

CHINA PETROLEUM & CHEMICAL CORP  
Form 20-F  
April 29, 2019  
Table of Contents

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

**FORM 20-F**

(Mark One)

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

**OR**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended DECEMBER 31, 2018**

**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 form 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)

**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, Email and/or Facsimile number and Address of Company Contact Person)

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

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

---

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

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

**None**  
(Title of Class)

---

# Edgar Filing: CHINA PETROLEUM & CHEMICAL CORP - Form 20-F

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

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

Yes  No

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

Yes  No

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

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

Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Edgar Filing: CHINA PETROLEUM & CHEMICAL CORP - Form 20-F

Large accelerated filer

Accelerated filer

Non-accelerated filer

Emerging growth company

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

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

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

U.S. GAAP

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

Other

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

Item 17  Item 18

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

Yes  No

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

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

Yes  No

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

---

Table of Contents

**Table of Contents**

	<b>Page</b>
<u>ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS</u>	3
<u>ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE</u>	3
<u>ITEM 3. KEY INFORMATION</u>	3
<u>A. SELECTED FINANCIAL DATA</u>	3
<u>B. CAPITALIZATION AND INDEBTEDNESS</u>	5
<u>C. REASONS FOR THE OFFER AND USE OF PROCEEDS</u>	5
<u>D. RISK FACTORS</u>	5
<u>ITEM 4. INFORMATION ON THE COMPANY</u>	14
<u>A. HISTORY AND DEVELOPMENT OF THE COMPANY</u>	14
<u>B. BUSINESS OVERVIEW</u>	16
<u>C. ORGANIZATIONAL STRUCTURE</u>	34
<u>D. PROPERTY, PLANT AND EQUIPMENT</u>	34
<u>ITEM 4A. UNRESOLVED STAFF COMMENTS</u>	35
<u>ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u>	35
<u>A. GENERAL</u>	35
<u>B. CONSOLIDATED RESULTS OF OPERATIONS</u>	38
<u>C. DISCUSSIONS ON RESULTS OF SEGMENT OPERATIONS</u>	45
<u>D. LIQUIDITY AND CAPITAL RESOURCES</u>	53
<u>ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u>	56
<u>A. DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT</u>	56
<u>B. COMPENSATION</u>	63
<u>C. BOARD PRACTICE</u>	64
<u>D. EMPLOYEES</u>	65
<u>E. SHARE OWNERSHIP</u>	66
<u>ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</u>	66
<u>A. MAJOR SHAREHOLDERS</u>	66
<u>B. RELATED PARTY TRANSACTIONS</u>	67
<u>C. INTERESTS OF EXPERTS AND COUNSEL</u>	68
<u>ITEM 8. FINANCIAL INFORMATION</u>	68
<u>A. CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION</u>	68
<u>B. SIGNIFICANT CHANGES</u>	69
<u>ITEM 9. THE OFFER AND LISTING</u>	69
<u>A. OFFER AND LISTING DETAILS</u>	69

<u>ITEM 10.</u>	<u>ADDITIONAL INFORMATION</u>	70
<u>A.</u>	<u>SHARE CAPITAL</u>	70
<u>B.</u>	<u>MEMORANDUM AND ARTICLES OF ASSOCIATION</u>	70

