

CHINA PETROLEUM & CHEMICAL CORP  
Form 20-F  
April 11, 2013  
[Table of Contents](#)

**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, 2012**
- 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

**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, E-mail 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 RMB1.00 per share	New York Stock Exchange, Inc.
H Shares of par value RMB1.00 per share	New York Stock Exchange, Inc.*

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

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

**None**  
(Title of Class)



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Table of Contents

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 RMB1.00 per share	16,780,488,000
A Shares, par value RMB1.00 per share	70,039,798,886

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.

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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

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

U.S. GAAP

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

Other

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

Item 17  Item 18

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

Yes  No

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

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

Yes  No

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

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Table of Contents**Table of Contents**

	<b>Page</b>
<u>ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS</u>	6
<u>ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE</u>	6
<u>ITEM 3. KEY INFORMATION</u>	6
A. <u>SELECTED FINANCIAL DATA</u>	6
B. <u>CAPITALIZATION AND INDEBTEDNESS</u>	8
C. <u>REASONS FOR THE OFFER AND USE OF PROCEEDS</u>	8
D. <u>RISK FACTORS</u>	8
<u>ITEM 4. INFORMATION ON THE COMPANY</u>	15
A. <u>HISTORY AND DEVELOPMENT OF THE COMPANY</u>	15
B. <u>BUSINESS OVERVIEW</u>	17
C. <u>ORGANIZATIONAL STRUCTURE</u>	32
D. <u>PROPERTY, PLANT AND EQUIPMENT</u>	32
<u>ITEM 4A. UNRESOLVED STAFF COMMENTS</u>	33
<u>ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u>	34
A. <u>GENERAL</u>	34
B. <u>CONSOLIDATED RESULTS OF OPERATIONS</u>	36
C. <u>DISCUSSIONS ON RESULTS OF SEGMENT OPERATIONS</u>	43
D. <u>LIQUIDITY AND CAPITAL RESOURCES</u>	50
<u>ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u>	53
A. <u>DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT</u>	53
B. <u>COMPENSATION</u>	59
C. <u>BOARD PRACTICE</u>	61
D. <u>EMPLOYEES</u>	62
E. <u>SHARE OWNERSHIP</u>	62
<u>ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</u>	63
A. <u>MAJOR SHAREHOLDERS</u>	63
B. <u>RELATED PARTY TRANSACTIONS</u>	63
C. <u>INTERESTS OF EXPERTS AND COUNSEL</u>	64
<u>ITEM 8. FINANCIAL INFORMATION</u>	64
A. <u>CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION</u>	64
B. <u>SIGNIFICANT CHANGES</u>	65
<u>ITEM 9. THE OFFER AND LISTING</u>	65
A. <u>OFFER AND LISTING DETAILS</u>	65
<u>ITEM 10. ADDITIONAL INFORMATION</u>	66
A. <u>SHARE CAPITAL</u>	66
B. <u>MEMORANDUM AND ARTICLES OF ASSOCIATION</u>	66
C. <u>MATERIAL CONTRACTS</u>	74
D. <u>EXCHANGE CONTROLS</u>	74
E. <u>TAXATION</u>	74
F. <u>DIVIDENDS AND PAYING AGENTS</u>	78
G. <u>STATEMENT BY EXPERTS</u>	78
H. <u>DOCUMENTS ON DISPLAY</u>	78
I. <u>SUBSIDIARY INFORMATION</u>	79
<u>ITEM 11. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK</u>	79
<u>ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</u>	82
<u>ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u>	83
<u>ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</u>	83
A. <u>MATERIAL MODIFICATIONS TO THE RIGHTS TO SECURITIES HOLDERS</u>	83
B. <u>USE OF PROCEEDS</u>	83
<u>ITEM 15. CONTROLS AND PROCEDURES</u>	83

ITEM 16. RESERVED

85

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

85

Table of Contents

<u>ITEM 16B. CODE OF ETHICS</u>	85
<u>ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES</u>	85
<u>ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES</u>	86
<u>ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</u>	86
<u>ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT</u>	86
<u>ITEM 16G. COMPARISON OF NEW YORK STOCK EXCHANGE CORPORATE GOVERNANCE RULES AND CHINA CORPORATE GOVERNANCE RULES FOR LISTED COMPANIES</u>	86
<u>ITEM 16H. MINE SAFETY DISCLOSURE</u>	89
<u>ITEM 17. FINANCIAL STATEMENTS</u>	89
<u>ITEM 18. FINANCIAL STATEMENTS</u>	90
<u>ITEM 19. EXHIBITS</u>	90



Table of Contents

**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**

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, 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.

**Glossary of Technical Terms**

Unless otherwise indicated in the context, references to:

- billion are to a thousand million.
- BOE are to barrels-of-oil equivalent; natural gas is converted at a ratio of 6,000 cubic feet of natural gas to one BOE.
- 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.

Table of Contents**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 middle exchange rate of Renminbi as published by 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 5, 2013, the noon buying rate was RMB6.2005 to US\$1.00.

Period	End	Noon Buying Rate(1)		
		Average(2)	High	Low
(RMB per US\$1.00)				
2008	6.8225	6.9193	7.2976	6.7800
2009	6.8259	6.8295	6.8470	6.8176
2010	6.6000	6.7603	6.8330	6.6000
2011	6.2939	6.4475	6.6364	6.2939
2012	6.2301	6.2990	6.3879	6.2221
October 2012	6.2372	6.2627	6.2877	6.2372
November 2012	6.2265	6.2338	6.2454	6.2221
December 2012	6.2301	6.2328	6.2502	6.2251
January 2013	6.2186	6.2215	6.2303	6.2134
February 2013	6.2213	6.2323	6.2438	6.2213
March 2013	6.2108	6.2154	6.2246	6.2105
April 2013 (through April 5, 2013)	6.2005	6.2008	6.2078	6.1962

(1) For the period prior to January 1, 2009, the exchange rates reflect the noon buying rates certified by the Federal Reserve Bank of New York. For the period after January 1, 2009, 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.

Table of Contents

**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,

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- 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.

Table of Contents

**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, 2010, 2011 and 2012, and the selected consolidated balance sheet data as of December 31, 2011 and 2012 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, 2008 and 2009 and the selected consolidated balance sheet data as of December 31, 2008, 2009 and 2010 are derived from our audited consolidated financial statements which are not included elsewhere in this annual report and the financial statements of the acquired businesses described below.

We acquired from Sinopec Group Company the entire equity interest of Sinopec Qingdao Petrochemical Company Limited and certain marketing and distribution operations (collectively, the Acquired Group) in 2009; and part of interest in Angola Block 18 in 2010. As we and these companies are under the common control of Sinopec Group Company, our acquisitions are reflected in our consolidated financial statements as combination of entities under common control that is accounted for in a manner similar to a pooling-of-interests. Accordingly, the acquired assets and related liabilities have been accounted for at historical cost and our consolidated financial statements for periods prior to the combinations have been restated to include the financial condition and the results of operation of these companies on a combined basis.

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.

Table of Contents

	2008	2009	Year Ended December 31, 2010	2011	2012
	(RMB in millions, except per share, per ADS data and number of shares)				
<b>Consolidated Statement of income Data(1):</b>					
Operating revenues	1,444,291	1,345,052	1,913,182	2,505,683	2,786,045
Other income	50,857				
Operating expenses	(1,456,597)	(1,254,383)	(1,808,208)	(2,400,153)	(2,687,383)
Operating income	38,551	90,669	104,974	105,530	98,662
Earnings before income tax	33,412	86,574	103,663	104,565	90,642
Tax expense	(3,618)	(19,591)	(25,681)	(26,120)	(23,846)
Net income attributable to equity shareholders of the Company	31,180	63,129	71,782	73,225	63,879
Basic earnings per share(2)	0.360	0.728	0.828	0.845	0.736
Basic earnings per ADS(2)	35.96	72.81	82.79	84.46	73.58
Diluted earnings per share(2)	0.319	0.723	0.820	0.812	0.708
Diluted earnings per ADS(2)	31.90	72.34	82.02	81.23	70.79
Cash dividends declared per share	0.145	0.160	0.190	0.230	0.300
<b>Segment results</b>					
Exploration and production	78,649	23,894	47,149	71,631	70,054
Refining	(66,644)	27,504	15,851	(35,780)	(11,444)
Marketing and distribution	38,519	30,300	30,760	44,696	42,652
Chemicals	(12,976)	13,779	15,011	26,732	1,178
Corporate and others	(2,167)	(2,205)	(2,342)	(2,640)	(2,443)
Elimination of inter-segment sales	3,170	(2,603)	(1,455)	891	(1,335)
Operating income	38,551	90,669	104,974	105,530	98,662
<b>Shares</b>					
Basic weighted average number of A and H shares	86,702,439,000	86,702,439,000	86,702,513,472	86,702,538,041	86,810,557,493
Diluted weighted average number of A and H shares	87,789,799,595	87,789,799,595	87,789,874,067	89,795,334,781	91,086,256,256

	2008	2009	As of December 31, 2010	2011	2012
	(RMB in millions)				
<b>Consolidated Balance Sheet Data(1):</b>					
Cash and cash equivalents	7,040	8,782	17,008	24,647	10,456
Total current assets	165,525	201,479	260,229	342,755	365,015
Total non-current assets	635,533	697,474	735,593	801,773	901,678
Total assets	801,058	898,953	995,822	1,144,528	1,266,693
Total current liabilities	(292,095)	(315,921)	(336,406)	(444,240)	(513,373)
Short-term debts and loans from Sinopec Group Company and its affiliates (including current portion of long-term debts)	(114,208)	(75,216)	(35,828)	(80,373)	(115,982)
Long-term debts and loans from Sinopec Group Company and its affiliates (excluding	(135,720)	(152,725)	(174,075)	(154,457)	(162,116)

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current portion of long-term  
debts)

Total equity attributable to equity shareholders of the Company	(330,376)	(379,515)	(419,604)	(472,328)	(510,914)
Total equity	(352,700)	(405,506)	(451,036)	(507,344)	(548,036)
Capital employed(3)	(595,588)	(624,665)	(643,931)	(717,527)	(815,678)



Table of Contents

	2008	2009	Year Ended December 31 2010 (RMB in millions)	2011	2012
<b>Statement of Cash Flow and Other Financial Data(1):</b>					
Net cash generated from operating activities	86,443	165,513	170,333	150,622	142,380
Net cash generated from/ (used in) financing activities	20,347	(46,411)	(56,294)	(2,516)	5,628
Net cash used in investing activities	(108,288)	(117,355)	(105,788)	(140,449)	(162,197)
<b>Capital expenditure</b>					
Exploration and production	60,496	54,748	53,801	62,050	79,071
Refining	12,793	15,468	20,015	25,767	32,161
Marketing and distribution	15,160	16,996	30,829	30,387	31,723
Chemicals	22,930	27,258	18,422	16,980	23,616
Corporate and others	2,373	1,505	1,894	2,488	2,397
<b>Total</b>	<b>113,752</b>	<b>115,975</b>	<b>124,961</b>	<b>137,672</b>	<b>168,968</b>

(1) The acquisition of the Acquired Group in 2009, and the acquisition of 55% equity interest of Sonangol Sinopec International Limited (SSI) in 2010 from Sinopec Group Company were considered as combination of entities under common control and accounted in a manner similar to pooling-of-interests. Accordingly, the acquired assets and liabilities have been accounted for at historical cost and the consolidated financial statements for periods prior to the combinations have been restated to include the financial condition and results of operation of these acquired companies on a combined basis. The considerations for these acquisitions were treated as equity transactions.

(2) Basic earnings per share have been computed by dividing net income attributable to equity shareholders of our company by the weighted average number of shares in issue. Basic and diluted earnings per ADS have been computed as if all of our issued 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.

(3) Capital employed is derived by the sum of short-term debts, long-term debts, loans from Sinopec Group Company and its affiliates and total equity less cash and cash equivalents.

**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**

*Our business may be adversely affected by the fluctuation of crude oil and refined petroleum product prices.*

We consume a large amount of crude oil to produce our refined petroleum products and petrochemical products. 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 is dependent on international and domestic market conditions as well as the PRC government's price control over refined petroleum products. Although the current price-setting mechanism for refined petroleum products in China allows the PRC government to adjust price in the PRC market when the average international crude oil price fluctuates beyond certain levels within a certain time period, the PRC government still retains discretion as to whether or when to adjust the prices of the refined petroleum products. The PRC government generally exercises certain price control over refined petroleum products once 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 and adversely 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 and further exploring our current reserve base. 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. Without reserve additions through further exploration and development or acquisition activities, our reserves and production will decline over time, which may materially and adversely affect our results of operations and financial condition.

Table of Contents

***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 requirements from outside suppliers located in different countries and areas in the world. In 2012, approximately 79.71% of the crude oil required for our refinery business was sourced from international suppliers, some of which are 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 and petrochemical products involve a number of operating hazards. 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.

We focus on the safety of our operation and implemented health, safety and environment management system within our company to prevent accident, and reduce personal injuries, property losses and environment pollution. We also maintain insurance coverage on our property, plant, equipment and inventory. However, our preventative measures may not be effective and our insurance coverage may not be sufficient to cover all the financial losses caused by the operation risks and natural disasters. Losses incurred or payments required to be made by us due to operating hazards or natural disasters, which are not fully insured, may 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. The reserve data set forth in this annual report represent third-party estimates only. 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:

Table of Contents

- 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.***

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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 segment 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.

Table of Contents

***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.***

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. For example, more than 190 nations are signatories to the Framework Convention on Global Climate Change, commonly known as the Kyoto Protocol. The implementation of the Kyoto Protocol in a number of countries and other potential legislation limiting emissions could affect the global demand for fossil fuels. Although the first commitment period under Kyoto Protocol expired in 2012, nations who are parties to Kyoto Protocol adopted an amendment to the Kyoto Protocol (the Doha Amendment) at a conference held in Doha, Qatar, in December 2012. Under the Doha Amendment, the second commitment period for implementation of the amended Kyoto Protocol was extended to 2020. The PRC government has also announced proposals to introduce a carbon tax, which may have an adverse impact on our operations. If China or other countries in which we operate or desire to operate enact legislation focused on reducing greenhouse gases, either independently or in response to the Kyoto Protocol or the Doha Amendment, it could result in substantial capital expenditure from compliance with these laws, reduced demand for our products, and revenue generation and strategic growth opportunities could also be adversely impacted.

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

We acquired a 55% equity interest of SSI who has a 50% interest in Angola Block 18 in 2010. Since the end of civil war in 2002, the Angola government has focused on economic recovery and social development. It has made substantial progress on stability of its social and investment environment in recent years, and keeps continuity and stability on the oil production related policies. However, Angola is still one of the most undeveloped countries defined by the United Nations, and its social and investment conditions are subject to certain risks, including without limitation, the income distribution gap among nationals, a high unemployment rate, and the problem of discretionary execution of its laws and regulations. Angola entered into the Organization of the Petroleum Exporting Countries, or the OPEC, in 2006, and therefore it is also subject to the oil-output restriction imposed by the OPEC. Although Angola has a relatively complete legal system, significant uncertainties remain in the effectiveness of enforcement of judicial decisions. In addition, Angola suffers from other social issues such as significant polarization of wealth distribution and unemployment that affect the country's overall stability.

In addition, in respect to the oil production management in Angola, if there is any malfunction on our water or gas injection systems, the maintenance work may take a long time and our oil production capacity and outputs may decline. In respect to the reserve management in Angola, as more oilfields are developed, water cut in oilfields may increase and the oil reservoir pressures may decrease, which may materially and adversely affect our oil production capacity and reserve development.

**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 mediate the negative influences caused by factors such as the slowdown of world economic development and the European financial crisis, it is uncertain when and how soon the world economy can be fully recovered. 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.



Table of Contents

*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. On December 4, 2007, Ministry of Commerce of the PRC promulgated the Administrative Rules for Crude Oil Market and Administrative Rules for Refined Petroleum Products Market, which open the wholesale market of crude oil and refined petroleum products to new market entrants. 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. 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. 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 .

***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 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 administered by OFAC and by the U.S. Department of State. 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 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. It is possible that the United States could subject Sinopec Group Company 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.

Table of Contents

Further, the Iran Sanctions Act, as amended, and other U.S. laws and Executive Orders, authorize the imposition of sanctions on companies that engage in certain activities in and with Iran, especially in Iran's energy sector. It is possible that Sinopec Group Company or its affiliates engage in activities that are targeted for sanctions by U.S. laws. It is possible that the U.S. government would determine, and in the event that the U.S. government so determines, that Sinopec Group Company, or an entity it owns or controls, had engaged in any such activities and if the most extreme sanction, blocking, was applied to Sinopec Group Company's property, including controlled subsidiaries, Sinopec Group Company could be prohibited from engaging in business activities in the United States or with U.S. individuals or entities, and U.S. transactions in our securities and distributions to U.S. individuals and entities with respect to our securities could also be prohibited.

**Risks Relating to the PRC**

*The PRC governmental authorities, from time to time, audit or inspect our ultimate controlling shareholder. We cannot predict the effect of their outcome on our reputation, our 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. We cannot predict the outcome of such actions of governmental authorities. If, as a result of such audits, inspections or inquiries, (i) material irregularities are found within Sinopec Group Company or us or (ii) Sinopec Group Company or we become the target of any negative publicity, there may be a material adverse effect on our reputation, our business and financial condition as well as the trading prices of our ADSs and H shares.

*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 gain 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.

*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; and
- 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.

Table of Contents

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.

*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 for capital expenditures. 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, the People's Bank of China decided to further promote the reform of Renminbi exchange rate formation mechanism, and improve the flexibility of Renminbi exchange rate. Since 2005, the value of the Renminbi has appreciated significantly against the U.S. dollar. Fluctuations in the exchange rate of the Renminbi against the U.S. dollars and certain other foreign currencies may materially and adversely affect our oil and gas business, financial condition and results of operations.

***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.

Table of Contents

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 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.

**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 subsidiary in the United States, SINOPEC-USA Co., Ltd., 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.

Table of Contents

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 all the assets of certain research institutes from Sinopec Group Company. We have also sold and disposed of certain auxiliary assets and chemical assets to third parties. 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 addition, in 2007, we acquired 20 service stations and fuel business in Hong Kong from China Resources Enterprise, Ltd.

On March 3, 2010, the warrants issued by us in 2008 matured, of which 188,292 warrants had been exercised and converted into 88,774 shares, providing funding of approximately RMB1.7 million to us.

On September 30, 2010, we acquired a 55% equity interest of SSI, from Sinopec Overseas Oil & Gas Limited, a subsidiary of Sinopec Group Company, for a cash consideration of US\$1.678 billion. SSI owns a 50% interest in Angola Block 18.

In 2011, we issued RMB23 billion convertible bonds which are convertible into our A shares. As of December 31, 2012, our A shares increased by 117,759,112 shares as a result of the exercise of conversion rights by some holders of our convertible bonds. As of April 5, 2013, an aggregate 117,820,273 A shares have been converted from these convertible bonds.

Table of Contents

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.

On March 22, 2013, Sinopec Corporation Hongkong International Limited, a company which is incorporated in Hong Kong and a wholly-owned subsidiary of the Company ( SHI ) and Tiptop Energy Limited, a limited company incorporated in Hong Kong and a wholly-owned subsidiary of Sinopec Group Company ( Tiptop HK ) entered into a framework agreement ( Framework Agreement ), pursuant to which the parties agreed (1) to establish a joint venture company, namely Sinopec International Petroleum E&P Hongkong Overseas Limited, or JV HK as soon as possible; (2) following the establishment of JV HK, to procure JV HK (as the purchaser) to enter into the three purchase agreements with certain relevant vendors for the acquisition of (i) 5,001 Class A Shares of Caspian Investment Resources Ltd., a limited company incorporated in British Virgin Islands ( CIR ) and 50% of CIR 's total issued share capital at a price of US\$1,571 million, subject to adjustments; (ii) 50% of the total issued share capital of Mansarovar Energy Colombia Ltd., a company incorporated in Bermuda ( Mansarovar ) at a price of US\$428 million and the shareholder 's loan under the shareholder loan agreement dated September 18, 2006 between Mansarovar, as the borrower and Sinopec Overseas Oil & Gas Limited, a company which is incorporated in the Cayman Islands and a subsidiary of Sinopec Group Company ( SOOGL ), as the lender at a price of approximately 348 million, and (iii) 49% of the total issued share capital of Taihu Limited, a company incorporated in Republic of Cyprus at a price of US\$560 million and SOOGL 's certain rights of dividends under certain shareholders agreement at a price of approximately US\$93 million. CIR holds a 100% interest in the Karakuduk and Arman oil fields and a 50% interest in North Bazachi, Kozhasai and Alibekmola. Mansarovar owns a 50% interest in Nare Contract Block and a 100% interest in Velasquez Contract Block; Mansarovar is also the operator of these two blocks. Taihu Limited is principally engaged in oil and gas exploration, development and production in Russia. According to Shanghai Listing Rules and the Hong Kong Listing Rules, the aforementioned transactions constitute connected transaction for the Company. For details, please refer to the announcements dated March 22, 2013 published on the website of the Stock Exchange of Shanghai (<http://www.sse.com.cn>) and the Stock Exchange of Hong Kong (<http://www.hkex.com.hk>).

On March 28, 2013, the board announced that JV HK has been duly incorporated in Hong Kong and according to the Framework Agreement, each of SHI and Tiptop HK holds 50% of the equity interest in JV HK. On March 28, 2013, SHI, Tiptop HK and JV HK entered into a shareholders agreement pursuant to which SHI has actual control over the determination of the financial and operational policy of JV HK. Therefore, JV HK is a subsidiary with its financial statements consolidated by the Company. In addition, in accordance with the Framework Agreement, on March 28, 2013, JV HK entered into the Purchase Agreements with the relevant vendors. Completion of the transactions under Purchase Agreements is subject to the fulfillment or waiver of the conditions precedent in the relevant Purchase Agreements, and the required approval from the relevant government authorities and consents from the relevant third parties. For details, please refer to the announcements dated March 28, 2013 published on the website of the Stock Exchange of Shanghai (<http://www.sse.com.cn>) and the Stock Exchange of Hong Kong (<http://www.hkex.com.hk>).

**B. BUSINESS OVERVIEW**

**Exploration and Production**

*Overview*

We currently explore for, develop and produce crude oil and natural gas in a number of areas across China and Africa. As of December 31, 2012, we held 194 production licenses in China, with an aggregate acreage of 20,420 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 RMB1,000 per square kilometer.

As of December 31, 2012, we held 286 exploration licenses in China for various blocks in which we engaged in exploration activities, with an aggregate acreage of approximately 913, 800 square kilometers and with the maximum term of 7 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 RMB100 to RMB500 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.

Table of Contents

As of December 31, 2012, we held 2 production licenses in Africa (Anglo Block 18), with an aggregate acreage of 322.57 square kilometers. We currently do not have exploration licenses in Africa.

*Properties*

We currently operate 16 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 70 producing blocks of various sizes extending over an area of 2,564 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 2012, Shengli production field produced 196 million barrels of crude oil and 17.66 billion cubic feet of natural gas, with an average daily production of 544 thousand BOE, accounting for approximately 46.49% of our total crude oil and natural gas production for the year.

As of December 31, 2012, the total acreage of our oil and gas producing fields and blocks in China was 8,709 square kilometers, including 6,026 square kilometers of developed acreage, all of which were net developed acreage; and 2,683 square kilometers of gross undeveloped acreage, all of which were net undeveloped acreage.

As of December 31, 2012, the total acreage of our oil and gas producing fields and blocks in Africa was 140.5 square kilometers, including 110.0 square kilometers of developed acreage, of which 30.25 square kilometers were net developed acreage; and 30.5 square kilometers of gross undeveloped acreage, of which 8.4 square kilometers were net undeveloped acreage.

*Oil and Natural Gas Reserves*

As of December 31, 2012, our estimated proved reserves of crude oil and natural gas were 3,964 million BOE (including 2,843 million barrels of crude oil and 6,730 billion cubic feet of natural gas), representing a decrease of 0.05% from 2011. 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. Our domestic crude oil and natural gas reserves account for more than 95% of our total reserves in each of 2010, 2011 and 2012. Our reserve replacement ratio of crude oil and natural gas amounted to approximately 80%, 101% and 100% in 2010, 2011 and 2012, respectively.

The following tables set forth our proved developed and undeveloped crude oil and natural gas reserves by region as of December 31, 2010, 2011 and 2012.

**As of December 31,**

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	2010	2011	2012
	(in millions of barrels)		
<b>Crude Oil Proved Reserves</b>			
<b>Developed</b>			
China			
Shengli	1,963	1,975	1,974
Others	519	518	539
Africa(1)	72	52	64
Total Developed	2,554	2,545	2,577
<b>Undeveloped</b>			
China			
Shengli	131	101	84
Others	180	175	174
Africa(1)	23	27	8
Total Undeveloped	334	303	266
<b>Total Proved Reserves</b>	<b>2,888</b>	<b>2,848</b>	<b>2,843</b>

Table of Contents

	2010	As of December 31, 2011 (in billions of cubic feet)	2012
<b>Natural Gas Proved Reserves</b>			
<b>Developed</b>			
China			
Puguang	2,804	2,590	3,605
Others	1,667	1,656	1,834
Africa(1)			
Total Developed	4,471	4,246	5,439
<b>Undeveloped</b>			
China			
Puguang	978	978	
Others	998	1,485	1,291
Africa(1)			
Total Undeveloped	1,976	2,463	1,291
<b>Total Proved Reserves</b>	<b>6,447</b>	<b>6,709</b>	<b>6,730</b>

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

As of December 31, 2012, approximately 266 million barrels of our crude oil proved reserves and 1,291 billion cubic feet of our natural gas proved reserves were classified as proved undeveloped reserves in China and Africa. This compares to 303 million barrels and 2,463 billion cubic feet of proved undeveloped reserves of crude oil and natural gas, respectively, as of December 31, 2011. During 2012, 982 new wells were drilled by us in China and 4 new wells were drilled in Africa. We converted 97 million barrels of proved undeveloped crude oil reserves and 1,189 billion cubic feet of proved undeveloped natural gas reserves into proved developed reserves in 2012. Total capital expenditure incurred in converting proved undeveloped reserves into proved developed reserves amounted to RMB16.345 billion, including RMB14.538 billion and RMB1.807 billion incurred in connection with our operations in China and Africa, respectively, in 2012.

As of December 31, 2012, we have approximately 11.65 million barrels of our crude oil proved reserves and 0.105 billion cubic feet of our natural gas proved reserves classified as proved undeveloped reserves for more than five years, due to offshore platform construction, delay on transport-channel construction and other factors. These reserves are mostly located in the Shengli, Xi'an and Shanghai branches.

We manage our reserves estimation through a two-tier management system. Our 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 management committee that manages the reserves estimation process and reviews the reserves estimation report at the branches level.

Our RMC is chaired by Mr. Wang Zhigang, one of our senior vice presidents, and is co-led by our deputy chief geologist and our director general of our exploration and production segment. Mr. Wang 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 oil and gas industry. Our RMC also consists of 31 other members who are 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 holds peer 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 reporting 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.

Table of Contents*Oil and Natural Gas Production*

In 2012, we produced an average of 1,113 thousand BOE per day in China, of which approximately 75.48% was crude oil and 24.52% was natural gas. We produced an average of 59 thousand BOE per day in Africa, all of which was crude oil. The following tables set forth our average daily production of crude oil and natural gas sold for the years ended December 31, 2010, 2011 and 2012. The production of crude oil includes condensed oil.

	2010	Year Ended December 31, 2011 (in thousands of barrels)	2012
<b>Average Daily Crude Oil Production</b>			
China			
Shengli	532	532	536
Others	296	299	304
Africa(1)	70	50	59
<b>Total Crude Oil Production</b>	<b>898</b>	<b>881</b>	<b>899</b>

	2010	Year Ended December 31, 2011 (in millions of cubic feet)	2012
<b>Average Daily Natural Gas Production</b>			
China			
Puguang	401	586	732
Others	808	830	905
Africa(1)			
<b>Total Natural Gas Production</b>	<b>1,209</b>	<b>1,416</b>	<b>1,637</b>

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

*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, 2010, 2011 and 2012.

	Weighted Average	China (RMB)	Africa(1)
<b>For the year ended December 31, 2012</b>			
Average petroleum lifting cost per BOE	110.64	111.47	92.55
Average realized sales price			
Per barrel of crude oil	632.51	625.79	704.17



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Per thousand cubic meters of natural gas	1,291.65	1,291.65	
<b>For the year ended December 31, 2011</b>			
Average petroleum lifting cost per BOE	103.86	104.89	81.64
Average realized sales price			
Per barrel of crude oil	636.61	632.03	707.70
Per thousand cubic meters of natural gas	1,284.02	1,284.02	
<b>For the year ended December 31, 2010</b>			
Average petroleum lifting cost per BOE	94.87	97.48	54.34
Average realized sales price			
Per barrel of crude oil	479.77	475.37	517.21
Per thousand cubic meters of natural gas	1,173.92	1,173.92	

Table of Contents

(1) The exchange rates we used for Africa data in this table was the average exchange rates for each year ended December 31, 2010, 2011 and 2012, which are RMB6.7698 to US\$ 1.00, RMB 6.4588 to US\$1.00, and RMB6.3125 to US\$1.00, respectively.

*Exploration and Development Activities*

In 2012, we increased our oil and gas reserves by exploring resources in our five important exploration areas for our upstream business activities. We made remarkable progresses in our exploration of unconventional oil and gas resources. We made intensive explorations in 2012. In 2012, we made two dimensional seismic exploration of 23,436 kilometers representing an increase of 26% from 2011, three dimensional seismic exploration of 11,813 square kilometers representing an increase of 4% from 2011, and drill footage of 2,545 kilometers representing an increase of 17% from 2011. In 2012, we achieved 100% replacement ratio of oil and gas in China. For our exploration of crude oil, we expedited development activities in new areas and enhanced recovery rates in old areas. For our exploration of natural gas, we improved our construction of production capacity in Sichuan basin, Erdos basin and Dawan Block of Puguang Gas Field. For our exploration of unconventional oil and gas resources, our project in Erdos basin which focuses on exploration of tight gas achieved its construction goal of building a one-billion-cubic-meter horizontal well. We launched our first shale gas pilot project in Fuling.

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, 2010, 2011 and 2012.

	Total	Shengli	China	Others	Africa
<b>For the year ended December 31, 2012</b>					
Exploratory					
Productive	329	101		228	0
Dry	682	89		593	0
Development					
Productive (oil)	3,583	2,047		1,532	4
Dry (oil)	35	6		29	0
<b>For the year ended December 31, 2011</b>					
Exploratory					
Productive	321	112		209	0
Dry	504	124		380	0
Development					
Productive	3,333	1,839		1,494	0
Dry	23	5		18	0
<b>For the year ended December 31, 2010</b>					
Exploratory					
Productive	319	231		88	0
Dry	390	107		283	0
Development					
Productive	3,206	1,777		1,425	4
Dry	25	4		21	0

The following table sets forth the number of wells being drilled by us as of December 31, 2012, as compared to December 31, 2011:

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	As of December 31,			
	2011		2012	
	Gross	Net	Gross	Net
<b>China</b>				
Shengli	37	37	86	86
Others	110	110	199	199
<b>Africa</b>	2	1	4	1
<b>Total Wells Drilling</b>	149	148	289	286

Table of Contents

The following table sets forth our number of productive wells for crude oil and natural gas as of December 31, 2012, as compared to December 31, 2011:

	As of December 31,			
	2011		2012	
	Gross	Net	Gross	Net
<b>Productive Wells for Crude Oil</b>				
<b>China</b>				
Shengli	28,465	28,465	30,082	30,082
Others	15,125	15,125	16,165	16,165
<b>Africa</b>	18	8	21	7
<b>Total Productive Wells</b>	43,608	43,598	46,268	46,254

	As of December 31,			
	2011		2012	
	Gross	Net	Gross	Net
<b>Productive Wells for Natural Gas</b>				
<b>China</b>				
Puguang	35	35	53	53
Others	3,537	3,526	3,794	3,776
<b>Africa</b>	0	0	0	0
<b>Total Productive Wells</b>	3,572	3,561	3,847	3,829

**Refining***Overview*

In 2012, our refinery throughputs were approximately 221 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, 2010, 2011 and 2012.

