

CHINA PETROLEUM & CHEMICAL CORP  
Form 20-F  
April 20, 2016

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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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, 2015

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

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CHINA PETROLEUM & CHEMICAL CORPORATION  
(Exact name of Registrant as specified in its charter)

---

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

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22 Chaoyangmen North Street  
Chaoyang District, Beijing, 100728  
The People's Republic of China  
(Address of principal executive offices)

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

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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	New York Stock Exchange, Inc.
H Shares of par value RMB 1.00 per share	New York Stock Exchange, Inc.*

\* Not for trading, but only in connection with the registration of American Depository Shares.  
Securities registered or to be registered pursuant to Section 12 (g) of the Act.

None  
(Title of Class)

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

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

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):

Large accelerated filer  Accelerated filer  Non-accelerated filer

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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  Other   
as issued by the International Accounting Standards Board

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.”, “we”, “our” and “us” are to China Petroleum & Chemical Corporation, a PRC joint stock 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

Unless otherwise specified, conversions of crude oil from tonnes to barrels are made at a rate of one tonne to 7.35 barrels for crude oil we purchase from external sources, one tonne to 7.10 barrels for crude oil we produced domestically and one tonne to 7.21 barrels for crude oil we produced overseas, representing the American Petroleum Institute (API) gravity of the respective source of crude oil. 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 rate of Renminbi as published by the PRC State Administration of Foreign Exchange (SAFE).

The following table sets forth 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 13, 2016, the noon buying rate was RMB 6.4768 to US\$1.00.

Period	End	Noon Buying Rate(1)		
		Average(2)	High	Low
		(RMB per US\$1.00)		
2011	6.2939	6.4475	6.6364	6.2939
2012	6.2301	6.2990	6.3879	6.2221
2013	6.0537	6.1412	6.2438	6.0537
2014	6.2046	6.1620	6.2591	6.0402
2015	6.4778	6.2869	6.4896	6.1870
October 2015	6.3180	6.3505	6.3591	6.3180
November 2015	6.3883	6.3640	6.3945	6.3180
December 2015	6.4778	6.4491	6.4896	6.3883
January 2016	6.5752	6.5726	6.5932	6.5219
February 2016	6.5525	6.5501	6.5795	6.5154
March 2016	6.4480	6.5027	6.5500	6.4480
April 2016 (through April 13, 2016)	6.4768	6.4713	6.4810	6.4580

(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,
- 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 prices,
- fluctuations in prices of our 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.

## ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

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, 2013, 2014 and 2015, and the selected consolidated balance sheet data as of December 31, 2014 and 2015 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 and consolidated cash flows data for the years ended December 31, 2011 and 2012 and the selected consolidated balance sheet data as of December 31, 2011, 2012 and 2013 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,				
	2011	2012	2013	2014	2015
	(RMB in millions, except per share, per ADS data and number of shares)				
<b>Consolidated Statement of Income Data:</b>					
Operating revenues	2,505,683	2,786,045	2,880,311	2,825,914	2,018,883
Operating expenses	(2,400,153)	(2,687,383)	(2,783,526)	(2,752,427)	(1,961,855)
Operating income	105,530	98,662	96,785	73,487	57,028
Earnings before income tax	104,565	90,642	95,052	65,504	56,277
Tax expense	(26,120)	(23,846)	(24,763)	(17,571)	(12,613)
Net income attributable to equity shareholders of the Company	73,225	63,879	66,132	46,466	32,438
Basic earnings per share(1)	0.650	0.566	0.570	0.398	0.268
	65.00	56.62	56.96	39.77	26.82

Basic earnings per ADS(1)					
Diluted earnings per share(1)	0.625	0.545	0.534	0.397	0.268
Diluted earnings per ADS(1)	62.46	54.46	53.41	39.74	26.82
Cash dividends declared per share	0.177	0.231	0.244	0.240	0.150
Segment					
Operating Income/(Loss)					
Exploration and production	71,631	70,054	54,793	47,057	(17,418 )
Refining	(35,780 )	(11,444 )	8,599	(1,954 )	20,959
Marketing and distribution	44,696	42,652	35,143	29,449	28,855
Chemicals	26,732	1,178	868	(2,181 )	19,682
Corporate and others	(2,640 )	(2,443 )	(3,412 )	(1,063 )	384
Elimination of inter-segment sales	891	(1,335 )	794	2,179	4,566
Operating income	105,530	98,662	96,785	73,487	57,028
Shares					
Basic weighted average number of A and H shares	112,713,299,453	112,853,724,741	116,102,910,373	116,822,487,451	120,852,547,200
Diluted weighted average number of A and H shares	116,733,935,215	118,412,133,133	121,858,818,276	117,242,396,710	120,852,547,200

	2011	As of December 31,				2015
		2012	2013	2014	(RMB in millions)	
Consolidated Balance Sheet Data:						
Cash and cash equivalents	24,647	10,456	15,046	9,355	67,824	
Total current assets	342,755	365,015	373,010	360,144	332,405	
Total non-current assets	794,423	892,929	1,009,906	1,091,224	1,110,724	
Total assets	1,137,178	1,257,944	1,382,916	1,451,368	1,443,129	
Total current liabilities	(444,240 )	(513,373 )	(571,822 )	(604,257 )	(462,642 )	
Short-term debts and loans from Sinopec Group Company and its affiliates (including current portion of long-term debts)	(80,373 )	(115,982 )	(163,870 )	(178,148 )	(115,446 )	
Long-term debts and loans from Sinopec Group Company and its affiliates (excluding current portion of long-term debts)	(154,457 )	(162,116 )	(145,590 )	(150,932 )	(139,746 )	
Total equity attributable to equity shareholders of the Company	(472,328 )	(510,914 )	(568,803 )	(593,041 )	(674,029 )	
Total equity	(507,344 )	(548,036 )	(621,626 )	(645,577 )	(784,219 )	

	2011	Year Ended December 31,				2015
		2012	2013	2014	(RMB in millions)	
Statement of Cash Flow and Other Financial Data:						
Net cash generated from operating activities	150,622	142,380	151,893	148,347	165,818	
Net cash (used in)/generated from financing activities	(2,516 )	5,628	31,519	(21,421 )	9,310	
Net cash used in investing activities	(140,449 )	(162,197 )	(178,740 )	(132,633 )	(116,952 )	
Capital expenditure						
Exploration and production	62,050	79,071	105,311	80,196	54,710	
Refining	25,767	32,161	26,064	27,957	15,132	
Marketing and distribution	30,387	31,723	29,486	26,989	22,115	
Chemicals	16,980	23,616	19,189	15,850	17,471	
Corporate and others	2,488	2,397	5,076	3,648	2,821	
Total	137,672	168,968	185,126	154,640	112,249	

(1) 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 or potential ordinary shares, including domestic shares and H shares, are represented by ADSs during each of the years presented. Each ADS represents 100 shares.

#### 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 petroleum products.

We consume a large amount of crude oil to produce our refined petroleum 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 crude oil and refined product prices may cause us to incur impairment to our investment and assets. A prolonged period of oil price drop 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 track 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 petroleum products. For instance, the PRC government could exercise price control over refined petroleum 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 crude oil and refined petroleum product prices.

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 base of our proved oil or natural gas reserves. 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.

Future exploration and discovery of new reserves may not fully replace our existing oil and natural gas reserves. Due to persistently low prices of crude oil and natural gas, only large scale, high quality reserves are able to meet our development criteria. Therefore some exploration projects are not viable at the current crude oil price level and cannot be implemented, potentially leading to failure in fully replacing and supplementing our oil and natural gas reserves with additional reserves through future exploration. For acquired exploration blocks, due to the limited nature of reservoir data, evaluation of underground resources is subject to inherent uncertainties and the acquired assets may fail to meet previous expectations.

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. In 2015, approximately 83.7% of the crude oil required for our refinery business was sourced from international suppliers, and an insignificant amount is 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 development requires us to source an increasing amount of crude oil from outside suppliers. We are subject to the political, geographical and economic risks associated with these countries and areas. If one or more of our material supply contracts 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 chemical 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 and refined oil 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 such 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 may render it uneconomical to develop certain 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 reliability of reserves estimates depends on:

- 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
- extensive engineering judgments.

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 drilling conditions;
- pressure or irregularities in geological formations;
- equipment failures or accidents;
- 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 other factors;
  - availability and terms of external financing;
- 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.

We intend to expand our exploration and production activities and, from time to time, 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, which may be expensive to develop, purchase and implement, and may not function as expected. There is a risk that 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 the international society has reach 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 implementation of such measures in a number of countries and other potential legislation limiting emissions could affect the global demand for fossil fuels. If China or other countries in which we operate or desire to operate enact new laws that focus on limiting greenhouse gas emissions, it could result in substantial capital expenditure from compliance with these laws, and revenue generation and strategic growth opportunities could also be adversely impacted. In November 2014, China and the United States made joint announcement against the threat of climate change, whereby China undertook to peak CO2 emissions around 2030 or earlier if possible, and to increase the non-fossil fuel share of all energy to around 20 percent by 2030. Following the pledge, the National Development and Reform Commission of China (NDRC) adopted the Provisional Measures on the Management of Carbon Emission Trading on December 10, 2014. In December 2015, 195 nations at the United Nations climate change conference in Paris adopted the Paris Agreement, for implementation after 2020. The Paris Agreement will place binding commitments on all signing parties and may lead to more stringent

national and regional measures in the near future. These measures may impose more strict standards on carbon emission, increase demand for competing energy alternatives or products with lower-carbon intensity, and affect the sales and specifications of our products.

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, frequent disease outbreaks and deterioration in social security. Any of these conditions occurring could disrupt or curtail our operations or development activities. These may in turn cause 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 significant capital expenditure required.

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 current taxable year ended December 31, 2015 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 spend 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.”

#### 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. Although nations around the world have adopted various economic policies to mitigate the negative influences caused by factors such as the slowdown of world economic development, it is uncertain how soon the world economy can be fully recovered. The Chinese economy has entered the “new normal” stage with more moderate economic growth. Our operations may also be adversely affected by factors such as some countries’ trade protection policies which may affect the export and some regional trade agreements which may affect the import.

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

Most of our revenues are attributable to sales of refined petroleum 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 changes in consumer demand. Although we are an integrated company with upstream, midstream and downstream businesses, we have limited ability to mitigate the adverse influence of the cyclical nature of global markets.



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. In 2015, the PRC government gradually opened the wholesale market of crude oil and refined petroleum products to new market entrants including local refineries. As a result, we face more competition in both crude oil and refined petroleum product markets. 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.

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, and chemical projects. Sinopec Group Company's overseas asset portfolio includes oil and gas development projects in Iran, Sudan and Syria, which countries are targets of U.S. sanctions administrated by OFAC and by the U.S. Department of State. In 2013, Sinopec International Petroleum E&P Hongkong Overseas Limited, a joint venture owned by Sinopec Group Company and us on an equal basis, acquired from Sinopec Group Company 49% interest in Taihu which is engaged in oil and gas exploration, development and production business in Russia. In December 2015, we acquired a 10% shareholding stake in PAO SIBUR Holding (Sibur Holding). Starting from 2014, OFAC imposed economic sanctions against Russia focusing on trading activities involving certain Russia's financial

and energy entities. We currently do not believe that our investment in Taihu and our 10% shareholding stake in Sibur Holding will result in any direct sanctions imposed by OFAC. However, events in or relating to Russia, including further trade restrictions and other sanctions, could adversely impact our investment in Russia. 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. 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 the impact that such actions may have on Sinopec Group Company and us. It is possible that the United States could subject Sinopec Group Company and us to sanctions due to these activities. 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.

#### 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 petroleum 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 further improvement of pricing mechanism of petroleum 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.

On the other hand, the PRC government has been gradually relaxing the control over imports of crude oil and refined oil products, which may result in refining overcapacity in China and intensify competition among refining companies in China. Such relaxation of the import control may have material and adverse effects on our refining margin, including procurement cost of imported crude oil and lower prices of refined oil products.

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 fees for the discharge of waste substances;
- the levy of fines and payments for damages for serious environmental offenses;
- the government, at its discretion, to close any facility which fails to comply with orders 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. In addition, our production facilities require operating permits that are subject to renewal, modification and revocation. 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 and expensive 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.

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. Most of our crude oil purchases are settled in foreign currencies calculated on the basis of prices in U.S. dollar. Fluctuations in the exchange rate of the Renminbi against the U.S. dollars and certain other foreign currencies may adversely affect our oil and gas business, financial condition and results of operations. Meanwhile, 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.

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.

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 410 Park Avenue, 6/F, 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.

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 petroleum products, including transportation, storage, trading, import and export of petroleum products; and
  - production and sales of petrochemical products.

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

- exploring and developing oil and gas reserves overseas;
- operating certain petrochemical facilities and small capacity refineries;
- 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.

In order to expand our core businesses, prevent competition between us and members of Sinopec Group and reduce related party transactions, between 2001 and 2009 we have acquired Sinopec National Star Petroleum Company, Sinopec Group Maoming Petrochemical Company, Tahe Oilfield Petrochemical Factory and Xi'an Petrochemical Main Factory, certain Petrochemical and Catalyst Assets, certain Refinery Plants and certain service stations, certain Oil Production Plants, Sinopec Hainan and certain downhole operation assets, 100% equity interest of Sinopec Qingdao Petrochemical Company Limited and certain other assets relating to exploration and production, refining and marketing and distribution segments and assets of certain research institutes from Sinopec Group Company. We have also sold and disposed of certain auxiliary assets and chemical assets. In addition, we completed the privatization of Beijing Yanshan Petrochemical Co., Ltd. and Sinopec Zhenhai Refinery and Chemicals Co., Ltd. and the tender offers for the acquisition of

publicly-held A-shares of four subsidiaries formerly listed on stock exchanges in China, namely Sinopec Qilu Petrochemical Co., Ltd., Sinopec Yangzi Petrochemical Co., Ltd., Sinopec Zhongyuan Petroleum Co., Ltd., and Shengli Oil Field Dynamic Co., Ltd.

In 2011, we issued RMB 23 billion convertible bonds which are convertible into our A shares. As of December 31, 2014, an aggregate of 1,832,955,041 A shares have been converted from these convertible bonds. As of February 17, 2015, an aggregate of 4,623,769,047 A shares have been converted from these convertible bonds. On the same date, we exercised our redemption right and redeemed all the outstanding amount of these convertible bonds.

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”.

On February 14, 2013, we completed a placing of an aggregate of 2,845,234,000 new H shares at a price of HK\$8.45 per share. The net proceeds from such placing are approximately HK\$23.97 billion.

In 2013, Sinopec International Petroleum E&P Hongkong Overseas Limited, a joint venture owned by Sinopec Group Company and us on an equal basis, acquired from Sinopec Group Company (i) 50% interest in Caspian Investment Resources Ltd. (CIR), (ii) 49% interest in Taihu Limited (Taihu), and (iii) 50% interest in Mansarovar Energy Colombia Ltd. (Mansarovar), for a cash consideration of US\$2.711 billion in the aggregate. Each of CIR, Taihu and Mansarovar is engaged in oil and gas exploration, development and production business, with CIR based in Kazakhstan, Taihu in Russia and Mansarovar in Colombia.

On February 19, 2014, our board of directors unanimously approved a proposal to restructure our marketing and distribution business and to diversify the ownership of this segment by way of introducing private capital investments. In April 2014, our ownership, management and control of the assets in the marketing and distribution segment have been transferred to Sinopec Marketing Co., Ltd., one of our wholly owned subsidiaries. On September 12, 2014, Sinopec Marketing Co., Ltd. entered into a capital injection agreement with 25 domestic and foreign investors, pursuant to which the investors will subscribe for certain equity interest in Sinopec Marketing Co., Ltd. As of March 6, 2015, the 25 investors have made an aggregate capital contribution of RMB 105.04 billion, representing 29.58% equity interest in Sinopec Marketing Co., Ltd.

On September 12, 2014, in connection with our plan to spin off Sinopec Yizheng Chemical Fibre Company Limited (Yizheng Chemical), in which we originally owned 40.25% equity interest, we entered into a disposal agreement and a share repurchase agreement with Yizheng Chemical, pursuant to which Yizheng Chemical agreed to transfer to us all of its assets and liabilities. As consideration, our 40.25% equity interest in Yizheng Chemical was repurchased and cancelled by Yizheng Chemical. Subsequently, through a series of inter-group company restructuring steps, Yizheng Chemical was spun off from us in December 2014.

On October 30, 2014, Sinopec Overseas Investment Holdings Limited (SOI) and Sinopec Chemical Commercial Holdings Company Limited (SCC), two of our wholly-owned subsidiaries, entered into acquisition agreements with two subsidiaries of Sinopec Group Company, pursuant to which SOI and SCC acquired 99% and 1% membership interests in Sinopec Century Bright Capital Investment (Netherlands) Cooperation U.A. (COOP), respectively, from the two subsidiaries of Sinopec Group Company with an aggregate consideration of US\$562 million. Upon completion of the acquisition, we indirectly held 100% interest in COOP, which holds 37.5% interest in Yanbu Aramco Sinopec Refining Company (YASREF) Limited (YASREF). The remaining 62.5% interest in YASREF is held by Saudi Arabian Oil Company. YASREF is mainly engaged in the production and sale of gasoline and diesel oil, petroleum coke and sulfur, benzene and other products in Saudi Arabia and has a designed processing capability of 3,890 thousand barrels per day.

On July 8, 2015, Sinopec Group Company informed us that, it proposed to increase its shareholding in the Company through acquisitions of our ordinary shares on the secondary market in its own name or through other concerting parties within 12 months commencing on July 8, 2015 (Increase Period). The aggregate amount of such increase in shareholding will not exceed 2% (inclusive of the shares acquired on July 8, 2015) of our issued and outstanding shares. As of July 9, 2015, Sinopec Group Company had increased its shareholding in the Company by way of acquiring 72,000,000 A shares during the Increase Period, representing approximately 0.06% of 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. Sinopec Group Company undertakes not to reduce its shareholding in the Company during the Increase Period and the statutory holding period.

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, 2015, we held 202 production licenses in China, with an aggregate acreage of 25,748 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, 2015, we held 269 exploration licenses in China for various blocks in which we engaged in exploration activities, with an aggregate acreage of approximately 857,421 square kilometers and with the maximum term of seven years. Our exploration licenses may be renewed upon our application at least 30 days prior to the expiration date, with each renewal for a maximum two-year term. We are obligated to make an annual minimum exploration investment in each of the exploration blocks which we obtained the exploration licenses. We are also obligated to pay an annual exploration license fee ranging from RMB 100 to RMB 500 per square kilometer. Under the PRC laws and regulations, however, we are entitled for reduction and exemption of exploration license fee for exploration in the western region, northeast region and offshore of China.

As of December 31, 2015, our overseas subsidiary held two production licenses, with an aggregate acreage of 323 square kilometers. It currently does not have exploration licenses. Our overseas equity-accounted investments held 72 production licenses, with an aggregate acreage of 4,660 square kilometers, and 5 exploration and licenses.

Properties

We currently operate 12 oil and gas production fields in China, each of which consists of many oil and gas producing fields and blocks.

Shengli production field is our most important crude oil production field. It consists of 73 producing blocks of various sizes extending over an area of 2,549 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 2015, Shengli production field produced 192 million barrels of crude oil and 16.12 billion cubic feet of natural gas, with an average daily production of 535 thousand BOE.

As of December 31, 2015, the total acreage of our oil and gas producing fields and blocks in China was 10,829 square kilometers, including 8,267 square kilometers of developed acreage, all of which were net developed acreage; and 2,562 square kilometers of gross undeveloped acreage, all of which were net undeveloped acreage.

As of December 31, 2015, the total acreage of our oil and gas producing fields and blocks of our overseas subsidiary was 323 square kilometers, including 169 square kilometers of developed acreage, of which 30 square kilometers were net developed acreage; and 153 square kilometers of gross undeveloped acreage, of which 8 square kilometers were net undeveloped acreage.

As of December 31, 2015, the total acreage of our oil and gas producing fields and blocks of our overseas equity-accounted investments was 1,737 square kilometers, including 1,624 square kilometers of developed acreage, of which 1,484 square kilometers were net developed acreage; and 113 square kilometers of gross undeveloped acreage, of which 113 square kilometers were net undeveloped acreage.

## Oil and Natural Gas Reserves

As of December 31, 2015, our estimated proved reserves of crude oil and natural gas in China were 3,160.3 million BOE (including 1,901.9 million barrels of crude oil and 7,550.7 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 344.2 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. There may be material changes to our proved reserves in connection with our discovery in exploration projects in the Fuling shale gas field after January 1, 2016.

The following tables set forth our proved developed and undeveloped crude oil and natural gas reserves by region as of December 31, 2015.

Crude Oil Proved Reserves	As of December 31, 2015 (in millions of barrels)
Developed	
Subsidiaries	
China	
Shengli	1,326
Others	375
Overseas(1)	52
Subtotal	1,753
Equity-accounted investments	
China	
	0
Overseas(2)	260
Subtotal	260
Total Developed	2,013
Undeveloped	
Subsidiaries	
China	
Shengli	116
Others	85
Overseas(1)	3
Subtotal	204
Equity-accounted investments	
China	
	0
Overseas(2)	26
Subtotal	26
Total Undeveloped	230
Total Proved Reserves	2,243

Natural Gas Proved Reserves	As of December 31, 2015 (in billions of cubic feet)
Developed	
Subsidiaries	
China	
Puguang	2,470
Fuling	1,016
Others(1)	2,953
Overseas	0
Subtotal	6,439

Equity-accounted investments	
China	0
Overseas(2)	18
Subtotal	18
Total Developed	6,457
Undeveloped Subsidiaries	
China	
Puguang	
Fuling	181
Others	931
Overseas(1)	0
Subtotal	1,112
Equity-accounted investments	
China	0
Overseas(2)	1
Subtotal	1
Total Undeveloped	1,113
Total Proved Reserves	7,570



(1) In 2010, we acquired from Sinopec Group Company part of its interests in Angola Block 18. The proved reserves amount of our overseas subsidiary is the net reserves amount of SSI after deducting the government's amount-sharing. We hold a 55% equity interests in SSI.

(2) In 2013, a joint venture, owned by Sinopec Group Company and us on an equal basis, acquired from Sinopec Group Company (i) 50% interest in CIR, (ii) 49% interest in Taihu, and (iii) 50% interest in Mansarovar. The proved reserves amount reflects the joint venture's shares in CIR, Taihu and Mansarovar.

As of December 31, 2015, approximately 230 million barrels of our crude oil proved reserves and 1,113 billion cubic feet of our natural gas proved reserves were classified as proved undeveloped reserves in China and overseas, among which approximately 2.2 million barrels of our crude oil proved reserves and 32.6 billion cubic feet of our natural gas proved reserves in China were classified as proved undeveloped reserves for more than five years, due to international factors. These reserves are mostly located in our Shanghai branch.

During 2015, a total of 1,092 wells were drilled by us in China and 150 wells were drilled overseas. We converted 91.3 million barrels of proved undeveloped crude oil reserves and 384 billion cubic feet of proved undeveloped natural gas reserves into proved developed reserves in 2015. Total capital expenditure incurred in converting proved undeveloped reserves into proved developed reserves amounted to RMB 21.229 billion, including RMB 20.9 billion and RMB 0.329 billion incurred in connection with our operations in China and overseas, respectively, in 2015.

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. Wang Zhigang, holds a Ph.D. degree in geology from Geology and Geo-physics Research Institute of the China Academy of Science 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, financial and legal 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 headquarter 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 improved and updated periodically.

#### Oil and Natural Gas Production

In 2015, we produced an average of 1,145.6 thousand BOE per day in China, of which approximately 70.9% was crude oil and 29.1% was natural gas. We produced an average of 147.8 thousand BOE per day overseas, of which 99.4% was crude oil and 0.6% was natural gas.

The following tables set forth our average daily production of crude oil and natural gas sold for the years ended December 31, 2013, 2014 and 2015. The production of crude oil includes condensate.

	Year Ended December 31,		
	2013	2014	2015
	(in thousands of barrels)		
Average Daily Crude Oil Production			
China			
Shengli	540	542	527
Others	312	310	285
Overseas			
Subsidiary(1)	59	42	54
Equity-accounted investments(2)	10	95	92
Total Crude Oil Production	921	989	958

	Year Ended December 31,		
	2013	2014	2015
	(in millions of cubic feet)		
Average Daily Natural Gas Production			
China			
Puguang	784	761	530
Fuling	14	105	306
Others	1,010	1,085	1,116
Overseas			
Total Natural Gas Production	1,808	1,962	1,963

(1) The average daily production of our overseas subsidiary is the net production of SSI after deducting the government's sharing of production. We hold 55% equity interest of SSI.

(2) The average daily production of our equity-accounted investments reflects our shares of the production in CIR, Taihu and Mansarovar, starting from our acquisition in 2013 of (i) 50% interest in CIR, (ii) 49% interest in Taihu, and (iii) 50% interest in Mansarovar, through a joint venture owned by Sinopec Group Company and us.

#### 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, 2013, 2014 and 2015.

	Weighted Average	China (RMB)	Overseas(1)
For the year ended December 31, 2015			
Average petroleum lifting cost per BOE	109.70	111.56	70.20
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	-
For the year ended December 31, 2014			
Average petroleum lifting cost per BOE	113.10	113.40	105.07
Average realized sales price			
Per barrel of crude oil	554.71	552.73	597.24
Per thousand cubic meters of natural gas	1,598.99	1,598.99	-
For the year ended December 31, 2013			

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Average petroleum lifting cost per BOE	112.56	113.63	91.27
Average realized sales price			
Per barrel of crude oil	590.86	584.35	671.17
Per thousand cubic meters of natural gas	1,359.23	1,359.23	-

(1) The exchange rates we used for overseas data in this table was the average exchange rates for each year ended December 31, 2013, 2014 and 2015, which were RMB 6.1928 to US\$ 1.00, RMB 6.1428 to US\$1.00, and RMB 6.2284 to US\$1.00, respectively.

## Exploration and Development Activities

In the low oil price environment of 2015, we strived to optimize the deployment of our exploration and development projects. To manage the oil price fluctuation, we implemented dynamic investment decision-making mechanism and adjusted our production structure by cutting inefficient production capacities with the aim to improve yield. We made remarkable progresses in enhancing the efficiency of our exploration activities, drilled 568 exploratory and development wells in 2015, which improved our year-on-year exploratory success rate and led to a number of new discoveries in Beibu Gulf of the South China Sea, the Sichuan Basin, the Ordos Basin, and the Central Tahe Basin. With respect to development activities, we completed the construction of the first phase of our Fuling project with a production capacity of 5 billion cubic meters per year, made considerable progresses in optimizing development programs in mature fields and focused on the construction and development of production capacity in frontier acreages. In 2015, our production dropped by 1.7% to 471.91 million barrels, with domestic crude oil production down by 4.7%, overseas production up by 6.6%, and natural gas production rose by 2.6%. As compared to the same period in 2014, our proved reserves of crude oil fell while our proved reserves of natural gas increased by 12.3%, mainly due to the significant increase of our Fuling shale gas reserves.

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, 2013, 2014 and 2015.

	Total	China		Overseas	
		Shengli	Others	Subsidiary	Equity-accounted investments
For the year ended December 31, 2015					
Exploratory					
Productive	373	150	223	-	-
Dry	196	73	122	-	1
Development					
Productive	1,950	1,020	781	5	144
Dry	26	18	7	-	1
For the year ended December 31, 2014					
Exploratory					
Productive	337	141	193	-	3
Dry	187	64	123	-	-
Development					
Productive	3,964	2,027	1,614	6	317
Dry	56	30	26	-	-
For the year ended December 31, 2013					
Exploratory					
Productive	350	112	238	-	-
Dry	352	96	256	-	-
Development					
Productive	4,513	2,490	2,016	5	2
Dry	83	39	44	-	-

The following table sets forth the number of wells being drilled by us as of December 31, 2015, as compared to December 31, 2014:

	As of December 31,
2014	2015

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	Gross	Net	Gross	Net
<b>China</b>				
Shengli	63	63	58	58
Others	247	246	204	204
<b>Overseas</b>				
Subsidiary	1	-	-	-
Equity-accounted investments	2	1	3	1
<b>Total Wells Drilling</b>	<b>313</b>	<b>310</b>	<b>265</b>	<b>263</b>

The following table sets forth our number of productive wells for crude oil and natural gas as of December 31, 2015, as compared to December 31, 2014:

	2014		2015	
	Gross	Net	Gross	Net
Productive Wells for Crude Oil				
China				
Shengli	30,534	30,534	31,547	31,547
Others	18,058	18,058	18,115	18,115
Overseas				
Subsidiary	25	8	28	15
Equity-accounted investments	7,102	2,778	6,885	3,107
Total	55,719	51,378	56,575	52,784

	2014		2015	
	Gross	Net	Gross	Net
Productive Wells for Natural Gas				
China				
Puguang	54	54	55	55
Fuling	56	56	175	175
Others	4,440	4,415	4,528	4,497
Overseas	0	0	0	0
Total	4,550	4,581	4,758	4,727

## Refining

### Overview

In 2015, our refinery throughputs were approximately 236 million tonnes. We produce a full range of refined petroleum products. The following table sets forth our production of our principal refined petroleum products for the years ended December 31, 2013, 2014 and 2015.

	Year Ended December 31,		
	2013	2014	2015
	(in million tonnes)		
Gasoline	45.56	51.22	53.98
Diesel	77.40	74.26	70.05
Kerosene and jet fuel	17.43	20.75	24.35
Light chemical feedstock	37.97	39.17	38.81
Liquefied petroleum gas	10.56	11.25	11.58
Fuel oil	3.17	2.48	1.48

Gasoline and diesel are our largest revenue producing 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 refined petroleum products were sold in China to a wide variety of industrial and agricultural customers, and a small amount are exported.

### Refining Facilities

Currently we operate 34 refineries in China. As of December 31, 2015, our total primary distillation capacity of crude oil was 293.20 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, 2013, 2014 and 2015.

	As of and for the Year Ended December		
	2013	2014	2015
Primary distillation capacity of crude oil (million tonnes per annum)	282.20	292.40	293.20
Refinery throughputs (million tonnes)	231.95	235.38	236.49

Notes:

- (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 2015, measured by the total output from our refineries, our gasoline yield was 22.83%, diesel yield was 29.62%, kerosene yield was 10.3%, and light chemical feedstock yield was 16.41%. Other products include lubricant, liquefied petroleum gas, solvent, asphalt, petroleum coke, paraffin and fuel oil. For the years ended December 31, 2013, 2014 and 2015, our overall yield for all refined petroleum products at our refineries was 94.82%, 94.66% and 94.75% , respectively.

The following table sets forth the primary distillation capacity per annum as of December 31, 2015 of each of our refineries with the primary distillation capacity of 8 million tonnes or more per annum.

Refinery	Primary Distillation Capacity as of December 31, 2015 (in million tonnes per annum)
Maoming	23.50
Zhenhai	23.00
Jinling	21.00
Shanghai	16.00
Yangzi	14.00
Fujian	14.00
Qilu	14.00
Tianjin	13.80
Guangzhou	13.20
Gaoqiao	13.00
Qingdao	12.00
Changling	11.50
Yanshan	11.00
Shijiazhuang	10.00
Hainan	9.20
Luoyang	8.00
Wuhan	8.00
Anqing	8.00

In 2015, our primary distillation capacity of crude oil increased by 0.80 million tonnes per annum. In addition, in 2015, our hydrofining capacity increased by 3.90 million tonnes per annum. The revamping projects for a number of refining facilities to improve refined petroleum product quality were also completed and put into operation.

Source of crude oil

In 2015, approximately 83.7% of the crude oil required for our refinery business was sourced from international suppliers.

## Marketing and Sales of Refined Petroleum Products

## Overview

We operate the largest sales and distribution network for refined petroleum products in China. In 2015, we distributed and sold approximately 171.37 million tonnes of gasoline, diesel, jet fuel and kerosene. Most of the refined petroleum products sold by us are produced internally. In 2015, approximately 78.1% of our gasoline sales volume and approximately 82.0% 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 petroleum products in the years of 2013, 2014 and 2015.

	2013	2014	2015
Total sales volume of refined petroleum products (in million tonnes)	179.99	189.17	189.33
Domestic sales volume of refined petroleum products (in million tonnes)	165.42	170.97	171.37
Retail	113.73	117.84	119.03
Wholesale and Distribution	51.69	53.13	52.34
Average annual throughput of service stations (in tonnes per station)	3,707	3,858	3,896
		As of December 31,	
	2013	2014	2015
Total number of service stations under Sinopec brand	30,536	30,551	30,560
Self-operated service stations	30,523	30,538	30,547

## 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 more able to implement consistent pricing policies, maintain both product and service quality standards and more efficiently deploy our retail network.

In 2015, we sold approximately 119.03 million tonnes of gasoline, diesel and kerosene through our retail network, representing approximately 69.5% 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, 2015, we had 13 franchised service stations that are owned and operated by third parties. In 2015, the average annual throughput of our service stations increased by 1.0% from 2014, 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 2015, we sold approximately 52.34 million tonnes of refined petroleum products, including 5.23 million tonnes of gasoline, 32.64 million tonnes of diesel and 14.47 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 371 storage facilities with a total capacity of approximately 16.21 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 in China. We produce a full range of petrochemical products including intermediate petrochemicals, synthetic resins, synthetic fiber monomers and polymers, synthetic fibers, synthetic rubber and chemical fertilizers. Synthetic resins, synthetic fibers, synthetic rubber and some intermediate petrochemicals comprise a significant majority of our external sales. Synthetic fiber monomers 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 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 petrochemical products in China.

## Products

## Intermediate Petrochemicals

We are the largest ethylene producer in China. Our rated ethylene capacity as of December 31, 2015 was 10.37 million tonnes per annum. In 2015, we produced 11.12 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, 2015 for our principal intermediate petrochemical products.

	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Production
Ethylene	10,370	11,118	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin, Zhongyuan, SECCO*, BASF-YPC*, Fujian, Zhongsha (Tianjing)*, Zhenhai and Sino-Korean (Wuhan)*
Propylene	9,676	9,170	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin, Zhongyuan, SECCO*, BASF-YPC*, Gaoqiao, Anqing, Jinan, Jingmen, Fujian, Zhongsha (Tianjing)*, Zhenhai and Sino-Korean (Wuhan)*
Benzene	5,384	4,028	Yanshan, Shanghai, Yangzi, Qilu, Guangzhou, Zhenhai, Tianjin,

Styrene	2,126	2,159	Luoyang, SECCO* and BASF-YPC* Yanshan, Qilu, Guangzhou, Maoming, SECCO* and Zhenhai
Para-xylene	4,839	4,402	Shanghai, Yangzi, Qilu, Tianjin, Luoyang, Zhenhai, Jinling, Fujian* and Hainan
Phenol	857.5	689	Yanshan, Gaoqiao and Zhongsha (Tianjin)* and Gaoqiao (Mitsui)*

\* Joint ventures, of which the production capacities and outputs are fully included in our statistics.

#### 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, 2015.

	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Production
Polyethylene	6,939	7,333	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin, Zhongyuan, SECCO*, BASF-YPC*, Fujian, Zhongsha (Tianjing)*, Zhenhai and Sino-Korean (Wuhan)*
Polypropylene	6,605	6,428	Yanshan, Shanghai, Yangzi, Qilu, Guangzhou, Maoming, Tianjin, Zhongyuan, SECCO*, Jingmen, Fujian, Zhongsha (Tianjing)*, Zhenhai and Sino-Korean (Wuhan)*
Polyvinyl chloride	600	226	Qilu
Polystyrene	698	585	Yanshan, Qilu, Maoming, Guangzhou, and SECCO*
Acrylonitrile butadiene styrene	200	166	Gaoqiao

\* Joint ventures, of which the production capacities and outputs are fully included in our statistics.

#### 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 2015 production, we are the largest producer of ethylene glycol and caprolactam in China. Most of our production of synthetic fiber monomers and polymers are used as feedstock for synthetic fibers.

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, 2015 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	2,267	Shanghai, Yangzi, Yizheng, Tianjin and Luoyang
Ethylene glycol	3,209	2,553	Yanshan, Shanghai, Yangzi, Tianjin, Maoming, BASF-YPC*, Zhongsha (Tianjing)*, Zhenhai, Hubei and Fujian*
Acrylonitrile	1,070	990	Shanghai, Anqing, Qilu and SECCO*
Caprolactam	700	488	Shijiazhuang and Baling

Polyester	3,378	2,646	Shanghai, Yizheng, Tianjin and Luoyang
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\* Joint ventures, of which the production capacities and outputs are fully included in our statistics.

### 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, 2015.



	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Production
Polyester fiber	1,227	1,008	Yizheng, Shanghai, Tianjin and Luoyang
Acrylic fiber	265	270	Shanghai, Anqing and Qilu

### 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 2015 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, 2015 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	540	391	Yanshan, Qilu, Maoming and Gaoqiao
Styrene butadiene rubber	430	318	Yanshan, Qilu, Maoming and Gaoqiao and Yangzi
Styrene-butadiene-styrene thermoplastic elastomers	140	90	Yanshan and Maoming
Isobutylene isoprene rubber	135	14	Yanshan
Isoprene rubber	30	-	Yanshan
Ethylene propylene rubber	75	29	Gaoqiao (Mitsui)*

### Marketing and Sales of Petrochemicals

Most of our petrochemicals sales are generated in China. Price and volume of petrochemical sales are primarily market driven. The southern and eastern 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.

Our principal sales and distribution channels consist of (i) direct sales to end-users, most of which are large- and medium-sized manufacturing enterprises, which account for more than 70% of our customers and (ii) sales to distributors. The distributors are responsible for sales and distribution to a portion of our smaller and scattered customers. We also provided after-sale services to our customers, including technical support. We set up customer

service hotline 95388 and fully utilized our customer service center to timely address customer complaints, and to consistently improve customer satisfaction. In order to support our brand-building efforts, we built up our technical support for our downstream customers by creating the role of technical service engineers and contracting technical support consultants; accommodated customers' increasing demand for mobile purchase and delivery services through the promotion of our mobile sales platform application and improving the efficiency of customers' procurement process; improved the effectiveness of our customer visitation and feedback programs by promoting client visits and encouraging rectification based on customers' suggestions, and targeting clients from different segments. We continuously strive to improve our product mix and enhance our product quality to meet market needs.

## Competition

### Refining and Marketing of Refined Petroleum 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 believe our proximity to customers has given us significant geographical advantages. Most of our petrochemical production facilities are located in the eastern and southern regions in China, an area which has experienced higher economic growth rates in China in the past thirty years. Proximity of our production facilities to our markets has given us an advantage 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.

We strive to keep our position as the market leader through our efforts to accurately predict and grasp market trends in order to effectively guide operations, and to motivate our sales personnel with the goal of increasing sales volume and margin, developing new markets and better serving our clients. At the same time, we made significant progresses in promoting our e-commerce business segment and consolidating and expanding our sales and marketing channels by improving transaction efficiency, simplifying transaction procedures and developing information platform.

## Patents and Trademarks

In 2015, we were granted 3,769 patents in China and overseas. As of December 31, 2015, we owned a total of 18,349 patents in China and overseas.

In 2015, we have 391 material trademarks approved in our system, 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 2015, we sourced a small amount of crude oil from Iran, and such amount represented 5% of our total refinery throughputs. In addition, we engaged in a small amount of trading activities with an Iranian company with net profit of approximately US\$2.71 million.

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 0.02% of its total unaudited sales revenue.

Since we have performance obligations under our Iran-related contracts, we are legally required to continue our performance of part of Iran related contracts in 2016.

## 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 petroleum 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:

- 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 (2015); and

The Ministry of Commerce (MOFCOM)

MOFCOM is responsible for examining and approving Sino-foreign equity joint venture contracts and Sino-foreign cooperation joint venture contracts for oil and gas development within the PRC. It is also responsible to issue the enterprise overseas investment certificate and quotas and licenses for import and export of crude oil and refined oil products.

In November 2010, we were approved by four Ministries including MOFCOM to become one of the first trial enterprises to cooperate with international business partners and develop coal bed methane resources (MOFCOM Circular 984[2010]).

#### 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, only we, PetroChina, China National Offshore Oil Corporation (CNOOC) and Yanchang Petroleum Group Ltd. 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 exploration license is 7 years. The 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.

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 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

(No. 847 [2012] of the Ministry of Finance), 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 (Circular No.5 [2013]) (Policy) 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. The Chinese government also proposed to implement tax incentive programs for shale gas exploration and discovery with respect to resource tax, value added tax and income tax.

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 (No. 112 [2015] of the Ministry of Finance) 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

According to the Measures for Administration of Petroleum Products Price (Trial) 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.

#### Price Controls on Natural Gas

In June 2013, NDRC released the Circular on Adjustment of the Price of Natural Gas (Fagai Jiage Circular 1246[2013]). Pursuant to the circular, a dynamic adjustment mechanism shall be established by linking prices of natural gas to the prices of alternative energy to reflect market demands. A reference ceiling price is set by the government bench-marked against city-gate price, and suppliers and buyers may determine the specific prices through negotiations below the price ceiling. The natural gas prices of stock gas and incremental gas shall be differentiated, and the price of incremental gas shall be adjusted in one-go to maintain a reasonable correlations with such alternative energies as fuel oil and liquefied petroleum gas (with the weight of 60% and 40%); stock gas shall refer to the 2012 actual consumption amount, the price of stock gas shall be adjusted step by step to be on par with the price of incremental gas. City-gate prices shall be applied to domestic onshore natural gas and imported pipeline natural gas. Control over the ex-factory prices of shale gas, coal-bed gas, and coal gas and the gas source price of liquefied natural gas shall be lifted and such prices shall be determined by both the supplier and the buyer through negotiation. Where it is necessary to transmit such gases in a mixed manner in long-distance pipelines and sell them together, the uniform city-gate price shall be implemented; where such gases are transmitted in a mixed manner in long-distance pipelines, but are sold separately, the gas source price shall be determined by the supplier and the buyer through negotiation and transportation expenses shall be paid to the pipeline transportation service provider at the pipeline transportation price

as prescribed by the state.

In August 2014, NDRC released the Circular on Adjustment of the Price of Non-Residential Stock Natural Gas (Fagai Jiage Circular 1835[2014]), which was implemented from September 2014. Ceiling city-gate prices for stock non-residential natural gas will be increased by RMB 0.4 per cubic meter, the ceiling city-gate prices for incremental gas will remain unchanged. Due to then stagnant fertilizer market, the adjustment to fertilizer gas price was postponed and the ceiling city-gate prices for residential natural gas was not adjusted. The circular further lifted control over gas source price of imported LNG and ex-factory prices of shale gas, coal-bed gas, and coal gas. Where it is necessary to transmit such gases in a mixed manner with domestic onshore gas and imported pipeline gas and sell them together, the supplier and the user may enter into separate purchase and transportation contracts for different gas sources. The gas source price and ex-factory price shall be market oriented, the pipeline transportation price shall be subject to relevant regulations. In 2015, the stock natural gas and incremental natural gas prices shall be unified.



In February 2015, with the goal of standardizing stock gas and incremental gas prices, NDRC released the Circular on Rationalizing the Price of Non-Residential Natural Gas (Fagai Jiage Circular 351[2015]), which calls for rationalizing the price of non-residential natural gas and implementing pilot programs for price liberalization of directly supplied gas for end-users. Based on the price fluctuation of alternative energies such as fuel oil and liquefied petroleum gas, and in accordance with the pricing mechanism of natural gas then in place, ceiling city-gate prices for incremental non-residential natural gas will be decreased by RMB 0.44 per cubic meter, the ceiling city-gate prices for stock gas will be increased by RMB 0.04 per cubic meter to unify gas prices. This circular will be implemented from April 2015.