Table of Contents

<u>C.</u>	<u>MATERIAL CONTRACTS</u>	78
<u>D.</u>	<u>EXCHANGE CONTROLS</u>	78
<u>E.</u>	<u>TAXATION</u>	79
<u>F.</u>	<u>DIVIDENDS AND PAYING AGENTS</u>	83
<u>G.</u>	<u>STATEMENT BY EXPERTS</u>	83
<u>H.</u>	<u>DOCUMENTS ON DISPLAY</u>	83
<u>I.</u>	<u>SUBSIDIARY INFORMATION</u>	83
<u>ITEM 11.</u>	<u>QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK</u>	84
<u>ITEM 12.</u>	<u>DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</u>	89
<u>A.</u>	<u>DEBT SECURITIES</u>	89
<u>B.</u>	<u>WARRANTS AND RIGHTS</u>	89
<u>C.</u>	<u>OTHER SECURITIES</u>	89
<u>D.</u>	<u>AMERICAN DEPOSITARY SHARES</u>	89
<u>ITEM 13.</u>	<u>DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u>	90
<u>ITEM 14.</u>	<u>MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</u>	90
<u>A.</u>	<u>MATERIAL MODIFICATIONS TO THE RIGHTS TO SECURITIES</u>	90
	<u>HOLDERS</u>	90
<u>B.</u>	<u>USE OF PROCEEDS</u>	90
<u>ITEM 15.</u>	<u>CONTROLS AND PROCEDURES</u>	90
<u>ITEM 16.</u>	<u>RESERVED</u>	91
<u>ITEM 16A.</u>	<u>AUDIT COMMITTEE FINANCIAL EXPERT</u>	91
<u>ITEM 16B.</u>	<u>CODE OF ETHICS</u>	91
<u>ITEM 16C.</u>	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u>	91
<u>ITEM 16D.</u>	<u>EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES</u>	91
<u>ITEM 16E.</u>	<u>PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</u>	92
<u>ITEM 16F.</u>	<u>CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT</u>	92
<u>ITEM 16G.</u>	<u>COMPARISON OF NEW YORK STOCK EXCHANGE CORPORATE GOVERNANCE RULES AND CHINA CORPORATE GOVERNANCE RULES FOR LISTED COMPANIES</u>	92
<u>ITEM 16H.</u>	<u>MINE SAFETY DISCLOSURE</u>	96
<u>ITEM 17.</u>	<u>FINANCIAL STATEMENTS</u>	96
<u>ITEM 18.</u>	<u>FINANCIAL STATEMENTS</u>	96
<u>ITEM 19.</u>	<u>EXHIBITS</u>	96

Table of Contents

**CERTAIN TERMS AND CONVENTIONS**

**Definitions**

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

- Sinopec Corp., Company, we, our and us are to China Petroleum & Chemical Corporation, a PRC joint limited liability 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**



## Edgar Filing: CHINA PETROLEUM & CHEMICAL CORP - Form 20-F

Unless otherwise specified, conversion of crude oil from tonnes to barrels are made at a rate of one tonne to 7.10 barrels for crude oil we produced domestically and one tonne to 7.20, 7.21 and 7.21 barrels for the years ended December 31, 2016, 2017 and 2018, respectively, for crude oil we produced overseas. Conversions of natural gas from cubic meters to cubic feet are made at a rate of one cubic meter to 35.31 cubic feet; and 6,000 cubic feet of natural gas is converted to one BOE.

### Glossary of Technical Terms

Unless otherwise indicated in the context, references to:

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

### CURRENCIES AND EXCHANGE RATES

We publish our financial statements in Renminbi. Unless otherwise indicated, all translations from Renminbi to US dollars in this annual report were made at RMB 6.6174 to US\$1.00, the average of mid-point exchange rates of Renminbi as published by the PRC State Administration of Foreign Exchange (SAFE) for the year of 2018. We do not guarantee that the Renminbi or US dollar amount can be converted to US dollars or Renminbi, as appropriate, at this exchange rate or any specific exchange rate.

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 D. Risk Factors and the following:

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

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

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, 2016, 2017 and 2018, and the selected consolidated balance sheet data as of December 31, 2017 and 2018 are derived from, and should be read in conjunction with, the audited consolidated financial statements included elsewhere in this annual report. The selected consolidated statement of income data (except per ADS data) and consolidated cash flows data for the years ended December 31, 2014 and 2015 and the selected consolidated balance sheet data as of December 31, 2014, 2015 and 2016 are derived from our audited consolidated financial statements which are not included elsewhere in this annual report.

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

	2014	2015	2016	2017	2018
	Year Ended December 31, (RMB in millions, except per share, per ADS data and number of shares)				
<b>Consolidated Statement of Income Data(1):</b>					
Operating revenues	2,827,566	2,020,375	1,930,911	2,360,193	2,891,179
Operating expenses	(2,754,127)	(1,963,553)	(1,853,718)	(2,288,723)	(2,808,915)
Operating income	73,439	56,822	77,193	71,470	82,264
Earnings before income tax	65,818	56,411	80,151	86,697	99,110
Tax expense	(17,571)	(12,613)	(20,707)	(16,279)	(20,213)
Net income attributable to equity shareholders of the Company	46,639	32,512	46,672	51,244	61,618