	Year Ended December 31,		
	2010	2011	2012
	(in million tonnes)		
Gasoline	35.87	37.10	40.55
Diesel	76.09	77.17	77.39
Kerosene and Jet Fuel	12.42	13.73	15.01
Light chemical feedstock	35.00	37.38	36.33
Lubricant	1.44	1.37	1.13
Liquefied petroleum gas	9.33	9.47	9.92
Fuel oil	3.02	2.54	2.38

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, 2012, our total primary distillation capacity of crude oil was 261 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, 2010, 2011 and 2012.

	As of and for the Year Ended December 31,		
	2010	2011	2012
Primary distillation capacity of crude oil (million tonnes per annum)	244.70	247.10	260.90
Refinery throughputs (million tonnes per annum)	211.13	217.37	221.31

Note (1): When calculating refinery throughputs, conversion from tonnes to barrels are made at a rate of one tonne to 7.35 barrels.

Note (2): The primary distillation capacity and refinery throughputs of joint ventures are 100% included in our statistics.

Table of Contents

In 2012, measured by the total output from our refineries, our overall gasoline yield was 18.32%, overall diesel yield was 34.97%, overall kerosene yield was 6.78%, and overall light chemical feedstock yield was 16.42%. Other products include lubricant, liquefied petroleum gas, solvent, asphalt, petroleum coke, paraffin and fuel oil. For the years ended December 31, 2010, 2011 and 2012, our overall yield for all refined petroleum products at our refineries was 94.83%, 95.09% and 95.15% , respectively.

The following table sets forth the primary distillation capacity per annum as of December 31, 2012 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, 2012 (in million tonnes per annum)
Zhenhai	23.00
Shanghai	14.00
Maoming	18.00
Guangzhou	13.20
Jinling	18.00
Yanshan	13.50
Gaoqiao	13.00
Qilu	14.00
Qingdaoliahua	12.00
Yangzi	9.50
Hainan	8.50
Luoyang	8.00
Wuhan	8.00
Fujian	12.00
Tianjin	12.50
Changling	8.00

In 2012, our primary distillation capacity of crude oil increased by 20.0 million tonnes per annum, representing a net increase of 13.8 million tonnes per annum from 2011, which includes an increase of 16.0 million tonnes per annum in the distillation capacity of sour crude. In addition, in 2012, our hydro-refining capacity increased by 5.3 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 2012, approximately 79.71% of the crude oil required for our refinery business was sourced from international suppliers.

Table of Contents**Marketing and Sales of Refined Petroleum Products***Overview*

We operate the largest sales and distribution network for refined petroleum products in China. In 2012, we distributed and sold approximately 173.15 million tonnes of gasoline, diesel, jet fuel and kerosene. Most of the refined petroleum products sold by us are produced internally. In 2012, approximately 78% of our gasoline sales volume and approximately 81% 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 2010, 2011 and 2012.

	2010	2011	2012
<b>Total sales volume of refined petroleum products</b> (in million tonnes)	149.23	162.32	173.15
<b>Sales volume of refined petroleum products in China</b> (in million tonnes)	140.49	151.16	158.99
Of which: Retail	87.63	100.24	107.85
Direct Sales	32.40	33.22	33.25
Wholesale	20.47	17.70	17.89
<b>Average annual throughput of service stations</b> (in tonnes per station)	2,960	3,330	3,498

	2010	As of December 31, 2011	2012
<b>Total number of service stations under Sinopec brand</b>	30,116	30,121	30,836
Of which: Self-operated service stations	29,601	30,106	30,823

*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 2012, we sold approximately 107.85 million tonnes of gasoline, diesel and kerosene through our retail network, representing approximately 67.8% of our total gasoline, diesel, jet fuel and kerosene sales volume in China. 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, 2012, we had 13 franchised service stations that are owned and operated by third parties.

In 2012, we continued to improve our refined petroleum products retail networks through acquisition, construction and renovation of service stations, and added 717 new service stations operated by us into our retail network. We believe we have further strengthened our leading position in our principal market, and further improved our brand awareness and customer loyalty.

***Direct Sales***

In 2012, we sold approximately 33.25 million tonnes of refined petroleum products in China, including 2.1 million tonnes of gasoline, 28.9 million tonnes of diesel and 2.2 million tonnes of kerosene, through direct sales to commercial customers such as industrial enterprises, hotels, restaurants and agricultural producers.

***Wholesale***

In 2012, we sold approximately 17.89 million tonnes of gasoline, diesel, kerosene and jet fuel through wholesale channels in China, representing approximately 11.3% of our total sales volume of gasoline, diesel, kerosene and jet fuel. Our wholesale sales include sales to large commercial or industrial customers and independent distributors as well as sales to certain long-term customers such as railway, airlines, shipping and public utilities.



Table of Contents

Through our wholesale centers, we operate 399 storage facilities with a total capacity of approximately 15.2 million cubic meters, substantially all of which are wholly-owned by us. Our wholesale centers are connected to our refineries by railway, waterway and, in some cases, by 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, chemical fertilizers 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. Because of strong domestic demand, most of our petrochemical products are sold in China's domestic market.

*Products*

*Intermediate Petrochemicals*

We are the largest ethylene producer in China. Our rated ethylene capacity as of December 31, 2012 was 9.425 million tonnes per annum. In 2012, we produced 9.452 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.

Organic chemicals extracted mainly from olefins and aromatics are intermediate petrochemicals and are essential raw materials for synthetic resins, synthetic rubber and synthetic fibers. We are the largest producer of butanol, styrene, paraxylene, vinyl acetate, phenol and acetone 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, 2012 for our principal intermediate petrochemical products.

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	<b>Our Rated Capacity (thousand tonnes per annum)</b>	<b>Our Production (thousand tonnes)</b>	<b>Major Plants of Production</b>
Ethylene	9,425	9,452	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin, Zhongyuan, SECCO*, BASF-YPC*, Fujian*, Zhongsha (Tianjing)* and Zhenhai
Propylene	8,650	7,948	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin, Zhongyuan, SECCO*, BASF-YPC*, Gaoqiao, Anqing, Jinan, Jingmen, Wuhan, Fujian*, Zhongsha (Tianjing)* and Zhenhai
Benzene	4,546	3,517	Yanshan, Shanghai, Yangzi, Qilu, Guangzhou, Zhenhai, Tianjin, Luoyang, SECCO* and BASF-YPC*
Styrene	2,039	2,036	Yanshan, Qilu, Guangzhou, Maoming, SECCO* and Zhenhai
Para-xylene	4,068	4,406	Shanghai, Yangzi, Qilu, Tianjin Luoyang and Fujian*
Phenol	594	597	Yanshan and Gaoqiao

Table of Contents


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\* Joint ventures, of which the production capacities and outputs are 100% 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, 2012.

	<b>Our Rated Capacity (thousand tonnes per annum)</b>	<b>Our Production (thousand tonnes)</b>	<b>Major Plants of Production</b>
Polyethylene	5,941	6,185	Yanshan, Shanghai, Yangzi, Qilu, Maoming, Guangzhou, Tianjin, Zhongyuan, SECCO*, BASF-YPC*, Fujian*, Zhongsha (Tianjing)* and Zhenhai
Polypropylene	5,610	5,459	Yanshan, Shanghai, Yangzi, Qilu, Guangzhou, Maoming, Tianjin, Zhongyuan, SECCO*, Wuhan Fenghuang, Jingmen, Fujian*, Zhongsha (Tianjing)* and Zhenhai
Polyvinyl chloride	600	578	Qilu
Polystyrene	750	672	Yanshan, Qilu, Maoming, Guangzhou and SECCO*
Acrylonitrile butadiene styrene	200	142	Gaoqiao

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\* Joint ventures, of which the production capacities and outputs are 100% 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 2012 production, we are the largest producer of purified terephthalic acid, ethylene glycol, caprolactam and polyester 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, 2012 for each type of our principal synthetic fiber monomers and polymers.

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	Our Rated Capacity (thousand tonnes per annum)	Our Production (thousand tonnes)	Major Plants of Production
Purified terephthalic acid	3,119	3,125	Shanghai, Yangzi, Yizheng, Tianjin and Luoyang
Ethylene glycol	2,423	1,951	Yanshan, Shanghai, Yangzi, Tianjin, Maoming, BASF-YPC*, Zhongsha (Tianjing)* and Zhenhai
Acrylonitrile	550	613	Shanghai, Anqing, Qilu and SECCO*
Caprolactam	360	305	Shijiazhuang and Baling
Polyester	2,962	2,797	Shanghai, Yizheng, Tianjin and Luoyang

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\* Joint ventures, of which the production capacities and outputs are 100% included in our statistics.

Table of Contents*Synthetic Fibers*

We are the largest producer of polyester and 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, 2012.

	<b>Our Rated Capacity (thousand tonnes per annum)</b>	<b>Our Production (thousand tonnes)</b>	<b>Major Plants of Production</b>
Polyester fiber	1,283	1,044	Yizheng, Shanghai, Tianjin and Luoyang
Acrylic fiber	265	289	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 2012 production, we are the largest producer of SBR and cis-polybutadiene rubber and the only producer of IIR 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, 2012 for each of our principal synthetic rubbers.

	<b>Our Rated Capacity (thousand tonnes per annum)</b>	<b>Our Production (thousand tonnes)</b>	<b>Major Plants of Operation</b>
Cis-polybutadiene rubber	315	309	Yanshan, Qilu, Maoming and Gaoqiao
Styrene butadiene rubber	430	492	Yanshan, Qilu, Maoming and Gaoqiao and Yangzi
Styrene-butadiene-styrene thermoplastic elastomers	170	103	Yanshan and Maoming
Isobutylene isoprene rubber	45	32	Yanshan

*Synthetic Ammonia and Urea*

We produce synthetic ammonia and urea. Our synthetic ammonia is used to manufacture urea, caprolactam and acrylic nitrile.

The major companies of our production for chemical fertilizers for the year ended December 31, 2012 were Sinopec Anqing Company, Sinopec Baling Company and Sinopec Hubei Chemical Fertilizer Company.

*Marketing and Sales of Petrochemicals*

Most of our sales revenue come from 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 direct sales to end-users, most of which are large- and medium-sized manufacturing enterprises, and sales to distributors in our national sales network. We also provided after-sale services to our customers, including technical support. We continuously strive to improve our product mix and enhance our product quality to meet market needs.

Table of Contents

**Competition**

***Refining and Marketing of Refined Petroleum Products***

Market participants compete primarily on the basis of 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 over our competitors in most of these aspects.

***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.

**Patents and Trademarks**

In 2012, we were granted 1,349 patents in China. As of December 31, 2012, we owned a total of 8,430 patents in China.

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

In 2012, we sourced a small amount of crude oil from Iran, and such amount represented 3.9% of our total refinery throughputs. In addition, we engaged in a small amount of methanol trading activities with an Iranian company with net profit of approximately \$0.65 million.

Based on feedback to our inquiries to Sinopec Group Company, our controlling shareholder, Sinopec Group Company, directly or indirectly through its affiliates, engaged in a small amount of business activities in Iran such as providing engineering support and designs. Sales revenue from these business activities accounted for 0.08% of its total unaudited sales revenue. In 2012, no profits were generated from these business activities.

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 2013.

## 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 )*

The 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 gasoline nationwide based on its forecast on macro-economic conditions in China;
- Setting the pricing policy for refined petroleum 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 (2004); and
- Approving foreign investment projects that are in excess of certain investment limits.



Table of Contents

*The Ministry of Commerce ( MOFCOM )*

MOFCOM is responsible for examining and approving production sharing contracts, 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 quotas and licenses for import and export of crude oil and refined oil.

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 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.

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At the exploration stage, an applicant can also apply for a progressive exploration and production license that allows the holder to test and develop reserves not yet fully proved. The progressive 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 RMB1,000 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.

### *Volume and Price of Natural Gas*

The NDRC formulates the annual natural gas supply guidelines. The actual production level of natural gas (excluding the amount supplied to the fertilizer producers) is determined by the natural gas producers themselves.

Table of Contents

On December 26, 2011, NDRC decided to implement the reform of natural gas price formation mechanism in Guangdong Province and Guangxi Autonomous Region. The purpose of such reform is to liberalize the ex-factory price of natural gas so that it is more driven by market demand, and government would only interfere with the price of natural gas pipeline transmission, which is monopolistic in nature. Such reform is proposed to be implemented in the following aspects: first of all, change the prevailing pricing method (cost plus pricing) to net back pricing, and decide the pricing reference point and the types of alternative energy while establishing the correlation between the prices of natural gas and alternative energies; secondly, determine the price of natural gas at city gate in each province (region and city) based on the pricing reference point and taken into considerations the major consumers of natural gas resources and pipeline transmission costs; thirdly, adjust the price of natural gas at city gate in a dynamic fashion, for instance, adjust the price annually based on the changes of alternative energy prices and gradually transit the frequency into semiannually or quarterly in the future; lastly, implement market-oriented pricing mechanism for the pricing of unconventional natural gas such as shale gas, coal bed methane and coal-to-gas.

***Regulation of Refining and Marketing of Refined Petroleum Products***

*Volume and Price Controls on Gasoline, Diesel and Jet Fuels*

The PRC government continues to exercise control over the prices of gasoline, diesel and jet fuels.

According to the Notice on Implementing Reforms on Prices of Refined Products and Tax promulgated by the State Council on December 18, 2008 and the Measures for Administration of Petroleum Products Price (Trial) issued by the NDRC on May 7, 2009, the sale prices for refined petroleum products in the PRC market shall be adjusted with reference to international crude oil price fluctuations, subject to governmental control. The NDRC will set maximum retail price and the provincial price bureaus have the authority to set maximum whole sale prices for gasoline and diesel. As a principle, maximum retail price for gasoline and diesel in the Chinese market shall be decided with reference to the international crude oil price plus the average domestic processing costs, tax levies, reasonable sales and marketing expenses and appropriate profit. The refined petroleum products price in the PRC market may be adjusted when the moving average price of international crude oil price fluctuates beyond 4% within a period of 22 consecutive business days. If the international crude oil prices experience sustained increase or radical fluctuation, the price of refined petroleum products, including gasoline and diesel products, will be controlled by the government to reduce the oil price fluctuation impact upon the PRC market. In addition, the ex-factory price of the jet fuel (standard product) will be determined by the buyers and the sellers, subject to a limit of no more than the delivered-duty-paid Chinese main port price from Singapore market. The National Development and Reform Commission (NDRC) will regularly release the delivered-duty-paid Chinese main port price for jet fuels from Singapore market.

***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. Foreign enterprises' rapid entrance into Chinese petroleum and chemical products markets will change the current market status for petroleum and chemical products.

On March 26, 2012, the NDRC announced adjustments to the existing refined oil pricing mechanism, which include, among other things, (i) shortening of price reference period from 22 working days to 10 working days; (ii) lifting the 4% downward and upward fluctuation cap on benchmark crude oil prices; (iii) adjusting the composition of domestic benchmark crude oil types in response to changes of types of imported crude oil and crude oil trading in the overseas market. In the cases of changes such as significant increase in domestic prices or significant fluctuations of crude oil price, NDRC may issue additional procedural guidelines, such as implementing ad hoc suspension or delay of price adjustment upon the approval by the State Council.

### *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.

On February 14, 2011, the NDRC issued the Notice of Delegating the Power and Authority to Verify and Approve Overseas Investment, pursuant to which, overseas investment project falling within the category of resources development involving investment of less than US\$300 million by any Chinese party which is a local enterprise, and overseas investment project falling outside the category of resources development (other than special projects) involving investment of less than US\$100 million by any Chinese party which is a local enterprise, shall be verified and approved by the provincial-level authority of NDRC. Any forgoing overseas investment by any Chinese party which is an enterprise managed by PRC central government shall be filed with the NDRC. Overseas investment project falling within the category of resources development involving investment of more than US\$300 million (inclusive) by PRC central government, and overseas investment project falling outside the category of resources development involving investment of more than US\$100 million (inclusive) by PRC central government, shall be verified and approved by the NDRC.

Table of Contents

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.

***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 January 1, 2009, China has adjusted the consumption tax rates of the refined oil and other refined products under the country's refined oil tax reform plan.

On October 28, 2011, the Rules for Implementation of Interim Regulations of the Resource Tax was promulgated by the Ministry of Finance and State Administration of Taxation, under which the implementation of resources taxes reform will cover oil and gas enterprises at nationwide since November 1, 2011. Any person who is involved in production of crude oil and natural gas, and is qualified to pay resources taxes, shall pay 5% of the price of crude oil or natural gas as the resource taxes. Qualified taxes payers may enjoy an exemption or reduction of resources taxes.

Effective from November 1, 2011, The Ministry of Finance increased the threshold of the special oil income levy to US\$55 per barrel, and a five-level progressive rate will still be applicable to special oil income levy collection based on the sale prices, which is calculated and paid monthly.

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

<b>Tax Item</b>	<b>Tax Base</b>	<b>Tax Rate</b>
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 of any value-added tax that we paid for (i) purchasing materials consumed during the production process; (ii) charges paid for drilling and other engineering services; and (iii) labor consumed during the production

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		process.
Business tax	Revenue from pipeline transportation services	3%.
Consumption tax	Aggregate volume sold or self-consumed	RMB1 per liter for gasoline, naphtha, solvent oil and lubricant; RMB0.8 per liter for diesel, jet fuel and fuel oil. The consumption tax for naphtha for the production of ethylene and aromatic hydrocarbon will be taxed first but refunded later. The consumption tax for naphtha which is produced internally for the production of ethylene and aromatic hydrocarbon and listed in direct supply scheme of State Administration of Taxation will be exempted. Consumption tax on jet fuel is currently exempted.
Import tariff	CIF China price	5% for gasoline, 6% for diesel, 9% for jet kerosene and 6% for fuel oil. Beginning on July 1, 2011, the applicable tax rates for gasoline, fuel oil, diesel and jet kerosene are 1%, 1%, 0% and 0%, respectively.
Resource tax	Aggregate volume sold or self-consumed	Effective from November 1, 2011, for domestic production of crude oil and natural gas, the applicable tax rate is 5% of the sales revenue, exemption or deduction may apply if qualified.
Compensatory fee for mineral resources	Revenue of crude oil and natural gas	1%
Exploration license fee	Area	RMB100 to RMB500 per square kilometer per annum.
Production license fee	Area	RMB1,000 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%.
Education Surcharge and local education surcharge	Total amount of value-added tax, consumption tax and business tax	3% and 2%.
Special Oil Income Levy	Any revenue derived from sale of domestically produced crude oil when the realized crude oil price exceeds US\$55 per barrel.	Progressive rate of 20% to 40% for revenues derived from crude oil with realized price in excess of US\$55 per barrel.

Table of Contents

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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. We hold production licenses covering all of our interests in our developed and undeveloped crude oil and natural gas fields and productive wells. 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 increase of the 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.

Table of Contents

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. Our previous Central Safety and Environmental Compliance Department was renamed as Safety Supervision Bureau.

Our production facilities have their own facilities to treat waste water, solid waste and waste gases on site. Waste water first goes through preliminary treatment at our own waste water treatment facilities. Thereafter, the water is sent to nearby waste water treatment centers operated either by us or by Sinopec Group for further treatment. All solid waste materials generated by our production facilities are buried at disposal sites or burned in furnaces either operated by us or by Sinopec Group. Waste gases are generally treated and burned in furnaces before dissipation and the ash is disposed in accordance with our solid waste disposal procedures.

Environmental regulations also require companies to file an environmental impact report to the environmental bureau for approval before undertaking any construction of a new production facility or any major expansion or renovation of an existing production facility. Such an undertaking will not be permitted to operate until 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 RMB3.9 billion in 2010, RMB4.2 billion in 2011 and RMB4.8 billion in 2012.

**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 RMB618.1 billion of coverage on our property and plants and approximately RMB100.4 billion of coverage on our inventory. In 2012, we paid an insurance premium of approximately RMB2.5 billion to Sinopec Group Company for such coverage. Transportation vehicles and products in transit are not covered by Sinopec Group Company and we maintain insurance policies for those assets with insurance companies in the PRC.

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



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Pursuant to an approval of the Ministry of Finance, Sinopec Group Company entered into an agreement with China People's Insurance Company 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 RMB4.0 billion and a maximum of RMB2.36 billion per occurrence.

We do not currently carry any third party liability insurance to cover claims in respect of personal injury, environmental damage arising from accidents on our property or relating to our operations other than on our transportation vehicles. We have not had a third party liability claim filed against us during the past three years. We do not carry business interruption insurance.

### **ITEM 4A. UNRESOLVED STAFF COMMENTS**

None.

Table of Contents

**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).

In 2009, we acquired Sinopec Qingdao Petrochemical Company Limited, eight refined petroleum pipelines and SSI. As we and these newly acquired entities are under the common control of Sinopec Group Company, our acquisitions of such entities are reflected in our consolidated financial statements as a combination of entities under the common control that is accounted for in a manner similar to a pooling-of-interests.

**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. There have been no significant changes to the original reserve estimates during any of the three years ended December 31, 2010, 2011 and 2012.

Table of Contents*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, 2010, 2011 and 2012 in our statement of income on long-lived assets are summarized as follows:

	2010	Year ended December 31, 2011 (RMB in millions)	2012
Exploration and production	3,250	2,153	1,006
Refining	4,902	78	
Marketing and distribution	1,183	269	8
Chemicals	5,121	308	
Corporate and others	21	1	
Total	14,477	2,809	1,014

*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, 2010, 2011 and 2012.

*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:

	2010	Year ended December 31, 2011 (RMB in millions)	2012
Balance as of January 1	1,921	1,322	1,012
Impairment losses recognized for the year	48	51	44
Reversal of impairment losses	(130)	(124)	(155)
Written off	(517)	(237)	(202)
Balance as of December 31	1,322	1,012	699

Table of Contents*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:

	2010	Year ended December 31, 2011 (RMB in millions)	2012
Balance as of January 1	1,038	1,091	1,382
Allowance for the year	1,087	3,264	7,419
Reversal of allowance on disposal	(77)	(122)	(378)
Written off	(957)	(2,851)	(7,943)
Other increase			11
Balance as of December 31	1,091	1,382	491

**Recently Pronounced International Financial Reporting Standards**

Information relating to the recently pronounced IFRS is presented in Note 36 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, 2012 Compared with Year Ended December 31, 2011*

In 2012, our total operating revenues were RMB2,786.0 billion, representing an increase of 11.2% over 2011. Our operating income was RMB98.7 billion, representing a decrease of 6.5% over 2011.

Table of Contents

The following table sets forth major revenue and expense items in the consolidated statement of income for the years ended December 31, 2011 and 2012.

	Year Ended December 31,		Rate of Change from
	2012	2011	2011 to 2012
	(RMB in millions)		%
Operating revenues	2,786,045	2,505,683	11.2
Sales of goods	2,733,618	2,463,767	11.0
Other operating revenues	52,427	41,916	25.1
Operating expenses	(2,687,383)	(2,400,153)	12.0
Purchased crude oil, products and operating supplies and expenses	(2,301,199)	(2,027,646)	13.5
Selling, general and administrative expenses	(61,174)	(58,960)	3.8
Depreciation, depletion and amortization	(70,456)	(63,816)	10.4
Exploration expenses, including dry holes	(15,533)	(13,341)	16.4
Personnel expenses	(51,767)	(45,428)	14.0
Taxes other than income tax	(188,483)	(189,949)	(0.8)
Other operating income/(expenses), net	1,229	(1,013)	
Operating income	98,662	105,530	(6.5)
Net finance costs	(9,881)	(5,285)	87.0
Investment income and income from associates and jointly controlled entities	1,861	4,320	(56.9)
Earnings before income tax	90,642	104,565	(13.3)
Tax expense	(23,846)	(26,120)	(8.7)
Net income	66,796	78,445	(14.8)
Attributable to:			
Equity shareholders of the Company	63,879	73,225	(12.8)
Non-controlling interests	2,917	5,220	(44.1)

**Operating revenues**

In 2012, our sales of goods were RMB2,733.6 billion, representing an increase of 11.0% over 2011. This was mainly due to the active expansion of the markets and its increased sales volume and higher prices of oil products.

The following table sets forth our external sales volume, average realized prices and the respective rates of change from 2011 to 2012 for our major products:

	Average Realized Price		Rate of Change from 2011 to 2012 (%)	Sales Volume		Rate of Change from 2011 to 2012 (%)
	2012	2011		2012	2011	
	(RMB)					
Crude Oil	4,579(1)	4,621(1)	(0.9)	6,221(2)	5,581(2)	11.5
Natural Gas	1,281(3)	1,274(3)	0.5	14,431(4)	12,310(4)	17.2
Gasoline	8,615(1)	8,403(1)	2.5	53,488(2)	47,494(2)	12.6



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Diesel	7,219(1)	7,075(1)	2.0	99,864(2)	97,897(2)	2.0
Kerosene	6,416(1)	6,193(1)	3.6	18,760(2)	16,570(2)	13.2
Basic chemical feedstock	6,740(1)	6,915(1)	(2.5)	23,387(2)	20,944(2)	11.7
Synthetic Fiber Monomer and Polymer	8,238(1)	9,880(1)	(16.6)	6,943(2)	6,585(2)	5.4
Synthetic Resin	9,181(1)	9,841(1)	(6.7)	10,503(2)	10,518(2)	(0.1)
Synthetic Fiber	10,790(1)	13,301(1)	(18.9)	1,458(2)	1,496(2)	(2.5)
Synthetic Rubber	17,564(1)	22,215(1)	(20.9)	1,287(2)	1,220(2)	5.5
Chemical fertilizer	2,052(1)	2,186(1)	(6.1)	1,193(2)	951(2)	25.4

Table of Contents

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- (1) per tonne
  - (2) thousand tonnes
  - (3) per thousand cubic meters
  - (4) million cubic meters

***Sales of crude oil and natural gas***

Most of crude oil and a portion of natural gas we produced internally were used for refining and chemical production and the remaining were sold to other customers. In 2012, the total revenue from crude oil, natural gas and other upstream products that were sold externally amounted to RMB53.7 billion, representing an increase of 13.1% over 2011, and accounted for 1.9% of our operating revenues. The change was mainly due to the increase in the sales volume of crude oil, natural gas and other upstream products.

***Sales of refined petroleum products***

In 2012, 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 RMB1,647.0 billion, accounting for 59.1% of our operating revenues and representing an increase of 8.0% over 2011. The increase was mainly because of the increase of sales volume and prices for these products. The sales revenue of gasoline, diesel and kerosene was RMB1,302.0 billion, accounting for 79.1% of the total revenue of petroleum products and representing an increase of 9.0% over 2011. Sales revenue of other refined petroleum products was RMB345.0 billion, accounting for 20.9% of the total revenue of petroleum products and representing an increase of 4.3% over 2011.

***Sales of chemical products***

Our external sales revenue of chemical products was RMB356.2 billion, accounting for 12.8% of our operating revenues and representing a decrease of 3.4% over 2011. This was mainly attributable to the decrease of prices for chemical products as a result of overall market conditions.

***Revenue from corporate and others segment***

In 2012, our corporate and others segment realized sales revenue of RMB677.9 billion, accounting for 24.2% of our operating revenue and representing an increase of 29.5% over 2011. This was mainly attributable to expanded sales volume, imports and exports of crude oil and refined petroleum products.

*Operating expenses*

In 2012, our operating expenses were RMB2,687.4 billion, representing an increase of 12.0% over 2011, among which:

**Purchased crude oil, products and operating supplies and expenses** were RMB2,301.2 billion, representing an increase of 13.5% over 2011, accounting for 85.6% of the total operating expenses, of which:

- crude oil purchase expenses were RMB880.7 billion, representing an increase of 5.0% over 2011. In 2012, the total throughput of crude oil that was purchased externally was 168.61 million tonnes (excluding the amount processed for third parties), representing an increase of 1.1% over 2011; the average unit processing cost for crude oil purchased externally was RMB5,223 per tonne, representing an increase of 3.9% over 2011; and
- other purchasing expenses were RMB1,420.5 billion, representing an increase of 19.5% over 2011. This was mainly due to the expansion of our trading activities, as well as the increased prices of refined oil and other products.

**Selling, general and administrative expenses** totaled RMB61.2 billion, representing an increase of 3.8% over 2011. This was mainly attributable to the expansion of our sales, increase in labor costs and increase in sales expenses such as agency fees and selling and transportation expenses.

Table of Contents

**Depreciation, depletion and amortization** was RMB70.5 billion, representing an increase of 10.4% over 2011. This was mainly due to the increase of depreciation resulting from our continuous capital expenditure on property, plant and equipment.

**Exploration expenses, including dry holes** were RMB15.5 billion, representing an increase of 16.4% over 2011, reflecting our enhanced exploration activities in Erdos, Sichuan Basin and Jungar regions, as well as our investment in unconventional oil and gas exploration.

**Personnel expenses** were RMB51.8 billion, representing an increase of RMB6.3 billion, or 14.0%, over 2011, or an increase of 5.0% over 2011 excluding adjustments made to salary-based surcharges and insurance contribution basis according to relevant regulations, implementation of employee vacation and recuperation system, housing subsidy and annuity for employees. This is largely because of the improvement of compensation system and moderate increase of wages and salaries of our employees, in particular direct labor in the production lines.

**Taxes other than income tax** were RMB188.5 billion, representing a decrease of 0.8% over 2011. This was mainly due to the decrease of special oil income levy by RMB8.3 billion over 2011 resulting from the increase of special oil income levy threshold as of November 1, 2011, partially offset by the increase of resources tax of RMB4.4 billion attributable to collection of resource tax on ad valorem effective as of November 1, 2011.

**Other operating income/(expenses), net** were RMB2.2 billion less than that for 2011.

*Operating income*

In 2012, our operating income was RMB98.7 billion, representing a decrease of 6.5% over 2011.

*Net finance costs*

In 2012, our net finance costs were RMB9.9 billion, representing an increase of 87.0% over 2011. This increase in finance costs was mainly attributable to (i) increase of net interest expenses of RMB2.0 billion due to increase of our interest-bearing debts by RMB43.3 billion, offset by a decrease of 0.2 percentage points in our overall financing costs because of our expansion of low-cost U.S. dollars denominated financing and timely issuance of super short financing instruments and corporate bonds; (ii) decrease of foreign exchange gain of RMB1.0 billion due to slower appreciation of Renminbi; and (iii) increase of RMB1.3 billion in the loss arising from the change in fair value of our issued H shares and debts convertible to A shares at period end.

*Earnings before income tax*

In 2012, our earnings before income tax were RMB90.6 billion, representing a decrease of 13.3% over 2011.

*Tax expense*

In 2012, we recognized income tax expense of RMB23.8 billion, representing a decrease of RMB2.3 billion over 2011.

*Net income attributable to non-controlling interests*

In 2012, our net income attributable to non-controlling interests was RMB2.9 billion, representing a decrease of RMB2.3 billion over 2011.

*Net income attributable to equity shareholders of the Company*

In 2012, our net income attributable to our equity shareholders was RMB63.9 billion, representing a decrease of 12.8% over 2011.

*Year Ended December 31, 2011 Compared with Year Ended December 31, 2010*

In 2011, our total operating revenues were RMB2,505.7 billion, representing an increase of 31.0% over 2010. Our operating income was RMB105.5 billion, representing an increase of 0.5% over 2010. The increase in our operating revenues was primarily due to increased demand for refined and petrochemical products as a result of sustained economic growth in China, continued expansion of our operations, and rise of the prices for crude oil, refined petroleum products and petrochemical products. We have also expanded our market share and realized good operating result by leveraging our strength in business scale and integration, making efforts to develop markets, enhancing marketing and services quality and increasing our market share.

Table of Contents

The following table sets forth major revenue and expense items in the consolidated statement of income for the years ended December 31, 2010 and 2011.

	Year Ended December 31,		Rate of Change from 2010 to 2011 %
	2011	2010	
	(RMB in millions)		
Operating revenues	2,505,683	1,913,182	31.0
Sales of goods	2,463,767	1,876,758	31.3
Other operating revenues	41,916	36,424	15.1
Operating expenses	(2,400,153)	(1,808,208)	32.7
Purchased crude oil, products and operating supplies and expenses	(2,027,646)	(1,477,126)	37.3
Selling, general and administrative expenses	(58,960)	(51,048)	15.5
Depreciation, depletion and amortization	(63,816)	(59,253)	7.7
Exploration expenses, including dry holes	(13,341)	(10,955)	21.8
Personnel expenses	(45,428)	(39,030)	16.4
Taxes other than income tax	(189,949)	(157,189)	20.8
Other operating expenses, net	(1,013)	(13,607)	(92.6)
Operating income	105,530	104,974	0.5
Net finance costs	(5,285)	(6,974)	(24.2)
Investment income and income from associates and jointly controlled entities	4,320	5,663	(23.7)
Earnings before income tax	104,565	103,663	0.9
Tax expense	(26,120)	(25,681)	1.7
Net income	78,445	77,982	0.6
Attributable to:			
Equity shareholders of the Company	73,225	71,782	2.0
Non-controlling interests	5,220	6,200	(15.8)

*Operating revenues*

In 2011, our operating revenues were RMB2,505.7 billion, representing an increase of 31.0% over 2010. This was mainly due to our proactive efforts to develop market and expand sales volume of products, as well as rise of the prices for crude oil, natural gas, refined oil and petrochemical products.

