.

Sinopec Group Company transferred the businesses to us either by transferring its equity holdings in subsidiaries or by transferring their assets and liabilities. Sinopec Group Company also agreed in the reorganization agreement to transfer to us its exploration and production licenses and all rights and obligations under the agreements in connection with its core businesses transferred to us. The employees relating to these assets were also transferred to us.

From July 8, 2015 to July 7, 2016, Sinopec Group Company increased its shareholding in the Company through acquisitions of our ordinary shares on the stock market in its own name or through other concerting parties, by way of acquiring 72,000,000 A shares, representing approximately 0.06% of our issued and outstanding shares. Immediately following the shareholding increase, Sinopec Group Company directly and indirectly held 86,345,821,101 shares of the Company, representing approximately 71.32% of our issued and outstanding shares.

On October 29, 2015, we entered into a joint venture agreement with Sinopec Assets Management Co., Ltd. (SAMC), a wholly-owned subsidiary of Sinopec Group Company, in relation to the formation of Sinopec Shanghai Gaoqiao Petrochemical Co., Ltd. (Gaoqiao). We and SAMC subscribed for 55% and 45% of the registered capital of Gaoqiao, respectively, and Gaoqiao became a subsidiary of the Company.

On August 2, 2016, our board of directors unanimously approved the proposal to introduce capitals from potential investors to invest in Sichuan-to-East China gas pipeline project, through our indirectly wholly-owned subsidiary Sinopec Sichuan-to-East China Natural Gas Pipeline

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Co., Ltd. (Sichuan-to-East China Pipeline Co.). On December 12, 2016, China Life Insurance Co., Ltd. (China Life) and SDIC Communications Holding Co., Ltd. (SDIC Communications) entered into the Capital Injection Agreement in relation to Sichuan-to-East China Pipeline Co. and agreed to collectively subscribe for 50% equity interest in Sichuan-to-East China Pipeline Co. for an aggregate amount of RMB 22.8 billion in cash. Upon completion of the capital injection, China Life, SDIC Communications and us hold 43.86%, 6.14% and 50% equity interest in Sichuan-to-East China Pipeline Co., respectively.

On April 27, 2017, our board of directors unanimously approved the proposal of the acquisition of equity interest in Shanghai SECCO Petrochemical Company Limited (Shanghai SECCO) by Gaoqiao. On October 26, 2017, Gaoqiao purchased 50% equity interest in Shanghai SECCO from BP Chemicals East China Investment Limited with a cash consideration of RMB 10,135 million. Before the acquisition, we and one of our subsidiaries held 30% and 20% equity interest in Shanghai SECCO, respectively. Upon completion of the acquisition, we, together with our subsidiaries, hold 100% equity interest of Shanghai SECCO, which became a subsidiary of us.

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B. BUSINESS OVERVIEW

Exploration and Production

Overview

We currently explore for, develop and produce crude oil and natural gas in a number of areas in China and overseas. As of December 31, 2017, we held 217 production licenses in China, with an aggregate acreage of 31,498 square kilometers and with terms ranging from 10 to 80 years. Our production licenses may be renewed upon our application at least 30 days prior to the expiration date, which are renewable for unlimited times. During the term of our production license, we pay an annual production license fee of RMB 1,000 per square kilometer.

As of December 31, 2017, we held 211 exploration licenses in China for various blocks in which we engaged in exploration activities, with an aggregate acreage of approximately 621,500 square kilometers.

As of December 31, 2017, our overseas subsidiary held one production licenses, with an acreage of 322.57 square kilometers. It currently does not have exploration licenses. Our overseas equity-accounted investments held 72 production licenses, with an aggregate acreage of 4,783 square kilometers, and four exploration licenses.

Properties

We currently operate 295 oil and gas producing fields and blocks.

Shengli production field is our most important crude oil production field. It consists of 75 producing blocks of various sizes extending over an area of 2,559 square kilometers in northern Shandong province, all of which are our net developed acreage. Most of Shengli's blocks are located in the Jiyang trough with various oil producing layers. In 2017, Shengli production field produced 166 million barrels of crude oil and 14.38 billion cubic feet of natural gas, with an average daily production of 426 thousand BOE.

As of December 31, 2017, the total acreage of our oil and gas producing fields and blocks in China was 14,394 square kilometers, including 8,528 square kilometers of developed acreage, all of which were net developed acreage; and 5,866 square kilometers of gross undeveloped acreage, all of which were net undeveloped acreage.

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As of December 31, 2017, the total acreage of our oil and gas producing fields and blocks of our overseas subsidiary was 322.57 square kilometers, including 169.21 square kilometers of developed acreage, of which 110 square kilometers were net developed acreage; and 153.36 square kilometers of gross undeveloped acreage, of which 31.8 square kilometers were net undeveloped acreage.

As of December 31, 2017, the total acreage of our oil and gas producing fields and blocks of our overseas equity-accounted investments was 1,700 square kilometers, including 1,628 square kilometers of developed acreage, of which 1,628 square kilometers were net developed acreage; and 72.4 square kilometers of gross undeveloped acreage, of which 72.4 square kilometers were net undeveloped acreage.

Oil and Natural Gas Reserves

As of December 31, 2017, our estimated proved reserves of crude oil and natural gas in China were 2,425 million BOE (including 1,261 million barrels of crude oil and 6,985 billion cubic feet of natural gas), and our estimated proved reserves of crude oil and natural gas outside of China, which included a share of the estimated proved reserves of our equity-accounted investments, were 340 million BOE. Our estimated proved reserves do not include additional quantities recoverable beyond the term of the relevant production licenses, or that may result from extensions of currently proved areas, or from application of improved recovery processes not yet tested and determined to be economical.

The following tables set forth our proved developed and undeveloped crude oil and natural gas reserves by region as of December 31, 2017.

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Crude Oil Proved Reserves	As of December 31, 2017 (in millions of barrels)
Developed Subsidiaries	
China	1,124
Shengli	811
Others	313
Overseas	32
Subtotal	1,156
Equity-accounted investments	
China	
Overseas	273
Subtotal	273
Total Proved Developed	1,429
Undeveloped Subsidiaries	
China	137
Shengli	49
Others	88
Overseas	
Subtotal	137
Equity-accounted investments	
China	
Overseas	33
Subtotal	33
Total Proved Undeveloped	170
Total Crude Oil Proved Reserves	1,599

Natural Gas Proved Reserves	As of December 31, 2017 (in billions of cubic feet)
Developed Subsidiaries	
China	6,000
Puguang	2,127
Fuling	1,121
Others	2,752
Overseas	
Subtotal	6,000
Equity-accounted investments	
China	
Overseas	12
Subtotal	12
Total Proved Developed	6,012
Undeveloped Subsidiaries	
China	985
Puguang	
Fuling	187
Others	798
Overseas	
Subtotal	985
Equity-accounted investments	
China	
Overseas	
Subtotal	
Total Proved Undeveloped	985
Total Natural Gas Proved Reserves	6,997

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As of December 31, 2017, approximately 170 million barrels of our crude oil proved reserves and 985 billion cubic feet of our natural gas proved reserves were classified as proved undeveloped reserves in China and overseas. 2 million barrels of crude oil and 33 billion cubic feet natural gas proved reserves in China have been classified as proved undeveloped for more than five years, mainly under Sinopec Shanghai Offshore Petroleum Company, one of our subsidiaries.

During 2017, a total of 312 wells were drilled by us in China and 122 wells were drilled overseas. We converted 41 million barrels of proved undeveloped crude oil reserves and 33 billion cubic feet of proved undeveloped natural gas reserves into proved developed reserves in 2017. Proved developed reserves of natural gas increased from 724 billion cubic feet at the beginning of the year to 985 billion cubic feet at the end of the year. Total capital expenditure incurred in converting proved undeveloped reserves into proved developed reserves amounted to RMB 5.7 billion, including RMB 5.1 billion and RMB 0.6 billion incurred in connection with our operations in China and overseas, respectively, in 2017.

We manage our reserves estimation through a two-tier management system. The Oil and Natural Gas Reserves Management Committee, or the RMC, at our headquarters level oversees the overall reserves estimation process and reviews the reserves estimation of our company. Each of our Branches has a reserves committee that manages the reserves estimation process and reviews the reserves estimation report at the branches level.

Our RMC is co-led by several of our senior vice presidents and the head of our exploration and production segment. The current chairman of our RMC, Mr. Jiao Fangzheng, holds a Ph.D. degree in petroleum and natural gas engineering and has over 30 years of experience in the oil and gas industry. The rest of the members of our RMC are all senior management members in charge of exploration and development activities at production bureau level. A majority of our RMC members hold doctor's or master's degrees and our RMC members have an average of 20 years of technical experience in relevant industry fields, such as geology, engineering and economics.

Our reserves estimation is guided by procedural manuals and technical guidance. Initial collection and compilation of reserves information are conducted by different working divisions, including exploration, development and financial divisions, at production bureau level. Exploration and development divisions collectively prepare the initial report on reserves estimation. Together with technical experts, reserves management committees at production bureau level then review to ensure the qualitative and quantitative compliance with technical guidance and accuracy and reasonableness of the reserves estimation. At our headquarters level, the RMC is primarily responsible for the management and coordination of the reserves estimation process, review and approval of annual changes and results in reserves estimation and disclosure of our proved reserves. We also engage outside consultants who assist us to be in compliance with the U.S. Securities and Exchange Commission rules and regulations. Our reserves estimation process is further facilitated by a specialized reserves database which is reviewed and updated periodically.

Oil and Natural Gas Production

In 2017, we produced an average of 1,105 thousand BOE per day in China, of which approximately 61.7% was crude oil and 38.3% was natural gas. We produced an average of 124 thousand BOE per day overseas, of which 98.4% was crude oil and 1.6% was natural gas.

The following tables set forth our average daily production of crude oil and natural gas for the years ended December 31, 2015, 2016 and 2017. The production of crude oil includes condensate.

	2015	Year Ended December 31, 2016 (in thousands of barrels)	2017
Average Daily Crude Oil Production			
China	812	692	682
Subsidiaries	812	692	682
Shengli	527	464	455
Others	285	228	227
Overseas	146	138	122
Subsidiary	54	51	41
Equity-accounted investments	92	87	81
Total Crude Oil Production	958	830	804

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	2015	Year Ended December 31, 2016 (in millions of cubic feet)	2017
Average Daily Natural Gas Production			
China	1,952	2,083	2,490
Subsidiaries	1,952	2,083	2,490
Puguang	530	362	558
Fuling	306	486	581
Others	1,116	1,235	1,351
Overseas	11	10	10
Equity-accounted investments	11	10	10
Total Natural Gas Production	1,963	2,093	2,500

Lifting Cost & Realized Prices

The following table sets forth our average lifting costs per BOE of crude oil produced, average sales prices per barrel of crude oil and average sales prices per thousand cubic meters of natural gas for the years ended December 31, 2015, 2016 and 2017.

	Weighted Average	China (RMB)	Overseas(1)
For the year ended December 31, 2017			
Average petroleum lifting cost per BOE	107.53	111.47	85.52
Average realized sales price			
Per barrel of crude oil	332.60	327.06	363.6
Per thousand cubic meters of natural gas	1,185.53	1,185.53	
For the year ended December 31, 2016			
Average petroleum lifting cost per BOE	108.21	112.19	77.62
Average realized sales price			
Per barrel of crude oil	240.70	246.10	213.41
Per thousand cubic meters of natural gas	1,266.03	1,266.03	
For the year ended December 31, 2015			
Average petroleum lifting cost per BOE	109.70	111.56	72.20
Average realized sales price			
Per barrel of crude oil	283.72	280.74	316.15
Per thousand cubic meters of natural gas	1,519.83	1,519.83	

(1) The exchange rates we used for overseas data in this table were exchange rates for each year ended December 31, 2015, 2016 and 2017, which were RMB 6.2284 to US\$1.00, RMB 6.6400 to US\$ 1.00 and RMB 6.7518 to US\$ 1.00, respectively.

Exploration and Development Activities

In the low oil price environment in 2017, we prioritized low-cost and high-quality exploration activities. We continued our efforts in exploration activities, focused on increasing efficiency and effectiveness, reducing our inefficient crude oil production and high cost activities, and

completed the construction of the second phase of our Fuling shale gas project.

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The following table sets forth the numbers of our exploratory and development wells, including a breakdown of productive wells and dry wells we drilled during the years ended December 31, 2015, 2016 and 2017.

Number of Drilled Wells	As of December 31,											
	2015				2016				2017			
	Exploratory		Development		Exploratory		Development		Exploratory		Development	
	Productive	Dry	Productive	Dry	Productive	Dry	Productive	Dry	Productive	Dry	Productive	Dry
China	373	195	1,801	25	266	149	801	6	266	149	1,442	9
Subsidiaries	373	195	1,801	25	266	149	801	6	266	149	1,442	9
Shengli	150	73	1,020	18	166	73	462	5	151	71	845	1
Others	223	122	781	7	100	76	339	1	115	78	597	8
Overseas		1	149	1	2	1	99		2	1	119	
Subsidiaries			5									
Equity-accounted investments		1	144	1	2	1	99		2	1	119	
Total	373	196	1,950	26	268	150	900	6	268	150	1,561	9

The following table sets forth the number of wells being drilled by us as of December 31, 2017, as compared to December 31, 2016:

Number of Drilling Wellings	As of December 31,							
	2016				2017			
	Gross		Net		Gross		Net	
	Exploratory	Development	Exploratory	Development	Exploratory	Development	Exploratory	Development
China	78	138	78	138	62	147	62	147
Subsidiaries	78	138	78	138	62	147	62	147
Shengli	28	21	28	21	19		19	
Others	50	117	50	117	43	147	43	147
Overseas		2		2		5		5
Subsidiaries								
Equity-accounted investments		2		2		5		5
Total	78	140	78	140	62	152	62	152

The following table sets forth our number of productive wells for crude oil and natural gas as of December 31, 2017, as compared to December 31, 2016:

Productive Wells for Crude Oil	As of December 31,									
	2015				2016				2017	
	Gross		Net		Gross		Net		Gross	Net
China	49,662	49,662	49,921	49,921	50,121	50,121	50,121	50,121	50,121	
Subsidiaries	49,662	49,662	49,921	49,921	50,121	50,121	50,121	50,121	50,121	
Shengli	31,547	31,547	32,019	32,019	32,105	32,105	32,105	32,105	32,105	
Others	18,115	18,115	17,902	17,902	18,016	18,016	18,016	18,016	18,016	
Overseas	6,913	3,122	7,432	3,614	7,350	3,968	7,350	3,968	3,968	
Subsidiaries	28	15	28	14	28	14	28	14	14	
Equity-accounted investments	6,885	3,107	7,404	3,600	7,322	3,954	7,322	3,954	3,954	

Total	56,575	52,784	57,353	53,535	57,471	54,089
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Productive Wells for Natural Gas	2015		As of December 31, 2016		2017	
	Gross	Net	Gross	Net	Gross	Net
China	4,758	4,727	4,966	4,932	4,800	4,762
Subsidiaries	4,758	4,727	4,966	4,932	4,800	4,762
Puguang	55	55	57	57	57	57
Fuling	175	175	253	253	266	266
Others	4,528	4,497	4,656	4,622	4,477	4,439
Total	4,758	4,727	4,966	4,932	4,800	4,762

Refining*Overview*

In 2017, our refinery throughputs were approximately 239 million tonnes. We produce a full range of refined oil products. The following table sets forth our production of our principal refined oil products for the years ended December 31, 2015, 2016 and 2017.

	2015	Year Ended December 31, 2016	2017
		(in million tonnes)	
Gasoline	53.98	56.36	57.03
Diesel	70.05	67.34	66.76
Kerosene	24.35	25.47	26.88
Light chemical feedstock	38.81	38.54	38.60
Liquefied petroleum gas	11.58	12.12	12.37
Fuel oil	1.48	0.94	0.80

Gasoline and diesel are our largest revenue-generating products, and are sold mostly through our marketing and distribution segment through both wholesale and retail channels. We use most of our production of chemical feedstock as feedstock for our own chemical operations. Most of our other refined oil products were sold in China to a wide variety of industrial and agricultural customers, and a small amount is exported.

Refining Facilities

Currently we operate 30 refineries in China. As of December 31, 2017, our total primary distillation capacity of crude oil was 295 million tonnes per annum.

The following table sets forth our total primary distillation capacity per annum of crude oil and refinery throughputs as of and for the years ended December 31, 2015, 2016 and 2017.

	As of and for the Year Ended December 31,		
	2015	2016	2017
Primary distillation capacity of crude oil (million tonnes per annum)(1)	293.2	294.7	294.7
Refinery throughputs (million tonnes)(2)	236.5	235.5	238.5

(1) The primary distillation capacity and refinery throughputs of joint ventures are fully included in our statistics.

(2) When calculating refinery throughputs, conversion from tonnes to barrels are made at a rate of one tonne to 7.35 barrels.

In 2017, our gasoline yield was 22.08%, diesel yield was 25.84%, kerosene yield was 10.41%, and light chemical feedstock yield was 14.94%. Other products include lubricant, liquefied petroleum gas, solvent, asphalt, petroleum coke, paraffin and fuel oil. For the years ended December 31, 2015, 2016 and 2017, our overall yield for all refined oil products at our refineries was 94.75%, 94.70% and 94.88%, respectively.

The following table sets forth the primary distillation capacity per annum as of December 31, 2017 of each of our refineries with the primary distillation capacity of 8 million tonnes or more per annum.

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Refinery	Primary Distillation Capacity as of December 31, 2017 (in million tonnes per annum)
Maoming	23.5
Zhenhai	23.0
Jinling	21.0
Shanghai	16.0
Qilu	14.0
Yangzi	14.0
Fujian	14.0
Tianjin	13.8
Guangzhou	13.2
Gaoqiao	13.0
Qingdao	12.0
Changling	11.5
Yanshan	11.0
Shijiazhuang	10.0
Jiujiang	10.0
Hainan	9.2
Luoyang	8.0
Wuhan	8.0

In 2017, our primary distillation capacity of crude oil remained the same. In addition, in 2017, our hydrofining capacity increased by 1.8 million tonnes per annum. The revamping projects for a number of refining facilities to improve refined oil product quality were also completed and put into operation.

Source of crude oil

In 2017, approximately 88% of the crude oil required for our refinery business was imported.

Marketing and Sales of Refined Oil Products*Overview*

We operate the largest sales and distribution network for refined oil products in China. In 2017, we distributed and sold approximately 178 million tonnes of gasoline, diesel and kerosene domestically. Most of the refined oil products sold by us are produced internally. In 2017, approximately 67% of our gasoline sales volume and approximately 78% of our diesel sales volumes were produced internally.

The table below sets forth a summary of key data in the marketing and sales of refined oil products in the years of 2015, 2016 and 2017.

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	2015	As of December 31, 2016	2017
Total sales volume of refined oil products (in million tonnes)	189.33	194.84	198.75
Domestic sales volume of refined oil products (in million tonnes)			
Retail	171.37	172.70	177.76
Wholesale and Distribution	119.03	120.14	121.56
Average annual throughput of service stations (in tonnes per station)	3,896	3,926	3,969

	2015	As of December 31, 2016	2017
Total number of service stations under Sinopec brand	30,560	30,603	30,633
Self-operated service stations	30,547	30,597	30,627

Retail

All of our retail sales are made through a network of service stations and petroleum shops operated under the Sinopec brand. Through this unified network we are able to implement consistent pricing policies, maintain both product and service quality standards and more efficiently deploy our retail network.