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 (Fagai Jiage 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, which was set at RMB 0.7 per cubic meter below the reference ceiling price. Suppliers and buyers may determine through negotiations the specific prices, subject to the cap of 120% of the reference base rate. This circular also continued the existing subsidy program for fertilizer gas price and the fertilizer gas price will remain unchanged. This circular was implemented from November 2015.

#### Regulation of Refining and Marketing of Refined Petroleum 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 (Fagai Jiage 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 for approval.

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.

On September 16, 2013, a Circular of Relevant Opinions on Pricing Policies for Upgrading Oil Product Quality 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.

#### Regulation of Crude Oil and Refined Petroleum 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 Petroleum Products Market” to open the wholesale market of crude oil and refined petroleum products to new market entrants, respectively. The rapid entrance of foreign enterprises into Chinese petroleum, chemical and other related business will change the current horizon of crude oil resource, as well as petroleum and chemical products market.

## Investment

Under the State Council's Decision on Investment System Reform, 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.

In accordance with NDRC Decree No. 20: Decision of NDRC on Amending the Relevant Clauses of the Administrative Measures for the Approval and Record-Filing of Outbound Investment Projects and Administrative Measures for the Approval and Record-Filing of Foreign Investment Projects (27 December 2014), overseas investment projects involving sensitive countries or regions or sensitive industries shall be approved 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 filing with NDRC. 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.

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.

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) (No. 84 [2014] of the National Energy Administration) 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.

## 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.

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

Tax Item	Tax Base	Tax Rate
Enterprise income tax	Taxable income	25% effective from January 1, 2008.
Value-added tax	Revenue	13% for liquefied petroleum gas, natural gas, and low density polyethylene for production of agricultural film and fertilizers and 17% for other items. 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 2016, the applicable tax rate for gasoline, fuel oil and diesel is 1% and 0% for jet kerosene.
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.
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 amount of value-added tax, consumption tax and business tax	1%, 5% and 7%.  3% and 2%.

Education Surcharge and local education surcharge	Total amount of value-added tax, consumption tax and business tax	
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.

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(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 33 to our consolidated financial statements.

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 whose jurisdictions we have operations. For example, national regulations promulgated by the central government set discharge standards for emissions into air and water. They also set forth schedules of discharge fees for various waste substances. These schedules usually provide for discharge fee increases for each incremental amount of discharge up to a certain level. Above a certain level, the central 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 in China.

Each of our production subsidiaries has implemented policies to control its pollutant emissions and discharge and to oversee compliance with the PRC environmental regulations. In January 2013, we integrated our environmental protection functions such as low-carbon development strategy and energy-saving mission by setting up a new department named Energy Management and Environmental Protection Department. The main functions of this new department are environmental management functions such as energy saving, emission reduction, environmental protection, water saving, comprehensive utilization of resources and clean production.

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 environmental bureau for approval before undertaking any project with negative impact on the environment. The construction of such projects will only be permitted to operate after the environmental bureau has performed an inspection and is satisfied that environmentally sound equipment has been installed for the facility.

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 require additional expenditure on compliance with environmental regulations.

Our environmental protection expenditures were approximately RMB 5.2 billion in 2013, RMB 5.4 billion in 2014, and RMB 5.8 billion in 2015.

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 747.6 billion of coverage on our property and plants and approximately RMB 125.3 billion of coverage on our inventory. In 2015, we paid an insurance premium of approximately RMB 2.182 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.

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

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. Under the full cost method, these costs are capitalized and written-off (depreciation) over time.

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. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depreciation rates.

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. Depreciation rates are determined based on estimated proved developed reserve quantities (the denominator) and capitalized costs of producing properties

(the numerator). Producing properties' capitalized costs are amortized based on the units of oil or gas produced. 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. The larger the estimated reserves, the less likely the property is impaired.

For reserve estimates in accordance with the Accounting Standards Update 2010-03, Extractive Activities – Oil and Gas (Topic 932): Oil and Gas Reserve Estimation and Disclosures, (ASU 2010-03), issued by the Financial Accounting Standards Board of the United States, of the three years ended December 31, 2013, 2014 and 2015, please refer to Supplemental Information on Oil and Gas Producing Activities (unaudited).

#### 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 “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 and amount of operating costs. 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 and amount of operating costs.

Impairment losses recognized for each of the three years ended December 31, 2013, 2014 and 2015 in our statement of income on long-lived assets are summarized as follows:

	Year ended December 31,		
	2013	2014	2015
	(RMB in millions)		
Exploration and production	2,523	2,436	4,864
Refining	88	29	9
Marketing and distribution	35	40	19
Chemicals	-	1,106	142
Corporate and others	15	8	112
Total	2,661	3,619	5,146

#### 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 changes to the estimated useful lives and residual values during each of the three years ended December 31, 2013, 2014 and 2015.

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:

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	Year ended December 31,		
	2013	2014	2015
	(RMB in millions)		
Balance as of January 1	699	574	530
Impairment losses recognized for the year	36	44	40
Reversal of impairment losses	(38 )	(15 )	(13 )
Written off	(123 )	(57 )	(38 )
Others	-	(16 )	6
Balance as of December 31	574	530	525

#### 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:

	Year ended December 31,		
	2013	2014	2015
	(RMB in millions)		
Balance as of January 1	491	1,751	3,603
Allowance for the year	1,453	3,327	3,687
Reversal of allowance on disposal	(1 )	(136 )	(34 )
Written off	(192 )	(1,327 )	(2,931 )
Others	-	(12 )	77
Balance as of December 31	1,751	3,603	4,402

#### 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 petroleum products and petrochemicals. 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;
- Refining Segment, which consists of purchasing crude oil from our exploration and production segment and from third parties, processing of crude oil into refined petroleum products, selling refined petroleum products principally to our marketing and distribution segment;

- Marketing and Distribution Segment, which consists of purchasing refined petroleum products from our refining segment and third parties, and marketing, selling and distributing refined petroleum 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, 2015 Compared with Year Ended December 31, 2014

In 2015, our total operating revenues were RMB 2,018.9 billion, representing a decrease of 28.6% over 2014. Our operating income was RMB 57.0 billion, representing a decrease of 22.4% over 2014.

The following table sets forth major revenue and expense items in the consolidated statement of income for the years ended December 31, 2014 and 2015.

	Year Ended December 31,		Change
	2015	2014	from 2014 to 2015
	(RMB in millions)		(%)
Operating revenues	2,018,883	2,825,914	(28.6 )
Sales of goods	1,976,412	2,781,641	(28.9 )
Other operating revenues	42,471	44,273	(4.1 )
Operating expenses	(1,961,855)	(2,752,427)	(28.7 )
Purchased crude oil, products and operating supplies and expenses	(1,492,926)	(2,334,399)	(36.0 )
Selling, general and administrative expenses	(69,330 )	(68,374 )	1.4
Depreciation, depletion and amortization	(96,368 )	(90,097 )	7.0
Exploration expenses, including dry holes	(10,459 )	(10,969 )	(4.6 )
Personnel expenses	(56,331 )	(57,233 )	(1.6 )
Taxes other than income tax	(236,343 )	(191,202 )	23.6
Other operating (expenses)/income, net	(98 )	(153 )	(35.9 )
Operating income	57,028	73,487	(22.4 )
Net finance costs	(9,276 )	(14,229 )	(34.8 )
Investment income and income from associates and jointly controlled entities	8,525	6,246	36.5
Earnings before income tax	56,277	65,504	(14.1 )
Tax expense	(12,613 )	(17,571 )	(28.2 )
Net income	43,664	47,933	(8.9 )
Attributable to:			
Equity shareholders of the Company	32,438	46,466	(30.2 )
Non-controlling interests	11,226	1,467	665.2

Operating revenues

In 2015, our sales of goods were RMB 1,976.4 billion, representing a decrease of 28.9% over 2014. This was mainly attributable to the price decline of crude oil and petroleum products.

The following table sets forth our external sales volume, average realized prices and the respective rates of change from 2014 to 2015 for our major products:

Sales Volume		Change from	Average Realized Price		Change from
2015	2014		2015	2014	

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	(thousand tonnes)		2014 to 2015 (%)	(RMB per tonne)		2014 to 2015 (%)
Crude oil	9,674	8,864	9.1	2,019	4,008	(49.6 )
Domestic	9,674	8,780	10.2	2,019	4,001	(49.5 )
Oversea	-	84	-	-	4,691	-
Natural gas	18,440	16,661	(1) 10.7	1,519	1,589	(2) (4.4 )
Gasoline	69,749	64,083	8.8	6,749	8,339	(19.1 )
Diesel	95,472	102,724	(7.1 )	4,937	6,647	(25.7 )
Kerosene	23,028	21,845	5.4	3,387	5,710	(40.7 )
Basic chemical feedstock	29,608	27,277	8.5	4,175	6,151	(32.1 )
Synthetic fiber monomer and polymer	6,071	6,479	(6.3 )	5,796	7,223	(19.8 )
Synthetic resin	11,989	11,584	3.5	7,771	9,684	(19.8 )
Synthetic fiber	1,380	1,430	(3.5 )	7,740	9,436	(18.0 )
Synthetic rubber	1,104	1,205	(8.4 )	8,778	10,554	(16.8 )
Chemical Fertilizer	245	598	(59.4 )	1,823	1,686	8.1

(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 2015, the total revenue from crude oil, natural gas and other upstream products that were sold externally amounted to RMB 57.7 billion, representing a decrease of 17.0% over 2014. The change was mainly due to price decline of crude oil in 2015.

#### Sales of refined petroleum products

In 2015, 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 1,206.7 billion, accounting for 59.8% of our operating revenues and representing a decrease of 26.1% over 2014. The decrease was mainly because of the decline in prices of various petroleum products. The sales revenue of gasoline, diesel and kerosene was RMB 1,020.2 billion, accounting for 84.5% of the total revenue of petroleum products and representing a decrease of 24.0% over 2014. Sales revenue of other refined petroleum products was RMB 186.5 billion, accounting for 15.5% of the total revenue of petroleum products and representing a decrease of 36.1% over 2014.

#### Sales of chemical products

Our external sales revenue of chemical products was RMB 275.2 billion, accounting for 13.6% of our operating revenues and representing a decrease of 22.9% over 2014. This was mainly attributable to the price decline of chemical product .

#### Revenue from corporate and others

In 2015, our corporate and others realized sales revenue of RMB 436.7 billion, accounting for 21.6% of our operating revenue and representing a decrease of 39.4% over 2014. This was mainly attributable to the price decline of crude oil and petroleum products.

#### Operating expenses

In 2015, our operating expenses were RMB 1,961.9 billion, representing a decrease of 28.7% over 2014, among which:

Purchased crude oil, products and operating supplies and expenses were RMB 1,492.9 billion, representing a decrease of 36.0% over 2014, accounting for 76.1% of the total operating expenses, of which:

- crude oil purchase expenses were RMB 469.4 billion, representing a decrease of 44.0% over 2014. In 2015, the total throughput of crude oil that was purchased externally was 176.29 million tonnes (excluding the amount processed for third parties), representing a decrease of 0.6% over 2014; the average unit processing cost for crude oil purchased externally was RMB 2,663 per tonne, representing a decrease of 43.6% over 2014; and
- other purchasing expenses were RMB 1,023.5 billion, representing a decrease of 31.6% over 2014. This is mainly due to the price decline of feedstock purchased from external sources.

Selling, general and administrative expenses totaled RMB 69.3 billion, representing an increase of 1.4% over 2014.

Depreciation, depletion and amortization was RMB 96.4 billion, representing an increase of 7.0% over 2014. This was mainly due to the continued investment in fixed assets.

Exploration expenses, including dry holes were RMB 10.5 billion, representing a decrease of 4.6% over 2014, reflecting our optimization of exploration investment and effective reduction of exploration expenses.

Personnel expenses were RMB 56.3 billion, representing a decrease of 1.6% over 2014.

Taxes other than income tax were RMB 236.3 billion, representing an increase of 23.6% over 2014. Although the special oil income levy and resources tax decreased by RMB 24.6 billion over the same period of 2014 due to crude oil price drop, the consumption tax increased by RMB 62.0 billion as a result of increased consumption tax rate, and city construction tax and educational surcharge increased by RMB 7.9 billion accordingly over the same period of 2014.

Other operating expenses, net were RMB 0.1 billion.

#### Operating income

In 2015, our operating income was RMB 57.0 billion, representing a decrease of 22.4% over 2014.

#### Net finance costs

In 2015, our net finance costs were RMB 9.3 billion, representing a decrease of 34.8% over 2014. This decrease in finance costs was mainly attributable to (i) the net interest expenses of RMB 5.2 billion, representing a decrease of RMB 4.3 billion over 2014; (ii) net losses from foreign exchange increased by RMB 3.7 billion as compared with 2014 due to the RMB exchange rate fluctuation in 2015; and (iii) loss from the fair value of our issued convertible bonds that decreased RMB 4.4 billion.

#### Investment income and income from associates and jointly controlled entities

The investment income and income from associates and jointly controlled entities in 2015 was RMB 8.5 billion, representing an increase of RMB 2.3 billion over 2014, which was mainly due to improved operating results of our affiliates in refining and chemicals industry.

#### Earnings before income tax

In 2015, our earnings before income tax were RMB 56.3 billion, representing a decrease of 14.1% over 2014.

#### Tax expense

In 2015, we recognized income tax expense of RMB 12.6 billion, representing a decrease of RMB 5.0 billion over 2014.

#### Net income attributable to non-controlling interests

In 2015, our net income attributable to non-controlling interests was RMB 11.2 billion, representing an increase of RMB 9.8 billion over 2014.

#### Net income attributable to equity shareholders of the Company

In 2015, our net income attributable to our equity shareholders was RMB 32.4 billion, representing a decrease of 30.2% over 2014. This was mainly due to the restructuring of Sinopec Marketing Co., Ltd.

Year Ended December 31, 2014 Compared with Year Ended December 31, 2013

In 2014, our total operating revenues were RMB 2,825.9 billion, representing a decrease of 1.9% over 2013. Our operating income was RMB 73.5 billion, representing a decrease of 24.1% over 2013.

The following table sets forth major revenue and expense items in the consolidated statement of income for the years ended December 31, 2013 and 2014.

	Year Ended December 31,		Change from 2013 to 2014 (%)
	2014 (RMB in millions)	2013	
Operating revenues	2,825,914	2,880,311	(1.9 )
Sales of goods	2,781,641	2,833,247	(1.8 )
Other operating revenues	44,273	47,064	(5.9 )
Operating expenses	(2,752,427)	(2,783,526)	(1.1 )
Purchased crude oil, products and operating supplies and expenses	(2,334,399)	(2,371,858)	(1.6 )
Selling, general and administrative expenses	(68,374 )	(69,928 )	(2.2 )
Depreciation, depletion and amortization	(90,097 )	(81,265 )	10.9
Exploration expenses, including dry holes	(10,969 )	(12,573 )	(12.8 )
Personnel expenses	(57,233 )	(55,353 )	3.4
Taxes other than income tax	(191,202 )	(190,672 )	0.3
Other operating (expenses)/income, net	(153 )	(1,877 )	(91.8 )
Operating income	73,487	96,785	(24.1 )
Net finance costs	(14,229 )	(4,246 )	235.1
Investment income and income from associates and jointly controlled entities	6,246	2,513	148.5
Earnings before income tax	65,504	95,052	(31.1 )
Tax expense	(17,571 )	(24,763 )	(29.0 )
Net income	47,933	70,289	(31.8 )
Attributable to:			
Equity shareholders of the Company	46,466	66,132	(29.7 )
Non-controlling interests	1,467	4,157	(64.7 )

### Operating revenues

In 2014, our sales of goods were RMB 2,781.6 billion, representing a decrease of 1.8% over 2013. This was mainly attributable to the price decline of crude oil and petroleum products.

The following table sets forth our external sales volume, average realized prices and the respective rates of change from 2013 to 2014 for our major products:

	Sales Volume		Change from 2013 to 2014 (%)	Average Realized Price		Change from 2013 to 2014 (%)
	2014 (thousand tonnes)	2013		2014 (RMB per tonne)	2013	
Crude oil	8,864	7,604	16.6	4,008	4,253	(5.8 )
Domestic	8,780	7,582	15.8	4,001	4,252	(5.9 )
Oversea	84	22	281.8	4,691	4,678	0.3
Natural gas	16,661	15,907	(1) 4.7	1,589	1,336	(2) 18.9
Gasoline	64,083	59,482	7.7	8,339	8,498	(1.9 )
Diesel	102,724	99,855	2.9	6,647	7,050	(5.7 )
Kerosene	21,845	20,162	8.3	5,710	6,116	(6.6 )

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Basic chemical feedstock	27,277	25,838	5.6	6,151	6,870	(10.5 )
Synthetic fiber monomer and polymer	6,479	6,856	(5.5 )	7,223	8,167	(11.6 )
Synthetic resin	11,584	10,696	8.3	9,684	9,631	0.6
Synthetic fiber	1,430	1,488	(3.9 )	9,436	10,356	(8.9 )
Synthetic rubber	1,205	1,346	(10.5 )	10,554	12,214	(13.6 )
Chemical fertilizer	598	1,129	(47.0 )	1,686	1,698	(0.7 )

(1)

million cubic meters

(2)

RMB per thousand cubic meters

45

#### 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 2014, the total revenue from crude oil, natural gas and other upstream products that were sold externally amounted to RMB 69.6 billion, representing an increase of 14.3% over 2013. The change was mainly due to the increase in the sales volume of crude oil and the sale volume and price of natural gas in 2014.

#### Sales of refined petroleum products

In 2014, 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 1,633.9 billion, accounting for 58.7% of our operating revenues and representing a decrease of 2.8% over 2013. The decrease was mainly because of the decline in prices and sales volumes of various petroleum products, which offset the increase in sales volumes of gasoline, diesel and kerosene. The sales revenue of gasoline, diesel and kerosene was RMB 1,342.0 billion, accounting for 82.1% of the total revenue of petroleum products and representing an increase of 0.7% over 2013. Sales revenue of other refined petroleum products was RMB 291.9 billion, accounting for 17.9% of the total revenue of petroleum products and representing a decrease of 16.0% over 2013.

#### Sales of chemical products

Our external sales revenue of chemical products was RMB 357.0 billion, accounting for 12.8% of our operating revenues and representing a decrease of 4.6% over 2013. This was mainly attributable to the price decline of chemical product which offset the sales volume increase of basic chemical feedstock and synthetic resin.

#### Revenue from corporate and others

In 2014, our corporate and others realized sales revenue of RMB 721.2 billion, accounting for 25.9% of our operating revenue and representing a slight increase of 0.5% over 2013.

#### Operating expenses

In 2014, our operating expenses were RMB 2,752.4 billion, representing a decrease of 1.1% over 2013, among which:

Purchased crude oil, products and operating supplies and expenses were RMB 2,334.4 billion, representing a decrease of 1.6% over 2013, accounting for 84.8% of the total operating expenses, of which:

- crude oil purchase expenses were RMB 837.4 billion, representing a decrease of 4.2% over 2013. In 2014, the total throughput of crude oil that was purchased externally was 177.29 million tonnes (excluding the amount processed for third parties), representing a decrease of 0.6% over 2013; the average unit processing cost for crude oil purchased externally was RMB 4,724 per tonne, representing a decrease of 3.6% over 2013; and
- other purchasing expenses were RMB 1,497.0 billion, remaining consistent with that of 2013.

Selling, general and administrative expenses totaled RMB 68.4 billion, representing a decrease of 2.2% over 2013.

Depreciation, depletion and amortization was RMB 90.1 billion, representing an increase of 10.9% over 2013. This was mainly due to the increase of expenditure on fixed assets.

Exploration expenses, including dry holes were RMB 11.0 billion, representing a decrease of 12.8% over 2013, reflecting our optimization of exploration investment, which improve the exploration efficiency and reduce exploration costs.

Personnel expenses were RMB 57.2 billion, representing an increase of 3.4% over 2013.



Taxes other than income tax were RMB 191.2 billion, representing an increase of 0.3% over 2013. This was mainly due to an increase of RMB 3.4 billion in consumption tax resulting from the increase of the consumption tax rate of petroleum products as compared with 2013, an increase of RMB 0.6 billion in city construction tax and education surcharge, and a decrease in special oil income levy by RMB 3.4 billion resulting from the decreased oil price.

Other operating expenses, net were RMB 0.2 billion.

Operating income

In 2014, our operating income was RMB 73.5 billion, representing a decrease of 24.1% over 2013.

Net finance costs

In 2014, our net finance costs were RMB 14.2 billion, representing an increase of 235.1% over 2013. This increase in finance costs was mainly attributable to (i) the net interest expenses of RMB 9.4 billion, representing an increase of RMB 0.4 billion over 2013; (ii) decrease in net foreign exchange gain of RMB 2.9 billion due to the slowdown of Renminbi appreciation in 2014; and (iii) increase of RMB 6.6 billion in the losses arising from the change in fair value of our issued convertible bonds.

Earnings before income tax

In 2014, our earnings before income tax were RMB 65.5 billion, representing a decrease of 31.1% over 2013.

Tax expense

In 2014, we recognized income tax expense of RMB 17.6 billion, representing a decrease of RMB 7.2 billion over 2013.

Net income attributable to non-controlling interests

In 2014, our net income attributable to non-controlling interests was RMB 1.5 billion, representing a decrease of RMB 2.7 billion over 2013.

Net income attributable to equity shareholders of the Company

In 2014, our net income attributable to our equity shareholders was RMB 46.5 billion, representing a decrease of 29.7% over 2013.

## 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 the 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.



	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	
	2013	2014	2015	2014	2015	2014	2015
	(RMB in billions)			(%)	(%)	(%)	(%)
<b>Exploration and production</b>							
External sales(1)	83	86	68	1.8	2.1	3.0	3.4
Inter-segment sales	159	142	71	3.0	2.2		
Total operating revenue	242	228	139	4.8	4.3		
<b>Refining</b>							
External sales(1)	200	181	126	3.8	3.8	6.4	6.2
Inter-segment sales	1,111	1,092	801	23.3	24.4		
Total operating revenue	1,311	1,273	927	27.1	28.2		
<b>Marketing and distribution</b>							
External sales(1)	1,496	1,471	1,103	31.2	33.6	52.1	54.7
Inter-segment sales	6	6	3	0.1	0.1		
Total operating revenue	1,502	1,477	1,106	31.3	33.7		
<b>Chemicals</b>							
External sales(1)	382	365	283	7.7	8.6	12.9	14.0
Inter-segment sales	56	62	43	1.3	1.3		
Total operating revenue	438	427	326	9.0	9.9		
<b>Corporate and others</b>							
External sales(1)	719	723	438	15.3	13.4	25.6	21.7
Inter-segment sales	640	587	346	12.5	10.5		
Total operating revenue	1,359	1,310	784	27.8	23.9		
Total operating revenue before inter-segment eliminations	4,852	4,715	3,282	100.0	100.0		
Elimination of inter-segment sales	(1,972 )	(1,889 )	(1,263 )				
Consolidated operating revenues	2,880	2,826	2,019			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 2014 to 2015.

	Year Ended December 31,			Change from 2014 to 2015 (%)
	2013	2014	2015	
	(RMB in billions)			
<b>Exploration and production</b>				
Total operating revenues	242	228	139	(39.1 )
Total operating expenses	(187 )	(181 )	(156 )	(13.6 )
Total operating income/(loss)	55	47	(17 )	-
<b>Refining</b>				
Total operating revenues	1,311	1,273	927	(27.2 )
Total operating expenses	(1,302 )	(1,275 )	(906 )	(29.0 )
Total operating income/(loss)	9	(2 )	21	-
<b>Marketing and distribution</b>				
Total operating revenues	1,502	1,477	1,107	(25.1 )
Total operating expenses	(1,467 )	(1,448 )	(1,078 )	(25.5 )
Total operating income/(loss)	35	29	29	-
<b>Chemicals</b>				
Total operating revenues	438	427	326	(23.7 )
Total operating expenses	(437 )	(429 )	(306 )	(28.6 )
Total operating income/(loss)	1	(2 )	20	-
<b>Corporate and others</b>				
Total operating revenues	1,359	1,310	784	(40.2 )
Total operating expenses	(1,362 )	(1,311 )	(784 )	(40.3 )
Total operating loss	(3 )	(1 )	0	-
Elimination of inter-segment income	1	2	5	-

## Exploration and Production Segment

Most of the crude oil and a 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, 2015 Compared with Year Ended December 31, 2014

In 2015, the operating revenues of this segment were RMB 138.7 billion, representing a decrease of 39.1% over 2014. This was mainly attributable to the decline of realized price of crude oil.

The segment sold 42.22 million tonnes of crude oil and 19.83 billion cubic meters of natural gas in 2015, representing a decrease of 2.6% and an increase of 10.3% over 2014, respectively. The average realized price of crude oil and natural gas were RMB 2,014 per tonne and RMB 1,535 per thousand cubic meters, respectively, representing a decrease of 48.9% and 4.0%, respectively, over 2014.

In 2015, the operating expenses of this segment were RMB 156.1 billion, representing a decrease of 13.6% over 2014. This was mainly due to:

- Special oil income levy and resources tax dropped by RMB 25.9 billion owing to the decline of crude oil price;
- By strengthening cost control, operating costs decreased by RMB 2.3 billion; and
- Depreciation, depletion and amortization increased by RMB 3.3 billion .

The lifting cost for oil and gas was RMB 780 per tonne in 2015, representing a year-on-year decrease of 3.0% over 2014. This was mainly attributable to stricter cost cutting policy put forward by the Company in respond to the decline of crude oil price.

In 2015, the operating loss of this segment was RMB 17.4 billion, representing a decrease of RMB 64.5 billion over 2014, which was primarily attributable to the sharp decline of crude oil price.

### Year Ended December 31, 2014 Compared with Year Ended December 31, 2013

In 2014, the operating revenues of this segment were RMB 227.6 billion, representing a decrease of 6.0% over 2013. This was mainly attributable to the decrease of sales price and volume of crude oil.

The segment sold 43.37 million tonnes of crude oil and 17.98 billion cubic meters of natural gas in 2014, representing a decrease of 2.0% and an increase of 5.8% over 2013, respectively. The average realized price of crude oil and natural gas were RMB 3,944 per tonne and RMB 1,599 per thousand cubic meters, respectively, representing a decrease of 6.0% and an increase of 17.6%, respectively, over 2013.

In 2014, the operating expenses of this segment were RMB 180.5 billion, representing a decrease of 3.6% over 2013. This was mainly due to:

- The exploration expenses decreased by RMB 1.6 billion over 2013, reflecting our optimization of exploration investment which improve the exploration efficiency;
-

The special oil income levy, resource tax and other taxes decreased by RMB 3.4 billion due to the decline in crude oil price;

- Other operation expenses decreased by 6.1 billion due to the decrease of raw material sales expenses which is related to the decline in sales revenue; and

- The expense of depreciation, depletion and amortization increased by RMB 4.8 billion over 2013.

The lifting cost for oil and gas was RMB 804 per tonne in 2014, representing a slight increase of 0.5% over 2013. This was primarily due to the effectiveness of our cost control.

In 2014, the operating income of this segment was RMB 47.1 billion, representing a decrease of 14.1% over 2013, which was primarily due to the decrease in crude oil price.

#### 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 petroleum 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 petroleum products to the domestic and overseas customers.

#### Year Ended December 31, 2015 Compared with Year Ended December 31, 2014

In 2015, the operating revenues of this segment were RMB 926.6 billion, representing a decrease of 27.2% over 2014. This was mainly attributable to the price decline of refined petroleum products.

The table below sets forth sales volume and average realized prices by product for 2015 and 2014, as well as the percentage changes in sales volume and average realized prices for the periods shown.

	Sales volume		Change	Average realized prices		Change
	2015	2014	from 2014 to 2015	2015	2014	from 2014 to 2015
	(thousand tonnes)		(%)	(RMB per tonne)		(%)
Gasoline	50,921	47,786	6.6	6,191	7,784	(20.5 )
Diesel	63,359	67,945	(6.7 )	4,797	6,288	(23.7 )
Kerosene	13,518	12,410	8.9	3,420	5,705	(40.0 )
Chemical feedstock	35,945	37,690	(4.6 )	2,984	5,333	(44.1 )
Other refined petroleum products	52,418	49,901	5.0	2,842	3,943	(27.9 )

In 2015, our sales revenues of gasoline were RMB 315.3 billion, representing a decrease of 15.2% over 2014; the sales revenues of diesel were RMB 303.9 billion, representing a decrease of 28.9% over 2014; the sales revenues of kerosene were RMB 46.2 billion, representing a decrease of 34.7% over 2014; the sales revenues of chemical feedstock were RMB 107.3 billion, representing a decrease of 46.6% over 2014; and the sales revenues of other refined petroleum products other than gasoline, diesel, kerosene and chemical feedstock were RMB 148.9 billion, representing a decrease of 24.3% over 2014.

The segment's operating expenses were RMB 905.7 billion in 2015, representing a decrease of 29.0% over 2014, which is mainly attributable to the decline in procurement cost of crude oil.

In 2015, the average unit cost of refining feedstock processed was RMB 2,693 per tonne, representing a decrease of 42.6% over 2014. Refining throughput were 223.43 million tonnes (excluding the volume processed for third parties), representing a decrease of 0.2% over 2014. In 2015, the total costs of refining feedstock processed were RMB 601.7 billion, representing a decrease of 42.8% over 2014.

The refining margin was RMB 318.1 per tonne in 2015, representing an increase of RMB 105.1 per tonne over 2014. This was mainly attributable to continuous decline in international crude oil price, and prices of refined petroleum products dropped less, therefore widened the price spread between raw materials and products.

In 2015, 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 167.6 per tonne, remaining flat over 2014 despite of investment in refined oil products quality upgrading.

The segment's operating income was RMB 21.0 billion in 2015, representing an increase of RMB 22.9 billion as compared with 2014. This was mainly due to the timely adjustment of refined oil product prices, tapping the Company's well established advantages in scale of refining, as well as production increase of oil products and high-value-added products for which demand was strong.



Year Ended December 31, 2014 Compared with Year Ended December 31, 2013

In 2014, the operating revenues of this segment were RMB 1,273.1 billion, representing a decrease of 2.9% over 2013. This was mainly attributable to the price decline of refined petroleum products.

The table below sets forth sales volume and average realized prices by product for 2014 and 2013, as well as the percentage changes in sales volume and average realized prices for the periods shown.

	Sales volume		Change	Average realized prices		Change
	2014	2013	from 2013 to 2014	2014	2013	from 2013 to 2014
	(thousand tonnes)		(%)	(RMB per tonne)		(%)
Gasoline	47,786	42,759	11.8	7,784	7,879	(1.2)
Diesel	67,945	72,402	(6.2)	6,288	6,571	(4.3)
Kerosene	12,410	11,944	3.9	5,705	6,116	(6.7)
Chemical feedstock	37,690	36,353	3.7	5,333	5,722	(6.8)
Other refined petroleum products	49,901	51,207	(2.6)	3,943	4,136	(4.7)

In 2014, our sales revenues of gasoline were RMB 372.0 billion, representing an increase of 10.4% over 2013; the sales revenues of diesel were RMB 427.2 billion, representing a decrease of 10.2% over 2013; the sales revenues of kerosene were RMB 70.8 billion, representing a decrease of 3.1% over 2013; the sales revenues of chemical feedstock were RMB 201.0 billion, representing a decrease of 3.4% over 2013; and the sales revenues of other refined petroleum products were RMB 196.8 billion, representing a decrease of 7.1% over 2013.

The segment's operating expenses were RMB 1,275.0 billion in 2014, representing a decrease of 2.1% over 2013, which is mainly attributable to the decline in procurement cost of crude oil.

In 2014, the average unit cost of refining feedstock processed was RMB 4,695 per tonne, representing a decrease of 3.3% over 2013. Refining throughput were 223.88 million tonnes (excluding the volume processed for third parties), representing an increase of 0.3% over 2013. In 2014, the total costs of refining feedstock processed were RMB 1,051.2 billion, representing a decrease of 3.0% over 2013.

The refining margin was RMB 213.0 per tonne in 2014, representing a decrease of RMB 48.1 per tonne over 2013. This was mainly attributable to continuous decline in international crude oil price, and the relatively long period from procurement of raw materials to sales of products which reduced the spread between raw materials and products.

In 2014, 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 165.9 per tonne, representing a decrease of 1.5% over 2013. This was mainly due to improvement of internal management and reduction of various expenses.

The segment's operating loss was RMB 2.0 billion in 2014, comparing to an operating income of RMB 8.6 billion in 2013.

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 the segment's retail distribution network, as well as providing related services.

Year Ended December 31, 2015 Compared with Year Ended December 31, 2014

In 2015, the operating revenues of this segment were RMB 1,106.7 billion, representing a decrease of 25.1% compared with 2014.

In 2015, the sales revenues of gasoline, diesel and kerosene were RMB 471.2 billion, RMB 473.4 billion and RMB 78.0 billion, representing a decrease of 12.0%, a decrease of 31.0% and a decrease of 37.5%, respectively, over 2014.

The following table sets forth the sales volumes, average realized prices and the respective rates of changes of the four major product categories in 2015 and 2014, including breakdown in retail, wholesale and distribution of gasoline and diesel.

	Sales Volume		Change from 2014 to 2015 (%)	Average Realized Prices		Change from 2014 to 2015 (%)
	2015 (thousand tonnes)	2014		2015	2014	
Gasoline	69,842	64,190	8.8	6,747	8,338	(19.1 )
Retail sale	58,211	53,003	9.8	6,996	8,585	(18.5 )
Wholesale and distribution	11,631	11,187	4.0	5,498	7,166	(23.3 )
Diesel	95,907	103,255	(7.1 )	4,936	6,648	(25.7 )
Retail sale	50,756	55,934	(9.3 )	5,490	7,029	(21.9 )
Wholesale and distribution	45,151	47,322	(4.6 )	4,314	6,196	(30.4 )
Kerosene	23,028	21,845	5.4	3,387	5,710	(40.7 )
Fuel oil	24,980	25,537	(2.2 )	2,215	4,016	(44.8 )

The operating expenses of the segment in 2015 was RMB 1,077.8 billion, representing a decrease of RMB 369.3 billion or 25.5%, over 2014, which was mainly attributable to the decrease of purchase costs as a result of price decline of oil products.

In 2015, the 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 189.2 per tonne, representing a decrease of 1.9%.

The operating income of the segment in 2015 was RMB 28.9 billion, representing a decrease of 2.0% over 2014.

Year Ended December 31, 2014 Compared with Year Ended December 31, 2013

In 2014, the operating revenues of this segment were RMB 1,476.6 billion, representing a decrease of 1.7% compared with 2013.

In 2014, the sales revenues of gasoline, diesel and kerosene were RMB 535.2 billion, RMB 686.4 billion and RMB 124.7 billion, representing an increase of 5.8%, a decrease of 3.1% and an increase of 0.8%, respectively, over 2013.

The following table sets forth the sales volumes, average realized prices and the respective rates of changes of the four major product categories in 2014 and 2013 in different forms of sales channels.

	Sales Volume		Change from 2013 to 2014 (%)	Average Realized Prices		Change from 2013 to 2014 (%)
	2014 (thousand tonnes)	2013		2014	2013	
Gasoline	64,190	59,523	7.8	8,338	8,498	(1.9 )
Retail sale	53,003	49,733	6.6	8,585	8,690	(1.2 )
Wholesale and distribution	11,187	9,791	14.3	7,166	7,524	(4.8 )
Diesel	103,255	100,477	2.8	6,648	7,049	(5.7 )
Retail sale	55,934	58,148	(3.8 )	7,029	7,325	(4.0 )

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Wholesale and distribution	47,322	42,328	11.8	6,196	6,671	(7.1 )
Kerosene	21,845	20,232	8.0	5,710	6,116	(6.6 )
Fuel oil	25,537	33,100	(22.8 )	4,016	4,333	(7.3 )

The operating expenses of the segment in 2014 was RMB 1,447.2 billion, representing a decrease of RMB 20.1 billion or 1.4%, over 2013, which was mainly attributable to the decrease of purchase costs as a result of price decline of oil products.

In 2014, the 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 192.8 per tonne, representing a decrease of 1.7%.

The operating income of the segment in 2014 was RMB 29.4 billion, representing a decrease of 16.2% over 2013, mainly attributable to 11 consecutive price cuts of domestic refined oil products in the second half of 2014, which consumed the high-cost inventory.

### Chemicals Segment

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

#### Year Ended December 31, 2015 Compared with Year Ended December 31, 2014

The operating revenues of the chemicals segment in 2015 were RMB 326.3 billion, representing a decrease of 23.7% over 2014, which was mainly attributable to the decrease in prices of chemical products, partly offset by the volume increase of basic organic chemicals and synthetic resin.

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 2015 were approximately RMB 309.6 billion, representing a decrease of 23.6% compared with 2014, accounting for 94.9% 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 2014 to 2015.

	Sales Volume		Change from 2014 to 2015 (%)	Average Realized Prices		Change from 2014 to 2015 (%)
	2015 (thousand tonnes)	2014		2015 (RMB per tonne)	2014	
Basic organic chemicals	38,903	35,788	8.7	4,121	6,118	(32.6 )
Synthetic fiber monomers and polymers	6,083	6,496	(6.4 )	5,797	7,220	(19.7 )
Synthetic resins	11,993	11,603	3.4	7,771	9,679	(19.7 )
Synthetic fiber	1,380	1,430	(3.5 )	7,739	9,436	(18.0 )
Synthetic rubber	1,107	1,207	(8.3 )	8,769	10,549	(16.9 )
Chemical fertilizer	243	598	(59.4 )	1,823	1,686	8.1

The operating expenses of this segment in 2015 were RMB 306.6 billion, representing a decrease of 28.6% over 2014. This was mainly attributable to the decline in chemical feedstock prices which resulted in the decrease in raw material costs by RMB 115.2 billion or 32.6% over 2014 as the crude oil prices dropped.

In 2015, the operating income of this segment was RMB 19.7 billion, representing an increase of RMB 21.9 billion as compared with 2014. This was mainly due to the increasing competitiveness of naphtha-based chemical and preferable product margin as feedstock costs lowered.

#### Year Ended December 31, 2014 Compared with Year Ended December 31, 2013

The operating revenues of the chemicals segment in 2014 were RMB 427.5 billion, representing a decrease of 2.3% over 2013, which was mainly attributable to the decrease in prices 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 2014 were approximately RMB 405.4 billion, representing a decrease of 2.6% compared with 2013, accounting for 94.8% 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 2013 to 2014.

	Sales Volume		Change	Average Realized Prices		Change
	2014	2013	from 2013 to 2014	2014	2013	from 2013 to 2014
	(thousand tonnes)		(%)	(RMB per tonne)		(%)
Basic organic chemicals	35,788	32,971	8.5	6,118	6,764	(9.6 )
Synthetic fiber monomers and polymers	6,496	6,883	(5.6 )	7,220	8,161	(11.5 )
Synthetic resins	11,603	10,700	8.4	9,679	9,631	0.5
Synthetic fiber	1,430	1,488	(3.9 )	9,436	10,356	(8.9 )
Synthetic rubber	1,207	1,349	(10.5 )	10,549	12,203	(13.6 )
Chemical fertilizer	598	1,129	(47.0 )	1,686	1,698	(0.7 )

The operating expenses of this segment in 2014 were RMB 429.7 billion, representing a decrease of 1.6% over 2013. This was mainly attributable to the decline in chemical feedstock prices which resulted in the decrease in raw material costs by RMB 12.1 billion or 3.3% over 2013.

In 2014, the operating loss of this segment was RMB 2.2 billion, compared with an operating profit of RMB 0.9 billion in 2013.

#### 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, 2015 Compared with Year Ended December 31, 2014

In 2015, the operating revenue generated from corporate and others was RMB 783.9 billion, among which the sales revenues realized by subsidiaries such as trading companies were RMB 779.3 billion, representing decrease of 40.2% over 2014, which was mainly attributable to the decrease in trading incomes caused by price drop of crude oil.

In 2015, the operating expenses of this segment was RMB 783.5 billion, among which operating expenses realized by subsidiaries such as trading companies were RMB 775.5 billion, representing a decrease of 40.3% over 2014.

In 2015, the operating income of this segment was RMB 0.4 billion, among which the operating profit realized by subsidiaries such as trading companies was RMB 3.8 billion.

#### Year Ended December 31, 2014 Compared with Year Ended December 31, 2013

In 2014, the operating revenue generated from corporate and others was RMB 1,310.2 billion, representing decrease of 3.6% over 2013, which was mainly attributable to the decrease in trading price of crude oil and refined oil products caused by the price cut of international crude oil. This includes operating revenue of RMB 1,306.1 billion from trading companies.

In 2014, the operating expenses of this segment was RMB 1,311.3 billion, representing a decrease of 3.8% over 2013. This includes the operating expense of RMB 1,304.3 billion from trading companies.

In 2014, the operating loss of this segment was RMB 1.1 billion. This includes operating profit of RMB 1.8 billion from trading companies.

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.



The following table sets forth a summary of our consolidated statements of cash flow data for the years ended December 31, 2013, 2014 and 2015.

Statement of cash flow data	Year Ended December 31,		
	2015	2014	2013
	(RMB in millions)		
Net cash generated from operating activities	165,818	148,347	151,893
Net cash used in investing activities	(116,952 )	(132,633 )	(178,740 )
Net cash generated from/(used in) financing activities	9,310	(21,421 )	31,519
Net increase/(decrease) in cash and cash equivalents	58,176	(5,707 )	4,672

The net cash generated from our operating activities in 2015 was RMB 165.8 billion, representing an increase of RMB 17.5 billion over 2014, which was mainly due to the improvement in capital management over the same period of 2014.

The net cash generated from our operating activities in 2014 was RMB 148.3 billion, representing decrease of RMB 3.6 billion over 2013, which was mainly due to the decrease in profit before taxation and improvement on working capital.

The net cash generated from our operating activities in 2013 was RMB 151.9 billion, representing an increase of RMB 9.5 billion over 2012, which was mainly due to the increase in pre-tax profit, depreciation, depletion and amortization for the same period.

The net cash used in our investing activities in 2015 was RMB 117.0 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 our investing activities in 2014 was RMB 132.6 billion, representing a decrease of RMB 46.1 billion over 2013, which was mainly due to our control on investment activities, of which capital expenditure and exploration expenses decreased by RMB 30.6 billion and oversea acquisitions and investments in associates and joint ventures decreased by RMB 17.1 billion, compared with 2013.

The net cash used in our investing activities in 2013 was RMB 178.7 billion, representing an increase of RMB 16.5 billion over 2012, which was mainly due to the acquisition of equity interests in CIR, Taihu and Mansarovar.

The net cash inflow generated from our financing activities in 2015 was RMB 9.3 billion, representing an increase of RMB 30.7 billion over 2014. This reflected: (i) the completion of capital injection to Sinopec Marketing Co.; and (ii) the repayment of high interest bearing debts.

The net cash outflow used in our financing activities in 2014 was RMB 21.4 billion, representing a decrease of RMB 52.9 billion over 2013. This reflected: (i) proceeds from issuing shares decreased by RMB 19.4 billion; (ii) contributions to subsidiaries from non-controlling shareholders decreased by RMB 8.6 billion and (iii) interest bearing debt financing decreased by RMB 23.5 billion.

The net cash inflow generated from our financing activities in 2013 was RMB 31.5 billion, representing an increase of RMB 25.9 billion over 2012. This reflected: (i) increase of cash inflow of RMB 19.4 billion as a result of our H share placement and issuance; (ii) increase of cash inflow of RMB 11.2 billion as a result of non-controlling shareholder's investments, among which Sinopec International Petroleum Exploration and Development Co., Ltd. and Sinopec Kantons Holdings Co., Ltd. received RMB 9.2 billion and RMB 2.1 billion, respectively; and (iii) decrease of cash inflow of RMB 4.3 billion from interest-bearing debt financing against 2012.