The following table sets forth our external sales volume, average realized prices and the respective rates of change from 2010 to 2011 for our major products:

	Average Realized Price		Rate of Change from 2010 to 2011 (%)	Sales Volume		Rate of Change from 2010 to 2011 (%)
	2011	2010		2011	2010	
	(RMB)					
Crude Oil	4,621(1)	3,349(1)	38.0	5,581(2)	5,554(2)	0.5
Natural Gas	1,274(3)	1,155(3)	10.3	12,310(4)	9,951(4)	23.7

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Gasoline	8,403(1)	7,297(1)	15.2	47,494(2)	43,467(2)	9.3
Diesel	7,075(1)	5,992(1)	18.1	97,897(2)	90,827(2)	7.8
Kerosene	6,193(1)	4,758(1)	30.2	16,570(2)	14,758(2)	12.3
Basic chemical feedstock	6,915(1)	5,598(1)	23.5	20,944(2)	17,821(2)	17.5
Synthetic Fiber Monomer and Polymer	9,880(1)	8,211(1)	20.3	6,585(2)	5,772(2)	14.1
Synthetic Resin	9,841(1)	9,243(1)	6.5	10,518(2)	9,871(2)	6.6
Synthetic Fiber	13,301(1)	11,644(1)	14.2	1,496(2)	1,512(2)	(1.1)
Synthetic Rubber	22,215(1)	16,436(1)	35.2	1,220(2)	1,222(2)	(0.2)
Chemical fertilizer	2,186(1)	1,641(1)	33.2	951(2)	1,299(2)	(26.8)

Table of Contents

- 
- (1) per tonne
  - (2) thousand tonnes
  - (3) per thousand cubic meters
  - (4) million cubic meters

***Sales of crude oil and natural gas***

Most of crude oil and a small portion of natural gas we produced internally were used for refining and chemical production and the remaining were sold to other customers. In 2011, the total revenue from crude oil, natural gas and other upstream products that were sold externally amounted to RMB47.5 billion, representing an increase of 35.7% over 2010. The change was mainly due to the increase in the sales volume and prices of crude oil and natural gas.

***Sales of refined petroleum products***

In 2011, 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 RMB1,525.1 billion, accounting for 60.9% of our operating revenues and representing an increase of 27.9% over 2010. The increase was mainly because we took advantage of the increase of prices for refined oil and other refined petroleum products to enlarge our sales volume of these products. The sales revenue of gasoline, diesel and kerosene was RMB1,194.4 billion, accounting for 78.3% of the total revenue of petroleum products and representing an increase of 28.2% over 2010. Sales revenue of other refined petroleum products was RMB330.7 billion, accounting for 21.7% of the total revenue of petroleum products and representing an increase of 26.6% over 2010.

***Sales of chemical products***

Our external sales revenue of chemical products was RMB368.7 billion, accounting for 14.7% of our operating revenues and representing an increase of 29.1% over 2010. This was mainly due to the rise of prices for chemical products and increase in the sales volume resulting from our proactive market developing efforts.

***Revenue from corporate and others segment***



In 2011, our corporate and others segment realized sales revenue of RMB522.5 billion, accounting for 20.9% of our operating revenue and representing an increase of 43.8% over 2010. This was mainly attributable to expanded sales, imports and exports of crude oil and refined petroleum products by our affiliated trading companies.

*Operating expenses*

In 2011, our operating expenses were RMB2,400.2 billion, representing an increase of 32.7% over 2010, among which:

**Purchased crude oil, products and operating supplies and expenses** were RMB2,027.6 billion, representing an increase of 37.3% over 2010, accounting for 84.5% of the total operating expenses, of which:

- crude oil purchase expenses were RMB839.0 billion, representing an increase of 38.4% over 2010. In 2011, the total throughput of crude oil that was purchased externally was 166.85 million tonnes (excluding the amount processed for third parties), representing an increase of 7.6% over 2010; the average unit processing cost for crude oil purchased externally was RMB5,029 per tonne, representing an increase of 28.7% over 2010; and
- other purchasing expenses were RMB1,188.6 billion, representing an increase of 36.4% over 2010. This was mainly due to the increase in the costs of refined oils, chemical feedstock and other products, as well as the rising costs of purchases by affiliated trading companies.

Table of Contents

**Selling, general and administrative expenses** totaled RMB59.0 billion, representing an increase of 15.5% over 2010. This was mainly attributable to the expansion of our sales which contributed to the increase in the sales expenses including selling and transportation expenses, as well as increase in operating lease charges.

**Depreciation, depletion and amortization** was RMB63.8 billion, representing an increase of 7.7% over 2010. This was mainly due to the depreciation resulting from our continuous capital expenditure on property, plant and equipment.

**Exploration expenses, including dry holes** were RMB13.3 billion, representing an increase of 21.8% over 2010, reflecting our enhanced exploration activities in Yuanba and Erdos regions, as well as our investment in unconventional oil and gas exploration.

**Personnel expenses** were RMB45.4 billion, representing an increase of RMB6.4 billion over 2010 and representing 1.9% of the total operating expenses, or an increase of 16.4% over 2010. This is largely because of the increase of wages and salaries of direct labor of production lines.

**Taxes other than income tax** were RMB189.9 billion, representing an increase of 20.8% compared with 2010. This was mainly due to the increase of special oil income levy by RMB17.8 billion over 2010 resulting from the increased crude oil price, and the increase of the consumption tax, urban construction tax and educational surcharge by RMB12.9 billion over 2010 resulting from the increased of sales volume.

**Other operating expenses, net** were RMB1.0 billion, representing a decrease of 92.6% over 2010, which was mainly due to the decrease of long-lived asset impairment losses.

*Operating income*

In 2011, our operating income was RMB105.5 billion, representing an increase of 0.5% over 2010.

*Net finance costs*

In 2011, our net finance costs were RMB5.3 billion, representing a decrease of 24.2% over 2010. This decrease in finance costs was mainly due to unrealized gain arising from the change in fair value of the embedded derivative component of our issued convertible bonds at period end; our continuing efforts in centralizing our capital management, optimizing the financing structure and increasing the scale of US dollars denominated financing, by which we realized foreign exchange gains of RMB600 million over 2010 and offset by our increase of net interests payment of RMB300 million over 2010 driven by our increased scale of indebtedness.

*Earnings before income tax*

In 2011, our earnings before income tax were RMB104.6 billion, representing an increase of 0.9% over 2010.

*Tax expense*

In 2011, we recognized income tax expense of RMB26.1 billion, representing an increase of 1.7% over 2010.

*Net income attributable to non-controlling interests*

In 2011, our net income attributable to non-controlling interests was RMB5.2 billion, representing a decrease of 15.8% over 2010. This was mainly due to the decreased profitability of these entities that we do not wholly own as affected by market conditions.

*Net income attributable to equity shareholders of the Company*

In 2011, our net income attributable to our equity shareholders was RMB73.2 billion, representing an increase of 2.0% over 2010.

Table of Contents**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	
	2010	2011	2012	2011	2012	2011	2012
<b>Exploration and production</b>							
External sales(1)	53	69	82	1.6	1.7	2.7	3.0
Inter-segment sales	134	173	175	4.0	3.7		
Total operating revenue	187	242	257	5.6	5.4		
<b>Refining</b>							
External sales(1)	166	196	200	4.5	4.2	7.8	7.2
Inter-segment sales	806	1,016	1,071	23.3	22.7		
Total operating revenue	972	1,212	1,271	27.8	26.9		
<b>Marketing and distribution</b>							
External sales(1)	1,038	1,342	1,462	30.8	31.0	53.6	52.5
Inter-segment sales	3	6	10	0.1	0.2		
Total operating revenue	1,041	1,348	1,472	30.9	31.2		
<b>Chemicals</b>							
External sales(1)	292	375	364	8.6	7.7	15.0	13.1
Inter-segment sales	36	45	48	1.0	1.0		
Total operating revenue	328	420	412	9.6	8.7		
<b>Corporate and others</b>							
External sales(1)	364	524	678	12.0	14.4	20.9	24.2
Inter-segment sales	433	611	635	14.1	13.4		
Total operating revenue	797	1,135	1,313	26.1	27.8		
<b>Total operating revenue before inter-segment eliminations</b>							
	3,325	4,357	4,725	100.0	100.0		
Elimination of inter-segment sales	(1,412)	(1,851)	(1,939)				
Consolidated operating revenues	1,913	2,506	2,786			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 rate of changes from 2011 to 2012.

Table of Contents

	2010	Year Ended December 31, 2011 (RMB in billions)	2012	Rate of Change from 2011 to 2012 (%)
<b>Exploration and production</b>				
Total operating revenues	187	242	257	6.3
Total operating expenses	(140)	(170)	(187)	9.9
Total operating income	47	72	70	(2.2)
<b>Refining</b>				
Total operating revenues	972	1,212	1,271	4.9
Total operating expenses	(956)	(1,248)	(1,282)	2.8
Total operating income/(loss)	16	(36)	(11)	(68.0)
<b>Marketing and distribution</b>				
Total operating revenues	1,041	1,348	1,472	9.2
Total operating expenses	(1,010)	(1,303)	(1,429)	9.7
Total operating income	31	45	43	(4.6)
<b>Chemicals</b>				
Total operating revenues	328	420	412	(2.0)
Total operating expenses	(313)	(394)	(411)	4.3
Total operating income	15	26	1	(95.6)
<b>Corporate and others</b>				
Total operating revenues	797	1,134	1,313	15.8
Total operating expenses	(799)	(1,137)	(1,315)	15.7
Total operating loss	(2)	(3)	(2)	(7.5)
Elimination of inter-segment income (loss)	(1)	1	(1)	

***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, 2012 Compared with Year Ended December 31, 2011***

In 2012, the operating revenues of this segment were RMB257.2 billion, representing an increase of 6.3% over 2011. This is mainly attributable to the increased sales volume of crude oil and natural gas, of 1.07 million tonnes and 2.1 billion cubic meters, respectively.

The segment sold 44.06 million tonnes of crude oil and 15.1 billion cubic meters of natural gas in 2012, representing an increase of 2.5% and an increase of 16.3% over 2011, respectively. The average realized price of crude oil and natural gas were RMB4,491 per tonne and RMB1,292 per thousand cubic meters, respectively, representing a decrease of 0.8% and an increase of 0.6%, respectively, over 2011.

In 2012, the operating expenses of this segment were RMB187.1 billion, representing an increase of 9.9% over 2011. This was mainly due to:

- The expense of depreciation, depletion and amortization increased by RMB3.8 billion over 2011. This was mainly due to the increased depreciation and depletion resulting from the oil and gas assets invested;
- The exploration expenses increased by RMB2.2 billion over 2011, reflecting our enhanced exploration activities in Erdos, Sichuan Basin and Jungar regions, as well as our investment in unconventional oil and gas exploration.;
- The personnel expenses increased by RMB2.7 billion over 2011; and
- Other operating expenses increased by RMB7.7 billion over 2011 due to the increase of selling costs of raw materials along with the increase of their selling revenue.

Table of Contents

The lifting cost for oil and gas was RMB786 per tonne in 2012, representing an increase of 6.4% over 2011. This was primarily due to the increases in the price of raw materials, fuels and power and an increase of labor expense, and the increased expenses for improving oil fields injection-production system.

In 2012, the operating income of this segment was RMB70.1 billion, representing a decrease of 2.2% over 2011.

*Year Ended December 31, 2011 Compared with Year Ended December 31, 2010*

In 2011, the operating revenues of this segment were RMB241.8 billion, representing an increase of 29.2% over 2010. This is mainly attributable to the increase in the selling price of crude oil and natural gas, and the increase in the sales volume of natural gas.

The segment sold 43.0 million tonnes of crude oil and 12.99 billion cubic meters of natural gas in 2011, representing a decrease of 2.0% and an increase of 17.5% over 2010, respectively. The average realized price of crude oil and natural gas were RMB4,526 per tonne and RMB1,284 per thousand cubic meters respectively, representing an increase of 32.9% and an increase of 9.4%, respectively, over 2010.

In 2011, the operating expenses of this segment were RMB170.2 billion, representing an increase of 21.6% over 2010. This was mainly due to:

- The special oil income levy increased by RMB17.8 billion over 2010, which resulted from the increase in oil price;
  
- The expense of depreciation, depletion and amortization increased by RMB3.9 billion over 2010. This was mainly due to the increased depreciation and depletion resulting from the oil and gas assets invested;
  
- The personnel expenses increased by RMB2.9 billion over 2010;
  
- The exploration expenses increased by RMB2.4 billion over 2010, reflecting our enhanced exploration activities in Yuanba and Erdos regions and our enhanced exploration of unconventional oil and gas resources; and
  
- Other operating expenses increased by RMB2.7 billion over 2010 due to the increase of selling costs of raw materials along with the increase of their selling revenue.



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The lifting cost for oil and gas was RMB738 per tonne in 2011, representing an increase of 9.5% over 2010. This was primarily due to the increases in the price of raw materials, fuels and power purchased externally and an increase of labor expense, and the increased expenses for improving oil fields injection-production system.

In 2011, the segment took advantage of high oil prices and realized operating income of RMB71.6 billion, representing an increase of 51.9% over 2010.

### *Refining Segment*

Business activities of the refining segment consist of purchasing crude oil from third parties or 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, 2012 Compared with Year Ended December 31, 2011*

In 2012, the operating revenues of this segment were RMB1,270.9 billion, representing an increase of 4.9% over 2011. This was mainly attributable to the increase in prices and sales volumes of the refined petroleum products.

The table below sets forth sales volume and average realized prices by product for 2012 and 2011, as well as the percentage changes in sales volume and average realized prices for the periods shown.

Table of Contents

	2012	2011	2012	2012	2011	2011 to 2012
Gasoline	38,473	35,173	9.4	7,957	7,629	4.3
Diesel	72,883	74,338	(2.0)	6,682	6,421	4.1
Kerosene	10,262	9,538	7.6	6,379	6,038	5.6
Chemical feedstock	34,431	35,783	(3.8)	5,983	5,774	3.6
Other refined petroleum products	46,932	45,187	3.9	4,267	4,325	(1.3)

In 2012, our sales revenues of gasoline were RMB306.1 billion, representing an increase of 14.1% over 2011; the sales revenues of diesel were RMB487.0 billion, representing an increase of 2.0% over 2011; the sales revenues of kerosene were RMB65.5 billion, representing an increase of 13.7% over 2011; the sales revenues of chemical feedstock were RMB206.0 billion, representing a decrease of 0.3% over 2011; and the sales revenues of other refined petroleum products were RMB200.3 billion, representing an increase of 2.5% over 2011.

The segment's operating expenses were RMB1,282.4 billion in 2012, representing an increase of 2.8% over 2011, which is mainly attributable to the increase of refining feedstock sales price and processing volume.

In 2012, the average unit cost of refining feedstock processed was RMB5,146 per tonne, representing an increase of 3.4% over 2011. Refining throughput were 212.10 million tonnes (excluding the volume processed for third parties), representing an increase of 0.9% over 2011. In 2012, the total costs of refining feedstock processed were RMB1,091.4 billion, representing an increase of 4.3% over 2011.

The refining margin was RMB156.5 per tonne in 2012, representing an increase of RMB121.8 per tonne over 2011. This was primarily because China timely adjusted the prices of refined oil based on the trends of the prices of crude oil and gradually improved the pricing mechanism for refined oil. In addition, this segment actively adjusted the structure of product offerings and expanded sales volume of high value added products.

In 2012, 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 RMB157.5 per tonne, representing an increase of RMB8 per tonne over 2011. This was mainly due to the increase in external purchase prices of supporting materials, power and fuels.

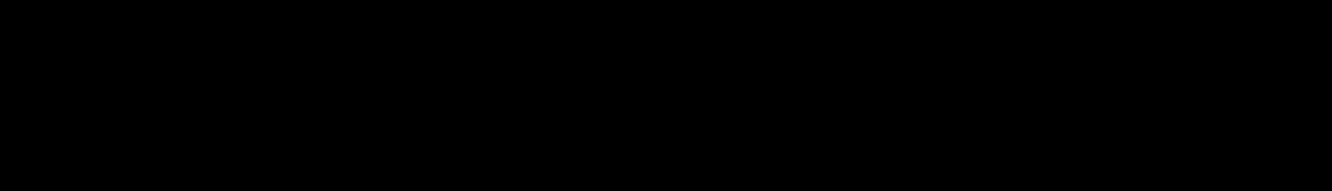
The segment's operating loss was RMB11.4 billion in 2012, representing a decrease of RMB24.3 billion from 2011.

***Year Ended December 31, 2011 Compared with Year Ended December 31, 2010***

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In 2011, the operating revenues of this segment were RMB1,212.1 billion, representing an increase of 24.8% over 2010. This was mainly attributable to the increase in prices and sales volumes of the refined petroleum products.

The table below sets forth sales volume and average realized prices by product for 2011 and 2010, as well as the percentage changes in sales volume and average realized prices for the periods shown.



Gasoline	35,173	32,699	7.6	7,629	6,581	15.9
Diesel	74,338	69,535	6.9	6,421	5,554	15.6
Kerosene	9,358	8,684	7.8	6,038	4,595	31.4
Chemical feedstock	35,783	34,260	4.4	5,774	4,574	26.2
Other refined petroleum products	45,187	41,734	8.3	4,325	4,014	7.7

Table of Contents

In 2011, our sales revenues of gasoline were RMB268.4 billion, representing an increase of 24.7% over 2010; the sales revenues of diesel were RMB477.4 billion, representing an increase of 23.6% over 2010; the sales revenues of kerosene were RMB57.6 billion, representing an increase of 44.3% over 2010; the sales revenues of chemical feedstock were RMB206.6 billion, representing an increase of 31.8% over 2010; and the sales revenues of other refined petroleum products were RMB195.4 billion, representing an increase of 16.7% over 2010.

The segment's operating expenses were RMB1,247.9 billion in 2011, representing an increase of 30.6% over 2010, which is mainly attributable to the increase of refining feedstock sales price and processing volume.

In 2011, the average unit cost of refining feedstock processed was RMB4,979 per tonne, representing an increase of 28.4% over 2010. Refining throughput were 210.26 million tonnes (excluding the volume processed for third parties), representing an increase of 5.9% over 2010. In 2011, the total costs of refining feedstock were RMB1,046.8 billion, representing an increase of 36.0% over 2010.

The refining margin was RMB34.7 per tonne in 2011, representing a decrease of 88.1% over 2010. This was primarily because of significant increase of price in international crude oil market and controlled pricing of refined oil in China.

In 2011, 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 RMB149.5 per tonne, representing an increase of RMB9.7 per tonne, or 6.9%, over 2010. This was mainly due to the increase in purchase prices of supporting materials, power and fuels, and higher processing cost associated with the upgrade of refined petroleum products and the worsening quality of the crude oil for processing.

The segment's operating loss was RMB35.8 billion in 2011, representing a decrease of RMB51.7 billion compared with the operating income of RMB15.9 billion in 2010.

***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 direct sales 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, 2012 Compared with Year Ended December 31, 2011***

In 2012, the operating revenues of this segment were RMB1,471.9 billion, representing an increase of 9.2% compared with 2011.

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In 2012, the sales revenues of gasoline, diesel and kerosene were RMB461.2 billion, RMB727.0 billion and RMB120.2 billion, representing an increase of 15.5%, 4.4% and 17.7% over 2011, respectively.

The following table sets forth the sales volumes, average realized prices and the respective rates of changes of the four major product categories in 2012 and 2011 in different forms of sales channels.

	Sales Volume		Rate of Change from 2011 to 2012 (%)	Average Realized Prices		Rate of Change from 2011 to 2012 (%)
	2012 (thousand tonnes)	2011		2012 (RMB per tonne)	2011	
Gasoline	53,535	47,540	12.6	8,614	8,403	2.5
Retail sale	45,477	40,380	12.6	8,744	8,509	2.8
Direct sale	3,577	2,514	42.3	7,505	7,636	(1.7)
Wholesale	4,481	4,647	(3.6)	8,182	7,889	3.7
Diesel	100,790	98,508	2.3	7,213	7,075	2.0
Retail sale	57,382	55,521	3.4	7,454	7,247	2.9
Direct sale	32,355	31,998	1.1	6,882	6,853	0.4
Wholesale	11,053	10,988	0.6	6,932	6,824	1.6
Kerosene	18,741	16,493	13.6	6,416	6,193	3.6
Fuel oil	29,690	26,560	11.8	4,622	4,486	3.0

Table of Contents

The operating expenses of the segment in 2012 was RMB1,429.2 billion, representing an increase of RMB126.3 billion, or 9.7%, over 2011, which was mainly attributable to the increase of purchase costs of RMB120.1 billion, or 9.6%, over 2011 as a result of increase of volume and prices of oil purchased.

In 2012, 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 RMB186.3 per tonne, representing an increase of 0.8%.

The operating income of the segment in 2012 was RMB42.7 billion, representing a decrease of 4.6% over 2011,

***Year Ended December 31, 2011 Compared with Year Ended December 31, 2010***

In 2011, the operating revenues of this segment were RMB1,347.6 billion, representing an increase of 29.5% compared with 2010.

In 2011, the sales revenues of gasoline, diesel and kerosene were RMB399.5 billion, RMB696.6 billion and RMB102.1 billion, representing an increase of 25.8%, 27.4% and 45.3% from 2010, respectively.

The following table sets forth the sales volumes, average realized prices and the respective rates of changes of the four major product categories in 2010 and 2011 in different forms of sales channels.

	Sales Volume		Rate of Change from 2010 to 2011 (%)	Average Realized Prices		Rate of Change from 2010 to 2011 (%)
	2011 (thousand tonnes)	2010		2011 (RMB per tonne)	2010	
Gasoline	47,540	43,511	9.3	8,403	7,297	15.2
Retail sale	40,380	35,050	15.2	8,509	7,469	13.9
Direct sale	2,514	2,489	1.0	7,636	6,424	18.9
Wholesale	4,647	5,972	(22.2)	7,889	6,649	18.6
Diesel	98,508	91,257	7.9	7,075	5,992	18.1
Retail sale	55,521	46,357	19.8	7,247	6,243	16.1
Direct sale	31,998	29,134	9.8	6,853	5,819	17.8
Wholesale	10,988	15,766	(30.3)	6,824	5,560	22.7
Kerosene	16,493	14,770	11.7	6,193	4,758	30.2
Fuel oil	26,560	23,424	13.4	4,486	3,527	27.2

The operating expenses of the segment in 2011 was RMB1,302.9 billion, representing an increase of 29.0% over 2010, which was mainly attributable to the significant increase of sales volume and purchase cost of refined oil.

In 2011, 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 RMB184.8 per tonne, representing an increase of 8.7% over 2010. This was primarily attributable to the increase of transportation, storage and lease expenses as a result of the growth of operation and sales volume.

The operating income of the segment in 2011 was RMB44.7 billion, representing an increase of 45.3% over 2010, which was primarily attributable to our proactive efforts to improve sales structure by expanding the proportion of retail sales.

### *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, 2012 Compared with Year Ended December 31, 2011*

The operating revenues of the chemicals segment in 2012 were RMB412.0 billion, representing a decrease of 2.0% over 2011, which was mainly attributable to the significant decrease in sales prices of chemical products as a result of the depressed chemical market.

Table of Contents

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 2012 were approximately RMB393.9 billion, representing a decrease of 2.1% compared with 2011, accounting for 95.6% 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 2011 to 2012.

	Sales Volume		Rate of Change	Average Realized Prices		Rate of Change
	2012	2011	from 2011 to 2012	2012	2011	from 2011 to 2012
	(thousand tonnes)		(%)	(RMB per tonne)		(%)
Basic organic chemicals	29,873	27,335	9.3	6,667	6,746	(1.2)
Synthetic fiber monomers and polymers	6,972	6,631	5.1	8,231	9,866	(16.6)
Synthetic resins	10,507	10,524	(0.2)	9,182	9,841	(6.7)
Synthetic fiber	1,458	1,496	(2.5)	10,790	13,301	(18.9)
Synthetic rubber	1,289	1,220	5.7	17,553	22,215	(21.0)
Chemical fertilizer	1,232	960	28.3	2,044	2,187	(6.5)

The operating expenses of the segment in 2012 were RMB410.8 billion, representing an increase of 4.3% over 2011. This was mainly attributable to the increase in trade volume and the change in inventory. Thus raw material costs increased by RMB 17.3 billion or 4.9% over 2011.

In 2012, the segment registered operating income of RMB1.2 billion, representing a decrease of 95.6% over 2011, which was mainly because of significant drop of product prices compared with 2011.

***Year Ended December 31, 2011 Compared with Year Ended December 31, 2010***

The operating revenues of the chemicals segment in 2011 were RMB420.5 billion, representing an increase of 28.3% over 2010, which was mainly attributable to the increase in sales prices of chemical products as a result of the implementation of market-oriented policy, maximization of the use of machine and adjustment of products mix in this segment.

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 2011 were approximately RMB402.5 billion, representing an increase of 30.7% compared with 2010, accounting for 95.7% of the operating revenues of this segment.



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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 2010 to 2011.

	Sales Volume		Rate of Change from 2010 to 2011 (%)	Average Realized Prices		Rate of Change from 2010 to 2011 (%)
	2011 (thousand tonnes)	2010		2011 (RMB per tonne)	2010	
Basic organic chemicals	27,335	23,339	17.1	6,746	5,547	21.6
Synthetic fiber monomers and polymers	6,631	5,820	13.9	9,866	8,194	20.4
Synthetic resins	10,524	9,880	6.5	9,841	9,243	6.5
Synthetic fiber	1,496	1,512	(1.0)	13,301	11,644	14.2
Synthetic rubber	1,220	1,222	(0.2)	22,215	16,435	35.2
Chemical fertilizer	960	1,329	(27.7)	2,187	1,641	33.3

The operating expenses of the segment in 2011 were RMB393.8 billion, representing an increase of 26.0% over 2010, which was mainly attributable to the increases of raw materials consumed as a result of the increased unit cost and increased production volume.

Table of Contents

In 2011 the segment streamlined products mix, proactively expanded the market, improved customer services and expanded operations, and hence achieved operating income of RMB26.7 billion, representing an increase of 78.1% over 2010.

*Corporate and Others Segment*

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, 2012 Compared with Year Ended December 31, 2011*

In 2012, the operating revenue generated from corporate and others was RMB1,313.0 billion, representing an increase of 15.8% over 2011, which was mainly attributable to the increase of trade volume of crude oil and refined oil. This includes operating revenue of RMB1,309.1 billion from trading companies.

In 2012, the operating expenses of this segment was RMB1,315.4 billion, representing an increase of 15.7% over 2011. This includes the operating expense of RMB1,307.7 billion from trading companies.

In 2012, the operating loss of this segment was RMB2.4 billion. This includes operating income of RMB1.4 billion from trading companies.

*Year Ended December 31, 2011 Compared with Year Ended December 31, 2010*

In 2011, the operating revenue generated from corporate and others was RMB1,134.2 billion, representing an increase of 42.3% over 2010, which was mainly attributable to the expansion of operation scale of our trading companies and a rapid increase of international trade volume. This includes operating revenue from trading companies which amounted to RMB1,131.3 billion, representing an increase of 45.3% over 2010.

In 2011, the operating expenses of this segment was RMB1,136.8 billion, representing an increase of 42.3% over 2010, which was mainly attributable to an increase of cost along with the expansion of operation scale of our trading companies. This includes the operating expense from trading companies which amounted to RMB1,130.6 billion, representing an increase of 45.4% over 2010.

In 2011, the operating loss of this segment was RMB2.6 billion, representing an increase of RMB300 million over 2010. This includes operating income from trading companies which amounted to RMB700 million and the operating loss of RMB3.3 billion from research affiliates and headquarters.

**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 requirements, 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, 2011 and 2012.

Statement of cash flow data	Year Ended December 31,	
	2012	2011
	(RMB in millions)	
Net cash generated from operating activities	142,380	150,622
Net cash used in investing activities	(162,197)	(140,449)
Net cash generated from/ (used in) financing activities	5,628	(2,516)
Net (decrease)/increase in cash and cash equivalents	(14,189)	7,657

The net cash generated from our operating activities in 2012 was RMB142.4 billion, representing a decrease of RMB8.2 billion over 2011, which was mainly due to the decrease of pre-tax profit for the same period.

Table of Contents

The net cash used in our investing activities was RMB162.2 billion, representing an increase of RMB21.7 billion over 2011, which reflected the growth of our investments as planned for our rapid development.

The net cash inflow from our financing activities was RMB5.6 billion, representing an increase of RMB8.1 billion comparing to a net cash outflow of RMB2.5 billion in 2011. This reflected: (i) an increase of cash inflow of RMB16.2 billion from RMB41.8 billion of corporate bonds issued and bank loans borrowed in 2012; and (ii) an increase in cash outflow of RMB8.1 billion as a result of external dividend and interest payments of RMB36.2 billion in 2012.

In respect of our cash flows, we maintained ongoing and steady growth of operating cash flow throughout 2012 by seizing the favorable opportunities of stable international economic conditions and sound development of domestic economy to continually and consistently expand our operations. We also further improved our centralized funds management, strictly controlled the size of amount of monetary funds and interest-bearing debts, reduced the level of idle funds and accelerated capital turnover, which contributed to the increase of our efficiency as a whole.

In respect of our debts and borrowings, we increased our debts to RMB278.1 billion at the end of 2012 from RMB234.8 billion from the beginning of 2012 as a result of slight decrease of the operating cash flows and continued expansion of our business operations. Our short-term debts increased by RMB35.6 billion from the beginning of 2012, which was mainly attributable to the short-term U.S. dollar loan borrowed in 2012, and the proportion of short term debts in our total debts increased to 42% from 34% at the beginning of 2012. Our long-term debts increased by RMB7.7 billion from the beginning of 2012, reflecting the issuance of corporate bonds and the decrease of the transferred amount due within one year, and the proportion of long term debts in our total debts decreased to 58% from 66% at the beginning of 2012. We primarily borrowed short-term revolving loans according to our business plan and operation needs, and entered into overdrawing agreements 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, 2012.

	As of December 31, 2012				
	Total	less than 1 year	1-3 years	4-5 years	After 5 years
<b>Contractual obligations(1)</b>					
Short-term debt	117,440	117,440			
Long-term debt	180,182	3,358	61,761	60,267	54,796
<b>Total contractual obligations</b>	<b>297,622</b>	<b>120,798</b>	<b>61,761</b>	<b>60,267</b>	<b>54,796</b>
<b>Other commercial commitments</b>					
Operating lease commitments	401,248	15,844	29,827	29,343	326,234
Capital commitments	219,548	202,745	16,803		

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Exploration and production licenses	1,266	325	191	51	699
Guarantees(2)	6,145	6,145			
<b>Total commercial commitments</b>	<b>628,207</b>	<b>225,059</b>	<b>46,821</b>	<b>29,394</b>	<b>326,933</b>

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(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, 2012, 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, 2012, the maximum amount of potential future payments under the guarantees was RMB6.1 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 2010, 2011 and 2012 and the capital expenditure in each segment as a percentage of our total capital expenditure for such year.