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In 2017, we sold approximately 121.56 million tonnes of gasoline, diesel and kerosene through our retail network, representing approximately 68.4% of our total domestic gasoline, diesel, jet fuel and kerosene sales volume. Our retail network mainly consists of service stations that are wholly-owned and operated by us, and jointly-owned and generally operated or leased by us, all of which are operated under the Sinopec brand. We also franchised the Sinopec brand to third parties services stations. As of December 31, 2017, we had 6 franchised service stations that are owned and operated by third parties. In 2017, the average annual throughput of our service stations increased slightly from 2016, and we have further strengthened our leading position in our principal market, and further improved our brand awareness and customer loyalty.

Wholesale and Distribution

In 2017, we sold approximately 56.20 million tonnes of refined oil products, including 10.76 million tonnes of gasoline, 28.77 million tonnes of diesel and 16.67 million tonnes of kerosene, through wholesale and distribution to independent distributors such as domestic industrial enterprises, hotels, restaurants and agricultural producers and long-term large-scale end users such as railways, airlines, shipping and public utilities.

We operate 353 storage facilities with a total capacity of approximately 18.58 million cubic meters, substantially all of which are wholly-owned by us. These storage facilities and our wholesale centers are connected to our refineries by railway, waterway and pipelines. We also own some dedicated railways, oil wharfs and oil barges, as well as a number of rail tankers and oil trucks.

Chemicals

Overview

We are the largest petrochemicals producer and distributor in China, with our petrochemical production plants located in economically developed regions such as central, eastern and southern China. We produce and distribute a full range of chemical products including intermediate petrochemicals, synthetic resins, synthetic fiber monomer and polymers, synthetic fibers and synthetic rubber. Synthetic resins, synthetic fibers, and synthetic rubber comprise a significant majority of our external sales. Synthetic fiber monomer and polymers and intermediate petrochemicals, on the other hand, are mostly internally consumed as feedstock for the production of other chemical products. Our chemical operations are integrated upstream and downstream with our refining businesses, which supply a significant portion of our chemical feedstock such as naphtha. Due to the high demand in China, we sell substantially all of our chemical products in China.

Products

Intermediate Petrochemicals

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We are the largest ethylene producer in China. Our rated ethylene capacity as of December 31, 2017 was 11.13 million tonnes per annum. In 2017, we produced 11.61 million tonnes of ethylene. Nearly all of our olefins production is used as feedstock for our petrochemical operations.

We produce aromatics mainly in the forms of benzene and para-xylene, which are used primarily as feedstock for purified terephthalic acid, or PTA, the preferred raw material for polyester. We are the largest aromatics producer in China.

Chemicals extracted from olefins and aromatics are mainly used to produce synthetic resins, synthetic rubber and synthetic fibers, as well as intermediate petrochemicals.

The following table sets forth our rated capacity per annum, production volume and major plants of production as of or for the year ended December 31, 2017 for our principal intermediate chemical products.

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	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Production
Ethylene	11,128	11,610	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin, Zhongyuan, Shanghai SECCO*, BASF-YPC*, Fujian, Zhongsha (Tianjin)*, Zhenhai, Sino-Korean (Wuhan)* and Great Wall EC*
Propylene	10,210	9,397	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin, Zhongyuan, Shanghai SECCO*, BASF-YPC*, Jinling, Anqing, Qingdao, Hainan, Fujian, Zhongsha (Tianjin)*, Zhenhai, Sino-Korean (Wuhan)* and Great Wall EC*
Benzene	5,363	4,155	Yanshan, Shanghai, Yangzi, Qilu, Guangzhou, Zhenhai, Tianjin, Luoyang, Shanghai SECCO*, BASF-YPC*, Fujian*, Maoming, Hainan and Sino-Korean (Wuhan)*, Jinling
Styrene	2,303	2,349	Zhenhai, Yanshan, Qilu, Guangzhou, Maoming, Shanghai SECCO*, Anqing and BASF-YPC*
Para-xylene	4,839	4,625	Shanghai, Yangzi, Qilu, Tianjin, Luoyang, Zhenhai, Jinling, Fujian* and Hainan
Phenol	758	709	Yanshan, Gaoqiao and Zhongsha (Tianjin)*

* Joint ventures, of which the production capacities and outputs are fully included in our statistics; Shanghai SECCO became our wholly owned subsidiary in November 2017.

Synthetic Resins

We are the largest producer of polyethylene, polypropylene and polystyrene and supplier of major synthetic resins products in China.

The following table sets forth our rated capacity per annum, production volumes and major plants of production for each of our principal synthetic resins as of or for the year ended December 31, 2017.

	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Production
Polyethylene	7,564	7,486	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin,

			Zhongyuan, Shanghai SECCO*, BASF-YPC*, Fujian, Zhongsha (Tianjing)*, Zhenhai, Sino-Korean (Wuhan)* and Great Wall EC*
Polypropylene	7,409	7,082	Yanshan, Shanghai, Yangzi, Qilu, Guangzhou, Maoming, Tianjin, Zhongyuan, Shanghai SECCO*, Fujian, Zhongsha (Tianjing)*, Zhenhai, Sino-Korean (Wuhan)*, Great Wall EC*, Luoyang, Jiujiang, Jingmen, Hainan, Beihai, and Shijiazhuang
Polyvinyl chloride	600	203	Qilu
Polystyrene	698	630	Yanshan, Qilu, Maoming, Guangzhou, and Shanghai SECCO*
Acrylonitrile butadiene styrene	200	180	Gaoqiao

* Joint ventures, of which the production capacities and outputs are fully included in our statistics; Shanghai SECCO became our wholly owned subsidiary in November 2017.

Table of Contents*Synthetic Fiber Monomers and Polymers*

Our principal synthetic fiber monomers and polymers are purified terephthalic acid, ethylene glycol, acrylonitrile, caprolactam, polyester, polyethylene glycol and polyamide fiber. Based on our 2017 production, we are the largest producer of ethylene glycol and caprolactam in China.

The following table sets forth our rated capacity per annum, our production volume and major plants of production as of or for the year ended December 31, 2017 for each type of our principal synthetic fiber monomers and polymers.

	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Production
Purified terephthalic acid	3,119	2,248	Shanghai, Yangzi, Yizheng, Tianjin and Luoyang
Ethylene glycol	3,209	2,690	Yanshan, Shanghai, Yangzi, Tianjin, Maoming, BASF-YPC*, Zhongsha (Tianjing)*, Zhenhai
Acrylonitrile	1,070	979	Anqing, Qilu and Shanghai SECCO*
Caprolactam	709	589	Baling and Shijiazhuang
Polyester	3,393	2,723	Shanghai, Yizheng, Tianjin and Luoyang

* Joint ventures, of which the production capacities and outputs are fully included in our statistics; Shanghai SECCO became our wholly owned subsidiary in November 2017.

Synthetic Fibers

We are the largest producer of acrylic fibers in China. Our principal synthetic fiber products are polyester fiber and acrylic fiber.

The following table sets forth our rated capacity per annum, production volume and major plants of production for each type of our principal synthetic fibers as of or for the year ended December 31, 2017.

	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Production
Polyester fiber	1,231	1,006	Yizheng, Shanghai, Tianjin and Luoyang
Acrylic fiber	265	208	Shanghai, Anqing and Qilu

Table of Contents*Synthetic Rubbers*

Our principal synthetic rubbers are cis-polybutadiene rubber, styrene butadiene rubber, or SBR, styrene butadiene-styrene thermoplastic elastomer and isobutadiene isoprene rubber, or IIR. Based on our 2017 production, we are the largest producer of SBR and cis-polybutadiene rubber in China.

The following table sets forth our rated capacity per annum, production volume and major plants of production as of or for the year ended December 31, 2017 for each of our principal synthetic rubbers.

	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Operation
Cis-polybutadiene rubber	420	363	Yanshan, Qilu, Maoming and Yangzi
Styrene butadiene rubber	430	316	Qilu, Gaoqiao and Yangzi
Styrene-butadiene-styrene thermoplastic elastomers	340	96	Yanshan and Maoming
Isobutylene isoprene rubber	125	13	Yanshan
Isoprene rubber	30		Yanshan
Ethylene propylene rubber	75	62	Gaoqiao

Marketing and Sales of Petrochemicals

The central, eastern and southern regions in China, where most of our petrochemical plants are located, constitute the major petrochemical market in China. Our proximity to the major petrochemical market gives us a geographic advantage over our competitors.

The prices of petrochemical products in China have become market-oriented. Our principal sales channels consist of (i) direct sales to domestic and foreign large- and medium-sized manufacturing enterprises, which account for more than 74% of our direct sales, (ii) sales to distributors, who are responsible for sales and distribution to a portion of our smaller and scattered customers or specific customers, and (iii) sales of chemical products through our e-commerce platform Chem E-Mall, which effectively expands our traditional sales channels and provides new options for procurement.

Competition

According to the Measures for the Administration of Overseas Investment of Enterprises (Decree No. 11 of 2017 of the National Development and Reform Commission), when an investment entity conducts overseas investment, it shall undergo the formalities for the confirmation or recordation of overseas investment projects, report relevant information, and cooperate in supervision and inspection. The scope of implementation of confirmation management is sensitive projects conducted by investors directly or through overseas enterprises controlled by them, including projects involving sensitive countries and regions, and projects involving sensitive industries. The scope of the implementation

of recordation management is non-sensitive projects that are directly conducted by investors, namely, non-sensitive projects that involve investors' direct contribution of assets or rights and interests or provision of financing or security. The confirmation or recordation authority is the National Development and Reform Commission (NDRC).

In accordance with the Administrative Measures Confirmation or Recordation of Overseas Investment Projects (NDRC Decree No. 9 of 2014) and the Decision of NDRC on Amending the Relevant Clauses of the Administrative Measures for the Confirmation or Recordation of Outbound Investment Projects and Administrative Measures for the Approval and Record-Filing of Foreign Investment Projects (NDRC Decree No. 20), overseas investment projects involving sensitive countries or regions or sensitive industries shall be confirmed by NDRC, among which, projects with the amount of Chinese investment over US\$ 2 billion shall be subject to an examination opinion of NDRC after being reported to the State Council for confirmation. All other projects, including those by enterprises directly administered by the SASAC and local enterprises with an investment size over US\$3 billion, will require only a recordation with NDRC.

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Pursuant to the Anti-Monopoly Law of the PRC which became effective on August 1, 2008, when market concentration by business carriers through merger, acquisition of control through shares or assets acquisition, or acquisition of control or the ability to exercise decisive influence over other business carriers by contract or by other means reaches a threshold of declaration level prescribed by the State Council, the business carriers shall declare in advance to the Anti-monopoly Law enforcement agency, otherwise, the business carriers shall not implement such market concentration.

Refining and Marketing of Refined Oil Products

Market participants compete primarily on the basis of wide-established sales network and logistics system, quality of products and service, efficiency of operations including proximity to customers, awareness of brand name and price. While we constantly face competition from other market participants, we believe that we have a competitive advantage in our principal market against our competitors.

Chemicals

We compete with domestic and foreign chemicals producers in the chemicals market. We adopt the strategy of "one product one policy, one customer one case" to meet customers' needs, tailor supply secured plans for customers, provide customized services, and strive to create value for customers. Our petrochemical production facilities' proximity to customers has given us significant regional advantages over our competitors in terms of easy access to our customers, resulting in lower transportation costs, more reliable delivery of products and better service to customers.

Patents and Trademarks

In 2017, we were granted 3,640 patents in China and overseas. As of December 31, 2017, we owned a total of 25,931 patents in China and overseas.

In 2017, we have 391 material trademarks approved internally, among which 241 are registered in China and 150 registered overseas.

Business Operations Relating to Iran Threat Reduction and Syria Human Rights Act of 2012

In 2017, we sourced approximately 8.57% of our total refinery throughputs of crude oil from Iran. In addition, we engaged in a small amount of trading activities with an Iranian company which generated us a net profit of approximately US\$2.32 million.

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Based on feedback to our inquiries to Sinopec Group Company, our controlling shareholder, Sinopec Group Company engaged in a small amount of business activities in Iran such as providing engineering services and designs. Sales revenue from these business activities accounted for 0.0001% of its total unaudited sales revenue.

Since we have performance obligations under our Iran-related contracts, we are contractually required to continue our performance under our Iran-related contracts in 2018.

Regulatory Matters

Overview

China's petroleum and petrochemical industry has seen significant liberalization in the past ten years. However, the exploration, production, marketing and distribution of crude oil and natural gas, as well as the production, marketing and distribution of certain refined oil products are still subject to regulation of many government agencies including:

National Development and Reform Commission (NDRC)

NDRC is responsible for formulating and implementing key policies in respect of petroleum and petrochemical industry, including:

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- Formulating guidance plan for annual production, import and export amount of crude oil, natural gas and petroleum products nationwide based on its forecast on macro-economic conditions in China;
- Setting the pricing policy for refined oil products;
- Approving certain domestic and overseas resource investment projects which are subject to NDRC's approval as required by the Catalogue of Investment Projects Approved by the Government in effect; and

National Energy Administration (NEA)

NEA is primarily responsible for the formulation of energy development plans and annual directive plans, approving major energy-related projects and facilitating the implementation of sustainable development of energy strategies, coordinating the development and utilization of renewable energies and new energies, and organizing matters relating to energy conservation and comprehensive utilization as well as environmental protection for the energy industry.

The Ministry of Commerce (MOFCOM)

MOFCOM is responsible for the record-filing of Sino-foreign equity joint venture contracts and Sino-foreign cooperation joint venture contracts, and monitoring the foreign investors' oil and gas exploration projects in the PRC. It is responsible for approving or filing of the overseas investment by PRC enterprises and issuing the enterprise overseas investment certificate and quotas and licenses for import and export of crude oil and refined oil products. According to the law, MOFCOM is also responsible for supervising, approving and record-filing of foreign investment (excluding financial investment) of domestic enterprises.

Ministry of Land and Resources (MLR)

The MLR is responsible for issuing the licenses that are required to explore and produce crude oil and natural gas in China.

Regulation of Exploration and Production

Exploration and Production Rights

The PRC Constitution provides that all mineral and oil resources belong to the state. In 1986, the Standing Committee of the National People's Congress passed the Mineral Resources Law which authorizes the Ministry of Land and Resources, or the MLR, to exercise administrative authority over the exploration and production of the mineral and oil resources within the PRC, including its territorial waters. The Mineral Resources Law and its supplementary regulations provide the basic legal framework under which exploration licenses and production licenses are granted. The MLR has the authority to grant exploration licenses and production licenses on a competitive bidding or other basis it considers appropriate. Applicants for these licenses must be companies approved by the State Council to engage in oil and gas exploration and production activities. Currently, we are one of the few companies that have received such exploration licenses and production licenses in oil and gas industry. In addition, pursuant to the Regulation on the Administration of Geological Survey Qualifications promulgated by the State Council, which became effective from July 1, 2008, any entity engaging in geological survey activities shall obtain a geological survey qualification certificate. Oil and natural gas survey qualifications, among others, shall be examined, approved and granted by the MLR.

Applicants for exploration licenses must first submit applications to the MLR with respect to blocks in which they intend to engage in exploration activities. The holder of an exploration license is obligated to make an annual minimum exploration investment and pay annual exploration license fees, ranging from RMB 100 to RMB 500 per square kilometer, relating to the exploration blocks in respect of which the license is issued. The maximum term of an oil and gas exploration license is 7 years. Such exploration license may be renewed upon application by the holder at least 30 days prior to expiration date, with each renewal for a maximum two-year term. Under the PRC laws and regulations, we are entitled for reductions and exemptions of exploration license fees for exploration in the western, offshore and northeastern regions of China.

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At the exploration stage, an applicant can also apply for a progressive exploration and production license that allows the holder to test and develop reserves not yet fully proved. The progressive oil and gas exploration and production license has a maximum term of 15 years. When the reserves become proved for a block, the holder must apply for a full production license in order to undertake production.

The MLR issues full production licenses to applicants on the basis of the reserve reports approved by relevant authorities. The maximum term of a full production license is 30 years unless a special dispensation is given by the State Council. Due to a special dispensation granted to us by the State Council, the maximum term of our full production licenses is 80 years. The full production license is renewable upon application by the holder at least 30 days prior to expiration of the original term. A holder of the full production license has to pay an annual full production right usage fee of RMB 1,000 per square kilometer.

Exploration and production licenses do not grant the holders the right to enter upon any land for the purpose of exploration and production. Holders of exploration and production licenses must separately obtain the right to use the land covered by the licenses, and if permissible under applicable laws, current owners of the rights to use such land may transfer or lease the land to the license holder.

Incentives for Shale Gas Development

In order to incentivize the exploration, discovery and development of China's shale gas reserves, to increase the supply of natural gas and to relieve the imbalance between supply and demand of natural gas, the Ministry of Finance of China and China National Energy Administration issued the Notice on Subsidy for Shale Gas Development and Utilization (Ministry of Finance No. 847 [2012]), pursuant to which the central government will subsidize shale gas production companies at a rate of RMB 0.4 per cubic meter of shale gas produced from 2012 to 2015.

China National Energy Administration issued the Shale Gas Industry Policy (NEA No. 5 [2013]) in October, 2013, which classifies shale gas as a national strategic new industry and calls for more fiscal support for exploration and development of shale gas. In particular, subsidies should be given directly to a shale gas production company according to the amount of its shale gas development and utilization. Local governments are also encouraged to provide subsidies to shale gas production companies, with the subsidy amount to be determined by local fiscal authorities. The Policy also reduces or waives compensatory fee for mineral resources, license and royalty fees for shale gas production companies. For encouraged projects like shale gas exploration and discovery, the policy also waives customs duty for imported equipment and machineries that cannot be manufactured domestically in accordance with relevant regulations.

In April 2015, to facilitate the development of the shale gas industry, the Ministry of Finance of China and China National Energy Administration issued the Notice on Fiscal Subsidies for Shale Gas Development and Utilization (Ministry of Finance No. 112 [2015]) to further implement the policy of fiscally subsidizing the shale gas industry during the period of the thirteenth five-year plan, and the subsidy will be RMB 0.3 per cubic meter of shale gas produced and RMB 0.2 per cubic meter of shale gas produced from 2016 to 2018 and from 2019 to 2020, respectively.

Price Controls on Crude Oil

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According to the Measures for Administration of Petroleum Products Price (for Trial Implementation) issued by NDRC on March 26, 2013, the crude oil price shall be determined by the enterprises on their own accord, by reference to the international market price. The price for supplying crude oil by us and CNPC to each other shall be determined by both the parties upon consultation in accordance with the principle that the cost for transporting domestic crude oil to the refinery is equivalent to the cost for importing crude oil from international market to the refinery. The price for providing crude oil by us and the CNPC to local refineries shall be determined in reference to the supply prices between the two corporations. The price of crude oil produced by CNOOC or other enterprises shall be determined on their own accord by reference to the international market price.

According to the Measures for Administration of Petroleum Products Price issued by NDRC on January 13, 2016, the crude oil price shall be determined by the enterprises on their own accord, by reference to the international market price.

