CHINA PETROLEUM & CHEMICAL CORP
Form 20-F
April 11, 2013
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

o	**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**
	OR
x	**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
o	**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
	OR
o	**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report . . . .

For the transaction period from to

Commission file number 1-15138

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

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

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

Mr. HUANG, Wensheng

22 Chaoyangmen North Street

Chaoyang District, Beijing, 100728

The People s Republic of China

Tel: +86 (10) 5996 0028

Fax: +86 (10) 5996 0386
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

Title of each class	Name of each exchange on which registered
American Depositary Shares, each representing 100 H Shares of par value 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 Depository Shares.

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

None
(Title of Class)

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

None
(Title of Class)

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

H Shares, par value 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.

x Yes o 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.

o Yes x 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.

x Yes o 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)*

o Yes o No

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

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

Large accelerated filer x	Accelerated filer o	Non-accelerated filer o

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

U.S. GAAP o	International Financial Reporting Standards as issued by the International Accounting Standards Board x	Other o

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.

o Item 17 o 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).

o Yes x 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. *

o Yes o No

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

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CERTAIN TERMS AND CONVENTIONS

Definitions

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

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

Conversion Conventions

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.

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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.

	Noon Buying Rate(1) (RMB per US$1.00)			
Period	**End**	**Average(2)**	**High**	**Low**
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.

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FORWARD-LOOKING STATEMENTS

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

- amount and nature of future exploration and development,
- future prices of and demand for our products,
- future earnings and cash flow,
- development projects and drilling prospects,
- future plans and capital expenditures,
- estimates of proved oil and gas reserves,
- exploration prospects and reserves potential,
- expansion and other development trends of the petroleum and petrochemical industry,
- production forecasts of oil and gas,
- expected production or processing capacities, including expected rated capacities and primary distillation capacities, of units or facilities not yet in operation,
- expansion and growth of our business and operations, and
- our prospective operational and financial information.

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

- fluctuations in crude oil prices,

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

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

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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.

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	Year Ended December 31,				
	2008	2009	2010	2011	2012
	(RMB in millions, except per share, per ADS data and number of shares)				
Consolidated Statement of income Data(1):					
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
Segment results					
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
Shares					
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

	As of December 31,				
	2008	2009	2010	2011	2012
	(RMB in millions)				
Consolidated Balance Sheet Data(1):					
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)

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)

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	Year Ended December 31				
	2008	2009	2010 (RMB in millions)	2011	2012
Statement of Cash Flow and Other Financial Data(1):					
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)
Capital expenditure					
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
Total	113,752	115,975	124,961	137,672	168,968

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(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.

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

We purchase a significant portion of crude oil and other feedstock 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:

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

The future production of our oil and gas business depends significantly upon our success in finding or acquiring additional reserves and retaining and developing such reserves. If our oil and gas business fails to conduct successful exploration activities or to acquire or retain assets holding proved reserves, it may not meet its production or growth targets, and its proved reserves will decline as it extracts crude oil and natural gas from the existing reservoirs, which could adversely affect our business, financial condition and results of operations.

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

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

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

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

- availability and terms of external financing;

- mix of exploration and development activities conducted on an independent basis and those conducted jointly with other partners;

- extent to which its ability to influence or adjust plans for exploration and development related expenditures is limited under joint operating agreements for those projects in which it has partners;

- government approvals required for exploration and development-related expenditures and investments in jurisdictions in which it conducts business; and

- economic, political and other conditions in jurisdictions in which it conducts business.

We intend to expand our exploration and production 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.

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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.

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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 cyclicality 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.

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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.

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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.

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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.

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

- exploration for, development, production and marketing of crude oil and natural gas;
- refining of crude oil and marketing and distribution of refined 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.

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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 Syprus 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.

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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,

	2010	2011 (in millions of barrels)	2012
Crude Oil Proved Reserves			
Developed			
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
Undeveloped			
China			
Shengli	131	101	84
Others	180	175	174
Africa(1)	23	27	8
Total Undeveloped	334	303	266
Total Proved Reserves	2,888	2,848	2,843

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	As of December 31,		
	2010	2011	2012
		(in billions of cubic feet)	
Natural Gas Proved Reserves			
Developed			
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
Undeveloped			
China			
Puguang	978	978	
Others	998	1,485	1,291
Africa(1)			
Total Undeveloped	1,976	2,463	1,291
Total Proved Reserves	6,447	6,709	6,730

(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 nan 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.

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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.

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

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

(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	Africa(1)
		(RMB)	
For the year ended December 31, 2012			
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

Per thousand cubic meters of natural gas	1,291.65	1,291.65	
For the year ended December 31, 2011			
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	
For the year ended December 31, 2010			
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	

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(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.

		China		
	Total	**Shengli**	**Others**	**Africa**
For the year ended December 31, 2012				
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
For the year ended December 31, 2011				
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
For the year ended December 31, 2010				
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:

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

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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
Productive Wells for Crude Oil				
China				
Shengli	28,465	28,465	30,082	30,082
Others	15,125	15,125	16,165	16,165
Africa	18	8	21	7
Total Productive Wells	43,608	43,598	46,268	46,254

	As of December 31,			
	2011		2012	
	Gross	Net	Gross	Net
Productive Wells for Natural Gas				
China				
Puguang	35	35	53	53
Others	3,537	3,526	3,794	3,776
Africa	0	0	0	0
Total Productive Wells	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.

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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
Qingdaolianhua	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.

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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**
Total sales volume of refined petroleum products (in million tones)	149.23	162.32	173.15
Sales volume of refined petroleum products in China (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
Average annual throughput of service stations (in tonnes per station)	2,960	3,330	3,498

		As of December 31,	
	2010	**2011**	**2012**
Total number of service stations under Sinopec brand	30,116	30,121	30,836
Of which: Self-operated service stations			