Table of Contents

	2010		2011		2012		Total	
	RMB	Percent	RMB	Percent	RMB	Percent	RMB	Percent
	(in billions, except percentage data)							
Exploration and production	53.80	43.05%	62.05	45.07%	79.07	46.80%	194.92	45.16%
Refining	20.02	16.02%	25.77	18.72%	32.16	19.03%	77.94	18.06%
Marketing and distribution	30.83	24.67%	30.39	22.07%	31.72	18.77%	92.94	21.53%
Chemicals	18.42	14.74%	16.98	12.33%	23.62	13.98%	59.02	13.67%
Corporate and others	1.89	1.52%	2.49	1.81%	2.40	1.42%	6.78	1.57%
Total	124.96	100.00%	137.68	100.00%	168.97	100.00%	431.60	100.00%

In 2012, our total capital expenditure amounted to RMB168.968 billion, among which:

- Exploration and production.* RMB79.071 billion was used in exploration and production segment to support the exploration and production capacity of Shengli Tanhai oil field, Tahe oilfield, Erdos oil gas field, natural gas field in Northeastern Sichuan and LNG project in Shandong. The production capacity of newly-built crude oil was 6.1830 million tonnes per annum, and the production capacity of newly-built natural gas was 4.663 billion cubic meters per annum.
- Refining.* RMB32.161 billion was used in our refining segment to support renovation and expansion of our refining projects and clean energy production projects, including used in the gasoline quality upgrade projects by Sinopec Shanghai Petrochemical Company Limited and Jingling as well as our successful on-going renovation of refining in Anqing and Maoming.
- Marketing and distribution.* RMB31.723 billion was used in this segment to construct and acquire petroleum and gas stations of high quality in highways, major cities and newly planned regions, accelerate building oil products storage facilities and delivery systems, improve sales network for refined oil products, and continue construction of ancillary projects for non-oil businesses and gas cards value added services.
- Chemicals.* RMB23.616 billion was spent in this segment focusing on preparations for the operation of Wuhan ethylene project, Yizheng 1,4 butanediol projects, Anqing acrylonitrile projects, and Luoyang polypropylene projects; on-going construction of Hainan aromatics, Yanshan butyl rubber, and Guangzhou propylene projects.
- Corporate and others.* RMB2.397 billion was used for scientific research equipment and construction of information systems.

In 2013, 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 2013 amounts to RMB181.752 billion, including:

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- *Exploration and production.* The planned capital expenditure in 2013 for this segment is approximately RMB89.085 billion. We expect to focus on the exploration and production of oil and gas fields in Jiyang, Tarim, Jungar, Erdos and Sichuan Basin, in order to increase our proved reserves. We also expect to support our construction of production capacity for our key crude oil projects in Shengli, Tahe, southern Hubei and key natural gas projects in Yuanba and northern Hubei.
- *Refining.* The planned capital expenditure in 2013 for this segment is RMB33.809 billion. We expect to focus on gasoline quality upgrade projects, on-going renovation of Anqing and Maoming refining projects, and commencement of construction of Jiujiang refining renovation projects and Guangdong Refinery integration project.
- *Marketing and distribution.* The planned capital expenditure in 2013 for this segment is RMB27.010 billion. We expect to focus on the construction and renovation of petrol and gas stations, further construction of refined oil pipelines, optimization of layout of oil houses, development of ancillary projects for non-oil businesses and improvement of our storage and transportation facilities .
- *Chemicals.* The planned capital expenditure in 2013 for this segment is RMB25.907 billion. We expect to focus on construction of Wuhan ethylene and Hainan aromatics projects for them to commence operation. We also expect to further the on-going construction of Fujian ethylene renovation and Maoming polypropylene projects.
- *Corporate and others.* The planned capital expenditure in 2013 for this segment is RMB5.941 billion. We expect to focus on scientific research equipment and construction of information systems.

Table of Contents**Research and Development**

Our expenditures for the research and development were RMB4.84 billion in 2010, RMB4.86 billion in 2011 and RMB5.84 billion in 2012.

**Consumer Price Index**

According to the data provided by the National Bureau of Statistics, the consumer price index in the PRC increased by 2.6% in 2012, compared with an increase of 5.4% in 2011 and an increase of 3.3% in 2010. According to China's official analysis, the inflation in the PRC during 2012 was due to the increase in prices of food, raw materials, fuels and power. Inflation has not had a significant impact on our results of operations in 2012.

**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.

<b>Name</b>	<b>Age</b>	<b>Positions with Sinopec Corp.</b>
Fu Chengyu	61	Chairman
Wang Tianpu	50	Vice Chairman, President
Zhang Yaocang	59	Vice Chairman
Zhang Jianhua	48	Director, Senior Vice President
Wang Zhigang	55	Director, Senior Vice President
Cai Xiyou	51	Director, Senior Vice President
Cao Yaofeng	59	Director
Li Chunguang	57	Director
Dai Houliang	49	Director, Senior Vice President
Liu Yun	56	Director
Chen Xiaojin	68	Independent Non-executive Director
Ma Weihua	64	Independent Non-executive Director
Jiang Xiaoming	59	Independent Non-executive Director
Andrew Y. Yan	55	Independent Non-executive Director
Bao Guoming	61	Independent Non-executive Director



*Fu Chengyu*, aged 61, Chairman of Board of Directors of Sinopec Corp., President and Secretary of Communist Party of China (CPC) Leading Group of Sinopec Group Company. Mr. Fu is a professor level senior engineer and obtained a master's degree. In 1983, he successively served as Chairman of the Joint Management Committee of the joint venture projects established between China National Offshore Oil Corporation (CNOOC) and foreign oil giants such as Amoco, Chevron, Texaco, Phillips, Shell and Agip, etc; from 1994 to 1995, he served as Deputy General Manager of China Offshore Oil Nanhai East Corporation; in December 1995, he served as vice president of USA Phillips International Petroleum Company (Asia), and concurrently as General Manager of the Xijiang Development Project; in April 1999, he was appointed as General Manager of China National Offshore Oil Nanhai East Corporation; in September 1999, he was appointed as Executive Director, Executive Vice President and Chief Operating Officer of China National Offshore Oil Co., Ltd.; in October 2000, he was appointed as Deputy General Manager of CNOOC; in December 2000, he concurrently served as President of China National Offshore Oil Co., Ltd; in August 2002, he served as Chairman and CEO of China Oilfield Services Co., Ltd., a subsidiary of CNOOC; in October 2003, he served as General Manager of CNOOC, and concurrently as Chairman and CEO of China National Offshore Oil Co., Ltd.; in September, 2010, Mr. Fu resigned the post of CEO of China National Offshore Oil Co., Ltd. and continued to serve as Chairman; in April 2011, he served as Chairman and Secretary of CPC Leading Group of Sinopec Group Company; in May, 2011, he was appointed as Chairman of Board of Directors of Sinopec Corp.

Table of Contents

*Wang Tianpu*, aged 50, Vice Chairman of the Board of Directors of and President of Sinopec Corp. Mr. Wang graduated from Qingdao Chemical Institute in July 1985 majoring in basic organic chemistry. He obtained his MBA degree in Dalian University of Science & Technology in July 1996 and Ph.D. degree in Zhejiang University in August 2003 majoring in chemical engineering. He is a professor level senior engineer. In March 1999, he was appointed as Vice President of Qilu Petrochemical Company of Sinopec Group Company; in February 2000, he was appointed as Vice President of Sinopec Qilu Company; in September 2000, he was appointed as President of Sinopec Qilu Company; in August 2001, he was appointed as Vice President of Sinopec Corp.; in April 2003, he was appointed as Senior Vice President of Sinopec Corp.; in March 2005, he was appointed as President of Sinopec Corp.; in May 2006, he was elected as Board Director and appointed as President of Sinopec Corp.; in May 2009, he was elected as Vice Chairman of Board of Directors and President of Sinopec Corp. in August 2011, he was elected as Board Director and President of Sinopec Group Company.

*Zhang Yaocang*, aged 59, Vice Chairman of the Board of Directors of Sinopec Corp. and Vice President of Sinopec Group Company. Mr. Zhang is a professor level senior engineer and obtained a graduate degree from Graduate School. In November 1990, he was appointed as Deputy Director General of Bureau of Petroleum Geology and Marine Geology, Ministry of Geology and Mineral Resources (MGMR); in February 1994, he was appointed as Secretary of CPC Committee and Deputy Director General of Bureau of Petroleum Geology and Marine Geology, Ministry of Geology and Mineral Resources (MGMR); in June 1997, he was appointed as Deputy Secretary of CPC Leading Group and Executive Vice President of Sinopec Star Petroleum Co. Ltd; in April 2000, he was appointed as Assistant to President of Sinopec Group Company and concurrently as President of Sinopec Star Petroleum Co., Ltd.; in August 2000, he was appointed concurrently as Secretary of CPC Committee of Sinopec Star Petroleum Co. Ltd; in July 2001, he was appointed as Vice President of Sinopec Group Company; in December 2003, he was appointed concurrently as Chairman of Sinopec International Petroleum Service Corporation; in January 2007, he was appointed concurrently as Chairman of Sinopec International Petroleum Exploration and Production Corporation; in May 2009, he was elected as Vice Chairman of the Board of Directors of Sinopec Corp.

*Zhang Jianhua*, aged 48, Director of the Board of Directors and Senior Vice President of Sinopec Corp. Mr. Zhang graduated from East China Chemical Institute in July 1986 majoring in petroleum refining, and obtained a master's degree from East China University of Science and Technology in December 2000 majoring in chemical engineering. He obtained a Ph.D. degree from East China University of Science and Technology in 2011 majoring in chemical engineering. He is a professor level senior engineer. In April 1999, he was appointed as Vice President of Shanghai Gaoqiao Petrochemical Company of Sinopec Group Company; 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.; and in May 2006, he was elected as Board Director and appointed as Senior Vice President of Sinopec Corp.; in June 2007, he was appointed concurrently as Chairman of Sinopec (Hong Kong) Co., Ltd.

*Wang Zhigang*, aged 55, Director of the Board of Directors and Senior Vice President of Sinopec Corp. Mr. Wang graduated from East China Petroleum Institute in January 1982, majoring in oil production, and then obtained a master's degree from University of Petroleum in June 2000, majoring in oil and gas development engineering. He obtained a Ph.D. degree from Geology and Geo-physics Research Institute of the China Academy of Sciences in September 2003 majoring in geology. He is a professor level senior engineer. 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 as Director General of Oilfield Exploration and Development Department of Sinopec Corp.; in March 2005, he was appointed as Senior Vice President of Sinopec Corp.; in May 2006, he was elected as Board Director and 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.

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*Cai Xiyou*, aged 51, Director of the Board of Directors and Senior Vice President of Sinopec Corp. Mr. Cai graduated from Fushun Petroleum Institute in August 1982 majoring in petroleum refining automation, and obtained a MBA degree from China Industry and Science Dalian Training Center in October 1990. He is a professor level senior economist. In June 1995, he was appointed as Vice President of Jingzhou Petrochemical Corporation of the former Sinopec Group Company; in May 1996, he was appointed as Vice President of Dalian West Pacific Petrochemical Corporation; in December 1998, he was appointed as Vice President of Sinopec Sales Co., Ltd.; in June 2001, he was appointed as Executive Vice President of Sinopec Sales Co., Ltd.; in December 2001, he served as Board Director and President of China International United Petroleum & Chemicals Co., Ltd. (UNIPEC); in April 2003, he was appointed as Vice President of Sinopec Corp.; in November 2005, he was appointed as Senior Vice President of Sinopec Corp.; in May 2009, he was elected as Board Director and appointed as Senior Vice President of Sinopec Corp.; in June 2012, he was appointed concurrently as Chairman of Sinopec Refining & Chemical Engineering (Group) Co., Ltd.

Table of Contents

*Cao Yaofeng*, aged 59, Director of the Board of Directors of Sinopec Corp. and Vice President of Sinopec Group Company. Mr. Cao is a professor level senior engineer and obtained a master degree. In April 1997, he was appointed as Deputy Director General of Shengli Petroleum Administration Bureau; in May 2000, he served as concurrently as Vice Chairman of Board of Directors of Sinopec Shengli Oilfield Co., Ltd.; in December 2001, he served as Board Director and President of Sinopec Shengli Oilfield Co., Ltd.; in December 2002, he served as Director General of Shengli Petroleum Administration Bureau of Sinopec Group Company and Chairman of Board of Directors of Sinopec Shengli Oilfield Company Limited; from April 2003 to May 2006, he served as Employee Representative Board Director of Sinopec Corp.; in October 2004, he was appointed as Assistant to President of Sinopec Group Company; in November 2005, he was appointed as Vice President of Sinopec Group Company; in May 2009, he was elected as Board Director of Sinopec Corp.; in June 2012, he was appointed concurrently as Chairman of Sinopec Oilfield Service Corporation.

*Li Chunguang*, aged 57, Director of the Board of Directors of Sinopec Corp. and Vice President of Sinopec Group Company. Mr. Li is a professor level senior engineer and obtained a university diploma. In August 1991, he was appointed as Deputy General Manager of Sinopec Sales Company North China Branch; in October 1995, he was appointed as Deputy General Manager of Sinopec Sales Company; in June 2001, he was appointed as General Manager 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 General Manager 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 Sinopec Group Company; in May 2009, he was elected as Board Director of Sinopec Corp.

*Dai Houliang*, aged 49, Director of the Board of Directors of Sinopec Corp. and Senior Vice President of Sinopec Corp. He is a professor level senior engineer with a PhD 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 and President of Yangzi Petrochemical Co., Ltd. and concurrently as Chairman 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; and in May 2009, he was elected as Board Director and appointed as Senior Vice President of Sinopec Corp.; in February 2012, he was appointed concurrently as Chairman of Sinopec Xinjiang Energy & Chemical Co., Ltd.; in August 2012, he was appointed concurrently as Chairman of Sinopec Great Wall Energy & Chemical Co., Ltd.

*Liu Yun*, aged 56, Director of the Board of Directors of Sinopec Corp. and Chief Accountant of Sinopec Group Company. Mr. Liu is a senior accountant with a master's degree. In December 1998, he was appointed as Deputy Director General of Financial Department of Sinopec Group Company; in February 2000, he was appointed as Deputy Director General of Financial Department of Sinopec Corp.; in January 2001, he was appointed as Director General of Financial 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 Sinopec Group Company; and in May 2009, he was elected as Board Director of Sinopec Corp.; and in May 2012, he was appointed concurrently as the Chairman of Sinopec Finance Co., Ltd.

*Chen Xiaojin*, aged 68, Independent Non-executive Director of Sinopec Corp. Mr. Chen is a senior engineer (research fellow level) with a university diploma. In December 1982, he was appointed as President of Tianjin Ship Industry Corporation; in January 1985, he was appointed successively as Vice President and President of CNOOC Platform Corporation; in February 1987, he was appointed successively as Director General of Operation Department, Director General of Foreign Affairs Bureau, Director General of International Affairs Department in China State Shipbuilding Corporation and Deputy President of China State Shipbuilding Trading Company; in December 1988, he was appointed as Vice President of China State Shipbuilding Corporation; in January 1989, he was appointed concurrently as President of China State Shipbuilding Trading Company; in October 1996, he was elected as concurrently as Chairman of Board of Directors of China State Shipbuilding Trading Company; from June 1999 to July 2008, he served as President and Secretary of CPC Leading Group of China State Shipbuilding

Corporation; in May 2009, he was elected as Independent Non-executive Director of Sinopec Corp.

Table of Contents

*Ma Weihua*, aged 64, Independent Non-executive Director of Sinopec Corp. Mr. Ma is a senior economist and obtained a PhD Degree. Mr. Ma is the Director, Governor and Secretary of the CPC Committee of China Merchants Bank, Chairman of the Board of Director of CIGNA-CMC, China Merchants Fund Management Co., Ltd and Wing Lung Bank Ltd., Independent Non-executive Director of Winox Holdings Ltd. and Independent Director of the Guotai Junan Securities Co., Ltd. (GTJA). In May 1988, he was appointed as the Deputy Director of the General Affairs Office of the People's Bank of China ( PBOC ); in March 1990, he was appointed as the Deputy Director of Fund Planning Department of PBOC; in October 1992, he was appointed as the branch President and Secretary of the CPC Leading Group of the Hainan Branch of PBOC; in January 1999, he was appointed as the Director, Governor and Secretary of the CPC Committee of China Merchants Bank; and in May 2010, he was elected as Independent Non-executive Director of Sinopec Corp.

*Jiang Xiaoming*, aged 59, 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 The Chinese People's Political Consultative Conference, director of China Foundation for Disabled Persons, member of the United Nations Board of Investment, President of Hong Kong Saibo International Co. Ltd., Independent Director of COSCO International and SPG Land (Holdings) Ltd., 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 Director of JSW Energy Ltd., member of the Advisory Committee of American Capital Group and Rothschild, the British Investment Bank, and an Independent Director of China Oilfield Services Co., Ltd.. From May 2012 to the present, he has acted as an Independent Non-executive Director of Sinopec Corp..

*Andrew Y. Yan*, aged 55, Independent Non-executive Director of Sinopec Corp.. Mr. Yan is the founding Managing Partner of SAIF Partners and has a master degree. Presently, he acts as the Chairman and Independent Non-executive Director of NVC Lighting Holding Limited; the Independent Nonexecutive Director of China Resources Land Limited, China Mengniu Dairy Co. and Fosun International Ltd., the Independent Executive Director of Digital China Holdings Limited, China Huiyuan Juice Group Limited, Feng Deli Holdings Limited, Mobi Development Co., Ltd. and Guodian Technology & Environment Group Corporation Limited; the Independent Director of the Giant Network Co. Ltd.; and the Director of Acorn International Co., Ltd., ATA Co., Ltd., and Eternal Asia Supply Chain Management Ltd. Between 1989 and 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 - 2001, he acted as the Director, General Manager and Director of Hong Kong Office of AIG Asia Infrastructural Investment Fund. And from May 2012 to the present, he has acted as an Independent Non-executive Director of Sinopec Corp..

*Bao Guoming*, aged 61, Independent Non-executive Director of Sinopec Corp. Madam Bao is a Professor and the international registered internal auditor with a master's degree. Since December of 1992, she acted as the associate professor of Accounting Dept. of International Business School of Nankai University, and since December of 1995, as a Professor of Accounting Dept. of International Business School of Nankai University; since November of 1997, as the Vice Director of Accounting Dept. of International Business School of Nankai University; since April of 1999, as the Vice Director of the Audit Cadre Training Center of National Audit Office; Since February of 2003, as the Director of the Audit Cadre Training Center of National Audit Office; since July of 2004, as the Director of the Administrative Audit Department of National Audit Office; since February of 2010, as the Director-Level Auditor of the Laws and Regulations Department of National Audit Office; since July of 2010, as the Vice-Chairman and Secretary General of China Internal Audit Association; and since May of 2011, as the External Supervisor of Bank of China. From May 2012 to the present, she has acted as an Independent Non-executive Director of Sinopec Corp.. Madam Bao is an expert who enjoys the State Council Special Allowance.

**Supervisors**

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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.

<b>Name</b>	<b>Age</b>	<b>Position with the Company</b>
Xu Bin	56	Chairman of the Board of Supervisors
Geng Limin	58	Supervisor
Li Xinjian	59	Supervisor
Zou Huiping	52	Supervisor
Kang Mingde	62	Independent Supervisor
Zhou Shiliang	55	Employee Representative Supervisor
Chen Mingzheng	55	Employee Representative Supervisor
Jiang Zhenying	48	Employee Representative Supervisor
Yu Renming	49	Employee Representative Supervisor

Table of Contents

*Xu Bin*, aged 56, Chairman of the Board of Supervisors of Sinopec Corp.. Mr. Xu is a professor level administration engineer with a university certificate. Since June 1999, he acted as Deputy Director of the 6th Discipline Inspection and Monitoring Office of the Central Discipline Inspection Commission of CPC; since April 2000, as Deputy Director of the 3rd Discipline Inspection and Monitoring Office of CPC; since November of 2004, as the Bureau Level Inspector, Supervisory Attaché and Deputy Director of the 3rd Discipline Inspection and Monitoring Office of the Central Discipline Inspection Commission of CPC; since November 2006, as the Director of the Petition Letters and Visits Office of Central Discipline Inspection Commission of CPC; since May 2011, as the Member of the CPC Leading Group of China Petrochemical Corporation and the Team Leader of the Discipline Inspection Group for CPC Leading Group of Sinopec Group; and since October 2011, as the Director of Sinopec Group Company. And since May 2012, he has acted as the Chairman of the Board of Supervisors of Sinopec Corp..

*Geng Limin*, aged 58, Supervisor of Sinopec Corp., Director General of Supervision Department of Sinopec Corp.. Mr. Geng is a senior administration engineer with a college diploma. In February 2000, he was appointed as Deputy Director General of Supervision Department of Sinopec Corp. and Deputy Director General of Supervision Bureau of Sinopec Group Company; in January 2007, he was appointed as Deputy Secretary of CPC Committee, Secretary of Discipline Inspection Committee as well as Labor Union Chairman of Sinopec Chemical Products Sales Company; in August 2008, he was appointed as Director General of Supervision Department of Sinopec Corp. and Vice Leader of Discipline Inspection Group for CPC Leading Group of Sinopec Group Company and Director General of Supervision Bureau of Sinopec Group Company; and in May 2009, he was elected as Supervisor of Sinopec Corp.

*Li Xinjian*, aged 59, Supervisor of Sinopec Corp., Deputy Director General of the Office of the President of Sinopec Corp. (Director General Level). Mr. Li is a senior administration engineer with a university diploma. In February 2001, he was appointed as Director of General Office and Assistant Inspector of Leading Group of Promotion of Cultural and Ideological Progress Central Office of the CPC Central Committee; in June 2004, he was appointed as Deputy Secretary of Central Office of CPC Central Committee and Director of General Office of Leading Group of Promotion of Cultural and Ideological Progress Central Office of the CPC Central Committee; in January 2006, he was appointed concurrently as Deputy Director General of HR Dept. of the Central Office of the CPC Central Committee; and in March 2008, he was appointed as Deputy Director General of the General Office of Sinopec Group Company and Deputy Director General of President Office of Sinopec Corp.(Director General Level). In May 2012, he was elected as Supervisor of Sinopec Corp.

*Zou Huiping*, aged 52, Supervisor of Sinopec Corp. and Director General of Auditing Department of Sinopec Corp. Mr. Zou graduated from Jiangxi Institute of Finance and Economics in July 1986 specializing in trade economics. He is a professor level senior accountant. In November 1998, he was appointed as Chief Accountant in Guangzhou Petrochemical General Plant of Sinopec Group Company; in February 2000, he was appointed as Deputy Director General of Finance & Assets Department of Sinopec Group Company; 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.

*Kang Mingde*, aged 62, Independent Supervisor of Sinopec Corp., Mr. Kang obtained a college diploma. Since January 1992, he worked in the 6th Discipline Inspection Office of CPC Central Discipline Inspection Commission and Ministry of Supervision, and was appointed as (officer (deputy director level) Deputy Director, director, Inspector (Deputy Director General level), and Supervision Commissioner; since January 2005, he was appointed as the Discipline Inspector (Deputy Director General level) and Supervision Commissioner of the first Discipline Inspection Office of CPC Central Discipline Inspection Commission and Ministry of Supervision; between November 2010 and July 2011, he was appointed as the Discipline Inspector (Director level) and Supervision Commissioner of the first Discipline Inspection Office of CPC Central Disciplinary Committee and Ministry of Supervision; and in May 2012, he was elected as Supervisor of Sinopec Corp.



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*Zhou Shiliang*, aged 55, Employee Representative Supervisor of Sinopec Corp.. Mr. Zhou is a professor level senior engineer with a master's degree. In February 2000, he was appointed as Deputy Director General of Yunnan-Guizhou-Guangxi Petroleum Exploration Bureau; in September 2000, he was appointed as President of Sinopec Yunnan-Guizhou-Guangxi Oilfield Company; in April 2002, he was appointed as Secretary of CPC Committee and Vice President in Sinopec South Exploration & Development Company; in April 2006, he was appointed as Secretary of CPC Committee and Deputy Director General in Sinopec Henan Petroleum Exploration Bureau; in November 2007, he was appointed as Director General of Sinopec Personnel Department of Sinopec Corp.; since June 2012, he has acted as the Secretary of CPC Committee and Supervisory Committee, Chairman of the Labor Union and Supervisory Board of Sinopec Oilfield Service Corporation and in May 2009, he was elected as Employee Representative Supervisor of Sinopec Corp.

Table of Contents

*Chen Mingzheng*, aged 55, Employee Representative Supervisor of Sinopec Corp. and Vice President of Sinopec Northwest Oilfield Company. Mr. Chen is a senior engineer and a graduate from a postgraduate school. In November 2000, he was appointed as Deputy Director General of North China Petroleum Bureau under Sinopec Star Petroleum Co. Ltd.; in June 2003, he was appointed as Deputy Director General of North China Petroleum Bureau under Sinopec Group Company; in October 2004, he was appointed as Secretary of CPC Committee in North China Petroleum Bureau under Sinopec Group Company; in March 2008, he was appointed as Vice President of Sinopec Northwest Oilfield Company; in May 2009, he was elected as Employee Representative Supervisor of Sinopec Corp.

*Jiang Zhenying*, aged 48, Employee s Representative Supervisor of Sinopec Corp., General Director, Executive Director and Deputy Secretary of CPC Committee of Sinopec Supplies & Equipment Department, and General Manager of China Petrochemical International Co., Ltd. . Mr. Jiang is a professor level senior economist with a doctor s degree. In December 1998, he was appointed as the deputy general manager of the China Petrochemical Supplies & Equipment Co., Ltd.; in February 2000, he was appointed as the Deputy Director General of Sinopec Supplies & Equipment Department; in December 2001, he was appointed as the Director General of Sinopec Supplies & Equipment Department and in November 2005 concurrently held the positions of Chairman, General Manger and Secretary of CPC Committee of China Petrochemical International Co., Ltd.; in March 2006, he was appointed as the Director, Executive Director and Secretary of the CPC committee of Sinopec Supplies & Equipment Department, General Manager of China Petrochemical International Co., Ltd.; and in April 2010, he was appointed as the Director General, Executive Director and Deputy Secretary of the CPC committee of Sinopec Materials Procurement Department and General Manager of China Petrochemical International Co., Ltd. and in December 2010, he was elected as the Employee s Representative Supervisor of Sinopec Corp.

*Yu Renming*, aged 49, Employee s Representative Supervisor of Sinopec Corp., General Director of Sinopec Production Management Department. Mr. Yu is a professor level senior engineer with a university Degree. 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 deputy manager of Sinopec Zhenhai Refining & Chemical Company; in September 2007, he was appointed as the manager and the vice secretary of CPC committee of Sinopec Zhenhai Refining & Chemical Company; in January 2008, appointed as the director of Sinopec Production Management Department; and in December 2010, he was elected as Employee s Representative Supervisor of Sinopec Corp.

**Other Executive Officers**

<b>Name</b>	<b>Age</b>	<b>Positions with Sinopec Corp.</b>
Wang Xinhua	57	Chief Financial Officer
Zhang Kehua	59	Vice President
Zhang Haichao	55	Vice President
Jiao Fangzheng	50	Vice President
Lei Dianwu	50	Vice President
Ling Yiqun	50	Vice President
Huang Wensheng	46	Secretary of the Board of Directors

*Wang Xinhua*, 57, Chief Financial Officer of Sinopec Corp. and Director General of Financial Department of Sinopec Corp. Mr. Wang is a professor level senior accountant with a university diploma. In January 2001, he was appointed as Deputy Director General of Finance & Assets Department of Sinopec Group Company; in December 2001, he was appointed as Deputy Director General of Finance & Planning Department of Sinopec Group Company; in October 2004, he was appointed as Director General of Finance & Planning Department of Sinopec Group Company; in May 2008, he was appointed as Director General of Finance Department of Sinopec Group Company; in March 2009, he was appointed as Director General of Finance Department of Sinopec Corp.; in May 2009, he was appointed as CFO of Sinopec Corp.



Table of Contents

*Zhang Kehua*, 59, Vice President of Sinopec Corp. Mr. Zhang graduated from Shanghai Chemical Engineering University in January 1980 majoring in chemical and mechanical engineering. He is a professor level senior engineer and had his master's degree from University of Petroleum majoring in management science and engineering in December 2000. In February 1994, he was appointed as Vice President of No.3 Construction Company of the former Sinopec Group Company; in April 1996, he was appointed as Deputy Director General of Engineering & Construction Department (concurrently Vice President of Engineering & Construction Co., Ltd.) of the former Sinopec Group Company; in December 1998, he was appointed as Deputy Director General of Engineering & Construction Department of Sinopec Group Company; in September 2002, he was appointed as Director General of Engineering & Construction Department of Sinopec Group Company; in June 2007, he was appointed as Director General of Engineering Department of Sinopec Corp.; since June 2012, he concurrently acts as the Vice Chairman of SEG (Sinopec Engineering Group), in May 2006, he was appointed as Vice President of Sinopec Corp.

*Zhang Haichao*, 55, Vice President of Sinopec Corp., Chairman of Board of Directors and General Manager of Sinopec Sales Co., Ltd. Mr. Zhang is a professor level senior economist with a master's degree. In March 1998, he was appointed as Deputy General Manager of Zhejiang Petroleum Corporation; in September 1999, he was appointed as General Manager of Zhejiang Petroleum Corporation; in February 2000, he was appointed as General Manager of Sinopec Zhejiang Petroleum Co., Ltd.; 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 Deputy General Manager of Sinopec Sales Co., Ltd.; in November 2005 he served as Secretary of CPC Committee, Chairman of Board of Directors, and Manager of Sinopec Sales Co., Ltd.; in June 2006, he served as Chairman of Board of Directors, and General Manager of Sinopec Sales Co., Ltd.; in April 2003, he was elected as Employee Representative Supervisor of Sinopec Corp. and in November 2005, he was appointed as Vice President of Sinopec Corp.

*Jiao Fangzheng*, 50, Vice President of Sinopec Corp., General Director of Sinopec Exploration and Production Department. Mr. Jiao obtained his bachelor's degree in petroleum exploration and obtained his doctor's degree in natural gas engineering from Southwest Petroleum Institute respectively in July 1983 and November 2000. Mr. Jiao is a professor level senior engineer. In January 1999, he was appointed as Chief Geologist in Zhongyuan Petroleum Exploration Bureau of Sinopec Group Company; 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 July 2010, he was appointed as the General Director of Sinopec Exploration & Production Department; and in October 2006, he was appointed as Vice President of Sinopec Corp.

*Lei Dianwu*, 50, Vice President of Sinopec Corp, General Director of Development & Planning Department of Sinopec Corp. Mr. Lei is a professor level senior engineer and obtained a university diploma. In October 1995, he was appointed as Vice President of Yangzi Petrochemical Corporation; in December 1997, he was appointed as Director 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 in Yangzi Petrochemical Co., Ltd.; in March 1999, he was appointed temporarily as Deputy Director General of Development & Planning Department of Sinopec Group Company; 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 May 2009, he was appointed as Vice President of Sinopec Corp.

*Ling Yiqun*, aged 50, Vice President of Sinopec Corp, General Director of Sinopec Refining Department. Mr. Ling is a professor level senior engineer with a master's 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 Sinopec Refining Department; in June 2003, he was appointed as the General Director of Sinopec Refining Department; in May 2012, he was appointed as Executive Director, General Manager and Secretary of CPC Committee of Sinopec Oil Sales Co., Ltd.; in July 2010, he was appointed as Vice President of Sinopec Corp.

*Huang Wensheng*, 46, Secretary to the Board of Directors of Sinopec Corp. and Director General of the Board Secretariat of Sinopec Corp..Mr. Huang is a senior engineer with a university diploma. In March 2003, he was appointed as Deputy Director General of the Board Secretariat of Sinopec Corp.; in May 2006, he was appointed as Representative on Securities Matters of Sinopec Corp.; in 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.

**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.

Table of Contents

The following table sets forth the compensation on individual basis for our directors, supervisors and executive officers who receive compensation from us in 2012.