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Price Controls on Natural Gas

In recent years, the pace of market-oriented natural gas price reforms has accelerated significantly. In April 2015, according to the change in the price of alternative energy, NDRC has reduced the price of non-residential incremental natural gas by RMB 0.44 per cubic meter, increased the price of stock natural gas by RMB 0.04 per cubic meter, and unified the stock natural gas and incremental natural gas prices. In November 2015, pursuant to the general guideline of furthering the price reform of resource products, NDRC released the Circular on Adjustment of the City-Gate Price of Non-Residential Stock Natural Gas (NDRC Pricing Circular 2688[2015]) to further liberalize the pricing of natural gas by replacing the reference ceiling price for city-gate prices of non-residential stock natural gas with a reference base rate. Starting from November 2016, suppliers and buyers may determine through negotiations the specific prices, subject to the cap of 120% of the reference base rate. In October 2016, NDRC has gradually relaxed the control over service prices for gas prices used for fertilizer production, determined that the relevant prices of gas storage facilities were market-oriented, and launched a trial reform of the marketization of city-gate prices in Fujian Province. The city-gate prices for the supply of natural gas in Fujian Province were determined by the supplying and demanding parties through consultation, which further promoted the market-oriented reform of natural gas prices.

In August 2017, based on the results of the supervision and review of the pricing of natural gas pipelines, NDRC adjusted the pipeline transportation prices, and issued the Notice on Reducing the Non-Residential Natural Gas Reference City-Gate Price (NDRC Pricing Circular 1582[2017]) in conjunction with the adjustment of the natural gas value-added tax rate. Since September 1, 2017, the non-residential natural gas reference city-gate prices have been reduced by RMB 0.1 per cubic meter. NDRC encouraged the natural gas production and operation enterprises and users to actively enter the natural gas trading platform, and the prices of natural gas that have been openly traded on trading platforms such as the Shanghai Oil and Gas Exchange Center and Chongqing Oil and Gas Exchange Center are formed by the market. The marketization of domestic natural gas prices is further enhanced.

Regulation of Pipelines Networks

In October 2016, NDRC issued the Interim Provisions for Management Measures of Natural Gas Pipeline Transmission Prices and the Interim Provisions for Supervision and Review of Natural Gas Pipeline Transmission Cost (NDRC Pricing Circular 2142[2016]).

In August 2017, according to the Interim Provisions for Management Measures of Natural Gas Pipeline Transmission Prices and the Interim Provisions for Supervision and Review of Natural Gas Pipeline Transmission Cost, after the supervision and review of the pricing of natural gas interprovincial pipelines, NDRC issued the Notice on Ratifying the Natural Gas Pipeline Transmission Prices (NDRC Pricing Circular 1581[2017]) to adjust the prices of natural gas interprovincial pipelines. Since September 1, 2017, based on the pipeline transmission prices (traffic price rate) of the Sichuan-East Gas Pipeline and Yulin-Jinan Pipeline published by the NDRC, along the transportation distance of the natural gas inlet and export, we have calculated and determined the prices of the gas transmission points for Sichuan-East Gas Pipeline and the Yulin-Jinan Pipeline and published the list of prices on our official website.

Regulation of Refining and Marketing of Refined Oil Products

Gasoline and Diesel Prices

Gasoline and diesel prices are government-guided.

In March 2013, NDRC released Circular on Establishment of Sound Price Formation Mechanism of Refined Oil Products (NDRC Pricing Circular 624[2013]), which specified that a reformed refined oil product price formation mechanism shall include: shortening of the refined oil product price adjustment period to 10 working days; elimination of the 4% price fluctuation on international market as a prerequisite for price adjustment; adjustment of the composition of benchmarked crude oil as a reference for domestic oil product prices. To save social resources, if the assessed adjustment in domestic refined oil product prices is less than RMB 50 per tonne, the adjustment will be postponed to next period. In cases of special conditions such as significant increase in domestic CPI, significant emergencies or significant fluctuations of crude oil price on international market which may trigger adjustment of domestic refined oil price, NDRC may implement ad hoc suspension, delay or narrowing of price adjustment upon the approval by the State Council. Upon elimination of the special conditions, the price formation mechanism may resume operation after NDRC obtains the State Council's approval.

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On September 16, 2013, a Circular of Relevant Opinions on Pricing Policies for Upgrading Oil Product Quality (NDRC Pricing Circular 1845[2013]) was promulgated by NDRC. The Circular provides that the prices of gasoline and diesel products shall be increased if the quality of such products is upgraded. For standard gasoline and diesel products that are upgraded to GB IV standards, their prices shall be raised by RMB 290 per tonne and RMB 370 per tonne, respectively; for gasoline and diesel products that are upgraded from GB IV to GB V standards, their price shall be raised by RMB 170 per tonne and RMB 160 per tonne, respectively. Prices for regular diesel shall be benchmarked against automobile diesel with same specification.

On January 13, 2016, NDRC made further adjustments to the pricing mechanism for refined oil products, effective immediately. When benchmark crude oil price falls below US\$ 40/bbl, NDRC will not further adjust oil product prices, the unadjusted portion would be transferred into a risk fund, which can be used for energy conservation and emission reduction, refined oil product quality upgrading and security of and gas supply upon approval by relevant departments.

Jet Fuels Price

During the transition period, the ex-factory price of the jet fuels (standard) will temporarily be determined by the buyers and the sellers, subject to a limit of no more than the CIF post-duty price in the Singapore market.

Regulation of Crude Oil and Refined Oil Products Market

On December 4, 2006, Ministry of Commerce of the PRC promulgated the Administrative Rules for Crude Oil Market and Administrative Rules for Refined Oil Products Market to open the wholesale market of crude oil and refined oil products to new market entrants, respectively.

The Notice of the National Energy Administration on Issuing the Measures for the Supervision and Administration of Fair Opening of Oil and Gas Pipelines Network Facilities (for Trial Implementation) (NEA No. 84 [2014]) requires that (i) oil and gas pipelines network facilities operating enterprises, in case of spare capacity of oil and gas pipelines network facilities, shall equally provide their pipeline network facilities to main third-party market players and provide transportation, storage, gasification, liquefaction, compression, and other services; (ii) the transportation (storage, gasification, etc.) prices determined by the pricing authorities in accordance with the relevant administrative provisions shall be implemented for the opening of oil and gas pipelines network facilities; (iii) oil and gas pipelines network facilities operating enterprises shall disclose the access standards, transportation (storage and gasification) prices, conditions for application for access, acceptance procedures, and other information on oil and gas pipelines network facilities on the websites or the information platforms designated by the National Energy Administration on a quarterly basis; and (iv) oil and gas pipeline network facilities operating enterprises shall submit the relevant status of oil and gas pipelines network facilities to the National Energy Administration or its dispatched offices semiannually.

Investment

Overseas investments by Chinese enterprises (other than financial enterprises) involving sensitive countries or regions or sensitive industries shall be submitted to MOFCOM for approval, and other overseas investments by Chinese enterprises will only need to submit a filing with

MOFCOM or its regional branches.

On June 28, 2017, NDRC and MOFCOM jointly issued the Catalogue of Industries for Guiding Foreign Investment (Revision 2017), which came into force on July 28, 2017. The catalogue further reduces the restrictive measures for foreign investment, promotes the substantial relaxation of foreign investment access, and enhances the level of opening of industries of services, manufacturing and mining. It also explicitly presents a negative list for foreign investment access.

According to the Measures for Supervision and Administration of Overseas Investment by Central Enterprises (SASAC Decree No. 35[2017]) promulgated by the State-owned Assets Supervision and Administration Commission of the State Council, central enterprises shall establish a negative list for overseas investment. The foreign investment projects listed in the special supervision category of the negative list shall be submitted to the SASAC for approval.

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In accordance with the Administrative Measures for Overseas Investments (MOFCOM Order No. 3[2014]) issued by MOFCOM, overseas investments involving sensitive countries (regions) and sensitive shall be approved by MOFCOM. All other investments will require only a filing with MOFCOM.

Under the State Council Decision on Investment System Reform (State Council No.20[2004]), investments without the use of government funds are only subject to a licensing system or a registration system, as the case may be. Under the current system, only significant projects and the projects of restrictive nature are subject to approval so as to maintain social and public interests, and all other projects of any investment scale are only subject to a registration system.

Taxation, Fees and Royalty

Companies which operate petroleum and petrochemical businesses in China are subject to a variety of taxes, fees and royalties.

Effective from December 1, 2014, the rate of mineral resource compensation charges on crude oil and natural gas is reduced to zero, and the applicable resource tax rate is correspondingly increased from 5% to 6%.

Effective from January 1, 2015, the threshold of the special oil income levy is increased from US\$55 to 65 per barrel, and a five-level progressive rate is applied to special oil income levy collection based on the sale prices.

From November 29, 2014 to January 12, 2015, the unit tax amount of consumption tax on gasoline, naphtha, solvent and lubricant have been adjusted three times and the current applicable consumption tax rates are set forth in the table below. For further information about consumption tax rates, see Note 6 to our consolidated financial statements.

Effective from May 1, 2016, business tax has been completely replaced by value-added tax to cover all the business sectors that used to fall under the business tax regime.

In April 2017, the State Council issued a notice to implement the reform of the existing mineral resources income levy system, in which the existing license fees of exploration rights and production rights will be integrated into mining rights occupancy fees, and will be dynamically adjusted based on the changes in mineral product prices and economic development needs. Collection methods and standards have not yet been released.

Applicable tax, fees and royalties on refined oil products and other refined oil products generally payable by us or by other companies in similar industries are shown below.

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Tax Item	Tax Base	Tax Rate/Fee Rate
Enterprise income tax	Taxable income	25% effective from January 1, 2008.
Value-added tax	Revenue	11% for liquefied petroleum gas, natural gas, and low density polyethylene for production of agricultural film and fertilizers and 17% for other items. 6%, 11% and 17% for taxable services. We generally charge value-added tax to our customers at the time of settlement on top of the selling prices of our products on behalf of the taxation authority. We may directly claim refund from the value-added tax collected from our customers for value-added tax that we paid for (i) purchasing materials consumed during the production process; and (ii) charges paid for drilling and other engineering services.
Consumption tax	Aggregate volume sold or self-consumed	Effective from January 13, 2015, RMB 1.52 per liter for gasoline, naphtha, solvent and lubricant, and RMB 1.2 per liter for diesel, fuel oil and jet kerosene.
Import tariff	CIF China price	5% for gasoline, 6% for diesel, 9% for jet kerosene and 6% for fuel oil. In 2017, the applicable tax rate for motor gasoline and aviation gasoline, No. 5-7 fuel oil and diesel is 1% and 0% for jet kerosene and naphtha.
Resource tax	Aggregate volume sold or self-consumed	Effective from December 1, 2014, for domestic production of crude oil and natural gas, the applicable tax rate is increased from 5% to 6% of the sales revenue, exemption or deduction may apply if qualified.
Resource compensation tax	Sales revenue of crude oil and natural gas	Effective from December 1, 2014, the applicable tax rate is reduced from 1% to zero.
Exploration license fee	Area	RMB 100 to RMB 500 per square kilometer per annum.
Production license fee	Area	RMB 1,000 per square kilometer per annum.
Royalty fee(1)	Production volume	Progressive rate of 0-12.5% for crude oil and 0-3% for natural gas.
City construction tax	Total payment of value-added tax, consumption tax and business tax	1%, 5% and 7%.
Education surcharge and local education surcharge	Total payment of value-added tax, consumption tax and business tax	3% for education surcharge and 2% for local education surcharge.
Special Oil Income Levy	Any revenue derived from sale of domestically produced crude oil when the realized crude oil price exceeds US\$65 per barrel.	Progressive rate of 20% to 40% for revenues derived from crude oil with realized price in excess of US\$65 per barrel.

(1) Sino-foreign oil and gas exploration and development cooperative projects whose contracts were signed prior to November 1, 2011 and have not yet expired are still subject to royalty fee, and the project companies of those cooperative projects are not subject to any other resource taxes or fees. Sino-foreign oil and gas exploration

cooperative projects whose contracts are signed after November 1, 2011 are not subject to royalty fee, but are subject to resource taxes.

c. ORGANIZATIONAL STRUCTURE

For a description of our relationship with Sinopec Group Company, see Item 4. Information on the Company A. History and Development of the Company and Item 7. Major Shareholders and Related Party Transactions. For a description of our significant subsidiaries, see Note 35 to our consolidated financial statements.

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D. PROPERTY, PLANT AND EQUIPMENT

We own substantially all of our properties, plants and equipment relating to our business activities. See Item 4. Information on the Company B. Business Overview for description of our property, plant and equipment.

Environmental Matters

We are subject to various national environmental laws and regulations and also environmental regulations promulgated by the local governments in those jurisdictions we have operations, and we must pay the environmental tax for pollutant emissions. Usually the environmental tax increases for each incremental amount of discharge up to a certain level. Above a certain level prescribed by the pollutant discharge permits or other standards, the PRC regulations permit the local government to order any of our facilities to cure certain behavior causing environmental damage and subject to the central government's approval, the local government may also issue orders to close any of our facilities that fail to comply with the existing regulations. In addition, we have incurred capital expenditure specifically in compliance with the various environmental protection objectives set by the PRC government for the petroleum and chemical industry, to promote energy saving and environmental protection.

Our Energy Management and Environmental Protection Department is responsible for environmental management functions such as energy saving, emission reduction, environmental protection, water saving, comprehensive utilization of resources and clean production. Each of our production subsidiaries has implemented policies to control its pollutant emissions and discharge and to oversee compliance with the PRC environmental regulations.

Most of our production facilities have their own environmental protection facilities, and the rest of our production facilities utilize available social resources, to guarantee the effective treatment of waste water, solid waste and waste gases, to ensure the compliance with applicable emission standard for our emission of waste water and waste gas, and to follow applicable disposal procedures for our disposal of solid waste.

Environmental regulations also require companies to file an environmental impact report to the Ministry of Ecology and Environment or local environment department for approval before undertaking any project with negative impact on the environment. The construction of such projects shall comply with any environmental protection measures required by the environmental bureau. After the completion of the construction, the projects shall be assessed according to the relevant requirements of environmental assessment, and the projects will only be permitted to operate after the assessment of its discharge treatment facilities, measures and pollutant discharge satisfactory environmental assessment and approval requirements.

We believe our environmental protection systems and facilities are adequate for us to comply with current applicable national and local environmental protection regulations. The PRC government, however, may impose stricter regulations which may require additional expenditure on compliance with environmental regulations.

Our environmental protection expenditures were approximately RMB 5.8 billion in 2015, RMB 6.4 billion in 2016 and RMB 7.9 billion in 2017.

Insurance

In respect of our refining, petrochemical production, and marketing and sales operations, we currently maintain with Sinopec Group Company, under the terms of its Safety Production Insurance Fund (SPI Fund), approximately RMB 817.1 billion of coverage on our property and plants and approximately RMB 81.8 billion of coverage on our inventory. In 2017, we paid an insurance premium of approximately RMB 2.4 billion to Sinopec Group Company for such coverage.

Transportation vehicles and products in transit are not covered by Sinopec Group Company and we maintain insurance policies for those assets with insurance companies in the PRC.

The insurance coverage under SPI Fund applies to all domestic enterprises controlled by Sinopec Group Company under regulations published by the Ministry of Finance. We believe that, in the event of a major accident, we will be able to recover most of our losses from insurance proceeds paid under the SPI Fund or by insurance companies.

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Pursuant to an approval of the Ministry of Finance, Sinopec Group Company entered into an agreement with PICC Property and Casualty Company Limited on January 29, 2002 to purchase a property and casualty policy which would also cover our assets. The policy provides for an annual maximum cumulative claim amount of RMB 4.0 billion and a maximum of RMB 2.36 billion per occurrence.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

A. GENERAL

The following discussion and analysis should be read in conjunction with our audited consolidated financial statements. Our consolidated financial statements have been prepared in accordance with IFRS. Certain financial information presented in this section is derived from our audited consolidated financial statements. Unless otherwise indicated, all financial data presented on a consolidated basis or by segment, are presented net of inter-segment transactions (i.e., inter-segment and other intercompany transactions have been eliminated).

Critical Accounting Policies

Our reported consolidated financial condition and consolidated results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of our financial statements. We base our assumptions and estimates on historical experience and on various other assumptions that we believe to be reasonable and which form the basis for making judgments about matters that are not readily apparent from other sources. On an on-going basis, our management evaluates its estimates. Actual results may differ from those estimates as facts, circumstances and conditions change.

The selection of critical accounting policies, the judgments and other uncertainties affecting application of those policies and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered when reviewing our financial statements. Our principal accounting policies are set forth in Note 2 to the consolidated financial statements. We believe the following critical accounting policies involve the most significant judgments and estimates used in the preparation of our financial statements.

Oil and gas properties and reserves

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The accounting for our upstream oil and gas activities is subject to special accounting rules that are unique to the oil and gas business. There are two methods to account for oil and gas business activities, the successful efforts method and the full cost method. We have elected to use the successful efforts method.

The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense as they are incurred. These costs primarily include dry hole costs, seismic costs and other exploratory costs.

Engineering estimates of our oil and gas reserves are inherently imprecise and represent only approximate amounts because of the subjective judgments involved in developing such information. There are authoritative guidelines regarding the engineering criteria that have to be met before estimated oil and gas reserves can be designated as proved. Proved and proved developed reserves estimates are updated at least annually and take into account recent production and technical information about each field. In addition, as prices and cost levels change from year to year, the estimate of proved and proved developed reserves also changes. If the estimated proved reserves is adjusted downward, the change in depreciation expense or write-down of book value of oil and gas properties will have impact on our profit. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depletion rates.

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Future dismantlement costs for oil and gas properties are estimated with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with industry practices in similar geographic area, including estimation of economic life of oil and gas properties, technology and price level. The present values of these estimated future dismantlement costs are capitalized as oil and gas properties with equivalent amounts recognized as provision for dismantlement costs.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation expense, impairment expense and future dismantlement costs, and in disclosing the supplemental standardized measure of discounted future net cash flows relating to proved oil and gas properties. Depletion rates are determined based on estimated proved developed oil and gas reserve quantities (the denominator) and oil and gas production volume within reporting period (the numerator). Therefore, assuming all other variables are held constant, an increase in estimated proved developed reserves decreases our depreciation, depletion and amortization expense. Also, estimated reserves are often used to calculate future cash flows from our oil and gas operations, which serve as an indicator of fair value in determining whether a property is impaired or not.

Impairment for long-lived assets

If circumstances indicate that the net book value of a long-lived asset, including oil and gas properties, may not be recoverable, the asset may be considered impaired, and an impairment loss may be recognized. The carrying amounts of long-lived assets are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. For goodwill, the recoverable amount is estimated annually. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to recoverable amount. The recoverable amount is the greater of the net selling price and the value in use. It is difficult to precisely estimate selling price because quoted market prices for our assets or cash-generating units are not readily available. In determining the value in use, expected cash flows generated by the asset or the cash-generating unit are discounted to their present value, which requires significant judgment relating to level of sales volume, selling price, amount of operating costs and discount rate. We use all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of reserve quantities, sales volume, selling price, amount of operating costs and discount rate.

Impairment losses recognized for each of the three years ended December 31, 2015, 2016 and 2017 in our statement of income on long-lived assets are summarized as follows:

	2015	Year ended December 31, 2016 (RMB in millions)	2017
Exploration and production	4,864	11,605*	13,556*
Refining	9	1,655	1,894
Marketing and distribution	19	267	675
Chemicals	142	2,898	4,922
Corporate and others	112		211
Total	5,146	16,425	21,258

* Information relating to the detailed analysis of the change in impairment losses is presented in Note 7 to the consolidated financial statements.