In respect of our debts and borrowings, due to continuing improvement of our cash flow and receipt of proceeds from sales and investment, we decreased our debts to RMB 255.2 billion at the end of 2015 from RMB 329.1 billion from the beginning of 2015. Our short-term debts decreased by RMB 62.7 billion from the beginning of 2015, and the proportion of short term debts in our total debts decreased to 45.24% from 54.14% at the beginning of 2015. Our long-term debts decreased by RMB 11.2 billion from the beginning of 2015, reflecting the conversion to equity of our issued convertible bonds and prepayment of long-term debt, and the proportion of long term debts in our total debts increased to 54.76% from 45.86% at the beginning of 2015. 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.

## 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, 2015.

	As of December 31, 2015				
	Total	less than 1 year	1-3 years	4-5 years	After 5 years
	(RMB in millions)				
<b>Contractual obligations(1)</b>					
Short-term debt	116,645	116,645	-	-	-
Long-term debt	155,767	4,017	76,461	15,611	59,678
<b>Total contractual obligations</b>	<b>272,412</b>	<b>120,662</b>	<b>76,461</b>	<b>15,611</b>	<b>59,678</b>
<b>Other commercial commitments</b>					
Operating lease commitments	350,022	13,737	26,464	25,521	284,300
Capital commitments	160,060	113,017	47,043	-	-
Exploration and production licenses	1,317	283	157	43	834
Guarantees(2)	6,713	6,713	-	-	-
<b>Total commercial commitments</b>	<b>518,112</b>	<b>133,750</b>	<b>73,664</b>	<b>25,564</b>	<b>285,134</b>

(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, 2015, we have not entered into any off-balance sheet arrangements other than guarantees given to banks in respect of banking facilities granted to certain parties. As of December 31, 2015, the maximum amount of potential future payments under the guarantees was RMB 6.7 billion. See Note 29 to the consolidated financial statements for further information of the guarantees.

## Historical and Planned Capital Expenditure

The following table sets forth our capital expenditure by segment for the years of 2013, 2014 and 2015 and the capital expenditure in each segment as a percentage of our total capital expenditure for such year.

	2013		2014		2015		Total	
	RMB	Percent	RMB	Percent	RMB	Percent	RMB	Percent
	(in billions, except percentage data)							
Exploration and production	105.31	56.88%	80.20	51.86%	54.71	48.74%	240.22	53.14%
Refining	26.06	14.08%	27.96	18.08%	15.13	13.48%	69.15	15.30%
Marketing and distribution	29.49	15.93%	26.99	17.45%	22.12	19.71%	78.60	17.39%
Chemicals	19.19	10.37%	15.85	10.25%	17.47	15.56%	52.51	11.61%
Corporate and others	5.08	2.74%	3.65	2.36%	2.82	2.51%	11.55	2.56%
<b>Capital Expenditure</b>	<b>185.13</b>	<b>100.00%</b>	<b>154.64</b>	<b>100.00%</b>	<b>112.25</b>	<b>100.00%</b>	<b>452.03</b>	<b>100%</b>

In 2015, we focused on the quality and yield of our investments and continued to optimize our investment projects. Our capital expenditure amounted to RMB 112.249 billion, representing a decrease of 27.4% over 2014, among which:

- Exploration and production. RMB 54.710 billion, representing a decrease of 27.4% over 2014, was used mainly for domestic exploration and production, development of Fuling shale gas field (First Phase), actively carrying out the construction of the liquefied natural gas terminal projects in Guangxi and Tianjin, and construction of long-distance gas pipelines such as the Jinan-Qingdao gas pipeline (Second Phase), as well as for overseas projects.
- Refining. RMB 15.132 billion, representing a decrease of 45.9% over 2014, was used mainly for gasoline and diesel quality upgrading projects and refinery revamping.

- Marketing and distribution. RMB 22.115 billion, representing a decrease of 18.1% over 2014, was used for revamping service stations and building oil product pipelines, oil depots and storage facilities, as well as for hazard rectification and vapor recovery facilities.
- Chemicals. RMB 17.471 billion, representing an increase of 27.4% over 2014, was spent in this segment for equity acquisition in Sibur Holding, the East Ningxia and Zhongtian Synergetic coal chemical projects, and the Zhenhai ethylene revamping project.
  - Corporate and others. RMB 2.821 billion, representing a decrease of 22.7% over 2014, was used for research and development and construction of information systems.

In 2016, we will continue to focus on improving growth quality and efficiency, implement strict investment management procedures in arranging investments and organizing construction project. The total planned capital expenditure in 2016 amounts to RMB 100.4 billion, including:

- Exploration and production. The planned capital expenditure in 2016 for this segment is approximately RMB 47.9 billion, with the aim to prioritize our domestic oil and gas exploration projects, development projects in the Fuling shale gas field (Second Phase), the Pingbei and Huangyan gas field and the Daniudi gas field, and to facilitate the first-phase pressure boosting project to transport gas from Sichuan to Eastern China.
- Refining. The planned capital expenditure in 2016 for this segment is RMB 19.5 billion. We expect to focus on revamping the Zhenhai and Maoming refineries as well as oil product quality upgrade projects.
- Marketing and distribution. The planned capital expenditure in 2016 for this segment is RMB 17.9 billion. We expect to focus on the construction and renovation of services stations, improvement of the pipeline network and building non-fuel business facilities that promote integrated services.
- Chemicals. The planned capital expenditure in 2016 for this segment is RMB 10.8 billion. We expect to focus on construction of the Zhongtian Synergetic coal chemical project, the Jinling propylene oxide and LPG project, and the Maoming ethylene oxide project.
  - Corporate and others. The planned capital expenditure in 2016 for this segment is RMB 4.3 billion. We expect to focus on research and development and information technology projects.

#### Research and Development

Our expenditures for the research and development were RMB 6.34 billion in 2013, RMB 5.62 billion in 2014, and RMB 5.65 billion in 2015.

#### Consumer Price Index

According to the data provided by the National Bureau of Statistics, the consumer price index in the PRC increased by 1.4% in 2015, compared with an increase of 2.0% in 2014 and an increase of 2.6% in 2013. According to China's official analysis, the inflation in the PRC during 2015 was due to the increase in prices of food and services. Inflation has not had a significant impact on our results of operations in 2015.

#### 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 2015.

Name	Age	Positions with Sinopec Corp.
Wang Yupu	59	Chairman
Li Chunguang	60	Director, President
Zhang Jianhua	51	Director, Senior Vice President

Name	Age	Positions with Sinopec Corp.
Wang Zhigang	58	Director, Senior Vice President
Dai Houliang	52	Director, Senior Vice President
Zhang Haichao	58	Director, Senior Vice President
Jiao Fangzheng	53	Director, Senior Vice President
Ma Yongsheng	54	Director, Senior Vice President
Jiang Xiaoming	62	Independent Non-executive Director
Andrew Y. Yan	58	Independent Non-executive Director
Tang Min	62	Independent Non-executive Director
Fan Gang	61	Independent Non-executive Director

Wang Yupu, aged 59, Chairman of Board of Directors of Sinopec Corp. Mr. Wang is a professor level senior engineer with a Ph.D. degree and an academician of the Chinese Academy of Engineering. In October 2000, he was appointed as Director, Deputy General Manager of Daqing Oilfield Company Limited; in December 2003, he was appointed as Chairman and General Manager of Daqing Oilfield Company Limited; in March 2008, he was appointed as Chairman and General Manager (Director-General) of Daqing Oilfield Company Limited (Daqing Petroleum Administration Bureau); in August 2009, he was appointed as Vice Governor of the People's Government of Heilongjiang Province. In July 2010, he was elected as Secretary of the Party Leadership Group, Vice Chairman, and First Secretary of the Secretariat of All China Federation of Trade Unions; in March 2013, he was appointed as Deputy Secretary of the Party Leadership Group (Minister Level) of the Chinese Academy of Engineering; in June 2014, he was appointed as Deputy Secretary of the Party Leadership Group and Vice President (Minister Level) of the Chinese Academy of Engineering. In April 2015, Mr. Wang acts as Chairman and Secretary of the Party Leadership Group of China Petrochemical Corporation. Mr. Wang is an Alternate Member of the 17th CPC Central Committee and a Member of the 18th CPC Central Committee. In May 2015, Mr. Wang was appointed as Chairman of Board of Directors of Sinopec Corp.

Li Chunguang, aged 60, Board Director and President of Sinopec Corp. and Vice President of China Petrochemical Corporation. Mr. Li is a professor level senior engineer with a university diploma. In August 1991, he was appointed as Vice President of Sinopec Sales Company North China Branch; in October 1995, he was appointed as Vice President of Sinopec Sales Company; in June 2001, he was appointed as President of Sinopec Sales Co., Ltd.; in December 2001, he was appointed as Director General of Oil Product Sales Department of Sinopec Corp.; in April 2002 he was elected as Chairman of Board of Directors and President of Sinopec Sales Co., Ltd.; in April 2003, he was appointed as Vice President of Sinopec Corp.; in November 2005, he was appointed as Vice President of China Petrochemical Corporation; in May 2009, he was elected as Board Director of Sinopec Corp.; in May 2013, he was elected as Board Director and President of Sinopec Corp.

Zhang Jianhua, aged 51, Board Director and Senior Vice President of Sinopec Corp. Mr. Zhang is a professor level senior engineer with a Ph.D. degree. In April 1999, he was appointed as Vice President of Shanghai Gaoqiao Petrochemical Company of China Petrochemical Corporation; in February 2000, he was appointed as Vice President of Sinopec Shanghai Gaoqiao Company; in September 2000, he was appointed as President of Sinopec Shanghai Gaoqiao Company; in April 2003, he was appointed as Vice President of Sinopec Corp.; in November 2003, he was appointed concurrently as Director General of Production and Operation Management Department of Sinopec Corp.; in March 2005, he was appointed as Senior Vice President of Sinopec Corp.; in June 2007, he was appointed concurrently as Chairman of Sinopec (Hong Kong) Co., Ltd; in October 2014, he was appointed concurrently as Chairman of Sinopec Engineering (Group) Co.,Ltd; and in May 2006, he was elected as Board Director and appointed

as Senior Vice President of Sinopec Corp.

Wang Zhigang, aged 58, Board 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 CPC Leading 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 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 Board Director and appointed as Senior Vice President of Sinopec Corp.

Dai Houliang, aged 52, Board Director and Senior Vice President of Sinopec Corp. Mr. Dai is a professor level senior engineer with a Ph.D. degree. In December 1997, he was appointed as Vice President of Yangzi Petrochemical Corporation; in April 1998, he served as Board 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 Board 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 Board Director, Senior Vice President and CFO of Sinopec Corp.; in August 2008, he was concurrently appointed as the Chairman of Petro-Cyberworks Information Technology Co., Ltd. (PCITC) and Sinopec Technology Development Company; 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 Board Director and appointed as Senior Vice President of Sinopec Corp.

Zhang Haichao, aged 58, Board 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 CPC Committee, 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 Vice President of China Petrochemical Corporation; and in May 2015, he was elected as Board Director and Senior Vice President of Sinopec Corp.

Jiao Fangzheng, aged 53, Board 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 Vice President of China Petrochemical Corporation; in September 2014, he was elected concurrently as Chairman of Board of Directors of Sinopec Oilfield Service Co. Ltd and Vice Chairman of Board of Directors of Sinopec International Petroleum Exploration and Production Corporation; and in May 2015, he was elected as Board Director and Senior Vice President of Sinopec Corp.

Ma Yongsheng, aged 54, Board 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. In April 2002, he was appointed as Chief Geologist of Sinopec Southern Exploration and Production Branch; in April 2006, he was appointed as Executive Deputy Manager (presiding over the work), Chief Geologist of Sinopec Southern Exploration and Production Branch; in January 2007, he was appointed as Manager and Party Secretary of Sinopec Southern Exploration and Production Branch; in March 2007, he served as General Manager and Deputy Party Secretary of Sinopec Exploration Branch; 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 Branch; 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 February 2016, he was elected as Board Director of Sinopec Corp., and in December 2015, he served as Vice President of China

Petrochemical Corporation and appointed as Senior Vice President of Sinopec Corp.

Jiang Xiaoming, aged 62, Independent Non-executive Director of Sinopec Corp. Mr. Jiang has a doctorate in economics. Presently, he acts as the member of the national committee of CPPCC, director of China Foundation for Disabled Persons, 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 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 Co., Ltd. From May 2012 to the present, he has acted as Independent Non-executive Director of Sinopec Corp.

Andrew Y. Yan, aged 58, Independent Non-executive 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, CPMC Holdings Limited and Cogobuy Group, the Non-executive Director of Digital China Holdings Limited, 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, TCL Group and Sky Solar Holdings Ltd.; and the Director of ATA Co., Ltd. From 1989 to 1994, he acted as the Economist of the World Bank headquarters in Washington, Senior 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. And from May 2012 to the present, he has acted as Independent Non-executive Director of Sinopec Corp.

Tang Min, aged 62, Independent Non-executive Director of Sinopec Corp. Mr. Tang has a doctorate 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. He has served as the 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 Non-executive Director of Sinopec Corp.

Fan Gang, aged 61, Independent Non-executive Director of Sinopec Corp. Mr. Fan has a doctorate in economics. He presently acts as Vice President of China Society of Economic Reform, President of China Reform Foundation, Head of the National Economic Research Institution, 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 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 Non-executive 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 2015.

Name	Age	Position with the Company
Liu Yun	59	Chairman of the Board of Supervisors
Liu Zhongyun	52	Supervisor
Zhou Hengyou	52	Supervisor
Zou Huiping	55	Supervisor
Jiang Zhenying	51	Employee Representative Supervisor
Yu Renming	52	

		Employee Representative Supervisor
Wang Yajun	58	Employee Representative Supervisor

Liu Yun, aged 59, Chairman of the Board of Supervisors of Sinopec Corp. Mr. Liu is a professor level senior accountant with a master degree. In December 1998, he was appointed as Deputy Director General of Finance Department of China Petrochemical Corporation; in February 2000, he was appointed as Deputy Director General of Finance Department of Sinopec Corp.; in January 2001, he was appointed as Director General of Finance Department of Sinopec Corp.; in June 2006, he was appointed as Deputy CFO of Sinopec Corp.; in February 2009, he was appointed as Chief Accountant of China Petrochemical Corporation; in May 2009, he was elected as a Director of Sinopec Corp.; in May 2012, he was appointed concurrently as the Chairman of Sinopec Finance Co., Ltd.; in September 2013, he was appointed concurrently as Chairman of Sinopec Insurance Co., Ltd.; and in May 2015, he was elected as Chairman of the Board of Supervisors of Sinopec Corp.

Liu Zhongyun, aged 52, Supervisor of Sinopec Corp. Mr. Liu is a professor level senior engineer with a doctorate 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.

Zhou Hengyou, aged 52, Supervisor of Sinopec Corp. Mr. Zhou is a professor level senior administration engineer and a postgraduate. 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 Supervisory 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 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 55, 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.

Jiang Zhenying, aged 51, 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 Security Management Department of Sinopec Corp.; and in December 2010, he was elected as the Employee's Representative Supervisor of Sinopec Corp.

Yu Renming, aged 52, 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; and in December 2010, he was elected as Employee's Representative Supervisor of Sinopec Corp.

Wang Yajun, aged 58, Employee's Representative Supervisor of Sinopec Corp. Mr. Wang is a professor level senior administration engineer with a university diploma. In December 2004, he was appointed as Vice Secretary of CPC committee, Secretary of Discipline Inspection Committee and Labour Union Chairman of Zhongyuan Petroleum Exploration Bureau of China Petrochemical Corporation. In November 2010, he was appointed as Party Secretary of CPC committee, of Zhongyuan Petroleum Exploration Bureau. In March 2015, Mr. Wang was appointed as Secretary of CPC of China Sinopec International Petroleum Exploration and Development Co., Ltd; and in May 2015, he was elected as Employee's Representative Supervisor of Sinopec Corp.

## Other Executive Officers

Name	Age	Positions with Sinopec Corp.
Jiang Zhenghong	54	Vice President
Ling Yiqun	53	Vice President
Huang Wensheng	49	Secretary of the Board of Directors/Vice President
Chang Zhenyong	57	Vice President
Wen Dongfen	51	CFO
Lei Dianwu	53	Vice President

Jiang Zhenghong, aged 54, Vice President of Sinopec Corp. Mr. Jiang is a professor level senior economist with a doctor degree. In September 2000, he became Vice President of Shanghai Gaoqiao Petrochemical Co., Ltd. and Sinopec Shanghai Gaoqiao Company; in September 2001, he was appointed as President of Shanghai Gaoqiao Petrochemical Co., Ltd.; in April 2006, he was appointed as Secretary of CPC Committee and Vice President of Sinopec Zhenhai Refining & Chemical Company; in September 2006, he was appointed as Secretary of CPC Committee and Vice President of Zhenhai subsidiary of China Petrochemical Corporation; in March 2008, he was promoted to President and Secretary of CPC Committee of Sinopec Zhenhai Refining & Chemical Company; in July 2010, he was appointed as President and Deputy Secretary of CPC Committee of Sinopec Zhenhai Refining & Chemical Company; in August 2013, he was appointed as the Director General of Sinopec Corporate Reform Dept.; in September 2013, he was appointed as Vice President of Sinopec Corp.

Ling Yiqun, aged 53, Vice President of Sinopec Corp. Mr. Ling is a professor level senior engineer with a master 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 General Director of Refining Department of Sinopec Corp.; in June 2003, he was appointed as the Director General of Refining Department 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 July 2010, he was appointed as Vice President of Sinopec Corp.

Huang Wensheng, aged 49, 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 57, 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 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.

Wen Dongfen, aged 51, Chief Financial Officer of Sinopec Corp. Ms. Wen is a professor level senior accountant with a university diploma. In December 2001, she was appointed as Deputy Director General of the Finance & Planning Department of China Petrochemical Corporation; in May 2008, she was appointed as Deputy Director General of the Finance Department of China Petrochemical Corporation; in March 2009, she was promoted to Director General of the Finance Department of China Petrochemical Corporation; between May 2012 and November 2015, she concurrently served as Chairman of Sinopec Century Bright Capital Investment Limited and in November 2015, she was appointed as Director General of the Finance Department of Sinopec Corp. Ms. Wen now concurrently serves as Director of Sinopec Shanghai Engineering Co. Ltd., Sinopec International Petroleum Exploration and Production Corporation and Sinopec Insurance Co., Ltd. She also concurrently serves as the Supervisor of Sinopec Oilfield Service Corporation, Vice Chairman



of Sinopec Finance Company Limited and Director of Sunshine Insurance Group. In December 2015, she was appointed as Chief Financial Officer of Sinopec Corp.

Lei Dianwu, aged 53, 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 their remuneration in the form of basic salary and performance rewards.

The following table sets forth the compensation on individual basis for our directors, supervisors and executive officers who received compensation from us in 2015.

Name	Position with the Company	Remuneration paid by the Company in 2015 (RMB in thousands)
<b>Directors</b>		
Wang Yupu	Chairman	—
Li Chunguang	Director, President	525.5
Zhang Jianhua	Director, Senior Vice President	489.4
Wang Zhigang	Director, Senior Vice President	488.9
Dai Houliang	Director, Senior Vice President	485.9
Zhang Haichao	Director, Senior Vice President	—
Jiao Fangzheng	Director, Senior Vice President	—
Ma Yongsheng	Director, Senior Vice President	—
Jiang Xiaoming	Independent Non-executive Director	300.0
Andrew Y. Yan	Independent Non-executive Director	300.0
Tang Min	Independent Non-executive Director	175.0
Fan Gang	Independent Non-executive Director	175.0
<b>Supervisors</b>		
Liu Yun	Chairman of the Board of Supervisors	—
Liu Zhongyun	Supervisor	—
Zhou Hengyou	Supervisor	—
Zou Huiping	Supervisor	551.9
Jiang Zhenying	Employee Representative Supervisor	551.9

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Yu Renming	Employee Representative Supervisor	551.9
Wang Yajun	Employee Representative Supervisor	257.9
Other Executive officers		
Jiang Zhenghong	Vice President	643.4
Ling Yiqun	Vice President	647.1
Huang Wensheng	Secretary of the Board of Directors/Vice President	622.4
Chang Zhenyong	Vice President	622.4
Wen Dongfen	CFO	42.9
Lei Dianwu	Vice President	647.1

C. BOARD PRACTICE

We have twelve 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;
- 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 internal control 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 strategic committee are to conduct research and put forward proposals on the long-term development strategy and significant investments.

The members of our strategic committee are Wang Yupu, Li Chunguang, Zhang Jianhua, Wang Zhigang, Dai Houliang, Zhang Haichao, Jiao Fangzheng, Andrew Y. Yan and Fan Gang.

The main responsibilities of the remuneration and evaluation committee include:

- to research on evaluation criteria for directors and the president, to conduct their evaluations and make necessary suggestions; and
- to research on and review the policies and scheme in respect of the remuneration of directors, supervisors and executive officers, and make necessary suggestions.

The members of our remuneration and evaluation committee are Fan Gang, Li Chunguang 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 Wang Yupu, Li Chunguang 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.

D. EMPLOYEES

As of December 31, 2013, 2014 and 2015, we had approximately 368,953, 358,571 and 351,019 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, 2015.

By Segment	Number of Employees	Percentage of Total Number of Employees (%)
Exploration and production	143,441	41
Refining	74,458	21
Marketing and distribution	56,679	16
Chemicals	65,689	19
Corporate and others	10,752	3
Total	351,019	100

By Employee's Scope of Work	Number of Employees	Percentage of Total Number of Employees (%)
Production	171,570	49
Sales	47,435	13
Technical	51,165	15
Finance	15,272	4
Administration	28,080	8
Others	37,497	11
Total	351,019	100

By Education	Number of Employees	Percentage of Total Number of Employees (%)
Master's degree and above	14,576	4
University	94,303	27
Junior college	78,246	22
Technical secondary school	25,847	8
Senior high school and technical school degree or below	138,047	39
Total	351,019	100

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

We have trade unions that protect employee rights, organize educational programs, assist in the fulfillment of economic objectives, encourage employee participation in management decisions, and assist 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.

As of December 31, 2015, a total of 208,061 employees have retired and all of them were participants in the basic pension schemes administered by provincial (autonomous region or municipalities) governments. Government-administered pension schemes are responsible for the payments of basic pensions.

#### E.

#### SHARE OWNERSHIP

As of December 31, 2015, 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 13, 2016.

Shareholder	Number of Shares	
	Owned (in millions)	Percentage of Ownership (%)
Sinopec Group Company	85,793	70.86
HKSCC Nominees Limited(1)	25,374	20.96

(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 13, 2016, 1,074,850,200 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 13, 2016, 10,748,502 ADSs, representing 1,074,850,200 H shares, were held of record by Cede & Co. and 40 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. 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, Sinopec Group Company will dispose its minor remaining chemicals business by April 2019 in order to avoid the competition with us with regard to the chemicals business; and third, 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 70.86% of our outstanding equity as of April 13, 2016. 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.

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 and April 16, 2014 respectively, and under the heading "Item 4 – Information on the Company – History and Development of the Company" of this annual report.

In 2010, we acquired a 55% equity interest of SSI from Sinopec Overseas Oil & Gas Limited (SOOGL), a subsidiary of Sinopec Group Company for a cash consideration of US\$1.678 billion. SSI holds a 50% interest in Angola Block 18.

In 2013, we acquired, through a joint venture, owned by Sinopec Group Company and us on an equal basis, from Sinopec Group Company (i) 50% interest in CIR, (ii) 49% interest in Taihu, and (iii) 50% interest in Mansarovar, for a cash consideration of US\$2.711 billion in the aggregate.

In September 2014, in connection with our plan to spin off Yizheng Chemical, we acquired all of Yizheng Chemical's assets and liabilities. As consideration, our 40.25% equity interest in Yizheng Chemical was repurchased and cancelled by Yizheng Chemical. Subsequently, through a series of inter-group company restructuring steps, Yizheng Chemical was spun off from us in December 2014. In the same year, SOI and SCC, two of our wholly-owned subsidiaries, entered into acquisition agreements with two subsidiaries of Sinopec Group Company, pursuant to which SOI and SCC acquired 99% and 1% membership interests in COOP, respectively, from the two subsidiaries of Sinopec Group Company



with an aggregate consideration of US\$562 million. Upon completion of the acquisition, we indirectly held 100% interest in COOP, which holds 37.5% interest in YASREF.

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 Sinopec Assets Management Corporation (SAMC, a wholly-owned subsidiary of Sinopec Group Company) in relation to the formation of the Sinopec Shanghai Gaoqiao Petrochemical Company Limited (Gaoqiao Petrochemical Co.). We and SAMC subscribed 55% and 45% of the registered capital of Gaoqiao Petrochemical Co. 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 (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, 2015, please also see Note 30 of our consolidated financial statements included elsewhere in this annual report for a detailed discussion of our related party transactions.

In 2015, we provided RMB 6.89 billion of loans to certain affiliates of Sinopec Group Company. In addition, we repaid loans with a net amount of RMB 57.88 billion to certain affiliates of Sinopec Group Company in 2015.

The aggregate amount of related party transactions we incurred during 2015 was RMB 190.867 billion, of which, expenses amounted to RMB 112.449 billion (including RMB 93.421 billion of purchase of goods and services (including procurement, storage and transportation, exploration and production and production related services), representing 5.73% of the aggregate amount of similar transactions, RMB 6.754 billion of auxiliary and social services, RMB 0.462 billion and 10.618 billion of house and land operating lease charges, respectively, and RMB 1.194 billion of interest expenses), and revenues amounted to RMB 78.418 billion (including RMB 78.184 billion of sales of goods, RMB 0.207 billion of interest income and RMB 0.027 billion of agency commission receivable), representing 3.88% of the aggregate amount of similar transactions.

The amounts of the aforementioned continuing related party transactions with Sinopec Group Company did not exceed the upper limit as approved our by shareholders' meetings and board meetings.

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.

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## 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.

## 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 fifth meeting of the sixth session of our board, our board approved the proposal to distribute a final cash dividend of RMB 0.06 (including tax) per ordinary share, combining with an interim distributed dividend of RMB 0.09 (including tax) per ordinary share, the total dividend for 2015 is RMB 0.15 (including tax) per ordinary 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 February 14, 2013, we completed a placing of an aggregate of 2,845,234,000 new H shares at a price of HK\$8.45 per share. The net proceeds from such placing are HK\$23.97 billion.

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 2016 (as of April 13, 2016)		5.42	5.21	70.34	69.24	5.14	4.69
	Past 6 months	(HK dollar per H share)		(US dollar per ADS)		(RMB per A share)	
2016	March	5.09	4.54	65.15	60.02	4.76	4.41
2016	February	4.43	4.10	57.89	52.26	4.50	4.27
2016	January	4.68	3.88	59.98	49.82	4.96	4.28
2015	December	4.95	4.35	63.64	55.73	5.14	4.83
2015	November	5.69	4.75	73.61	61.61	5.39	4.90
2015	October	5.81	4.71	75.39	62.07	5.21	4.74
Quarterly Data							
2016	First Quarter						
2015	F o u r t h Quarter	5.81	4.35	75.39	55.73	5.39	4.74
	Third Quarter	6.69	4.48	84.32	59.37	7.47	4.49
	S e c o n d Quarter	7.63	6.19	96.41	80.20	8.67	6.45
	First Quarter	6.53	6.01	83.80	76.93	7.18	5.68
2014	F o u r t h Quarter	6.80	5.93	87.79	76.12	6.56	5.02
	Third Quarter	8.18	6.80	105.28	87.30	5.74	4.89
	S e c o n d Quarter	7.49	6.64	97.43	86.45	5.44	4.49
	First Quarter	7.06	5.74	90.21	74.53	5.41	4.38
Annual Data							
2015							
2014		8.18	5.74	105.28	74.53	6.56	4.38
2013		7.26	5.08	94.36	65.95	5.94	4.10
2012		9.63	6.43	124.95	82.69	7.86	5.80
2011		8.75	6.45	111.89	83.21	9.27	6.86

Source: Bloomberg

ITEM 10.

ADDITIONAL INFORMATION

A.

SHARE CAPITAL

Not applicable.

B.

MEMORANDUM AND ARTICLES OF ASSOCIATION

The following is a summary of certain provisions of our articles of association and its appendices, as amended, the Company Law of the PRC (2006) and certain other applicable laws and regulations of the PRC. You and your advisors should refer to the text of our articles of association, as amended, and to the texts of applicable laws and regulations for further information.

## Objects and Purposes

We are a joint stock limited company established in accordance with the Company Law and certain other laws and regulations of the PRC. We are registered with the PRC State Administration of Industry and Commerce with business license number 100000000032985. Article 12 of our articles of association provides that our scope of businesses includes, among other things, the production, storage, pipeline transportation, land transportation, water transportation and sale of non-coal mines (oil and natural gas etc.), dangerous chemicals (ethylene, propylene, butadiene and naphtha etc.), heavy oil, rubber and other chemical raw materials and products; oil refining; wholesaling and retailing (for subsidiaries only) of gasoline, kerosene and diesel oil; the production, storage, transportation and sale of natural gas chemicals and coal chemicals; sale of lubricant, fuel oil, solvent naphtha and asphalt; production of chemical fertilizer; operation of LPG station, sales of CNG, LNG, LPG and city gas; operation of electrical vehicle charging station; production, supervision of manufacturing, installation of oil and petrochemical machinery and equipment; purchase and sale of oil and petrochemical raw and auxiliary materials, equipment and parts; technology and information, research, development, application and consultation of alternative energy products; production and sales of electricity, steam, water and industrial gases; wholesaling of farm, forestry and pasture products; operation of general merchandise convenience stores; wholesaling and retailing of knitted garments and housewares; wholesaling and retailing of cultural and sports goods and equipment; sale of food, beverages and tobacco products; wholesaling and retailing of pharmaceuticals and medical devices; retailing of automobiles, motorcycles and components; repair and maintenance of and technical training for automobiles and motorcycles; wholesaling and retailing of machineries, hardware products, electronic products and household appliances; retailing of furniture and materials for indoor decoration; stalls, no-store sale and other forms of retail business; general merchandise retail; accommodation and catering services; residents' services; transportation agency services; warehousing; operation of self-owned properties; lease of machineries; media, advertising and acting as commission agent; insurance brokerage and agency services; financial trust and management services; E-commerce; self-operation of and acting as agency for the import and export of various commodities and technologies other than those restricted or prohibited by the state from import and export; contractor of overseas mechanical, electronics, petrochemical projects and domestic international bid-inviting projects; export of equipment and materials required for the aforementioned overseas projects; dispatch of labor required for the aforementioned overseas projects.

## Directors

Our directors shall be elected at our shareholders' general meeting. Cumulative voting shall be adopted for the election of directors if a controlling shareholder controls 30% or more of our shares. Details of the cumulative voting mechanism are set forth in Article 59 of the Rules and Procedures for the Shareholders' General Meetings that is an appendix to, and forms an integral part of, our articles of association. Our directors shall be elected for a term of three years and may serve consecutive terms upon re-election, except that independent directors may only serve a maximum of two terms. Our directors are not required to hold any shares in us, and there is no age limit requirement for the retirement or non-retirement of our directors.

Where a director is materially interested, directly or indirectly, in a contract, transaction or arrangement (including any proposed contract, transaction or arrangement) with us, he or she shall declare the nature and extent of his or her interests to the board of directors at the earliest opportunity, whether or not such contract, transaction or arrangement is otherwise subject to the approval of the board. A director shall not vote, and shall not be counted in the quorum of the meeting, on any resolution concerning any contract, transaction or arrangement where the director owns material rights or interests therein. A director is deemed to be interested in a contract, transaction or arrangement in which his associate (as defined by the Listing Rule of the Hong Kong Stock Exchange) is interested.

Unless the interested director discloses his interests to the board and the contract, transaction or arrangement in which the director is materially interested is approved by the board at a meeting in which the director neither votes nor is not

counted in the quorum, such contract, transaction or arrangement shall be voidable by us except with respect to a bona fide party thereto who does not have notice of the director's interests.

We are prohibited from making loans or providing guarantees to our directors and their associates except where such loan or guarantee is to meet expenditure requirement incurred or to be incurred by the director for the purposes of the company or for the purpose of enabling the director to perform his or her duties properly in accordance with the terms of a service contract approved by the shareholders in a general meeting.

The board of directors shall examine and approve the amount of the long-term loans for the current year according to the annual investment plan as approved by the shareholders' general meeting. The chairman of the board of directors is authorized to make adjustments of no more than 10% of the total amount of the long-term loans as approved by the board of directors for the current year. Within the total amount of the long-term loans as approved by the board of directors, the chairman of the board of directors is authorized to approve and execute individual long-term loan agreement with the loan



amount exceeding RMB 1 billion, and the president is authorized to approve and execute individual long-term loan agreement with the loan amount not exceeding RMB 1 billion. Within the total amount of the working capital loans for the current year as approved by the board of directors, the chairman of the board of directors is authorized to execute the overall short-term loan facility agreement for raising working capitals as we need.

Matters relating to the remuneration of our directors shall be determined by the shareholders' general meeting.

#### Dividends

A distribution of final dividends for any financial year is subject to shareholders' approval. Except as otherwise decided by Shareholders' meeting, the board of directors may make decision on the distribution of interim dividends. Except as otherwise provided by laws and regulations, the sum of interim dividends shall not exceed 50 percents of the net profit for the half year interim period. Dividends may be distributed in the forms of cash, shares or other forms provided by laws, administrative rules or 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. A distribution of shares, however, must be approved by special resolution of the shareholders.

Dividends may only be distributed after allowance has been made for:

- recovery of losses, if any;
- allocations to the statutory surplus reserve fund; and
- allocations to a discretionary surplus reserve fund if approved by the shareholders.

The allocations to the statutory surplus reserve fund shall be 10% of our after-tax profits of the current year determined in accordance with ASBE. In the event that the statutory surplus reserve balance reaches fifty (50) percent of the registered capital of the Company, no allocation is needed.

The articles of association require us to appoint on behalf of the holders of H shares a receiving agent which is registered as a trust corporation under the Trustee Ordinance of Hong Kong to receive dividends declared by us in respect of the H shares on behalf of such shareholders. The articles of association require that cash dividends in respect of H shares be declared in Renminbi and paid by us in HK dollars. The depositary of our ADSs will convert such proceeds into U.S. dollars and will remit such converted proceeds to our holders of ADSs. If we record no profit for the year, we may not normally distribute dividends for the year.

Dividend payments may be subject to PRC withholding tax.

#### Voting Rights and Shareholders' Meetings

Our board of directors shall convene a shareholders' annual general meeting once every year and within six months from the end of the preceding financial year. Our board shall convene an extraordinary general meeting within two months of the occurrence of any one of the following events:

- where the number of directors is less than the number stipulated in the PRC Company Law or two-thirds of the number specified in our articles of association;
- where our unrecovered losses reach one-third of the total amount of our actually paid-in share capital;

- where shareholder(s) holding 10% or more of our issued and outstanding voting shares request(s) in writing the convening of an extraordinary general meeting;
  - whenever our board deems necessary or our board of supervisors so requests; or
  - circumstances provided in the articles of association.

Meetings of a special class of shareholders must be called in certain enumerated situations when the rights of the holders of such class of shares may be modified or adversely affected as discussed below. Proposals made by the board of directors, the board of supervisors or shareholder(s) holding 3% or more of the total number of voting shares shall be included in the agenda for the relevant general meeting if they are matters which fall within the scope of the functions and

powers of shareholders in general meeting. Shareholder(s) holding 3% or more of the total shares of the Company may put forward interim motions by written proposals to the convener 10 days before the shareholders' general meeting. The convener shall publish supplementary notice to announce the interim motion within two days upon receiving.

All shareholders' meetings must be convened by our board of directors by written notice given to shareholders no less than 45 days before the meeting, by our board of supervisors or certain qualified shareholders in case a shareholders' meeting is not convened by our board of directors and board of supervisors. Shareholder(s) holding 10% or more the total number of shares of the Company have the right to convene and chair the interim shareholders' general meeting or class shareholders' meeting in accordance with the provisions in laws, administrative rules and the articles of association, in the event that the board of directors and the board of supervisors fail to convene and chair such meeting upon demand made by such shareholders. Based on the written replies received by us 20 days before a shareholders' meeting, we shall calculate the number of voting shares represented by shareholders who have indicated that they intend to attend the meeting. Where the number of voting shares represented by those shareholders amount to more than one-half of our total voting shares, we may convene the shareholders' general meeting (regardless of the number of shareholders who actually attend). Otherwise, we shall, within five days, inform the shareholders again of the motions to be considered and the date and venue of the meeting by way of public announcement. After the announcement is made, the shareholders' meeting may be convened. The accidental omission by us to give notice of a meeting to, or the non-receipt of notice of a meeting by, a shareholder will not invalidate the proceedings at that shareholders' meeting.

Shareholders at meetings have the power, among other things, to approve or reject our profit distribution plans, annual budget, financial statements, increase or decrease in share capital, issuance of debentures, merger or liquidation and any amendment to our articles of association. Shareholders of the shares which the Company issues to foreign investors for subscription in foreign currencies possess the same rights and undertake the same obligations as those of the shares which the Company issues to domestic investors for subscription in Renminbi. In addition, the rights of a class of shareholders may not be modified or abrogated, unless approved by a special resolution of all shareholders at a general shareholders' meeting and by a special resolution of shareholders of that class of shares at a separate meeting. Our articles of association enumerate, without limitation, certain amendments which would be deemed to be a modification or abrogation of the rights of a class of shareholders, including increasing or decreasing the number of shares of a class disproportionate to increases or decreases of other classes of shares, removing or reducing rights to receive dividends in a particular currency or creating shares with voting or equity rights superior to shares of such class.

Cumulative voting in accordance with the relevant laws and regulations in effect is adopted for the election of directors and supervisors. For all other matters, each share is entitled to one vote on all such matters submitted to a vote of our shareholders at all shareholders' meetings, except for meetings of a special class of shareholders where only holders of shares of the affected class are entitled to vote on the basis of one vote per share of the affected class.

Shareholders are entitled to attend and vote at meetings either in person or by proxy. Proxies must be in writing and deposited at our legal address, or such other place as is specified in the meeting notice, no less than 24 hours before the time for holding the meeting at which the proxy proposes to vote or the time appointed for the passing of the relevant resolution(s). When the instrument appointing a proxy is executed by the shareholder's attorney-in-fact, such proxy when deposited must be accompanied by a notary certified copy of the relevant power of attorney or other authority under which the proxy was executed.

Except for those actions discussed below which require supermajority votes (special resolutions), resolutions of the shareholders are passed by a simple majority of the voting shares held by shareholders who are present in person or by proxy. Special resolutions must be passed by or more than two-thirds of the voting rights represented held by

shareholders who are present in person or by proxy.

The following decisions must be adopted by special resolution:

- an increase or reduction of our share capital or the issue of shares, including stock distributions, of any class, warrants and other similar securities;
- issuance of debentures;
- our division, merger, dissolution and liquidation; (Shareholders who object to a proposed division or merger are entitled to demand that either we or the shareholders who approved the merger purchase their shares at a fair price.)
- amendments to our articles of association and its appendices;

- change of our company form;
- acquisition or disposal of material assets or provision of material guarantee within one year, with the value exceeding 30% of our latest audited total assets;
- any stock incentive plan;
- any other matters required by laws and regulations or our articles of association and its appendices or considered by the shareholders in a general meeting and which they have resolved by way of an ordinary resolution to be of a nature which may have a material impact on us and should be adopted by special resolution.

All other actions taken by the shareholders, including the appointment and removal of our directors and supervisors and the declaration of cash dividend payments, will be decided by an ordinary resolution of the shareholders. The listing agreement between us and the Hong Kong Stock Exchange (Listing Agreement) provided that we may not permit amendments to certain sections of the articles of association which have been mandated by the Hong Kong Stock Exchange. These sections include provisions relating to:

- varying the rights of existing classes of shares;
- voting rights;
- our power to purchase our own shares;
- rights of non-controlling shareholders; and
- procedure on liquidation.

In addition, certain amendments to the articles of association require the approval and consent of the relevant PRC authorities.

Any shareholder resolution which is in violation of any laws or administrative regulations of the PRC will be null and void subject to statutory procedures.

#### Liquidation Rights

In the event of our liquidation, the H shares will rank *pari passu* with the domestic ordinary shares, and payment of debts out of our remaining assets shall be made in the order of priority prescribed by applicable laws and regulations or, if no such standards exist, in accordance with such procedure as the liquidation committee which has been appointed either by us or the People's Court of the PRC may consider to be fair and reasonable. After payment of debts, we shall distribute the remaining property to shareholders according to the class and proportion of their shareholders.

#### Further Capital Call

Shareholders are not liable to make any further contribution to the share capital other than according to the terms, which were agreed by the subscriber of the relevant shares at the time of subscription.

#### Increases in Share Capital and Preemptive Rights

The articles of association require the approval by a special resolution of the shareholders and by special resolution of holders of domestic ordinary shares and overseas-listed foreign invested shares at separate shareholder class meetings be obtained prior to authorizing, allotting, issuing or granting shares, securities convertible into shares or options, warrants or similar rights to subscribe for any shares or such convertible securities. No such approval is required if, but only to the extent that:

- we issue domestic ordinary shares and/or overseas-listed foreign-invested shares, either separately or concurrently, in numbers not exceeding 20% of the number of domestic ordinary shares and overseas-listed foreign-invested shares then in issue, respectively, in any 12-month period, as approved by a special resolution of the shareholders; or

- if our plans for issuing domestic ordinary shares and overseas-listed foreign-invested shares upon our establishment are implemented within fifteen months of the date of approval by the China Securities Regulatory Commission.

New issues of shares must also be approved by the relevant PRC authorities.

#### Reduction of Share Capital and Purchase by Us of Our Shares and General Mandate to Repurchase Shares

We may reduce our registered share capital only upon obtaining the approval of the shareholders by a special resolution and, in certain circumstances, of relevant PRC authorities. The number of H shares, which may be purchased is subject to the Hong Kong Takeovers and Share Repurchase Codes.

#### Restrictions on Large or Controlling Shareholders

Our articles of association provide that, in addition to any obligation imposed by laws and administration regulations or required by the listing rules of the stock exchanges on which our H shares are listed, a controlling shareholder shall not exercise his voting rights in a manner prejudicial to the interests of the shareholders generally or of some part of the shareholders:

- to relieve a director or supervisor from his or her duty to act honestly in our best interests;
- to approve the expropriation by a director or supervisor (for his or her own benefit or for the benefit of another person) of our assets in any way, including, without limitation, opportunities which may benefit us; or
- to approve the expropriation by a director or supervisor (for his or her own benefit or for the benefit of another person) of the individual rights of other shareholders, including, without limitation, rights to distributions and voting rights (save according to a restructuring of our company which has been submitted for approval by the shareholders in a general meeting in accordance with our articles of association and its appendices).

A controlling shareholder, however, will not be precluded by our articles of association or any laws and administrative regulations or the listing rules of the stock exchanges on which our H shares are listed from voting on these matters.

A controlling shareholder is defined by our articles of association as any person who acting alone or in concert with others:

- is in a position to elect half or more of the board of directors;
- has the power to exercise, or to control the exercise of, 30% or more of our voting rights;
- acting separately or in concert with others, holds 30% or more of our issued and outstanding shares; or
- acting separately or in concert with others, has de facto control of us in any other way.

As of the date of this annual report, Sinopec Group Company is and will be our only controlling shareholder.

#### Disclosure

The Listing Agreement imposes a requirement on us to keep the Hong Kong Stock Exchange, our shareholders and other holders of our listed securities informed as soon as reasonably practicable of any information relating to us and our subsidiaries, including information on any major new developments which are not public knowledge, which:

- is necessary to enable them and the public to appraise the position of us and our subsidiaries;
- is necessary to avoid the establishment of a false market in its securities; and
- might be reasonably expected materially to affect market activity in and the price of its securities.