Name	Position with the Company	Remuneration paid by the Company in 2012 (RMB in thousands)
<b><u>Directors</u></b>		
Fu Chengyu	Chairman	
Wang Tianpu	Vice Chairman, President	1,034.4
Zhang Yaocang	Vice Chairman	
Zhang Jianhua	Director, Senior Vice President	975.4
Wang Zhigang	Director, Senior Vice President	975.4
Cai Xiyou	Director, Senior Vice President	975.4
Cao Yaofeng	Director	
Li Chunguang	Director	
Dai Houliang	Director, Senior Vice President	975.4
Liu Yun	Director	
Li Deshui (1)	Independent Non-executive Director	100
Xie Zhongyu (1)	Independent Non-executive Director	100
Chen Xiaojin	Independent Non-executive Director	300
Ma Weihua	Independent Non-executive Director	300
Wu Xiaogen (1)	Independent Non-executive Director	100
Jiang Xiaoming (2)	Independent Non-executive Director	200
Andrew Y. Yan(2)	Independent Non-executive Director	200
Bao Guoming(2)	Independent Non-executive Director	200
<b><u>Supervisors</u></b>		
Wang Zuoran(3)	Chairman of the Board of Supervisors	
Zhang Youcai(4)	Vice Chairman, Independent Supervisor	100
Xu Bin(5)	Chairman of the Board of Supervisors	
Geng Limin	Supervisor	
Li Xinjian(6)	Supervisor	
Zou Huiping	Supervisor	533.8
Li Yonggui(7)	Independent Supervisor	100
Kang Mingde(8)	Independent Supervisor	200
Zhou Shiliang	Employee Representative Supervisor	533.8
Chen Mingzheng	Employee Representative Supervisor	509.7
Jiang Zhenying	Employee Representative Supervisor	520.6
Yu Renming	Employee Representative Supervisor	533.8
<b><u>Other Executive officers</u></b>		
Wang Xinhua	Chief Financial Officer	620.4
Zhang Kehua	Vice President	633.6
Zhang Haichao	Vice President	620.4
Jiao Fangzheng	Vice President	620.4
Lei Dianwu	Vice President	633.6
Ling Yiqun	Vice President	633.6
Huang Wensheng(9)	Secretary of the Board of Directors	242.6

Table of Contents

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- (1) Li Deshui, Xie Zhongyu and Wu Xiaogen resigned from the positions as Independent Non-executive Director in May 2012.
- (2) Jiang Xiaoming, Andrew Y. Yan and Bao Guoming were appointed as Independent Non-executive Director in May 2012.
- (3) Wang Zuoran resigned from the position of Chairman of the Board of Supervisors in May 2012.
- (4) Zhang Youcai resigned from the position of Independent Supervisor and Vice Chairman of the Supervisory Board in May 2012.
- (5) Xu Bin was appointed as Chairman of the Board of Supervisors in May 2012.
- (6) Li Xinjian was appointed as Supervisor in May 2012.
- (7) Li Yonggui resigned from the position of Independent Supervisor in May 2012.
- (8) Kang Mingde was appointed as Independent Supervisor in May 2012.
- (9) Huang Wensheng was appointed as Secretary of the Board of Directors in May 2012.

**C. BOARD PRACTICE**

We have fifteen 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, the audit committee shall have at least one independent director who is a financial expert.

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 Bao Guoming, Jiang Xiaoming and Andrew Y. Yan, all of whom are our Independent Non-executive Directors. Our Board has determined that Bao Guoming 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 Tianpu, Ma Weihua, Zhang Jianhua, Wang Zhigang, Cai Xiyou, Dai Houliang, Jiang Xiaoming and Andrew Y. Yan.

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 proposals in respect of the remuneration of directors, supervisors, president, vice-president, Chief Financial Officer and secretary of the board of directors.

The members of our remuneration and evaluation committee are Chen Xiaojin, Li Chunguang and Bao Guoming.

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 Fu Chengyu, Wang Tianpu, Chen Xiaojin and Ma Weihua.



Table of Contents

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, 2010, 2011 and 2012, we had approximately 373,375, 377,235 and 376,201 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, 2012.

<b>By Segment</b>	<b>Number of Employees</b>	<b>Percentage of Total Number of Employees (%)</b>
Exploration and production	152,889	41
Refining	79,895	21
Marketing and distribution	61,280	16
Chemicals	70,308	19
Corporate and others	11,829	3
<b>Total</b>	<b>376,201</b>	<b>100</b>

<b>By Employee s Scope of Work</b>	<b>Number of Employees</b>	<b>Percentage of Total Number of Employees (%)</b>
Production	191,319	51
Sales	53,076	14
Technical	53,424	14
Finance	10,414	3
Administration	30,096	8
Others	37,872	10
<b>Total</b>	<b>376,201</b>	<b>100</b>

<b>By Education</b>	<b>Number of Employees</b>	<b>Percentage of Total Number of Employees (%)</b>
Master s degree and above	13,061	3
University	89,957	24
Junior college	82,737	22
Technical secondary school	30,405	8
Senior high school and technical school degree or below	160,041	43
<b>Total</b>	<b>376,201</b>	<b>100</b>

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.

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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, 2012, a total of 187,682 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, 2012, except our vice president Ling Yiqun who holds 10,000 shares of our A shares, our directors, supervisors and senior officers do not have share ownership in us.

Table of Contents**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 5, 2013.

Shareholder	Number of Shares Owned (in millions)	Percentage of Ownership (%)
Sinopec Group Company	66,222.63(1)	73.86(1)

(1) Inclusive of 425,500,000 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 5, 2013, 970,344,200 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 5, 2013, 9,703,442 ADSs, representing 970,344,200 H shares, were held of record by Cede & Co. and 42 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 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 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 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 after the integration of these upstream, midstream and downstream businesses in Sinopec Group Company; second, Sinopec Group Company will dispose its minor remaining chemicals business within the next five years 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, after a thorough analysis from political and economic perspectives, we propose to acquire overseas oil and gas assets owned by Sinopec Group Company when appropriate and Sinopec Group company undertakes to transfer 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 at the time of such respective proposed acquisitions.

**B. RELATED PARTY TRANSACTIONS**

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Sinopec Group Company owned 73.86% of our outstanding equity as of April 5, 2013. 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 and May 20, 2009, respectively, and under the heading **Item 4 Information on the Company History and Development of the Company** of this annual report.

On August 24, 2012, we entered into certain agreements with Sinopec Group Company, pursuant to which certain related party transaction agreements between the parties were amended. Pursuant to the Continuing Connected Transactions Third Supplemental Agreement dated August 24, 2012 between Sinopec Group Company and us, the term of each of the Mutual Supply Agreement and the Community Services Agreement dated June 3, 2000 and as amended and supplemented from time to time, were extended to December 31, 2015. Pursuant to the Land Use Rights Leasing Agreement Third Amendment Memo dated August 24, 2012 between Sinopec Group Company and us, the members of Sinopec Group Company agreed to lease to us certain parcels of land with an area of approximately 418 million square meters.

Table of Contents

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 \$1.678 billion. SSI holds a 50% interest in Angola Block 18. Such transaction was completed on September 30, 2010.

For our continuing related party transaction starting from January 1, 2013, we entered into the Continuing Connected Transactions Third Supplemental Agreement with Sinopec Group Company pursuant to which certain terms of related party transactions were amended. 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.

The aggregate amount of related party transactions we incurred during 2012 was RMB518.206 billion, of which, expenses amounted to RMB204.017 billion (including RMB191.319 billion of sales of goods and services, RMB4.062 billion of auxiliary and community services, RMB7.408 billion of operating and leasing expenses and RMB1.228 billion of interest expenses), and revenues amounted to RMB 314.189 billion (including RMB313.919 billion of sales of goods and services, RMB0.116 billion of interest income and RMB0.154 billion of agency commission receivable). Among the total expenses of RMB204.017 billion, we paid Sinopec Group Company RMB133.432 billion, including RMB120.736 billion of sales of goods and services (procurement, storage, exploration, production and other services related to production) , which represented 4.49% of our operating expenses for 2012; RMB4,062 billion of auxiliary and community services, which represented 0.15% of our operating expenses for 2012; RMB0.507 billion of our rent for building; RMB6.742 billion of our rent for land; RMB0.157 billion of our rent for other things and RMB1.228 billion of interest payment. Among the total revenue of RMB314.189 billion, Sinopec Group Company paid us RMB84.115 billion, including RMB83.98 billion of sales of goods and services, which represented 3.01% of our operating revenue for 2012; RMB0.096 billion of interest income and RMB0.039 billion of agency commission receivable.

In 2011, we provided RMB2 billion of entrusted loan to Zhanjiang Dongxing Petrochemical Company Limited, one of our subsidiaries and such loan was repaid during the reporting period.

In 2012, we provided RMB2.359 billion of loans to certain entities jointly controlled by Sinopec Group Company.

The amounts of the aforementioned continuing related party transactions 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 F-pages following Item 19.

**Legal Proceedings**

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

**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.

Table of Contents

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.

In accordance with the board resolution passed at the sixth meeting of our fifth board, our board has proposed to make a year-end cash dividend distribution for 2012 of RMB0.20 (including tax) per ordinary share in addition to an interim cash dividend distribution of RMB0.10 (including tax) per ordinary share earlier in 2012. Therefore, the full-year aggregate cash dividend for 2012 is RMB0.30 (including tax) per ordinary share. In addition, based on the total share capital as of the record date, we proposed to issue two bonus shares converted from retained earnings and one bonus share transferred from share premium for every 10 existing shares held by the shareholders on relevant record date. 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).

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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.



Table of Contents

Period	The Stock Exchange of Hong Kong		The New York Stock Exchange		The Shanghai Stock Exchange	
	High	Low	High	Low	High	Low
April 2013 (as of April 5, 2013)	9.11	8.75	117.25	113.45	7.38	7.24
Past 6 months	(HK dollar per H share)		(US dollar per ADS)		(RMB per A share)	
March	9.14	8.62	117.19	111.47	7.72	7.14
February	9.37	8.61	121.30	110.50	7.28	6.90
2013 January	9.44	8.78	122.67	116.48	7.11	6.76
December	8.87	8.10	115.29	104.79	6.92	6.02
November	8.48	7.85	109.43	100.71	6.41	5.97
2012 October	8.36	7.20	107.70	92.54	6.40	5.99
Quarterly Data						
2013 First Quarter	9.44	8.61	122.67	110.50	7.72	6.76
2012 Fourth Quarter	8.87	7.20	115.29	92.54	6.92	5.97
Third Quarter	7.53	6.43	96.77	82.69	6.30	5.80
Second Quarter	8.47	6.73	109.80	86.22	7.35	6.29
First Quarter	9.63	8.17	124.95	105.05	7.86	7.13
2011 Fourth Quarter	8.41	7.09	106.79	91.43	7.60	6.86
Third Quarter	7.93	6.45	102.43	83.21	8.29	6.90
Second Quarter	8.24	7.17	105.02	92.78	9.05	7.86
First Quarter	8.75	7.47	111.89	97.18	9.27	8.08
Annual Data						
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
2010	7.94	5.75	102.69	73.80	13.90	7.77
2009	7.15	3.65	93.50	47.08	15.42	7.06
2008	11.66	3.76	146.28	50.57	24.38	6.67

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 sales 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 of gasoline, kerosene and diesel oil(for subsidiaries only); the production, storage, transportation and sales of natural gas chemicals and coal chemicals; sales of lubricant, fuel oil, solvent naphtha and asphalt; production of chemical fertilizer; production and sales of electricity, steam, water and industrial gases; operation of 24-hour stores; sales of books, newspapers, audio video products and electronic publications; media, advertisement and commission agent; sales of foods, beverage and cigarettes, automobile decorations(for subsidiaries only), automobile cleaning; 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 sales of oil and petrochemical raw and auxiliary materials, equipment and parts; technology and information, research, development, application and consultation of alternative energy products; 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 labour required for the aforementioned overseas projects.

Table of Contents

***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 RMB1 billion, and the president is authorized to approve and execute individual long-term loan agreement with the loan amount not exceeding RMB1 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***

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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.

Table of Contents

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.

Table of Contents

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.)

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- 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 (the 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.



Table of Contents

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 oversea-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).

Table of Contents

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.

Table of Contents

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 (the *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 (the *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 (the *SDI Ordinance* ), the Securities (Insider Dealing) Ordinance and the Hong Kong Codes on Takeovers and Mergers and Share Repurchases (the *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;

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- 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

Table of Contents

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 subsidiary in the U.S., SINOPEC-USA Co., Ltd., 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***

Our H shares shall only be traded among investors who are not PRC persons and may not be sold to PRC investors. There are no restrictions on the ability of investors who are not PRC residents to hold our H shares.

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.



Table of Contents

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 RMB 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 RMB 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 RMB 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.

Table of Contents

*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 became effective in October 1988, 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 that are anticipated to be material to US Holders (as defined below) relating to the acquisition, ownership and disposition of our H shares or ADSs. 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 investors subject to special tax rules including: financial institutions, insurance companies, broker-dealers, traders in securities that elect mark-to-market treatment, partnerships and their partners, tax-exempt organizations (including private foundations), non-US Holders, investors 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, 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, or alternative minimum tax considerations. This summary only addresses investors that hold their H shares or ADSs as capital assets (generally, property held for investment) under the United States Internal Revenue Code of 1986, as amended (the Code). US Holders should consult their tax advisors regarding the United States federal, state, local, and non-United States income and other tax considerations of an investment in H shares or ADSs.

Table of Contents

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 consequences applicable to them of an investment in H shares or ADSs.

For United States federal income tax purposes, US Holders of ADSs will be treated as the beneficial owners of the underlying H shares represented by the ADSs. Accordingly, deposits or withdrawals of H shares for ADSs will not be subject to United States federal income tax. A US Holder's tax basis in withdrawn H shares will be the same as the tax basis in the ADSs surrendered, and the holding period of withdrawn H shares will include the period during which the holder held the surrendered ADSs.

*Passive Foreign Investment Company Considerations*

A non-United States corporation, such as our company, will be a passive foreign investment company (a 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 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.

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We do not believe that we were classified as a PFIC for the taxable year ending 2012 and we do not expect to be classified as a PFIC for the current taxable year ending 2013. 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 value 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 depositary 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.

Table of Contents

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 (the 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 depositary, 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.



Table of Contents

The above results may be eliminated if a mark-to-market election is available and a US Holder validly makes such an election. If the election is made, such 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).

*Backup Withholding and Information Reporting*

Certain US Holders who are individuals 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 \$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. Dividend payments with respect to our H shares or ADSs and proceeds from the sale or other disposition of our H shares or ADSs are not generally subject to U.S. backup withholding (provided that certain certification requirements are satisfied). U.S. Holders are advised to consult with their tax advisors regarding the application of the United States information reporting and backup withholding rules.

**F. DIVIDENDS AND PAYING AGENTS**

Not applicable.

**G. STATEMENT BY EXPERTS**

Not applicable.

**H. DOCUMENTS ON DISPLAY**

We filed with the Securities and Exchange Commission in Washington, D.C. a Registration Statement on Form F-1 (Registration No. 333-12502) under the Securities Act in connection with the ADSs offered in the global offering. The Registration Statement 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 as an exhibit to the Registration Statement, 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 contract or documents.

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You may inspect and copy our registration statements, including their exhibits and schedules, and the reports and other information we file with the Securities and Exchange Commission in accordance with the Exchange Act at the public reference facilities maintained by the Securities and Exchange Commission at Judiciary Plaza, 450 Fifth Street, Room 1024, N.W., Washington, D.C. 20549 and at the regional offices of the Securities and Exchange Commission located at 233 Broadway, New York, NY 10279 and at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. You may also inspect the registration statements, including their exhibits and schedules, at the office of the New York Stock Exchange, Wall Street, New York, New York 10005. Copies of such material may also be obtained from the Public Reference Section of the Securities and Exchange Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. You may obtain information regarding the Washington D.C. Public Reference Room by calling the Securities and Exchange Commission at 1-800-SEC-0330 or by contacting the Securities and Exchange Commission over the internet at its website at <http://www.sec.gov>.

Table of Contents

**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.

**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, 2012 we had certain commodity contracts of crude oil and refined oil products designated as qualified cash flow hedges and economic hedges. As of December 31, 2012, the fair value assets and fair value liabilities of these derivative financial instruments were RMB1,193 million and RMB1,072 million, respectively.

As of December 31, 2012, 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 RMB221 million, and decrease/increase our other reserves by approximately RMB152 million. 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 RMB 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, 2012 and 2011. 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, 2012 and 2011. For debt obligations, the table presents cash flows and related weighted average rates by expected maturity dates.

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Table of Contents

(RMB equivalent in millions, except interest rate)

As of December 31, 2012								
	2013	2014	Expected Maturity Date		2017	Thereafter	Total carrying amount	Fair value
			2015	2016				
<b>Assets</b>								
<i>Cash and cash equivalent</i>								
In US Dollar	1,243						1,243	1,243
In HK Dollar	67						67	67
In Japanese Yen	10						10	10
In Euro	38						38	38
<i>Time deposits with financial institutions</i>								
In US Dollar	5						5	5
<b>Liabilities</b>								
<i>Debts in US Dollar</i>								
Fixed rate	5,167	52	52	52	38	115	5,476	5,483
Average interest rate	1.0%	1.4%	1.4%	1.4%	1.4%	1.4%		
Variable rate	50,424	1	8				50,433	50,433
Average interest rate(1)	1.2%	4.9%	4.9%					
<i>Debts in Japanese Yen</i>								
Fixed rate	76	76	76	76	76	405	785	867
Average interest rate	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%		
Variable rate								
Average interest rate(1)								
<i>Debts in HK Dollar</i>								
Fixed rate		10,956					10,956	10,956
Average interest rate		4.20%						
Variable rate								
Average interest rate(1)								

(1) The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2012.

(RMB equivalent in millions, except interest rate)

As of December 31, 2011								
	2012	2013	Expected Maturity Date		2016	Thereafter	Total carrying amount	Fair value
			2014	2015				
<b>Assets</b>								
<i>Cash and cash equivalent</i>								

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In US Dollar	292					292	292
In HK Dollar	25					25	25
In Japanese Yen	11					11	11
In Euro	21					21	21
<i>Time deposits with financial institutions</i>							
In US Dollar	3					3	3
<b>Liabilities</b>							
<i>Debts in US Dollar</i>							
Fixed rate	1,655	53	53	53	53	154	2,021
Average interest rate	2.5%	1.4%	1.4%	1.4%	1.4%	1.4%	
Variable rate	26,680		2	9			26,691
Average interest rate(2)	2.89%	4.89%	4.89%	4.89%			
<i>Debts in Japanese Yen</i>							
Fixed rate	307	84	84	84	84	533	1,176
Average interest rate	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	
Variable rate							
Average interest rate(2)							
<i>Debts in HK Dollar</i>							
Fixed rate			10,415				10,415
Average interest rate			4.2%				
Variable rate							
Average interest rate(2)							

(2) The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2011.

Table of Contents**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, 2012 and 2011.

(RMB equivalent in millions, except interest rate)

	As of December 31, 2012						Total carrying amount	Fair value
	2013	2014	Expected Maturity Date		2017	Thereafter		
			2015	2016				
<b>Assets</b>								
<i>Cash and cash equivalent</i>								
In Renminbi	9,098						9,098	9,098
In US Dollar	1,243						1,243	1,243
In HK Dollar	67						67	67
In Japanese Yen	10						10	10
In Euro	38						38	38
<i>Time deposits with financial institutions</i>								
In Renminbi	403						403	403
In US Dollar	5						5	5
<b>Liabilities</b>								
<i>Debts in Renminbi</i>								
Fixed rate	45,220	31,827	11,245		52,066	51,850	192,208	186,093
Average interest rate	2.4%	2.1%	2.5%	2.4%	2.5%	1.4%		
Variable rate	15,094	1,391	220	703	832		18,240	18,240
Average interest rate(1)	4.9%	5.4%	5.6%	6.0%	6.0%			
<i>Debts in US Dollar</i>								
Fixed rate	5,167	52	52	52	38	115	5,476	5,483
Average interest rate	1.0%	1.4%	1.4%	1.4%	1.4%	1.4%		
Variable rate	50,424	1	8				50,433	50,433
Average interest rate(1)	1.2%	4.9%	4.9%					
<i>Debts in Japanese Yen</i>								

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Fixed rate	76	76	76	76	76	405	785	867
Average interest rate	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%		
<b>Variable rate</b>								
<b>Average interest rate(1)</b>								
<i>Debts in HK Dollar</i>								
Fixed rate		10,956					10,956	10,956
Average interest rate		4.20%						
<b>Variable rate</b>								
<b>Average interest rate(1)</b>								

(1) The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2012.

(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, 2011

	2012	2013	Expected Maturity Date		2016	Thereafter	Total carrying amount	Fair value
			2014	2015				
<b>Assets</b>								
<i>Cash and cash equivalent</i>								
In Renminbi	24,298						24,298	24,298
In US Dollar	292						292	292
In HK Dollar	25						25	25
In Japanese Yen	11						11	11
In Euro	21						21	21
<i>Time deposits with financial institutions</i>								
In Renminbi	547						547	547
In US Dollar	3						3	3
<b>Liabilities</b>								
<i>Debts in Renminbi</i>								
Fixed rate	47,521	60	30,920	11,245		81,367	171,113	195,202
Average interest rate	2.2%	1.8%	1.9%	2.2%	2.0%	1.6%		
Variable rate	4,210	15,245	889	335	125		20,804	20,804
Average interest rate(3)					6.27%			
<i>Debts in US Dollar</i>								
Fixed rate	1,655	53	53	53	53	154	2,021	2,022
Average interest rate	2.5%	1.4%	1.4%	1.4%	1.4%	1.4%		
Variable rate	26,680		2	9			26,691	26,691
Average interest rate(3)	2.89%	4.89%	4.89%	4.89%				
<i>Debts in Japanese Yen</i>								
Fixed rate	307	84	84	84	84	533	1,176	1,287
Average interest rate	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%		
<b>Variable rate</b>								
<b>Average interest rate(3)</b>								



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*Debts in HK Dollar*

Fixed rate	10,415	10,415	10,415
Average interest rate	4.2%		
Variable rate			
Average interest rate(3)			

Table of Contents

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(3) The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2011.

(4) 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**

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Issuance of ADSs	\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) issued
Cancellation of ADSs	\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) canceled
Distribution of cash dividends or other cash distributions	\$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	\$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	\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) held

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.

Table of Contents

*Depository Payments for the Year 2012*

In 2012, Citibank, N.A., the Depository for our ADR program, provided reimbursement for our expenses related to the listing and investor relations activities as follows:

- reimbursement of application fees: US\$52,534.21
  
- reimbursement of data infrastructure fees: US\$10,183.81
  
- reimbursement of proxy procedure fees: US\$102,036.50
  
- reimbursement of investor relations expenses (including expenses related to non-deal road show, investor meeting and investor relations agency) : US\$274,654.64
  
- the accounting committee and accounting standard committee of public company: US\$69,218.28
  
- Total: US\$508,627.44

**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 (the 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, 2011 (the 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.

Table of Contents

**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.

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* issued by the Committee of Sponsoring Organizations of the Treadway Commission as of December 31, 2012. Based on that evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2012 based on these criteria.

KPMG, 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.

**Attestation Report of the Registered Public Accounting Firm**

The Board of Directors and Shareholders

China Petroleum & Chemical Corporation:

We have audited China Petroleum & Chemical Corporation's internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). China Petroleum & Chemical Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit 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 audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

Table of Contents

In our opinion, China Petroleum & Chemical Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of China Petroleum & Chemical Corporation and subsidiaries as of December 31, 2011 and 2012, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2012, and our report dated March 22, 2013 expressed an unqualified opinion on those consolidated financial statements.

/s/ **KPMG**

Hong Kong, China

March 22, 2013

**Changes in Internal Control over Financial Reporting**

During the year ended December 31, 2012, 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 Ms. Bao Guoming qualifies as an audit committee financial expert in accordance with the terms of Item 16.A of Form 20-F. Ms. Bao was appointed as an independent non-executive director and a manager of the audit committee of the fifth board of our company in 2012. For Mr. Bao'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**

As of the date of this annual report, we do not have, in form, a code of ethics that solely applies to our principal executive officer, principal financial officer and principal accounting officer. Our principal executive officers, Mr. Fu Chengyu (Chairman) and Mr. Wang Tianpu (Vice Chairman and President), currently also serve as our directors and are thus subject to the director service contracts that they have with us. Our



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principal financial officer, Mr. Wang Xinhua (CFO) is subject to the employment contract that he has with us. Under such contracts, each of them agrees that he owes a fiduciary and diligence obligation to our company and that he shall not engage in any activities in competition with our business or carry any activities detrimental to the interests of our company. Each of them also agrees to perform his respective duties as a director and senior officer in accordance with the Company Law of the PRC, relevant rules and regulations promulgated by China Securities Regulatory Commission and the Mandatory Provisions of Articles of Association of Overseas Listed Companies.

### 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 2011 and 2012.

	Audit Fees	Audit-Related Fees	Tax Fees	Other Fees
2011	RMB81 million			
2012	RMB83 million			

Before our principal accountants were engaged by our company or our subsidiaries to render audit or non-audit services, the engagement has been approved by our audit committee.

Table of Contents

**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**

KPMG has served as our independent registered public accounting firm for the audit of our consolidated financial statements for more than 10 years. On March 22, 2013, our board of directors approved the proposed change of our independent registered public accounting firm, KPMG, after the completion of the audit of our consolidated financial statements for the year ended December 31, 2012 and the effectiveness of our internal control over financial reporting as of December 31, 2012, based on recommendation from our audit committee. Such change in our principal accountants is due to the relevant regulations issued by the Ministry of Finance and the State-Owned Assets Supervision and Administration Commission of the PRC. According to the relevant regulations, there are restrictions in respect of the number of years of audit services that an accounting firm can continuously provide to a State-owned enterprise and its subsidiaries. As a result, we are required not to re-appoint KPMG as our principal accountant at the annual general meeting to be held in May 2013.

The audit reports of KPMG on our consolidated financial statements as of and for the fiscal years ended December 31, 2011 and 2012 contain no adverse opinion or disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope, or accounting principles.

During the two fiscal years ended December 31, 2011 and 2012 and through April 11, 2013, there have been no disagreements with KPMG on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements if not resolved to the satisfaction of KPMG, would have caused them to make reference to the subject matter of the disagreement in connection with their report, nor have there been any reportable events (as defined in Item 16F(a)(1)(v) of Form 20-F). We have provided a copy of the foregoing disclosure to KPMG and requested that KPMG furnish a letter addressed to the SEC stating whether or not KPMG agrees with such disclosure. A copy of the letter from KPMG addressed to the SEC, dated April 11, 2013, is filed as Exhibit 15.1 to this Form 20-F.

With the approvals of our board and the audit committee, we resolved to appoint PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian CPAs Limited Company (the name will be changed to PricewaterhouseCoopers Zhong Tian LLP), or PwC as our principal independent registered public accounting firm for the year 2013, which is subject to the approval of shareholders at our forthcoming 2012 annual general meeting.

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During the two most recent fiscal years and through April 11, 2013, neither we nor anyone on our behalf consulted PwC regarding either (i) the application of accounting principles to a specified transaction, either completed or proposed; or the type of audit opinion that might be rendered on the registrant's financial statements, or (ii) any matter that was either the subject of a disagreement (as defined in Item 16F(a)(1)(iv) of Form 20-F and related instructions to Item 16-F of Form 20-F) with PwC or a reportable event (as described in Item 16F(a)(1)(v) of Form 20-F). Also, during the two most recent fiscal years and through April 11, 2013, we have not obtained any written report or oral advice that PwC concluded was an important factor considered by us in reaching a decision as to the accounting, auditing or financial reporting issue.

### **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 New York Stock Exchange (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:

Table of Contents

**NYSE corporate governance rules**

**Corporate governance guidelines**

Listed companies must adopt and disclose corporate governance guidelines, involving director qualification standards, director responsibilities, director compensation, director continuing education, annual performance evaluation of the board of directors, etc.

**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 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).

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.

**Nominating/Corporate Governance Committee**

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

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.

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

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 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.

No similar requirements.

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.

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.

Table of Contents

**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:

It is stipulated in China that the responsibilities of the compensation committee are:

(1) review and approve the corporate goals associated with CEO's compensation, 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;

(1) to study evaluation standards on the performance of directors and the senior management and submit suggestion to the board of directors;

(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;

(2) to study and review the compensation policies on the directors and the senior management. It is also stipulated that the committee shall produce a report about the committee's performance in the annual report.

(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.

But the committee is not required to produce a report on the executive compensation or make an annual performance evaluation of the committee.

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

**Audit Committee**

Listed companies must have an audit committee that satisfies the requirements of Rule 10A-3 of Securities Exchange Act of 1934 (the 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.

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 directors, of which the independent directors are the majority and act as the convener, and, at minimum, one independent director is an accounting professional.

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.

The responsibilities of the audit committee are similar to those stipulated by the NYSE rules. It is also stipulated that the committee shall produce a report about the committee's performance in the annual report.

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 committee.

But according to the domestic practices, the company is not required to make an annual performance evaluation of the audit committee, and the audit committee is not required to prepare an audit report to be included in the company's annual proxy statement.

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

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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.

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

Each listed company must have an internal audit department.

Table of Contents

**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 upon the approval of the board of directors.

The Company has complied with the above mentioned laws or 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.

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.

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.

No similar requirements.

**ITEM 16H. MINE SAFETY DISCLOSURE**

Not applicable.

**ITEM 17. FINANCIAL STATEMENTS**

Not applicable.

Table of Contents

**ITEM 18. FINANCIAL STATEMENTS**

See F-pages 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).
- 1.2\* Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders meeting on October 16, 2012 (English translation).
- 4.1\* Forms of Director Service Contracts dated May 11, 2012 (English translation).
- 4.2\* Forms of Supervisor Service Contracts dated May 11, 2012 (English translation).
- 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



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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).

Table of Contents

- 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).
- 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).
- 8\* A list of the Registrant's subsidiaries.
- 12.1\* Certification of Chairman pursuant to Rule 13a-14(a).

Table of Contents

- 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.

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\* Filed herewith.

\*\* Incorporated by reference.

Table of Contents

**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 11, 2013

Table of Contents

**CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES**

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

	<b>Page</b>
<u>Report of independent registered public accounting firm</u>	F-2
<u>Consolidated statements of income</u>	F-3
<u>Consolidated statements of comprehensive income</u>	F-4
<u>Consolidated balance sheets</u>	F-5
<u>Consolidated statements of changes in equity</u>	F-6
<u>Consolidated statements of cash flows</u>	F-9
<u>Notes to consolidated financial statements</u>	F-11
<u>Supplemental information on oil and gas producing activities (unaudited)</u>	F-65

Table of Contents

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Shareholders

China Petroleum & Chemical Corporation:

We have audited the accompanying consolidated balance sheets of China Petroleum & Chemical Corporation and its subsidiaries as of December 31, 2011 and 2012, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of China Petroleum & Chemical Corporation and its subsidiaries as of December 31, 2011 and 2012, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2012, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), China Petroleum & Chemical Corporation's internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 22, 2013 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

**/S/ KPMG**

Hong Kong, China

March 22, 2013

Table of Contents

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF INCOME

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(Amounts in millions, except per share data)

	Note	2010 RMB	Years ended December 31, 2011 RMB	2012 RMB
<b>Operating revenues</b>				
Sales of goods		1,876,758	2,463,767	2,733,618
Other operating revenues	3	36,424	41,916	52,427
		1,913,182	2,505,683	2,786,045
<b>Operating expenses</b>				
Purchased crude oil, products and operating supplies and expenses		(1,477,126)	(2,027,646)	(2,301,199)
Selling, general and administrative expenses	4	(51,048)	(58,960)	(61,174)
Depreciation, depletion and amortization		(59,253)	(63,816)	(70,456)
Exploration expenses, including dry holes		(10,955)	(13,341)	(15,533)
Personnel expenses	5	(39,030)	(45,428)	(51,767)
Taxes other than income tax	6	(157,189)	(189,949)	(188,483)
Other operating (expenses)/income, net	7	(13,607)	(1,013)	1,229
<b>Total operating expenses</b>		(1,808,208)	(2,400,153)	(2,687,383)
<b>Operating income</b>		104,974	105,530	98,662
<b>Finance costs</b>				
Interest expense	8	(7,972)	(9,241)	(11,217)
Interest income		660	1,584	1,254
Unrealized (loss) / gain on embedded derivative component of the convertible bonds	23(c) and (e)	(127)	1,259	(62)
Net foreign currency exchange gains		465	1,113	144
<b>Net finance costs</b>		(6,974)	(5,285)	(9,881)
Investment income		273	168	235
Income from associates and jointly controlled entities		5,390	4,152	1,626
<b>Earnings before income tax</b>		103,663	104,565	90,642
Tax expense	9	(25,681)	(26,120)	(23,846)
<b>Net income</b>		77,982	78,445	66,796
<b>Attributable to:</b>				
Equity shareholders of the Company		71,782	73,225	63,879
Non-controlling interests		6,200	5,220	2,917
<b>Net income</b>		77,982	78,445	66,796
<b>Earnings per share:</b>				
Basic	11	0.83	0.84	0.74
Diluted	11	0.82	0.81	0.71

See accompanying notes to consolidated financial statements.