Depreciation

Property, plant and equipment (other than oil and gas properties) are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. We review the estimated useful lives of the assets regularly in order to determine the amount of depreciation expense to be recorded during any reporting period. The useful lives are based on our historical experience with similar assets and take into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates. There have been no significant changes to the estimated useful lives and residual values during each of the three years ended December 31, 2015, 2016 and 2017.

Table of Contents*Impairment of accounts receivable for bad and doubtful debts*

We estimate impairment of accounts receivable for bad and doubtful debts resulting from the inability of our customers to make the required payments. We base our estimates on the aging of our accounts receivable balance, customer credit-worthiness, and historical write-off experience. If the financial condition of our customers were to deteriorate, actual write-offs would be higher than estimated. The changes in the impairment losses for bad and doubtful accounts are as follows:

	2015	Year ended December 31, 2016 (RMB in millions)	2017
Balance as of January 1	530	525	683
Impairment losses recognized for the year .	40	238	49
Reversal of impairment losses	(13)	(8)	(100)
Written off	(38)	(72)	(21)
Others	6		1
Balance as of December 31	525	683	612

Allowance for diminution in value of inventories

If the costs of inventories become higher than their net realizable values, an allowance for diminution in value of inventories is recognized. Net realizable value represents the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. We base the estimates on all available information, including the current market prices of the finished goods and raw materials, and historical operating costs. If the actual selling prices were to be lower or the costs of completion were to be higher than estimated, the actual allowance for diminution in value of inventories could be higher than estimated. Allowance for diminution in value of inventories is analyzed as follows:

	2015	Year ended December 31, 2016 (RMB in millions)	2017
Balance as of January 1	3,603	4,402	920
Allowance for the year	3,687	430	436
Reversal of allowance on disposal	(34)	(10)	(13)
Written off	(2,931)	(4,021)	(190)
Others	77	119	2
Balance as of December 31	4,402	920	1,155

Recently Pronounced International Financial Reporting Standards

Information relating to the recently pronounced IFRS is presented in Note 1 to the consolidated financial statements.

Overview of Our Operations

We are the largest integrated petroleum and petrochemical company in China and one of the largest in Asia in terms of operating revenues. We engage in exploring for, developing and producing crude oil and natural gas, operating refineries and petrochemical facilities and marketing crude oil, natural gas, refined oil products and petrochemical products. We have reported our consolidated financial results according to the following four principal business segments and the corporate and others segment.

- *Exploration and Production Segment*, which consists of our activities related to exploring for and developing, producing and selling crude oil and natural gas;

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- *Refining Segment*, which consists of purchasing crude oil from our exploration and production segment and from third parties, processing of crude oil into refined oil products, selling refined oil products principally to our marketing and distribution segment;
- *Marketing and Distribution Segment*, which consists of purchasing refined oil products from our refining segment and third parties, and marketing, selling and distributing refined oil products by wholesale to large customers and independent distributors and retail through our retail network;
- *Chemicals Segment*, which consists of purchasing chemical feedstock principally from the refining segment and producing, marketing, selling and distributing chemical products; and
- *Corporate and Others Segment*, which consists principally of trading activities of the import and export subsidiaries and our research and development activities.

B. CONSOLIDATED RESULTS OF OPERATIONS**Year Ended December 31, 2017 Compared with Year Ended December 31, 2016**

In 2017, our total operating revenues were RMB 2,360.2 billion, representing an increase of 22.2% over 2016. Our operating income was RMB 86.7 billion, representing an increase of 8.2% over 2016.

The following table sets forth major revenue and expense items in the consolidated statement of income for the years ended December 31, 2016 and 2017.

	Year Ended December 31,		Change from 2016 to 2017 (%)
	2016	2017	
	(RMB in millions)		
Operating revenues	1,930,911	2,360,193	22.2
Sales of goods	1,880,190	2,300,470	22.4
Other operating revenues	50,721	59,723	17.7
Operating expenses	(1,853,718)	(2,288,723)	23.5
Purchased crude oil, products and operating supplies and expenses	(1,379,691)	(1,770,651)	28.3
Selling, general and administrative expenses	(64,360)	(64,973)	1.0
Depreciation, depletion and amortization	(108,425)	(115,310)	6.4

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Exploration expenses, including dry holes	(11,035)	(11,089)	0.5
Personnel expenses	(63,887)	(74,854)	17.2
Taxes other than income tax	(232,006)	(235,292)	1.4
Other operating (expenses)/income, net	5,686	(16,554)	
Operating income	77,193	71,470	(7.4)
Net finance costs	(6,611)	(1,560)	(76.4)
Investment income and share of profits less losses from associates and joint ventures	9,569	16,787	75.4
Earnings before income tax	80,151	86,697	8.2
Tax expense	(20,707)	(16,279)	(21.4)
Net income	59,444	70,418	18.5
Attributable to:			
Owners of the Company	46,672	51,244	9.8
Non-controlling interests	12,772	19,174	50.1

Operating revenues

In 2017, our sales of goods were RMB 2,300.5 billion, representing a increase of 22.4% over 2016. This was mainly attributable to our expanded market by taking opportunities along with oil price s gradually rising, and the increase of prices and sales volume of main crude oil and petrochemical products in 2017.

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The following table sets forth our external sales volume, average realized prices and the respective rates of change from 2016 to 2017 for our major products:

	Sales Volume		Change from 2016 to 2017 (%)	Average Realized Price		Change from 2016 to 2017 (%)
	2016 (thousand tonnes)	2017		2016 (RMB per tonne)	2017	
Crude oil	6,808	6,567	(3.5)	1,628	2,390	46.8
Natural gas	19,008 ⁽¹⁾	22,529	18.5	1,258 ⁽²⁾	1,290	2.5
Gasoline	77,480	83,933	8.3	6,386	6,941	8.7
Diesel	91,492	88,848	(2.9)	4,482	5,038	12.4
Kerosene	25,164	25,557	1.6	2,807	3,531	25.8
Basic chemical feedstock	32,248	35,964	11.5	4,054	4,855	19.8
Monomer and polymer for synthetic fiber	7,146	10,267	43.7	5,325	6,038	13.4
Synthetic resin	12,223	13,199	8.0	7,488	8,155	8.9
Synthetic fiber	1,369	1,304	(4.7)	7,113	8,556	20.3
Synthetic rubber	1,098	1,128	2.7	9,608	11,913	24.0
Chemical Fertilizer	714	698	(2.2)	1,612	2,010	24.7

(1) million cubic meters

(2) RMB per thousand cubic meters

Sales of crude oil and natural gas

Most of crude oil and a portion of natural gas we produced were used internally for refining and chemical production and the remaining were sold to external customers. In 2017, the total revenue from crude oil, natural gas and other upstream products that were sold externally amounted to RMB 69.2 billion, representing an increase of 45.8% over 2016. The change was mainly due to price increase of crude oil and sales volume increase of natural gas in 2017.

Sales of refined petroleum products

In 2017, our refining segment and marketing and distribution segment sell petroleum products (mainly consisting of gasoline, diesel and kerosene which are referred to as the refined oil products and other refined petroleum products) to external parties. The external sales revenue realized by these two segments were RMB 1,324.4 billion, accounting for 56.1% of our operating revenues and representing an increase of 17.2% over 2016. The increase was mainly because of the increase in prices of various refined petrochemical products. The sales revenue of gasoline, diesel and kerosene was RMB 1,120.4 billion, accounting for 84.6% of the total revenue of other refined petroleum products and representing an increase of 14.8% over 2016. The sales revenue of other refined petroleum products was RMB 204.0 billion, accounting for

15.4% of the total revenue of petroleum products and representing an increase of 31.8% over 2016.

Sales of chemical products

Our external sales revenue of chemical products was RMB 373.8 billion, accounting for 15.8% of our operating revenues and representing an increase of 31.5% over 2016. This was mainly attributable to the increase in prices and sales volume of chemical products.

Revenue from corporate and others

In 2017, our corporate and others realized sales revenue of RMB 533.1 billion, accounting for 22.6% of our operating revenue and representing an increase of 27.5% over 2016. This was mainly attributable to the price increase of trading crude oil and refined oil.

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Operating expenses

In 2017, our operating expenses were RMB 2,288.7 billion, representing an increase of 23.5% over 2016, which was mainly attributable to the prices increase of crude oil and petrochemical products. Among the operating expenses:

Purchased crude oil, products and operating supplies and expenses were RMB 1,770.7 billion, representing an increase of 28.3% over 2016, accounting for 77.4% of the total operating expenses, of which:

- crude oil purchase expenses were RMB 497.1 billion, representing an increase of 33.0% over 2016. In 2017, the total throughput of crude oil that was purchased externally was 211.03 million tonnes (excluding the amount processed for third parties), representing an increase of 4.3% over 2016; the average unit processing cost for crude oil purchased externally was RMB 2,655 per tonne, representing an increase of 27.4% over 2016;
- refined oil purchase expenses were RMB 300.5 billion, representing an increase of 23.3% over 2016, which was mainly attributable to the prices increase of purchased refined oil along with the price increase of crude oil;
- trade purchase expenses were RMB 503.9 billion, representing an increase of 27.7% over 2016, which was mainly attributable to the price increase of trading crude oil and refined oil; and
- other purchasing expenses were RMB 469.2 billion, representing an increase of 27.6% over 2016. This was mainly due to the price increase of other petroleum related products purchased from external sources along with the price increase of crude oil.

Selling, general and administrative expenses totaled RMB 65.0 billion, representing an increase of 1.0% over 2016.

Depreciation, depletion and amortization was RMB 115.3 billion, representing an increase of RMB 6.9 billion and 6.4% over 2016. This was mainly due to the increase of exploration and production segment by RMB 4.9 billion over 2016.

Exploration expenses, including dry holes were RMB 11.1 billion, representing an increase of 0.5% over 2016.

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Personnel expenses were RMB 74.9 billion, representing an increase of 17.2% over 2016. That was mainly because the Company promoted the reform of employment system, transferred some labours into contracted employees, which increased salary and other expenses. To implement the requirement of deepening the reform as required by the Central government, the Company handed over parts of its subsidiaries' social insurance to local government, and paid relevant fees according to the local government's requirements. As the Company improved its profit in 2017, income of employee was increased accordingly in line with its incentive mechanism.

Taxes other than income tax were RMB 235.3 billion, representing an increase of 1.4% over 2016.

Other operating (expenses)/income, net were RMB 16.6 billion, increased by RMB 22.2 billion over the same period of 2016. That was mainly due to the non-operating income from capital injection of Sichuan-to-East China Pipeline Co.

Operating income

In 2017, our operating income was RMB 71.5 billion, representing a decrease of 7.4% over 2016. Excluding the capital introduction in Sichuan-to-East China gas pipeline in 2016 and the acquisition of Shanghai SECCO in 2017, our operating income in 2017 increased by 19.2% over 2016.

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Net finance costs

In 2017, our net finance costs were RMB 1.6 billion, representing a decrease of 76.4% over 2016. This decrease in finance costs was mainly attributable to (i) interest expenses decreased by RMB 2.1 billion as a result of the significant decrease of interest-bearing debts ; (ii) foreign exchange gain of RMB 0.3 billion, increased by RMB 0.9 billion as compared with 2016; (iii) interest income increased by RMB 2.0 billion due to the increase of monetary reserve.

Earnings before income tax

In 2017, our earnings before income tax were RMB 86.7 billion, excluding the capital introduction in Sichuan-to-East China gas pipeline in 2016 and the acquisition of Shanghai SECCO in 2017, representing an increase of 38.9% over 2016.

Tax expense

In 2017, we recognized income tax expense of RMB 16.3 billion, representing a decrease of 21.4% over 2016. That was mainly due to the increase in exempt investment income.

Net income attributable to non-controlling interests

In 2017, our net income attributable to non-controlling interests was RMB 19.2 billion, representing an increase of RMB 6.4 billion over 2016.

Net income attributable to equity shareholders of the Company

In 2017, our net income attributable to our equity shareholders was RMB 51.2 billion, representing an increase of 9.8% over 2016.

Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, our total operating revenues were RMB 1,930.9 billion, representing a decrease of 4.4% over 2015. Our operating income was RMB 77.2 billion, representing an increase of 35.9% over 2015.

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The following table sets forth major revenue and expense items in the consolidated statement of income for the years ended December 31, 2015 and 2016.

	Year Ended December 31,		Change from 2015 to 2016 (%)
	2015	2016	
	(RMB in millions)		
Operating revenues	2,020,375	1,930,911	(4.4)
Sales of goods	1,977,877	1,880,190	(4.9)
Other operating revenues	42,498	50,721	19.3
Operating expenses	(1,963,553)	(1,853,718)	(5.6)
Purchased crude oil, products and operating supplies and expenses	(1,494,046)	(1,379,691)	(7.7)
Selling, general and administrative expenses	(69,491)	(64,360)	(7.4)
Depreciation, depletion and amortization	(96,460)	(108,425)	12.4
Exploration expenses, including dry holes	(10,459)	(11,035)	5.5
Personnel expenses	(56,619)	(63,887)	12.8
Taxes other than income tax	(236,349)	(232,006)	(1.8)
Other operating (expenses)/income, net	(129)	5,686	
Operating income	56,822	77,193	35.9
Net finance costs	(9,239)	(6,611)	(28.4)
Investment income and share of profits less losses from associates and joint ventures	8,828	9,569	8.4
Earnings before income tax	56,411	80,151	42.1
Tax expense	(12,613)	(20,707)	64.2
Net income	43,798	59,444	35.7
Attributable to:			
Owner of the Company	32,512	46,672	43.6
Non-controlling interests	11,286	12,772	13.2

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In 2016, our sales of goods were RMB 1,880.2 billion, representing a decrease of 4.9% over 2015. This was mainly attributable to the price decline of crude oil and petrochemical products.

The following table sets forth our external sales volume, average realized prices and the respective rates of change from 2015 to 2016 for our major products:

	Sales Volume		Change from 2015 to 2016 (%)	Average Realized Price		Change from 2015 to 2016 (%)
	2015 (thousand tonnes)	2016		2015	2016	
Crude oil	9,674	6,808	(29.6)	2,019	1,628	(19.4)
Natural gas	18,440 ⁽¹⁾	19,008 ⁽¹⁾	3.1	1,519 ⁽²⁾	1,258 ⁽²⁾	(17.2)
Gasoline	69,749	77,480	11.1	6,749	6,386	(5.4)
Diesel	95,472	91,492	(4.2)	4,937	4,482	(9.2)
Kerosene	23,028	25,164	9.3	3,387	2,807	(17.1)
Basic chemical feedstock	29,608	32,248	8.9	4,175	4,054	(2.9)
Synthetic fiber monomer and polymer	6,071	7,146	17.7	5,796	5,325	(8.1)
Synthetic resin	11,989	12,223	2.0	7,771	7,488	(3.6)
Synthetic fiber	1,380	1,369	(0.8)	7,740	7,113	(8.1)
Synthetic rubber	1,104	1,098	(0.5)	8,778	9,608	9.5
Chemical fertilizer	243	714	193.8	1,823	1,612	(11.6)

(1) million cubic meters

(2) RMB per thousand cubic meters

Sales of crude oil and natural gas

Most of crude oil and a portion of natural gas we produced were used internally for refining and chemical production and the remaining were sold to other customers. In 2016, the total revenue from crude oil, natural gas and other upstream products that were sold externally amounted to RMB 47.4 billion, representing a decrease of 17.8% over 2015. The change was mainly due to price and sales volume decline of crude oil in 2016.

Sales of refined oil products

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In 2016, our refining segment and marketing and distribution segment sell petroleum products (mainly consisting of gasoline, diesel and kerosene which are referred to as the refined oil products and other refined oil products) to external parties. The external sales revenue realized by these two segments were RMB 1,130.4 billion, accounting for 58.5% of our operating revenues and representing a decrease of 6.3% over 2015. The decrease was mainly because of the decline in prices of various refined petrochemical products. The sales revenue of gasoline, diesel and kerosene was RMB 975.6 billion, accounting for 86.3% of the total revenue of other refined petroleum products and representing a decrease of 4.4% over 2015. Sales revenue of other refined oil products was RMB 154.8 billion, accounting for 13.7% of the total revenue of petroleum products and representing a decrease of 17.0% over 2015.

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Sales of chemical products

Our external sales revenue of chemical products was RMB 284.3 billion, accounting for 14.7% of our operating revenues and representing an increase of 2.8% over 2015. This was mainly attributable to the sales volume increase of our chemical products.

Revenue from corporate and others

In 2016, our corporate and others realized sales revenue of RMB 418.1 billion, accounting for 21.7% of our operating revenue and representing a decrease of 4.3% over 2015. This was mainly attributable to the price decline of crude oil and petrochemical products.

Operating expenses

In 2016, our operating expenses were RMB 1,853.7 billion, representing a decrease of 5.6% over 2015, among which:

Purchased crude oil, products and operating supplies and expenses were RMB 1,379.7 billion, representing a decrease of 7.7% over 2015, accounting for 74.4% of the total operating expenses, of which:

- crude oil purchase expenses were RMB 373.7 billion, representing a decrease of 20.4% over 2015. In 2016, the total throughput of crude oil that was purchased externally was 202.40 million tonnes (excluding the amount processed for third parties), representing a decrease of 1.9% over 2015; the average unit processing cost for crude oil purchased externally was RMB 2,084 per tonne, representing a decrease of 19.6% over 2015; and
- other purchasing expenses were RMB 1,006.0 billion, representing a decrease of 1.8% over 2015. This was mainly due to the price decline of feedstock purchased from external sources.

Selling, general and administrative expenses totaled RMB 64.4 billion, representing a decrease of 7.4% over 2015. This was mainly attributable to the reform of our employment system, the transfer of certain labor services to contract employment and continued efforts in cost control.

Depreciation, depletion and amortization was RMB 108.4 billion, representing an increase of 12.4% over 2015. This was mainly due to the decrease of oil and gas reserves and the increase in depreciation and depletion rate as a result of the oil price decline.

Exploration expenses, including dry holes were RMB 11.0 billion, representing an increase of 5.5% over 2015. This was mainly due to our exploration efforts maintained in low oil price environment.

Personnel expenses were RMB 63.9 billion, representing an increase of 12.8% over 2015. This was mainly attributable to the reform of our employment system from 2016.

Taxes other than income tax were RMB 232.0 billion, representing a decrease of 1.8% over 2015. This was mainly attributable to the decrease of consumption tax by RMB 4.9 billion as a result of the decline of diesel production, and the decrease of resources tax by RMB 1.0 billion over the same period of 2015 due to oil price drop.

Other operating income, net were RMB 5.7 billion, compared by a loss of RMB 0.1 billion in 2015 was mainly attributable to the increase of non-operating income as a result of the disposal of Sichuan-to-East China gas pipeline assets as well as the increase of asset impairment.

Operating income

In 2016, our operating income was RMB 77.2 billion, representing an increase of 35.9% over 2015. This was mainly attributable to the utilization of our integration advantage, particularly offsetting the negative impact of low oil price by the profitability of our downstream business.

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Net finance costs

In 2016, our net finance costs were RMB 6.6 billion, representing a decrease of 28.4% over 2015. This decrease in finance costs was mainly attributable to (i) interest expenses increased by RMB 1.1 billion as a result of replacing US dollar loans with RMB loans (including replacing US dollar loans and compressing risk exposures of US dollar); (ii) foreign exchange loss of RMB 0.6 billion, decreased by RMB 3.2 billion as compared with 2015; (iii) interest income increased by RMB 0.2 billion due to the increase of monetary reserve.

Earnings before income tax

In 2016, our earnings before income tax were RMB 80.2 billion, representing an increase of 42.1% over 2015.