Edgar Filing: CHINA PETROLEUM & CHEMICAL CORP - Form 20-F

Basic earnings per share(2)	0.399	0.269	0.385	0.423	0.509
Basic earnings per ADS(2)	39.92	26.90	38.55	42.33	50.89
Diluted earnings per share(2)	0.399	0.269	0.385	0.423	0.509
Diluted earnings per ADS(2)	39.89	26.90	38.55	42.33	50.89
<b>Segment Operating Income/(Loss)</b>					
Exploration and production	47,057	(17,418)	(36,641)	(45,944)	(10,107)
Refining	(1,954)	20,959	56,265	65,007	54,827
Marketing and distribution	29,449	28,855	32,153	31,569	23,464
Chemicals	(2,229)	19,476	20,623	26,977	27,007
Corporate and others	(1,063)	384	3,212	(4,484)	(9,293)
Elimination of inter-segment sales	2,179	4,566	1,581	(1,655)	(3,634)
Operating income	73,439	56,822	77,193	71,470	82,264
<b>Shares</b>					
Basic weighted average number of A and H shares	116,822,487,451	120,852,547,200	121,071,209,646	121,071,209,646	121,071,209,646
Diluted weighted average number of A and H shares	117,242,396,710	120,852,547,200	121,071,209,646	121,071,209,646	121,071,209,646

Table of Contents

	As of December 31,				
	2014	2015	2016	2017	2018
	(RMB in millions, except per share, per ADS data and number of shares)				
<b>Consolidated Balance Sheet Data(1):</b>					
Cash and cash equivalents	10,526	68,933	124,468	113,218	111,922
Total current assets	361,559	333,657	412,261	529,049	504,120
Total non-current assets	1,094,035	1,113,611	1,086,348	1,066,455	1,088,188
Total assets	1,455,594	1,447,268	1,498,609	1,595,504	1,592,308
Total current liabilities	(604,451)	(462,832)	(485,543)	(579,446)	(565,098)
Short-term debts and loans from Sinopec Group Company and its affiliates (including current portion of long-term debts)	(178,148)	(115,446)	(74,819)	(80,649)	(61,127)
Long-term debts and loans from Sinopec Group Company and its affiliates (excluding current portion of long-term debts)	(150,932)	(139,746)	(117,446)	(99,124)	(93,527)
Total equity attributable to equity shareholders of the Company	(595,255)	(676,197)	(710,994)	(726,120)	(717,284)
Total equity	(649,603)	(788,161)	(831,235)	(852,890)	(856,535)
Cash dividends per share	0.200	0.150	0.249	0.500	0.420

	Year Ended December 31,				
	2014	2015	2016	2017	2018
	(RMB in millions, except per share, per ADS data and number of shares)				
<b>Statement of Cash Flow and Other Financial Data(1):</b>					
Net cash generated from operating activities	148,019	165,740	214,543	190,935	175,868
Net cash generated from/(used in) financing activities	(21,524)	9,093	(93,047)	(56,509)	(111,260)
Net cash used in investing activities	(132,321)	(116,719)	(66,217)	(145,323)	(66,422)
Capital expenditure Exploration and production	80,196	54,710	32,187	31,344	42,155
Refining	27,957	15,132	14,347	21,075	27,908
Marketing and distribution	26,989	22,115	18,493	21,539	21,429
Chemicals	15,944	17,634	8,849	23,028	19,578
Corporate and others	3,648	2,821	2,580	2,398	6,906
Total	154,734	112,412	76,456	99,384	117,976

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

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

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

Table of Contents

**B. CAPITALIZATION AND INDEBTEDNESS**

Not applicable.

**C. REASONS FOR THE OFFER AND USE OF PROCEEDS**

Not applicable.