F-3

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Table of Contents

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(Amounts in millions)

	Note	2010 RMB	Years ended December 31, 2011 RMB	2012 RMB
<b>Net income</b>		77,982	78,445	66,796
<b>Other comprehensive income for the year (after tax and reclassification adjustments)</b>	10			
Cash flow hedges		(221)	142	(151)
Available-for-sale securities		(9)	(15)	26
Share of other comprehensive income of associates		(533)	(179)	80
Foreign currency translation differences		(1,360)	(676)	(44)
<b>Total other comprehensive income</b>		(2,123)	(728)	(89)
<b>Total comprehensive income for the year</b>		75,859	77,717	66,707
<b>Attributable to:</b>				
Equity shareholders of the Company		69,775	72,735	63,814
Non-controlling interests		6,084	4,982	2,893
<b>Total comprehensive income for the year</b>		75,859	77,717	66,707

See accompanying notes to consolidated financial statements.

Table of Contents**CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS****AS OF DECEMBER 31, 2011 AND 2012****(Amounts in millions)**

	Note	December 31, 2011 RMB	2012 RMB
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents		24,647	10,456
Time deposits with financial institutions		550	408
Trade accounts receivable, net	12	58,721	81,395
Bills receivable		27,961	20,045
Inventories	13	203,417	218,262
Prepaid expenses and other current assets	14	27,459	34,449
<b>Total current assets</b>		<b>342,755</b>	<b>365,015</b>
<b>Non-current assets</b>			
Property, plant and equipment, net	15	565,936	588,969
Construction in progress	16	111,311	168,977
Goodwill	17	8,212	6,257
Interest in associates	18	25,692	28,812
Interest in jointly controlled entities	19	19,992	21,388
Investments	20	1,829	2,001
Deferred tax assets	22	12,706	14,288
Lease prepayments		26,101	36,240
Long-term prepayments and other assets	21	29,994	34,746
<b>Total non-current assets</b>		<b>801,773</b>	<b>901,678</b>
<b>Total assets</b>		<b>1,144,528</b>	<b>1,266,693</b>
<b>LIABILITIES AND EQUITY</b>			
<b>Current liabilities</b>			
Short-term debts	23	68,224	73,063
Loans from Sinopec Group Company and its affiliates	23	12,149	42,919
Trade accounts payable	24	177,002	215,628
Bills payable	24	5,933	6,656
Accrued expenses and other payables	25	176,878	169,062
Income tax payable		4,054	6,045
<b>Total current liabilities</b>		<b>444,240</b>	<b>513,373</b>
<b>Non-current liabilities</b>			
Long-term debts	23	116,894	124,518
Loans from Sinopec Group Company and its affiliates	23	37,563	37,598
Deferred tax liabilities	22	15,181	16,043
Provisions	26	18,381	21,591
Other liabilities		4,925	5,534
<b>Total non-current liabilities</b>		<b>192,944</b>	<b>205,284</b>
<b>Total liabilities</b>		<b>637,184</b>	<b>718,657</b>
<b>Equity</b>			
Share capital	27	86,702	86,820

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Reserves	28	385,626	424,094
Total equity attributable to equity shareholders of the Company		472,328	510,914
Non-controlling interests		35,016	37,122
<b>Total equity</b>		<b>507,344</b>	<b>548,036</b>
<b>Total liabilities and equity</b>		<b>1,144,528</b>	<b>1,266,693</b>

See accompanying notes to consolidated financial statements.

Table of Contents

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(Amounts in millions)

	Share capital RMB	Capital reserve RMB	Share premium RMB	Statutory surplus reserve RMB	Discretionary surplus reserve RMB	Other reserves RMB	Retained earnings RMB	Total equity attributable to equity shareholders of the Company RMB	Non- controlling interests RMB	Total equity RMB
Balance as of January 1, 2010	86,702	(17,911)	18,072	48,031	67,000	5,512	172,109	379,515	25,991	405,506
Net income							71,782	71,782	6,200	77,982
Other comprehensive income						(2,007)		(2,007)	(116)	(2,123)
Total comprehensive income for the year						(2,007)	71,782	69,775	6,084	75,859
Transactions with owners recorded directly in equity:										
Contributions by and distributions to owners:										
Warrants exercised			2					2		2
Expiry of warrants		(6,879)	6,879							
Final dividend for 2009							(9,537)	(9,537)		(9,537)
Interim dividend for 2010							(6,936)	(6,936)		(6,936)
Appropriation (Note 28 (c))				6,680	20,000		(26,680)			
Transfer from retained earnings to other reserves						1,672	(1,672)			
Transfer from other reserves to capital reserve		(8,310)				8,310				
Consideration for the Acquisition of SSI (Note 1)						(13,177)		(13,177)		(13,177)
Distribution to Sinopec Group Company		(29)						(29)		(29)
Distributions by subsidiaries to non-controlling interests net of contributions									(643)	(643)
Total contributions by and distributions to owners		(15,218)	6,881	6,680	20,000	(3,195)	(44,825)	(29,677)	(643)	(30,329)
Changes in ownership interests in subsidiaries that do not result in a loss of control:										
Acquisitions of non-controlling interests of subsidiaries		(9)						(9)		(9)
Total transactions with owners		(15,227)	6,881	6,680	20,000	(3,195)	(44,825)	(29,686)	(643)	(30,329)
Others(Note 28(i))						1,325	(1,325)			
Balance as of December 31, 2010	86,702	(33,138)	24,953	54,711	87,000	1,635	197,741	419,604	31,432	451,036

See accompanying notes to consolidated financial statements.



Table of Contents**CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (CONTINUED)****FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012****(Amounts in millions)**

	Share capital RMB	Capital reserve RMB	Share premium RMB	Statutory surplus reserve RMB	Discretionary surplus reserve RMB	Other reserves RMB	Retained earnings RMB	Total equity attributable to equity shareholders of the Company RMB	Non- controlling interests RMB	Total equity RMB
Balance as of January 1, 2011	86,702	(33,138)	24,953	54,711	87,000	1,635	197,741	419,604	31,432	451,036
Net income							73,225	73,225	5,220	78,445
Other comprehensive income						(490)		(490)	(238)	(728)
Total comprehensive income for the year						(490)	73,225	72,735	4,982	77,717
Transactions with owners recorded directly in equity:										
Contributions by and distributions to owners:										
Final dividend for 2010							(11,271)	(11,271)		(11,271)
Interim dividend for 2011							(8,670)	(8,670)		(8,670)
Appropriation (Note 28 (c) and (d))				6,552	30,000		(36,552)			
Distribution to Sinopec Group Company		(27)						(27)		(27)
Distributions by subsidiaries to non-controlling interests net of contributions									(1,374)	(1,374)
Total contributions by and distributions to owners		(27)		6,552	30,000		(56,493)	(19,968)	(1,374)	(21,342)
Changes in ownership interests in subsidiaries that do not result in a loss of control:										
Acquisitions of non-controlling interests of subsidiaries		(43)						(43)	(24)	(67)
Total transactions with owners		(70)		6,552	30,000		(56,493)	(20,011)	(1,398)	(21,409)
Others (Note 28(i))						1,790	(1,790)			
Balance as of December 31, 2011	86,702	(33,208)	24,953	61,263	117,000	2,935	212,683	472,328	35,016	507,344

See accompanying notes to consolidated financial statements.

Table of Contents

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (CONTINUED)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(Amounts in millions)

	Share capital RMB	Capital reserve RMB	Share premium RMB	Statutory surplus reserve RMB	Discretionary surplus reserve RMB	Other reserves RMB	Retained earnings RMB	Total equity attributable to equity shareholders of the Company RMB	Non- controlling interests RMB	Total equity RMB
Balance as of January 1, 2012	86,702	(33,208)	24,953	61,263	117,000	2,935	212,683	472,328	35,016	507,344
Net income							63,879	63,879	2,917	66,796
Other comprehensive income						(65)		(65)	(24)	(89)
Total comprehensive income for the year						(65)	63,879	63,814	2,893	66,707
Transactions with owners recorded directly in equity:										
Contributions by and distributions to owners:										
Exercise of Conversion of the 2011 Convertible Bonds (Note 27)	118		799					917		917
Final dividend for 2011							(17,364)	(17,364)		(17,364)
Interim dividend for 2012							(8,682)	(8,682)		(8,682)
Appropriation (Note 28 (c))				6,340			(6,340)			
Rights issue of shares by a subsidiary, net of issuance costs (Note 28(h))		(18)						(18)	781	763
Distribution to Sinopec Group Company		(2)						(2)		(2)
Distributions by subsidiaries to non-controlling interests net of contributions									(1,462)	(1,462)
Total contributions by and distributions to owners	118	(20)	799	6,340			(32,386)	(25,149)	(681)	(25,830)
Changes in ownership interests in subsidiaries that do not result in a loss of control:										
Acquisitions of non-controlling interests of subsidiaries		(79)						(79)	(106)	(185)
Total transactions with owners	118	(99)	799	6,340			(32,386)	(25,228)	(787)	(26,015)
Others (Note 28(i))						435	(435)			
Balance as of December 31, 2012	86,820	(33,307)	25,752	67,603	117,000	3,305	243,741	510,914	37,122	548,036

See accompanying notes to consolidated financial statements.





Table of Contents

## CHINA PETROLEUM &amp; CHEMICAL CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(Amounts in millions)

	Note	Years ended December 31,		
		2010 RMB	2011 RMB	2012 RMB
<b>Net cash generated from operating activities</b>	(a)	170,333	150,622	142,380
<b>Investing activities</b>				
Capital expenditure		(106,371)	(131,737)	(145,663)
Exploratory wells expenditure		(7,392)	(10,517)	(11,403)
Purchase of investments, investments in associates and investments in jointly controlled entities		(11,310)	(7,488)	(10,246)
Proceeds from disposal of investments and investments in associates		1,687	3,039	1,384
Proceeds from disposal of property, plant and equipment		16,126	1,216	325
Purchase of time deposits with financial institutions		(3,522)	(5,801)	(2,239)
Proceeds from maturity of time deposits with financial institutions		3,626	6,383	2,381
Interest received		660	1,584	1,254
Investment and dividend income received		1,335	2,961	2,429
Payments for derivative financial instruments		(5,273)	(3,768)	(2,908)
Proceeds from derivative financial instruments		4,646	3,679	2,489
<b>Net cash used in investing activities</b>		(105,788)	(140,449)	(162,197)
<b>Financing activities</b>				
Proceeds from issuance of corporate bonds		21,000	5,000	80,000
Proceeds of issuance of 2011 Convertible Bonds, net of issuing expenses			22,889	
Proceeds from warrants exercised		2		
Proceeds from bank and other loans		663,491	536,397	850,317
Repayments of corporate bonds and redemption of 2007 Convertible Bonds		(31,000)	(6,036)	(68,500)
Repayments of bank and other loans		(672,804)	(532,667)	(820,067)
Distributions by subsidiaries to non-controlling interests		(1,051)	(1,812)	(2,807)
Contributions to subsidiaries from non-controlling interests		408	117	1,474
Acquisitions of non-controlling interests of subsidiaries			(36)	(152)
Dividend paid		(16,391)	(19,469)	(25,486)
Interest paid		(6,739)	(6,899)	(9,151)
Distributions to Sinopec Group Company		(13,210)		
<b>Net cash used in financing activities</b>		(56,294)	(2,516)	5,628
<b>Net increase /(decrease) in cash and cash equivalents</b>		8,251	7,657	(14,189)
<b>Cash and cash equivalents as of January 1</b>		8,782	17,008	24,647
<b>Effect of foreign currency exchange rate changes</b>		(25)	(18)	(2)
<b>Cash and cash equivalents as of December 31</b>		17,008	24,647	10,456

See accompanying notes to consolidated financial statements.

F-9

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Table of Contents**CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES****NOTES TO CONSOLIDATED STATEMENTS OF CASH FLOWS****FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

(Amounts in millions)

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

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
<b>Operating activities</b>			
<b>Earnings before income tax</b>	103,663	104,565	90,642
Adjustment for:			
Depreciation, depletion and amortization	59,253	63,816	70,456
Dry hole costs written off	4,986	5,979	7,988
Income from associates and jointly controlled entities	(5,390)	(4,152)	(1,626)
Investment income	(273)	(168)	(235)
Interest income	(660)	(1,584)	(1,254)
Interest expense	7,972	9,241	11,217
Unrealized gain on foreign currency exchange rate changes and derivative financial instruments	(438)	(1,679)	(190)
Gain on disposal of property, plant and equipment, net	(253)	(754)	(16)
Impairment losses on long-lived assets	14,477	2,809	1,014
Unrealized loss / (gain) on embedded derivative component of the convertible bonds	127	(1,259)	62
	183,464	176,814	178,058
Increase in trade accounts receivable	(16,500)	(15,628)	(22,674)
(Increase)/decrease in bills receivable	(13,840)	(12,011)	7,916
Increase in inventories	(14,819)	(46,871)	(14,845)
Increase in prepaid expenses and other current assets	(7,062)	(3,189)	(8,245)
Increase in lease prepayments	(3,196)	(5,776)	(10,139)
Decrease in long-term prepayments and other assets	2,831	5,815	7,549
Increase in trade accounts payable	35,765	44,474	38,626
(Decrease)/increase in bills payable	(19,293)	2,115	723
Increase/(decrease) in accrued expenses and other payables	37,288	33,809	(12,040)
(Decrease)/increase in other liabilities	(147)	868	129
	184,491	180,420	165,058
Income tax paid	(14,158)	(29,798)	(22,678)
<b>Net cash generated from operating activities</b>	<b>170,333</b>	<b>150,622</b>	<b>142,380</b>

See accompanying notes to consolidated financial statements.



Table of Contents

**CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES**

**SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING**

**ACTIVITIES (UNAUDITED)**

**(All currency amounts in millions)**

**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 bureau, 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*

Pursuant to the resolution passed at the Directors' meeting on March 26, 2010, the Group acquired 55% equity interests of Sonangol Sinopec International Limited ( SSI) from Sinopec Overseas Oil & Gas Limited ( SOOGL ), a subsidiary of Sinopec Group Company, and assumed the shareholder's loans of USD 292 provided by SOOGL to SSI for a total cash consideration of USD 2,259 (hereinafter referred to as the Acquisition of SSI ). SSI is engaged in the oil and gas operations in the Republic of Angola ( Angola ).

As the Group and SSI are under the common control of Sinopec Group Company, the Acquisition of SSI has been reflected in the accompanying consolidated financial statements as combination of entities under common control in a manner similar to a pooling-of-interests. Accordingly, the assets and liabilities of the SSI have been accounted for at historical cost and the consolidated financial statements of the Company prior to these acquisition have been restated to include the results of operations and the assets and liabilities of SSI on a combined basis. The differences between the total consideration paid over the amounts of the net assets of SSI were RMB 8,310, which were accounted for as equity transactions.

The accompanying financial statements have been prepared in accordance with International Financial Reporting Standards ( IFRS ) as issued by the International Accounting Standards Board ( IASB ). IFRS includes International Accounting Standards ( IAS ) and related interpretations. 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 22, 2013.

The IASB has issued certain new and revised IFRS that are first effective for the current accounting period of the Group. There have been no significant changes to the accounting policy applied in these financial statements for the periods presented as a result of these developments.

The Group has not adopted any other new standard or interpretation that is not yet effective for the current accounting period (Note 36).

Table of Contents

The accompanying 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 (m)) and derivative component of the convertible bonds (Note 2(q)) to their fair values.

The preparation of the financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the 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 judgments 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 IFRS that have significant effect on the financial statements and the major sources of estimation uncertainty are disclosed in Note 35.

Certain comparative figures have been reclassified to conform with presentation adopted in the financial statements.

Table of Contents

**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 jointly controlled entities.

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

Subsidiaries are those entities controlled by the Group. Control exists when the Group has the power, directly or indirectly, to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

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 statements of changes in equity within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statements of income and consolidated statements of comprehensive income as an allocation of the total net income or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Company.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is 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 jointly controlled entity (note 2a(ii)).

The particulars of the Group's principal subsidiaries are set out in Note 3.



(ii) Associates and jointly controlled entities

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.

A jointly controlled entity is an entity which operates under a contractual arrangement between the Group and other parties, where the contractual arrangement establishes that the Group and one or more of the other parties share joint control over the economic activity of the entity.

Investments in associates and jointly controlled entities 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 (n)).

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 statements 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 statements of comprehensive income.

Table of Contents

When the Group ceases to have significant influence over an associate or joint control over a jointly controlled entity, 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 2a (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 jointly controlled entities 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 statements 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 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 statements 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(n)). 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.

**(e) Inventories**

Inventories, other than spare parts and consumables, 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.

Spare parts and consumables are stated at cost less any provision for obsolescence.

Table of Contents**(f) Property, plant and equipment**

An item of property, plant and equipment is recorded at cost, less accumulated depreciation and impairment losses (Note 2(n)). The cost of an asset comprises its purchase price, any directly attributable costs of bringing the asset to working condition and location for its intended use. The Group 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, 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 statements 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 statements 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:

Buildings	12to 50 years
Equipment, machinery and others	4 to 30 years

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 support 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 relating to proved properties are amortized at the field level on a unit-of-production method. The amortization rates are determined based on oil and gas reserves estimated to be recoverable from existing facilities over the shorter of the economic lives of crude oil and natural gas reservoirs and the terms of the relevant production licenses.

Gains and losses on the disposal of proved oil and gas properties are not recognized unless the disposal encompasses an entire property. The proceeds on such disposals are credited to the carrying amounts of oil and gas properties.

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. These estimated future dismantlement costs are discounted at a credit-adjusted 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.

Table of Contents

**(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(n)). 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(n)). Cost comprises direct costs of construction as well as interest charges, and foreign exchange differences on related borrowed funds to the extent that they are regarded as an adjustment to interest charges, during the periods of construction.

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

No depreciation is provided in respect of construction in progress.

**(j) Goodwill**

Goodwill represents amounts arising on acquisition of subsidiaries, associates or jointly controlled entities. 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 cash-generating units, or groups of cash generating units, that is expected to benefit the synergies of the combination and is tested annually for impairment (Note 2(n)). In respect of associates and jointly controlled entities, the carrying amount of goodwill is included in the carrying amount of the interest in the associates or jointly controlled entities and the investment as a whole is tested for impairment whenever there is objective evidence of impairment (Note 2(n)).

**(k) Investments**

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 statements of income. Investments in equity securities, other than investments in associates and jointly controlled entities, 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(n)).

Investments in securities held for trading are classified as current assets. Any attributable transaction costs are recognized in the consolidated statements 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 statements of income.

Table of Contents

**(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 statements of income, except where the derivatives qualify for cash flow hedge accounting or the hedge of the net investment in a foreign operation, in which case recognition of any resultant gain or loss depends on the nature of the item being hedged (Note 2(m)).

**(m) 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 statements of income.

If a hedge of a forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability, 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 or liability.

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 statements of income in the same period or periods during which the asset acquired or liability assumed affects the consolidated statements 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 statements of income in the same period or periods during which the hedged forecast transaction affects the consolidated statements 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 statements of income immediately.

**(ii) 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 the exchange reserve until the disposal of the foreign operation, at which time the cumulative gain or loss is reclassified from equity to the consolidated statements of income. The ineffective portion is recognized immediately in the consolidated statements of income.

**(n) 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 statements of income. Impairment losses for trade and other receivables are reversed through the consolidated statements 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.

Table of Contents

For investments in subsidiaries, associates and jointly controlled entities 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(n)(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(n)(ii).

(ii) Impairment of other long-lived assets is accounted for 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 sell 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 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 statements 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 sell, or value in use, if determinable.

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.

(o) **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.

**(p) 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 statements of income over the period of borrowings using the effective interest method.

**(q) 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.

Table of Contents

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 statements 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 statements of income. The liability component is subsequently carried at amortized cost until extinguished on conversion or redemption. The interest expense recognized in the consolidated statements 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.

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 statements of income.

(r) 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, 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.

Table of Contents

**(s) 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 statements 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.

**(t) 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.

**(u) Repairs and maintenance expenditure**

Repairs and maintenance expenditure is expensed as incurred.

**(v) Environmental expenditures**

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

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

**(w) Research and development expense**

Research and development expenditures are expensed in the period in which they are incurred. Research and development expense amounted to RMB 4,835, RMB 4,862 and RMB 5,842 for the years ended December 31, 2010, 2011 and 2012, respectively.

**(x) Operating leases**

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

**(y) Employee benefits**

The contributions payable under the Group's retirement plans are recognized as an expense in the consolidated statements 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.

Table of Contents

**(z) Income tax**

Income tax comprises current and deferred tax. Current tax is calculated on taxable income by applying the applicable tax rates. Deferred tax is provided using the 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 statements 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.

**(aa) Dividends**

Dividends are recognized as a liability in the period in which they are declared.

**(bb) Segment reporting**

Operating segments, and the amounts of each segment item reported in the 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.



Table of Contents**3. OTHER OPERATING REVENUES**

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Sale of materials, service and others	36,032	41,479	51,918
Rental income	392	437	509
	36,424	41,916	52,427

**4. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES**

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

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Operating lease charges	10,452	11,231	11,646
Impairment losses			
- trade accounts receivable	48	51	44
- other receivables	308	212	47

**5. PERSONNEL EXPENSES**

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Salaries, wages and other benefits	34,018	40,034	45,164
Contributions to retirement schemes (Note 31)	5,012	5,394	6,603
	39,030	45,428	51,767

**6. TAXES OTHER THAN INCOME TAX**

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Consumption tax (i)	117,928	126,023	129,044
Special oil income levy (ii)	19,760	37,600	29,319
City construction tax (iii)	11,277	13,018	12,443
Education surcharge	6,339	9,441	9,436
Resources tax	1,318	3,185	7,610

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Business tax	567	682	631
	157,189	189,949	188,483

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Note:

(i) The consumption tax rates on gasoline, diesel, naphtha, solvent oil, lubricant oil, fuel oil and jet fuel oil are RMB 1,388.0 per tonne, RMB 940.8 per tonne, RMB 1,385.0 per tonne, RMB 1,282.0 per tonne, RMB 1,126.0 per tonne, RMB 812.0 per tonne and RMB 996.8 per tonne, respectively.

(ii) Before November 1, 2011, special oil income levy is levied on oil exploration and production entities based on the progressive rates ranging from 20% to 40% on the portion of the monthly weighted average sales price of the crude oil produced in the PRC exceeding USD 40 per barrel. Effective from November 1, 2011, special oil income levy is levied on oil exploration and production entities based on the progressive rates ranging from 20% to 40% on the portion of the monthly weighted average sales price of the crude oil produced in the PRC exceeding USD 55 per barrel.

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

Table of Contents**7. OTHER OPERATING EXPENSES/(INCOME), NET**

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Fines, penalties and compensations	69	236	181
Donations	177	90	231
Gain on disposal of property, plant and equipment, net	(253)	(754)	(133)
Impairment losses on long-lived assets (Note i)	14,477	2,809	1,014
Net realized and unrealized losses on derivative financial instruments not qualified as hedging	55	132	68
Ineffective portion of change in fair value of cash flow hedges	(16)	(134)	(1)
Government grants (Note ii)	(1,196)	(1,497)	(2,926)
Others	294	131	337
	13,607	1,013	(1,229)

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Note:

(i) The primary factor resulting in the exploration and production ( E&P ) segment impairment losses of RMB 1,889, RMB 2,153 and RMB 1,006 on property, plant and equipment (Note 15) for the years ended December 31, 2010, 2011 and 2012, respectively, and impairment losses of RMB 1,361 on goodwill in respect of Dynamic cash generating unit for the year ended December 31, 2010 was unsuccessful development drilling and high operating and development costs for certain small 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 for the years ended December 31, 2010, 2011 and 2012, 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 5,121, RMB 308 and nil for the years ended December 31, 2010, 2011 and 2012, respectively, and comprised of impairment losses of RMB 2,953 and RMB 308 on property, plant and equipment (Note 15) for the years ended December 31, 2010 and 2011, respectively, and impairment loss of RMB 2,168 on goodwill in respect of Sinopec Qilu cash generating unit for the year ended December 31, 2010. Impairment losses recognized for the refining segment were RMB 4,902, RMB 78 and nil for the years ended December 31, 2010, 2011 and 2012, respectively, and comprised of impairment losses of RMB 1,649 and RMB 78 on property, plant and equipment (Note 15) for the years ended December 31, 2010 and 2011, respectively, impairment loss of RMB 2,737 on goodwill in respect of Sinopec Yangzi cash generating unit for the year ended December 31, 2010, and impairment losses of RMB 516 on construction in progress for the years ended December 31, 2010, 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, 2010, 2011 and 2012, 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.

Impairment losses recognized on long-lived assets of the marketing and distribution segment were RMB 1,183, RMB 269 and RMB 8 for the

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years ended December 31, 2010, 2011 and 2012, respectively, and comprised of impairment losses of RMB 1,055, RMB 241 and RMB 8 on property, plant and equipment (Note 15) for the years ended December 31, 2010, 2011 and 2012, respectively, and impairment losses of RMB 128 and RMB 28 on construction in progress (Note 16) for the years ended December 31, 2010 and 2011, respectively, 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 .

(ii) Government grants for the years ended December 31, 2010, 2011 and 2012 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 these grants.

Table of Contents**8. INTEREST EXPENSE**

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Interest expense incurred	8,664	9,398	12,069
Less: Interest expense capitalized*	(1,266)	(898)	(1,708)
	7,398	8,500	10,361
Accretion expenses (Note 26)	574	741	856
Interest expense	7,972	9,241	11,217
* Interest rates per annum at which borrowing costs were capitalized for construction in progress	3.0% to 6.5%	3.1% to 6.9%	2.6% to 6.2%

**9. INCOME TAX**

Income tax in the consolidated statements of income represents:

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Current tax			
- Provision for the year	22,177	22,731	23,950
- (Over) / under provision in prior years	(299)	367	572
Deferred taxation (Note 22)	3,803	3,022	(676)
	25,681	26,120	23,846

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

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Earnings before income tax	103,663	104,565	90,642
Expected PRC income tax expense at statutory tax rates of 25%	25,915	26,141	22,661
Tax effect of preferential tax rate (Note)	(1,525)	(1,825)	(2,080)
Effect of income taxes from foreign operations in excess of taxes at the PRC statutory tax rate (Note)	2,639	1,587	1,911
Tax effect of non-deductible expenses	2,361	542	536
Tax effect of non-taxable income	(1,839)	(1,565)	(707)
Tax effect of utilization of previously unrecognized tax losses and temporary differences	(1,663)	(394)	(190)
Tax effect of tax losses not recognized	92	734	963
Write-down of deferred tax assets		533	180
(Over) / under -provision in prior years	(299)	367	572

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Actual income tax expense	25,681	26,120	23,846
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Note:

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 the PRC that are taxed at preferential rates, and the foreign operation in Angola that is taxed at 50% of the assessable income as determined in accordance with the relevant income tax rules and regulations of Angola.

F-24

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Table of Contents**10 OTHER COMPREHENSIVE INCOME**

(a) Tax effects relating to each component of other comprehensive income

	Years ended December 31,								
	Before-tax amount RMB	2010 Tax effect RMB	Net-of-tax amount RMB	Before-tax amount RMB	2011 Tax effect RMB	Net-of-tax amount RMB	Before-tax amount RMB	2012 Tax effect RMB	Net-of-tax amount RMB
Cash flow hedges	(263)	42	(221)	166	(24)	142	(180)	29	(151)
Available-for-sale securities	(9)		(9)	(16)	1	(15)	26		26
Share of other comprehensive income of associates	(533)		(533)	(179)		(179)	80		80
Foreign currency translation differences	(1,360)		(1,360)	(676)		(676)	(44)		(44)
Other comprehensive income	(2,165)	42	(2,123)	(705)	(23)	(728)	(118)	29	(89)

(b) Reclassification adjustments relating to components of other comprehensive income

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
<b>Cash flow hedges:</b>			
Effective portion of changes in fair value of hedging instruments recognized during the year	(682)	(2,926)	(438)
Amounts transferred to initial carrying amount of hedged items	53	(14)	
Reclassification adjustments for amounts transferred to the cost of inventories for the year	366	3,106	258
Net deferred tax benefit/(expense) recognized in other comprehensive income	42	(24)	29
Net movement during the year recognized in other comprehensive income	(221)	142	(151)
<b>Available-for-sale securities:</b>			
Changes in fair value recognized during the year	(6)	(16)	26
Gain on disposal transferred to the consolidated statements of income	(3)		
Net deferred tax benefit recognized in other comprehensive income		1	
Net movement during the year recognized in other comprehensive income	(9)	(15)	26
<b>Share of other comprehensive income of associates:</b>			
Net movement during the year recognized in other comprehensive income	(533)	(179)	80

Foreign currency translation differences:

Net movement during the year recognized in other comprehensive  
income

(1,360)

(676)

(44)

F-25

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Table of Contents**11. BASIC AND DILUTED EARNINGS PER SHARE**

The calculation of basic earnings per share for the years ended December 31, 2010, 2011 and 2012 is based on the net income attributable to ordinary equity shareholders of the Company of RMB 71,782, RMB 73,225 and RMB 63,879, respectively, and the weighted average number of the shares of 86,702,513,472, 86,702,538,041 and 86,810,557,493, respectively. The calculation of diluted earnings per share for the years ended December 31, 2010, 2011 and 2012 is based on the net income attributable to ordinary equity shareholders of the Company of RMB 72,003, RMB 72,938 and RMB 64,482, respectively, and the weighted average number of the shares of 87,789,874,067, 89,795,334,781, and 91,086,256,256, respectively, calculated as follows:

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

	<b>2010 RMB</b>	<b>2011 RMB</b>	<b>2012 RMB</b>
Net income attributable to ordinary equity shareholders of the Company	71,782	73,225	63,879
After tax effect of interest expense (net of exchange gain) of the convertible bonds	126	657	556
After tax effect of unrealized loss/(gain) on embedded derivative component of the convertible bonds	95	(944)	47
Net income attributable to ordinary equity shareholders of the Company (diluted)	72,003	72,938	64,482

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

	<b>2010 Number of shares</b>	<b>2011 Number of shares</b>	<b>2012 Number of shares</b>
Weighted average number of shares as of December 31	86,702,513,472	86,702,538,041	86,810,557,493
Effect of conversion of the 2007 Convertible Bonds	1,087,360,595	1,084,859,551	1,093,640,860
Effect of conversion of the 2011 Convertible Bonds		2,007,937,189	3,182,057,903
Weighted average number of shares (diluted) as of December 31	87,789,874,067	89,795,334,781	91,086,256,256

Table of Contents**12. TRADE ACCOUNTS RECEIVABLE, NET**

	December 31,	
	2011 RMB	2012 RMB
Amounts due from third parties	44,344	63,311
Amounts due from Sinopec Group Company and its affiliates	6,185	7,207
Amounts due from associates and jointly controlled entities	9,204	11,576
	59,733	82,094
Less: Impairment losses for bad and doubtful debts	(1,012)	(699)
Trade accounts receivable, net	58,721	81,395

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

	2010 RMB	2011 RMB	2012 RMB
Balance as of January 1	1,921	1,322	1,012
Impairment losses recognized for the year	48	51	44
Reversal of impairment losses	(130)	(124)	(155)
Written off	(517)	(237)	(202)
Balance as of December 31	1,322	1,012	699

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 its affiliates are repayable under the same terms.

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

Table of Contents**13. INVENTORIES**

	December 31,	
	2011 RMB	2012 RMB
Crude oil and other raw materials	113,918	115,025
Work in progress	14,989	20,734
Finished goods	71,853	79,494
Spare parts and consumables	4,039	3,500
	204,799	218,753
Less: Allowance for diminution in value of inventories	(1,382)	(491)
	203,417	218,262

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

	2010 RMB	2011 RMB	2012 RMB
Balance as of January 1	1,038	1,091	1,382
Allowance for the year	1,087	3,264	7,419
Reversal of allowance on disposal	(77)	(122)	(378)
Written off	(957)	(2,851)	(7,943)
Other increase			11
Balance as of December 31	1,091	1,382	491

During the years ended December 31, 2010, 2011 and 2012, costs of inventories recognized as an expense in the consolidated statements of income were RMB 1,542,923, RMB 2,092,421 and RMB 2,372,215, respectively. Such costs include the write-down of inventories that was primarily related to the refining and chemicals segment, of RMB 1,087, RMB 3,264 and RMB 7,419, respectively, and the reversal of write-down of inventories of RMB 1,034, RMB 2,973 and RMB 8,321, respectively, that was mainly due to the sales of inventories. 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 statements of income.