Tax expense

In 2016, we recognized income tax expense of RMB 20.7 billion, representing an increase of 64.2% over 2015. That was mainly due to the substantial increase of profits over the same period of 2015.

Net income attributable to non-controlling interests

In 2016, our net income attributable to non-controlling interests was RMB 12.8 billion, representing an increase of RMB 1.5 billion over 2015.

Net income attributable to equity shareholders of the Company

In 2016, our net income attributable to our equity shareholders was RMB 46.7 billion, representing an increase of 43.6% over 2015.

C. DISCUSSIONS ON RESULTS OF SEGMENT OPERATIONS

We divide our operations into four business segments (exploration and production segment, refining segment, marketing and distribution segment and chemicals segment) and corporate and others. Unless otherwise specified, the inter-segment transactions have not been eliminated in the financial data discussed in this section. In addition, the operating revenue data of each segment have included the other operating revenues

of this segment.

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

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	Year Ended December 31,			As a Percentage of Consolidated Operating Revenues Before Elimination of Inter-segment Sales		As a Percentage of Consolidated Operating Revenues After Elimination of Inter-segment Sales	
	2015	2016 (RMB in billions)	2017	2016 (%)	2017 (%)	2016 (%)	2017 (%)
Exploration and production							
External sales(1)	68	57	80	1.8	2.1	3.0	3.4
Inter-segment sales	71	59	78	1.9	2.0		
Total operating revenue	139	116	158	3.7	4.1		
Refining							
External sales(1)	126	108	138	3.5	3.6	5.6	5.8
Inter-segment sales	801	748	874	24.2	23.0		
Total operating revenue	927	856	1,012	27.7	26.6		
Marketing and distribution							
External sales(1)	1,103	1,049	1,220	33.9	32.1	54.3	51.7
Inter-segment sales	3	4	4	0.1	0.1		
Total operating revenue	1,106	1,053	1,224	34.0	32.2		
Chemicals							
External sales(1)	285	297	388	9.6	10.2	15.4	16.5
Inter-segment sales	43	38	50	1.2	1.3		
Total operating revenue	328	335	438	10.8	11.5		
Corporate and others							
External sales(1)	438	420	534	13.5	14.0	21.7	22.6
Inter-segment sales	346	320	440	10.3	11.6		
Total operating revenue	784	740	974	23.8	25.6		
Total operating revenue before inter-segment eliminations	3,284	3,100	3,806	100.0	100.0		
Elimination of inter-segment sales	(1,264)	(1,169)	(1,446)				
Consolidated operating revenues	2,020	1,931	2,360			100.0	100.0

(1) include other operating revenues.

The following table sets forth the operating revenues, operating expenses and operating income/(loss) by each segment before elimination of the inter-segment transactions for the periods indicated, and the changes from 2016 to 2017.

	2015	Year Ended December 31, 2016 (RMB in billions)	2017	Change from 2016 to 2017 (%)
Exploration and production				
Total operating revenues	139	116	158	35.9
Total operating expenses	(156)	(153)	(204)	33.3
Total operating income/(loss)	(17)	(37)	(46)	
Refining				
Total operating revenues	927	856	1012	18.2
Total operating expenses	(906)	(800)	(947)	18.4
Total operating (loss)/income	21	56	65	15.5

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Marketing and distribution				
Total operating revenues	1,106	1,053	1,224	16.3
Total operating expenses	(1,078)	(1,021)	(1,193)	16.8
Total operating income/(loss)	28	32	31	(1.8)
Chemicals				
Total operating revenues	328	335	438	30.6
Total operating expenses	(309)	(314)	(411)	30.6
Total operating (loss)/income	19	21	27	30.8
Corporate and others				
Total operating revenues	784	740	974	31.7
Total operating expenses	(784)	(737)	(979)	32.9
Total operating (loss)/income	0	3	(5)	
Elimination of inter-segment income	5	2	(2)	

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Exploration and Production Segment

Most of the crude oil and a small portion of the natural gas produced by the exploration and production segment were used for our refining and chemicals operations. Most of our natural gas and a small portion of crude oil were sold to other customers.

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, the operating revenues of this segment were RMB 157.5 billion, representing an increase of 35.9% over 2016. This was mainly attributed to the rise of realized price of crude oil and natural gas as well as expansion of LNG business.

This segment sold 35.31 million tonnes of crude oil and 24.48 billion cubic meters of natural gas in 2017, representing a decrease of 2.9% and an increase of 19.1% over 2016, respectively; 4.82 billion cubic meters of gasified LNG, representing an increase of 118.9% over 2016; and 2.28 million tonnes of LNG, representing an increase of 43.7% over 2016. The average realized price of crude oil and natural gas were RMB 2,341 per tonne and RMB 1,296 per thousand cubic meters, respectively, representing an increase of 35.0% and 2.3%, respectively, over 2016, and the average realized price of gasified LNG and LNG were RMB 1,742 per thousand cubic meters and RMB 3,056 per tonne, respectively, representing an increase of 2.0% and 24.0%, respectively.

In 2017, the operating expenses of this segment were RMB 204 billion, representing an increase of 33.3% over 2016. This was mainly due to:

- Depreciation, depletion and amortization increased by RMB 4.9 billion;
- Impairment of assets increased by RMB 2.0 billion;
- Personnel expenses increased by RMB 1.7 billion;
- Increase of resources tax by RMB 1.0 billion over the same period of 2016 due to price increase of crude oil;
- Increase of purchasing expenses by RMB 15.1 billion as a result of the expansion of LNG business; and

- other income (net) decreased by RMB 20.6 billion, as a result of the restructuring of Sichuan-to-East China Pipeline Co in 2016.

The lifting cost for oil and gas was RMB 788.3 per tonne in 2017, representing a slight increase of 0.3% over 2016.

In 2017, the operating loss of the exploration and production segment were RMB 45.9 billion, representing an increase by RMB 9.3 billion over 2016. Excluding the restructuring of Sichuan-to-East China Pipeline Co., the operating loss of the exploration and production segment decreased by 11.3 billion over 2016.

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Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, the operating revenues of this segment were RMB 115.9 billion, representing a decrease of 16.5% over 2015. This was mainly attributable to the decline of price of crude oil and natural gas, and decline of sales volume of crude oil.

This segment sold 36.38 million tonnes of crude oil and 20.56 billion cubic meters of natural gas in 2016, representing a decrease of 13.8% and an increase of 3.7% over 2015, respectively. The average realized price of crude oil and natural gas were RMB 1,734 per tonne and RMB 1,267 per thousand cubic meters, respectively, representing a decrease of 13.9% and 17.5%, respectively, over 2015.

In 2016, the operating expenses of this segment were RMB 152.6 billion, representing a decrease of 2.2% over 2015. This was mainly due to:

- Depreciation, depletion and amortization increased by RMB 9.8 billion, primarily as a result of downward revision of oil and gas reserve due to price decrease;
- Impairment of oil and gas assets increased by RMB 6.7 billion, as a result of downward revision of oil and gas reserve due to price decrease and high operating and development cost for certain oil fields; and
- other expenses (net) decreased by RMB 20.6 billion, as a result of the restructuring of Sichuan-to-East China Pipeline Co..

The lifting cost for oil and gas was RMB 786.0 per tonne in 2016, representing a slight increase of 0.8% despite of the production volume of crude oil decreased by 13.2% over 2015.

In 2016, the segment made every effort to optimize resource mix, attached great emphasis on cash flow contributions, and proactively controlled costs. Due to the drop in crude oil and natural gas prices, the operating loss of the exploration and production segment were RMB 36.6 billion.

Refining Segment

Business activities of the refining segment consist of purchasing crude oil from third parties and from our exploration and production segment, processing crude oil into refined oil products, selling gasoline, diesel and kerosene to the marketing and distribution segment, selling a portion of chemical feedstock to our chemicals segment, and selling other refined oil products to the domestic and overseas customers.

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, the operating revenues of this segment were RMB 1,011.9 billion, representing an increase of 18.2% over 2016. This was mainly attributable to the price increase of refined oil products.

The table below sets forth sales volume and average realized prices by product for 2017 and 2016, as well as the percentage changes in sales volume and average realized prices for the periods shown.

	Sales volume		Change from 2016 to 2017 (%)	Average realized prices		Change from 2016 to 2017 (%)
	2016 (thousand tonnes)	2017		2016	2017 (RMB per tonne)	
Gasoline	52,461	54,273	3.5	5,904	6,538	10.7
Diesel	58,734	60,680	3.3	4,505	4,962	10.1
Kerosene	14,529	17,080	17.6	2,814	3,527	25.3
Chemical feedstock	36,408	36,951	1.5	2,584	3,204	24.0
Other refined oil products	55,742	58,801	5.5	2,529	2,929	15.8

In 2017, the domestic gasoline and diesel prices were raised 11 times and lowered 6 times. The 90# gasoline price (tax included) was accumulatively increased by RMB 435 per tonne, and the 0# diesel price (tax included) was increased by RMB 420 per tonne cumulatively.

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In 2017, our sales revenues of gasoline were RMB 354.8 billion, representing an increase of 14.6% over 2016; the sales revenues of diesel were RMB 301.1 billion, representing an increase of 13.8% over 2016; the sales revenues of kerosene were RMB 60.2 billion, representing an increase of 47.3% over 2016; the sales revenues of chemical feedstock were RMB 118.4 billion, representing an increase of 25.8% over 2016; and the sales revenues of other refined oil products other than gasoline, diesel, kerosene and chemical feedstock were RMB 172.2 billion, representing an increase of 22.2% over 2016.

This segment's operating expenses were RMB 946.8 billion in 2017, representing an increase of 18.4% over 2016, which is mainly attributable to the increase in procurement cost of crude oil.

In 2017, the average processing cost of crude oil was RMB 2,774 per tonne, representing an increase of 26.4% over 2016. Refining throughput were 230.30 million tonnes (excluding the volume processed for third parties), representing an increase of 4.2% over 2016. In 2017, the total costs of crude oil processed were RMB 638.8 billion, representing an increase of 31.8% over 2016.

The refining margin was RMB 510.7 per tonne in 2017, representing an increase of RMB 38.8 per tonne compared with 2016. This is mainly due to the increased proportion of high value added products (volume of gasoline with high octane number and jet fuel increased by 0.7% and 5.6% over 2016 and diesel to gasoline ratio down to 1.17), the promotion of quality upgrading of refined oil products (output of gasoline and diesel with GB V standard or above increased by 58% over 2016), enlarged total refinery throughput by increasing the export volume, and further improved margins for LPG, asphalt and other refined oil products by our centralized marketing advantages brought fully into play.

In 2017, the unit refining cash operating cost (defined as operating expenses less the processing cost of crude oil and refining feedstock, depreciation and amortisation, taxes other than income tax and other operating expenses, then divided by the throughput of crude oil and refining feedstock) was RMB 175.2 per tonne, an increase of RMB 9.5 per tonne over 2016, mainly because of increased operating expenses resulting from newly operated facilities related to quality upgrading of refined oil products as well as safety enhancement and environment protection.

This segment's operating profit of the segment was RMB 65.0 billion in 2017, representing an increase of RMB 8.7 billion or 15.5% as compared with 2016.

Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, the operating revenues of this segment were RMB 855.8 billion, representing a decrease of 7.7% over 2015. This was mainly attributable to the price decline of refined oil products.

The table below sets forth sales volume and average realized prices by product for 2016 and 2015, as well as the percentage changes in sales volume and average realized prices for the periods shown.

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	Sales volume		Change from 2015 to 2016 (%)	Average realized prices		Change from 2015 to 2016 (%)
	2015 (thousand tonnes)	2016		2015 (RMB per tonne)	2016	
Gasoline	50,921	52,461	3.0	6,191	5,904	(4.6)
Diesel	63,359	58,734	(7.3)	4,797	4,505	(6.1)
Kerosene	13,518	14,529	7.5	3,420	2,814	(17.7)
Chemical feedstock	35,945	36,408	1.3	2,984	2,584	(13.4)
Other refined oil products	52,418	55,742	6.3	2,842	2,529	(11.0)

In 2016, our sales revenues of gasoline were RMB 309.7 billion, representing a decrease of 1.8% over 2015; the sales revenues of diesel were RMB 264.6 billion, representing a decrease of 12.9% over 2015; the sales revenues of kerosene were RMB 40.9 billion, representing a decrease of 11.6% over 2015; the sales revenues of chemical feedstock were RMB 94.1 billion, representing a decrease of 12.3% over 2015; and the sales revenues of other refined oil products other than gasoline, diesel, kerosene and chemical feedstock were RMB 141.0 billion, representing a decrease of 5.4% over 2015.

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This segment's operating expenses were RMB 799.5 billion in 2016, representing a decrease of 11.7% over 2015, which is mainly attributable to the decline in procurement cost of crude oil.

In 2016, the average unit cost of refining feedstock processed was RMB 2,194 per tonne, representing a decrease of 18.5% over 2015. Refining throughput were 220.98 million tonnes (excluding the volume processed for third parties), representing a decrease of 1.1% over 2015. In 2016, the total costs of refining feedstock processed were RMB 484.8 billion, representing a decrease of 19.4% over 2015.

The refining margin was RMB 471.9 per tonne in 2016, representing an increase of RMB 153.8 per tonne over 2015. This was mainly attributable to the rebound of international crude oil price, and floor prices policy for refined oil products announced by the PRC government, therefore widened the price spread between raw materials and products

In 2016, the unit refining cash operating cost (defined as operating expenses less the purchase cost of crude oil and refining feedstock, depreciation and amortization, taxes other than income tax and other operating expenses, and divided by the refinery throughput) was RMB 165.7 per tonne, decreased by RMB 1.9 per tonne. This was mainly attributable to strengthening of cost control, improving operating efficiency and reducing costs of fuel, electricity and other auxiliaries facilities.

In 2016, this segment utilized the rebound of oil price, strengthened crude oil procurement management, adjusted structure with market-oriented efforts, increased exports and improved the profitability of self-selling products, and as a result, realized significant increase in operating profit.

This segment's operating income was RMB 56.3 billion in 2016, representing an increase of RMB 35.3 billion as compared with 2015.

Marketing and Distribution Segment

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

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, the operating revenues of this segment were RMB 1,224.2 billion, representing an increase of 16.3% compared with 2016.

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In 2017, the sales revenues of gasoline, diesel and kerosene were RMB 582.9 billion, RMB 449.2 billion and RMB 90.2 billion, representing an increase of 17.7%, 9.0% and 27.8%, respectively, over 2016.

The following table sets forth the sales volumes, average realized prices and the respective rates of changes of the four major product categories in 2017 and 2016, including breakdown in retail, wholesale and distribution of gasoline and diesel.

	Sales Volume		Change from 2016 to 2017 (%)	Average Realized Prices		Change from 2016 to 2017 (%)
	2016 (thousand tonnes)	2017		2016	2017 (RMB per tonne)	
Gasoline	77,613	83,980	8.2	6,380	6,941	8.8
Retail sale	63,718	66,364	4.2	6,722	7,346	9.3
Wholesale and distribution	13,895	17,616	26.8	4,812	5,412	12.5
Diesel	91,998	89,146	(3.1)	4,478	5,039	12.5
Retail sale	46,656	44,736	(4.1)	5,088	5,588	9.8
Wholesale and distribution	45,342	44,410	(2.1)	3,851	4,486	16.5
Kerosene	25,164	25,555	1.6	2,807	3,531	25.8
Fuel oil	22,034	23,299	5.7	1,703	2,251	32.2

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In 2017, the operating expenses of the segment were RMB 1,192.6 billion, representing an increase of RMB 171.9 billion or 16.8% as compared with that of 2016. This was mainly due to increased procurement prices of refined oil products and volume of gasoline.

In 2017, the segment's marketing cash operating cost (defined as the operating expenses less purchase costs, taxes other than income tax, depreciation and amortisation, and then divided by the sales volume) was RMB 198.7 per tonne, representing an increase of 0.7% compared with that of 2016.

In 2017, the operating revenues of non-fuel business was RMB 27.6 billion, representing an increase of RMB 6.2 billion compared with 2016; the profit of non-fuel business was RMB 2.2 billion, representing an increase of RMB 0.7 billion compared with 2016.

The operating income of this segment in 2017 was RMB 31.6 billion, representing a decrease of 1.8% compared with 2016.

Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, the operating revenues of this segment were RMB 1,052.9 billion, representing a decrease of 4.9% compared with 2015.

In 2016, the sales revenues of gasoline, diesel and kerosene were RMB 495.2 billion, RMB 412.0 billion and RMB 70.6 billion, representing an increase of 5.1%, a decrease of 13.0% and a decrease of 9.5%, respectively, over 2015.

The following table sets forth the sales volumes, average realized prices and the respective rates of changes of the four major product categories in 2016 and 2015, including breakdown in retail, wholesale and distribution of gasoline and diesel.

	Sales Volume		Change from 2015 to 2016 (%)	Average Realized Prices		Change from 2015 to 2016 (%)
	2015 (thousand tonnes)	2016		2015 (RMB per tonne)	2016	
Gasoline	69,842	77,613	11.1	6,747	6,380	(5.4)
Retail sale	58,211	63,718	9.5	6,996	6,722	(3.9)
Wholesale and distribution	11,631	13,895	19.5	5,498	4,812	(12.5)
Diesel	95,907	91,998	(4.1)	4,936	4,478	(9.3)
Retail sale	50,756	46,656	(8.1)	5,490	5,088	(7.3)
Wholesale and distribution	45,151	45,342	0.4	4,314	3,851	(10.7)
Kerosene	23,028	25,164	9.3	3,387	2,807	(17.1)
Fuel oil	24,980	22,034	(11.8)	2,215	1,703	(23.1)

The operating expenses of this segment in 2016 was RMB 1,020.7 billion, representing a decrease of RMB 57.1 billion or 5.3%, over 2015, which was mainly attributable to the decrease of purchase volume and purchase costs of diesel and fuel oil.

In 2016, this segment's unit cash selling expenses of refined oil products per tonne (defined as the operating expenses less the purchasing costs, taxes other than income tax, depreciation and amortization and divided by the sales volume) was RMB 197.3 per tonne, representing an increase of 4.3%.

In 2016, facing abundant domestic supply of refined oil products and strong market competition, the segment made full use of the advantages of our extensive sales network to actively expand the gasoline market, increased sales of high-grade gasoline and expanded the total sales volume, coordinated for more efficient utilization of internal and external resources, which led to improved profit margins and better performance.

The operating income of this segment in 2016 was RMB 32.2 billion, representing an increase of 11.4% over 2015.

Table of Contents**Chemicals Segment**

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

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

The operating revenues of the chemicals segment in 2017 were RMB 437.7 billion, representing an increase of 30.6% over 2016, which was mainly attributable to the increase in sales volume and price of chemical products.

The sales revenues generated by the segment's six major categories of chemical products (namely basic organic chemicals, synthetic resin, synthetic fiber monomer and polymer, synthetic fiber, synthetic rubber, and chemical fertiliser) totaled RMB 413.5 billion, representing an increase of 30.8% as compared with 2016, and accounted for 94.5% of the operating revenues of the segment.

The following table sets forth the sales volume, average realized price and the respective rates of changes for each of these six categories of chemical products of this segment from 2016 to 2017.