**D. RISK FACTORS**

**Risks Relating to Our Business Operation**

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

We consume a large amount of crude oil to produce our refined oil products and petrochemical products. Increases in crude oil prices may result in cost inflation, and high prices may also reduce demand for our products which might adversely affect our profitability. Decreases in prices of crude oil, refined oil products and petrochemical products may cause us to incur impairment to our investment and assets. A prolonged period of low oil prices may impact our profit and ability to maintain our long-term investment projects. We use financial derivatives, including commodity futures, to hedge risks of the volatility in the crude oil price. The use of such financial derivatives may not successfully hedge all risks. The fair value of derivatives fluctuates due to the volatility of crude oil price, which in turn impacts our financial performance. In addition, while we try to adjust the sale prices of our products to reflect international crude oil price fluctuations, our ability to pass on the increased cost resulting from crude oil price increases to our customers may be limited, and is dependent on international and domestic market conditions as well as the PRC government's price control policies over refined oil products. For instance, the PRC government could exercise price control over refined oil products when international crude oil prices experience a sustained rise or become significantly volatile. As a result, our results of operations and financial condition may be materially affected by the fluctuation of prices of crude oil, refined oil products and petrochemical products.

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

Our ability to achieve our growth objectives is dependent in part on our level of success in discovering or acquiring additional oil and natural gas reserves. Our exploration and development activities for additional reserves also expose us to inherent risks associated with drilling, including the risk that no proved oil or natural gas reserves might be discovered. Exploring for, developing and acquiring reserves is highly risky and capital intensive. The fluctuation in the prices of crude oil and natural gas will impact the amount of our proved oil or natural gas reserves. In the low oil price environment, only large scale, high quality reserves meet our development criteria, and some exploration projects may not be viable and thus cannot be carried forward, potentially leading to failure in supplementing our oil and natural gas



reserves with additional reserves through future exploration. Without reserve additions through further exploration and development or acquisition activities, or if the prices of crude oil and natural gas fall sharply, our reserves and production will decline over time, which may materially and adversely affect our results of operations and financial condition.

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

Starting from January 2016, the United States suspended most secondary sanctions (i.e., those covering non-U.S. persons) pursuant to the terms of the Joint Comprehensive Plan of Action (the JCPOA ). In May 2018, the United States withdrew from the JCPOA. Effective on November 5, 2018, all U.S. sanctions on Iran including those on the crude oil and petrochemical sectors were re-imposed, with eight countries and regions including China granted temporary significant reduction exceptions as exemptions to such sanctions to allow the importation of crude oil from Iran, which is scheduled to expire on May 2, 2019. The United States government has recently made an announcement that such exemptions under the significant reduction exceptions would not be extended. If the relevant sanctions exemption cannot be continuously obtained, we may be unable to source crude oil from Iran or be subject to secondary sanctions resulting from continuing importing crude oil from Iran, which may have further adverse impact on us, including but not limited to being prohibited to conduct certain business and financing activities that relate to the United States, and in turn materially and adversely impact our ADS trading price, results of operations and financial status.

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

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

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

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

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

- the quality and quantity of technical and economic data;

Table of Contents

- the prevailing oil and gas prices applicable to our production;
- the production performance of the reservoirs; and
- the production plans and etc.

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:

- disruption caused by unexpected stratigraphic factors;
- irregularities in geological formations pressure;
- equipment failures;
- oil/gas 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:

Table of Contents

- ability to generate sufficient cash flows from operations to finance its expenditures, investments and other requirements, which are affected by changes in crude oil and natural gas prices and sales volumes, and other factors;
- availability and terms of external financing;
- mix of exploration and development activities conducted on an independent basis and those conducted jointly with other partners;
- extent to which its ability to influence or adjust plans for exploration and development related expenditures is limited under joint operating agreements for those projects in which it has partners;
- government approvals required for exploration and development-related expenditures and investments in jurisdictions in which it conducts business; and
- economic, political and other conditions in jurisdictions in which it conducts business.

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

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

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

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

Many nations in the world have reached consensus on the importance and urgency of addressing climate change. The oil and gas industry in which we operate is drawing increasing concerns about global climate change in recent years. A number of international, national and regional measures to limit greenhouse gas emissions have been enacted. The Paris Agreement on climate change adopted by 195 nations in December 2015 has placed binding commitments on nations that have ratified it since November 2016, which may lead to more stringent national and regional measures in the near future. It could result in substantial impact on capital expenditure from compliance with these measures and revenue generation and strategic growth opportunities. In addition, China has undertaken to peak the CO2 emissions by 2030 or earlier, if possible, and to increase the non-fossil fuel share of all energy to around 20 percent by 2030. China has also implemented a national carbon emissions trading scheme in 2017, power generation industry has been included initially, and will gradually expand the industry coverage after the market matures. As most of our producing subsidiaries in China may be recognized as emission-control enterprises, such change could have certain effect on our business operations.