**14. PREPAID EXPENSES AND OTHER CURRENT ASSETS**

	December 31,	
	2011 RMB	2012 RMB
Advances to third parties	869	906
Amounts due from Sinopec Group Company and its affiliates	821	932
Amounts due from associates and jointly controlled entities	984	1,970
Other receivables	963	963
Loans and receivables	3,637	4,771
Purchase deposits and other assets	5,273	6,814
Prepaid value-added tax and customs duty	17,458	21,671

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Available-for-sale financial assets	200	
Derivative financial instruments    hedging	837	1,006
Derivative financial instruments    non-hedging	54	187
	27,459	34,449

F-28

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Table of Contents**15. PROPERTY, PLANT AND EQUIPMENT, NET****By segment:**

	Exploration and production RMB	Refining RMB	Marketing and distribution RMB	Chemicals RMB	Corporate and others RMB	Total RMB
<b>Cost:</b>						
Balance as of January 1, 2011	499,802	212,385	127,123	214,946	13,555	1,067,811
Additions	2,464	79	1,664	277	174	4,658
Transferred from construction in progress	50,774	19,337	12,984	4,692	1,845	89,632
Reclassification	2	2,524	100	(2,389)	(237)	
Reclassification to lease prepayments and other assets		(57)	(2,397)	(9)	(5)	(2,468)
Exchange adjustment	(1,372)		(142)		(18)	(1,532)
Disposals	(1,174)	(2,666)	(2,545)	(2,700)	(357)	(9,442)
Balance as of December 31, 2011	550,496	231,602	136,787	214,817	14,957	1,148,659
Balance as of January 1, 2012	550,496	231,602	136,787	214,817	14,957	1,148,659
Additions	3,034	89	996	205	14	4,338
Transferred from construction in progress	58,201	19,615	12,318	6,625	1,024	97,783
Contributed to a jointly controlled entity		(3)		(268)		(271)
Reclassification	(410)	5,598	399	(8,035)	2,448	
Reclassification to lease prepayments and other assets		(51)	(8,707)	(233)	(1,142)	(10,133)
Exchange adjustment	(69)				(3)	(72)
Disposals	(2,319)	(2,588)	(1,294)	(2,900)	(117)	(9,218)
Balance as of December 31, 2012	608,933	254,262	140,499	210,211	17,181	1,231,086
<b>Accumulated depreciation:</b>						
Balance as of January 1, 2011	239,032	104,511	39,444	139,332	4,792	527,111
Depreciation charge for the year	35,288	11,356	6,496	8,087	1,028	62,255
Impairment losses for the year (Note 7(i))	2,153	78	241	308	1	2,781
Reclassification	(3)	2,529	4	(2,515)	(15)	
Reclassification to lease prepayments and other assets		(2)	(328)			(330)
Exchange adjustment	(523)		(61)		(2)	(586)
Written back on disposals	(1,114)	(2,442)	(2,034)	(2,589)	(329)	(8,508)
Balance as of December 31, 2011	274,833	116,030	43,762	142,623	5,475	582,723
Balance as of January 1, 2012	274,833	116,030	43,762	142,623	5,475	582,723
Depreciation charge for the year	39,103	12,119	7,401	8,479	1,078	68,180
Impairment losses for the year (Note 7(i))	1,006		8			1,014
Contributed to a jointly controlled entity		(1)		(218)		(219)
Reclassification	2,815	2,580	(1,005)	(5,404)	1,014	
Reclassification to lease prepayments and other assets		(14)	(2,192)	(62)		(2,268)
Exchange adjustment	(32)					(32)
Written back on disposals	(1,938)	(1,664)	(947)	(2,623)	(109)	(7,281)

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Balance as of December 31, 2012	315,787	129,050	47,027	142,795	7,458	642,117
<b>Net book value:</b>						
Balance as of January 1, 2011	260,770	107,874	87,679	75,614	8,763	540,700
Balance as of December 31, 2011	275,663	115,572	93,025	72,194	9,482	565,936
Balance as of December 31, 2012	293,146	125,212	93,472	67,416	9,723	588,969

F-29

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Table of Contents**By asset class:**

	Buildings RMB	Oil and gas properties RMB	Plant, machinery, equipment and others RMB	Total RMB
<b>Cost:</b>				
Balance as of January 1, 2011	66,253	421,600	579,958	1,067,811
Additions	196	2,421	2,041	4,658
Transferred from construction in progress	5,282	46,701	37,649	89,632
Reclassification	(1,987)	16	1,971	
Reclassification to lease prepayments and other assets	(598)		(1,870)	(2,468)
Exchange adjustment	(62)	(1,372)	(98)	(1,532)
Disposals	(608)	(188)	(8,646)	(9,442)
Balance as of December 31, 2011	68,476	469,178	611,005	1,148,659
Balance as of January 1, 2012	68,476	469,178	611,005	1,148,659
Additions	369	2,848	1,121	4,338
Transferred from construction in progress	4,445	44,829	48,509	97,783
Contributed to a jointly controlled entity			(271)	(271)
Reclassification	15,696	(65,498)	49,802	
Reclassification to lease prepayments and other assets	(1,740)		(8,393)	(10,133)
Exchange adjustment	(2)	(69)	(1)	(72)
Disposals	(1,029)		(8,189)	(9,218)
Balance as of December 31, 2012	86,215	451,288	693,583	1,231,086
<b>Accumulated depreciation:</b>				
Balance as of January 1, 2011	33,044	204,555	289,512	527,111
Depreciation charge for the year	2,531	31,560	28,164	62,255
Impairment losses for the year	37	2,153	591	2,781
Reclassification	47	14	(61)	
Reclassification to lease prepayments and other assets	(21)		(309)	(330)
Exchange adjustment	(25)	(523)	(38)	(586)
Written back on disposals	(525)	(167)	(7,816)	(8,508)
Balance as of December 31, 2011	35,088	237,592	310,043	582,723
Balance as of January 1, 2012	35,088	237,592	310,043	582,723
Depreciation charge for the year	2,757	30,293	35,130	68,180
Impairment losses for the year		1,006	8	1,014
Contributed to a jointly controlled entity			(219)	(219)
Reclassification	(2,864)	(16,645)	19,509	
Reclassification to lease prepayments and other assets	(158)		(2,110)	(2,268)
Exchange adjustment		(32)		(32)
Written back on disposals	(333)		(6,948)	(7,281)
Balance as of December 31, 2012	34,490	252,214	355,413	642,117
<b>Net book value:</b>				
Balance as of January 1, 2011	33,209	217,045	290,446	540,700
Balance as of December 31, 2011	33,388	231,586	300,962	565,936
Balance as of December 31, 2012	51,725	199,074	338,170	588,969

Note:

The additions to the exploration and production segment and oil and gas properties of the Group for the years ended December 31, 2011 and 2012 included RMB 2,425 and RMB 2,833, respectively, of the estimated dismantlement costs for site restoration (Note 26).

F-30

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Table of Contents**16. CONSTRUCTION IN PROGRESS**

	Exploration and production RMB	Refining RMB	Marketing and distribution RMB	Chemicals RMB	Corporate and others RMB	Total RMB
Balance as of January 1, 2011	30,374	20,675	27,312	8,985	2,253	89,599
Additions	64,305	20,445	26,292	10,136	1,868	123,046
Dry hole costs written off	(5,979)					(5,979)
Transferred to property, plant and equipment	(50,774)	(19,337)	(12,984)	(4,692)	(1,845)	(89,632)
Reclassification to lease prepayments and other assets	(187)	(376)	(4,713)	(152)	(234)	(5,662)
Impairment losses for the year (Note 7(i))			(28)			(28)
Exchange adjustment	(31)		(2)			(33)
Balance as of December 31, 2011	37,708	21,407	35,877	14,277	2,042	111,311
Balance as of January 1, 2012	37,708	21,407	35,877	14,277	2,042	111,311
Additions	85,988	35,397	25,862	20,993	1,995	170,235
Dry hole costs written off	(7,988)					(7,988)
Transferred to property, plant and equipment	(58,201)	(19,615)	(12,318)	(6,625)	(1,024)	(97,783)
Reclassification to lease prepayments and other assets	(381)	(698)	(5,238)	(127)	(352)	(6,796)
Reclassification		275		(275)		
Exchange adjustment	(2)					(2)
Balance as of December 31, 2012	57,124	36,766	44,183	28,243	2,661	168,977

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:

	2010 RMB	2011 RMB	2012 RMB
At beginning of year	8,823	10,652	10,649
Additions, net of amount that were capitalized and subsequently expensed in the same year, pending the determination of proved reserves	6,121	5,611	14,083
Transferred to oil and gas properties based on the determination of proved reserves	(1,158)	(1,637)	(1,108)
Dry hole costs written off	(3,134)	(3,977)	(5,795)
At end of year	10,652	10,649	17,829

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

	2010	December 31, 2011	2012
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	RMB	RMB	RMB
One year or less	9,530	7,571	11,931
Over one year	1,122	3,078	5,898
	10,652	10,649	17,829

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, 2010, 2011 and 2012 amounted to RMB 6,433, RMB 7,182 and RMB 7,469, respectively.

Table of Contents**17. GOODWILL**

	<b>2011</b>	<b>December 31,</b>	<b>2012</b>
	<b>RMB</b>		<b>RMB</b>
Cost:	15,869		13,914
Less: accumulated impairment losses	(7,657)		(7,657)
	8,212		6,257

**Impairment tests for cash-generating units containing goodwill**

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

	<b>2011</b>	<b>December 31,</b>	<b>2012</b>
	<b>RMB</b>		<b>RMB</b>
Sinopec Beijing Yanshan Branch ( Sinopec Yanshan )	1,157		1,157
Sinopec Zhenhai Refining and Chemical Branch ( Sinopec Zhenhai )	4,043		4,043
Sinopec (Hong Kong) Limited	853		853
Multiple units without individually significant goodwill	2,159		204
	8,212		6,257

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 12.0% to 12.7% and 11.5% to 12.5% for the years ended December 31, 2011 and 2012, respectively. Cash flows beyond the one-year period are maintained constant. Based on the estimated recoverable amount, no impairment loss was recognized. However, as key assumptions on which management has made in respect of future cash projections are subject to change, management believes that any adverse change in the assumptions would cause the carrying amount to exceed its recoverable amount.

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.

During the year ended December 31, 2012, the Group adjusted the carrying amounts of certain identifiable assets acquired in prior periods and corresponding goodwill, that are insignificant to the Group, has been adjusted accordingly.



Table of Contents**18. INTEREST IN ASSOCIATES**

	December 31,	
	2011 RMB	2012 RMB
Share of net assets	25,692	28,812

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. These investments, other than the principal associates disclosed below, are individually and in aggregate not material to the Group's financial condition or results of operations for all periods presented.

The Group's principal associates, all of which are incorporated in the PRC, 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
Sinopec Finance Company Limited	Incorporated	Registered capital RMB 10,000	49.00		Provision of non-banking financial services
China Aviation Oil Supply Company Limited	Incorporated	Registered capital RMB 3,800		29.00	Marketing and distribution of refined petroleum products
Zhongtian Synergetic Energy Company Limited	Incorporated	Registered capital RMB 5,404	38.75		Manufacturing of coal-chemical products
Shanghai Chemical Industry Park Development Company Limited	Incorporated	Registered capital RMB 2,372		38.26	Planning, development and operation of the Chemical Industry Park in Shanghai, the PRC
Shanghai Petroleum Company Limited	Incorporated	Registered capital RMB 900	30.00		Exploration and production of crude oil and natural gas

Summarized financial information in respect of the Group's principal associates is as follows:

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Results of operation:			

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Operating revenue	66,344	91,929	106,871
Net income	3,122	3,559	3,470
The Group's share of net income of associates	1,154	1,290	1,292

	December 31,	
	2011 RMB	2012 RMB
<b>Financial condition:</b>		
Total assets	171,072	161,095
Total liabilities	(137,375)	(123,225)
Net assets	33,697	37,870
The Group's share of net assets of associates	13,512	15,283

F-33

Table of Contents**19. INTEREST IN JOINTLY CONTROLLED ENTITIES**

	December 31,	
	2011 RMB	2012 RMB
Share of net assets	19,992	21,388

The Group's principal interests in jointly controlled entities are primarily engaged in the refining and chemical operations in the PRC 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
Shanghai Secco Petrochemical Company Limited	Incorporated	Registered capital USD 901	30.00	20.00	Manufacturing and distribution of petrochemical products
BASF-YPC Company Limited	Incorporated	Registered capital RMB 11,505	30.00	10.00	Manufacturing and distribution of petrochemical products
Fujian Refining and Petrochemical Company Limited	Incorporated	Registered capital RMB 13,306		50.00	Manufacturing and distribution of petrochemical products
Sinopec SABIC Tianjin Petrochemical Company limited	Incorporated	Registered capital RMB 6,120	50.00		Manufacturing and distribution of petrochemical products
State Power-Sinopec (Ningxia)Energy Chemical Company Limited	Incorporated	Registered capital RMB 4,600		50.00	Manufacturing and distribution of coal-chemical products

The Group's effective interest share of the jointly controlled entities' results of operation, financial condition and cash flows are as follows:

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Results of operation:			
Operating revenue	61,523	70,026	72,495
Expenses	(58,344)	(68,462)	(73,299)
Net income/(loss)	3,179	1,564	(804)

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	December 31,	
	2011 RMB	2012 RMB
Financial condition:		
Current assets	16,329	18,610
Non-current assets	38,122	45,459
Current liabilities	(10,931)	(17,069)
Non-current liabilities	(23,528)	(25,612)
Net assets	19,992	21,388

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
Cash flows:			
Net cash generated from operating activities	5,800	4,407	4,619
Net cash used in investing activities	(10,505)	(3,983)	(5,551)
Net cash generated from / (used in) financing activities	6,430	(645)	2,844
Net increase / (decrease) in cash and cash equivalents	1,725	(221)	1,912



Table of Contents**20. INVESTMENTS**

	December 31,	
	2011 RMB	2012 RMB
Available-for-sale financial assets		
- Equity securities, listed and at quoted market price	55	83
Investments in equity securities, unlisted and at cost	1,952	2,084
	2,007	2,167
Less: Impairment losses for investments	(178)	(166)
	1,829	2,001

Unlisted investments represent the Group's interests in PR (privately owned enterprises which are mainly engaged in non-oil and gas activities and operations.

The impairment losses relating to investments for the years ended December 31, 2011 and 2012 amounted to RMB 2 and RMB nil, respectively.

**21. LONG-TERM PREPAYMENTS AND OTHER ASSETS**

Long-term prepayments and other assets primarily represent prepaid rental expenses over one year, computer software, catalysts, operating rights of service stations and prepayments in connection with construction work and equipment purchases.

**22. DEFERRED TAX ASSETS AND LIABILITIES**

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

	Assets December 31,		Liabilities December 31,		Net balance December 31,	
	2011 RMB	2012 RMB	2011 RMB	2012 RMB	2011 RMB	2012 RMB
<i>Current</i>						
Receivables and inventories	3,105	3,292			3,105	3,292
Accruals	1,844	421			1,844	421
Cash flow hedges	7	36			7	36
<i>Non-current</i>						
Property, plant and equipment	6,163	7,467	(14,785)	(15,661)	(8,622)	(8,194)
Tax value of losses carried forward	1,550	3,051			1,550	3,051

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Embedded derivative component of the convertible bonds			(379)	(364)	(379)	(364)
Others	37	21	(17)	(18)	20	3
Deferred tax assets / (liabilities)	12,706	14,288	(15,181)	(16,043)	(2,475)	(1,755)

As of December 31, 2011 and 2012, certain subsidiaries of the Company did not recognize the tax value of losses carried forward of RMB 8,082 and RMB 11,510, respectively, of which RMB 2,936 and RMB 3,852 were incurred for the years ended December 31, 2011 and 2012, respectively, because it was not probable that the related tax benefit will be realized. The tax losses carried forward of RMB 2,994, RMB 825, RMB 365, RMB 3,474 and RMB 3,852 will expire in 2013, 2014, 2015, 2016 and 2017, respectively.

Periodically, management performs assessment on the probability that 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 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, 2011 and 2012, write-down of deferred tax assets amounted to RMB 533 and RMB 180 related to the expiration of tax loss, respectively.

Table of Contents

Movements in deferred tax assets and liabilities are as follows:

	Balance as of January 1, 2010 RMB	Recognized in consolidated statements of income RMB	Recognized in other comprehensive income RMB	Balance as of December 31, 2010 RMB
<i>Current</i>				
Receivables and inventories	3,207	300		3,507
Accruals	815	773		1,588
Cash flow hedges	(11)		42	31
<i>Non-current</i>				
Property, plant and equipment	(3,987)	(2,988)		(6,975)
Tax losses carried forward	3,954	(1,838)		2,116
Embedded derivative component of the convertible bonds	(96)	32		(64)
Others	94	(82)		12
Net deferred tax assets	3,976	(3,803)	42	215

	Balance as of January 1, 2011 RMB	Recognized in consolidated statements of income RMB	Recognized in other comprehensive income RMB	Balance as of December 31, 2011 RMB
<i>Current</i>				
Receivables and inventories	3,507	(402)		3,105
Accruals	1,588	256		1,844
Cash-flow hedges	31		(24)	7
<i>Non-current</i>				
Property, plant and equipment	(6,975)	(2,002)	355	(8,622)
Tax losses carried forward	2,116	(566)		1,550
Embedded derivative component of the the convertible bonds	(64)	(315)		(379)
Others	12	7	1	20
Net deferred tax assets/(liabilities)	215	(3,022)	332	(2,475)

Table of Contents

	Balance as of January 1, 2012 RMB	Recognized in consolidated statements of income RMB	Recognized in other comprehensive income RMB	Balance as of December 31, 2012 RMB
<i>Current</i>				
Receivables and inventories	3,105	187		3,292
Accruals	1,844	(1,423)		421
Cash-flow hedges	7		29	36
<i>Non-current</i>				
Property, plant and equipment	(8,622)	413	15	(8,194)
Tax value of losses carried forward	1,550	1,501		3,051
Embedded derivative component of the the convertible bonds	(379)	15		(364)
Others	20	(17)		3
Net deferred tax liabilities	(2,475)	676	44	(1,755)

**23. SHORT-TERM AND LONG-TERM DEBTS AND LOANS FROM SINOPEC GROUP COMPANY AND ITS AFFILIATES**

Short-term debts represent:

	December 31,	
	2011 RMB	2012 RMB
<b>Third parties debts</b>		
Short-term bank loans	25,036	27,597
Current portion of long-term bank loans	4,609	15,387
Current portion of long-term other loans	79	79
Current portion of long-term corporate bonds	38,500	15,466
Corporate bonds (Note (a))	43,188	30,000
	68,224	73,063
<b>Loans from Sinopec Group Company and its affiliates</b>		
Short-term loans	11,949	42,631
Current portion of long-term loans	200	288
	12,149	42,919
	80,373	115,982

The Group's weighted average interest rates on short-term loans were 3.5% and 1.9% as of December 31, 2011 and 2012, respectively.

Table of Contents

Long-term debts comprise:

	Interest rate and final maturity	2011 RMB	December 31, 2012 RMB
<b>Third parties debts</b>			
<b>Long-term bank loans</b>			
Renminbi denominated	Interest rates ranging from interest free to 6.9% per annum as of December 31, 2012 with maturities through 2025	19,620	16,770
Japanese Yen denominated	Interest rates 2.6% with maturities through 2024	1,179	785
US Dollar denominated	Interest rates ranging from interest free to 1.55% per annum as of December 31, 2012 with maturities through 2031	415	353
		21,214	17,908
<b>Long-term other loans</b>			
Renminbi denominated	Interest free as of December 31, 2012 with maturities through 2014	208	208
US Dollar denominated	Interest rates ranging from interest free to 4.89% per annum as of December 31, 2012 with maturities through 2015	23	19
		231	227
<b>Corporate bonds</b>			
Renminbi denominated	Fixed interest rate ranging from 3.75% to 5.68% per annum as of December 31, 2012 with maturities through 2022 (Note (b))	78,500	60,000

Table of Contents

Interest rate and final maturity		2011 RMB	December 31, 2012 RMB
<b>Convertible bonds</b>			
Hong Kong Dollar denominated	Convertible bonds with maturity in 2014 (Note (c))	10,415	10,956
Renminbi denominated	Bonds with Warrants with maturity in 2014 (Note (d))	27,095	28,327
	Convertible Bonds with maturity in 2017 (Note (e))	22,627	22,566
		60,137	61,849
Total third parties long-term debts		160,082	139,984
Less: Current portion		(43,188)	(15,466)
		116,894	124,518
<b>Long-term loans from Sinopec Group Company and its affiliates</b>			
Renminbi denominated	Interest rates ranging from interest free to 6.98% per annum as of December 31, 2012 with maturities through 2020	37,763	37,700
US Dollar denominated	Interest rates 2.06% per annum at 31 December 2012 with maturity in 2013		186
Total Long-term loans from Sinopec Group Company and its affiliates		37,763	37,886
Less: Current portion		(200)	(288)
		37,563	37,598
		154,457	162,116

Short-term and long-term bank loans, long-term other loans and loans from Sinopec Group Company and its affiliates are primarily unsecured and carried at amortized cost.

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Notes:

(a) The Company issued 270-day corporate bonds of face value RMB 5 billion to corporate investors in the PRC debenture market on July 25, 2012 at par value of RMB 100. The effective yield of the 270-day corporate bonds is 3.11% per annum.

The Company issued 90-day corporate bonds of face value RMB 5 billion to corporate investors in the PRC debenture market on October 25, 2012 at par value of RMB 100. The effective yield of the 90-day corporate bonds is 3.70% per annum.

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The Company issued 180-day corporate bonds of face value RMB 10 billion to corporate investors in the PRC debenture market on November 8, 2012 at par value of RMB 100. The effective yield of the 180-day corporate bonds is 3.88% per annum.

The Company issued 270-day corporate bonds of face value RMB 10 billion to corporate investors in the PRC debenture market on November 19, 2012 at par value of RMB 100. The effective yield of the 270-day corporate bonds is 3.90% per annum.

- (b) These corporate bonds are guaranteed by Sinopec Group Company and carried at amortized cost.

Table of Contents

(c) On April 24, 2007, the Company issued zero coupon convertible bonds due 2014 with an aggregate principal amount of HKD 11,700 (the 2007 Convertible Bonds). The holders can convert the 2007 Convertible Bonds into shares of the Company from June 4, 2007 onwards at a price of HKD10.76 per share, subject to adjustment for subdivision or consolidation of shares, bonus issues, rights issues, capital distribution, change of control and other events which have a dilutive effect on the issued share capital of the Company (the Conversion Option). Unless previously redeemed, converted or purchased and cancelled, the 2007 Convertible Bonds will be redeemed on the maturity date at 121.069% of the principal amount. The Company has an early redemption option at any time after April 24, 2011 (subject to certain criteria) (the Early Redemption Option) and a cash settlement option when the holders exercise their conversion right (the Cash Settlement Option).

During the year ended December 31, 2011, the Company redeemed part of the 2007 Convertible Bonds upon certain holders' request, with the principal amount of HKD 39.

During the year ended December 31, 2012, the conversion price of the 2007 Convertible Bonds was adjusted to HKD 10.60 per share as the result of dividend distribution.

As of December 31, 2011, the carrying amount of the liability component and the derivative component, representing the Conversion Option, the Early Redemption Option and the Cash Settlement Option, of the 2007 Convertible Bonds were RMB 10,345 and RMB 70, respectively. No conversion of the 2007 Convertible Bonds occurred up to December 31, 2011.

As of December 31, 2012, the carrying amount of the liability component and the derivative component, representing the Conversion Option, the Early Redemption Option and the Cash Settlement Option, of the 2007 Convertible Bonds were RMB 10,842 and RMB 114, respectively. No conversion of the 2007 Convertible Bonds occurred up to December 31, 2012.

As of December 31, 2011 and 2012, the fair value of the derivative components of the 2007 Convertible Bonds was calculated using the Black-Scholes Model. The following are the major inputs used in the Black-Scholes Model:

Stock price of H shares	HKD 8.17	HKD 8.78
Option adjusted spread	200 basis points	150 basis points
Average expected life	2.3 years	1.3 years

Any change in the major inputs into the Black-Scholes Model will result in changes in the fair value of the derivative component. The change in the fair value of the conversion option from December 31, 2010 to December 31, 2011 and from December 31, 2011 to December 31, 2012 resulted in an unrealized gain of RMB 259 and an unrealized loss of RMB 43, respectively, which have been recorded in the finance costs section of the consolidated statements of income.



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The initial carrying amount of the liability component of the 2007 Convertible Bonds is the residual amount, which is after deducting the allocated issuance cost of the 2007 Convertible Bonds relating to the liability component and the fair value of the derivative component as of April 24, 2007. Interest expense is calculated using the effective interest method by applying the effective interest rate of 4.19% to the adjusted liability component. Should the aforesaid derivative components not been separated out and the entire 2007 Convertible Bonds been considered as the liability component, the effective interest rate would have been 3.03%.

(d) On February 26, 2008, the Company issued bonds with stock warrants due 2014 with an aggregate principal amount of RMB 30,000 in the PRC (the Bonds with Warrants ). The Bonds with Warrants, which bear a fixed interest rate of 0.80% per annum payable annually, were issued at par value of RMB 100. The Bonds with Warrants are guaranteed by Sinopec Group Company.

The initial recognition of the liability component of the Bond with Warrants 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 or other derivative components ( market interest rate ). Interest expense is calculated using the effective interest method by applying the market interest rate of 5.40% to the liability component.

Table of Contents

(e) On March 1, 2011, the Company issued convertible bonds due 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 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 amount 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.

As of December 31, 2011, the carrying amount of the liability component and the derivative component, representing the Conversion Option of the 2011 Convertible Bonds were RMB 20,017 and RMB 2,610, respectively.

As of December 31, 2012, the carrying amount of the liability component and the derivative component, representing the Conversion Option of the 2011 Convertible Bonds were RMB 20,104 and RMB 2,462, respectively.

During the year ended December 31, 2012, the conversion price of the 2011 Convertible Bonds was adjusted to RMB 6.98 per share as a result of the final dividends for the year ended December 31, 2011 and the interim dividends for the year ended December 31, 2012 declared and paid during the year.

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.

As of December 31, 2011 and 2012, the fair value of the derivative component of the 2011 Convertible Bonds was calculated using the Binomial Model. The followings are the major inputs used in the Binomial Model:

[REDACTED]		
Stock price of A shares	RMB 7.18	RMB 6.92
[REDACTED]		
Credit spread	180 basis points	120 basis points
[REDACTED]		

F-41

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Table of Contents

Any change in the major inputs into the Binomial Model will result in changes in the fair value of the derivative component. The changes in the fair value of the derivative component from March 1, 2011 to December 31, 2011 and from December 31, 2011 to December 31, 2012 resulted in an unrealized gain of RMB 1,000 and an unrealized loss of RMB 19, respectively, which have been recorded in the finance costs section of the consolidated statement of income.

The initial carrying amount of the liability component of the 2011 Convertible Bonds is the residual amount, which is after deducting the allocated issuance cost of the 2011 Convertible Bonds relating to the liability component and the fair value of the derivative component as of March 1, 2011. Interest expense is calculated using the effective interest method by applying the effective interest rate of 5.10% to the adjusted liability component. Should the aforesaid derivative component not been separated out and the entire 2011 Convertible Bonds been considered as the liability component, the effective interest rate would have been 2.07%.

**24 TRADE ACCOUNTS AND BILLS PAYABLE**

	2011 RMB	December 31,	2012 RMB
Amounts due to third parties	167,207		204,535
Amounts due to Sinopec Group Company and its affiliates	6,429		6,870
Amounts due to associates and jointly controlled entities	3,366		4,223
	177,002		215,628
Bills payable	5,933		6,656
Trade accounts and bills payable measured at amortized cost	182,935		222,284

**25. ACCRUED EXPENSES AND OTHER PAYABLES**

	2011 RMB	December 31,	2012 RMB
Accrued expenditures	33,849		43,091
Advances from third parties	5,989		4,309
Amounts due to Sinopec Group Company and its affiliates	9,714		11,295
Others	7,167		7,421
Financial liabilities measured at amortized cost	56,719		66,116
Taxes other than income tax	47,864		33,718
Receipts in advance	65,606		68,120
Provision for onerous contracts for purchases of crude oil (Note)	5,800		
Derivative financial instruments - hedging	684		1,032
Derivative financial instruments - non-hedging	205		76
	176,878		169,062

Note:

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As of December 31, 2011, the Group has entered into certain non-cancellable purchase contracts of crude oil for delivery in 2012. Due to the high purchase costs of crude oil of these contracts, the Group determined that the economic benefits to be derived from processing the crude oil under these purchase contracts would be lower than the unavoidable cost of meeting the Group's obligations under these purchase contracts. Consequently, a provision for onerous contracts of RMB 5,800 was recognized as of December 31, 2011. The amount of provision for onerous contracts as of December 31, 2011 approximated the actual losses incurred from these non-cancellable purchase commitment contracts during the year ended December 31, 2012 and the provision has been utilized accordingly. Management expects the economic benefits to be derived from non-cancellable purchase commitment contracts entered into by the Group as of December 31, 2012 would be higher than the unavoidable cost of meeting the obligation under these contracts. Therefore, the Group did not recognize such a provision as of December 31, 2012.

F-42

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Table of Contents**26. PROVISIONS**

Provisions primarily represent provision for future dismantlement costs of oil and gas properties. The Group has committed to the local 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:

	2010 RMB	2011 RMB	2012 RMB
Balance as of January 1	11,789	15,510	18,317
Provision for the year	3,389	2,425	2,833
Accretion expenses	574	741	856
Utilized	(242)	(343)	(480)
Exchange adjustment		(16)	(1)
Balance as of December 31	15,510	18,317	21,525

**27. SHARE CAPITAL**

	2011 RMB	December 31, 2012 RMB
<b>Registered, issued and fully paid</b>		
70,039,798,886 listed A shares (2011: 69,922,074,436) of RMB 1.00 each	69,922	70,040
16,780,488,000 listed H shares (2011: 16,780,488,000) of RMB 1.00 each	16,780	16,780
	86,702	86,820

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 HK\$ 1.59 per H share and US\$ 20.645 per ADS,

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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 domestic 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, 2011, the Company issued 34,662 listed A shares with a par value of RMB 1.00 each, as a result of conversion exercised 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 exercised by the holders of the 2011 Convertible Bonds. (Note 23(e)).

All A shares and H shares rank pari passu in all material aspects.

Table of Contents**Capital management**

Management optimizes the structure of the Group's capital, which comprises of equity and loans. 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 its affiliates, by the total equity attributable to equity shareholders 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 24.6% and 24.1% as of December 31, 2011 and 2012, respectively. The liability-to-asset ratio of the Group was 55.7% and 56.7% as of December 31, 2011 and 2012, respectively.

The schedules of the contractual maturities of loans and commitments are disclosed in Notes 23 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 are subject to externally imposed capital requirements.

**28. RESERVES**

	2011 RMB	2012 RMB
<b>Capital reserve (Note (a))</b>		
Balance as of January 1	(33,138)	(33,208)
Distributions to Sinopec Group Company	(27)	(2)
Rights issue of shares by a subsidiary, net of issuance costs (Note (h))		(18)
Acquisitions of non-controlling interests of subsidiaries	(43)	(79)
Balance as of December 31	(33,208)	(33,307)
<b>Share premium (Note (b))</b>		
Balance as of January 1	24,953	24,953
Exercise of Conversion of the 2011 Convertible Bonds		799
Balance as of December 31	24,953	25,752
<b>Statutory surplus reserve (Note (c))</b>		
Balance as of January 1	54,711	61,263
Appropriation	6,552	6,340
Balance as of December 31	61,263	67,603
<b>Discretionary surplus reserve (Note (d))</b>		
Balance as of January 1	87,000	117,000
Appropriation	30,000	
Balance as of December 31	117,000	117,000



<b>Other reserves</b>		
Balance as of January 1	1,635	2,935
Other comprehensive income	(490)	(65)
Others (Note (i))	1,790	435
Balance as of December 31	2,935	3,305
<b>Retained earnings (Note (e))</b>		
Balance as of January 1	197,741	212,683
Net income attributable to equity shareholders of the Company	73,225	63,879
Final dividend in respect of the previous year, approved and paid during the year (Note (f))	(11,271)	(17,364)
Interim dividend (Note (g))	(8,670)	(8,682)
Appropriation	(36,552)	(6,340)
Others (Note (i))	(1,790)	(435)
Balance as of December 31	212,683	243,741
	385,626	424,094

Table of Contents

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Notes:

(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 consideration 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 168 and 169 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 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, 2010, 2011 and 2012, the Company transferred RMB 6,680, RMB 6,552 and RMB 6,340, respectively, being 10% of the net income determined in accordance with the PRC accounting policies complying with ASBE, to this reserve.