	Sales Volume		Change from 2016 to 2017 (%)	Average Realized Prices		Change from 2016 to 2017 (%)
	2016 (thousand tonnes)	2017		2016 (RMB per tonne)	2017	
Basic organic chemicals	41,605	46,351	11.4	3,963	4,684	18.2
Synthetic fiber monomers and polymers	7,169	10,332	44.1	5,328	6,047	13.5
Synthetic resins	12,250	13,215	7.9	7,482	8,153	9.0
Synthetic fiber	1,369	1,304	(4.7)	7,113	8,556	20.3
Synthetic rubber	1,099	1,138	3.5	9,609	11,957	24.4
Chemical fertilizer	714	700	(2.0)	1,612	2,008	24.6

In 2017, the operating expenses of the chemicals segment were RMB 410.8 billion, representing an increase of 30.6% over 2016, mainly because of the significant increase in the price of externally procured raw materials.

In 2017, the segment seized the opportunities of the improving market conditions, coordinated production with sales, intensified structural adjustment, increased the production of synthetic resin, rubber and some organic products which were more profitable, positively expanded the market, strictly controlled costs and expenses, thus, resulting in remarkable profits.

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In 2017, the operating income of this segment was RMB 27.0 billion, representing an increase of RMB 6.4 billion or 30.8% as compared with 2016.

Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

The operating revenues of the chemicals segment in 2016 were RMB 335.1 billion, representing an increase of 1.8% over 2015, which was mainly attributable to the increase in sales volume of chemical products.

The sales revenues of our six major categories of chemical products (namely basic organic chemicals, synthetic resins, synthetic fiber monomers and polymers for synthetic fiber, synthetic fiber, synthetic rubber and chemical fertilizer) of this segment in 2016 were approximately RMB 316.2 billion, representing an increase of 2.1% compared with 2015, accounting for 94.3% of the operating revenues of this segment.

The following table sets forth the sales volume, average realized price and the respective rates of changes for each of these six categories of chemical products of this segment from 2015 to 2016.

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	Sales Volume		Change from 2015 to 2016 (%)	Average Realized Prices		Change from 2015 to 2016 (%)
	2015 (thousand tonnes)	2016		2015 (RMB per tonne)	2016	
Basic organic chemicals	38,903	41,605	6.9	4,121	3,963	(3.8)
Synthetic fiber monomers and polymers	6,083	7,169	17.9	5,797	5,328	(8.1)
Synthetic resins	11,993	12,250	2.1	7,771	7,482	(3.7)
Synthetic fiber	1,380	1,369	(0.8)	7,739	7,113	(8.1)
Synthetic rubber	1,107	1,099	(0.7)	8,769	9,609	9.6
Chemical fertilizer	243	714	193.8	1,823	1,612	(11.6)

The operating expenses of this segment in 2016 were RMB 314.5 billion, representing an increase of 1.6% over 2015.

In 2016, the segment seized the favorable opportunities of the low feed stock price, further adjust feed stock and product mix, coordinated production with sales, strictly controlled costs and expenses, thus, resulting in remarkable profits.

In 2016, the operating income of this segment was RMB 20.6 billion, representing an increase of RMB 1.1 billion as compared with 2015.

Corporate and Others

The business activities of corporate and others mainly consist of the import and export business activities of our subsidiaries, research and development activities of us and managerial activities of our headquarters.

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, the operating revenue generated from corporate and others was RMB 974.9 billion, representing increase of 31.8% over 2016, which was mainly attributable to the increase in crude oil trading incomes caused by price increase of crude oil as compared with 2016.

In 2017, the operating expenses of this segment was RMB 979.3 billion, representing an increase of 32.9% over 2016.

In 2017, the operating loss of this segment was RMB 4.48 billion.

Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, the operating revenue generated from corporate and others was RMB 739.9 billion, among which the sales revenues realized by subsidiaries such as trading companies were RMB 736.2 billion, representing decrease of 5.6% over 2015, which was mainly attributable to the decrease in trading incomes caused by price drop of crude oil as well as lower revenue from crude oil trading business as compared with 2015.

In 2016, the operating expenses of this segment was RMB 736.7 billion, among which operating expenses realized by trading companies subsidiaries were RMB 728.0 billion, representing a decrease of 6.0% over 2015.

In 2016, the operating income of this segment was RMB 3.2 billion, among which the operating income realized by subsidiaries such as trading companies was RMB 8.2 billion.

D. LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of funding have been cash provided by our operating activities, along with short-term and long-term loans. Our primary uses of cash have been for working capital, capital expenditures and repayment of short-term and long-term loans. We arrange and negotiate financing with financial institutions to finance our capital resource requirement, and maintain a certain level of standby credit facilities to reduce liquidity risk. We believe that our current cash on hand, expected cash flows from operations and available standby credit facilities from financial institutions will be sufficient to meet our working capital requirements and repay our short term debts and obligations when they become due.

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The following table sets forth a summary of our consolidated statements of cash flow data for the years ended December 31, 2015, 2016 and 2017.

Statement of cash flow data	2015	Year Ended December 31,	
		2016	2017
		(RMB in millions)	
Net cash generated from operating activities	165,740	214,543	190,935
Net cash used in investing activities	(116,719)	(66,217)	(145,323)
Net cash generated from/(used in) financing activities	9,093	(93,047)	(56,509)
Net increase/(decrease) in cash and cash equivalents	58,114	55,279	(10,897)

The net cash generated from our operating activities in 2017 was RMB 190.9 billion, representing a decrease of RMB 23.6 billion over 2016, which was mainly due to the increase in receivables and inventory resulted from the rising oil prices and inventory level.

The net cash generated from our operating activities in 2016 was RMB 214.5 billion, representing an increase of RMB 48.8 billion over 2015, which was mainly due to an increase in earnings before income tax by RMB 23.7 billion, optimized fund utilization and improvement on working capital.

The net cash generated from our operating activities in 2015 was RMB 165.7 billion, representing an increase of RMB 17.7 billion over 2014, which was mainly due to an increase in earnings before tax and improvement on working capital.

The net cash used in our investing activities in 2017 was RMB 145.3 billion, representing an increase of RMB 79.1 billion over 2016, which was mainly due to an increase of fixed deposits due over three months and an increase of acquisitions and investments in associates and joint ventures.

The net cash used in our investing activities in 2016 was RMB 66.2 billion, representing a decrease of RMB 50.5 billion over 2015, which was mainly due to the decrease of capital expenditure by RMB 30.0 billion and RMB 13.2 billion received as proceeds from the sale of equity interest in Sinopec Sichuan-to-East China Pipeline Co., Ltd..

The net cash used in our investing activities in 2015 was RMB 116.7 billion, representing a decrease of RMB 15.6 billion over 2014, which was mainly due to the decrease of fixed assets expenditure in the reporting period.

The net cash used in the Company's financing activities in 2017 was RMB 56.5 billion, representing a decrease of cash out flow by RMB 36.5 billion over 2016. This was mainly due to the decrease in borrowing repayment.

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The net cash outflow used in our financing activities in 2016 was RMB 93.0 billion, representing a net cash outflow increase of RMB 102.1 billion over 2015, which was mainly due to a cash inflow of RMB 105.0 billion from the capital introduction of Sinopec Marketing Co., Ltd. in 2015 and the significant reduction in interest bearing debts for two consecutive years, of which, the Company repaid RMB 62.6 billion and RMB 63.0 billion in 2015 and 2016, respectively.

The net cash inflow generated from our financing activities in 2015 was RMB 9.1 billion, representing an increase of RMB 30.6 billion over 2014. This reflected: (i) the completion of capital injection to Sinopec Marketing Co.; and (ii) the repayment of high interest bearing debts.

In respect of our cash flow situation of 2017, we further intensified central management of funds, strictly controlled the size of monetary funds and interest bearing debts, reduced capital precipitation, accelerated cash flow to continuously maintain a high level of our operating cash flow.

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In respect of our debts and borrowings, due to continuing improvement of our cash flow, we decreased our debts to RMB 179.8 billion at the end of 2017 from RMB 192.3 billion from the beginning of 2017. Our short-term debts, primarily consist of revolving loans borrowed according to our business plan and operation needs and overdrawing agreements entered into on the corporate bank account with our strategic-alliance banks to meet our intra-day payment requirements, increased by RMB 5.8 billion from the beginning of 2017, representing an increase from 38.91% at the beginning of 2017 to 44.86% at the end of 2017 of the debts, which is mainly due to the increase of short-term debts when the direct financing rate is at historically high level to reduce the financing costs. Our long-term debts decreased by RMB 18.3 billion from the beginning of 2017, representing a decrease from 61.09% at the beginning of 2017 to 55.14% at the end of 2017 of the debts, which is due to the recognition of two tranches of our corporate bonds to be matured in 2018 as non-current debt within one year, and signed overdraft account agreements with major strategic and cooperative banks to meet the daily payment needs.

Contractual Obligations and Commercial Commitments

The following table sets forth our obligations and commitments to make future payments under contracts and commercial commitments as of December 31, 2017.

	As of December 31, 2017				
	Total	less than 1 year	1-3 years (RMB in millions)	4-5 years	After 5 years
Contractual obligations(1)					
Short-term debt	81,979	81,979			
Long-term debt	109,735	2,253	38,108	52,131	17,243
Total contractual obligations	191,714	84,232	38,108	52,131	17,243
Other commercial commitments					
Operating lease commitments	257,122	11,114	22,222	20,980	202,806
Capital commitments	178,383	178,383			
Exploration and production licenses	1,258	205	115	56	882
Guarantees(2)	24,192	24,192			
Total commercial commitments	460,955	213,894	22,337	21,036	203,688

(1) Contractual obligations include the contractual obligations relating to interest payments.

(2) Guarantee is not limited by time, therefore specific payment due period is not applicable. As of December 31, 2017, with respect to guarantees in relation to banking facilities granted to certain parties, we have not entered into any off-balance sheet arrangements. As of December 31, 2017, the maximum amount of potential future payments under the guarantees was RMB 24.2 billion. As of December 31, 2016, the maximum amount of potential future payments under the guarantees was RMB 22.9 billion. See Note 30 to the consolidated financial statements for further information of the guarantees.

Historical and Planned Capital Expenditure

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The following table sets forth our capital expenditure by segment for the years of 2015, 2016 and 2017 and the capital expenditure in each segment as a percentage of our total capital expenditure for such year.

	2015		2016		2017		Total	
	RMB	Percent	RMB	Percent	RMB	Percent	RMB	Percent
	(in billions, except percentage data)							
Exploration and production	54.71	48.67%	32.19	42.10%	31.34	31.54%	118.24	41.02%
Refining	15.13	13.46%	14.35	18.77%	21.07	21.21%	50.55	17.54%
Marketing and distribution	22.12	19.68%	18.49	24.18%	21.54	21.67%	62.15	21.56%
Chemicals	17.63	15.68%	8.85	11.58%	23.03	23.17%	49.51	17.18%
Corporate and others	2.82	2.51%	2.58	3.37%	2.40	2.41%	7.80	2.70%
Capital Expenditure	112.41	100.00%	76.46	100.00%	99.38	100.00%	288.25	100.00%

In 2017, focusing on quality and profitability of investment, we continuously optimized our investment projects. As a result, our capital expenditure amounted to RMB 99.4 billion, among which:

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- *Exploration and production.* RMB 31.3 billion was mainly for Fuling shale gas and Hangjinqi natural gas field development projects, Shengli and Northwest crude development projects, LNG terminals in Tianjin, Wen-23 gas storage and phase I of Xinjiang gas pipeline, as well as overseas projects.
- *Refining.* RMB 21.1 billion was mainly for Zhongke Refining and Petrochemical project, adjustments in the product mix of Zhenhai and Maoming refineries, and gasoline and diesel GB VI quality upgrading projects.
- *Marketing and distribution.* RMB 21.5 billion was mainly for construction of service stations and refined oil product pipelines, depots and storage facilities.
- *Chemicals.* RMB 23.0 billion was mainly for Zhongke Refining and Petrochemical project, phase II of Hainan high-efficiency and environment-friendly aromatics project, Gulei and Zhong an projects, acquisition of interest in Shanghai SECCO, as well as projects regarding resource comprehensive utilisation and product structure adjustments.
- *Corporate and others.* RMB 2.4 billion was mainly for R&D facilities and information technology application projects.

In 2018, we will devote attention to the quality and profitability of investments, and constantly optimise our investment projects. Capital expenditures for the year are budgeted at RMB 117.0 billion, including:

- *Exploration and production.* The planned capital expenditure in 2018 for this segment is approximately RMB 48.5 billion, mainly for the shale gas development in southwest China, the natural gas project in north China and crude capacity building in northwest China, as well as natural gas pipelines and storage projects, and overseas oil and gas projects.
- *Refining.* The planned capital expenditure in 2018 for this segment is RMB 28.8 billion, mainly for Zhongke Refining and Petrochemical Project, the structural adjustments of refining business in Zhenhai, Maoming and Tianjin subsidiaries, and the quality upgrading of GB VI standard gasoline and diesel.
- *Marketing and distribution.* The planned capital expenditure in 2018 for this segment is RMB 18.5 billion. We expect to focus on constructing and renovating pipelines and service stations and building refined oil product

storage.

- *Chemicals.* The planned capital expenditure in 2018 for this segment is RMB 17.7 billion, mainly for Zhongke Refining and Petrochemical Project, the high-efficiency and phase II of Hainan high-efficiency and environmental-friendly aromatics project, the integrated refining and petrochemical project in Gulei and the resource utilisation and structural adjustment projects in Zhenhai, Yangzi, Jinling, Maoming and Wuhan subsidiaries.
- *Corporate and others.* The planned capital expenditure in 2018 for this segment is RMB 3.5 billion, mainly for R&D facilities and information technology projects.

Research and Development

Our expenditures for the research and development were RMB 5.65 billion in 2015, RMB 5.94 billion in 2016, and RMB 6.42 billion in 2017.

Consumer Price Index

According to the data provided by the National Bureau of Statistics, the consumer price index (CPI) in the PRC increased by 1.6% in 2017 (CPI increased by 2.0% in 2016) over 2016 and increased by 3.6% over 2015. According to China's official analysis, the decrease of consumer price index in the PRC during 2017 was due to the decrease in prices of food, mainly for pork and fresh vegetables prices, which is the first decline since 2003. Inflation has not had a significant impact on our results of operations in 2017.

Table of Contents**ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES****A. DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT****Directors**

The table and discussion below set forth certain information concerning our directors. The current term for all our directors is three years, which will expire in May 2018.

Name	Age	Position with the Company
Dai Houliang	54	Vice Chairman, President
Li Yunpeng	58	Director
Wang Zhigang	60	Former Director, Senior Vice President
Zhang Haichao	60	Former Director, Senior Vice President
Jiao Fangzheng	55	Director, Senior Vice President
Ma Yongsheng	56	Director, Senior Vice President
Jiang Xiaoming	64	Independent Director
Andrew Y. Yan	60	Independent Director
Tang Min	64	Independent Director
Fan Gang	64	Independent Director

Dai Houliang, aged 54, Vice Chairman of Board of Directors and President of Sinopec Corp. Mr. Dai is a professor level senior engineer with a Ph.D. degree and an academician of the Chinese Academy of Engineering. In December 1997, he was appointed as Vice President of Yangzi Petrochemical Corporation; in April 1998, he served as Director and Vice President of Yangzi Petrochemical Co., Ltd.; in July 2002, he served as Vice Chairman of Board of Directors, President of Yangzi Petrochemical Co., Ltd. and Director of Yangzi Petrochemical Corporation; in December 2003, he served as Chairman of Board of Directors and President of Yangzi Petrochemical Co., Ltd. and concurrently as Chairman of Board of Directors of Yangzi Petrochemical Corporation; in December 2004, he served concurrently as Chairman of Board of Directors of BASF-YPC Company Limited; in September 2005, he was appointed as Deputy CFO of Sinopec Corp.; in November 2005, he was appointed as Vice President of Sinopec Corp.; in May 2006, he served as Director, Senior Vice President and CFO of Sinopec Corp.; in June 2008, he served as a member of the Leading Party Member Group of China Petrochemical Corporation; in August 2012, he was appointed concurrently as Chairman of Sinopec Great Wall Energy & Chemical Co., Ltd.; in March 2013, he was appointed concurrently as Chairman of Sinopec Catalyst Co., Ltd.; and in May 2009, he was elected as Director and appointed as Senior Vice President of Sinopec Corp. in May 2016, he was appointed as the President and Deputy Secretary of the Leading Party Member Group of China Petrochemical Corporation and since August 2016, he was elected as the Vice Chairman of the Board and appointed as President of Sinopec Corp.

Li Yunpeng, aged 58, Director of Sinopec Corp. Mr. Li is a senior administration engineer with a master degree in engineering. In January 1998, he was appointed as deputy General Manager of Executive Division of China Ocean Shipping (Group) Company (COSCO); in September 1998, he served as Deputy Secretary of Discipline Inspection Committee, Director of Supervision Office and concurrently served as General Manager of Supervision Division of COSCO; in November 1999, he was appointed as General Manager of Human Resource Division of COSCO; and in September 2000, he served as Head of Organisation Department of COSCO; in December 2000, he was appointed as Secretary of Communist Youth League Committee of COSCO; in April 2003, he was appointed as Assistant President of COSCO; in April 2004, he served as a member of the Leading Party Member Group and Team Leader of the Discipline Inspection Group of CPC Leading Group of COSCO; in December 2011, he was appointed as Executive Vice President and a member of the Leading Party Member Group of COSCO; in June 2013, he served as President and a member of the Leading Party Member Group of COSCO; in July 2013, he served as Director of COSCO; and in February 2017, Mr. Li was appointed as Deputy Secretary of the Leading Party Member Group and Vice President of China Petrochemical Corporation. In June 2017, he was elected as Director of Sinopec Corp.

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Wang Zhigang, aged 60, former Director and Senior Vice President of Sinopec Corp. Mr. Wang is a professor level senior engineer with a Ph.D. Degree. In February 2000, he was appointed as Vice President of Sinopec Shengli Oilfield Co., Ltd.; in June 2000, he served as Board Director and President of Shengli Oilfield Co., Ltd.; in November 2001, he was appointed temporarily as Deputy Director General and Deputy Secretary of Leading Party Member Group of Economic and Trade Commission, Ningxia Hui Autonomous Region; in April 2003, he was appointed as Vice President of Sinopec Corp.; in June 2003, he was appointed concurrently as Director General of Exploration and Production Department of Sinopec Corp.; in February 2005, he was appointed as Member of the Leading Party Member Group of China Petrochemical Corporation; in March 2005, he was appointed as Senior Vice President of Sinopec Corp.; in January 2007, he was appointed concurrently as Vice Chairman of Sinopec International Petroleum Exploration and Production Corporation; in September 2014, he was appointed concurrently as Chairman of Board of Directors of Sinopec International Petroleum Exploration and Production Corporation; and in May 2006, he was elected as Director and appointed as Senior Vice President of Sinopec Corp. In January 2018, he resigned as an executive director, a member of Strategy Committee of the Board and the Senior Vice President of Sinopec Corp.