There are also requirements under the Listing Rules for us to obtain prior shareholders' approval and/or to disclose to shareholders details of certain acquisitions or disposals of assets and other transactions (including transactions with controlling shareholders).

#### Sources of Shareholders' Rights

The PRC's legal system is based on written statutes and is a system in which decided legal cases have little precedent value. The PRC's legal system is similar to civil law systems in this regard. In 1979, the PRC began the process of developing its legal system by undertaking to promulgate a comprehensive system of laws. In December 1993, the Standing Committee of the 8th National People's Congress adopted the PRC Company Law. On October 27, 2005, the PRC Company law was amended by the Standing Committee of the 10th National People's Congress, and came into force on January 1, 2006. The amended PRC Company Law enhanced the protection of shareholders' rights primarily in the following regards:

- Shareholders holding 10 percent or more of the shares of the company are entitled to petition the court to dissolve the company if (i) the company is in serious operational difficulties; (ii) its continuing existence will seriously prejudice the interests of the shareholders; and (iii) such difficulties cannot be resolved through any other means;
- Shareholders holding 1 percent or more of the shares of the company for more than 180 consecutive days are entitled to request the board of supervisors (in terms of directors and senior management) or the board of directors (in terms of supervisors) to bring legal proceedings, or bring legal proceedings in their own name on behalf of the company where it is in emergency and the company will be subject to irreparable loss if not to do so, against directors, supervisors or senior management who fail to comply with the laws and regulations or the company's articles of association in the course of performing their duties and cause loss to the company;
- Shareholders who oppose the company's decision on merger or separation are entitled to request the company to repurchase their shares; and
- Shareholders holding 10 percent or more of the voting rights of the company are entitled to convene a shareholders' meeting.

Currently, the primary sources of shareholder rights are our articles of association, as amended, 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, i.e., Sinopec Group Company. To facilitate the offering and listing of shares of PRC companies overseas, and to regulate the behavior of companies whose shares are listed overseas, the State Council Securities Committee and the State Commission for Restructuring the Economic System issued on August 27, 1994 the Mandatory Provisions for articles of association of Company Listing Overseas (Mandatory Provisions). These Mandatory Provisions become entrenched in that, once they are incorporated into the articles of association of a PRC company, any amendment to those provisions will only become effective after approval by the SASAC. The Listing Rules require a number of additional provisions to the Mandatory Provisions to be included in the articles of association of PRC companies listing H shares on the Hong Kong Stock Exchange (Additional Provisions). The Mandatory Provisions and the Additional Provisions have been incorporated into our articles of association.

In addition, upon the listing of and for so long as the H shares are listed on the Hong Kong Stock Exchange, we will be subject to those relevant ordinances, rules and regulations applicable to companies listed on the Hong Kong Stock Exchange, including the Listing Rules of the Hong Kong Stock Exchange, the Securities (Disclosure of Interests) Ordinance (SDI Ordinance), the Securities (Insider Dealing) Ordinance and the Hong Kong Codes on Takeovers and Mergers and Share Repurchases (Hong Kong Takeovers and Repurchase Codes).

Unless otherwise specified, all rights, obligations and protections discussed below derive from our articles of association and/or the PRC Company Law.

#### Enforceability of Shareholders' Rights

There has not been any public disclosure in relation to the enforcement by holders of H shares of their rights under constitutive 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.

In most states of the United States, shareholders may sue a corporation “derivatively”. A derivative suit involves the commencement by a shareholder of a corporate cause of action against persons (including corporate officers, directors or controlling shareholders) who have allegedly wronged the corporation, where the corporation itself has failed to enforce such claim against such persons directly. Such action is brought based upon a primary right of the corporation, but is asserted by a shareholder on behalf of the corporation. The PRC company law as amended in October 2005 and effective in January 2006 has also granted shareholders with the rights to bring such derivative suits.

Our articles of association provide that all differences or claims, arising from any provision of our articles of association, any right or obligation conferred or imposed by the PRC Company Law or any other relevant law or administrative regulation which concerns our affairs:

- between a holder of overseas-listed foreign-invested shares and us;
- between a holder of overseas-listed foreign-invested shares and any of our directors, supervisors, general managers, deputy general managers or other senior officers; or
- between a holder of overseas-listed foreign-invested shares and a holder of domestic ordinary shares

must be referred to arbitration at either the China International Economic and Trade Arbitration Commission in the PRC or the Hong Kong International Arbitration Center, and the laws of the PRC shall apply, save as otherwise provided in the laws and administrative regulations. Our articles of association provide that such arbitration will be final and conclusive. In June 1999, an arrangement was made between the People’s Courts of the PRC and the courts of Hong Kong to mutually enforce arbitration awards rendered in the PRC and Hong Kong according to their respective laws. This new arrangement was approved by the Supreme Court of the PRC and the Hong Kong Legislative Council and became effective on February 1, 2000. We have provided an undertaking to the United States Securities and Exchange Commission that, at such time, if any, as all applicable laws and regulations of the PRC and (unless our H shares are no longer listed on the Hong Kong Stock Exchange) all applicable regulations of the Stock Exchange of Hong Kong Ltd. shall not prohibit, and to the extent Section 14 under the United States Securities Act of 1933, as amended, so requires, our board of directors shall propose an amendment to the articles of association which would permit shareholders to adjudicate disputes arising between our shareholders and us, our directors, supervisors or officers by means of judicial proceedings.

The holders of H shares will not be able to bring actions on the basis of violations of the Listing Rules and must rely on the Hong Kong Stock Exchange to enforce its rules. The SDI Ordinance establishes certain obligations in relation to disclosure of shareholder interests in Hong Kong listed companies, the violation of which is subject to prosecution by the Securities and Futures Commission of Hong Kong. The Hong Kong Takeovers and Repurchase Codes do not have the force of law and are only standards of commercial conduct considered acceptable for takeover and merger transactions and share repurchases in Hong Kong as established by the Securities and Futures Commission and the securities and futures industry in Hong Kong.

We have appointed our representative office, located at 410 Park Avenue, 22nd Fl., New York, NY 10022, USA, as our agent to receive service of process with respect to any action brought against us in certain courts in New York under the United States federal and New York State’s securities laws. However, as the PRC does not have treaties providing for the reciprocal recognition and enforcement of judgments of courts within the United States, the United Kingdom, Japan or most other the Organization for Economic Cooperation and Development countries, administrative actions brought by regulatory authorities, such as the Commission, and other actions which result in foreign court judgments, could (assuming such actions are not required by PRC law and the articles of association to be arbitrated) only be enforced in the PRC on a reciprocal basis or according to relevant international treaty to which China is a party if such judgments or rulings do not violate the basic principles of the law of the PRC or the sovereignty, security

and public interest of the society of the PRC, as determined by a People's Court of the PRC which has the jurisdiction for recognition and enforcement of judgments. We have been advised by our PRC counsel, Haiwen & Partners, that there is certain doubt as to the enforceability in the PRC of actions to enforce judgments of United States courts arising out of or based on the ownership of H shares or ADSs, including judgments arising out of or based on the civil liability provisions of United States federal or state securities laws.

#### Restrictions on Transferability and the Share Register

As provided in the articles of associations we may refuse to register a transfer of H shares unless:

- any relevant transfer fee is paid;
- the instrument of transfer is only related to H shares listed in Hong Kong;

- the instrument of transfer is accompanied by the share certificates to which it relates, or such other evidence is given as may be reasonably necessary to show the right of the transferor to make the transfer;
  - the stamp duty which is chargeable on the instrument of transfer has already been paid;
- if it is intended that the shares be transferred to joint owners, the maximum number of joint owners shall not be more than four (4); and
  - the Company does not have any lien on the relevant shares.

We are required to keep a register of our shareholders which shall be comprised of various parts, including one part which is to be maintained in Hong Kong in relation to H shares to be listed on the Hong Kong Stock Exchange. Shareholders have the right to inspect and, for a nominal charge, to copy the share register. No transfers of ordinary shares shall be recorded in our share register within 30 days prior to the date of a shareholders' general meeting or within 5 days prior to the record date established for the purpose of distributing a dividend.

We have appointed HKSCC Registrars Limited to act as the registrar of our H shares. This registrar maintains our register of holders of H shares at our offices in Hong Kong and enters transfers of shares in such register upon the presentation of the documents described above.

#### C. MATERIAL CONTRACTS

We have not entered into any material contracts other than in the ordinary course of business and other than those described under "Item 4. Information on the Company", "Item 7 - Major Shareholders and Related Party Transactions" or elsewhere in this Form 20-F.

#### D. EXCHANGE CONTROLS

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. We may undertake current account foreign exchange transactions without prior approval from the State Administration of Foreign Exchange by producing commercial documents evidencing such transactions, provided that they are processed through Chinese banks licensed to engage in foreign exchange transactions. 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 to foreign currency.

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 for capital expenditures.

On July 21, 2005, the PRC government changed its policy of pegging the value of the Renminbi to the U.S. dollar. Under the new policy, the Renminbi is permitted to fluctuate within a band against a basket of certain foreign currencies.

On January 4, 2006, the PBOC authorized the China Foreign Exchange Trade System to publish the exchange rate of the Renminbi against the US dollar, the euro, the Japanese yen, and the HK dollar at 9:15 am of each business day, which would be the medium exchange rate of Renminbi for transactions on the interbank spot foreign exchange

market (over-the-counter transactions and automatic price-matching transactions) as well as transactions over bank counters.

On June 19, 2010, the PRC government decided to further promote the Renminbi exchange rate formation mechanism, and enhance the flexibility of Renminbi exchange rate. Any fluctuation of exchange rate of the Renminbi against US dollars and Hong Kong dollars may have an effect on our revenues and financial condition, and the value of, and any dividends payable on, our ADSs in foreign currency terms. We cannot assure you that the fluctuation of exchange rate of the Renminbi against US dollars or other foreign currencies would not have a material and adverse effect on our operation and financial condition in the future. Information relating to the exchange risk, exchange rate and hedging activities is presented in “Item 11. Qualitative and Quantitative Disclosures about Market risk — Foreign Exchange Rate Risk”.

E.

TAXATION

PRC Taxation

The following discussion addresses the principal PRC tax consequences of investing in the H shares or ADSs.

Taxation of Dividends

Individual Investors

According to the PRC Individual Income Tax Law, as amended, dividends paid by Chinese companies are ordinarily subject to a Chinese withholding tax levied at a flat rate of 20%. For a foreign individual who has no domicile and does not stay in the territory of China or who has no domicile but has stayed in the territory of China for less than one year, the receipt of dividends from a company in China is normally subject to a withholding tax of 20% unless reduced or exempted by an applicable tax treaties.

Foreign Enterprises

In accordance with the new Enterprise Income Tax Law and its implementation rules that became effective on January 1, 2008, dividends derived from the revenues accumulated from January 1, 2008 and are paid to non-resident enterprises, which are established under the laws of non-PRC jurisdictions and have no establishment or place of business in China or whose dividends from China do not relate to their establishment or place of business in China, are generally subject to a PRC withholding tax levied at a rate of 10% unless exempted or reduced pursuant to an applicable double-taxation treaty or other exemptions. Dividends paid by PRC companies to resident enterprises, including enterprises established under the laws of non-PRC jurisdictions but whose “de facto management body” is located in the PRC, are not subject to any PRC withholding tax, unless the investment income are derived from the publicly traded shares which have been held continuously by the resident enterprises for less than twelve months. Dividends, bonuses and other return based on equity investment that a non-resident enterprise with establishment or place of business in China receives from a resident enterprise and that have actual connection with such establishment or place of business are also exempted from any PRC withholding tax, except for investment income derived from the publicly traded shares which have been held continuously by the resident enterprises for less than 12 months. Chinese resident enterprises are required to withhold PRC enterprise income tax at the rate of 10% on dividends paid for 2009 and later years’ earnings payable to their respective H Shares holders that are “non-resident enterprises,” except for those holders whose dividend income is not subject to PRC enterprise income tax pursuant to PRC governmental approval.

Tax Treaties

Holders resident in countries which have entered into avoidance of double taxation treaties or arrangements with the PRC may be entitled to a reduction or exemption of the withholding tax imposed on the payment of dividends. The PRC currently has avoidance of double taxation treaties or arrangements with a number of other countries/jurisdictions , which include Australia, Canada, France, Germany, Hong Kong, Japan, Malaysia, the Netherlands, Singapore, the United Kingdom and the United States.

Under a tax treaty between United States and China, China may tax dividends paid by Sinopec Corp. to eligible US Holders up to a maximum of 10% of the gross amount of such dividend. Under the tax treaty, an eligible US Holder is a person who, by reason of domicile, residence, place of head office, place of incorporation or any other criterion of similar nature is liable to tax in the United States, subject to a detailed “treaty shopping” provision.

Taxation of Capital Gains

In accordance with the new Enterprise Income Tax Law effective from January 1, 2008, and its implementation rules, capital gains realized by foreign enterprises which are non-resident enterprises in China upon the sale of overseas-listed shares are generally subject to a PRC withholding tax levied at a rate of 10%, unless exempted or reduced pursuant to an applicable double-taxation treaty or other exemptions. The capital gains realized by resident enterprises, including enterprises established under the laws of non-PRC jurisdictions but whose “de facto management body” is located in the PRC, upon the sales of overseas-listed shares are subject to the PRC enterprise income tax.



### PRC Stamp Tax Considerations

Under the Provisional Regulations of The People's Republic of China Concerning Stamp Tax, which was amended in January 2011, PRC stamp tax should not be imposed on the transfer of shares of H Shares or ADSs of PRC publicly traded companies.

### United States Federal Income Tax Considerations

The following is a summary of United States federal income tax considerations relating to the ownership and disposition of our H shares or ADSs by a US Holder (as defined below). This summary is based upon existing United States federal income tax law, which is subject to differing interpretations or change, possibly with retroactive effect. This summary does not discuss all aspects of United States federal income taxation which may be important to particular investors in light of their individual investment circumstances, such as certain investors subject to special tax rules including: financial institutions, regulated investment companies, real estate investment trusts, broker-dealers, cooperatives, pension plans, insurance companies, traders in securities that elect mark-to-market treatment, partnerships and their partners, tax-exempt organizations (including private foundations), non-US Holders, holders who own (directly, indirectly, or constructively) 10% or more of the voting power or value of our stock, investors that hold H shares or ADSs as part of a straddle, hedge, conversion, constructive sale, or other integrated transaction for United States federal income tax purposes, holders who acquired their H shares or ADSs pursuant to any employee share option or otherwise as compensation, or US Holders that have a functional currency other than the United States dollar, all of whom may be subject to tax rules that differ significantly from those summarized below. In addition, this summary does not discuss any state, local, non-United States, alternative minimum tax, non-income tax (such as the U.S. federal estate and gift tax) or Medicare considerations. This summary assumes that our H shares or ADSs held by investors are "capital assets" (generally, property held for investment) under the United States Internal Revenue Code of 1986, as amended (Code). US Holders should consult their tax advisors regarding the United States federal, state, local, and non-United States income and other tax considerations relating to their ownership or disposition of our H shares or ADSs.

For purposes of this summary, a US Holder is a beneficial owner of H shares or ADSs that is, for United States federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation created in or organized under the laws of, the United States or any State thereof or the District of Columbia;
- an estate the income of which is includible in gross income for United States federal income tax purposes regardless of its source; or
- a trust (a) the administration of which is subject to the primary supervision of a United States court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (b) a trust that has otherwise elected to be treated as a United States person under the Code.

If a partnership (including any entity treated as a partnership for United States federal income tax purposes) is a beneficial owner of H shares or ADSs, the tax treatment of a partner in such partnership will depend upon the status of the partner and the activities of the partnership. Partners in a partnership holding our H shares or ADSs should consult their tax advisors regarding the United States federal income tax considerations relating to the investment in our H shares or ADSs.

For United States federal income tax purposes, it is generally expected that US Holders of ADSs will be treated as the beneficial owners of the underlying H shares represented by the ADSs. The remainder of this discussion assumes that a holder of ADSs will be treated in this manner. Accordingly, deposits or withdrawals of H shares for ADSs will generally not be subject to United States federal income tax.

#### Passive Foreign Investment Company Considerations

A non-United States corporation, such as our company, will be a “passive foreign investment company” (PFIC), for United States federal income tax purposes for any taxable year, if either (a) 75% or more of its gross income for such year consists of certain types of “passive” income or (b) 50% or more of its average quarterly assets as determined on the basis of fair market value during such year produce or are held for the production of passive income. For this purpose, cash and assets readily convertible into cash are categorized as passive assets and the Company’s goodwill and other unbooked intangibles associated with active business activities may generally be classified as active assets. We will be treated as

owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the stock.

We do not believe that we were classified as a PFIC for the taxable year ending 2015 and we do not expect to be classified as a PFIC for the current taxable year ending 2016. The determination of whether we will be or become a PFIC will depend, in part, upon the composition of our income and our assets (which are subject to change from year to year) and the market price of our H shares or ADSs (of which we cannot control). Although we do not expect that our business plans will change in a manner that will affect our PFIC status, no assurance can be given in this regard. Because there are uncertainties in the application of the relevant rules and PFIC status is a fact-intensive determination made on an annual basis, no assurance can be given that we will not be classified as a PFIC for any taxable year.

The discussion below under “Dividends” and “Sale or Other Disposition” of H shares or ADSs assumes that we will not be classified as a PFIC for United States federal income tax purposes. See the discussion below under the heading “Passive Foreign Investment Company Rules” for a brief summary of the PFIC rules.

### Dividends

The gross amount of any cash distributions (including the amount of any tax withheld) paid on our H shares or ADSs out of our current or accumulated earnings and profits, as determined under United States federal income tax principles, will be subject to tax as dividend income on the day actually or constructively received by a US Holder, in the case of H shares, or by the depository bank, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of United States federal income tax principles, any distribution paid will generally be reported as a “dividend” for United States federal income tax purposes. A non-corporate recipient of dividend income will generally be subject to tax on dividend income from a “qualified foreign corporation” at a reduced capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that the holding period requirement is met.

A non-U.S. corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (i) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information program or (ii) with respect to any dividend it pays on stock which is readily tradable on an established securities market in the United States. There is currently a tax treaty in effect between the United States and the People’s Republic of China (U.S.-PRC Treaty) which the Secretary of Treasury of the United States determined is satisfactory for these purposes and we believe that we are eligible for the benefits of such treaty. Additionally, our ADSs trade on the New York Stock Exchange, an established securities market in the United States. Although we presently believe that we are a qualified foreign corporation for purposes of the reduced tax rate, no assurance can be given that we will continue to be treated as a qualified foreign corporation in the future. US Holders should consult their tax advisors regarding the availability of the reduced tax rate on dividends under their particular circumstances. Dividends received on H shares or ADSs will not be eligible for the dividends received deduction allowed to corporations.

Dividends paid in non-United States currency will be includible in income in a United States dollar amount based on the exchange rate prevailing at the time of receipt of such dividends by the depository, in the case of ADSs, or by the US Holder, in the case of H shares held directly by such US Holder, regardless of whether the non-United States currency is actually converted into United States dollars at that time. Gain or loss, if any, recognized on a subsequent sale, conversion or other disposition of the non-United States currency will generally be United States source income or loss.

Dividends received on H shares or ADSs will be treated, for United States foreign tax credit purposes, as foreign source income. A US Holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any non-United States withholding taxes imposed on dividends received on H shares or ADSs. US Holders who do not elect to claim a foreign tax credit for foreign income tax withheld may instead claim a deduction, for United States federal income tax purposes, in respect of such withholdings, but only for a year in which the US Holder elects to do so for all creditable foreign income taxes. US Holders should consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

#### Sale or Other Disposition of H shares or ADSs

A US Holder will recognize capital gain or loss upon the sale or other disposition of H shares or ADSs in an amount equal to the difference between the amount realized upon the disposition and the US Holder's adjusted tax basis in such H shares or ADSs. Any capital gain or loss will be long-term if the H shares or ADSs have been held for more than one year and will generally be United States source gain or loss for United States foreign tax credit purposes. If any PRC tax were to be imposed on any gain from the disposition of H shares or ADSs, however, a US Holder that is eligible for the

benefits of the U.S.- PRC Treaty may elect to treat the gain as non-United States source gain or loss. The deductibility of a capital loss may be subject to limitations. The rules governing the foreign tax credit are complex and their outcome depends in large part on the US Holder's individual facts and circumstances. Accordingly, US Holders should consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

US Holders that receive currency other than the United States dollar upon the sale or other disposition of H shares will realize an amount equal to the United States dollar value of the non-United States currency on the date of such sale or other disposition, or if the shares are traded on an established securities market, in the case of cash basis and electing accrual basis taxpayers, the settlement date. US Holders will recognize currency gain or loss if the United States dollar value of the currency received on the settlement date differs from the amount realized. US Holders will have a tax basis in the currency received equal to the United States dollar amount at the spot rate on the settlement date. Generally, any gain or loss realized by US Holders on a subsequent conversion or disposition of such currency will be United States source ordinary income or loss.

#### Passive Foreign Investment Company Rules

If we were to be classified as a PFIC in any taxable year, a special tax regime will apply to both (a) any "excess distribution" by us to a US Holder (generally, the US Holder's ratable portion of distributions in any year which are greater than 125% of the average annual distribution received by such US Holder in the shorter of the three preceding years or the US Holder's holding period for our H shares or ADSs) and (b) any gain realized on the sale or other disposition of the H shares or ADSs. Under this regime, any excess distribution and realized gain will be treated as ordinary income and will be subject to tax as if (a) the excess distribution or gain had been realized ratably over the US Holder's holding period, (b) the amount deemed realized in each year had been subject to tax in each year of that holding period at the highest marginal rate for such year (other than income allocated to the current period or any taxable period before we became a PFIC, which would be subject to tax at the US Holder's regular ordinary income rate for the current year and would not be subject to the interest charge discussed below), and (c) the interest charge generally applicable to underpayments of tax had been imposed on the taxes deemed to have been payable in those years. In addition, dividends made to a US Holder will not qualify for the lower rates of taxation applicable to long-term capital gains discussed above under "Dividends."

If a "mark-to-market" election is available and a US Holder validly makes such an election, notwithstanding the foregoing, such a holder generally will be required to take into account the difference, if any, between the fair market value and its adjusted tax basis in H shares or ADSs at the end of each taxable year as ordinary income or ordinary loss (to the extent of any net mark-to-market gain previously included in income). In addition, any gain from a sale or other disposition of H shares or ADSs will be treated as ordinary income, and any loss will be treated as ordinary loss (to the extent of any net mark-to-market gain previously included in income).

Because a mark-to-market election cannot be made for any lower-tier PFICs that we may own, a US Holder may continue to be subject to the PFIC rules with respect to such US Holder's indirect interest in any investments held by us that are treated as an equity interest in a PFIC for United States federal income tax purposes.

We do not intend to provide information necessary for US Holders to make qualified electing fund elections which, if available, would result in tax treatment different from (and generally less adverse than) the general tax treatment for PFICs described above.

Each US Holder is urged to consult its tax advisor concerning the United States federal income tax consequences of holding and disposing H shares or ADSs if we are or become treated as a PFIC, including the possibility of making a mark-to-market election, the "deemed sale" and "deemed dividend" elections and the unavailability of the election to treat us as a qualified electing fund.

### Withholding Tax and Information Reporting

Certain US Holders are required to report information relating to an interest in “specified foreign financial assets,” including shares issued by a non-United States corporation, for any year in which the aggregate value of all specified foreign financial assets exceeds US\$50,000, subject to certain exceptions (including an exception for ordinary shares held in custodial accounts maintained with a United States financial institution). A US Holder who fails to timely furnish the required information may be subject to a penalty. In addition, information reporting generally will apply to dividends on and proceeds from the sale or other disposition of our H shares or ADSs. US withholding tax is generally inapplicable to dividends on or proceeds from the sale or other disposition of our H shares or ADSs (provided that various certification requirements have been met). US Holders are advised to consult with their tax advisors regarding the application of the United States information reporting and withholding rules.

F. DIVIDENDS AND PAYING AGENTS

Not applicable.

G. STATEMENT BY EXPERTS

Not applicable.

H. DOCUMENTS ON DISPLAY

This annual report contains exhibits and schedules. Any statement in this annual report about any of our contracts or other documents is not necessarily complete. If the contract or document is filed or incorporated by reference as an exhibit to this annual report, the contract or document is deemed to modify the description contained in this annual report. You must review the exhibits themselves for a complete description of the contracts or documents.

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F no later than four months after the close of each fiscal year. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

I. SUBSIDIARY INFORMATION

Not applicable.

ITEM 11. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary market risk exposures are to fluctuations in oil and gas prices, exchange rates and interest rates. Please also refer to Note 34 to the consolidated financial statements included elsewhere in this annual report for a detailed discussion of other market risks that we have exposure to.

Commodity Price Risk

We engage in oil and gas operations and are exposed to commodity price risk related to price volatility of crude oil and refined oil products. The fluctuations in prices of crude oil and refined oil products could have significant impact on us. We use derivative financial instruments, including commodity futures and swaps, to manage a portion of this risk. As of December 31, 2015, we had certain commodity contracts that qualify as cash flow and economic hedging and protection instruments. The fair market value of our assets and liabilities for these financial derivatives are RMB 7.875 billion and RMB 2.75 billion, respectively.

As of December 31, 2015, it is estimated that a general increase/decrease of US\$10 per barrel in crude oil and refined oil products, with all other variables held constant, would decrease/increase our net income and retained earnings by

approximately RMB 1.951 billion, and decrease/increase our other reserves by approximately RMB 3.052 billion. This sensitivity analysis has been determined assuming that the change of prices was applied to our derivative financial instruments at balance sheet date with exposure to commodity price risk.

#### Foreign Exchange Rate Risk

The Renminbi is not a freely convertible currency. With the authorization from the PRC government, the PBOC announced that the PRC government reformed the exchange rate regime by moving into a managed floating exchange rate regime based on market supply and demand with reference to a basket of currencies on July 21, 2005. On June 19, 2010, the PRC government decided to further promote the Renminbi exchange rate formation mechanism, and enhance the flexibility of Renminbi exchange rate. Actions taken by the PRC government could cause future exchange rates to vary significantly from current or historical exchange rates. Fluctuations in exchange rates may adversely affect the value,



translated or converted into US dollars or Hong Kong dollars, of our net assets, earnings and any declared dividends. We cannot give any assurance that any future movements in the exchange rate of the Renminbi against the US dollar and other foreign currencies will not adversely affect our results of operations and financial condition.

The following presents various market risk information regarding market-sensitive financial instruments that we held or issued as of December 31, 2014 and 2015. We conduct our business primarily in Renminbi, which is also our functional and reporting currency.

The following tables provide information regarding instruments that are sensitive to foreign exchange rates as of December 31, 2014 and 2015. For debt obligations, the table presents cash flows and related weighted average rates by expected maturity dates.

(RMB equivalent in millions, except interest rate)

	As of December 31, 2015						Total carrying amount	Fair value
	2016	2017	Expected Maturity Date		2020	Thereafter		
<b>Assets</b>								
<b>Cash and cash equivalent</b>								
In US Dollar	12,481	-	-	-	-	-	12,481	12,481
In HK Dollar	101	-	-	-	-	-	101	101
In Japanese Yen	8	-	-	-	-	-	8	8
In Euro	39	-	-	-	-	-	39	39
Others	52	-	-	-	-	-	52	52
<b>Time deposits with financial institutions</b>								
In US Dollar	649	-	-	-	-	-	649	649
<b>Liabilities</b>								
<b>Debts in US Dollar</b>								
Fixed rate	13,033	40	6,493	25	25	11,577	31,193	30,417
Average interest rate	1.01%	1.38%	1.88%	1.41%	1.41%	3.48%		
Variable rate	36,777	-	-	-	-	-	36,777	36,777
Average interest rate(1)	1.14%	-	-	-	-	-		
<b>Debts in HK Dollar</b>								
Fixed rate	-	-	-	-	-	-	-	-
Average interest rate	-	-	-	-	-	-		
Variable rate	5	-	-	-	-	-	5	5
Average interest rate(1)	1.80%	-	-	-	-	-		
<b>Debts in Euro</b>								
Fixed rate	4	-	-	-	-	-	4	4
Average interest rate	0.68%	-	-	-	-	-		
Variable rate	7,855	-	-	-	-	-	7,855	7,855
Average interest rate(1)	0.49%	-	-	-	-	-		

(1) The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2015.

(RMB equivalent in millions, except interest rate)

	As of December 31, 2014						Total carrying amount	Fair value
	2015	2016	Expected Maturity Date			Thereafter		
			2017	2018	2019			
<b>Assets</b>								
<b>Cash and cash equivalent</b>								
In US Dollar	1,998	-	-	-	-	-	1,998	1,998
In HK Dollar	55	-	-	-	-	-	55	55
In Japanese Yen	7	-	-	-	-	-	7	7
In Euro	21	-	-	-	-	-	21	21

Others	65	-	-	-	-	-	65	65
Time deposits with financial institutions								
In US Dollar	613	-	-	-	-	-	613	613
Liabilities								
Debts in US Dollar								
Fixed rate	7,394	4,625	37	6,107	23	10,932	29,118	28,992
Average interest rate	0.9%	1.3%	1.4%	2.1%	1.5%	3.5%		
Variable rate	126,581	612	-	-	-	-	127,193	127,193
Average interest rate(1)	1.3%	1.8%	-	-	-	-		
Debts in Japanese Yen								
Fixed rate	54	54	54	54	54	175	445	492
Average interest rate	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%		
Variable rate	-	-	-	-	-	-		
Average interest rate(1)	-	-	-	-	-	-		
Debts in HK Dollar								
Fixed rate	5	-	-	-	-	-	5	5
Average interest rate	1.8%	-	-	-	-	-		
Variable rate	-	-	-	-	-	-		
Average interest rate(1)	-	-	-	-	-	-		
Debts in Euro								
Fixed rate	10	-	-	-	-	-	10	10
Average interest rate	3.0%	-	-	-	-	-		
Variable rate	429	-	-	-	-	-	429	429
Average interest rate(1)	1.2%	-	-	-	-	-		

(1)The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2014.

#### Interest Rate Risk

We are exposed to interest rate risk resulting from fluctuations in interest rates on our short-term and long-term debts. Upward fluctuations in interest rates increase the cost of new debt and the interest cost of outstanding floating rate borrowings.

Our debts consist of fixed and variable rate debt obligations with original maturities ranging from one to 22 years. Fluctuations in interest rates can lead to significant fluctuations in the fair values of our debt obligations.

The following tables present principal cash flows and related weighted average interest rates by expected maturity dates of our interest rate sensitive financial instruments as of December 31, 2014 and 2015.

(RMB equivalent in millions, except interest rate)

As of December 31, 2015

	Expected Maturity Date						Total carrying amount(2)	Fair value
	2016	2017	2018	2019	2020	Thereafter		
<b>Assets</b>								
<b>Cash and cash equivalent</b>								
In RMB	49,143	-	-	-	-	-	49,143	49,143
In US Dollar	12,481	-	-	-	-	-	12,481	12,481
In HK Dollar	101	-	-	-	-	-	101	101
In Japanese Yen	8	-	-	-	-	-	8	8
In Euro	39	-	-	-	-	-	39	39
Others	52	-	-	-	-	-	52	52
<b>Time deposits with financial institutions</b>								
In Renminbi	6,084	-	-	-	-	-	6,084	6,084
In US Dollar	649	-	-	-	-	-	649	649
<b>Liability</b>								
<b>Debts in RMB</b>								

Fixed rate	40,234	29,670	17,251	-	13,000	43,096	143,251	141,583
Average interest rate	2.08%	2.98%	3.30%	-	2.11%	0.34%		
Variable rate	17,538	8,778	8,935	103	103	650	36,107	36,107
Average interest rate(1)	4.12%	3.07%	3.16%	4.39%	4.39%	4.41%		
Debts in US Dollar								
Fixed rate	13,033	40	6,493	25	25	11,577	31,193	30,417
Average interest rate	1.01%	1.38%	1.88%	1.41%	1.41%	3.48%		
Variable rate	36,777	-	-	-	-	-	36,777	36,777
Average interest rate(1)	1.14%	-	-	-	-	-		
Debts in HK Dollar								
Fixed rate	-	-	-	-	-	-	-	-
Average interest rate	-	-	-	-	-	-		
Variable rate	5	-	-	-	-	-	5	5
Average interest rate(1)	1.80%	-	-	-	-	-		
Debts in Euro								
Fixed rate	4	-	-	-	-	-	4	4
Average interest rate	0.68%	-	-	-	-	-		
Variable rate	7,855	-	-	-	-	-	7,855	7,855
Average interest rate(1)	0.49%	-	-	-	-	-		

(1) The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2015.

(2) Carrying amounts are used for loans from Sinopec Group Company and its affiliates as it is not practicable to estimate their fair values because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive.

(RMB equivalent in millions, except interest rate)

As of December 31, 2014

	Expected Maturity Date						Total carrying amount(2)	Fair value
	2015	2016	2017	2018	2019	Thereafter		
Assets								
Cash and cash equivalent								
In RMB	7,209	-	-	-	-	-	7,209	7,209
In US Dollar	1,998	-	-	-	-	-	1,998	1,998
In HK Dollar	55	-	-	-	-	-	55	55
In Japanese Yen								
In Euro	21	-	-	-	-	-	21	21
Others	65	-	-	-	-	-	65	65
Time deposits with financial institutions								
In RMB	132	-	-	-	-	-	132	132
In US Dollar	613	-	-	-	-	-	613	613
Liability								

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Debts in RMB								
Fixed rate	23,461	1,275	46,281	2,014	4,259	52,204	129,494	125,305
Average interest rate	4.2%	4.7%	3.5%	3.1%	3.1%	1.4%		
Variable rate	20,215	6,958	1,050	344	5,000	8,819	42,386	42,386
Average interest rate(1)	3.9%	5.6%	5.6%	4.2%	5.2%	6.8%		
Debts in US Dollar								
Fixed rate	7,394	4,625	37	6,107	23	10,932	29,118	28,992
Average interest rate	0.9%	1.3%	1.4%	2.1%	1.5%	3.5%		
Variable rate	126,581	612	-	-	-	-	127,193	127,193
Average interest rate(1)	1.3%	1.8%	-	-	-	-		
Debts in Japanese Yen								
Fixed rate	54	54	54	54	54	175	445	492
Average interest rate	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%		
Variable rate								
Average interest rate(1)								
Debts in HK Dollar								

Fixed rate	5	-	-	-	-	-	5	5
Average interest rate	1.8%	-	-	-	-	-		
Variable rate	-	-	-	-	-	-		
Average interest rate(1)	-	-	-	-	-	-		
Debts in Euro								
Fixed rate	10	-	-	-	-	-	10	10
Average interest rate	3.0%	-	-	-	-	-		
Variable rate	429	-	-	-	-	-	429	429
Average interest rate(1)	1.2%	-	-	-	-	-		

(1) The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2014.

(2) Carrying amounts are used for loans from Sinopec Group Company and its affiliates as it is not practicable to estimate their fair values because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive.

## ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

### A. Debt Securities

Not applicable.

### B. Warrants and Rights

Not applicable.

### C. Other Securities

Not applicable.

### D. American Depositary Shares

#### Depositary Fees and Charges

Under the terms of the Deposit Agreement for China Petroleum & Chemical Corporation's American Depositary Shares (ADSs), an ADS holder may have to pay the following services fees to the Depositary:

Services	Fees
Issuance of ADSs	US\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) issued
Cancellation of ADSs	US\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) canceled
Distribution of cash dividends or other cash distributions	US\$2.00 (or less) per 100 ADSs (or portion of 100 ADSs) held
Distribution of ADSs pursuant to stock dividends, free stock distributions or exercises of rights	US\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) held

Distribution of securities other than ADSs or rights to purchase additional ADSs	US\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) held
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An ADS holder will also be responsible to pay certain fees and expenses incurred by the Depositary and certain taxes and governmental charges such as:

- Taxes (including relevant interests and fines) and other governmental charges;
- such registration fees as may from time to time be in effect, for the registration of deposited securities in the register of members, or for the registration of transfers of deposited securities to the name of the Depositary or its nominee or the Custodian or its nominee on the making of deposits or withdrawals;
- such cable, telex and facsimile transmission expenses as are expressly provided in the Deposit Agreement;



- such expenses as are incurred by the Depositary in the conversion of foreign currency;
- such expenses as are incurred with the compliance with the foreign currency control, ADSs and other deposited securities related laws, regulations and rules; and
- any other charge payable by the Depositary, any of the Depositary's agents, including the Custodian, Depositary, or the agents of the Custodian or Depositary, in connection with the servicing of deposited securities.

#### Depositary Payments for the Year 2015

In 2015, Citibank, N.A., the Depositary for our ADR program, provided reimbursement for our expenses related to the listing and investor' relations activities as follows:

- reimbursement of application fees: US\$225,434.97
- reimbursement of data infrastructure fees: US\$3,810.75
- reimbursement of proxy procedure fees: US\$141,763.59
- reimbursement of investor relations expenses (including expenses related to non-deal road show, investor meeting and investor relations agency): US\$388,474.59
- the accounting committee and accounting standard committee of public company: US\$96,598.98
- Total: US\$856,082.88

#### ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

#### ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

##### A. MATERIAL MODIFICATIONS TO THE RIGHTS TO SECURITIES HOLDERS

None.

##### B. USE OF PROCEEDS

Not applicable.

#### ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure the information required to be disclosed in reports filed by us under the U.S. Securities Exchange Act of 1934 (Exchange Act), as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our principal executive officer and principal officer, as appropriate, to allow for timely decisions regarding required disclosure. Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of December 31, 2015 (Evaluation Date), the end of the fiscal year covered by this annual report. Based on this evaluation, our principal executive officer and principal financial officer have concluded that, as of the Evaluation Date, our disclosure controls and procedures were effective.

## Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) of the Securities Exchange Act of 1934). The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting based upon the criteria established in Internal Control -- Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission as of December 31, 2015. Based on that evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2015 based on these criteria.

PricewaterhouseCoopers Zhong Tian LLP, an independent registered public accounting firm, has audited the consolidated financial statements included in this annual report on Form 20-F and, as part of the audit, has issued a report, included herein, on the effectiveness of our internal control over financial reporting.

## Changes in Internal Control over Financial Reporting

During the year ended December 31, 2015, there have been no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16.

RESERVED

ITEM 16A.

AUDIT COMMITTEE FINANCIAL EXPERT

The board of directors has determined that Mr. Andrew Y. Yan qualifies as an audit committee financial expert in accordance with the terms of Item 16.A of Form 20-F. Mr. Yan was appointed as an independent non-executive director and a manager of the audit committee of the sixth board of our company in 2015. For Mr. Yan's biographical information, see "Item 6 Directors, Senior Management and Employees – A. Directors, members of the supervisory committee and senior management."

ITEM 16B.

CODE OF ETHICS

Our controlling shareholder, Sinopec Group Company, adopted a Staff Code in 2015 to provide disciplines and requirements for its staff's conducts, including legal and ethical matters as well as the sensitivities involved in reporting illegal and unethical matters. The Staff Code covers such areas as HSE, conflict of interests, anti-corruption, protection and proper use of our assets and properties as well as reporting requirements. The Staff Code also applies to

all directors, officers and employees of each subsidiary of Sinopec Group Company, including us. We have provided all our directors and senior officers with a copy of the Staff Code and require them to comply with it in order to ensure our operations are proper and lawful. We have posted the Staff Code on our website, <http://english.sinopec.com/corporateculture/>.

## ITEM 16C.

## PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate audit fees, audit-related fees, tax fees of our principal accountants and all other fees billed for products and services provided by our principal accountants other than the audit fees, audit-related fees and tax fees for each of the fiscal years 2014 and 2015.

	Audit Fees	Audit-Related Fees	Tax Fees	Other Fees
2014	RMB 87 million	—	—	—
2015	RMB 64 million	—	—	—

We are only allowed to engage our principal accountants to render audit or non-audit services, after the engagement has been approved by our audit committee.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

None.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

None.

ITEM 16G. COMPARISON OF NEW YORK STOCK EXCHANGE CORPORATE GOVERNANCE RULES AND CHINA CORPORATE GOVERNANCE RULES FOR LISTED COMPANIES

Under the amended Corporate Governance Rules of the NYSE, foreign issuers (including us) listed on the NYSE are required to disclose a summary of the significant differences between their domestic corporate governance rules and NYSE corporate governance rules that would apply to a U.S. domestic issuer. A summary of such differences is listed below:

NYSE corporate governance rules Corporate governance guidelines Listed companies must adopt and disclose corporate governance guidelines, involving director qualification standards, director responsibilities, directors' access to management and independent advisors, director compensation, director continuing education, management succession, annual performance evaluation of the board of directors, etc.	Corporate governance rules applicable to the domestically listed companies in China and the Company's governance practices
Director Independence A listed company must have a majority of independent directors on its board of directors. No director qualifies as "independent" unless the board of directors affirmatively determines that the director has no material relationship with the listed	PRC corporate governance rules promulgated by China Securities Regulatory Commission prescribe detailed guidelines on directors of the listed companies, including director selection, the structure of the board of directors and director performance evaluation etc.  The Company has complied with the above mentioned laws or rules.  It is required in China that any listed company must establish an independent director system and set forth specific requirements for the qualification of independent directors. For example, an independent director shall not hold any other

company (either directly or as a partner, shareholder or officer of an organization that has a relationship with the company). In addition, a director must meet certain standards to be deemed independent. For example, a director is not independent if the director is, or has been within the last three years, an employee of the listed company, or an immediate family member is, or has been within the last three years, an executive officer of the listed company, or if the director has received, or has an immediate family member who has received, during any twelve-month period within the last three years, more than US\$120,000 in direct compensation from the listed company, other than director and committee fees and pension or other forms of deferred compensation for prior service (provided such compensation is not contingent in any way on continued service).

position in the listed company other than being a director and shall not be influenced by the main shareholders or the controlling persons of the listed company, or by any other entities or persons with whom the listed company has a significant relationship.

The Company has complied with the relevant Chinese corporate governance rules and has implemented internal rules governing the independence and responsibilities of independent directors. The Company determines the independence of independent directors every year.

NYSE corporate governance rules  
To empower non-management directors to serve as a more effective check on management, the non-management directors of each listed company must meet at regularly scheduled executive sessions without management.

Corporate governance rules applicable to the domestically listed companies in China and the Company's governance practices  
No similar requirements.

#### Nominating/Corporate Governance Committee

Listed companies must have a nominating/corporate governance committee composed entirely of independent directors.

It is stipulated in China that the board of directors of a listed company may, through the resolution of the shareholders' meeting, establish a nominating committee composed entirely of directors, of which the independent directors shall be the majority and the convener.

Up to now, the Company has not set up any nominating committee.

The nominating/corporate governance committee must have a written charter that addresses the committee's purposes and responsibilities which, at minimum, must be to: search for eligible people for the board of directors, select and nominate directors for the next session of the shareholders' annual meeting, study and propose corporate governance guidelines, supervise the evaluation of the board of directors and management, and evaluate the performance of the committee every year.

Relevant responsibilities of the nominating/corporate governance committee are similar to those stipulated by the NYSE rules, but the main responsibilities do not include the research and recommendation of corporate governance guidelines, the supervision of the evaluation of the board of directors and management, or the annual evaluation of the committee.

#### Compensation Committee

Listed companies must have a compensation committee composed entirely of independent directors.

It is stipulated in China that the board of directors of a listed company may, subject to shareholders' resolution, have a compensation and assessment committee composed entirely of directors, of whom the independent directors are the majority and act as the convener.

The compensation committee must have a written charter that addresses, at least, the following purposes and responsibilities:  
(1) review and approve the corporate goals associated with CEO's compensation,

It is stipulated in China that the responsibilities of the compensation committee are:  
(1) to study evaluation standards on the performance of directors and the senior

evaluate the performance of the CEO in fulfilling these goals, and, either as a committee or together with the other independent directors (as directed by the board), based on such evaluation, determine and approve the CEO's compensation level; (2) make recommendations to the board with respect to non-CEO executive officer compensation, and incentive-compensation and equity-based plans that are subject to board approval; (3) produce a committee report on executive compensation as required by the SEC to be included in the annual proxy statement or annual report filed with the SEC.