(d) For the year ended December 31, 2011, the directors authorized the transfer of RMB 30,000, which was approved by the shareholders at the Annual General Meeting on May 11, 2012, to discretionary surplus reserve.

(e) According to the Company's Articles of Association, the amount of retained earnings available for distribution to equity shareholders of the Company is the 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. As of December 31, 2011 and 2012, the amount of retained earnings available for distribution was RMB 121,463 and RMB 152,912, respectively, being the amount determined in accordance with the accounting policies complying with IFRS.

Pursuant to a resolution passed at the directors' meeting on March 22, 2013, final dividends in respect of the year ended December 31, 2012 were proposed for shareholders' approval at the Annual General Meeting, including a cash dividend of RMB 0.20 per share totaling RMB 17,933, and a bonus shares dividend in the proportion of 2 for every 10 shares. Final cash dividend for the year ended December 31, 2012 of RMB 17,933 proposed after the balance sheet date has not been recognized as a liability at the balance sheet date.

(f) Pursuant to the shareholders' approval at the Annual General Meeting on May 13, 2011, a final dividend of RMB 0.13 per share totaling RMB 11,271 in respect of the year ended December 31, 2010 was declared and paid on June 30, 2011.

Pursuant to the shareholders' approval at the Annual General Meeting on May 11, 2012, a final dividend of RMB 0.20 per share totaling RMB 17,364 in respect of the year ended December 31, 2011 was declared and paid on June 30, 2012.

(g) Pursuant to the Company's Articles of Association and a resolution passed at the Directors' meeting on August 26, 2011, the directors authorized to declare an interim dividend for the year ended December 31, 2011 of RMB 0.10 per share totaling RMB 8,670, which was paid on September 30, 2011.

Pursuant to the Company's Articles of Association and a resolution passed at the Directors' meeting on August 24, 2012, the directors authorized to declare an interim dividend for the year ended December 31, 2012 of RMB 0.10 per share totaling RMB 8,682, which was paid on September 28, 2012.

(h) During the year ended December 31, 2012, a subsidiary of the Group completed rights issue to its existing shareholders. The total proceeds received by this subsidiary from its non-controlling shareholders amounted to HKD 966.

(i) According to relevant PRC regulations, the Group is required to transfer an amount to other reserves for the safety production fund based on the turnover of certain refining and chemicals products or based on the production volume of crude oil and natural gas. During the year ended December 31, 2010, 2011 and 2012, the Group transferred RMB 1,325, RMB 1,790 and RMB 435 from retained earnings to other reserves for the safety production fund, respectively.

Table of Contents**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, 2011 and 2012, the future minimum lease payments under operating leases are as follows:

	December 31,	
	2011 RMB	2012 RMB
Within one year	10,414	15,844
Between one and two years	9,764	14,983
Between two and three years	9,668	14,844
Between three and four years	9,585	14,745
Between four and five years	9,465	14,598
Thereafter	215,810	326,234
	264,706	401,248

*Capital commitments*

As of December 31, 2011 and 2012, capital commitments are as follows:

	December 31,	
	2011 RMB	2012 RMB
Authorized and contracted for	192,792	202,745
Authorized but not contracted for	32,178	16,803
	224,970	219,548

These capital commitments relate to oil and gas exploration and development, refining and petrochemical production capacity expansion projects and the construction of service stations and oil depots.

*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 minimum 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 was 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.

Table of Contents

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 as incurred. Payments incurred were approximately RMB 450, RMB 438 and RMB 424 for the years ended December 31, 2010, 2011 and 2012, respectively.

Estimated future annual payments are as follows:

	December 31,	
	2011 RMB	2012 RMB
Within one year	335	325
Between one and two years	105	163
Between two and three years	25	28
Between three and four years	26	27
Between four and five years	28	24
Thereafter	730	699
	1,249	1,266

***Contingent liabilities***

As of December 31, 2011 and 2012, guarantees given to banks in respect of banking facilities granted to the parties below were as follows:

	December 31,	
	2011 RMB	2012 RMB
Jointly controlled entities	703	574
Associates	79	75
Others	6,700	5,496
	7,482	6,145

Management monitors the conditions that are subject to the guarantees to identify whether it is probable that a loss has occurred, and recognize any such losses under guarantees when those losses are estimable. As of December 31, 2011 and 2012, 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 3,880, RMB 4,228 and RMB 4,813 for the years ended December 31, 2010, 2011 and 2012, 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.

Table of Contents**30. 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 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 its affiliates, associates and jointly controlled entities*

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 its affiliates. 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 its affiliates, associates and jointly controlled entities, which were carried out in the ordinary course of business, are as follows:

	Note	Years ended December 31,		
		2010 RMB	2011 RMB	2012 RMB
Sales of goods	(i)	230,883	301,456	313,919
Purchases	(ii)	109,195	134,828	129,005
Transportation and storage	(iii)	1,407	1,385	1,590
Exploration and development services	(iv)	33,301	44,392	48,831
Production related services	(v)	10,287	12,401	11,893
Ancillary and social services	(vi)	3,693	3,856	4,062
Operating lease charges	(vii)	7,450	7,479	7,408
Agency commission income	(viii)	65	25	154
Interest received	(ix)	93	151	116
Interest paid	(x)	967	615	1,228
Net deposits placed with / (withdrawn from) related parties	(ix)	3,267	(1,483)	(3,108)
Net loans (repaid to) / obtained from related parties	(xi)	(1,254)	(6,707)	30,805

The amounts set out in the table above in respect of each of the years in the three-year period ended December 31, 2012 represent the relevant costs and income as determined by the corresponding contracts with the related parties.



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There were no guarantees given to banks by the Group in respect of banking facilities to related parties as of December 31, 2011 and 2012, 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.

Table of Contents

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Notes:

- (i) Sales of goods represent the sale of crude oil, intermediate petrochemical products, petroleum products and ancillary materials.
  
- (ii) Purchases represent the purchase of materials and utility supplies directly related to the Group's operations such as the procurement of raw and ancillary materials and related services, supply of water, electricity and gas.
  
- (iii) Transportation and storage represent the cost for the use of railway, road and marine transportation services, pipelines, loading, unloading and storage facilities.
  
- (iv) Exploration and development services comprise direct costs incurred in the exploration and development such as geophysical, drilling, well testing and well measurement services.
  
- (v) Production related services represent ancillary services rendered in relation to the Group's operations such as equipment repair and general maintenance, insurance premium, technical research, communications, fire fighting, 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 received 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, 2011 and 2012 were RMB 7,120 and RMB 4,012, respectively.

- (x) Interest paid represents interest charges on the loans and advances obtained from Sinopec Group Company and its affiliates.
- (xi) The Group obtained or repaid loans from or to Sinopec Group Company and its affiliates.

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. The terms of these agreements are summarized as follows:

(a) The Company has entered into a non-exclusive Agreement for Mutual Provision of Products and Ancillary Services ( Mutual Provision Agreement ) with Sinopec Group Company effective from 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:

- the government-prescribed price;
- where there is no government-prescribed price, the government-guidance price;
- where there is neither a government-prescribed price nor a government-guidance price, the market price; or
- where none of the above is applicable, the price to be agreed between the parties, which shall be based on a reasonable cost incurred in providing such services plus a profit margin not exceeding 6%.

(b) The Company has entered into a non-exclusive Agreement for Provision of Cultural and Educational, Health Care and Community Services with Sinopec Group Company effective from 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 agreed to in the above Mutual Provision Agreement.

Table of Contents

(c) The Company has entered into a series of lease agreements with Sinopec Group Company to lease certain land and buildings. The Company and Sinopec Group Company can renegotiate the rental amount every three years for land and the rental amount is approximately RMB 6,727 and RMB 6,727 per annum for the years ended December 31, 2011 and 2012, respectively. 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 Group has the option to terminate these leases upon six months notice to Sinopec Group Company.

(d) 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.

(e) 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.

Amounts due from / to Sinopec Group Company and its affiliates, associates and jointly controlled entities included in the following accounts captions are summarized as follows:

	December 31,	
	2011 RMB	2012 RMB
Trade accounts receivable	15,389	18,783
Prepaid expenses and other current assets	1,805	2,902
Long-term prepayment and other assets	4,626	4,196
Total amounts due from Sinopec Group Company and its affiliates, associates and jointly controlled entities	21,820	25,881
Trade accounts payable	9,795	11,093
Accrued expenses and other payables	9,714	11,295
Short-term loans and current portion of long-term loans from Sinopec Group Company and its affiliates	12,149	42,919
Long-term loans excluding current portion from Sinopec Group Company and its affiliates	37,563	37,598
Total amounts due to Sinopec Group Company and its affiliates, associates and jointly controlled entities	69,221	102,905

Amounts due from / to Sinopec Group Company and its affiliates, associates and jointly controlled entities, 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 its affiliates are set out in Note 23.

As of and for the years ended December 31, 2011 and 2012, no individually significant impairment losses for bad and doubtful debts were recognized in respect of amounts due from Sinopec Group Company and its affiliates, associates and jointly controlled entities.



Table of Contents**(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 compensations are as follows:

	Years ended December 31,		
	2010 RMB 000	2011 RMB 000	2012 RMB 000
Short-term employee benefits	8,692	8,558	8,990
Retirement scheme contributions	318	420	478
	9,010	8,978	9,468

Total emoluments are included in personnel expenses as disclosed in Note 5.

**(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, 2011 and 2012, 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 its affiliates, the Group has transactions with other state-controlled entities include but not limited to the following:

- sales and purchase 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 18.0% to 23.0% 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 staff salaries. A member of the above plans is entitled to a pension equal to a fixed proportion of the salary prevailing at his or her retirement date. The Group has no other material obligation for the payment of pension benefits associated with these plans beyond the annual contributions described above. The Group's contributions for the years ended December 31, 2010, 2011 and 2012 were RMB5,012, RMB 5,394 and RMB 6,603, respectively.

Table of Contents

**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 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



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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 cost plus an appropriate margin, as specified by the Group's policy.

Assets and liabilities dedicated to a particular segment's operations are included in that segment's total assets and liabilities. Segment assets include all tangible and intangible assets, except for cash and cash equivalents, time deposits with financial institutions, investments and deferred tax assets. Segment liabilities exclude short-term and long-term debts, loans from Sinopec Group Company and its affiliates, income tax payable, deferred tax liabilities and other non-current liabilities.

Table of Contents

Information on the Group's reportable segments is as follows:

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
<b>Sales of goods</b>			
Exploration and production			
External sales	35,024	47,519	53,738
Inter-segment sales	133,691	173,115	174,571
	168,715	220,634	228,309
Refining			
External sales	159,858	189,504	193,464
Inter-segment sales	805,704	1,015,855	1,071,387
	965,562	1,205,359	1,264,851
Marketing and distribution			
External sales	1,032,900	1,335,569	1,453,541
Inter-segment sales	3,258	5,767	9,638
	1,036,158	1,341,336	1,463,179
Chemicals			
External sales	285,596	368,658	356,150
Inter-segment sales	35,581	45,203	48,226
	321,177	413,861	404,376
Corporate and others			
External sales	363,380	522,517	676,725
Inter-segment sales	432,415	610,585	635,046
	795,795	1,133,102	1,311,771
Elimination of inter-segment sales	(1,410,649)	(1,850,525)	(1,938,868)
<b>Sales of goods</b>	1,876,758	2,463,767	2,733,618
<b>Other operating revenues</b>			
Exploration and production	18,430	21,204	28,876
Refining	6,015	6,713	6,061
Marketing and distribution	4,540	6,290	8,703
Chemicals	6,445	6,629	7,588
Corporate and others	994	1,080	1,199
<b>Other operating revenues</b>	36,424	41,916	52,427
<b>Sales of goods and other operating revenues</b>	1,913,182	2,505,683	2,786,045

Table of Contents

	Years ended December 31,		
	2010 RMB	2011 RMB	2012 RMB
<b>Result</b>			
<b>Operating income / (loss)</b>			
By segment			
- Exploration and production	47,149	71,631	70,054
- Refining	15,851	(35,780)	(11,444)
- Marketing and distribution	30,760	44,696	42,652
- Chemicals	15,011	26,732	1,178
- Corporate and others	(2,342)	(2,640)	(2,443)
- Elimination of inter-segment sales	(1,455)	891	(1,335)
<b>Total segment operating income</b>	104,974	105,530	98,662
Income / (loss) from associates and jointly controlled entities			
- Exploration and production	158	248	301
- Refining	557	(421)	(934)
- Marketing and distribution	864	1,103	1,034
- Chemicals	3,211	2,560	408
- Corporate and others	600	662	817
Aggregate income from associates and jointly controlled entities	5,390	4,152	1,626
Investment income / (loss)			
- Exploration and production	21		1
- Refining	26	4	75
- Marketing and distribution	169	143	131
- Chemicals	20	17	14
- Corporate and others	37	4	14
Aggregate investment income	273	168	235
Net finance costs	(6,974)	(5,285)	(9,881)
<b>Earnings before income tax</b>	103,663	104,565	90,642

Table of Contents

	2010 RMB	December 31, 2011 RMB	2012 RMB
<b>Assets</b>			
<b>Segment assets</b>			
- Exploration and production	305,413	329,968	368,587
- Refining	231,106	274,507	309,204
- Marketing and distribution	190,368	231,664	261,724
- Chemicals	126,357	143,215	145,867
- Corporate and others	60,897	77,489	100,517
<b>Total segment assets</b>	<b>914,141</b>	<b>1,056,843</b>	<b>1,185,899</b>
Interest in associates and jointly controlled entities	43,014	45,684	50,200
Investments	2,075	1,829	2,001
Deferred tax assets	15,232	12,706	14,288
Cash and cash equivalents and time deposits with financial institutions	18,140	25,197	10,864
Other unallocated assets	3,220	2,269	3,441
<b>Total assets</b>	<b>995,822</b>	<b>1,114,528</b>	<b>1,266,693</b>
<b>Liabilities</b>			
<b>Segment liabilities</b>			
- Exploration and production	65,067	86,538	90,430
- Refining	51,554	63,753	62,271
- Marketing and distribution	76,981	83,625	87,785
- Chemicals	33,836	30,459	30,100
- Corporate and others	75,832	111,680	139,811
<b>Total segment liabilities</b>	<b>303,270</b>	<b>376,055</b>	<b>410,397</b>
Short-term debts	17,019	68,224	73,063
Income tax payable	10,754	4,054	6,045
Long-term debts	136,465	116,894	124,518
Loans from Sinopec Group Company and its affiliates	56,419	49,712	80,517
Deferred tax liabilities	15,017	15,181	16,043
Other unallocated liabilities	5,842	7,064	8,074
<b>Total liabilities</b>	<b>544,786</b>	<b>637,184</b>	<b>718,657</b>

Table of Contents

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.

	2010 RMB	Years ended December 31, 2011 RMB	2012 RMB
<b>Capital expenditure</b>			
Exploration and production	52,680	58,749	78,272
Refining	20,015	25,767	32,161
Marketing and distribution	26,168	28,517	27,232
Chemicals	12,894	15,015	18,996
Corporate and others	1,894	2,136	2,061
	113,651	130,184	158,722
<b>Depreciation, depletion and amortization</b>			
Exploration and production	31,515	35,455	39,283
Refining	11,355	11,519	12,270
Marketing and distribution	6,489	7,202	8,792
Chemicals	8,864	8,457	8,883
Corporate and others	1,030	1,183	1,228
	59,253	63,816	70,456
<b>Impairment losses on long-lived assets</b>			
Exploration and production	3,250	2,153	1,006
Refining	4,902	78	
Marketing and distribution	1,183	269	8
Chemicals	5,121	308	
Corporate and others	21	1	
	14,477	2,809	1,014

## (2) Geographical information

The following tables set out information about the geographical information of (i) the Group's external sales and (ii) 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.

	2010 RMB	Years ended December 31, 2011 RMB	2012 RMB
<b>External sales</b>			
Mainland China	1,580,256	1,947,749	2,088,043
Others	332,926	557,934	698,002
	1,913,182	2,505,683	2,786,045

	2010 RMB	December 31, 2011 RMB	2012 RMB
<b>Non-current assets</b>			
Mainland China	693,435	762,805	862,044

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Others	26,144	24,375	22,123
	719,579	787,180	884,167

F-56

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Table of Contents**33. PRINCIPAL SUBSIDIARIES**

As of December 31, 2012, 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		Percentage of equity	Principal activities
China Petrochemical International Company Limited	RMB	1,400	100.00	Trading of petrochemical products
Sinopec Sales Company Limited	RMB	1,700	100.00	Marketing and distribution of refined petroleum products
Sinopec Yangzi Petrochemical Company Limited	RMB	13,203	100.00	Manufacturing of intermediate petrochemical products and petroleum products
Fujian Petrochemical Company Limited (Note)	RMB	5,019	50.00	Manufacturing of plastics, intermediate petrochemical products and petroleum products
Sinopec Shanghai Petrochemical Company Limited	RMB	7,200	55.56	Manufacturing of synthetic fibres, resin and plastics, intermediate petrochemical products and petroleum products
Sinopec Kantons Holdings Limited	HKD	207	72.34	Trading of crude oil and petroleum products
Sinopec Yizheng Chemical Fibre Company Limited (Note)	RMB	4,000	42.00	Production and sale of polyester chips and polyester fibres
Sinopec Zhongyuan Petrochemical Company Limited	RMB	2,400	93.51	Manufacturing of petrochemical products
Sinopec Shell (Jiangsu) Petroleum Marketing Company Limited	RMB	830	60.00	Marketing and distribution of refined petroleum products
BP Sinopec (Zhejiang) Petroleum Company Limited	RMB	800	60.00	Marketing and distribution of refined petroleum products
Sinopec Qingdao Refining and Chemical Company Limited	RMB	5,000	85.00	Manufacturing of intermediate petrochemical products and petroleum products
China International United Petroleum and Chemical Company Limited	RMB	3,000	100.00	Trading of crude oil and petrochemical products
Sinopec Hainan Refining and Chemical Company Limited	RMB	3,986	75.00	Manufacturing of intermediate petrochemical products and petroleum products
Sinopec (Hong Kong) Limited	HKD	5,477	100.00	Trading of crude oil and petrochemical products
Sinopec Senmei (Fujian) Petroleum Ltd.	RMB	1,840	55.00	Marketing and distribution of refined petroleum products
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
Sinopec International Petroleum Exploration and Production Limited	RMB	8,000	100.00	Investment in exploration, production and sales of petroleum and natural gas
Sinopec Fuel Oil Sales Company Limited	RMB	2,200	100.00	Marketing and distribution of refined petroleum products

Except for Sinopec Kantons Holdings Limited and Sinopec (Hong Kong) Limited, which are incorporated in Bermuda and Hong Kong, respectively, all of the above principal subsidiaries are incorporated in the PRC. All of the above principal subsidiaries are limited companies.

Note:

The Company consolidated the financial statements of the entity because it controlled the board of this entity and had the power to govern its financial and operating policies.

F-57

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Table of Contents

**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 its affiliates, advances to third parties, amounts due from associates and jointly controlled entities, derivative financial instruments and other receivables. Financial liabilities of the Group include short-term and long-term debts, loans from Sinopec Group Company and its affiliates, trade accounts payable, bills payable, amounts due to Sinopec Group Company and its affiliates, derivative financial instruments and advances from third parties.

The Group has exposure to the following risks from its use of financial instruments:

- credit risk;
- liquidity risk;
- market risk; and
- equity price 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, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management 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. Management performs ongoing credit evaluations of its 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. No single customer accounted for greater than 10% of total trade accounts receivable. The details of the Group's credit policy and quantitative disclosures in respect of the Group's exposure on credit risk for trade receivables are set out in Note 12.

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.

Table of Contents

As of December 31, 2011 and 2012, the Group has standby credit facilities with several PRC financial institutions which provide borrowings up to RMB 170,500 and RMB 197,696 on an unsecured basis, at a weighted average interest rate of 3.63% and 2.20% per annum, respectively. As of December 31, 2011 and 2012, the Group's outstanding borrowings under these facilities were RMB 3,767 and RMB 12,815 and were included in short-term 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:

	December 31, 2011					
	Carrying amount RMB	Total contractual undiscounted cash flow RMB	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	68,224	69,713	69,713			
Long-term debts	116,894	131,551	7,291	17,943	57,842	48,475
Loans from Sinopec Group						
Company and its affiliates	49,712	50,346	12,584	228	1,974	35,560
Trade accounts payable	177,002	177,002	177,002			
Bills payable	5,933	5,933	5,933			
Accrued expenses and other payables	53,655	53,655	53,655			
	471,420	488,200	326,178	18,171	59,816	84,035

	December 31, 2012					
	Carrying amount RMB	Total contractual undiscounted cash flow RMB	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	73,063	74,302	74,302			
Long-term debts	124,518	142,342	3,242	45,935	73,929	19,236
Loans from Sinopec Group						
Company and its affiliates	80,517	80,978	43,254	1,425	739	35,560
Trade accounts payable	215,628	215,628	215,628			
Bills payable	6,656	6,656	6,656			
Accrued expenses and other payables	63,559	63,559	63,559			
	563,941	583,465	406,641	47,360	74,668	54,796

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.

*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 its affiliates 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 its affiliates of the Group are the following amounts denominated in a currency other than the functional currency of the entity to which they relate:

F-59

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Table of Contents

Gross exposure arising from loans and borrowings	December 31,			
		2011		2012
US Dollars	USD	1,794	USD	2,405
Japanese Yen	JPY	14,532	JPY	10,753
Hong Kong Dollars	HKD	12,847	HKD	13,511

A 5 percent strengthening of Renminbi against the following currencies as of December 31 would have increased net income and retained earnings 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 2011.

	December 31,			
		2011		2012
US Dollars		424		567
Japanese Yen		44		29
Hong Kong Dollars		391		411

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 carrying 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 its affiliates of the Group are disclosed in Note 23.

As of December 31, 2011 and 2012, 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 and retained earnings by approximately RMB 271 and RMB 577, 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 2011.

***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 petroleum products and chemical products. The fluctuations in prices of crude oil, refined petroleum 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, 2011 and 2012, 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,

2011 and 2012 are set out in Notes 14 and 25.

As of December 31, 2011, it is estimated that a general increase/decrease of USD 10 per barrel in crude oil and refined oil products, with all other variables held constant, would increase/decrease the Group's net income and retained earnings by approximately RMB563, and increase/decrease the Group's other reserves by approximately RMB150. As of December 31, 2012, it is estimated that a general increase/decrease of USD 10 per barrel in crude oil and refined oil products, with all other variables held constant, would decrease/increase the Group's net income and retained earnings by approximately RMB 221, and increase/decrease the Group's other reserves by approximately RMB 152. This sensitivity analysis has been determined assuming that the change of prices was applied to the Group's derivative financial instruments at balance sheet date with exposure to commodity price risk. The analysis was performed on the same basis for 2011.

Table of Contents

***Equity price risk***

The Group is exposed to equity price risk arising from changes in the Company's own share price to the extent that the Company's own equity instruments underlie the fair values of derivatives of the Group. As of December 31, 2012, the Group's exposure to equity price risk is the derivative embedded in the 2007 Convertible Bonds and the 2011 Convertible Bonds issued by the Company as disclosed in Note 23(c) and (e) respectively.

As of December 31, 2011, it is estimated that an increase of 20% in the Company's own share price would decrease the Group's net income and retained earnings by approximately RMB 2,159 while a decrease of 20% in the Company's own share price would increase the Group's net income and retained earnings by approximately RMB 1,628. As of December 31, 2012, it is estimated that an increase of 20% in the Company's own share price would decrease the Group's net income and retained earnings by approximately RMB 2,007 while a decrease of 20% in the Company's own share price would increase the Group's net income and retained earnings by approximately RMB 1,448. The sensitivity analysis has been determined assuming that the changes in the Company's own share price had occurred at the balance sheet date and that all other variables remain constant. The analysis was performed on the same basis for 2011.

***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, 2011			
Level 1	Level 2	Level 3	Total

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	RMB	RMB	RMB	RMB
<b>Assets</b>				
Available-for-sale financial assets:				
- Listed	55			55
- Non-listed		200		200
Derivative financial instruments:				
- Derivative financial assets	133	758		891
	188	958		1,146
<b>Liabilities</b>				
Derivative financial instruments:				
- Embedded derivative components of the convertible bonds		2,680		2,680
- Other derivative financial liabilities	79	810		889
	79	3,490		3,569

F-61



Table of Contents

	December 31, 2012			Total RMB
	Level 1 RMB	Level 2 RMB	Level 3 RMB	
<b>Assets</b>				
Available-for-sale financial assets:				
- Listed	83			83
Derivative financial instruments:				
- Derivative financial assets	82	1,111		1,193
	165	1,111		1,276
<b>Liabilities</b>				
Derivative financial instruments:				
- Embedded derivative components of the convertible bonds		2,576		2,576
- Other derivative financial liabilities	92	1,016		1,108
	92	3,592		3,684

During the years ended December 31, 2011 and 2012, there were no transfers between instruments in Level 1 and Level 2.

## (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 (other than long-term indebtedness and investment 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 between 4.95% to 7.05% and 4.89% to 6.55% for the years ended December 31, 2011 and 2012, 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 its affiliates as of December 31, 2011 and 2012:

	December 31,	
	2011 RMB	2012 RMB
Carrying amount	160,082	137,408
Fair value	146,272	131,391

The Group has not developed an internal valuation model necessary to estimate the fair value of loans from Sinopec Group Company and its affiliates as it is not considered practicable to estimate their fair value because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive based on the Reorganization of the Group, its 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.

F-62

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Table of Contents

**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 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 those policies and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered when reviewing the financial statements. The significant accounting policies are set forth in Note 2. Management believes the following critical accounting policies involve the most significant judgments and estimates used in the preparation of the financial statements.

*Oil and gas properties and reserves*

The accounting for the exploration and production's oil and gas activities is subject to accounting rules that are unique to the oil and gas industry. There are two methods to account for oil and gas business activities, the successful efforts method and the full cost method. The Group has elected to use the successful efforts method. The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense as they are incurred. These costs primarily include dry hole costs, seismic costs and other exploratory costs. Under the full cost method, these costs are 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 expense and future dismantlement costs. 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.

*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.

Table of Contents

*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.

*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. POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE ANNUAL ACCOUNTING PERIOD ENDED DECEMBER 31, 2012**

Up to the date of issue of these financial statements, the IASB has issued a number of amendments, new standards and interpretations which are not yet effective for the annual accounting period ended December 31, 2012 and which have not been adopted in these financial statements.

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 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.

**37. POST BALANCE SHEET EVENT**

On February 4, 2013, the Company announced a schedule of placing new H shares to certain independent investors. Pursuant to the schedule and on February 14, 2013, the Company issued 2,845,234,000 H Shares with a par value of RMB 1.00 each at the placing price of HKD 8.45 per share to these independent investors, with the aggregate net proceeds of HKD 23,970.

Pursuant to a resolution passed at the director's meeting on March 22, 2013, the Company proposed to transfer share premium to share capital in the proportion of 1 for every 10 shares, subject to the shareholders' approval at the Annual General Meeting.

### **38. PARENT AND ULTIMATE HOLDING COMPANY**

The directors consider the parent and ultimate holding company of the Group as of December 31, 2012 is Sinopec Group Company, a state-owned enterprise established in the PRC. This entity does not produce financial statements available for public use.

Table of Contents**CHINA PETROLEUM & 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 as of December 31, 2010, 2011 and 2012, 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 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 of the Group set out below represent information of the Company and its consolidated subsidiaries. The oil and gas producing activities of the equity method investee of the Group are insignificant and have not been combined with the information included herein.

**Table I: Capitalized costs related to oil and gas producing activities**

	Years ended December 31,		
	2010	2011	2012
	RMB	RMB	RMB
Property cost, wells and related equipment and facilities	421,600	469,178	451,288
Supporting equipment and facilities	79,001	82,289	158,749
Uncompleted wells, equipment and facilities	30,374	37,708	57,124
Total capitalized costs	530,975	589,175	667,161
Accumulated depreciation, depletion, amortization and impairment losses	(239,414)	(275,348)	(316,445)
Net capitalized costs	291,561	313,827	350,716

**Table II: Cost incurred in oil and gas exploration and development**

	Years ended December 31,		
	2010	2011	2012
	RMB	RMB	RMB
Exploration	15,746	20,722	22,637
Development	47,889	51,368	71,168

Total costs incurred	63,635	72,090	93,805
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**Table III: Results of operations for oil and gas producing activities**

	2010 RMB	Years ended December 31, 2011 RMB	2012 RMB
Revenues			
Sales	34,133	46,901	53,270
Transfers	133,449	172,791	174,251
	167,582	219,692	227,521
Production costs excluding taxes	(38,423)	(42,505)	(47,467)
Exploration expenses	(10,955)	(13,341)	(15,533)
Depreciation, depletion, amortization and impairment losses	(33,404)	(37,608)	(40,289)
Taxes other than income tax	(22,830)	(43,647)	(39,784)
Income before income tax	61,970	82,591	84,448
Income tax expense	(17,454)	(22,141)	(22,953)
Results of operation from producing activities	44,516	60,450	61,495

F-65



Table of Contents

The results of operations for producing activities for the years ended December 31, 2010, 2011 and 2012 are shown above. Revenues include sales to unaffiliated parties and transfers (essentially at third-party sales prices) to other segments of the Group. All revenues reported in this table do not include royalties to others as there were none. 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.

**Table IV: Reserve quantities information**

The Group's estimated net proved underground oil and gas reserves and changes thereto for the years ended December 31, 2010, 2011 and 2012 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 the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether the estimate is a deterministic estimate or probabilistic estimate. 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 in effect at the time of the estimate.

	Years ended December 31,		
	2010	2011	2012
<b>Proved developed and undeveloped reserves (oil) (million barrels)</b>			
Beginning of year	2,919	2,889	2,848
Revisions of previous estimates	85	126	9
Improved recovery	144	72	163
Extensions and discoveries	69	82	151
Production	(328)	(321)	(328)
End of year	2,889	2,848	2,843
<b>Non-controlling interest in proved developed and undeveloped reserves at the end of year</b>	43	36	32
<b>Proved developed reserves</b>			
Beginning of year	2,589	2,554	2,545
End of year	2,554	2,545	2,577
<b>Proved undeveloped reserves</b>			
Beginning of year	330	335	303
End of year	335	303	266

<b>Proved developed and undeveloped reserves (gas) (billion cubic feet)</b>			
Beginning of year	6,739	6,447	6,709
Revisions of previous estimates	23	(74)	278
Improved recovery	81	4	109
Extensions and discoveries	45	849	232
Production	(441)	(517)	(598)
End of year	6,447	6,709	6,730
<b>Proved developed reserves</b>			
Beginning of year	1,727	4,471	4,246
End of year	4,471	4,246	5,439
<b>Proved undeveloped reserves</b>			
Beginning of year	5,012	1,976	2,463
End of year	1,976	2,463	1,291

Table of Contents

**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 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, 2010, 2011 and 2012 and should not be relied upon as an indication of the Group's future cash flows or value of its oil and gas reserves.

Table of Contents

	2010 RMB	Years ended December 31, 2011 RMB	2012 RMB
Future cash flows	1,621,070	1,990,353	2,029,836
Future production costs	(749,752)	(909,528)	(965,683)
Future development costs	(46,902)	(50,934)	(50,162)
Future income tax expenses	(140,804)	(191,391)	(176,591)
Undiscounted future net cash flows	683,612	838,500	837,400
10% annual discount for estimated timing of cash flows	(279,686)	(342,261)	(322,234)
Standardized measure of discounted future net cash flows	403,926	496,239	515,166
Discounted future net cash flow attributable to non-controlling interests	7,032	7,949	7,059

**Table VI: Changes in the standardized measure of discounted future net cash flows**

	2010 RMB	Years ended December 31, 2011 RMB	2012 RMB
Sales and transfers of oil and gas produced, net of production costs	(86,735)	(106,469)	(104,319)
Net changes in prices and production costs	88,765	104,795	(28,277)
Net change due to extensions, discoveries and improved recoveries	45,695	46,084	73,394
Revisions of previous quantity estimates	14,899	28,904	12,945
Previously estimated development costs incurred during the year	10,638	15,239	19,526
Accretion of discount	26,120	33,551	40,767
Net change in income taxes	(18,326)	(30,070)	4,630
Others	279	279	261
Net change for the year	81,335	92,313	18,927