Zhang Haichao, aged 60, former Director and Senior Vice President of Sinopec Corp. Mr. Zhang is a professor level senior economist with a master degree. In March 1998, he was appointed as Vice President of Zhejiang Petroleum Corporation; in September 1999, he was appointed as President of Zhejiang Petroleum Corporation; in February 2000, he was appointed as President of Sinopec Zhejiang Petroleum Co., Ltd.; in April 2003, he was elected as Employee's Representative Supervisor of Sinopec Corp.; in April 2004, he served as Chairman of Board of Directors of Sinopec-BP Zhejiang Petroleum Sales Co., Ltd.; in October 2004, he served as Secretary of CPC Committee, Vice Chairman of Board of Directors, and Vice President of Sinopec Sales Co., Ltd.; in November 2005 he served as Vice President of Sinopec Corp., Secretary of the Leading Party Member Group, Chairman of Board of Directors, and President of Sinopec Sales Co., Ltd.; in June 2006, he served as Chairman of Board of Directors, and President of Sinopec Sales Co., Ltd.; in July 2014, he was appointed as Member of the Leading Party Member Group and Vice President of China Petrochemical Corporation; and in May 2015, he was elected as Board Director and appointed as Senior Vice President of Sinopec Corp. In January 2018, he resigned as an executive director, a member of Strategy Committee of the Board and the Senior Vice President of Sinopec Corp.

Jiao Fangzheng, aged 55, Director and Senior Vice President of Sinopec Corp. Mr. Jiao is a professor level senior engineer with a Ph.D. degree. 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 of Sinopec Petroleum Exploration & Development Research Institute; in March 2001, he was appointed as Deputy Director General of Sinopec Exploration & Production Department; in June 2004, he was appointed as President of Sinopec Northwest Oilfield Company; in October 2006, he was appointed as Vice President of Sinopec Corp. in July 2010, he was appointed as the Director General of Sinopec Exploration & Production Department; in July 2014, he was appointed as Member of the Leading Party Member Group and Vice President of China Petrochemical Corporation; in September 2014, he was elected concurrently as Chairman of Board of Directors of Sinopec Oilfield Service Corporation and Vice Chairman of Board of Directors of Sinopec International Petroleum Exploration and Production Corporation; and in May 2015, he was elected as Director and appointed as Senior Vice President of Sinopec Corp.

Ma Yongsheng, aged 56, Director and Senior Vice President of Sinopec Corp. Mr. Ma is a professor level senior engineer with a Ph.D. degree and an academician of the Chinese Academy of Engineering. Mr. Ma is the member of the thirteenth national committee of CPPCC. In April 2002, he was appointed as Chief Geologist of Sinopec Southern Exploration and Production Company; in April 2006, he was appointed as Executive Deputy Manager (in charge of overall management), Chief Geologist of Sinopec Southern Exploration and Production Company; in January 2007, he was appointed as Manager and Party Secretary of CPC Committee of Sinopec Southern Exploration and Production Company; in March 2007, he served as General Manager and Deputy Party Secretary of CPC Committee of Sinopec Exploration Company; in May 2007, he was appointed as Deputy Commander of Sichuan-East China Gas Transmission Construction Project Headquarter of Sinopec Corp., General Manager and Deputy Secretary of CPC Committee of Sinopec Exploration Company; in May 2008, he was appointed as Deputy Director General of Exploration and Production Department of Sinopec Corp. (Director General Level) and Deputy Commander of Sichuan-East China Gas Transmission Construction Project Headquarter; in July 2010, he served as Deputy Chief Geologist of Sinopec Corp.; in August 2013, he was appointed as Chief Geologist of Sinopec Corp.; in December 2015, he served as Vice President of China Petrochemical Corporation and appointed as Senior Vice President of Sinopec Corp.; in January 2017, he was appointed as Member of the Leading Party Member Group of China Petrochemical Corporation. In February 2016, he was elected as Director of Sinopec Corp.

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Jiang Xiaoming, aged 64, Independent Director of Sinopec Corp. Mr. Jiang has a Ph.D. in economics. Presently, he acts as the member of the United Nations Board of Investment, Chairman of the Board of Directors of Hong Kong Saibo International Co. Ltd., Independent Director of COSCO International, Senior Fellow of the University of Cambridge Business School, and trustee of University of Cambridge China Development Fund. Between 1992 and 1998, he acted as the Vice President of United Nations Staff Retirement Fund; between 1999 and 2003, he acted as the Chairman of the Board of Directors of Frasers Property (China) Co., Ltd.; and he has previously acted as the member of the Eleventh and Twelfth national committee of CPPCC, the Board Director of JSW Energy Ltd., member of the Advisory Committee of American Capital Group and Rothschild, the British Investment Bank, and Independent Director of China Oilfield Services Limited. From May 2012 to the present, he has acted as Independent Director of Sinopec Corp.

Andrew Y. Yan, aged 60, Independent Director of Sinopec Corp. Mr. Yan is the founding Managing Partner of SAIF Partners. He studied in Nanjing University of Aeronautics and Astronautics, Peking University and Princeton University and earned a master degree from Princeton University. Presently, he acts as the Independent Non-executive Director of China Resources Land Limited, the Non-executive Director of China Huiyuan Juice Group Limited, Feng Deli Holdings Limited and Guodian Technology & Environment Group Corporation Limited; the Independent Director of Beijing BlueFocus Brand Management Consulting Co., Ltd and TCL Group; and the Director of ATA Co., Ltd and Ata Online(Beijing)Education Technology Co.,Ltd.. From 1989 to 1994, he acted as Economist of the World Bank headquarters in Washington, research Fellow of Hudson Institute, an American famous research think tank, and acted as the director of APAC Strategic Planning & Business Development of Sprint International Corporation; between 1994 and 2001, he acted as the Managing Director of Emerging Markets Partnership and Director of Hong Kong Office of AIG Asia Infrastructural Investment Fund. From May 2012 to the present, he has acted as Independent Director of Sinopec Corp.

Tang Min, aged 64, Independent Director of Sinopec Corp. Mr. Tang has a Ph.D. in economics. He presently acts as a Counsellor of the State Council of the PRC and the Executive Vice Chairman of YouChange China Social Entrepreneur Foundation, Independent Director of Minmetals Development Co., Ltd, Origin Agritech Limited and Baoshang Bank Co., Ltd. He has served as economist and senior economist at the Economic Research Centre of the Asian Development Bank between 1989 and 2000; chief economist at the Representative office of the Asian Development Bank in China between 2000 and 2004; deputy representative at the Representative Office of the Asian Development Bank in China between 2004 and 2007 and the deputy secretary-general of the China Development Research Foundation between 2007 and 2010. From May 2015 to the present, he has acted as Independent Director of Sinopec Corp.

Fan Gang, aged 64, Independent Director of Sinopec Corp. Mr. Fan has a Ph.D. in economics. He presently acts as Vice President of China Society of Economic Reform, Head of the National Economic Research Institution of China Reform Foundation, President of China Development Institute (Shenzhen) and an economics professor at Peking University. He began to work for Chinese Academy of Social Sciences in 1988, and subsequently served as Director of Editorial Department for the Economic Research Journal between 1992 and 1993 and as Deputy Head of the Institute of Economics of Chinese Academy of Social Sciences between 1994 and 1995. In 1996, he was redesignated to work for China Society of Economic Reform, and subsequently founded the National Economic Research

Institution. From 2006 to 2010, and from 2015 to the present, he has served as a member of the Monetary Policy Committee of People's Bank of China. Mr. Fan is recognised as one of the National Young and Middle-Aged Experts with Outstanding Contributions. From May 2015 to the present, he has acted as Independent Director of Sinopec Corp.

Supervisors

The table and discussion below set forth certain information concerning our supervisors. The current term of our supervisors is three years, which will expire in May 2018.

Name	Age	Position with the Company
Zhao Dong	47	Chairman
Liu Zhongyun	54	Former Supervisor
Zhou Hengyou	54	Supervisor
Zou Huiping	57	Supervisor
Jiang Zhenying	53	Employee Representative Supervisor
Yu Renming	54	Employee Representative Supervisor
Yu Xizhi	55	Employee Representative Supervisor

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Zhao Dong, aged 47, Chairman of Board of Supervisors of Sinopec Corp. Mr. Zhao is a professor-level senior accountant with a doctor's degree. In July 2002, he was appointed as chief accountant and manager of financial assets department of CNPC International (Nile) Ltd.; in January 2005, he was appointed as deputy chief accountant and executive deputy director of financial and capital operation department of China National Oil and Gas Exploration and Development Corporation; in April 2005, he was appointed as deputy chief accountant and manager of financial and capital operation department of China National Oil and Gas Exploration and Development Corporation; in June 2008, he was appointed as chief accountant of China National Oil and Gas Exploration and Development Corporation; in October 2009, he was appointed as chief accountant of China National Oil and Gas Exploration and Development Corporation and chief financial officer of PetroChina International Investment Company Limited; in September 2012, he was appointed as vice general manager of CNPC Nile Company and in August 2013, he was appointed as general manager of CNPC Nile Company; in November 2015, he was appointed as chief financial officer of PetroChina Company Limited. He has been a member of the Leading Party Member Group and chief accountant of China Petrochemical Corporation since November 2016; in June 2017, he was elected as Chairman of Board of Supervisors of Sinopec Corp.

Liu Zhongyun, aged 54, former Supervisor of Sinopec Corp. Mr. Liu is a professor level senior engineer with a Ph.D. in engineering. In December 2002, he was appointed as a standing committee member of CPC Committee and Director of Organisation Department of Shengli Petroleum Administration Bureau; in November 2004, he was appointed as Deputy Secretary of CPC Committee of Shengli Petroleum Administration Bureau; in December 2005, he was appointed as Manager of Sinopec Shengli Oilfield Branch; in December 2008, he was appointed as Secretary of CPC Committee of Sinopec International Petroleum Exploration and Production Corporation; in July 2010, he was appointed as General Manager of Sinopec Northwest Oilfield Company, Director General of Northwest Petroleum Bureau under China Petrochemical Corporation. Since August 2014, Mr. Liu has acted as Assistant to President and Director General of HR Department of China Petrochemical Corporation, and in May 2015, he was elected as Supervisor of Sinopec Corp.; in March 2017, he was appointed as Vice President of China Petrochemical Corporation; in February 2018, he resigned as Supervisor of Sinopec Corp.; in February 2018, he was appointed as Senior Vice President of Sinopec Corp.

Zhou Hengyou, aged 54, Supervisor of Sinopec Corp. Mr. Zhou is a professor level senior administration engineer and with a master degree. In December 1998, Mr. Zhou was appointed as a standing committee member of CPC Committee and Deputy Labour Union Chairman of Jiangsu Petroleum Exploration Bureau; in February 1999, he was appointed as a standing committee member of CPC Committee and Labour Union Chairman of Jiangsu Petroleum Exploration Bureau of China Petrochemical Corporation; in December 2002, he was appointed as Deputy Secretary of CPC Committee and Labour Union Chairman of Jiangsu Petroleum Exploration Bureau; in June 2004, he was appointed as Deputy Secretary of CPC Committee and Secretary of CPC Disciplinary Inspection Committee of Jiangsu Petroleum Exploration Bureau; in August 2005, he was appointed as Secretary of CPC Committee of Jiangsu Petroleum Exploration Bureau; in March 2011, he was appointed as Director General and Secretary of CPC Committee of China Petrochemical News. In March 2015, he was appointed as Director General of the General Office of China Petrochemical Corporation, Director General of Policy Research Department of the General Office and Director General of President's office of Sinopec Corp. In August 2015, he was appointed as Director General of Board of Directors Office under China Petrochemical Corporation; and in May 2015, he was elected as Supervisor of Sinopec Corp.

Zou Huiping, aged 57, Supervisor of Sinopec Corp. Mr. Zou is a professor level senior accountant with a university diploma. In November 1998, he was appointed as Chief Accountant in Guangzhou Petrochemical General Plant of China Petrochemical Corporation; in February 2000, he was appointed as Deputy Director General of Finance & Assets Department of China Petrochemical Corporation; in December 2001, he was appointed as Deputy Director General of Finance & Planning Department of China Petrochemical Corporation; in March 2006, he was appointed as Director General of Finance & Assets Department of Assets Management Co., Ltd. of China Petrochemical Corporation; in March 2006, he was appointed as Director General of Auditing Department of Sinopec Corp.; and in May 2006, he was elected as Supervisor of Sinopec Corp.

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Jiang Zhenying, aged 53, Employee s Representative Supervisor of Sinopec Corp. Mr. Jiang is a professor level senior economist with a doctor degree. In December 1998, he was appointed as the Vice President of the China Petrochemical Supplies & Equipment Co., Ltd.; in February 2000, he was appointed as the Deputy Director General of Sinopec Procurement Management Department; in December 2001, he was appointed as the Director General of Sinopec Procurement Management Department and in November 2005 he concurrently held the positions of Chairman of Board of Directors, President and Secretary of CPC Committee of China Petrochemical International Co., Ltd.; in March 2006, he was appointed as the Director General (General Manager), Executive Director and Secretary of the CPC Committee of Sinopec Procurement Management Department (Sinopec International Co. Ltd.); in April 2010, he was appointed as the Director General (General Manager), Executive Director and Deputy Secretary of the CPC Committee of Sinopec Procurement Management Department (Sinopec International Co. Ltd.); in November 2014, he was appointed as Director General of Safety Supervisory Department of Sinopec Corp.; in May 2017, he was appointed as Deputy Director of the Leading Group Office of Party Inspection Work of China Petrochemical Corporation and the leader of overseas enterprises inspection group; and since December 2010, he was elected as the Employee s Representative Supervisor of Sinopec Corp.

Yu Renming, aged 54, Employee s Representative Supervisor of Sinopec Corp. Mr. Yu is a professor level senior engineer with a university diploma. In June 2000, he was appointed as the Deputy General Manager of Sinopec Zhenhai Refining & Chemical Co., Ltd.; in June 2003, he was appointed as the Board Director and Deputy General Manager of Sinopec Zhenhai Refining & Chemical Co., Ltd.; in September 2006, he was appointed as the Vice President of Sinopec Zhenhai Refining & Chemical Company; in September 2007, he was appointed as the President and the Vice Secretary of CPC committee of Sinopec Zhenhai Refining & Chemical Company; in January 2008, he was appointed as the Director General of Sinopec Production Management Department; in December 2017, he was appointed as the Director General of Refining Department of Sinopec Corp.; and in December 2010, he was elected as Employee s Representative Supervisor of Sinopec Corp.

Yu Xizhi, aged 55, Employee s Representative Supervisor of Sinopec Corp. Mr Yu is a professor-level senior engineer with a Ph.D. in engineering. In August 1997, he was appointed as Deputy Manager of Anqing Petrochemical Complex and Manager of Fertiliser Plant; in September 1999, he became a member of the CPC Standing Committee of Anqing Petrochemical Complex; in February 2000, he was appointed as Deputy Manager of Sinopec Anqing Company and in September 2000, he was appointed as Manager of Sinopec Anqing Company. In January 2005, he was appointed as Manager of Anqing Petrochemical Complex and from May 2009 to July 2010, he served a temporary position at the Standing Committee of the CPC Anqing Municipal Committee. In July 2010, he became General Manager and Deputy Secretary of the CPC Committee of Maoming Petrochemical Company and General Manager of Sinopec Maoming Company; in July 2016, Mr. Yu was appointed as head of Maoming-Zhanjiang Integration Leading Group; in December 2016, he became Executive Director, General Manager and Deputy Secretary of the CPC Committee of Zhongke (Guangdong) Refining and Petrochemical Co., Ltd. Since April 2017, Mr. Yu has been Director General of Human Resources Department of China Petrochemical Corporation and Sinopec Corp. In June 2017, he was elected as Employee s Representative Supervisor of Sinopec Corp.

Other Executive Officers

Name	Age	Positions with Sinopec Corp.
Wang Dehua	51	CFO
Ling Yiqun	55	Former Vice President
Huang Wensheng	51	Vice President/Secretary to the Board of Directors
Chang Zhenyong	59	Vice President
Lei Dianwu	55	Vice President

Wang Dehua, aged 51, Chief Financial Officer of Sinopec Corp. Mr. Wang is a senior accountant with university diploma. In January 2001, he was appointed as Deputy Director General of Finance Department of Sinopec Corp.; in May 2014, he was appointed as Acting Director General of Finance Department of Sinopec Corp.; in October 2015, he was promoted to Director General of Finance Department of Sinopec Corp.; in November 2015, he was appointed as Director General of Finance Department of China Petrochemical Corporation; in August 2016, he was appointed as Director General of Finance Department of Sinopec Corp.. Mr. Wang now concurrently acts as Vice Chairman of Sinopec Finance CO., Ltd. and Taiping & Sinopec Financial Leasing Co., in September 2016, he was appointed as Chief Financial Officer of Sinopec Corp.

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Ling Yiqun, aged 55, former Vice President of Sinopec Corp. Mr. Ling is a professor level senior engineer with a Ph.D. degree. From 1983, he worked in the refinery of Beijing Yanshan Petrochemical Company and the Refining Department of Beijing Yanshan Petrochemical Company Ltd. In February 2000, he was appointed as the Deputy Director General of Refining Department of Sinopec Corp.; in June 2003, he was appointed as the Director General of Refining Department of Sinopec Corp.; in July 2010, he was appointed as Vice President of Sinopec Corp; in May 2012, he was appointed as Executive Director, President and Secretary of CPC Committee of Sinopec Refinery Product Sales Company Limited; in August 2013, he was appointed as the President of Sinopec Qilu Company; in December 2016, he was elected concurrently as Chairman of Board of Directors of Sinopec Engineering(Group) Co. Ltd.; in March 2017, he was appointed as Vice President of China Petrochemical Corporation and in February 2018, he was appointed as Senior Vice President of Sinopec Corp.

Huang Wensheng, aged 51, Vice President of Sinopec Corp., Secretary to the Board of Directors. Mr. Huang is a professor level senior economist with a university diploma. In March 2003, he was appointed as Deputy Director General of the Board Secretariat of Sinopec Corp.; in May 2006, he was appointed as Representative on Securities Matters of Sinopec Corp.; since August 2009, He has served as the Deputy Director General of President's office of Sinopec Corp. In September 2009, he was appointed as Director General of the Board Secretariat of Sinopec Corp.; in May 2012, he was appointed as Secretary to the Board of Directors of Sinopec Corp.; and in May 2014, he was appointed as Vice President of Sinopec Corp.

Chang Zhenyong, aged 59, Vice President of Sinopec Corp. Mr. Chang is a professor level senior engineer with a master's degree. In September 1997, he was appointed as Vice President of Tianjin Petrochemical Company; in February 2000, he was appointed as Vice President of Sinopec Tianjin Company; and in September 2000, he was promoted to President of Sinopec Tianjin Company; from February 2004, he was appointed temporarily as member of Standing Committee of CPC Committee of Beihai, Guangxi; in March 2004, he was appointed temporarily as deputy mayor of Beihai, Guangxi; in November 2005, he was appointed as Director General of Production and Operation Management Department of Sinopec Corp.; in December 2007, he was appointed as President of Qilu Petrochemical Company and President of Sinopec Qilu Company; in April 2010, he was appointed as Employee's Representative Supervisor of Sinopec Corp.; in July 2010, he was appointed as Deputy Chief Engineer and concurrently as Director General of Chemicals Department of Sinopec Corp.; in August 2012, he was appointed concurrently as Vice Chairman of Board of Directors of Sinopec Great Wall Energy & Chemical Co., Ltd.; in November 2014, he was appointed as Executive Director and President of Sinopec Chemical Products Sales Co. Ltd and concurrently as Chairman of Board of Directors of Sinopec Chemical Products Sales (Hong Kong) Co. Ltd.; and in May 2014, he was appointed as Vice President of Sinopec Corp.