The charter must also include the requirement for an annual performance evaluation of the compensation committee.

management and submit suggestion to the board of directors;

(2) to study and review the compensation policies on the directors and the senior management.

The committee is required to provide a summary report for the performance of its duties in the Company's annual report. But the committee is not required to produce a report on the executive compensation or make an annual performance evaluation of the committee.

The board of directors of the Company has established a compensation and performance evaluation committee composed mainly of independent directors who act as the convener, and the committee has established a written charter complying with the domestic corporate governance rules.



NYSE corporate governance rules  
The compensation committee may, in its sole discretion, retain or consult a compensation consultant, independent legal counsel or other advisor. The compensation committee shall be directly responsible for the appointment, compensation and oversight of the work of such advisor. A listed company must provide for appropriate funding for payment of reasonable compensation to such advisor. The compensation committee may select such advisor to the compensation committee only after taking into consideration all factors relevant to that person's independence from management.

#### Audit Committee

Listed companies must have an audit committee that satisfies the requirements of Rule 10A-3 of Securities Exchange Act of 1934 (Exchange Act). It must have a minimum of three members, and all audit committee members must satisfy the requirements for independence set forth in Section 303A.02 of NYSE Corporate Governance Rules as well as the requirements of Rule 10A-3(b)(1) of the Exchange Act.

The audit committee must have a written charter that specifies the purpose of the audit committee is, at minimum, to assist the board oversight of the integrity of financial statements, the company's compliance with legal and regulatory requirements, qualifications and independence of independent auditors and the performance of the listed company's internal audit function and independent auditors.

In addition, the written charter must require the audit committee to prepare an audit committee report as required by the SEC to be included in the listed company's annual proxy statement as well as an annual performance evaluation of the audit

Corporate governance rules applicable to the domestically listed companies in China and the Company's governance practices

It is stipulated in China that the board of directors of a listed company may, subject to shareholders' resolution, establish an audit committee composed entirely of competent directors with expertise and business experience, of which the independent directors are the majority and act as the convener, and, at minimum, one independent director is an accounting professional.

The responsibilities of the audit committee are similar to those stipulated by the NYSE rules. The committee is required to provide a summary report for the performance of its duties in the Company's annual report. The board of directors shall evaluate the independence and performance of members of the audit committee periodically, and may replace any member who is no longer suitable for the position. The company shall disclose the performance of the audit committee in its annual report, including meetings convened by the audit committee.

The Board of Directors of the Company has established an audit committee that satisfies relevant domestic and overseas requirements

committee.

and the audit committee has a written charter.

The written charter must also specify the duties and responsibilities of the audit committee, which, at a minimum, must include those set out in Rule 10A-3(b)(2), (3), (4) and (5) of the Exchange Act, as well as other duties and responsibilities such as to obtain and review a report by the independent auditor at least annually, meet to review and discuss the listed company's annual audited financial statements and quarterly financial statements with management and independent auditor.

Each listed company must have an internal audit department.

China has a similar regulatory provision, and the Company has an internal audit department.

Shareholder approval of equity compensation plan

Shareholders must be given the opportunity to vote on all equity-compensation plans and material revisions thereto, except for, among others, plans that are made available to shareholders generally, such as typical dividend reinvestment plan and certain awards and plans in the context of mergers and acquisitions.

The relevant regulations of China require the board of directors propose plans on the amount and types of director compensation for the shareholders' meeting to approve. The compensation plan of executive officers shall be approved by the board and disclosed to the public.

The Company has complied with the above mentioned laws or rules.

<p>NYSE corporate governance rules Code of ethics for directors, officers and employees Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. Each code of business conduct and ethics must require that any waiver of the code for executive officers or directors may be made only by the board or a board committee.</p>	<p>Corporate governance rules applicable to the domestically listed companies in China and the Company's governance practices</p> <p>China does not have such requirement for a code for ethics. But, since the directors and officers of the Company have all signed the Director Service Agreement or employment agreement, as applicable, they are bound by their fiduciary duties to the Company. In addition, the directors and officers must perform their legal responsibilities in accordance with the Company Law of PRC, relative requirements of CSRS and Mandatory Provisions to the Charter of Companies Listed Overseas. Meanwhile, the Company establishes The Model Code of Securities Transactions by Corporate Employees and The Rules of The Company's Shares Transactions by Corporate Directors, Superiors and Senior Managements to regulate the above mentioned people when transacting related securities. The Company also promulgated the Code for Employees of the Company as the standards of business conduct and ethics of the employees.</p>
<p>Each listed company CEO must certify to the NYSE each year that he or she is not aware of any violation by the listed company of NYSE corporate governance listing standards and he or she must promptly notify the NYSE in writing of any non-compliance with any applicable provisions of Section 303A.</p>	<p>No similar requirements.</p>

ITEM 16H.

MINE SAFETY DISCLOSURE

Not applicable.

ITEM 17.

FINANCIAL STATEMENTS

Not applicable.

ITEM 18.

FINANCIAL STATEMENTS

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

ITEM 19.

EXHIBITS

1\*\* Articles of Association of the Registrant, amended and adopted by the shareholders' meeting on May 22, 2009 (English translation), incorporated by reference to Exhibit 1.2 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 30, 2010 (File Number: 001-15138).

1.1\*\* Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on May 11, 2012 (English translation), incorporated by reference to Exhibit 1.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).

1.2\*\* Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on October 16, 2012 (English translation), incorporated by reference to Exhibit 1.2 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).

- 1.3\*\* Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on May 29, 2013 (English translation); incorporated by reference to Exhibit 1.3 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 22, 2014 (File Number: 001-15138).
- 1.4\*\* Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on May 9, 2014 (English translation).
- 1.5\* Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on May 27, 2015 (English translation).
- 4.1\*\* Forms of Director Service Contracts dated May 11, 2012 (English translation), , incorporated by reference to Exhibit 4.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).
- 4.2\*\* Forms of Supervisor Service Contracts dated May 11, 2012 (English translation), , incorporated by reference to Exhibit 4.2 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).
- 4.3\*\* Reorganization Agreement between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.1 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.4\*\* Agreement for Mutual Provision of Products and Ancillary Services between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.3 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.5\*\* Agreement for Provision of Cultural, Educational, Hygiene and Community Services between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.4 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.6\*\* Trademark License Agreement between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.6 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.7\*\* Patents and Proprietary Technology License Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.7 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.8\*\* Computer Software License Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.8 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).

- 4.9\*\* Assets Swap Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.9 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.10\*\* Land Use Rights Leasing Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.10 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.12\*\* Property Leasing Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.11 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).

- 4.13\*\* Accounts Collectable Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 16, 2000 (including English translation), incorporated by reference to Exhibit 10.17 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.14\*\* Loan Transfer and Adjustment Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 16, 2000 (including English translation), incorporated by reference to Exhibit 10.18 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).
- 4.15\*\* Agreement on Adjustment to Related Party Transactions between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 11, 2001 (English translation), incorporated by reference to Exhibit 4.15 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138).
- 4.16\*\* Land Use Right Leasing Agreement between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 22, 2003 (English translation), incorporated by reference to Exhibit 4.16 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138).
- 4.17\*\* 2004 Agreement on Adjustment to Related Party Transactions between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated October 31, 2004 (English translation) , incorporated by reference to Exhibit 4.17 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138).
- 4.18\*\* Memorandum on Adjustment of Rent of Land Use Rights between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated March 31, 2006 (English translation) , incorporated by reference to Exhibit 4.18 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138).
- 4.19\*\* Supplemental Agreement on Related Party Transactions between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated March 31, 2006 (English translation) , incorporated by reference to Exhibit 4.19 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138).
- 4.19.1\*\* Continuing Connected Transactions Second Supplemental Agreement between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 21, 2009 (English translation), incorporated by reference to Exhibit 4.21 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 30, 2010 (File Number: 001-15138).
- 4.19.2\*\* Continuing Connected Transactions Third Supplemental Agreement between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 24, 2012 (English translation), incorporated by reference to Exhibit 4.19.2 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).
- 4.20\*\* Memorandum on Adjustment of Rent of Land Use Rights between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 22, 2008 (English Translation), incorporated by reference to Exhibit 4.20 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on May 20, 2009 (File Number: 001-15138).

4.20.1\*\* Land Use Rights Leasing Agreement Third Amendment Memo between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 24, 2012 (English Translation), incorporated by reference to Exhibit 4.20.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).

4.21\*\* Non-Compete Agreement Between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 and its related Undertakings (English translation), incorporated by reference to Exhibit 4.21 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on September 26, 2013 (File Number: 001-15138).



4.21.1\*\* Undertakings from China Petrochemical Corporation Regarding Further Avoiding Competition with China Petroleum & Chemical Corporation dated April 28, 2014 (English translation).

4.22\* A Supplementary Agreement to the existing Non-Compete Agreement Between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 and its related Undertakings (English translation).

8.1\*\* A list of the Registrant's subsidiaries.

12.1\* Certification of Chairman pursuant to Rule 13a-14(a).

12.2\* Certification of President pursuant to Rule 13a-14(a).

12.3\* Certification of CFO pursuant to Rule 13a-14(a).

13\* Certification of CEO and CFO pursuant to 18 U.S.C. §1350, and Rule 13a-14(b).

15.1\*\* Letter from KPMG regarding Item 16F of this annual report, incorporated by reference to Exhibit 15.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on September 26, 2013 (File Number: 001-15138).

\* Filed herewith.

\*\* Furnished with this annual report on Form 20-F.

SIGNATURE

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

China Petroleum & Chemical Corporation

By:	/s/ Huang Wensheng
Name:	Huang Wensheng
Title:	Secretary to the Board of Directors

Date: April 20, 2016

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CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES

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Report of Independent Registered Public Accounting Firm

To the Shareholders of China Petroleum & Chemical Corporation,

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, comprehensive income, changes in equity and cash flows present fairly, in all material respects, the financial position of China Petroleum & Chemical Corporation (the “Company”) and its subsidiaries (collectively referred to as the “Group”) at December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the Management's Annual Report on Internal Control over Financial Reporting appearing under Item 15. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers Zhong Tian LLP  
Shanghai, the People's Republic of China

March 29, 2016

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF INCOME  
FOR THE YEARS ENDED DECEMBER 31, 2013, 2014 AND 2015

(Amounts in millions, except per share data)

	Note	Years ended December 31,		
		2013	2014	2015
		RMB	RMB	RMB
<b>Operating revenues</b>				
Sales of goods		2,833,247	2,781,641	1,976,412
Other operating revenues	3	47,064	44,273	42,471
		2,880,311	2,825,914	2,018,883
<b>Operating expenses</b>				
Purchased crude oil, products and operating supplies and expenses		(2,371,858)	(2,334,399)	(1,492,926)
Selling, general and administrative expenses	4	(69,928 )	(68,374 )	(69,330 )
Depreciation, depletion and amortization		(81,265 )	(90,097 )	(96,368 )
Exploration expenses, including dry holes		(12,573 )	(10,969 )	(10,459 )
Personnel expenses	5	(55,353 )	(57,233 )	(56,331 )
Taxes other than income tax	6	(190,672 )	(191,202 )	(236,343 )
Other operating expense, net	7	(1,877 )	(153 )	(98 )
Total operating expenses		(2,783,526)	(2,752,427)	(1,961,855)
Operating income		96,785	73,487	57,028
<b>Finance costs</b>				
Interest expense	8	(10,602 )	(11,218 )	(8,133 )
Interest income		1,568	1,779	2,978
Gain/(loss) on embedded derivative component of the convertible bonds	24(iii)	2,028	(4,611 )	(259 )
Net foreign currency exchange gain/(loss)		2,760	(179 )	(3,862 )
Net finance costs		(4,246 )	(14,229 )	(9,276 )
Investment income		154	2,616	444
Share of profits less losses from associates and joint ventures		2,359	3,630	8,081
Earnings before income tax		95,052	65,504	56,277
Tax expense	9	(24,763 )	(17,571 )	(12,613 )
Net income		70,289	47,933	43,664
<b>Attributable to:</b>				
Owners of the Company		66,132	46,466	32,438
Non-controlling interests		4,157	1,467	11,226
Net income		70,289	47,933	43,664
<b>Earnings per share:</b>				
Basic	11	0.57	0.40	0.27
Diluted	11	0.53	0.40	0.27

See accompanying notes to consolidated financial statements.

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME  
FOR THE YEARS ENDED DECEMBER 31, 2013, 2014 AND 2015  
(Amounts in millions)

	Note	Years ended December 31,		
		2013 RMB	2014 RMB	2015 RMB
Net income		70,289	47,933	43,664
Other comprehensive income:	10			
Items that may be reclassified subsequently to profit or loss (net of tax and after reclassification adjustments):				
Cash flow hedges		604	(4,485 )	3,163
Available-for-sale securities		1,314	(1,225 )	62
Share of other comprehensive loss of associates and joint ventures		(297 )	(3,042 )	(5,356 )
Foreign currency translation differences		(689 )	(514 )	2,268
Total items that may be reclassified subsequently to profit or loss		932	(9,266 )	137
Total other comprehensive income		932	(9,266 )	137
Total comprehensive income for the year		71,221	38,667	43,801
Attributable to:				
Owners of the Company		67,312	38,798	31,715
Non-controlling interests		3,909	(131 )	12,086
Total comprehensive income for the year		71,221	38,667	43,801

See accompanying notes to consolidated financial statements.



## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET  
AS OF DECEMBER 31, 2014 AND 2015  
(Amounts in millions)

ASSETS	Note	December 31, 2014 RMB	2015 RMB
<b>Current assets</b>			
Cash and cash equivalents		9,355	67,824
Time deposits with financial institutions		745	733
Trade accounts receivable, net	12	90,831	56,126
Bills receivable		13,963	10,949
Inventories	13	188,223	145,498
Prepaid expenses and other current assets	14	57,027	51,275
<b>Total current assets</b>		<b>360,144</b>	<b>332,405</b>
<b>Non-current assets</b>			
Property, plant and equipment, net	15	703,485	732,577
Construction in progress	16	177,667	152,276
Goodwill	17	6,281	6,271
Interest in associates	18	32,119	39,652
Interest in joint ventures	19	48,474	43,318
Available-for-sale financial assets	20	868	10,326
Deferred tax assets	21	6,979	7,469
Lease prepayments	22	49,136	51,044
Long-term prepayments and other assets	23	66,215	67,791
<b>Total non-current assets</b>		<b>1,091,224</b>	<b>1,110,724</b>
<b>Total assets</b>		<b>1,451,368</b>	<b>1,443,129</b>
<b>LIABILITIES AND EQUITY</b>			
<b>Current liabilities</b>			
Short-term debts	24	75,183	71,517
Loans from Sinopec Group Company and fellow subsidiaries	24	102,965	43,929
Trade accounts payable	25	198,366	130,446
Bills payable	25	4,577	3,566
Accrued expenses and other payables	26	222,075	212,136
Income tax payable		1,091	1,048
<b>Total current liabilities</b>		<b>604,257</b>	<b>462,642</b>
<b>Non-current liabilities</b>			
Long-term debts	24	107,787	95,446
Loans from Sinopec Group Company and fellow subsidiaries	24	43,145	44,300
Deferred tax liabilities	21	7,820	8,259
Provisions	27	29,715	33,186
Other long-term liabilities		13,067	15,077
<b>Total non-current liabilities</b>		<b>201,534</b>	<b>196,268</b>
<b>Total liabilities</b>		<b>805,791</b>	<b>658,910</b>
<b>Equity</b>			
Share capital	28	118,280	121,071
Reserves	37	474,761	552,958

Total equity attributable to owners of the Company	593,041	674,029
Non-controlling interests	52,536	110,190
Total equity	645,577	784,219
Total liabilities and equity	1,451,368	1,443,129

See accompanying notes to consolidated financial statements.

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY  
FOR THE YEARS ENDED DECEMBER 31, 2013, 2014 AND 2015  
(Amounts in millions)

	Share capital RMB	Capital reserve RMB	Share premium RMB	Statutory surplus reserve RMB	Dis- cretionary surplus reserve RMB	Other reserves RMB	Retained earnings RMB	Total equity attributable to owners of Non- controlling Company RMB	interests RMB	Total equity RMB
Balance as of January 1, 2013	86,820	(33,307)	25,752	67,603	117,000	3,305	243,741	510,914	37,122	548,036
Net income	—	—	—	—	—	—	66,132	66,132	4,157	70,289
Other comprehensive income(Note 10)	—	—	—	—	—	1,180	—	1,180	(248 )	932
Total comprehensive income for the year	—	—	—	—	—	1,180	66,132	67,312	3,909	71,221
Transactions with owners, recorded directly in equity:										
Contributions by and distributions to owners:										
Conversion of the 2011 Convertible Bonds (Note 24(iii))	—	—	1	—	—	—	—	1	—	1
Final dividend for 2012	—	—	—	—	—	—	(17,933 )	(17,933 )	—	(17,933 )
Interim dividend for 2013	—	—	—	—	—	—	(10,491 )	(10,491 )	—	(10,491 )
Appropriation (Note 37(c))	—	—	—	5,734	—	—	(5,734 )	—	—	—

Rights issue of H shares, net of issuance costs (Note 28)	2,845	—	16,561	—	—	—	—	19,406	—	19,406
Contributions to subsidiaries from non-controlling interests	—	600	—	—	—	—	—	600	12,096	12,696
Distributions to non-controlling interests	—	—	—	—	—	—	—	—	(1,261)	(1,261)
Total contributions by and distributions to owners	2,845	600	16,562	5,734	—	—	(34,158)	(8,417)	10,835	2,418
Bonus issues (Note 28)	17,933	—	—	—	—	—	(17,933)	—	—	—
Capitalization (Note 28)	8,967	—	(8,967)	—	—	—	—	—	—	—
Changes in ownership interests in subsidiaries that do not result in a loss of control										
Non-tradable shares reform	—	(986)	—	—	—	—	—	(986)	986	—
Acquisitions of non-controlling interests of subsidiaries	—	(20)	—	—	—	—	—	(20)	(29)	(49)
Total changes in ownership interests in subsidiaries that do not result in a loss of control	—	(1,006)	—	—	—	—	—	(1,006)	957	(49)
Total transactions with owners	29,745	(406)	7,595	5,734	—	—	(52,091)	(9,423)	11,792	2,369
Others	—	—	—	—	—	(1,994)	1,994	—	—	—
Balance as of December 31, 2013	116,565	(33,713)	33,347	73,337	117,000	2,491	259,776	568,803	52,823	621,626

See accompanying notes to consolidated financial statements.



## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

FOR THE YEARS ENDED DECEMBER 31, 2013, 2014 AND 2015

(Amounts in millions)

	Share capital RMB	Capital reserve RMB	Share premium RMB	Statutory surplus reserve RMB	Dis- cretionary surplus reserve RMB	Other reserves RMB	Retained earnings RMB	Total equity attributable to owners of the Company RMB	Non- controlling interests RMB	Total equity RMB
Balance as of January 1, 2014	116,565	(33,713)	33,347	73,337	117,000	2,491	259,776	568,803	52,823	621,626
Net income							46,466	46,466	1,467	47,933
Other comprehensive income (Note 10)						(7,668)		(7,668)	(1,598)	(9,266)
Total comprehensive income for the year						(7,668)	46,466	38,798	(131)	38,667
Transactions with owners, recorded directly in equity:										
Contributions by and distributions to owners:										
Conversion of the 2011 Convertible Bonds (Note 24(iii))	1,715		8,477					10,192		10,192
Final dividend for 2013							(17,519)	(17,519)		(17,519)
Interim dividend for 2014							(10,512)	(10,512)		(10,512)
Appropriation (Note 37 (c))				3,215			(3,215)			
									4,155	4,155

Contributions to subsidiaries from non-controlling interests										
Distributions to non-controlling interests								(1,545 )	(1,545 )	
Total contributions by and distributions to owners	1,715		8,477	3,215			(31,246 )	(17,839 )	2,610	(15,229 )
Changes in ownership interests in subsidiaries that do not result in a loss of control:										
Transaction with non-controlling interests		3,216						3,216	(2,877 )	339
Total changes in ownership interests in subsidiaries that do not result in a loss of control		3,216						3,216	(2,877 )	339
Total transactions with owners	1,715	3,216	8,477	3,215			(31,246 )	(14,623 )	(267 )	(14,890 )
Others						(1,002)	1,065	63	111	174
Balance as of December 31, 2014	118,280	(30,497)	41,824	76,552	117,000	(6,179)	276,061	593,041	52,536	645,577

See accompanying notes to consolidated financial statements.

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

FOR THE YEARS ENDED DECEMBER 31, 2013, 2014 AND 2015

(Amounts in millions)

	Share capital RMB	Capital reserve RMB	Share premium RMB	Statutory surplus reserve RMB	Dis- cretionary surplus reserve RMB	Other reserves RMB	Retained earnings RMB	Total equity attributable to owners of the Company RMB	Non- controlling interests RMB	Total equity RMB
Balance as of January 1, 2015	118,280	(30,497)	41,824	76,552	117,000	(6,179)	276,061	593,041	52,536	645,577
Net income							32,438	32,438	11,226	43,664
Other comprehensive income (Note 10)						(1,169)		(1,169)	1,306	137
Total comprehensive income for the year						(1,169)	32,438	31,269	12,532	43,801
Transactions with owners, recorded directly in equity:										
Contributions by and distributions to owners:										
Conversion of the 2011 Convertible Bonds (Note 24(iii))	2,791		14,026					16,817		16,817
Final dividend for 2014							(13,318)	(13,318)		(13,318)
Interim dividend for 2015							(10,896)	(10,896)		(10,896)
Appropriation (Note 37 (c))				3,088			(3,088)			
		56,224				446		56,670	48,807	105,477



Contributions to subsidiaries from non-controlling interests										
Distributions to non-controlling interests								(3,389 )	(3,389 )	
Total contributions by and distributions to owners	2,791	56,224	14,026	3,088		446	(27,302 )	49,273	45,418	94,691
Changes in ownership interests in subsidiaries that do not result in a loss of control:										
Transaction with non-controlling interests		326						326	(326 )	
Total changes in ownership interests in subsidiaries that do not result in a loss of control		326						326	(326 )	
Total transactions with owners	2,791	56,550	14,026	3,088		446	(27,302 )	49,599	45,092	94,691
Others		120				121	(121 )	120	30	150
Balance as of December 31, 2015	121,071	26,173	55,850	79,640	117,000	(6,781)	281,076	674,029	110,190	784,219

See accompanying notes to consolidated financial statements.

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2013, 2014 AND 2015  
(Amounts in millions)

	Note	Years ended December 31,		2015 RMB
		2013 RMB	2014 RMB	
Net cash generated from operating activities	(a)	151,893	148,347	165,818
Investing activities				
Capital expenditure		(144,972 )	(113,047 )	(95,454 )
Exploratory wells expenditure		(9,974 )	(11,334 )	(7,203 )
Purchase of investments, investments in associates and investments in joint ventures	18 and 19 20	(33,487 )	(16,387 )	(23,421 )
Proceeds from disposal of investments and investments in associates		4,198	3,874	3,353
Proceeds from disposal of property, plant, equipment and other non-current assets		1,550	1,020	454
Decrease/(increase) in time deposits with maturities over three months		353	(690 )	12
Interest received		1,456	1,619	2,196
Investment and dividend income received		2,136	2,312	3,111
Net cash used in investing activities		(178,740 )	(132,633 )	(116,952 )
Financing activities				
Proceeds from bank and other loans		1,142,890	1,128,447	1,090,241
Repayments of bank and other loans		(1,105,457)	(1,114,481)	(1,152,837)
Proceeds from issuing shares		19,406		
Contributions to subsidiaries from non-controlling interests		12,696	4,128	105,477
Dividends paid by the Company		(28,298 )	(28,031 )	(24,214 )
Distributions by subsidiaries to non-controlling interests		(1,346 )	(1,674 )	(1,212 )
Interest paid		(8,323 )	(9,789 )	(8,145 )
Transaction with non-controlling interests		(49 )	(21 )	
Net cash generated from/(used in) financing activities		31,519	(21,421 )	9,310
Net increase/(decrease) in cash and cash equivalents		4,672	(5,707 )	58,176
Cash and cash equivalents as of January 1		10,456	15,046	9,355
Effect of foreign currency exchange rate changes		(82 )	16	293
Cash and cash equivalents as of December 31		15,046	9,355	67,824

See accompanying notes to consolidated financial statements.

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED STATEMENT OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2013, 2014 AND 2015  
(Amounts in millions)

## (a) Reconciliation of earnings before income tax to net cash generated from operating activities

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Operating activities			
Earnings before income tax	95,052	65,504	56,277
Adjustment for:			
Depreciation, depletion and amortization	81,265	90,097	96,368
Dry hole costs written off	5,599	5,587	6,099
Income from associates and joint ventures	(2,359 )	(3,630 )	(8,081 )
Investment income	(154 )	(2,616 )	(444 )
Interest income	(1,568 )	(1,779 )	(2,978 )
Interest expense	10,602	11,218	8,133
(Gain)/loss on foreign currency exchange rate changes and derivative financial instruments	(934 )	(662 )	3,085
Loss on disposal of property, plant, equipment and other non-currents assets, net	826	1,622	721
Impairment losses on assets	4,044	6,839	8,767
(Gain)/loss on embedded derivative component of the convertible bonds	(2,028 )	4,611	259
	190,345	176,791	168,206
Net charges from:			
Accounts receivable and other current assets	(7,515 )	(28,654 )	40,866
Inventories	(5,096 )	28,540	39,072
Accounts payable and other current liabilities	151	(6,777 )	(68,327 )
	177,885	169,900	179,817
Income tax paid	(25,992 )	(21,553 )	(13,999 )
Net cash generated from operating activities	151,893	148,347	165,818

See accompanying notes to consolidated financial statements.

1 PRINCIPAL ACTIVITIES, ORGANIZATION AND BASIS OF PRESENTATION

Principal activities

China Petroleum & Chemical Corporation (the “Company”) is an energy and chemical company that, through its subsidiaries (hereinafter collectively referred to as the “Group”), engages in oil and gas and chemical operations in the People’s Republic of China (the “PRC”). Oil and gas operations consist of exploring for, developing and producing crude oil and natural gas; transporting crude oil and natural gas by pipelines; refining crude oil into finished petroleum products; and marketing crude oil, natural gas and refined petroleum products. Chemical operations include the manufacture and marketing of a wide range of chemicals for industrial uses.

Organization

The Company was established in the PRC on February 25, 2000 as a joint stock limited company as part of the reorganization (the “Reorganization”) of China Petrochemical Corporation (“Sinopec Group Company”), the ultimate holding company of the Group and a ministry-level enterprise under the direct supervision of the State Council of the PRC. Prior to the incorporation of the Company, the oil and gas and chemical operations of the Group were carried on by oil administration bureaux, petrochemical and refining production enterprises and sales and marketing companies of Sinopec Group Company.

As part of the Reorganization, certain of Sinopec Group Company’s core oil and gas and chemical operations and businesses together with the related assets and liabilities were transferred to the Company. On February 25, 2000, in consideration for Sinopec Group Company transferring such oil and gas and chemical operations and businesses and the related assets and liabilities to the Company, the Company issued 68.8 billion domestic state-owned ordinary shares with a par value of RMB 1.00 each to Sinopec Group Company. The shares issued to Sinopec Group Company on February 25, 2000 represented the entire registered and issued share capital of the Company as of that date. The oil and gas and chemical operations and businesses transferred to the Company were related to (i) the exploration, development and production of crude oil and natural gas, (ii) the refining, transportation, storage and marketing of crude oil and petroleum products, and (iii) the production and sales of chemicals.

Basis of preparation

The accompanying consolidated financial statements have been prepared in accordance with applicable International Financial Reporting Standards (“IFRSs”) as issued by the International Accounting Standards Board (“IASB”). IFRS includes International Accounting Standards (“IAS”) and related interpretations (“IFRIC”). A summary of the significant accounting policies adopted by the Group are set out in Note 2. The accompanying financial statements were authorized for issue by the Board of Directors on March 29, 2016.

(a) New and amended standards and interpretations adopted by the Group

The IASB has not issued any new and amended standards and interpretations that are first effective for the current accounting period of the Group. The Group has not adopted any new standard or interpretation that is not yet effective for the current accounting period.

(b) New and amended standards and interpretations not yet adopted by the Group

The following relevant IFRSs, amendments to existing IFRSs and interpretation of IFRS have been published and are mandatory for accounting periods beginning on or after January 1, 2016 or later periods and have not been early adopted by the Group. Management is in the process of making an assessment of what the impact of these

amendments, new standards and new interpretations is expected to be in the period of initial application and has so far concluded that, except for IFRS 16, the adoption of these amendments, new standards and new interpretations is unlikely to have a significant impact on the Group's results of operations and financial position.

IFRS 9, 'Financial instruments', addresses the classification, measurement and recognition of financial assets and financial liabilities. The complete version of IFRS 9 was issued in July 2014. It replaces the whole of IAS 39. IFRS 9 introduces a new model for the recognition of impairment losses – the expected credit losses (ECL) model, which constitutes a change from the incurred loss model in IAS 39. IFRS 9 applies to all hedging relationships, with the exception of portfolio fair value hedges of interest rate risk. The new guidance better aligns hedge accounting with the risk management activities of an entity and provides relief from the more "rule-based" approach of IAS 39. IFRS 9 is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted.

Amendments to IFRS 10 and IAS 28 on sale or contribution of assets between an investor and its associate or joint venture. The amendments address an inconsistency between IFRS 10 and IAS 28 in the sale and contribution of assets between an investor and its associate or joint venture. A full gain or loss is recognized when a transaction involves a business. A partial gain or loss is recognized when a transaction involves assets that do not constitute a business, even if those assets are in a subsidiary. The amendments were originally intended to be effective for annual periods beginning on or after January 1, 2016. The effective date has now been deferred/removed. Early application of the amendments continues to be permitted.

Amendment to IFRS 11 on accounting for acquisitions of interests in joint operations. The amendment requires an investor to apply the principles of business combination accounting when it acquires an interest in a joint operation that constitutes a 'business' (as defined in IFRS 3, Business combinations). Specifically, an investor will need to: (1) measure identifiable assets and liabilities at fair value; (2) expense acquisition-related costs; (3) recognize deferred tax; and (4) recognize the residual as goodwill. All other principles of business combination accounting apply unless they conflict with IFRS 11. The amendment is applicable to both the acquisition of the initial interest and a further interest in a joint operation. The previously held interest is not remeasured when the acquisition of an additional interest in the same joint operation with joint control maintained. Amendment to IFRS 11 is effective for annual financial statements for a period beginning on or after January 1, 2016. Earlier application is permitted.

IFRS 15, 'Revenue from contracts with customers', establishes a comprehensive framework for determining when to recognize revenue and how much revenue to recognize through a 5-step approach. IFRS 15 provides specific guidance on capitalization of contract cost and licence arrangements. It also includes a cohesive set of disclosure requirements about the nature, amount, timing and uncertainty of revenue and cash flows arising from the entity's contracts with customers. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to the customer in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. IFRS 15 replaces the previous revenue standards: IAS 18 'Revenue' and IAS 11 'Construction Contracts' and the related Interpretations on revenue recognition: IFRIC 13 'Customer Loyalty Programmes', IFRIC 15 'Agreements for the Construction of Real Estate', IFRIC 18 'Transfers of Assets from Customers' and SIC-31 'Revenue-Barter Transactions Involving Advertising Services'. IFRS 15 is effective for annual reporting periods beginning on or after January 1, 2018, with earlier application permitted.

Amendment to IAS 27, 'Method to measure investments in subsidiaries, joint ventures and associates', allows entities to use equity method to measure investments in subsidiaries, joint ventures and associates in their separate financial statements. IAS 27 currently allows entities to measure their investments in subsidiaries, joint ventures and associates either at cost or as a financial asset in their separate financial statements. The amendments introduce the equity method as a third option. The election can be made independently for each category of investment (subsidiaries, joint ventures and associates). Entities wishing to change to the equity method must do so retrospectively. The amendment is effective for annual period beginning on or after January 1, 2016. Earlier application is permitted.

IFRS 16, 'Leases', provides updated guidance on the definition of leases, and the guidance on the combination and separation of contracts. Under IFRS 16, a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. IFRS 16 requires lessees to recognize lease liability reflecting future lease payments and a 'right-of-use-asset' for almost all lease contracts, with an exemption for certain short-term leases and leases of low-value assets. The lessors accounting stays almost the same as under IAS 17 'Leases'. Management is still assessing the impact of adoption IFRS 16 to the Group's results of operation and financial position. An entity shall apply IFRS 16 for annual reporting periods beginning on or after January 1, 2019. Earlier application is permitted if IFRS 15 is also applied.

The accompanying consolidated financial statements are prepared on the historical cost basis except for the remeasurement of available-for-sale securities (Note 2(k)), securities held for trading (Note 2(k)), derivative financial

instruments (Note 2(l) and (n)) and derivative component of the convertible bonds (Note 2(r)) to their fair values.

The preparation of the financial statements in accordance with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets

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and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the year. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Key assumptions and estimation made by management in the application of IFRSs that have significant effect on the consolidated financial statements and the major sources of estimation uncertainty are disclosed in Note 35.

## 2 SIGNIFICANT ACCOUNTING POLICIES

### (a) Basis of consolidation

The consolidated financial statements comprise the Company and its subsidiaries, and the Group's interest in associates and joint ventures.

#### (i) Subsidiaries and non-controlling interests

Subsidiaries are those entities controlled by the Group. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The financial statements of subsidiaries are included in the consolidated financial statements from the date that control effectively commences until the date that control effectively ceases.

Non-controlling interests at the balance sheet date, being the portion of the net assets of subsidiaries attributable to equity interests that are not owned by the Company, whether directly or indirectly through subsidiaries, are presented in the consolidated balance sheet and consolidated statement of changes in equity within equity, separately from equity attributable to the owners of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of income and the consolidated statement of comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the owners of the Company.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognized.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognized in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognized at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (note 2(k)) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (note 2(a)(ii)).

The particulars of the Group's principal subsidiaries are set out in Note 33.

(ii)

Associates and joint ventures

An associate is an entity, not being a subsidiary, in which the Group exercises significant influence over its management. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations each investor has rather than the legal structure of the joint arrangement. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

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Investments in associates and joint ventures are accounted for in the consolidated financial statements using the equity method from the date that significant influence or joint control commences until the date that significant influence or joint control ceases. Under the equity method, the investment is initially recorded at cost and adjusted thereafter for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (Note 2(j) and (o)).

The Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognized in the consolidated statement of income, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognized in the consolidated statement of comprehensive income.

When the Group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognized in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognized at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see Note 2(k)) or, when appropriate, the cost on initial recognition of an investment in an associate (see Note 2(a) (ii)).

(iii) Transactions eliminated on consolidation

Inter-company balances and transactions and any unrealized gains arising from inter-company transactions are eliminated on consolidation. Unrealized gains arising from transactions with associates and joint ventures are eliminated to the extent of the Group's interest in the entity. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

(b) Translation of foreign currencies

The presentation currency of the Group is Renminbi. Foreign currency transactions during the year are translated into Renminbi at the applicable rates of exchange quoted by the People's Bank of China ("PBOC") prevailing on the transaction dates. Foreign currency monetary assets and liabilities are translated into Renminbi at the PBOC's rates at the balance sheet date.

Exchange differences, other than those capitalized as construction in progress, are recognized as income or expenses in the "finance costs" section of the consolidated statement of income.

The results of foreign operations are translated into Renminbi at the applicable rates quoted by the PBOC prevailing on the transaction dates. Balance sheet items, including goodwill arising on consolidation of foreign operations are translated into Renminbi at the closing foreign exchange rates at the balance sheet date. The income and expenses of foreign operations are translated into Renminbi at the spot exchange rates or an exchange rate that approximates the spot exchange rates on the transaction dates. The resulting exchange differences are recognized in other comprehensive income and accumulated in equity in the other reserves.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to the consolidated statement of income when the profit or loss on disposal is recognized.

(c) Cash and cash equivalents

Cash equivalents consist of time deposits with financial institutions with an initial term of less than three months when purchased. Cash equivalents are stated at cost, which approximates fair value.

(d) Trade, bills and other receivables

Trade, bills and other receivables are initially recognized at fair value and thereafter stated at amortized cost using the effective interest method, less impairment losses for bad and doubtful debts (Note 2(o)). Trade, bills and other receivables are derecognized if the Group's contractual rights to the cash flows from these financial assets expire or if the Group transfers these financial assets to another party without retaining control or substantially all risks and rewards of the assets.

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## (e) Inventories

Inventories are stated at the lower of cost and net realizable value. Cost includes the cost of purchase computed using the weighted average method and, in the case of work in progress and finished goods, direct labor and an appropriate proportion of production overheads. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

## (f) Property, plant and equipment

An item of property, plant and equipment is initially recorded at cost, less accumulated depreciation and impairment losses (Note 2(o)). The cost of an asset comprises its purchase price, any directly attributable costs of bringing the asset to working condition and location for its intended use. The Group recognizes in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred when it is probable that the future economic benefits embodied with the item will flow to the Group and the cost of the item can be measured reliably. All other expenditure is recognized as an expense in the consolidated statement of income in the year in which it is incurred.

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment, other than oil and gas properties, are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognized as income or expense in the consolidated statement of income on the date of retirement or disposal.

Depreciation is provided to write off the cost amount of items of property, plant and equipment, other than oil and gas properties, over its estimated useful life on a straight-line basis, after taking into account its estimated residual value, as follows:

	Estimated usage period	Estimated residuals rate
Buildings	12 to 50 years	3%
Equipment, machinery and others	4 to 30 years	3%

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reassessed annually.

## (g) Oil and gas properties

The Group uses the successful efforts method of accounting for its oil and gas producing activities. Under this method, costs of development wells, the related supporting equipment and proved mineral interests in properties are capitalized. The cost of exploratory wells is initially capitalized as construction in progress pending determination of whether the well has found proved reserves. The impairment of exploratory well costs occurs upon the determination that the well has not found proved reserves. The exploratory well costs are usually not carried as an asset for more than one year following completion of drilling, unless (i) the well has found a sufficient quantity of reserves to justify its completion as a producing well if the required capital expenditure is made; (ii) drilling of the additional exploratory wells is under way or firmly planned for the near future; or (iii) other activities are being undertaken to sufficiently progress the assessing of the reserves and the economic and operating viability of the project. All other exploration costs, including geological and geophysical costs, other dry hole costs and annual lease rentals, are expensed as incurred. Capitalized costs of proved oil and gas properties are amortized on a unit-of-production method based on volumes produced and reserves.

Management estimates future dismantlement costs for oil and gas properties with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with the industry practices and the future cash flows are adjusted to reflect such risks specific to the liability, as appropriate. These estimated future dismantlement costs are discounted at a pre-tax risk-free rate and are capitalized as oil and gas properties, which are subsequently amortized as part of the costs of the oil and gas properties.

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(h) Lease prepayments

Lease prepayments represent land use rights paid to the relevant government authorities. Land use rights are carried at cost less the accumulated amount charged to expense and impairment losses (Note 2(o)). The cost of lease prepayments is charged to expense on a straight-line basis over the respective periods of the rights.

(i) Construction in progress

Construction in progress represents buildings, oil and gas properties, various plant and equipment under construction and pending installation, and is stated at cost less impairment losses (Note 2(o)). Cost comprises direct costs of construction as well as interest charges, and foreign exchange differences on related borrowed funds to the extent that they are regarded as an adjustment to interest charges, during the periods of construction.

Construction in progress is transferred to property, plant and equipment when the asset is substantially ready for its intended use.

No depreciation is provided in respect of construction in progress.

(j) Goodwill

Goodwill represents amounts arising on acquisition of subsidiaries, associates or joint ventures. Goodwill represents the difference between the cost of acquisition and the fair value of the net identifiable assets acquired.

Prior to January 1, 2008, the acquisition of the non-controlling interests of a consolidated subsidiary was accounted for using the acquisition method whereby the difference between the cost of acquisition and the fair value of the net identifiable assets acquired (on a proportionate share) was recognized as goodwill. From January 1, 2008, any difference between the amount by which the non-controlling interest is adjusted (such as through an acquisition of the non-controlling interests) and the cash or other considerations paid is recognized in equity.

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit the synergies of the combination and is tested annually for impairment (Note 2(o)). In respect of associates and joint ventures, the carrying amount of goodwill is included in the carrying amount of the interest in the associates or joint ventures and the investment as a whole is tested for impairment whenever there is objective evidence of impairment (Note 2(o)).

(k) Available-for-sale financial assets

Investments in available-for-sale securities are carried at fair value with any change in fair value recognized in other comprehensive income and accumulated separately in equity in other reserves. When these investments are derecognized or impaired, the cumulative gain or loss is reclassified from equity to the consolidated statement of income. Investments in equity securities, other than investments in associates and joint ventures, that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are recognized in the balance sheet at cost less impairment losses (Note 2(o)).

Investments in securities held for trading are classified as current assets. Any attributable transaction costs are recognized in the consolidated statement of income as incurred. At each balance sheet date, the fair value is remeasured, with any resultant gain or loss being recognized in the consolidated statement of income.





(l) Derivative financial instruments

Derivative financial instruments are recognized initially at fair value. At each balance sheet date, the fair value is remeasured. The gain or loss on re-measurement to fair value is recognized immediately in the consolidated statement of income, except where the derivatives qualify for cash flow hedge accounting or the hedge of net investment in a foreign operation, in which case recognition of any resulting gain or loss depends on the nature of the item being hedged (Note 2(n)).

(m) Offsetting financial instruments

Financial assets and liabilities are presented respectively in the consolidated balance sheet, without any offset. However, they are offset and reported in the balance sheet when satisfied the following: (i) There is a legally enforceable right to offset the recognized amounts. (ii) There is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

(n) Hedging

(i) Cash flow hedges

Where a derivative financial instrument is designated as a hedge of the variability in cash flows of a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk of a committed future transaction, the effective portion of any gains or losses on re-measurement of the derivative financial instrument to fair value are recognized in other comprehensive income and accumulated separately in equity in other reserves. The ineffective portion of any gain or loss is recognized immediately in the consolidated statement of income.

If a hedge of a forecast transaction subsequently results in the recognition of a non-financial asset, the associated gain or loss is reclassified from equity to be included in the initial cost or other carrying amount of the non-financial asset.

If a hedge of a forecast transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gain or loss is reclassified from equity to the consolidated statement of income in the same period or periods during which the asset acquired or liability assumed affects the consolidated statement of income (such as when interest income or expense is recognized).

For cash flow hedges, other than those covered by the preceding two policy statements, the associated gain or loss is reclassified from equity to the consolidated statement of income in the same period or periods during which the hedged forecast transaction affects the consolidated statement of income.

When a hedging instrument expires or is sold, terminated, exercised, or the entity revokes designation of the hedge relationship but the hedged forecast transaction is still expected to occur, the cumulative gain or loss at that point remains in equity until the transaction occurs and it is recognized in accordance with the above policy. If the hedged transaction is no longer expected to take place, the cumulative unrealized gain or loss is reclassified from equity to the consolidated statement of income immediately.

(ii) Fair value hedges

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

The gain or loss from re-measuring the hedging instrument at fair value is recognized in profit or loss. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is recognized in profit or loss.

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When a hedging instrument expires or is sold, terminated or exercised, or no longer meets the criteria for hedge accounting, the Group discontinues prospectively the hedge accounting treatments. If the hedged item is a financial instrument measured at amortized cost, any adjustment to the carrying amount of the hedged item is amortized to profit or loss from the adjustment date to the maturity date using the recalculated effective interest rate at the adjustment date.

(iii) Hedge of net investments in foreign operations

The portion of the gain or loss on re-measurement to fair value of an instrument used to hedge a net investment in a foreign operation that is determined to be an effective hedge is recognized in other comprehensive income and accumulated separately in equity in other reserve until the disposal of the foreign operation, at which time the cumulative gain or loss is reclassified from equity to the consolidated statement of income. The ineffective portion is recognized immediately in the consolidated statement of income.

(o) Impairment of assets

- (i) Trade accounts receivable, other receivables and investment in equity securities that do not have a quoted market price in an active market are reviewed at each balance sheet date to determine whether there is objective evidence of impairment. If any such evidence exists, an impairment loss is determined and recognized.

The impairment loss is measured as the difference between the asset's carrying amount and the estimated future cash flows, discounted at the current market rate of return for a similar financial asset where the effect of discounting is material, and is recognized as an expense in the consolidated statement of income. Impairment losses for trade and other receivables are reversed through the consolidated statement of income if in a subsequent period the amount of the impairment losses decreases. Impairment losses for equity securities carried at cost are not reversed.

For investments in associates and joint ventures accounted under the equity method (Note 2(a)(ii)), the impairment loss is measured by comparing the recoverable amount of the investment as a whole with its carrying amount in accordance with the accounting policy set out in Note 2(o)(ii). The impairment loss is reversed if there has been a favorable change in the estimates used to determine the recoverable amount in accordance with the accounting policy set out in Note 2(o)(ii).

(ii) Impairment of other long-lived assets is accounted as follows:

The carrying amounts of other long-lived assets, including property, plant and equipment, construction in progress, lease prepayments and other assets, are reviewed at each balance sheet date to identify indicators that the assets may be impaired. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to the recoverable amount. For goodwill, the recoverable amount is estimated at each balance sheet date.

The recoverable amount is the greater of the fair value less costs to disposal and the value in use. In determining the value in use, expected future cash flows generated by the asset are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

The amount of the reduction is recognized as an expense in the consolidated statement of income. Impairment losses recognized in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit and then, to reduce the carrying amount of the other assets in the unit on a pro

rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs to disposal, or value in use, if determinable.

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Management assesses at each balance sheet date whether there is any indication that an impairment loss recognized for a long-lived asset, except in the case of goodwill, in prior years may no longer exist. An impairment loss is reversed if there has been a favorable change in the estimates used to determine the recoverable amount. A subsequent increase in the recoverable amount of an asset, when the circumstances and events that led to the write-down or write-off cease to exist, is recognized as an income. The reversal is reduced by the amount that would have been recognized as depreciation had the write-down or write-off not occurred. An impairment loss in respect of goodwill is not reversed.

(p) Trade, bills and other payables

Trade, bills and other payables are initially recognized at fair value and thereafter stated at amortized cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

(q) Interest-bearing borrowings

Interest-bearing borrowings are recognized initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortized cost with any difference between cost and redemption value being recognized in the consolidated statement of income over the period of borrowings using the effective interest method.

(r) Convertible bonds

(i) Convertible bonds that contain an equity component

Convertible bonds that can be converted to equity share capital at the option of the holder, where the number of shares that would be issued on conversion and the value of the consideration that would be received at that time do not vary, are accounted for as compound financial instruments that contain both a liability component and an equity component.

At initial recognition, the liability component of the convertible bonds is measured as the present value of the future interest and principal payments, discounted at the market rate of interest applicable at the time of initial recognition to similar liabilities that do not have a conversion option. Any excess of proceeds over the amount initially recognized as the liability component is recognized as the equity component. Transaction costs that relate to the issuance of the convertible bonds are allocated to the liability and equity components in proportion to the allocation of proceeds.

The liability component is subsequently carried at amortized cost. The interest expense on the liability component is calculated using the effective interest method. The equity component is recognized in the capital reserve until the bond is converted or redeemed.

If the bond is converted, the capital reserve, together with the carrying amount of the liability component at the time of conversion, is transferred to share capital and share premium as consideration for the shares issued. If the bond is redeemed, the capital reserve is transferred to share premium.

(ii) Other convertible bonds

Convertible bonds issued with a cash settlement option and other embedded derivative features are accounted for as compound financial instruments that contain a liability component and a derivative component.

At initial recognition, the derivative component of the convertible bonds is measured at fair value. Any excess of proceeds over the amount initially recognized as the derivative component is recognized as the liability component.

Transaction costs that relate to the issuance of the convertible bonds are allocated to the liability and derivative components in proportion to the allocation of proceeds. The portion of the transaction costs relating to the liability component is recognized initially as part of the liability. The portion relating to the derivative component is recognized immediately as an expense in the consolidated statement of income.

The derivative component is subsequently remeasured at each balance sheet date and any gains or losses arising from change in the fair value are recognized in the consolidated statement of income. The liability component is subsequently carried at amortized cost until extinguished on conversion or redemption. The interest expense recognized in the consolidated statement of income on the liability

component is calculated using the effective interest method. Both the liability and the related derivative components are presented together for financial statements reporting purposes (Note 24(iii)).

If the convertible bonds are converted, the carrying amounts of the derivative and liability components are transferred to share capital and share premium as consideration for the shares issued. If the convertible bonds are redeemed, any difference between the amount paid and the carrying amounts of both components is recognized in the consolidated statement of income.

(s) Provisions and contingent liability

A provision is recognized for liability of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, when it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made.

When it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

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

(t) Revenue recognition

Revenues associated with the sale of crude oil, natural gas, petroleum and chemical products and ancillary materials are recorded when the customer accepts the goods and the significant risks and rewards of ownership and title have been transferred to the buyer. Revenue from the rendering of services is recognized in the consolidated statement of income upon performance of the services. No revenue is recognized if there are significant uncertainties regarding recovery of the consideration due, the possible return of goods, or when the amount of revenue and the costs incurred or to be incurred in respect of the transaction cannot be measured reliably.

Interest income is recognized on a time apportioned basis that takes into account the effective yield on the asset.

A government grant that becomes receivable as compensation for expenses or losses already incurred with no future related costs is recognized as income in the period in which it becomes receivable.

(u) Borrowing costs

Borrowing costs are expensed in the consolidated statements of income in the period in which they are incurred, except to the extent that they are capitalized as being attributable to the construction of an asset which necessarily takes a period of time to get ready for its intended use.

(v) Repairs and maintenance expenditure

Repairs and maintenance expenditure is expensed as incurred.

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(w) Environmental expenditures

Environmental expenditures that relate to current ongoing operations or to conditions caused by past operations are expensed as incurred.

Liabilities related to future remediation costs are recorded when environmental assessments and/or cleanups are probable and the costs can be reliably estimated. As facts concerning environmental contingencies become known to the Group, the Group reassesses its position both with respect to accrued liabilities and other potential exposures.

(x) Research and development expense

Research and development expenditures are expensed in the period in which they are incurred. Research and development expense amounted to RMB 6,335, RMB 5,623 and RMB 5,648 for the years ended December 31, 2013, 2014 and 2015, respectively.

(y) Operating leases

Operating lease payments are charged to the consolidated statement of income on a straight-line basis over the period of the respective leases.

(z) Employee benefits

The contributions payable under the Group's retirement plans are recognized as an expense in the consolidated statement of income as incurred and according to the contribution determined by the plans. Further information is set out in Note 31.

Termination benefits, such as employee reduction expenses, are recognized when, and only when, the Group demonstrably commits itself to terminate employment or to provide benefits as a result of voluntary redundancy by having a detailed formal plan which is without realistic possibility of withdrawal.

(aa) Income tax

Income tax comprises current and deferred tax. Current tax is calculated on taxable income by applying the applicable tax rates. Deferred tax is provided using the balance sheet liability method on all temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes only to the extent that it is probable that future taxable income will be available against which the assets can be utilized. Deferred tax is calculated on the basis of the enacted tax rates or substantially enacted tax rates that are expected to apply in the period when the asset is realized or the liability is settled. The effect on deferred tax of any changes in tax rates is charged or credited to the consolidated statement of income, except for the effect of a change in tax rate on the carrying amount of deferred tax assets and liabilities which were previously charged or credited to other comprehensive income or directly in equity.

The tax value of losses expected to be available for utilization against future taxable income is set off against the deferred tax liability within the same legal tax unit and jurisdiction to the extent appropriate, and is not available for set off against the taxable profit of another legal tax unit. The carrying amount of a deferred tax asset is reviewed at each balance sheet date and is reduced to the extent that it is no longer probable that the related tax benefit will be realized.

(bb) Dividends

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

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(cc) Segment reporting

Operating segments, and the amounts of each segment item reported in the consolidated financial statements, are identified from the financial information provided regularly to the Group's chief operating decision maker for the purposes of allocating resources to, and assessing the performance of the Group's various lines of business.

## 3. OTHER OPERATING REVENUES

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Sale of materials, service and others	46,452	43,611	41,508
Rental income	612	662	963
	47,064	44,273	42,471

## 4. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

The following items are included in selling, general and administrative expenses:

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Operating lease charges	14,171	14,052	14,382
Impairment losses			
- trade accounts receivable	36	44	40
- other receivables	25	61	49

## 5. PERSONNEL EXPENSES

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Salaries, wages and other benefits	48,094	49,599	48,496
Contributions to retirement schemes (Note 31)	7,259	7,634	7,835
	55,353	57,233	56,331

6.

## TAXES OTHER THAN INCOME TAX

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Consumption tax (i)	133,312	136,718	198,754
Special oil income levy (ii)	25,541	22,187	6
City construction tax (iii)	13,283	13,753	18,195
Education surcharge	10,065	10,210	13,684
Resources tax (iv)	7,329	7,245	4,853
Other	1,142	1,089	851
	190,672	191,202	236,343

Note:

(i) Consumption tax was levied based on sales quantities of taxable products, tax rate of products is presented as below:

Products	Effective from January 1, 2009 RMB/Ton	Effective from November 29, 2014 RMB/Ton	Effective from December 13, 2014 RMB/Ton	Effective from January 13, 2015 RMB/Ton
Gasoline	1,388.00	1,554.56	1,943.20	2,109.76
Diesel	940.80	1,105.44	1,293.60	1,411.20
Naphtha	1,385.00	1,551.20	1,939.00	2,105.20
Solvent oil	1,282.00	1,435.84	1,794.80	1,948.64
Lubricant oil	1,126.00	1,261.12	1,576.40	1,711.52
Fuel oil	812.00	954.10	1,116.50	1,218.00
Jet fuel oil	996.80	1,171.24	1,370.60	1,495.20

(ii) In accordance with PRC rules and regulations, the threshold above which special oil income levy was imposed (with the five-level progressive tax rates varying from 20% to 40% remaining) has been raised from USD 55 per barrel to USD 65 per barrel from January 1, 2015.

(iii) City construction tax is levied on an entity based on its total paid amount of value-added tax, consumption tax and business tax.

(iv) The resources tax rate has been raised from 5% to 6% from December 1, 2014.

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## 7. OTHER OPERATING EXPENSE, NET

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Fines, penalties and compensations	(47 )	(110 )	(90 )
Donations	(245 )	(125 )	(112 )
Loss on disposal of property, plant, equipment and other non-currents assets, net	(826 )	(1,622 )	(721 )
Impairment losses on long-lived assets (Note i)	(2,661 )	(3,619 )	(5,146 )
Net realized and unrealized gain on derivative financial instruments not qualified as hedging	56	7	870
Ineffective portion of change in fair value of cash flow hedges	(34 )	2,260	165
Government grants (Note ii)	2,487	3,281	5,129
Others	(607 )	(225 )	(193 )
	(1,877 )	(153 )	(98 )

## Note:

(i) Impairment losses recognized on long-term assets of the exploration and production (“E&P”) segments comprised RMB 2,532, RMB 2,436 and RMB 4,213 on property, plant and equipment for the years ended December 31, 2013, 2014 and 2015, respectively, and RMB 651 on investment in associates for the year ended December 31, 2015. The primary factor resulting in the E&P segment impairment losses was unsuccessful development drilling and high operating and development costs for certain oil fields. The carrying values of these E&P properties were written down to respective recoverable amounts which were determined based on the present values of the expected future cash flows of the asset using a pre-tax discount rate of 10.70%, 10.13% and 10.80% for the years ended December 31, 2013, 2014 and 2015, respectively. The oil and gas pricing was a factor used in the determination of the present values of the expected future cash flows of the asset and had an impact on the recognition of the asset impairment.

Impairment losses recognized for the chemicals segment were RMB 1,106 and RMB 142 for the years ended December 31, 2014 and 2015, respectively, and comprised of impairment losses of and RMB 917 and RMB 142 on property, plant and equipment for the years ended December 31, 2014 and 2015, respectively, impairment losses of RMB 10 on construction in progress for the year ended December 31, 2014, and impairment losses of RMB 179 on intangible assets of the year ended December 31, 2014. Impairment losses recognized for the refining segment were RMB 88, RMB 29 and RMB 9 for the years ended December 31, 2013, 2014 and 2015, respectively, and comprised of impairment losses of RMB 88, RMB 29 and RMB 9 on property, plant and equipment for the years ended December 31, 2013, 2014 and 2015, respectively. These impairment losses relate to certain refining and chemicals production facilities that are held for use. The carrying values of these facilities were written down to their recoverable amounts that were primarily determined based on the asset held for use model using the present value of estimated future cash flows of the production facilities using the pre-tax discount rates for the years ended December 31, 2013, 2014 and 2015, respectively. The primary factor resulting in the impairment losses on long-lived assets of the refining and chemicals segments was due to higher operating and production costs caused by the increase in the prices of raw materials that are not expected to be covered through an increase in selling price for the year ended December 31, 2013 and the suspension of operations of certain production facilities for the years ended December 31, 2014 and 2015.

Impairment losses recognized on long-lived assets of the marketing and distribution segment were RMB 35, RMB 40 and RMB 19 for the years ended December 31, 2013, 2014 and 2015, respectively, and comprised of impairment

losses of RMB 18, RMB 38 and RMB 10 on property, plant and equipment for the years ended December 31, 2013, 2014 and 2015, respectively, impairment losses of RMB 15 on construction in progress for the year ended December 31, 2013, impairment losses of RMB 2, RMB 2 and RMB 2 on investments for the years ended December 31, 2013, 2014 and 2015, respectively, and impairment losses of RMB 7 on lease prepayments for the year ended December 31, 2015, primarily relate to certain service stations and certain construction in progress that were closed or abandoned during respective years. In measuring the amounts of impairment charges, the carrying amounts of these assets were compared to the present value of the expected future cash flows of the assets, as well as information about sales and purchases of similar properties in the same geographic area.

Impairment losses recognized on long-lived assets of the corporate and others segment were RMB 15, RMB 8 and RMB 112 for the years ended December 31, 2013, 2014 and 2015, respectively and comprised of impairment losses of RMB 15, RMB 8 and RMB 1 on property, plant and equipment for the years ended December 31, 2013, 2014 and 2015, respectively, and impairment of RMB 111 on construction in progress for the year ended December 31, 2015.

(ii) Government grants for the years ended December 31, 2013, 2014 and 2015 primarily represent financial appropriation income and non-income tax refunds received from respective government agencies without conditions or other contingencies attached to the receipts of the grants.

#### 8. INTEREST EXPENSE

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Interest expense incurred	11,435	11,929	8,273
Less: Interest expense capitalized*	(1,710 )	(1,719 )	(1,221 )
	9,725	10,210	7,052
Accretion expenses (Note 27)	877	1,008	1,081
Interest expense	10,602	11,218	8,133
* Interest rates per annum at which borrowing costs were Capitalized for construction in progress	0.9% to 6.4%	0.7% to 7.1%	2.6% to 5.9%

#### 9. TAX EXPENSE

Tax expense in the consolidated statement of income represents:

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Current tax			
- Provision for the year	22,741	18,341	13,677
- Adjustment of prior years	302	1,022	279
Deferred taxation (Note 21)	1,720	(1,792 )	(1,343 )
	24,763	17,571	12,613

Reconciliation between actual income tax expense and the expected income tax expense at applicable statutory tax rates is as follows:

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
Earnings before income tax	95,052	65,504	56,277
Expected PRC income tax expense at a statutory tax rate of 25%	23,763	16,376	14,069
Tax effect of preferential tax rate (Note i)	(1,962 )	(1,722 )	(1,033 )
	2,171	622	391

Effect of income taxes from foreign operations different from taxes at the PRC statutory tax rate (Note ii)

Tax effect of non-deductible expenses	805	717	788
Tax effect of non-taxable income	(1,327 )	(1,126 )	(2,549 )
Tax effect of utilization of previously unrecognized tax losses and temporary differences	(575 )	(27 )	(235 )
Tax effect of tax losses not recognized	660	1,595	828
Write-down of deferred tax assets	926	114	75
Adjustment of prior years	302	1,022	279
Actual income tax expense	24,763	17,571	12,613

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Note:

(i) The provision for PRC current income tax is based on a statutory income tax rate of 25% of the assessable income of the Group as determined in accordance with the relevant income tax rules and regulations of the PRC, except for certain entities of the Group in western regions in the PRC are taxed at preferential income tax rate of 15% through the year 2020.

(ii) It is mainly due to the foreign operation in the Republic of Angola (“Angola”) that is taxed at 50% of the assessable income as determined in accordance with the relevant income tax rules and regulations of Angola.

#### 10. OTHER COMPREHENSIVE INCOME

	Years ended December 31,								
	2013			2014			2015		
	Before-tax amount RMB	Tax effect RMB	Net-of-tax amount RMB	Before-tax amount RMB	Tax effect RMB	Net-of-tax amount RMB	Before-tax amount RMB	Tax effect RMB	Net-of-tax amount RMB
Cash flow hedges:									
Effective portion of changes in fair value of hedging instruments recognized during the year	1,271	(210 )	1,061	265	(47 )	218	2,881	(405 )	2,476
Amounts transferred to initial carrying amount of hedged items	(9 )	1	(8 )	(1,013 )	181	(832 )	(1,354)	223	(1,131)
Reclassification adjustments for amounts transferred to the consolidated statement of income	(538 )	89	(449 )	(4,710 )	839	(3,871)	2,273	(455 )	1,818
Net movement during the year recognized in other comprehensive income	724	(120 )	604	(5,458 )	973	(4,485)	3,800	(637 )	3,163
Available-for-sale securities:									
Changes in fair value recognized during the year	1,747	(433 )	1,314	659	(146 )	513	66	(4 )	62
Amounts transferred to the	—	—	—	(2,317 )	579	(1,738)	—	—	—

consolidated  
statement of  
income(i)

Net movement during the year recognized in other comprehensive income	1,747	(433 )	1,314	(1,658 )	433	(1,225)	66	(4 )	62
Share of other comprehensive loss of associates and joint ventures	(297 )	—	(297 )	(3,042 )	—	(3,042)	(5,356)	—	(5,356)
Foreign currency translation differences	(689 )	—	(689 )	(514 )	—	(514 )	2,268	—	2,268
Other comprehensive income	1,485	(553 )	932	(10,672)	1,406	(9,266)	778	(641 )	137

Note:

(i) The Group sold its shares of China Gas Holdings Limited in August 2014, which was accounted for as available-for-sale financial assets prior to the transaction and the accumulated unrealized gain in other comprehensive income of RMB 2,317 was reclassified to the investment income at the completion of this transaction.

#### 11. BASIC AND DILUTED EARNINGS PER SHARE

The calculation of basic earnings per share for the years ended December 31, 2013, 2014 and 2015 is based on the net income attributable to ordinary owners of the Company of RMB 66,132, RMB 46,466 and RMB 32,438, respectively, and the weighted average number of the shares of 116,102,910,373, 116,822,487,451 and 120,852,547,200, respectively.

The calculation of diluted earnings per share for the years ended December 31, 2013, 2014 and 2015 is based on the net income attributable to ordinary owners of the Company of RMB 65,087 , RMB 46,600 and RMB

32,436 , respectively, and the weighted average number of the shares of 121,858,818,276 , 117,242,396,710 and 120,852,547,200, respectively, calculated as follows:

## (i) Net income attributable to ordinary owners of the Company (diluted)

	2013 RMB	2014 RMB	2015 RMB
Net income attributable to ordinary owners of the Company	66,132	46,466	32,438
After tax effect of interest expense (net of exchange gain) of the 2007 Convertible Bonds and the 2011 Convertible Bonds	476	133	—
After tax effect of net (gain)/loss on embedded derivative components of the 2007 Convertible Bonds and the 2011 Convertible Bonds	(1,521 )	1	—
After tax effect of employee share option scheme of Shanghai Petrochemical	—	—	(2 )
Net income attributable to ordinary owners of the Company (diluted)	65,087	46,600	32,436

## (ii) Weighted average number of shares (diluted)

	2013 Number of shares	2014 Number of shares	2015 Number of shares
Weighted average number of shares as of December 31	116,102,910,373	116,822,487,451	120,852,547,200
Effect of conversion of the 2007 Convertible Bonds	1,439,688,889	419,909,259	—
Effect of conversion of the 2011 Convertible Bonds	4,316,219,014	—	—
Weighted average number of shares (diluted) as of December 31	121,858,818,276	117,242,396,710	120,852,547,200

## 12. TRADE ACCOUNTS RECEIVABLE, NET

	December 31,	
	2014 RMB	2015 RMB
Amounts due from third parties	65,883	34,245
Amounts due from Sinopec Group Company and fellow subsidiaries	20,188	18,672
Amounts due from associates and jointly ventures	5,290	3,734
	91,361	56,651
Less: Impairment losses for bad and doubtful debts	(530 )	(525 )
Trade accounts receivable, net	90,831	56,126

Impairment losses for bad and doubtful debts are analyzed as follows:

2013 RMB	2014 RMB	2015 RMB
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Balance as of January 1	699	574	530
Provision for the year	36	44	40
Written back for the year	(38 )	(15 )	(13 )
Written off for the year	(123 )	(57 )	(38 )
Others		(16 )	6
Balance as of December 31	574	530	525

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

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Trade accounts receivable (net of impairment losses for bad and doubtful debts) primarily represents receivables that are neither past due nor impaired. These receivables relate to a wide range of customers for whom there is no recent history of default.

### 13. INVENTORIES

	December 31,	
	2014	2015
	RMB	RMB
Crude oil and other raw materials	95,298	59,313
Work in progress	22,728	22,736
Finished goods	71,959	66,300
Spare parts and consumables	1,841	1,551
	191,826	149,900
Less: Allowance for diminution in value of inventories	(3,603 )	(4,402 )
	188,223	145,498

Allowance for diminution in value of inventories is analyzed as follows:

	2013	2014	2015
	RMB	RMB	RMB
Balance as of January 1	491	1,751	3,603
Allowance for the year	1,453	3,327	3,687
Reversal of allowance on disposal	(1 )	(136 )	(34 )
Written off	(192 )	(1,327 )	(2,931 )
Other (decrease)/increase	—	(12 )	77
Balance as of December 31	1,751	3,603	4,402

During the years ended December 31, 2013, 2014 and 2015, costs of inventories recognized as an expense in the consolidated statement of income were RMB 2,433,886, RMB 2,404,093 and RMB 1,565,205, respectively. Such costs include the write-down of inventories of RMB 1,453, RMB 3,327 and RMB 3,687, respectively, and the reversal of write-down of inventories of RMB 1, RMB 136 and RMB 34, respectively. The write-down of inventories and the reversal of write-down of inventories were recorded in purchased crude oil, products and operating supplies and expenses in the consolidated statement of income. The write-down of inventories for the year ended December 31, 2013, 2014 and 2015 were RMB 192, RMB 1,327 and RMB 2,931, which were realized primarily with the sales of inventories. The write-down of inventories in 2015 was mainly related to the work in progress in the refining segment and finished goods in the marketing segment, which was mainly due to decline of petroleum products price at the end of the year.

### 14. PREPAID EXPENSES AND OTHER CURRENT ASSETS

	December 31,	
	2014	2015
	RMB	RMB
Receivables	17,941	20,182
Advances to suppliers	3,780	2,919

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Value-added input tax to be deducted	22,684	20,299
Derivative financial instruments	12,622	7,875
	57,027	51,275

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15.

## PROPERTY, PLANT AND EQUIPMENT

	Plants and buildings RMB	Oil and gas properties RMB	Equipment, machinery and others RMB	Total RMB
<b>Cost:</b>				
Balance as of January 1, 2014	96,787	515,701	768,102	1,380,590
Additions	40	3,309	579	3,928
Transferred from construction in progress	6,164	50,130	73,857	130,151
Contributed to joint ventures	(52 )	—	(190 )	(242 )
Acquisitions	440	—	2,984	3,424
Reclassifications	390	(6 )	(384 )	—
Reclassification to lease prepayments and other long-term assets	(1,822 )	(13 )	(18,854 )	(20,689 )
Exchange adjustments	6	120	8	134
Disposals	(863 )	(69 )	(12,924 )	(13,856 )
Balance as of December 31, 2014	101,090	569,172	813,178	1,483,440
Balance as of January 1, 2015	101,090	569,172	813,178	1,483,440
Additions	268	2,899	560	3,727
Transferred from construction in progress	4,928	39,949	74,405	119,282
Contribution to associates and joint ventures	(4 )	—	(8 )	(12 )
Reclassifications	1,780	(1,008 )	(772 )	—
Reclassification to lease prepayments and other long-term assets	(380 )	—	(1,170 )	(1,550 )
Exchange adjustments	112	2,201	157	2,470
Disposals	(479 )	(79 )	(7,657 )	(8,215 )
Balance as of December 31, 2015	107,315	613,134	878,693	1,599,142
<b>Accumulated depreciation:</b>				
Balance as of January 1, 2014	37,680	288,594	384,721	710,995
Depreciation for the year	3,381	38,235	41,513	83,129
Impairment losses for the year	21	2,436	971	3,428
Reclassifications	130	(2 )	(128 )	—
Reclassification to lease prepayments and other long-term assets	(317 )	(8 )	(5,117 )	(5,442 )
Written back on disposals	(732 )	(57 )	(11,441 )	(12,230 )
Exchange adjustments	2	69	4	75
Balance as of December 31, 2014	40,165	329,267	410,523	779,955
Balance as of January 1, 2015	40,165	329,267	410,523	779,955
Depreciation for the year	3,528	40,200	44,078	87,806
Impairment losses for the year	32	4,213	130	4,375
Reclassifications	679	(766 )	87	—
Contribution to associates and joint ventures	—	—	(4 )	(4 )
Reclassification to lease prepayments and other long-term assets	(68 )	(2 )	(86 )	(156 )

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Written back on disposals	(278 )	(65 )	(6,518 )	(6,861 )
Exchange adjustments	40	1,344	66	1,450
Balance as of December 31, 2015	44,098	374,191	448,276	866,565
Net book value:				
Balance as of January 1, 2014	59,107	227,107	383,381	669,595
Balance as of December 31, 2014	60,925	239,905	402,655	703,485
Balance as of December 31, 2015	63,217	238,943	430,417	732,577

Note:

The additions to the oil and gas properties of the Group for the years ended December 31, 2014 and 2015 included RMB 3,309 and RMB 2,899, respectively, of the estimated dismantlement costs for site restoration (Note 27).

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16.

## CONSTRUCTION IN PROGRESS

	2014 RMB	2015 RMB
Balance as of January 1	160,630	177,667
Additions	149,830	106,620
Acquisitions	14,162	—
Dry hole costs written off	(5,587 )	(6,099 )
Transferred to property, plant and equipment	(130,151 )	(119,282 )
Reclassification to lease prepayments and other long-term assets	(10,154 )	(5,600 )
Impairment losses for the year	(10 )	(111 )
Disposals	(1,058 )	(1,009 )
Exchange adjustments	5	90
Balance as of December 31	177,667	152,276

Net changes in capitalized cost of exploratory wells included in the Group's construction in progress in the E&P segment are analyzed as follows:

	2013 RMB	2014 RMB	2015 RMB
At beginning of year	17,829	19,152	19,286
Additions, net of amount that were capitalized and subsequently expensed in the same year, pending the determination of proved reserves	9,603	9,480	5,901
Transferred to oil and gas properties based on the determination of proved reserves	(2,945 )	(3,891 )	(2,615 )
Dry hole costs written off	(5,335 )	(5,455 )	(5,800 )
At end of year	19,152	19,286	16,772

Aging of capitalized exploratory well costs based on the date the drilling was completed are analyzed as follows:

	December 31,		
	2013 RMB	2014 RMB	2015 RMB
One year or less	9,893	9,743	8,074
Over one year	9,259	9,543	8,698
	19,152	19,286	16,772

Capitalized exploratory wells costs aged over one year are related to wells for which the drilling results are being further evaluated or the development plans are being formulated.

The geological and geophysical costs paid during the years ended December 31, 2013, 2014 and 2015 amounted to RMB 6,735, RMB 5,028 and RMB 4,347, respectively.

## 17. GOODWILL

	December 31,	
	2014	2015
	RMB	RMB
Cost	13,938	13,928
Less: accumulated impairment losses	(7,657 )	(7,657 )
	6,281	6,271

Impairment tests for cash-generating units containing goodwill

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

		December 31,	
		2014	2015
Principal activities		RMB	RMB
Sinopec Beijing Yanshan Petrochemical Branch ("Sinopec Yanshan")	Manufacturing of intermediate petrochemical products and petroleum products	1,157	1,157
Sinopec Zhenhai Refining and Chemical Branch ("Sinopec Zhenhai")	Manufacturing of intermediate petrochemical products and petroleum products	4,043	4,043
Sinopec (Hong Kong) Limited	Trading of petrochemical products	853	853
Multiple units without individually significant goodwill		228	218
		6,281	6,271

Goodwill represents the excess of the cost of purchase over the fair value of the underlying assets and liabilities. The recoverable amounts of the above cash generating units are determined based on value in use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a one-year period and pre-tax discount rates primarily ranging from 10.0% to 10.9% and 10.7% to 11.3% for the years ended December 31, 2014 and 2015, respectively. Cash flows beyond the one-year period are maintained constant. Based on the estimated recoverable amount, no impairment loss was recognized.

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

18.

## INTEREST IN ASSOCIATES

The Group's investments in associates are with companies primarily engaged in the oil and gas, petrochemical, and marketing and distribution operations in the PRC.

The Group's principal associates are as follows:

Name of company	Form of business structure	Particulars of issued and paid up capital	Percentage of equity held by the Company %	Percentage of equity held by the Company's subsidiaries %	Principal activities	Country of incorporation	Principal place of business
Sinopec Finance Company Limited ("Sinopec Finance")	Incorporated	Registered capital RMB 10,000	49.00	—	Provision of non-banking financial services	PRC	PRC
China Aviation Oil Supply Company Limited ("China Aviation Oil")	Incorporated	Registered capital RMB 3,800	—	29.00	Marketing and distribution of refined petroleum products	PRC	PRC
Zhongtian Synergetic Energy Company Limited ("Zhongtian Synergetic Energy")	Incorporated	Registered capital RMB 16,000	—	38.75	Manufacturing of coal-chemical products	PRC	PRC
Shanghai Chemical Industry Park Development Company Limited ("Shanghai Chemical")	Incorporated	Registered capital RMB 2,372	—	38.26	Planning, development and operation of the Chemical Industry Park in Shanghai, the PRC	PRC	PRC
Caspian Investments Resources Ltd. ("CIR") (i)	Incorporated	Registered capital RMB 10,000	—	50.00	Crude oil and natural gas extraction	British Virgin Islands	The Republic of Kazakhstan

Summarized financial information and reconciliation to their carrying amounts in respect of the Group's principal associates:

Sinopec Finance	China Aviation Oil	Zhongtian Synergetic Energy	Shanghai Chemical	CIR (i)
December 31,	December 31,	December 31,	December 31,	December 31,

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	2014 RMB	2015 RMB	2014 RMB	2015 RMB	2014 RMB	2015 RMB	2014 RMB	2015 RMB	2015 RMB
Current assets	108,999	154,437	13,816	8,240	6,833	10,168	2,466	2,487	4,826
Non-current assets	14,992	15,739	4,996	5,220	15,849	37,571	2,819	2,693	7,768
Current liabilities	(105,289)	(147,952)	(11,051)	(4,717)	(7,538)	(16,536)	(640)	(404)	(1,305)
Non-current liabilities	(104)	(114)	(227)	(321)	(2,348)	(15,407)	(1,043)	(981)	(1,282)
Net assets	18,598	22,110	7,534	8,422	12,796	15,796	3,602	3,795	10,007
Net assets attributable to owners of the Company	18,598	22,110	6,657	7,438	12,796	15,796	3,602	3,795	10,007
Net assets attributable to non-controlling interests	—	—	877	984	—	—	—	—	—
Share of net assets from associates	9,113	10,834	1,998	2,157	4,958	6,121	1,043	1,121	5,004
Carrying Amounts	9,113	10,834	1,998	2,157	4,958	6,121	1,043	1,121	5,004

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## Summarized statement of comprehensive income

Year ended December 31	Sinopec Finance			China Aviation Oil			Zhongtian Synergetic Energy(ii)			Shanghai Chemical			CIR(i) 2015 RMB
	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB	
Operating revenues	2,893	2,706	2,533	111,023	115,725	78,623	—	—	—	6	1	1	687
Net income for the year	1,409	2,522	3,484	2,027	1,097	2,248	—	—	—	124	222	236	(90 )
Other comprehensive (loss)/income	(608 )	(508 )	28	—	—	—	—	—	—	—	—	—	(4,017)
Total comprehensive income/(loss)	801	2,014	3,512	2,027	1,097	2,248	—	—	—	124	222	236	(4,107)
Dividends declared by associates	—	—	—	444	309	336	—	—	—	17	11	16	—
Share of net income/(loss) from associates	690	1,236	1,707	513	318	495	—	—	—	47	85	90	(45 )
Share of other comprehensive (loss)/income from associates	(298 )	(249 )	14	—	—	—	—	—	—	—	—	—	(2,009)

The share of net income for years ended December 31, 2013, 2014 and 2015 in all individually immaterial associates accounted for using equity method in aggregate were RMB 771, RMB 1,209 and RMB 1,108, respectively.

The share of other comprehensive income/(loss) for the years ended December 31, 2013, 2014 and 2015 in all individually immaterial associates accounted for using equity method in aggregate were gain of RMB 1, loss of RMB 57 and loss of RMB 632, respectively.

The carrying amount as of December 31, 2014 and 2015 of all individually immaterial associates accounted for using equity method in aggregate were RMB 15,007 and RMB 14,415, respectively.

Note:

(i) In August 2015, one of the subsidiaries of Sinopec Group Company completed the acquisition from LUKOIL OVERSEAS WEST PROJECT Ltd. a 50% equity interests in CIR and revised CIR's Articles of Association subsequently. According to the revised CIR's Articles of Association, the Group retained significant influences over CIR. As a result, the Group reclassified the investment interest in CIR from joint ventures to associates. The summarized statement of comprehensive income represents the operating result for the period from the date when the Group reclassified the investment in joint ventures to interest in associates to December 31, 2015.

(ii)

The main assets of Zhongtian Synergetic Energy was under construction during the years ended December 31, 2013, 2014 and 2015.

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19.

## INTEREST IN JOINT VENTURES

The Group's principal interests in joint ventures which are incorporated companies are as follows:

Name of company	Country of incorporation	Particulars of issued and paid up capital	Percentage of equity held by the Company %	Percentage of equity held by the Company's subsidiaries %	Principal activities	Principal place of business
Yanbu Aramco Sinopec Refining Company Ltd. ("YASREF")(i)	Saudi Arabia	Registered capital USD 1,560 million	—	37.50	Petroleum refining and processing business	Saudi Arabia
BASF-YPC Company Limited ("BASF-YPC")	PRC	Registered capital RMB 12,547	30.00	10.00	Manufacturing and distribution of petrochemical products	PRC
Taihu Limited ("Taihu")(ii)	Cyprus	Registered capital USD 25,000	—	49.00	Crude oil and natural gas extraction	Russia
Mansarovar Energy Colombia Ltd. ("Mansarovar")(ii)	British Bermuda	Registered capital USD 12,000	—	50.00	Crude oil and natural gas extraction	Colombia

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

	YASREF(i)		BASF-YPC		Taihu(ii)		Mansarovar (ii)		CIR(iii)
	December 31, 2014	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB
<b>Current assets</b>									
Cash and cash equivalents	2,662	4,171	1,112	488	117	78	580	262	4,873
Other current assets	1,446	5,965	5,879	4,765	2,886	2,243	328	759	1,881
<b>Total current assets</b>	<b>4,108</b>	<b>10,136</b>	<b>6,991</b>	<b>5,253</b>	<b>3,003</b>	<b>2,321</b>	<b>908</b>	<b>1,021</b>	<b>6,754</b>
<b>Non-current assets</b>	<b>49,222</b>	<b>54,027</b>	<b>17,209</b>	<b>15,543</b>	<b>7,995</b>	<b>5,662</b>	<b>9,702</b>	<b>7,433</b>	<b>13,078</b>
<b>Current liabilities</b>									
Current financial liabilities (iv)	—	(3,362)	(3,318)	(2,005)	(1,228)	(2,315)	—	—	(272)
Other current liabilities	(3,160)	(7,886)	(2,235)	(1,864)	(1,742)	(1,088)	(860)	(767)	(851)
<b>Total current liabilities</b>	<b>(3,160)</b>	<b>(11,248)</b>	<b>(5,553)</b>	<b>(3,869)</b>	<b>(2,970)</b>	<b>(3,403)</b>	<b>(860)</b>	<b>(767)</b>	<b>(1,123)</b>

Non-current liabilities									
Non-current financial liabilities (v)	(37,029)	(39,214)	(4,019)	(3,113)	(2,905)	(26)	—	—	(680)
Other non-current liabilities	(910)	(978)	—	—	(2,175)	(1,337)	(3,662)	(3,320)	(1,253)
Total non-current liabilities	(37,939)	(40,192)	(4,019)	(3,113)	(5,080)	(1,363)	(3,662)	(3,320)	(1,933)
Net assets	12,231	12,723	14,628	13,814	2,948	3,217	6,088	4,367	16,776
Net assets attributable to owners of the company	12,231	12,723	14,628	13,814	2,846	3,106	6,088	4,367	16,776
Net assets attributable to non-controlling interests	—	—	—	—	102	111	—	—	—
Share of net assets from joint ventures	4,587	4,771	5,851	5,526	1,395	1,522	3,044	2,184	8,388
Other (vi)	—	—	—	—	814	729	85	—	616
Carrying Amounts	4,587	4,771	5,851	5,526	2,209	2,251	3,129	2,184	9,004



## Summarized statement of comprehensive income

Year ended December 31,	YASREF										
	(i) 2015 RMB	2013 RMB	BASF-YPC 2014 RMB		Taihu (ii) 2015 RMB		Mansarovar (ii) 2015 RMB			CIR (iii) 2015 RMB	
Operating revenues	31,823	23,176	22,191	15,430	18,183	10,725	360	3,781	1,876	8,366	1,821
Depreciation, depletion and amortization	(1,915 )	(2,147 )	(15,649 )	(2,312 )	(1,501 )	(1,279 )	(88 )	(1,870 )	(782 )	(2,632 )	(1,248 )
Interest income	13	20	26	29	—	—	—	31	9	8	64
Interest expense	(721 )	(319 )	(356 )	(239 )	(54 )	(119 )	(7 )	—	(15 )	—	(20 )
(Loss)/earning before income tax	(259 )	1,060	373	214	3,014	3,455	130	641	(1,847 )	7	870
Tax expense	13	(279 )	(94 )	(56 )	(809 )	(733 )	(50 )	(897 )	(333 )	(252 )	(367 )
Net (loss)/income for the year	(246 )	781	279	158	2,205	2,722	80	(256 )	(2,180 )	(245 )	503
Other comprehensive income/(loss)	738	—	—	—	(5,373 )	(2,633 )	—	24	290	63	(3,164 )
Total comprehensive income/(loss)	492	781	279	158	(3,168 )	89	80	(232 )	(1,890 )	(182 )	(2,661 )
Dividends declared by a joint venture	—	—	933	470	—	—	—	—	—	—	—
Share of net (loss)/income from joint ventures	(92 )	312	112	63	1,043	1,287	40	(128 )	(1,090 )	(123 )	252
Share of other comprehensive income/ (loss) from joint ventures	277	—	—	—	(2,541 )	(1,245 )	—	12	145	32	(1,582 )

The share of net income/(loss) for the year ended December 31, 2013, 2014 and 2015 in all individually immaterial joint ventures accounted for using equity method in aggregate were loss of RMB 14, loss of RMB 122 and gain of RMB 4,306, respectively.

The share of other comprehensive loss for the years ended December 31, 2013, 2014 and 2015 in all individually immaterial joint ventures accounted for using equity method in aggregate were RMB nil, RMB 239 and RMB 324, respectively.

The carrying amount as of year ended December 31, 2014 and 2015 of all individually immaterial joint ventures accounted for using equity method in aggregate were RMB 23,694 and RMB 28,586, respectively.

Note:

- (i) Pursuant to the resolution passed at the Directors' meeting held on October 31, 2014 and the purchase agreement entered into with relevant vendors, the Group completed the acquisition from the Sinopec Group Company a 37.5% equity interests in YASREF for a consideration of approximately USD 562 (approximately RMB 3,439) and also injected capital of approximately USD 199 (approximately RMB 1,216) to YASREF on December 31, 2014.
- (ii) The Group acquired from the Sinopec Group Company 50% of equity interests of Mansarovar in November 2013, 50% of equity interests of CIR and 49% of equity interests of Taihu in December 2013.
- (iii) The summarized statement of comprehensive income of CIR represents the operating result for the period from January 1, 2015 to the date when the Group reclassified the investment interest in CIR from joint ventures to associates (note 18(i)).
- (iv) Excluding trade accounts payable and other payables.
- (v) Excluding provisions.
- (vi) Other reflects the excess of consideration transferred over the net fair value of identifiable assets acquired and liabilities assumed as of the acquisition date.

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20.

## AVAILABLE-FOR-SALE FINANCIAL ASSETS

	December 31,	
	2014	2015
	RMB	RMB
Equity securities, listed and at quoted market price	183	261
Other investment, unlisted and at cost(i)	714	10,094
	897	10,355
Less: Impairment losses for investments	(29 )	(29 )
	868	10,326

Other investment, unlisted and at cost, represent the Group's interests in privately owned enterprises which are mainly engaged in oil and natural gas activities and chemical production.

The impairment losses relating to investments for the years ended December 31, 2014 and 2015 amounted to RMB nil and RMB nil, respectively.

Note:

(i) The Group acquired 10% share of Public-Stock Company SIBUR Holdings ("SIBUR") for a consideration of USD 1,338 (approximately RMB 8,725) in December 2015. SIBUR is registered in Russia, and mainly engaged in business of natural gas processing and petrochemical products.

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## 21. DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets and deferred tax liabilities before offset are attributable to the items detailed in the table below:

	Assets December 31,		Liabilities December 31,		Net balance December 31,	
	2014	2015	2014	2015	2014	2015
	RMB	RMB	RMB	RMB	RMB	RMB
<b>Current</b>						
Receivables and inventories	2,883	1,755			2,883	1,755
Accruals	258	413			258	413
Cash flow hedges	887	348		(98 )	887	250
<b>Non-current</b>						
Property, plant and equipment	7,752	8,209	(16,387 )	(17,340 )	(8,635 )	(9,131 )
Tax losses carried forward	3,474	5,883			3,474	5,883
Embedded derivative component of the convertible bonds	282				282	
Available-for-sale securities	7		(4 )		3	
Others	86	98	(79 )	(58 )	7	40
Deferred tax assets/(liabilities)	15,629	16,706	(16,470 )	(17,496 )	(841 )	(790 )

As of December 31, 2014 and 2015, certain subsidiaries of the Company did not recognize deferred tax of deductible loss carried forward of RMB 17,085 and RMB 19,338, respectively, of which RMB 6,996 and RMB 4,080 were incurred for the years ended December 31, 2014 and 2015, respectively, because it was not probable that the related tax benefit will be realized. Those deductible tax losses carried forward of RMB 3,299, RMB 3,777, RMB 2,634 and RMB 5,548 and RMB 4,080 will expire in 2016, 2017, 2018, 2019, 2020 and after, respectively.