Lei Dianwu, aged 55, Vice President of Sinopec Corp. Mr. Lei is a Professor level Senior Engineer with a university diploma. In October 1995, he was appointed as Vice President of Yangzi Petrochemical Corporation; in December 1997, he was appointed as Director General of Planning & Development Department in China Eastern United Petrochemical (Group) Co., Ltd.; in May 1998, he was appointed as Vice President of Yangzi Petrochemical Corporation; in August 1998 he was appointed as Vice President of Yangzi Petrochemical Co., Ltd.; in March 1999, he was appointed temporarily as Deputy Director General of Development & Planning Department of China Petrochemical Corporation; in February 2000, he was appointed as Deputy Director General of Development &

Planning Department of Sinopec Corp.; in March 2001, he was appointed as Director General of Development & Planning Department of Sinopec Corp.; in March 2009, he was appointed as Assistant to President of China Petrochemical Corporation; in August 2013, he was appointed as the Chief Economist of China Petrochemical Corporation; in October 2015, he was appointed as Secretary to the Board of Directors of China Petrochemical Corporation; and in May 2009, he was appointed as Vice President of Sinopec Corp.

B. COMPENSATION

Salaries of Directors, Supervisors and Members of the Senior Management

Our directors and supervisors who hold working posts with us and other senior management members receive all their compensation from us in cash. Our compensation committee, with assistances from relevant administrative departments, determines the appropriate level of annual compensation for each of our directors and supervisors who hold working posts with us and other senior management members in two components: a base salary component and a performance rewards component. The base salary component is a fixed amount that will be paid on monthly basis. The performance rewards component is paid in one lump sum at about year end and the exact amounts of the performance rewards to be paid will be based on the completion by the Company of certain performance targets (key performance indicators, or KPIs) which are set at the beginning of the year and reviewed at year end. The KPIs cover areas such as profitability, workplace safety and environmental protection. Based on the annual review by our compensation committee, with the assistances from relevant administrative departments, of the Company's completion of various KPIs, our directors and supervisors who hold working posts with us and other senior management members will receive full or partial payments as their performance rewards.

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The following table sets forth the compensation on individual basis for our directors, supervisors and executive officers who received compensation from us in 2017.

Name	Position with the Company	Remuneration paid by the Company in 2017 (RMB in thousands before tax)
<u>Directors</u>		
Dai Houliang	Vice Chairman, President	843.8
Li Yunpeng	Director	
Wang Zhigang	Former Director, Senior Vice President	769.9
Zhang Haichao	Former Director, Senior Vice President	
Jiao Fangzheng	Director, Senior Vice President	
Ma Yongsheng	Director, Senior Vice President	
Jiang Xiaoming	Independent Director	300.0
Andrew Y. Yan	Independent Director	300.0
Tang Min	Independent Director	300.0
Fan Gang	Independent Director	300.0
Wang Yupu	Former Chairman	
<u>Supervisors</u>		
Zhao Dong	Chairman of the Board of Supervisors	
Liu Zhongyun	Former Supervisor	
Zhou Hengyou	Supervisor	
Zou Huiping	Supervisor	758.2
Jiang Zhenying	Employee Representative Supervisor	758.2
Yu Renming	Employee Representative Supervisor	758.2
Yu Xizhi	Employee Representative Supervisor	265.9
Liu Yun	Former Chairman of the Board of Supervisors	
Wang Yajun	Former Employee Representative Supervisor	417.3
<u>Other Executive officers</u>		
Wang Dehua	CFO	866.3
Ling Yiqun	Former Vice President	
Huang Wensheng	Secretary of the Board of Directors/Vice President	892.9
Chang Zhenyong	Vice President	892.9
Lei Dianwu	Vice President	892.9
Jiang Zhenghong	Former Vice President	755.4

C. BOARD PRACTICE

We have eight directors. We have four special board committees, namely, the audit committee, the strategic committee, the remuneration and evaluation committee and social responsibility management committee. The majority of the members of the remuneration and evaluation committee and all members of the audit committee are independent directors. In addition, there is at least one independent director who is a financial expert in the audit committee.

The main responsibilities of the audit committee include:

- to propose the appointment or replacement of the independent auditor;

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- to oversee the internal auditing system and its implementation;
- to coordinate the communication between the internal auditing department and the independent auditor;
- to examine and approve financial information and its disclosure; and
- to examine the financial policies, internal auditing, internal control and risk management system.

The members of our audit committee are Andrew Y. Yan, Jiang Xiaoming and Tang Min, all of whom are our Independent Non-executive Directors. Our Board has determined that Andrew Y. Yan qualifies as an audit committee financial expert.

The main responsibilities of the strategy committee are to conduct research and put forward proposals on the long-term development strategy and significant investments.

The members of our strategy committee are Dai Houliang, Jiao Fangzheng, Ma Yongsheng, Andrew Y. Yan and Fan Gang.

The main responsibilities of the remuneration and appraisal committee (remuneration committee) include:

- to review evaluation standards on the performance of directors and senior management, to conduct their evaluations and make suggestions to the Board; and
- to review compensation policies and scheme in respect of the remuneration of directors, supervisors and executive officers, and make suggestions to the Board.

The members of our remuneration committee are Fan Gang, Dai Houliang and Jiang Xiaoming.

The main responsibilities of the social responsibility management committee are to research on the policy, governance, strategy and planning for the Company's social responsibility and put forward proposals to the Board.

The members of social responsibility management committee are Dai Houliang and Tang Min.

Our directors have entered into directors service contracts with us and under such contracts, there is no severance pay arrangements for our directors.

As a joint stock company incorporated in the PRC, we are required by the PRC law to have in place a board of supervisors. The board of supervisors shall consist of no less than three supervisors, and at least one third of the board of supervisors shall be employee representative supervisors. Employee representative supervisors shall be elected by our employees at a meeting of employee representatives, a general meeting of employees or through other means.

According to our articles of association, the main responsibilities of our board of supervisors include:

- to review the Company's financial affairs;
- to supervise directors and executive officers when they perform their duties, and to propose to our shareholders the dismissal of any director or executive officer who has violated our articles of association and relevant laws and regulation;
- to demand directors or executive officers to rectify their conducts that conflict with our interests;
- to propose the call of any extraordinary general meeting of shareholders to the Board, and to convene and preside over such shareholder meeting if the Board fails to do so; and
- to initiate legal proceedings against directors and executive officers on behalf of the Company.

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Our board of supervisors currently consists of six supervisors including three employee representative supervisors. In 2016, the supervisors attended the Company's shareholder meetings and presented at the Company's board meetings, attended the trainings for directors and supervisors of listed companies organized by Beijing Securities Supervisory Bureau under CSRC.. A detailed report of our board of supervisors' performance overview to our shareholders for the year 2016 was included in our annual report to shareholders, and could be found in the Section Report of the Board of Supervisors in our Form 6-K submitted to the Securities and Exchange Commission on April 7, 2017.

D. EMPLOYEES

As of December 31, 2015, 2016 and 2017, we had approximately 351,019, 451,611 and 446,225 employees, respectively. The following table sets forth the number of our employees by our business segments, their scope of work and their education as of December 31, 2017.

By Segment	Number of Employees	Percentage of Total Number of Employees (%)
Exploration and production	148,069	33.2
Refining	70,128	15.7
Marketing and distribution	153,804	34.5
Chemicals	63,052	14.1
Corporate and other	11,172	2.5
Total	446,225	100

By Employee's Scope of Work	Number of Employees	Percentage of Total Number of Employees (%)
Production	163,319	36.6
Sales	142,824	32.0
Technical	83,816	18.8
Finance	10,951	2.4
Administration	35,698	8.0
Others	9,617	2.2
Total	446,225	100

By Education	Number of Employees	Percentage of Total Number of Employees (%)
Master's degree and above	15,707	3.5
University	109,274	24.5
Junior college	98,983	22.2
Technical secondary school	40,272	9.0
Senior high school and technical school degree or below	181,989	40.8
Total	446,225	100

During this report period, there has been no significant change to our core technical team and key technicians.

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We have a workers' association that protects employee rights, organizes educational programs, assists in the fulfillment of economic objectives, encourages employee participation in management decisions, and assists in mediating disputes between us and individual employees. We have not been subject to any strikes or other labor disturbances that have interfered with our operation, and we believe that our relations with our employees are good.

The total remuneration of our employees includes salary, performance bonuses and allowances. Employees also receive certain subsidies in housing, health services, education and other miscellaneous items.

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E. SHARE OWNERSHIP

As of December 31, 2017, except our vice president Ling Yiqun who holds 13,000 shares of our A shares, none of our directors, supervisors and executive officers beneficially own any of our shares.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. MAJOR SHAREHOLDERS

The following table sets forth information regarding our 5% or more shareholders as of April 17, 2018.

Shareholder	Number of Shares Owned (in millions)	Percentage of Ownership (%)
Sinopec Group Company(1)	86,346	71.32

(1) Inclusive of 553,150,000 H shares held by Sinopec Century Bright Capital Investment Ltd. (overseas wholly-owned subsidiary of Sinopec Group Company) under HKSCC Nominees Limited.

As of April 17, 2018, 1,671,084,700 H shares were registered in the name of a nominee of Citibank, N.A., the depository under our ADS deposit agreement. Citibank, N.A. has advised us that, as of April 17, 2018, 16,710,847 ADSs, representing 1,671,084,700 H shares, were held of record by Cede & Co. and 36 other registered shareholders domiciled in and outside of the United States. We have no further information as to our shares held, or beneficially owned, by U.S. persons.

To avoid the adverse effects brought by intra-industry competition to the maximum extent possible, we and Sinopec Group Company have entered into a non-competition agreement whereby Sinopec Group Company has agreed to: refrain from operating new businesses which compete or could compete with us in any of our domestic or international markets; grant us an option to purchase Sinopec Group Company's operations that compete or could compete with our businesses; operate its sales enterprises in a manner uniform to our sales and service operations; and appoint us as sales agent for certain of its products which compete or could compete with our products.

In March 2017, Sinopec Group has earnestly fulfilled its undertaking in eliminating competitions in chemical business with us through: (1) subscribing capital contribution of joint ventures controlled by us, by way of injecting net assets of certain chemical business and cash; (2) authorizing us to be in charge of production plan, management and sales of the remaining chemical business. The competition in chemical business between Sinopec Group and us has been eliminated.

To further avoid the competition with us, Sinopec Group Company granted us an undertaking, as amended, whereby Sinopec Group Company undertakes that: first, we shall become the sole platform which deals with the exploration and production of oil and gas, oil refining, chemicals, sale of petroleum products; second, given that Sinopec Group Company engages in the same or similar businesses as us with regard to the exploration and production of overseas petroleum and natural gas, we have the option, after thorough analysis from political, economic and other perspectives, to require Sinopec Group Company to sell its overseas oil and gas assets owned at the time, to the extent remaining in its possession, to us. Sinopec Group Company further promises to sell its overseas oil and gas assets to us, provided that the aforementioned proposed acquisitions comply with the applicable laws and regulations, contractual obligations and other procedural requirements.

B. RELATED PARTY TRANSACTIONS

Sinopec Group Company owned 71.32% of our outstanding equity as of April 17, 2018. Sinopec Group Company is able to exercise all the rights of a controlling shareholder, including the election of directors and voting in respect of amendments to our articles of association. Sinopec Group Company, as our controlling shareholder, is subject to certain non-controlling shareholder protection provisions under our articles of association.

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We have engaged from time to time and will continue to engage in a variety of transactions with Sinopec Group Company, which provide a number of services to us, including ancillary supply, transport, educational and community services. The nature of our transactions with Sinopec Group Company is governed by a number of service and other contracts between Sinopec Group Company and us. A discussion of these agreements and arrangements is set forth under the heading **Item 7 Major Shareholders and Related Party Transactions** **Related Party Transactions** in our annual report on Form 20-F filed with the Securities and Exchange Commission on October 10, 2000, April 13, 2007, May 20, 2009, April 30, 2010, April 11, 2013, April 16, 2014, April 10, 2015, April 20, 2016 and April 24, 2017 respectively, and under the heading **Item 4 Information on the Company History and Development of the Company** of this annual report.

On August 26, 2015, we entered into a supplementary agreement of connected transactions with Sinopec Corp., whereby the terms of the Mutual Supply Agreement and the Cultural and Educational, Hygienic and Community Services Agreement (Exhibit 4.4) were extended from January 1, 2016 to December 31, 2018. The resolution relating to continuing connected transactions for the three years from 2016 to 2018 was approved at the first extraordinary general meeting for 2015 held on October 23, 2015. For details of the above continuing connected transactions, please refer to Exhibit 4.22. Capitalized terms used in this section shall have the same meaning as that used in the above-mentioned exhibit.

On August 26, 2015, we entered into an equity transfer agreement relating with Sinopec Baichuan Economic and Trading Company (Baichuan Co. , a wholly-owned subsidiary of Sinopec Group Company), pursuant to which, we proposed to transfer 100% of the equity interest of Sinopec Beijing Jingtian Engineering and Construction Co., Ltd. (Jingtian Co.) held by us to Baichuan Co. The final consideration of above-mentioned equity interest was around RMB 1.869 billion.

On October 29, 2015, we entered into a joint venture agreement with SAMC in relation to the formation of Gaoqiao. We and SAMC subscribed 55% and 45% of the registered capital of Gaoqiao, respectively.

On December 28, 2015, the Proposal on Providing Completion Guarantee for the Project Financing of Zhongtian Synergetic was considered and approved at the fourth meeting of the sixth session of Board, where our directors unanimously agreed to us providing a completion guarantee to Zhongtian Synergetic Ordos coal deep processing demonstration project subject to the provision of completion guarantees by the other shareholders of Zhongtian Synergetic on a pro-rata basis (the Guarantee). The Guarantee has been considered and approved at the first extraordinary general meeting for the year 2016. Zhongtian Synergetic is a connected party of the Company under the Shanghai Listing Rules because its vice chairman, Mr. Chang Zhenyong is a vice president of the Company. However, Zhongtian Synergetic is not a connected person under the Hong Kong Listing Rules.

For our related party transaction starting from January 1, 2016, please also see Note 32 of our consolidated financial statements included elsewhere in this annual report for a detailed discussion of our related party transactions.

In 2017, we provided RMB 1.46 billion of loans to certain affiliates of Sinopec Group Company. In addition, we received loans with a net amount of RMB 5.28 billion to certain affiliates of Sinopec Group Company in 2017.

The above-mentioned variety of transactions with Sinopec Group Company are in compliance with the upper limit of the amount of related party transactions approved by the shareholders and the Board.

C. INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

See consolidated financial statements included in this annual report following Item 19.

Legal Proceedings

We are involved in certain judicial and arbitral proceedings before Chinese courts or arbitral bodies concerning matters arising in connection with the conduct of our businesses. We believe, based on currently available information, that the results of such proceedings, in the aggregate, will not have a material adverse effect on our financial condition or results of operations.

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Dividend Distribution Policy

In 2012, we amended our articles of association based on its original framework. Our dividend distribution policy was amended. According to our amended articles of association:

Our board of directors will determine the payment of dividends, if any, with respect to our shares on a per share basis. Any final dividend for a financial year shall be subject to shareholders' approval. The board may declare interim and special dividends at any time under general authorization by a shareholders' ordinary resolution. A decision to declare or to pay any dividends in the future, and the amount of any dividends, will depend on our results of operations, cash flows, financial condition, the payment by our subsidiaries of cash dividends to us, future prospects and other factors which our directors may determine are important.

For holders of our H shares, cash dividend payments, if any, shall be declared by our board of directors in Renminbi and paid in HK dollars. The depositary will convert the HK dollar dividend payments and distribute them to holders of ADSs in US dollars, less expenses of conversion.

The Company may distribute dividends in the following forms: cash, shares or other forms provided by laws, administrative rules, regulations of competent authorities and regulatory provisions in the place where the Company's shares are listed. The Company shall give priority to the distribution of dividends in cash. The Company may make interim dividends distribution. The Company shall distribute cash dividends when the Company's net profit and retained earnings, in separate financial statement, are positive and the Company has adequate cash inflows over the requirements of cash outflows of operation and sustainable development. The cash dividends per annum should not be less than thirty (30) percent of the net profit of the Company in the current year. Dividends in the form of shares will be distributed to the depositary and, except as otherwise described in the Deposit Agreement, will be distributed by the depositary in the form of additional ADSs, to holders of ADSs.

At the seventeenth meeting of the sixth session of our board, our board approved the proposal to distribute a final cash dividend of RMB 0.40 (including tax) per share, combining with an interim distributed dividend of RMB 0.10 (including tax) per share, the total dividend for 2017 is RMB 0.50 (including tax) per share. The proposal is subject to the shareholder's approval at the annual general meeting.

B. SIGNIFICANT CHANGES

None.

ITEM 9. THE OFFER AND LISTING

A. OFFER AND LISTING DETAILS

Not applicable, except for Item 9A(4) and Item 9C.

Our H Shares have been listed on the Hong Kong Stock Exchange (Code: 0386), and our ADSs, each representing 100 H Shares, have been listed on the New York Stock Exchange and the London Stock Exchange under the symbol "SNP", since we completed our initial public offering on October 19, 2000. Prior to that time, there was no public market for our H Shares. The Hong Kong Stock Exchange is the principal non-U.S. trading market for our H Shares. Our publicly traded domestic shares, or A shares, are listed on the Stock Exchange of Shanghai since August 8, 2001 (Code: 600028).

On 14 February 2013, we issued 2,845,234,000 listed H shares with a par value of RMB 1.00 each at the price of HKD 8.45 per share. The aggregate gross proceeds from the placing amounted to approximately HKD 24.0 billion.

On January 26, 2015, the conditional redemption of the 2011 convertible bonds amounting to RMB 27 billion, was triggered. As of February 11, 2015 (the redemption registration date), the cumulative conversion of the 2011 convertible bonds to listed A shares is 4,623,769,047 shares, and the balance of registered 2011 convertible bonds is RMB 52,766,000. On February 17, 2015, we redeemed the balance plus interests payable at the aggregate amount of RMB 53,348,948.28. The 2011 convertible bonds were delisted from the Shanghai Stock Exchange.

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The following table sets forth, for the periods indicated, the high and low closing prices per H Share, as reported on the Stock Exchange of Hong Kong, per ADS, as reported on the New York Stock Exchange and per A share, as reported on the Stock Exchange of Shanghai.

Period	The Stock Exchange of Hong Kong		The New York Stock Exchange		The Shanghai Stock Exchange		
	High	Low	High	Low	High	Low	
April 2018 (as of April 17, 2018)	7.43	7.02	96.05	86.62	6.94	6.38	
	(HK dollar per H share)		(US dollar per ADS)		(RMB per A share)		
Past 6 months							
2018	March						
2018	February	6.97	5.99	88.46	74.98	7.63	6.30
2018	January	7.00	5.73	89.68	75.14	7.44	6.13
2017	December	5.77	5.45	74.06	69.82	6.18	5.93
2017	November	5.94	5.44	76.66	70.00	6.29	5.89
2017	October	5.85	5.63	75.88	72.45	5.99	5.81
Quarterly Data							
2018	First Quarter						
2017	Fourth Quarter	5.94	5.44	76.66	69.82	6.29	5.81
	Third Quarter	6.12	5.60	80.06	72.05	6.32	5.83
	Second Quarter	6.55	6.02	84.50	78.16	6.33	5.64
	First Quarter	6.36	5.50	82.42	71.02	6.06	5.41
2016	Fourth Quarter	5.95	5.27	77.47	68.12	5.67	4.86
	Third Quarter	5.84	5.28	75.21	68.10	5.02	4.70
	Second Quarter	5.65	4.93	73.06	62.99	5.08	4.60
	First Quarter	5.09	3.88	65.15	49.82	4.96	4.27