Periodically, management performed assessment on the probability that future taxable profit will be available over the period which the deferred tax assets can be realized or utilized. In assessing the probability, both positive and negative evidence was considered, including whether it is probable that the operations will have sufficient future taxable profits over the periods which the deferred tax assets are deductible or utilized and whether the tax losses result from identifiable causes which are unlikely to recur. During the years ended December 31, 2014 and 2015, write-down of deferred tax assets amounted to RMB 114 and RMB 75 related to the expiration of tax loss, respectively.

Movements in deferred tax assets and liabilities are as follows:

	Balance as of January 1, 2013 RMB	Recognized in consolidated statement of income RMB	Recognized in other comprehensive income RMB	Balance as of December 31, 2013 RMB
<b>Current</b>				
Receivables and inventories	3,292	23	—	3,315
Accruals	421	(64)	—	357
Cash flow hedges	36	(2)	(120)	(86)
<b>Non-current</b>				
Property, plant and equipment	(8,194)	(388)	192	(8,390)
Tax losses carried forward	3,051	(790)	—	2,261
Embedded derivative component of the convertible bonds	(364)	(506)	—	(870)
Available-for-sale securities	(3)	—	(433)	(436)
Others	6	7	—	13
Net deferred tax liabilities	(1,755)	(1,720)	(361)	(3,836)

	Balance as of January 1, 2014 RMB	Recognized in consolidated statement of income RMB	Recognized in other comprehensive income RMB	Others RMB	Balance as of December 31, 2014 RMB
<b>Current</b>					
Receivables and inventories	3,315	(432)	—	—	2,883
Accruals	357	(99)	—	—	258
Cash flow hedges	(86)	—	973	—	887
<b>Non-current</b>					
Property, plant and equipment	(8,390)	(42)	(21)	(182)	(8,635)
Tax losses carried forward	2,261	1,213	—	—	3,474
Embedded derivative component of the the convertible bonds	(870)	1,152	—	—	282
Available-for-sale securities	(436)	6	433	—	3
Others	13	(6)	—	—	7
Net deferred tax liabilities	(3,836)	1,792	1,385	(182)	(841)

	Balance as of January 1, 2015 RMB	Recognized in consolidated statement of income RMB	Recognized in other comprehensive income RMB	Others RMB	Balance as of December 31, 2015 RMB
<b>Current</b>					
Receivables and inventories	2,883	(1,131)	3	—	1,755
Accruals	258	155	—	—	413

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Cash flow hedges	887	—	(637	)	—	250	
<b>Non-current</b>							
Property, plant and equipment	(8,635	)	(113	)	(383	) — (9,131	
Tax losses carried forward	3,474	2,398	11	—	5,883		
Embedded derivative component of the the convertible bonds	282	—	—	(282	)	—	
Available-for-sale securities	3	1	(4	)	—	—	
Others	7	33	—	—	40		
Net deferred tax liabilities	(841	)	1,343	(1,010	)	(282	) (790

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22.

## LEASE PREPAYMENTS

	2014 RMB	2015 RMB
Cost:		
Balance at January 1	51,417	59,861
Additions	904	1,835
Transferred from construction in progress	4,693	3,125
Transferred from other long-term assets	4,408	543
Reclassification to other assets	(1,324 )	(536 )
Disposals	(247 )	(1,509 )
Exchange adjustments	10	—
Balance at December 31	59,861	63,319
Accumulated amortization:		
Balance at January 1	8,147	10,725
Amortization charge for the year	1,504	1,572
Transferred from other long-term assets	1,279	111
Reclassification to other assets	(186 )	(113 )
Written back on disposals	(22 )	(20 )
Exchange adjustments	3	—
Balance at December 31	10,725	12,275
Net book value:	49,136	51,044

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## LONG-TERM PREPAYMENTS AND OTHER ASSETS

	December 31, 2014 RMB	2015 RMB
Operating rights of service stations	26,075	26,097
Long-term receivables from and prepayment to Sinopec Group Company and fellow subsidiaries	14,935	17,759
Prepayments for construction projects to third parties	4,944	2,989
Others (i)	20,261	20,946
Balance at 31 December	66,215	67,791

Note:

- (i) Others mainly comprise prepaid operating lease charges over one year and catalyst expenditures.

The cost of operating rights of service stations is charged to expense on a straight-line basis over the respective periods of the rights. The movement of operating rights of service stations is as follows:

	2014 RMB	2015 RMB
Operating rights of service stations		
Cost:		
Balance at January 1	15,840	32,748
Additions	17,038	1,720
Decreases	(130 )	(61 )

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Balance at December 31	32,748	34,407
Accumulated amortization:		
Balance at January 1	2,213	6,673
Additions	4,477	1,643
Decreases	(17 )	(6 )
Balance at December 31	6,673	8,310
Net book value at December 31	26,075	26,097

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## 24. SHORT-TERM AND LONG-TERM DEBTS AND LOANS FROM SINOPEC GROUP COMPANY AND FELLOW SUBSIDIARIES

Short-term debts represent:

	December 31,	
	2014	2015
	RMB	RMB
Third parties' debts		
Short-term bank loans	63,915	31,036
RMB denominated	22,805	11,357
US Dollar denominated	40,685	11,824
Euro denominated	425	7,855
Current portion of long-term bank loans	268	5,613
RMB denominated	163	5,559
Japanese Yen denominated	54	—
US Dollar denominated	51	54
Current portion of long-term corporate bonds	11,000	4,868
US Dollar denominated	—	4,868
RMB denominated	11,000	—
	11,268	10,481
Corporate bonds (i)	—	30,000
	75,183	71,517
Loans from Sinopec Group Company and fellow subsidiaries		
Short-term loans	102,773	43,693
RMB denominated	9,628	10,806
US Dollar denominated	93,126	32,878
Hong Kong Dollar denominated	5	5
Euro denominated	14	4
Current portion of long-term loans	192	236
RMB denominated	80	50
US Dollar denominated	112	186
	102,965	43,929
	178,148	115,446

The Group's weighted average interest rates on short-term loans were 1.9% and 1.7% as of December 31, 2014 and 2015, respectively.

Long-term debts represent:

	Interest rate and final maturity	December 31,	
		2014	2015
		RMB	RMB
Third parties' debts			
Long-term bank loans			
Renminbi denominated	Interest rates ranging from 1.08% to 6.15% per annum as of December 31, 2015 with maturities through 2030	23,001	17,345
Japanese Yen denominated	Interest rates at 2.60% per annum as of December 31, 2015 with maturities in 2023 (which has redeemed in January 2015)	445	—
US Dollar denominated	Interest rates ranging from to 1.30% to 4.29% per annum as of December 31, 2015 with maturities through 2031	1,103	461
		24,549	17,806
Corporate bonds(ii)			
Renminbi denominated	Fixed interest rates ranging from 3.30% to 5.68% per annum as of December 31, 2015 with maturities through 2022	56,500	65,500
US Dollar denominated	Fixed interest rates ranging from 1.25% to 4.25% per annum as of December 31, 2015 with maturities through 2043	21,285	22,621
		77,785	88,121
Convertible bonds			
Renminbi denominated	Convertible Bonds with maturity in 2017 (iii)	16,721	—
Total third parties' long-term debts		119,055	105,927
Less: Current portion		(11,268 )	(10,481 )
		107,787	95,446
Long-term loans from Sinopec Group Company and fellow subsidiaries			
Renminbi denominated		43,225	44,350

	Interest rates ranging from interest free to 6.15% per annum as of December 31, 2015 with maturities through 2021		
US Dollar denominated	Interest rates of 1.93% per annum as of December 31, 2015 with maturities in 2016	112	186
Less: Current portion		(192 )	(236 )
		43,145	44,300
		150,932	139,746

Short-term and long-term bank loans, long-term other loans and loans from Sinopec Group Company and fellow subsidiaries are primarily unsecured and carried at amortised cost.

Note:

(i) The Company issued 180-day corporate bonds of face value RMB 10,000 to corporate investors in the PRC debenture market on September 23, 2015 at par value of RMB 100. The cost of the 180-day corporate bonds is 2.99% per annum.

The company issued 182-day corporate bonds of face value RMB 16,000 to corporate investors in the PRC debenture market on December 14, 2015 at par value of RMB 100. The cost of the 182-day corporate bonds is 2.90% per annum.

The company issued 180-day corporate bonds of face value RMB 4,000 to corporate investors in the PRC debenture market on December 31, 2015 at par value of RMB 100. The cost of the 180-day corporate bonds is 2.75% per annum.

(ii) These corporate bonds are carried at amortized cost. US dollar denominated corporate bonds are guaranteed by Sinopec Group Company.

(iii) On March 1, 2011, the Company issued convertible bonds due in 2017 with an aggregate principal amount of RMB 23,000 in the PRC (the "2011 Convertible Bonds"). The 2011 Convertible Bonds were issued at par value of RMB 100 and bear a fixed interest rate of 0.5% per annum for the first year, 0.7% for the second year, 1.0% for the third year, 1.3% for the fourth year, 1.8% for the fifth year and 2.0% for the sixth year, payable annually. The holders can convert the 2011 Convertible Bonds into A shares of the Company from August 24, 2011 onwards at an initial conversion price of RMB 9.73 per share, subject to adjustment for, amongst other things, cash dividends, subdivision or consolidation of shares, bonus issues, issue of new shares, rights issues, capital distribution, change of control and other events which have an effect on the issued share capital of the Company ("the Conversion Option"). Unless previously redeemed, converted or purchased and cancelled, the 2011 Convertible Bonds will be redeemed within 5 trading days after maturity at 107% of the principal amount, including interest for the sixth year. The initial carrying amounts of the liability component and the derivative component, representing the Conversion Option of the 2011 Convertible Bonds, were RMB 19,279 and RMB 3,610, respectively.

During the term of the 2011 Convertible Bonds, the conversion price may be subject to downward adjustment that if the closing prices of the Company's A Shares in any fifteen trading days out of any thirty consecutive trading days are lower than 80% of the prevailing conversion price, the board of directors may propose downward adjustment to the conversion price subject to the shareholders' approval. The adjusted conversion price shall be not less than (a) the average trading price of the Company's A Shares for the twenty trading days prior to the shareholders' approval, (b) the average trading price of the Company's A Shares on the day immediately before the shareholders' approval, (c) the net asset value per share based on the latest audited financial statements prepared under ASBE, and (d) the nominal value per share.

During the term of the 2011 Convertible Bonds, if the closing price of the A Shares of the Company is not lower than 130% of the conversion price in at least fifteen trading days out of any thirty consecutive trading days, the Company has the right to redeem all or part of the 2011 Convertible Bonds based on the nominal value plus the accrued interest ("the terms of conditional redemption").

As of January 26, 2015, the terms of conditional redemption of 2011 Convertible Bonds of the Company have been triggered for the first time. At the 22nd meeting of the fifth session of the board of the Company (the "Board"), the Board has reviewed and approved the proposal for the redemption of 2011 Convertible Bonds, and decided to exercise the right of redemption and to redeem all of the outstanding 2011 Convertible Bonds registered on February 11, 2015.

From January 1, 2015 to February 11, 2015, the 2011 Convertible Bonds with a total nominal value of RMB 13,647 were converted into 2,790,814,006 A shares of the Company with a conversion price of 4.89 per share. As of February

11, 2015, the total share capital of the Company has been increased to 121,071,209,646 shares. The unconverted convertible bonds amounted to RMB 52.78 (527,760 convertible bonds). As at February 17, 2015, the Company has redeemed and fully paid the unconverted portion at RMB 101.261 per convertible bond (including the accrued interest and interest tax accrued thereon).

The changes in the fair value of the derivative component from December 31, 2014 to December 31, 2015 resulted in realized loss of RMB 259 which has been recorded in “finance costs” section of the consolidated statement of income.

The changes in the fair value of the derivative component from December 31, 2013 to December 31, 2014 resulted in realized loss of RMB 1,613 and an unrealized loss of RMB 2,997, which has been recorded in “finance costs” section of the consolidated statement of income.

During the year ended December 31, 2011, RMB 328 thousand of the 2011 Convertible Bonds were converted into 34,662 A shares of the Company.

During the year ended December 31, 2012, RMB 857,033 thousand of the 2011 Convertible Bonds were converted into 117,724,450 A shares of the Company.

During the year ended December 31, 2013, RMB 725 thousand of the 2011 Convertible Bonds were converted into 114,076 A shares of the Company.

During the year ended December 31, 2014, RMB 8,442 of the 2011 Convertible Bonds were converted into 1,715,081,853 A shares of the Company.

As of December 31, 2015, the 2011 Convertible bonds have been fully converted or redeemed. As of December 31, 2014, the liability component of the 2011 Convertible Bonds was RMB 13,433, and derivative component was RMB 3,288.

#### 25. TRADE ACCOUNTS AND BILLS PAYABLE

	December 31,	
	2014	2015
	RMB	RMB
Amounts due to third parties	181,519	117,230
Amounts due to Sinopec Group Company and fellow subsidiaries	13,575	10,348
Amounts due to associates and joint ventures	3,272	2,868
	198,366	130,446
Bills payable	4,577	3,566
Trade accounts and bills payable measured at amortized cost	202,943	134,012

#### 26. ACCRUED EXPENSES AND OTHER PAYABLES

	December 31,	
	2014	2015
	RMB	RMB
Salaries and welfare payable	839	1,185
Interest payable	1,695	1,457
Payables for constructions	55,400	58,778
Other payables	27,647	23,892
Financial liabilities carried at amortized costs	85,581	85,312
Taxes other than income tax	27,586	31,425
Receipts in advance	89,918	92,649
Derivative financial instruments	18,990	2,750
	222,075	212,136

#### 27. PROVISIONS

Provisions primarily represent provision for future dismantlement costs of oil and gas properties. The Group has committed to the PRC government to establish certain standardized measures for the dismantlement of its oil and gas properties by making reference to the industry practices and is therefore constructively obligated to take dismantlement measures of its oil and gas properties.

Movement of provision of the Group's obligations for the dismantlement of its oil and gas properties is as follows:

	2013 RMB	2014 RMB	2015 RMB
Balance as of January 1	21,525	26,004	29,613
Provision for the year	4,188	3,309	2,899
Accretion expenses	877	1,008	1,081
Utilized	(561 )	(714 )	(599 )
Exchange adjustments	(25 )	6	121
Balance as of December 31	26,004	29,613	33,115

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## SHARE CAPITAL

	December 31,	
	2014	2015
	RMB	RMB
Registered, issued and fully paid		
95,557,771,046 listed A shares (2014: 92,766,957,040) of RMB 1.00 each	92,767	95,558
25,513,438,600 listed H shares (2014: 25,513,438,600) of RMB 1.00 each	25,513	25,513
	118,280	121,071

The Company was established on February 25, 2000 with a registered capital of 68.8 billion domestic state-owned shares with a par value of RMB 1.00 each. Such shares were issued to Sinopec Group Company in consideration for the assets and liabilities of the Predecessor Operations transferred to the Company (Note 1).

Pursuant to the resolutions passed at an Extraordinary General Meeting held on July 25, 2000 and approvals from relevant government authorities, the Company is authorized to increase its share capital to a maximum of 88.3 billion shares with a par value of RMB 1.00 each and offer not more than 19.5 billion shares with a par value of RMB 1.00 each to investors outside the PRC. Sinopec Group Company is authorized to offer not more than 3.5 billion shares of its shareholdings in the Company to investors outside the PRC. The shares sold by Sinopec Group Company to investors outside the PRC would be converted into H shares.

In October 2000, the Company issued 15,102,439,000 H shares with a par value of RMB 1.00 each, representing 12,521,864,000 H shares and 25,805,750 American Depositary Shares (“ADSs”, each representing 100 H shares), at prices of HKD 1.59 per H share and USD 20.645 per ADS, respectively, by way of a global initial public offering to Hong Kong and overseas investors. As part of the global initial public offering, 1,678,049,000 state-owned ordinary shares of RMB 1.00 each owned by Sinopec Group Company were converted into H shares and sold to Hong Kong and overseas investors.

In July 2001, the Company issued 2.8 billion listed A shares with a par value of RMB 1.00 each at RMB 4.22 by way of a public offering to natural persons and institutional investors in the PRC.

During the year ended December 31, 2010, the Company issued 88,774 listed A shares with a par value of RMB 1.00 each, as a result of exercise of 188,292 warrants entitled to the Bonds with Warrants.

During the year ended December 31, 2011, the Company issued 34,662 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

During the year ended December 31, 2012, the Company issued 117,724,450 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

On February 14, 2013, the Company issued 2,845,234,000 listed H shares (“the Placing”) with a par value of RMB 1.00 each at the Placing Price of HKD 8.45 per share. The aggregate gross proceeds from the Placing amounted to approximately HKD 24,042,227,300 and the aggregate net proceeds (after deduction of the commissions and estimated expenses) amounted to approximately HKD 23,970,100,618.

In June 2013, the Company issued 21,011,962,225 listed A shares and 5,887,716,600 listed H shares as a result of bonus issues of 2 shares converted from the retained earnings pursuant to the shareholders’ approval at the Annual General Meeting on May 29, 2013, and 1 share transferred from the share premium for every 10 existing shares.



During the year ended December 31, 2013, the Company issued 114,076 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds (Note 24(iii)).

During the year ended December 31, 2014, the Company issued 1,715,081,853 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds (Note 24(iii)).

During the year ended December 31, 2015, the Company issued 2,790,814,006 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds (Note 24(iii)).

All A shares and H shares rank pari passu in all material aspects.

### Capital management

Management optimizes the structure of the Group's capital, which comprises of equity and debts. In order to maintain or adjust the capital structure of the Group, management may cause the Group to issue new shares, adjust the capital expenditure plan, sell assets to reduce debt, or adjust the proportion of short-term and long-term loans. Management monitors capital on the basis of debt-to-capital ratio, which is calculated by dividing long-term loans (excluding current portion), including long-term debts and loans from Sinopec Group Company and fellow subsidiaries, by the total equity attributable to owners of the Company and long-term loans (excluding current portion), and liability-to-asset ratio, which is calculated by dividing total liabilities by total assets. Management's strategy is to make appropriate adjustments according to the Group's operating and investment needs and the changes of market conditions, and to maintain the debt-to-capital ratio and the liability-to-asset ratio of the Group at a range considered reasonable. The debt-to-capital ratio of the Group was 20.3% and 17.2% as of December 31, 2014 and 2015, respectively. The liability-to-asset ratio of the Group was 55.5% and 45.7% as of December 31, 2014 and 2015, respectively.

The schedules of the contractual maturities of loans and commitments are disclosed in Notes 24 and 29, respectively.

There were no changes in the management's approach to capital management of the Group during the year. Neither the Company nor any of its subsidiaries is subject to externally imposed capital requirements.

## 29. COMMITMENTS AND CONTINGENT LIABILITIES

## Operating lease commitments

The Group leases land and buildings, service stations and other equipment through non-cancellable operating leases. These operating leases do not contain provisions for contingent lease rentals. None of the rental agreements contain escalation provisions that may require higher future rental payments.

As of December 31, 2014 and 2015, the future minimum lease payments under operating leases are as follows:

	December 31,	
	2014	2015
	RMB	RMB
Within one year	13,909	13,737
Between one and two years	13,480	13,265
Between two and three years	13,113	13,199
Between three and four years	12,984	13,091
Between four and five years	13,063	12,430
Thereafter	297,425	284,300
	363,974	350,022

## Capital commitments

As of December 31, 2014 and 2015, capital commitments are as follows:

	December 31,	
	2014	2015
	RMB	RMB
Authorized and contracted for (i)	138,795	113,017
Authorized but not contracted for	102,386	47,043
	241,181	160,060

These capital commitments relate to oil and gas exploration and development, refining and petrochemical production capacity expansion projects, the construction of service stations and oil depots and investment commitments.

## Note

(i) The investment commitments for the year ended December 31, 2014 and 2015 of the Group were RMB 4,030 and RMB 4,089, respectively.

## Commitments to joint ventures

Pursuant to certain of the joint venture agreements entered into by the Group, the Group is obliged to purchase products from the joint ventures based on market prices.

## Exploration and production licenses

Exploration licenses for exploration activities in the PRC are registered with the Ministry of Land and Resources. The maximum term of the Group's exploration licenses is 7 years, and may be renewed twice within 30 days prior to expiration of the original term with each renewal being for a two-year term. The Group is obligated to make progressive annual exploration investment relating to the exploration blocks in respect of which the license is issued. The Ministry of Land and Resources also issues production licenses to the Group on the basis of the reserve reports approved by relevant authorities. The maximum term of a full production license is 30 years unless a special dispensation is given by the State Council. The maximum term of production licenses issued to the Group is 80 years as a special dispensation was given to the Group by the State Council. The Group's production license is renewable upon application by the Group 30 days prior to expiration.

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The Group is required to make payments of exploration license fees and production right usage fees to the Ministry of Land and Resources annually which are expensed. Payments incurred were approximately RMB 404, RMB 408 and RMB 372 for the years ended December 31, 2013, 2014 and 2015, respectively.

Estimated future annual payments are as follows:

	December 31, 2014	December 31, 2015
	RMB	RMB
Within one year	312	283
Between one and two years	160	125
Between two and three years	32	32
Between three and four years	22	22
Between four and five years	19	21
Thereafter	811	834
	1,356	1,317

#### Contingent liabilities

As of December 31, 2014 and 2015, guarantees by the group in respect of facilities granted to the parties below are as follows:

	December 31, 2014	December 31, 2015
	RMB	RMB
Joint ventures	168	703
Others	5,552	6,010
	5,720	6,713

Management monitors the conditions that are subject to the guarantees to identify whether it is probable that a loss has occurred, and recognizes any such losses under guarantees when those losses are estimable. As of December 31, 2014 and 2015, it is not probable that the Group will be required to make payments under the guarantees. Thus no liability has been accrued for the Group's obligation under these guarantee arrangements.

#### Environmental contingencies

Under existing legislation, management believes that there are no probable liabilities that will have a material adverse effect on the financial position or operating results of the Group. The PRC government, however, has moved, and may move further towards more rigorous enforcement of applicable laws, and towards the adoption of more stringent environmental standards. Environmental liabilities are subject to considerable uncertainties which affect management's ability to estimate the ultimate cost of remediation efforts. These uncertainties include i) the exact nature and extent of the contamination at various sites including, but not limited to refineries, oil fields, service stations, terminals and land development areas, whether operating, closed or sold, ii) the extent of required cleanup efforts, iii) varying costs of alternative remediation strategies, iv) changes in environmental remediation requirements, and v) the identification of new remediation sites. The amount of such future cost is indeterminable due to such factors as the unknown magnitude of possible contamination and the unknown timing and extent of the corrective actions that may be required. Accordingly, the outcome of environmental liabilities under proposed or future environmental legislation

cannot reasonably be estimated at present, and could be material. The Group paid normal routine pollutant discharge fees of approximately RMB 5,154, RMB 5,352 and RMB 5,813 in the consolidated financial statements for the years ended December 31, 2013, 2014 and 2015, respectively.

#### Legal contingencies

The Group is a defendant in certain lawsuits as well as the named party in other proceedings arising in the ordinary course of business. Management has assessed the likelihood of an unfavourable outcome of such contingencies, lawsuits or other proceedings and believes that any resulting liabilities will not have a material adverse effect on the financial position, operating results or cash flows of the Group.

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## RELATED PARTY TRANSACTIONS

Parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control or jointly control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are subject to control or common control. Related parties may be individuals (being members of key management personnel, significant shareholders and/ or their close family members) or other entities and include entities which are under the significant influence of related parties of the Group where those parties are individuals, and post-employment benefit plans which are for the benefit of employees of the Group or of any entity that is a related party of the Group.

## (a) Transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures

The Group is part of a larger group of companies under Sinopec Group Company, which is controlled by the PRC government, and has significant transactions and relationships with Sinopec Group Company and fellow subsidiaries. Because of these relationships, it is possible that the terms of these transactions are not the same as those that would result from transactions among wholly unrelated parties.

The principal related party transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures, which were carried out in the ordinary course of business are as follows:

	Note	Years ended December 31,		
		2013 RMB	2014 RMB	2015 RMB
Sales of goods	(i)	318,092	305,044	211,868
Purchases	(ii)	141,316	134,424	92,990
Transportation and storage	(iii)	1,639	1,606	1,299
Exploration and development services	(iv)	52,814	49,399	37,444
Production related services	(v)	13,235	10,306	10,878
Ancillary and social services	(vi)	6,755	6,753	6,754
Operating lease charges for land	(vii)	10,373	10,531	10,618
Operating lease charges for buildings	(vii)	491	497	462
Other operating lease charges	(vii)	252	274	302
Agency commission income	(viii)	185	132	116
Interest income	(ix)	89	135	207
Interest expense	(x)	1,802	1,421	1,194
Net deposits (placed with)/withdrawn from related parties	(ix)	(2,528 )	2,319	(14,082 )
Net loans obtained from/(repaid to) related parties	(xi)	11,903	53,690	(57,881 )

The amounts set out in the table above in respect of each of the years in the three-year period ended December 31, 2015 represent the relevant costs and income as determined by the corresponding contracts with the related parties.

There was no guarantee given to banks by the Group in respect of banking facilities to related parties as of December 31, 2014 and 2015, except for the guarantees disclosed in Note 29.

The directors of the Company are of the opinion that the above transactions with related parties were conducted in the ordinary course of business and on normal commercial terms or in accordance with the agreements governing such

transactions, and this has been confirmed by the independent non-executive directors.

Notes:

- (i) Sales of goods represent the sale of crude oil, intermediate petrochemical products, petroleum products and ancillary materials.
- (ii) Purchases represent the purchase of materials and utility supplies directly related to the Group's operations such as the procurement of raw and ancillary materials and related services, supply of water, electricity and gas.
- (iii) Transportation and storage represent the cost for the use of railway, road and marine transportation services, pipelines, loading, unloading and storage facilities.

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- (iv) Exploration and development services comprise direct costs incurred in the exploration and development such as geophysical, drilling, well testing and well measurement services.
- (v) Production related services represent ancillary services rendered in relation to the Group's operations such as equipment repair and general maintenance, insurance premium, technical research, communications, firefighting, security, product quality testing and analysis, information technology, design and engineering, construction of oilfield ground facilities, refineries and chemical plants, manufacture of replacement parts and machinery, installation, project management and environmental protection.
- (vi) Ancillary and social services represent expenditures for social welfare and support services such as educational facilities, media communication services, sanitation, accommodation, canteens, property maintenance and management services.
- (vii) Operating lease charges represent the rental paid to Sinopec Group Company for operating leases in respect of land, buildings and equipment.
- (viii) Agency commission income represents commission earned for acting as an agent in respect of sales of products and purchase of materials for certain entities owned by Sinopec Group Company.
- (ix) Interest income represents interest received from deposits placed with Sinopec Finance Company Limited and Sinopec Century Bright Capital Investment Limited, finance companies controlled by Sinopec Group Company. The applicable interest rate is determined in accordance with the prevailing saving deposit rate. The balance of deposits as of December 31, 2014 and 2015 were RMB 4,221 and RMB 18,303, respectively.
- (x) Interest expense represents interest charges on the loans and advances obtained from Sinopec Group Company and fellow subsidiaries.
- (xi) The Group obtained or repaid loans from or to Sinopec Group Company and fellow subsidiaries.

In connection with the Reorganization, the Company and Sinopec Group Company entered into a number of agreements under which 1) Sinopec Group Company will provide goods and products and a range of ancillary, social and supporting services to the Group and 2) the Group will sell certain goods to Sinopec Group Company. These agreements impacted the operating results of the Group for the year ended December 31, 2015. The terms of these agreements are summarized as follows:

- The Company has entered into a non-exclusive "Agreement for Mutual Provision of Products and Ancillary Services" ("Mutual Provision Agreement") with Sinopec Group Company effective from January 1, 2000 in which Sinopec Group Company has agreed to provide the Group with certain ancillary production services, construction services, information advisory services, supply services and other services and products. While each of Sinopec Group Company and the Company is permitted to terminate the Mutual Provision Agreement upon giving at least six months notice, Sinopec Group Company has agreed not to terminate the agreement if the Group is unable to obtain comparable services from a third party. The pricing policy for these services and products provided by Sinopec Group Company to the Group is as follows:

- (1) the government-prescribed price;
- (2) where there is no government-prescribed price, the government-guidance price;

- (3) where there is neither a government-prescribed price nor a government-guidance price, the market price; or
- (4) where none of the above is applicable, the price to be agreed between the parties, which shall be based on a reasonable cost incurred in providing such services plus a profit margin not exceeding 6%.
- The Company has entered into a non-exclusive “Agreement for Provision of Cultural and Educational, Health Care and Community Services” with Sinopec Group Company effective from January 1, 2000 in which Sinopec Group Company has agreed to provide the Group with certain cultural, educational, health care and community services on the same pricing terms and termination conditions as described in the above Mutual Provision Agreement.

- The Company has entered into a series of lease agreements with Sinopec Group Company to lease certain lands and buildings effective on January 1, 2000. The lease term is 40 or 50 years for lands and 20 years for buildings, respectively. The Company and Sinopec Group Company can renegotiate the rental amount every three years for land. The Company and Sinopec Group Company can renegotiate the rental amount for buildings every year. However such amount cannot exceed the market price as determined by an independent third party.
- The Company has entered into agreements with Sinopec Group Company effective from January 1, 2000 under which the Group has been granted the right to use certain trademarks, patents, technology and computer software developed by Sinopec Group Company.
- The Company has entered into a service stations franchise agreement with Sinopec Group Company effective from January 1, 2000 under which its service stations and retail stores would exclusively sell the refined products supplied by the Group.
- Pursuant to the Equity Transfer Agreement relating to the Transfer of 100% Equity Interest of Sinopec Beijing Jingtian Engineering and Construction Co., Ltd.(Jingtian Co.) entered into by the Company and Sinopec Baichuan Economic and Trading Company (Baichuan Co.) on August 26, 2015, the Company transferred 100% equity interest of Jingtian Co. to Baichuan Co. in December 2015, which was directly and wholly owned by Sinopec Group Company. The preliminary consideration of this transaction was RMB 1,869, which was based on the fair value of Jingtian Co.'s net assets as of March 31, 2015, adjusted by the subsequent changes to Jingtian Co.'s net assets between March 31, 2015 and December 31, 2015 according to the audited financial statements of Jingtian Co. as of each date.
- Pursuant to the resolutions passed at the Directors' meeting held on October 31, 2014, the Group acquired the equity interests of YASREF from Sinopec Group Company. The acquisition has been completed in 2014 (Note 19).
  - Pursuant to the Share Repurchase Agreement and Disposal Agreement by the Company and Sinopec Yizheng Chemical Fibre Company Limited (Yizheng Chemical Fibre Co., Ltd.) on September 12, 2014, Yizheng Chemical Fibre Co., Ltd repurchased and cancelled the 40.25% of its equity interests held by the Company in exchange for the transfer of its outgoing business to the Company and issued shares to Sinopec Group Company for the acquisition of 100% equity Interest of Sinopec Oilfield Service Corporation (a wholly-owned subsidiary of the Sinopec Group Company). These transactions were completed in December 2014.
- Pursuant to the resolutions passed at the Directors' meeting held on March 22, 2013, the Group acquired the equity interests of CIR, Taihu and Mansarovar from Sinopec Group Company. The acquisition was completed in 2013 (Note 19).

Amounts due from/to Sinopec Group Company and fellow subsidiaries, associates and joint ventures included in the following accounts captions are summarized as follows:

	December 31,	
	2014	2015
	RMB	RMB
Trade accounts receivable	25,478	22,406
Prepaid expenses and other current assets	3,564	9,084
Long-term prepayments and other assets	14,935	17,759
Total	43,977	49,249
Trade accounts payable	16,847	13,216
Accrued expenses and other payables	24,711	20,458
Other long-term liabilities	6,470	8,226
Short-term loans and current portion of long-term loans from Sinopec Group Company and fellow subsidiaries	102,965	43,929
Long-term loans excluding current portion from Sinopec Group Company and fellow subsidiaries	43,145	44,300
Total	194,138	130,129

Amounts due from/to Sinopec Group Company and fellow subsidiaries, associates and joint ventures, other than short-term loans and long-term loans, bear no interest, are unsecured and are repayable in accordance with normal commercial terms. The terms and conditions associated with short-term loans and long-term loans payable to Sinopec Group Company and fellow subsidiaries are set out in Note 24.

The long-term borrowings mainly include an interest-free loan with a maturity period of 20 years amounting to RMB 35,560 from the Sinopec Group Company (a state-owned enterprise) through the Sinopec Finance. This borrowing is a special arrangement to reduce financing costs and improve liquidity of the Company during its initial global offering in 2000.

As of and for the years ended December 31, 2014 and 2015, no individually significant impairment losses for bad and doubtful debts were recognized in respect of amounts due from Sinopec Group Company and fellow subsidiaries, associates and joint ventures.

(b) Key management personnel emoluments

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including directors and supervisors of the Group. The key management personnel compensation is as follows:

	Years ended December 31, ----		
	2013	2014	2015
	RMB'000	RMB'000	RMB'000
Short-term employee benefits	8,152	8,009	5,225
Retirement scheme contributions	480	501	510
	8,632	8,510	5,735

(c) Contributions to defined contribution retirement plans

The Group participates in various defined contribution retirement plans organized by municipal and provincial governments for its staff. The details of the Group's employee benefits plan are disclosed in Note 31. As of December 31, 2014 and 2015, the accrual for the contribution to post-employment benefit plans was not material.

(d) Transactions with other state-controlled entities in the PRC

The Group is a state-controlled energy and chemical enterprise and operates in an economic regime currently dominated by entities directly or indirectly controlled by the PRC government through its government authorities, agencies, affiliations and other organizations (collectively referred as “state-controlled entities”).

Apart from transactions with Sinopec Group Company and fellow subsidiaries, the Group has transactions with other state-controlled entities, include but not limited to the following:

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- sales and purchases of goods and ancillary materials;
- rendering and receiving services;
- lease of assets;
- depositing and borrowing money; and
- use of public utilities.

These transactions are conducted in the ordinary course of the Group's business on terms comparable to those with other entities that are not state-controlled.

### 31. EMPLOYEE BENEFITS PLAN

As stipulated by the regulations of the PRC, the Group participates in various defined contribution retirement plans organized by municipal and provincial governments for its staff. The Group is required to make contributions to the retirement plans at rates ranging from 17.0% to 24.0% of the salaries, bonuses and certain allowances of its staff. In addition, the Group provides a supplementary retirement plan for its staff at rates not exceeding 5% of the salaries. The Group has no other material obligation for the payment of pension benefits associated with these plans beyond the annual contributions described above. The Group's contributions for the years ended December 31, 2013, 2014 and 2015 were RMB 7,259, RMB 7,634 and RMB 7,835, respectively.

### 32. SEGMENT REPORTING

Segment information is presented in respect of the Group's business segments. The format is based on the Group's management and internal reporting structure.

In a manner consistent with the way in which information is reported internally to the Group's chief operating decision maker for the purposes of resource allocation and performance assessment, the Group has identified the following five reportable segments. No operating segments have been aggregated to form the following reportable segments.

- (i) Exploration and production, which explores and develops oil fields, produces crude oil and natural gas and sells such products to the refining segment of the Group and external customers.
- (ii) Refining, which processes and purifies crude oil, that is sourced from the exploration and production segment of the Group and external suppliers, and manufactures and sells petroleum products to the chemicals and marketing and distribution segments of the Group and external customers.
- (iii) Marketing and distribution, which owns and operates oil depots and service stations in the PRC, and distributes and sells refined petroleum products (mainly gasoline and diesel) in the PRC through wholesale and retail sales networks.
- (iv) Chemicals, which manufactures and sells petrochemical products, derivative petrochemical products and other chemical products mainly to external customers.
- (v) Corporate and others, which largely comprise the trading activities of the import and export companies of the Group and research and development undertaken by other subsidiaries.

The segments were determined primarily because the Group manages its exploration and production, refining, marketing and distribution, chemicals, and corporate and others businesses separately. The reportable segments are each managed separately because they manufacture and/or distribute distinct products with different production processes and due to their distinct operating and gross margin characteristics.

(1) Information of reportable segmental revenues, profits or losses, assets and liabilities

The Group's chief operating decision maker evaluates the performance and allocates resources to its operating segments on an operating income basis, without considering the effects of finance costs or investment income. Inter-segment transfer pricing is based on the market price or cost plus an appropriate margin, as specified by the Group's policy.

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Assets and liabilities dedicated to a particular segment's operations are included in that segment's total assets and liabilities. Segment assets include all tangible and intangible assets, except for interest in associates and joint ventures, investments, deferred tax assets, cash and cash equivalents, time deposits with financial institutions and other unallocated assets. Segment liabilities exclude short-term, income tax payable, long-term debts, loans from Sinopec Group Company and fellow subsidiaries, deferred tax liabilities and other unallocated liabilities.

Information on the Group's reportable segments is as follows:

	Years ended December 31,		
	2013 RMB	2014 RMB	2015 RMB
<b>Sales of goods</b>			
<b>Exploration and production</b>			
External sales	60,848	69,550	57,740
Inter-segment sales	158,618	141,544	71,019
	219,466	211,094	128,759
<b>Refining</b>			
External sales	194,469	175,534	120,650
Inter-segment sales	1,111,004	1,092,244	800,962
	1,305,473	1,267,778	921,612
<b>Marketing and distribution</b>			
External sales	1,486,037	1,458,390	1,086,098
Inter-segment sales	6,330	5,446	3,056
	1,492,367	1,463,836	1,089,154
<b>Chemicals</b>			
External sales	374,097	356,993	275,175
Inter-segment sales	55,999	62,208	42,743
	430,096	419,201	317,918
<b>Corporate and others</b>			
External sales	717,796	721,174	436,749
Inter-segment sales	640,224	587,663	345,454
	1,358,020	1,308,837	782,203
Elimination of inter-segment sales	(1,972,175)	(1,889,105)	(1,263,234)
Sales of goods	2,833,247	2,781,641	1,976,412
<b>Other operating revenues</b>			
<b>Exploration and production</b>			
	22,641	16,503	9,894
<b>Refining</b>			
	5,796	5,317	5,004
<b>Marketing and distribution</b>			
	10,047	12,770	17,512
<b>Chemicals</b>			
	7,491	8,284	8,390
<b>Corporate and others</b>			
	1,089	1,399	1,671
Other operating revenues	47,064	44,273	42,471
Sales of goods and other operating revenues	2,880,311	2,825,914	2,018,883



Result	Years ended December 31,		
	2013	2014	2015
	RMB	RMB	RMB
Operating income/(loss)			
By segment			
- Exploration and production	54,793	47,057	(17,418 )
- Refining	8,599	(1,954 )	20,959
- Marketing and distribution	35,143	29,449	28,855
- Chemicals	868	(2,181 )	19,682
- Corporate and others	(3,412 )	(1,063 )	384
- Elimination	794	2,179	4,566
Total segment operating income	96,785	73,487	57,028
Income/(loss) from associates and joint ventures			
- Exploration and production	358	1,117	633
- Refining	(486 )	(871 )	725
- Marketing and distribution	794	963	1,379
- Chemicals	418	603	3,062
- Corporate and others	1,275	1,818	2,282
Aggregate income from associates and joint ventures	2,359	3,630	8,081
Investment income			
- Exploration and production	8	1	835
- Refining	11	17	(8 )
- Marketing and distribution	93	71	70
- Chemicals	—	208	19
- Corporate and others	42	2,319	350
- Elimination	—	—	(822 )
Aggregate investment income	154	2,616	444
Net finance costs	(4,246 )	(14,229 )	(9,276 )
Earnings before income tax	95,052	65,504	56,277

	December 31,		
	2013	2014	2015
	RMB	RMB	RMB
<b>Assets</b>			
<b>Segment assets</b>			
- Exploration and production	406,237	453,060	447,307
- Refining	329,236	297,884	264,573
- Marketing and distribution	273,872	276,298	283,416
- Chemicals	156,373	162,685	150,577
- Corporate and others	107,197	147,015	108,921
Total segment assets	1,272,915	1,336,942	1,254,794
Interest in associates and joint ventures	75,318	80,593	82,970
Available-for-sale financial assets	3,730	868	10,326
Deferred tax assets	4,141	6,979	7,469
Cash and cash equivalents and time deposits with financial institutions	15,101	10,100	68,557
Other unallocated assets	11,711	15,886	19,013
Total assets	1,382,916	1,451,368	1,443,129
<b>Liabilities</b>			
<b>Segment liabilities</b>			
- Exploration and production	104,233	100,552	96,773
- Refining	69,029	67,327	58,578
- Marketing and distribution	101,564	118,493	118,897
- Chemicals	23,670	27,532	27,053
- Corporate and others	129,816	138,930	104,194
Total segment liabilities	428,312	452,834	405,495
Short-term debts	109,806	75,183	41,517
Income tax payable	3,096	1,091	1,048
Long-term debts	107,234	107,787	95,446
Loans from Sinopec Group Company and fellow subsidiaries	92,420	146,110	88,229
Deferred tax liabilities	7,977	7,820	8,259
Other unallocated liabilities	12,445	14,966	18,916
Total liabilities	761,290	805,791	658,910

Segment capital expenditure is the total cost incurred during the year to acquire segment assets that are expected to be used for more than one year.

	Years ended December 31,		
	2013	2014	2015
	RMB	RMB	RMB
<b>Capital expenditure</b>			
Exploration and production	105,311	80,196	54,710
Refining	26,064	27,957	15,132
Marketing and distribution	29,486	26,989	22,115
Chemicals	19,189	15,850	17,471
Corporate and others	5,076	3,648	2,821
	185,126	154,640	112,249
<b>Depreciation, depletion and amortization</b>			
Exploration and production	44,126	48,902	52,155
Refining	13,859	15,015	16,557
Marketing and distribution	11,127	12,491	14,075
Chemicals	10,757	12,130	11,996
Corporate and others	1,396	1,559	1,585
	81,265	90,097	96,368
<b>Impairment losses on long-lived assets</b>			
Exploration and production	2,523	2,436	4,864
Refining	88	29	9
Marketing and distribution	35	40	19
Chemicals	—	1,106	142
Corporate and others	15	8	112
	2,661	3,619	5,146

## (2) Geographical information

The following tables set out information about the geographical information of the Group's external sales and the Group's non-current assets, excluding financial instruments and deferred tax assets. In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers, and segment assets are based on the geographical location of the assets.

	Years ended December 31,		
	2013	2014	2015
	RMB	RMB	RMB
<b>External sales</b>			
Mainland China	2,107,202	2,062,775	1,579,364
Others	773,109	763,139	439,519
	2,880,311	2,825,914	2,018,883
	December 31,		
	2013	2014	2015
	RMB	RMB	RMB
<b>Non-current assets</b>			
Mainland China	941,046	1,003,521	1,027,070
Others	51,181	64,589	56,081

992,227 1,068,110 1,083,151

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## PRINCIPAL SUBSIDIARIES

As of December 31, 2015, the following list contains the particulars of subsidiaries which principally affected the results, assets and liabilities of the Group.

Name of Company	Particulars of issued capital	Interests held by the Company %	Interests held by non-controlling interests %	Principal activities
Sinopec International Petroleum Exploration and Production Limited ("SIPL")	RMB 8,000	100.00		—Investment in exploration, production and sale of petroleum and natural gas
Sinopec Great Wall Energy & Chemical Company Limited	RMB 20,125	100.00		—Coal chemical industry investment management, production and sale of coal chemical products
Sinopec Yangzi Petrochemical Company Limited	RMB 13,203	100.00		—Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Pipeline Storage & Transportation Company Limited	RMB 12,000	100.00		—Pipeline storage and transportation of crude oil
Sinopec Yizheng Chemical Fibre Limited Liability Company	RMB 4,000	100.00		—Production and sale of polyester chips and polyester fibres
Sinopec Lubricant Company Limited	RMB 3,374	100.00		—Production and sale of refined petroleum products, lubricant base oil, and petrochemical materials
Sinopec Qingdao Petrochemical Company Limited	RMB 1,595	100.00		—Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Chemical Sales Company Limited	RMB 1,000	100.00		—Marketing and distribution of petrochemical products
China International United Petroleum and Chemical Company Limited	RMB 3,000	100.00		—Trading of crude oil and petrochemical products
Sinopec Overseas Investment Holding Limited ("SOIH")	USD 300	100.00		—Investment holding
Sinopec Catalyst Company Limited	RMB 1,500	100.00		—Production and sale of catalyst products
China Petrochemical International Company Limited	RMB 1,400	100.00		—Trading of petrochemical products
		98.98	1.02	

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Sinopec Beihai Refining and Chemical Limited Liability Company	RMB 5,294			Import and processing of crude oil, production, storage and sale of petroleum products and petrochemical products
Sinopec Qingdao Refining and Chemical Company Limited	RMB 5,000	85.00	15.00	Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Zhanjiang Dongxing Petrochemical Company Limited	RMB 4,397	75.00	25.00	Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Hainan Refining and Chemical Company Limited	RMB 3,986	75.00	25.00	Manufacturing of intermediate petrochemical products and petroleum products
Sinopec Marketing Company Limited ("Marketing Company") (i)	RMB 28,403	70.42	29.58	Marketing and distribution of refined petroleum products
Sinopec-SK(Wuhan) Petrochemical Company Limited ("Zhonghan Wuhan")	RMB 6,270	65.00	35.00	Production, sale, research and development of ethylene and downstream byproducts
Sinopec Kantons Holdings Limited ("Sinopec Kantons")	HKD 248	60.34	39.66	Trading of crude oil and petroleum products
Sinopec Shanghai Petrochemical Company Limited ("Shanghai Petrochemical")	RMB 10,800	50.56	49.44	Manufacturing of synthetic fibres, resin and plastics, intermediate petrochemical products and petroleum products
Fujian Petrochemical Company Limited ("Fujian Petrochemical") (ii)	RMB 5,745	50.00	50.00	Manufacturing of plastics, intermediate petrochemical products and petroleum products

Except for Sinopec Kantons and SOIH, which are incorporated in Bermuda and Hong Kong respectively, all of the above principal subsidiaries are incorporated and operate their business principally in the PRC. All of the above principal subsidiaries are limited companies.

Note:

(i) Pursuant to the resolution of the Company's Meeting of Board of Directors held on February 19, 2014, the Company's business under its marketing and distribution segment of the Group was injected to Marketing Company, a subsidiary of the Group on April 1, 2014.

On September 12, 2014, Marketing Company entered into the "Capital Injection Agreement relating to Marketing Company" with a number of domestic and foreign investors, pursuant to which the investors shall subscribe for equity interest in Marketing Company in cash upon the relevant approvals for this capital injection being obtained, an aggregate capital contribution of RMB 105,044 was made to the Marketing Company by 25 investors, representing 29.58% equity interest in the Marketing Company on March 6, 2015. The difference between the contributions from and the net assets acquired by investors has been credited to capital reserve in amount of RMB 56,224 and to other comprehensive income in amount of RMB 446 of the equity attributable to the shareholders of the Company, respectively.

(ii) The Group consolidated the financial statements of the entity because it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

#### Summarized financial information on subsidiaries with material non-controlling interests

Set out below are the summarized financial information which the amount before inter-company eliminations for each subsidiary that has non-controlling interests that are material to the Group.

#### Summarized consolidated statement of balance sheet

	Fujian Petrochemical		Shanghai Petrochemical		Sinopec Kantons		SIPL		Marketing Company		Zhongyuan
	At December 31, 2014	At December 31, 2015	At December 31, 2014	At December 31, 2015	At December 31, 2014	At December 31, 2015	At December 31, 2014	At December 31, 2015	At December 31, 2014	At December 31, 2015	At December 31, 2014
	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB
Current assets	436	140	9,510	8,144	1,777	1,732	15,416	20,231	131,012	102,948	1,728
Current liabilities	(224 )	(73 )	(12,485)	(7,726 )	(1,149 )	(3,488 )	(2,387 )	(5,468 )	(280,010)	(156,028)	(13,800)
Net current assets/(liabilities)	212	67	(2,975 )	418	628	(1,756 )	13,029	14,763	(148,998)	(53,080 )	(11,072)
Non-current assets	4,050	5,487	21,395	19,676	12,622	13,025	47,623	40,075	229,281	240,312	16,800
Non-current liabilities	(996 )	(831 )	(1,649 )	—	(3,386 )	(3,384 )	(35,877)	(34,320)	(1,456 )	(1,628 )	—
Net non-current assets	3,054	4,656	19,746	19,676	9,236	9,641	11,746	5,755	227,825	238,684	16,800
Net assets	3,266	4,723	16,771	20,094	9,864	7,885	24,775	20,518	78,827	185,604	5,576
Attributable to owners of the Company	1,633	2,361	8,342	10,009	5,933	4,738	7,370	4,331	72,701	126,100	3,628
	1,633	2,362	8,429	10,085	3,931	3,147	17,405	16,187	6,126	59,504	1,950

Attributable to  
non-controlling  
interests

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## Summarized consolidated statement of comprehensive income

Year ended December 31,	Fujian Petrochemical			Shanghai Petrochemical			Sinopec Kantons			SIPL		
	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB
Operating revenues	5,379	7,322	5,532	115,490	102,126	80,748	19,902	16,337	1,642	13,652	9,038	6,500
Net (loss)/income for the year	(716 )	(745 )	1,456	2,066	(676 )	3,310	657	805	825	4,250	3,046	(220 )
Total Comprehensive (loss)/income	(714 )	(750 )	1,456	2,066	(676 )	3,310	885	622	302	3,814	(106 )	(4,000 )
Comprehensive (loss)/income attributable to non-controlling interests	(358 )	(375 )	728	924	(326 )	1,655	—	247	120	1,774	18	(1,000 )
Dividends paid to non-controlling interests	—	—	—	196	271	10	28	39	40	—	—	—

## Summarized statement of cash flows

Year ended December 31,	Fujian Petrochemical			Shanghai Petrochemical			Sinopec Kantons			SIPL			C 2015 RMB
	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB	2013 RMB	2014 RMB	2015 RMB	
Net cash generated from/(used in) operating activities	523	197	(179)	5,098	3,662	4,933	1,295	880	1,185	7,006	5,383	4,059	44,000
Net cash (used in)/generated from investing activities	(698)	(303)	76	(629 )	(910 )	(439 )	(3,275)	(1,120)	(504 )	(36,924)	(8,282)	(4,052)	(46,000)
Net cash generated from/(used in) financing activities	369	264	(176)	(4,497)	(2,606)	(3,696)	1,334	(414 )	(443 )	31,662	1,740	637	1,500
Net increase/(decrease)in cash and cash equivalents	194	158	(279)	(28 )	146	798	(646 )	(654 )	238	1,744	(1,159)	644	(21,000)

Cash and cash equivalents at January 1	28	222	380	161	133	279	1,952	1,279	630	824	2,468	1,327	2,8
Effect of foreign currency exchange rate changes	—	—	—	—	—	—	(27 )	5	18	(100 )	18	71	23
Cash and cash equivalents at December 31	222	380	101	133	279	1,077	1,279	630	886	2,468	1,327	2,042	2,6

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34. FINANCIAL RISK MANAGEMENT AND FAIR VALUES

Overview

Financial assets of the Group include cash and cash equivalents, time deposits with financial institutions, investments, trade accounts receivable, bills receivable, amounts due from Sinopec Group Company and fellow subsidiaries, amounts due from associates and joint ventures, available-for-sale financial assets, derivative financial instruments and other receivables. Financial liabilities of the Group include short-term and long-term debts, loans from Sinopec Group Company and fellow subsidiaries, trade accounts payable, bills payable, amounts due to Sinopec Group Company and fellow subsidiaries, derivative financial instruments and other payables.

The Group has exposure to the following risks from its use of financial instruments:

- credit risk;
- liquidity risk;
- market risk;

The Board of Directors has overall responsibility for the establishment, oversight of the Group's risk management framework, and developing and monitoring the Group's risk management policies.

The Group's risk management policies are established to identify and analyze the risks faced by the Group, and set appropriate risk limits and controls to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management controls and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations. Internal audit department undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Group's audit committee.

Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's deposits placed with financial institutions and receivables from customers. To limit exposure to credit risk relating to deposits, the Group primarily places cash deposits only with large financial institutions in the PRC with acceptable credit ratings. The majority of the Group's trade accounts receivable relate to sales of petroleum and chemical products to related parties and third parties operating in the petroleum and chemical industries. No single customer accounted for greater than 10% of total accounts receivable at December 31, 2015, except the amounts due from Sinopec Group Company and fellow subsidiaries. Management performs ongoing credit evaluations of the Group's customers' financial condition and generally does not require collateral on trade accounts receivable. The Group maintains an impairment loss for doubtful accounts and actual losses have been within management's expectations.

The carrying amounts of cash and cash equivalents, time deposits with financial institutions, trade accounts and bills receivables, derivative financial instruments and other receivables, represent the Group's maximum exposure to credit risk in relation to financial assets.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach in managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its

liabilities when due, under both normal and stressed capital conditions, without incurring unacceptable losses or risking damage to the Group's reputation. Management prepares monthly cash flow budget to ensure that the Group will always have sufficient liquidity to meet its financial obligations as they fall due. The Group arranges and negotiates financing with financial institutions and maintains a certain level of standby credit facilities to reduce the Group's liquidity risk.

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As of December 31, 2014 and 2015, the Group has standby credit facilities with several PRC financial institutions which provide borrowings up to RMB 302,570 and RMB 297,997 on an unsecured basis, at a weighted average interest rate of 3.51% and 2.50% per annum, respectively. As of December 31, 2014 and 2015, the Group's outstanding borrowings under these facilities were RMB 78,983 and RMB 32,991 and were included in debts, respectively.

The following table sets out the remaining contractual maturities at the balance sheet date of the Group's financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on prevailing rates current at the balance sheet date) and the earliest date the Group would be required to repay:

	Carrying amount RMB	Total contractual undiscounted cash flow RMB	December 31, 2014			
			Within 1 year or on demand RMB	More than 1 year but less than 2 years RMB	More than 2 years but less than 5 years RMB	More than 5 years RMB
Short-term debts	75,183	75,794	75,794	—	—	—
Long-term debts	107,787	129,849	4,328	16,411	63,221	45,889
Loans from Sinopec Group Company and fellow subsidiaries	146,110	147,321	103,475	1,301	6,634	35,911
Trade accounts payable	198,366	198,366	198,366	—	—	—
Bills payable	4,577	4,577	4,577	—	—	—
Accrued expenses and other payables	104,571	104,571	104,571	—	—	—
	636,594	660,478	491,111	17,712	69,855	81,800

	Carrying amount RMB	Total contractual undiscounted cash flow RMB	December 31, 2015			
			Within 1 year or on demand RMB	More than 1 year but less than 2 years RMB	More than 2 years but less than 5 years RMB	More than 5 years RMB
Short-term debts	71,517	72,476	72,476	—	—	—
Long-term debts	95,446	110,678	3,747	41,176	41,637	24,118
Loans from Sinopec Group Company and fellow subsidiaries	88,229	89,258	44,439	464	8,795	35,560
Trade accounts payable	130,446	130,446	130,446	—	—	—
Bills payable	3,566	3,566	3,566	—	—	—
Accrued expenses and other payables	88,062	88,062	88,062	—	—	—
	477,266	494,486	342,736	41,640	50,432	59,678

Management believes that the Group's current cash on hand, expected cash flows from operations and available standby credit facilities from financial institutions will be sufficient to meet the Group's working capital requirements and repay its short-term debts and obligations when they become due.

#### Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk.

#### Currency risk

Currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured. The Group's currency risk exposure primarily relates to short-term and long-term debts and loans from Sinopec Group Company and fellow subsidiaries denominated in US Dollars, Japanese Yen and Hong Kong Dollars. The Group enters into foreign exchange contracts to manage its currency risk exposure.

Included in short-term and long-term debts and loans from Sinopec Group Company and fellow subsidiaries of the Group are the following amounts denominated in a currency other than the functional currency of the entity to which they relate:

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		December 31,			
		2014		2015	
Gross exposure arising from loans and borrowings					
US Dollars	USD	8,382	USD	1,181	
Euro	EUR	57	EUR	1,108	
Japanese Yen	JPY	8,662		—	
Hong Kong Dollars	HKD	6	HKD	6	

A 5 percent strengthening/weakening of RMB against the following currencies as of December 31, 2014 and 2015 would have increased/decreased net income for the year of the Group by the amounts shown below. This analysis has been determined assuming that the change in foreign exchange rates had occurred at the balance sheet date and had been applied to the foreign currency balances to which the Group has significant exposure as stated above, and that all other variables, in particular interest rates, remain constant. The analysis is performed on the same basis for 2014.

		December 31,	
		2014	2015
US Dollars		1,923	288
Euro		16	295
Japanese Yen		17	—

Other than the amounts as disclosed above, the amounts of other financial assets and liabilities of the Group are substantially denominated in the functional currency of respective entity of the Group.

#### Interest rate risk

The Group's interest rate risk exposure arises primarily from its short-term and long-term debts. Debts bearing interest at variable rates and at fixed rates expose the Group to cash flow interest rate risk and fair value interest rate risk respectively. The interest rates of short-term and long-term debts, and loans from Sinopec Group Company and fellow subsidiaries of the Group are disclosed in Note 24.

As of December 31, 2014 and 2015, it is estimated that a general increase/decrease of 100 basis points in variable interest rates, with all other variables held constant, would decrease/increase the Group's net income by approximately RMB 1,119 and RMB 91, respectively. This sensitivity analysis has been determined assuming that the change of interest rates was applied to the Group's debts outstanding at the balance sheet date with exposure to cash flow interest rate risk. The analysis is performed on the same basis for 2014.

#### Commodity price risk

The Group engages in oil and gas operations and is exposed to commodity price risk related to price volatility of crude oil, refined oil products and chemical products. The fluctuations in prices of crude oil, refined oil products and chemical products could have significant impact on the Group. The Group uses derivative financial instruments, including commodity futures and swaps, to manage a portion of this risk. As of December, 31, 2014 and 2015, the Group had certain commodity contracts of crude oil, refined oil product and chemical products designated as qualified cash flow hedges and economic hedges. The fair values of these derivative financial instruments as of December 31, 2014 and 2015 are set out in Notes 14 and 26.

This sensitivity analysis has been determined assuming that the change in prices had occurred at the balance sheet date and the change was applied to the Group's derivative financial instruments at that date with exposure to commodity price risk. The analysis is performed on the same basis for 2014.

As of December 31, 2014, it is estimated that a general increase/decrease of USD 10 per barrel in basic price of derivative financial instruments, with all other variables held constant, would impact the fair value of derivative financial instruments, which would decrease/increase the Group's net income and retain earnings by approximately RMB 1,167, and increase/decrease the Group's other reserves by approximately RMB 2,206. As of December 31, 2015, it is estimated that a general increase/decrease of USD 10 per barrel in basic price of derivative financial instruments, with all other variables held constant, would impact the fair value of derivative financial instruments, which would decrease/increase the Group's net income and retain earnings by approximately RMB 1,951 and decrease/increase the Group's other reserves by approximately RMB 3,052. This sensitivity analysis has been determined assuming that the change in prices had occurred at the balance sheet

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date and the change was applied to the Group's derivative financial instruments at that date with exposure to commodity price risk. The analysis is performed on the same basis for 2014.

#### Fair values

##### (i) Financial instruments carried at fair value

The following table presents the carrying value of financial instruments measured at fair value at the balance sheet date across the three levels of the fair value hierarchy defined in IFRS 7, 'Financial Instruments: Disclosures', with the fair value of each financial instrument categorized in its entirety based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

- Level 1 (highest level): fair values measured using quoted prices (unadjusted) in active markets for identical financial instruments.
- Level 2: fair values measured using quoted prices in active markets for similar financial instruments, or using valuation techniques in which all significant inputs are directly or indirectly based on observable market data.
- Level 3 (lowest level): fair values measured using valuation techniques in which any significant input is not based on observable market data.

	December 31, 2014			
	Level 1	Level 2	Level 3	Total
	RMB	RMB	RMB	RMB
<b>Assets</b>				
Available-for-sale financial assets:				
- Listed	183			183
Derivative financial instruments:				
- Derivative financial assets	2,885	9,737		12,622
	3,068	9,737		12,805
<b>Liabilities</b>				
Derivative financial instruments:				
- Embedded derivative components of the convertible bonds		3,288		3,288
- Other derivative financial liabilities	1,920	17,070		18,990
	1,920	20,358		22,278

	December 31, 2015			
	Level 1	Level 2	Level 3	Total
	RMB	RMB	RMB	RMB
<b>Assets</b>				
Available-for-sale financial assets:				
- Listed	261	—	—	261
Derivative financial instruments:				
- Derivative financial assets	4,235	3,640	—	7,875
	4,496	3,640	—	8,136

Liabilities

Derivative financial instruments:

- Other derivative financial liabilities	305	2,445	—	2,750
	305	2,445	—	2,750

During the years ended December 31, 2014 and 2015, there were no transfers between instruments in Level 1 and Level 2.

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## (ii) Fair values of financial instruments carried at other than fair value

The disclosures of the fair value estimates, and their methods and assumptions of the Group's financial instruments, are made to comply with the requirements of IFRS 7 and IAS 39 and should be read in conjunction with the Group's consolidated financial statements and related notes. The estimated fair value amounts have been determined by the Group using market information and valuation methodologies considered appropriate. However, considerable judgment is required to interpret market data to develop the estimates of fair value. Accordingly, the estimates presented herein are not necessarily indicative of the amounts the Group could realize in a current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

The fair values of the Group's financial instruments carried at other than fair value (other than long-term indebtedness and investments in unquoted equity securities) approximate their carrying amounts due to the short-term maturity of these instruments. The fair values of long-term indebtedness are estimated by discounting future cash flows using current market interest rates offered to the Group that range from 0.33% to 6.15% and from 1.08% to 4.90% for the years ended December 31, 2014 and 2015, respectively. The following table presents the carrying amount and fair value of the Group's long-term indebtedness other than loans from Sinopec Group Company and fellow subsidiaries as of December 31, 2014 and 2015:

	December 31,	
	2014	2015
	RMB	RMB
Carrying amount	115,767	105,927
Fair value	112,362	103,482

The Group has not developed an internal valuation model necessary to estimate the fair value of loans from Sinopec Group Company and fellow subsidiaries as it is not considered practicable to estimate their fair values because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive based on the Reorganization, the Group's existing capital structure and the terms of the borrowings.

Investments in unquoted equity securities are individually and in aggregate not material to the Group's financial condition or results of operations. There are no listed market prices for such interests in the PRC and, accordingly, a reasonable estimate of fair value could not be made without incurring excessive costs. The Group intends to hold these unquoted other investments in equity securities for long term purpose.

Except for the above items, the financial assets and liabilities of the Group are carried at amounts not materially different from their fair values as of December 31, 2014 and 2015.

## 35. ACCOUNTING ESTIMATES AND JUDGMENTS

The Group's financial condition and results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of the consolidated financial statements. Management bases the assumptions and estimates on historical experience and on various other assumptions that it believes to be reasonable and which form the basis for making judgments about matters that are not readily apparent from other sources. On an on-going basis, management evaluates its estimates. Actual results may differ from those estimates as facts, circumstances and conditions change.

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

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### Oil and gas properties and reserves

The accounting for the exploration and production's oil and gas activities is subject to accounting rules that are unique to the oil and gas industry. There are two methods to account for oil and gas business activities, the successful efforts method and the full cost method. The Group has elected to use the successful efforts method. The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense as they are incurred. These costs primarily include dry hole costs, seismic costs and other exploratory costs. Under the full cost method, these costs are capitalized and written-off or depreciated over time.

Engineering estimates of the Group's oil and gas reserves are inherently imprecise and represent only approximate amounts because of the subjective 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. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depreciation rates.

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 loss and future dismantlement costs. Capitalized costs of proved oil and gas properties are amortized on a unit-of-production method based on volumes produced and reserves.

### Impairment for long-lived assets

If circumstances indicate that the net book value of a long-lived asset may not be recoverable, the asset may be considered "impaired", and an impairment loss may be recognized in accordance with IAS 36 "Impairment of Assets". The carrying amounts of long-lived assets are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to recoverable amount. For goodwill, the recoverable amount is estimated annually. The recoverable amount is the greater of the net selling price and the value in use. It is difficult to precisely estimate selling price because quoted market prices for the Group's assets or cash-generating units are not readily available. In determining the value in use, expected cash flows generated by the asset or the cash-generating unit are discounted to their present value, which requires significant judgment relating to level of sale volume, selling price and amount of operating costs. Management uses all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of sale volume, selling price and amount of operating costs.

### Depreciation

Property, plant and equipment, other than oil and gas properties, are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. Management reviews the estimated useful lives of the assets at least annually in order to determine the amount of depreciation expense to be

recorded during any reporting period. The useful lives are based on the Group's historical experience with similar assets and take into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

#### Impairment for bad and doubtful debts

Management estimates impairment losses for bad and doubtful debts resulting from the inability of the Group's customers to make the required payments. Management bases the estimates on the aging of the accounts receivable balance, customer credit-worthiness, and historical write-off experience. If the financial condition of the customers were to deteriorate, actual write-offs would be higher than estimated.

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## 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. Management bases the estimates on all available information, including the current market prices of the finished goods and raw materials, and historical operating costs. If the actual selling prices were to be lower or the costs of completion were to be higher than estimated, the actual allowance for diminution in value of inventories could be higher than estimated.

## 36. PARENT AND ULTIMATE HOLDING COMPANY

The directors consider the parent and ultimate holding company of the Group as of December 31, 2015 is Sinopec Group Company, a state-owned enterprise established in the PRC. This entity does not produce financial statements available for public use.

## 37. RESERVES

	2014 RMB	2015 RMB
<b>Capital reserve (Note (a))</b>		
Balance as of January 1	(33,713 )	(30,497 )
Transaction with non-controlling interests	3,216	326
Contributions to subsidiaries from non-controlling interests	—	56,244
Others	—	120
Balance as of December 31	(30,497 )	26,173
<b>Share premium (Note (b))</b>		
Balance as of January 1	33,347	41,824
Conversion of the 2011 Convertible Bonds (Note 24(iii))	8,477	14,026
Balance as of December 31	41,824	55,850
<b>Statutory surplus reserve (Note (c))</b>		
Balance as of January 1	73,337	76,552
Appropriation	3,215	3,088
Balance as of December 31	76,552	79,640
<b>Discretionary surplus reserve</b>		
Balance as of January 1	117,000	117,000
Balance as of December 31	117,000	117,000
<b>Other reserves</b>		
Balance as of January 1	2,491	(6,179 )
Other comprehensive income	(7,668 )	(1,169 )
Contributions to subsidiaries from non-controlling interests	—	446
Others	(1,002 )	121
Balance as of December 31	(6,179 )	(6,781 )





	2014 RMB	2015 RMB
Retained earnings (Note (d))		
Balance as of January 1	259,776	276,061
Net income attributable to owners of the Company	46,466	32,438
Final dividend inspect of the previous year, approved and paid during the year (Note (e))	(17,519 )	(13,318 )
Interim dividend (Note (f))	(10,512 )	(10,896 )
Appropriation	(3,215 )	(3,088 )
Others	1,065	(121 )
Balance as of December 31	276,061	281,076
	474,761	552,958

Note:

- (a) The capital reserve represents (i) the difference between the total amount of the par value of shares issued and the amount of the net assets transferred from Sinopec Group Company in connection with the Reorganization, and (ii) the difference between the considerations paid over the amount of the net assets of entities and related operations acquired from Sinopec Group Company and non-controlling interests.
- (b) The application of the share premium account is governed by Sections 167 and 168 of the PRC Company Law.
- (c) According to the Company's Articles of Association, the Company is required to transfer 10% of its net income in accordance with the PRC accounting policies complying with Accounting Standards for Business Enterprises ("ASBE"), adopted by the Group to statutory surplus reserve. In the event that the reserve balance reaches 50% of the registered capital, no transfer is needed. The transfer to this reserve must be made before distribution of a dividend to shareholders. Statutory surplus reserve can be used to make good previous years' losses, if any, and may be converted into share capital by the issue of new shares to shareholders in proportion to their existing shareholdings or by increasing the par value of the shares currently held by them, provided that the balance after such issue is not less than 25% of the registered capital.

During the years ended December 31, 2013, 2014 and 2015, the Company transferred RMB 5,734, RMB 3,215 and RMB 3,088, respectively, being 10% of the net income determined in accordance with the PRC accounting policies complying with ASBE, to this reserve.

- (d) As of December 31, 2014 and 2015, the amount of retained earnings available for distribution was RMB 166.481 and RMB 167.825, respectively, being the amount determined in accordance with IFRSs. According to the Articles of Association of the Company, the amount of retained earnings available for distribution to owners of the company is lower of the amount determined in accordance with the accounting policies complying with ASBE and the amount determined in accordance with the accounting policies complying with IFRS.

Pursuant to a resolution passed at the director's meeting on March 29, 2016, final dividends in respect of the year ended December 31, 2015 of RMB 0.06 per share totaling RMB 7,264 were proposed for shareholders' approval at the Annual General Meeting. Final cash dividend for the year ended December 31, 2015 proposed after the balance sheet date has not been recognized as a liability at the balance sheet date.

- (e) Pursuant to the shareholders' approval at the Annual General Meeting on May 9, 2014, a final dividend of RMB 0.15 per share totaling RMB 17,519 in respect of the year ended December 31, 2013 was declared and paid on June 19, 2014.

Pursuant to the shareholders' approval at the Annual General Meeting on May 27, 2015, a final dividend of RMB 0.11 per share totaling RMB 13,318 according to total shares of June 18, 2015 was approved. All dividends have been paid in the year ended December 31, 2015.

(f) Pursuant to the Company's Articles of Association and a resolution passed at the Directors' meeting on August 22, 2014, the directors authorized to declare an interim dividend for the year ended December 31, 2014 of RMB 0.09 per share totaling RMB 10,512. Dividends were paid on September 24, 2014.

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Pursuant to the Company's Articles of Association and a resolution passed at the Directors' meeting on August 26, 2015, the directors authorized to declare an interim dividend for the year ended December 31, 2015 of RMB 0.09 per share totaling RMB 10,896. Dividends were paid on September 23, 2015.

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

In accordance with the Accounting Standards Update 2010-03, Extractive Activities – Oil and Gas (Topic 932): Oil and Gas Reserve Estimation and Disclosures, (“ASU 2010-03”), issued by the Financial Accounting Standards Board of the United States, this section provides supplemental information on oil and gas exploration and producing activities of the Group and its equity method investments as of December 31, 2013, 2014 and 2015, and for the years then ended in the following six separate tables. Tables I through III provide historical cost information under IFRS pertaining to capitalized costs related to oil and gas producing activities; costs incurred in oil and gas exploration and development; and results of operations related to oil and gas producing activities. Tables IV through VI present information on the Group’s and its equity method investments’ estimated net proved reserve quantities; standardized measure of discounted future net cash flows; and changes in the standardized measure of discounted cash flows.

Tables I to VI of supplemental information on oil and gas producing activities set out below represent information of the Company and its consolidated subsidiaries and equity method investments.

Table I: Capitalized costs related to oil and gas producing activities

	Years ended December 31,								
	2013			2014			2015		
	RMB			RMB			RMB		
	Other			Other			Other		
	Total	China	countries	Total	China	countries	Total	China	countries
<b>The Group</b>									
Property cost, wells and related equipments and facilities	515,701	482,552	33,149	569,172	533,137	36,035	613,134	572,446	40,688
Supporting equipments and facilities	176,883	176,872	11	191,003	190,988	15	204,793	204,773	20
Uncompleted wells, equipments and facilities	64,569	63,801	768	78,971	78,185	786	70,731	69,873	858
<b>Total capitalized costs</b>	<b>757,153</b>	<b>723,225</b>	<b>33,928</b>	<b>839,146</b>	<b>802,310</b>	<b>36,836</b>	<b>888,658</b>	<b>847,092</b>	<b>41,566</b>
Accumulated depreciation, depletion, amortisation and impairment	(361,859)	(342,729)	(19,130)	(411,450)	(389,578)	(21,872)	(465,393)	(438,097)	(27,296)

losses									
Net									
capitalized									
costs	395,294	380,496	14,798	427,696	412,732	14,964	423,265	408,995	14,270
Equity									
method									
investments									
Share of net									
capitalized									
costs of									
associates									
and joint									
ventures	14,528	—	14,528	15,277	—	15,277	11,296	—	11,296
Total of the									
Group's and									
its equity									
method									
investments'									
results of net									
capitalized									
costs	409,822	380,496	29,326	442,973	412,732	30,241	434,561	408,995	25,566

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

Table II: Cost incurred in oil and gas exploration and development

	Years ended December 31,								
	2013			2014			2015		
	Total	China	Other	Total	China	Other	Total	China	Other
The Group									
Exploration	19,158	19,158	—	16,704	16,704	—	11,572	11,572	—
Development	81,969	79,505	2,464	73,923	71,468	2,455	52,229	49,605	2,624
Total costs incurred	101,127	98,663	2,464	90,627	88,172	2,455	63,801	61,177	2,624
Equity method investments									
Share of costs of exploration and development of associates and joint ventures	35	—	35	1,381	—	1,381	1,218	—	1,218
Total of the Group's and its equity method investments' results of exploration and development costs	101,162	98,663	2,499	92,008	88,172	3,836	65,019	61,177	3,842

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

Table Results of operations related to oil and gas producing activities

III:

	Years ended December 31,								
	2013			2014			2015		
	Total	China	RMB Other countries	Total	China	Other countries	Total	China	Other countries
<b>The Group</b>									
<b>Revenues</b>									
Sales	60,616	60,616	—	69,223	69,223	—	52,580	52,580	—
Transfers	158,317	144,767	13,550	141,521	132,920	8,601	70,453	63,900	6,553
	218,933	205,383	13,550	210,744	202,143	8,601	123,033	116,480	6,553
<b>Production costs excluding taxes</b>									
	(52,163)	(50,230)	(1,933)	(50,567)	(48,962)	(1,605)	(48,315)	(46,883)	(1,432)
<b>Exploration expenses</b>									
	(12,573)	(12,573)	—	(10,969)	(10,969)	—	(10,459)	(10,459)	—
<b>Depreciation, depletion, amortization and impairment losses</b>									
	(46,649)	(43,330)	(3,319)	(51,338)	(48,665)	(2,673)	(56,293)	(52,216)	(4,077)
<b>Taxes other than income tax</b>									
	(35,391)	(35,391)	—	(31,995)	(31,995)	—	(6,083)	(6,083)	—
<b>Earnings before taxation</b>									
	72,157	63,859	8,298	65,875	61,552	4,323	1,883	839	1,044
<b>Income tax expense</b>									
	(20,113)	(15,958)	(4,155)	(17,454)	(15,387)	(2,067)	(1,205)	(210)	(995)
<b>Results of operation from producing activities</b>									
	52,044	47,901	4,143	48,421	46,165	2,256	678	629	49
<b>Equity method investments</b>									
<b>Revenues</b>									

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Sales	180	—	180	12,973	—	12,973	7,207	—	7,207
Production costs excluding taxes	(71 )	—	(71 )	(1,371 )	—	(1,371 )	(1,165 )	—	(1,165 )
Exploration expenses	—	—	—	(10 )	—	(10 )	(4 )	—	(4 )
Depreciation, depletion, amortization and impairment losses	(44 )	—	(44 )	(2,961 )	—	(2,961 )	(2,157 )	—	(2,157 )
Taxes other than income tax	—	—	—	(6,881 )	—	(6,881 )	(3,036 )	—	(3,036 )
Earnings before taxation	65	—	65	1,750	—	1,750	845	—	845
Income tax expense	(25 )	—	(25 )	(958 )	—	(958 )	(418 )	—	(418 )
Share of net income for producing activities of associates and joint ventures	40	—	40	792	—	792	427	—	427
Total of the Group's and its equity method investments' results of operations for producing activities	52,084	47,901	4,183	49,213	46,165	3,048	1,105	629	476

The results of operations for producing activities for the years ended December 31, 2013, 2014 and 2015 are shown above. Revenues include sales to unaffiliated parties and transfers (essentially at third-party sales prices) to other segments of the Group. Income taxes are based on statutory tax rates, reflecting allowable deductions and tax credits. General corporate overhead and interest income and expense are excluded from the results of operations.



CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

Table IV: Reserve quantities information

The Group's and its equity method investments' estimated net proved underground oil and gas reserves and changes thereto for the years ended December 31, 2013, 2014 and 2015 are shown in the following table.

Proved oil and gas reserves are those quantities of oil and gas, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulation before contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether the estimate is a deterministic estimate or probabilistic estimate. Due to the inherent uncertainties and the limited nature of reservoir data, estimates of underground reserves are subject to change as additional information becomes available.

Proved developed oil and gas reserves are proved reserves that can be expected to be recovered through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared with the cost of a new well.

"Net" reserves exclude royalties and interests owned by others and reflect contractual arrangements and obligation of rental fee in effect at the time of the estimate.

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

	Years ended December 31,								
	2013			2014			2015		
	RMB			RMB			RMB		
	Other			Other			Other		
	Total	China	countries	Total	China	countries	Total	China	countries
<b>The Group</b>									
Proved developed and undeveloped reserves (oil) (million barrels)									
Beginning of year	2,843	2,771	72	2,841	2,773	68	2,772	2,700	72
Revisions of previous estimates	(10 )	(14 )	4	(38 )	(46 )	8	(638 )	(641 )	3
Improved recovery	166	153	13	154	154	—	99	99	—
Extensions and discoveries	175	175	—	141	130	11	41	41	—
Production	(333 )	(312 )	(21 )	(326 )	(311 )	(15 )	(317 )	(297 )	(20 )
End of year	2,841	2,773	68	2,772	2,700	72	1,957	1,902	55
Non-controlling interest in proved developed and undeveloped reserves at the end of year	31	—	31	32	—	32	25	—	25
Proved developed reserves									
Beginning of year	2,577	2,513	64	2,562	2,501	61	2,529	2,465	64
End of year	2,562	2,501	61	2,529	2,465	64	1,753	1,701	52
Proved undeveloped reserves									
Beginning of year	266	258	8	279	272	7	243	235	8
End of year	279	272	7	243	235	8	204	201	3
Proved developed and undeveloped reserves (gas) (billion cubic feet)									
Beginning of year	6,730	6,730	—	6,493	6,493	—	6,715	6,715	—
	(326 )	(326 )	—	175	175	—	(252 )	(252 )	—

Revisions of  
previous  
estimates

Improved recovery	35	35	—	48	48	—	70	70	—
Extensions and discoveries	714	714	—	711	711	—	1,749	1,749	—
Production	(660 )	(660 )	—	(712 )	(712 )	—	(731 )	(731 )	—
End of year	6,493	6,493	—	6,715	6,715	—	7,551	7,551	—
Proved developed reserves									
Beginning of year	5,439	5,439	—	5,781	5,781	—	5,987	5,987	—
End of year	5,781	5,781	—	5,987	5,987	—	6,439	6,439	—
Proved undeveloped reserves									
Beginning of year	1,291	1,291	—	712	712	—	728	728	—
End of year	712	712	—	728	728	—	1,112	1,112	—

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

	Years ended December 31,								
	2013			2014			2015		
	RMB			RMB			RMB		
	Other			Other			Other		
	Total	China	countries	Total	China	countries	Total	China	countries
Equity method investments									
Proved developed and undeveloped reserves of associates and joint ventures (oil) (million barrels)									
Beginning of year	—	—	—	289	—	289	275	—	275
Revisions of previous estimates	—	—	—	16	—	16	34	—	34
Improved recovery	—	—	—	—	—	—	1	—	1
Extensions and discoveries	—	—	—	2	—	2	9	—	9
Purchases (i)	290	—	290	—	—	—	—	—	—
Production	(1 )	—	(1 )	(32 )	—	(32 )	(33 )	—	(33 )
End of year	289	—	289	275	—	275	286	—	286
Proved developed reserves									
Beginning of year	—	—	—	259	—	259	252	—	252
End of year	259	—	259	252	—	252	260	—	260
Proved undeveloped reserves									
Beginning of year	—	—	—	30	—	30	23	—	23
End of year	30	—	30	23	—	23	26	—	26
Proved developed and undeveloped reserves of associates and joint ventures (gas) (billion cubic feet)									
Beginning of year	—	—	—	27	—	27	26	—	26
	—	—	—	4	—	4	(3 )	—	(3 )

Revisions of  
previous  
estimates

Improved recovery	—	—	—	—	—	—	—	—	—
Extensions and discoveries	—	—	—	—	—	—	—	—	—
Purchases(i)	27	—	27	—	—	—	—	—	—
Production	—	—	—	(5 )	—	(5 )	(4 )	—	(4 )
End of year	27	—	27	26	—	26	19	—	19
Proved developed reserves									
Beginning of year	—	—	—	24	—	24	24	—	24
End of year	24	—	24	24	—	24	18	—	18
Proved undeveloped reserves									
Beginning of year	—	—	—	3	—	3	2	—	2
End of year	3	—	3	2	—	2	1	—	1

Note:

(i) The Group acquired from the Sinopec Group Company 50% of equity interests of Mansarovar in November 2013, 50% of equity interests of CIR and 49% of equity interests of Taihu in December 2013.

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

	Years ended December 31,								
	2013			2014			2015		
	Total	China	Other	Total	China	Other	Total	China	Other
Total of the Group and its equity method investments									
Proved developed and undeveloped reserves (oil) (million barrels)									
Beginning of year	—	—	—	3,130	2,773	357	3,047	2,700	347
End of year	3,130	2,773	357	3,047	2,700	347	2,243	1,902	341
Proved developed and undeveloped reserves (gas) (billion cubic feet)									
Beginning of year	—	—	—	6,520	6,493	27	6,741	6,715	26
End of year	6,520	6,493	27	6,741	6,715	26	7,570	7,551	19

Table V: Standardized measure of discounted future net cash flows

The standardized measure of discounted future net cash flows, related to the above proved oil and gas reserves, is calculated in accordance with the requirements of ASU 2010-03. Estimated future cash inflows from production are computed by applying the average, first-day-of-the-month price for oil and gas during the twelve-month period before the ending date of the period covered by the report to year-end quantities of estimated net proved reserves. Future price changes are limited to those provided by contractual arrangements in existence at the end of each reporting year. Future development and production costs are those estimated future expenditures necessary to develop and produce year-end estimated proved reserves based on year-end cost indices, assuming continuation of year-end economic conditions. Estimated future income taxes are calculated by applying appropriate year-end statutory tax rates to estimated future pre-tax net cash flows, less the tax basis of related assets. Discounted future net cash flows are calculated using 10% midperiod discount factors. This discounting requires a year-by-year estimate of when the future expenditure will be incurred and when the reserves will be produced.

The information provided does not represent management's estimate of the Group's and its equity method investments' expected future cash flows or value of proved oil and gas reserves. Estimates of proved reserve quantities are imprecise and change over time as new information becomes available. Moreover, probable and possible reserves, which may become proved in the future, are excluded from the calculations. The arbitrary valuation requires assumptions as to the timing and amount of future development and production costs. The calculations are made for the years ended December 31, 2013, 2014 and 2015 and should not be relied upon as an indication of the Group's and its equity method investments' future cash flows or value of its oil and gas reserves.

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

	Years ended December 31,								
	2013			2014			2015		
	Total	China	RMB Other Countries	Total	China	Other countries	Total	China	Other countries
The Group									
Future cash flows	1,894,416	1,849,159	45,257	1,807,330	1,763,757	43,573	931,637	912,898	18,739
Future production costs	(902,692 )	(893,032 )	(9,660 )	(823,575 )	(811,267 )	(12,308 )	(440,079 )	(430,695 )	(9,384 )
Future development costs	(46,784 )	(40,487 )	(6,297 )	(46,684 )	(38,442 )	(8,242 )	(38,669 )	(34,092 )	(4,577 )
Future income tax expenses	(145,198 )	(129,757 )	(15,441 )	(135,219 )	(125,329 )	(9,890 )	(11,139 )	(9,779 )	(1,360 )
Undiscounted future net cash flows	799,742	785,883	13,859	801,852	788,719	13,133	441,750	438,332	3,418
10% annual discount for estimated timing of cash flows	(288,341 )	(285,924 )	(2,417 )	(288,393 )	(283,670 )	(4,723 )	(152,031 )	(150,855 )	(1,176 )
Standardized measure of discounted future net cash flows	511,401	499,959	11,442	513,459	505,049	8,410	289,719	287,477	2,242
Discounted future net cash flows attributable to non-controlling interests	5,149	—	5,149	4,815	—	4,815	1,356	—	1,356
Equity method investments									
Future cash flows	85,978	—	85,978	77,593	—	77,593	41,013	—	41,013
Future production costs	(27,596 )	—	(27,596 )	(14,393 )	—	(14,393 )	(11,665 )	—	(11,665 )
	(6,639 )	—	(6,639 )	(13,313 )	—	(13,313 )	(2,996 )	—	(2,996 )



Future development costs									
Future income tax expenses	(11,298 )	—	(11,298)	(8,530 )	—	(8,530 )	(4,159 )	—	(4,159 )
Undiscounted future net cash flows	40,445	—	40,445	41,357	—	41,357	22,193	—	22,193
10% annual discount for estimated timing of cash flows	(17,184 )	—	(17,184)	(21,707 )	—	(21,707)	(9,828 )	—	(9,828 )
Standardized measure of discounted future net cash flows	23,261	—	23,261	19,650	—	19,650	12,365	—	12,365
Total of the Group's and its equity method investments' results of standardized measure of discounted future net cash flows	534,662	499,959	34,703	533,109	505,049	28,060	302,084	287,477	14,607

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## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING  
ACTIVITIES (UNAUDITED)

(All currency amounts in millions)

Table VI: Changes in the standardized measure of discounted cash flows

	Years ended December 31, –		
	2013 RMB	2014 RMB	2015 RMB
<b>The Group</b>			
Sales and transfers of oil and gas produced, net of production costs	(131,379 )	(128,182 )	(68,635 )
Net changes in prices and production costs	(24,003 )	(11,220 )	(281,975 )
Net changes in estimated future development cost	(9,242 )	(14,207 )	(6,873 )
Net changes due to extensions, discoveries and improved recoveries	75,336	68,147	44,838
Revisions of previous quantity estimates	(10,478 )	(1,453 )	(68,875 )
Previously estimated development costs incurred during the year	17,831	22,286	18,494
Accretion of discount	62,380	60,425	60,005
Net changes in income taxes	15,790	6,262	79,281
Net changes for the year	(3,765 )	2,058	(223,740 )
<b>Equity method investments</b>			
Sales and transfers of oil and gas produced, net of production costs	(109 )	(4,721 )	(3,006 )
Net changes in prices and production costs	—	(4,573 )	(12,987 )
Net changes in estimated future development cost	—	(431 )	997
Net changes due to extensions, discoveries and improved recoveries	—	404	611
Revisions of previous quantity estimates	—	978	1,520
Previously estimated development costs incurred during the year	—	1,343	1,163
Accretion of discount	—	2,746	2,681
Net changes in income taxes	—	643	1,736
Net changes due to purchases and sales of minerals in place (i)	23,370	—	—
Net changes for the year	23,261	(3,611 )	(7,285 )
Total of the Group's and its equity method investments' results of net changes for the year	19,496	(1,553 )	(231,025 )