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

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

Table of Contents

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

Depending upon the value of our assets, which may be determined based, in part, on the market price of our H shares or ADSs, and the nature of our assets and income over time, we could be classified as a passive foreign investment company, or PFIC, for United States federal income tax purposes. Based on our income and assets and the market price of our H shares or ADSs, we do not believe that we were a PFIC for the taxable year ended December 31, 2018 and do not anticipate becoming a PFIC in the foreseeable future. Because PFIC status is a factual determination made annually after the close of each taxable year on the basis of the composition of our income and the value of our active versus passive assets for that year, there can be no assurance that we will not be a PFIC for any future taxable year. The overall level of our passive assets will be affected by how, and how quickly, we expend our liquid assets. Under circumstances where gross income from activities that produce passive income significantly increase relative to our gross income from activities that produce non-passive income or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming classified as a PFIC may substantially increase. If we were to be or become classified as a PFIC, a US Holder (as defined in Item 10. Additional Information E. Taxation United States Federal Income Tax Considerations ) may incur significantly increased United States income tax on gains recognized on the sale or other disposition of the H shares or ADSs and on the receipt of distributions on the H shares or ADSs to the extent such gains or distributions are treated as an excess distribution under the United States federal income tax rules. For more information see Item 10. Additional Information E. Taxation United States Federal Income Tax Considerations.

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

We have established cybersecurity control schemes and operation and maintenance schemes for our information infrastructure and application system, built a cybersecurity risk management and control information platform, and devoted significant resources to protecting our digital infrastructure and data against cyber-attacks. If our systems against cyber-security risk prove to be ineffective, we could be adversely affected by, among other things, disruptions to our business operations, and loss of proprietary information, including intellectual property, financial information and employer and customer data, injury to people, property, environment and reputation. As cyber-security attacks continue to evolve, we may be required to expend additional resources to enhance our protective measures against cyber-security breaches.

## **Risks Relating to Our Industry**

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

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

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



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

Table of Contents

*We face strong competition from domestic and foreign competitors.*

Among our competitors, some are major integrated petroleum and petrochemical companies within and outside China, which have recently become more significant participants in the petroleum and petrochemical industry in China. The PRC government has speeded up the release of restrictions on the right to use imported crude oil. This development may lead to refining overcapacity in China and intensify competition among local refineries. The Chinese crude oil and refined oil product markets are becoming increasingly dynamic and internationalized with implementation of tariff concessions and relaxation of market. In the opened-up wholesale market of refined oil products previously dominated by PetroChina and us, we are facing stronger competition with new players and imported products entering the market. Our market share of chemical products is also under stronger competitive pressure due to the increasingly active participation of diversified new market players including multinational petroleum and petrochemical companies and domestic private enterprises. In addition, we also expect to face competition in both domestic and international petrochemical product market as a result of our domestic and international competitors' increasing production capacity. Increased competition may have a material adverse effect on our financial condition and results of operations.

**Risks Relating to Our Controlling Shareholder**

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

We have engaged from time to time and will continue to engage in a variety of transactions with Sinopec Group, which provides us with a number of services, including, but not limited to, ancillary supply, engineering, maintenance, transport, lease of land use right, lease of buildings, as well as educational and ancillary 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 are likely to compete with our business.*

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

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

Sinopec Group Company undertakes, from time to time and without our involvement, overseas investments and operations in the oil and gas industry, including exploration and production of oil and gas, refining and Liquefied Natural Gas or LNG, oilfield services and refining engineering projects. Sinopec Group Company's overseas asset portfolio includes a limited number of projects in countries that are subject to U.S. sanctions administrated by OFAC and by the U.S. Department of State. We currently do not believe that any existing investments of Sinopec Group Company will result in any direct sanctions imposed by OFAC. However, we cannot predict the interpretation or implementation of sanction 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 in the case of Iran, or whether sanction scope will be modified or updated, or if any other countries or regions will be incorporated into the sanction list, or the impact that such actions may have on Sinopec Group Company and us. If becoming the target of U.S. sanctions, Sinopec Group Company may be prohibited from conducting business activities in the United States or with individuals or entities in the United States, and the transactions of the our securities in the United States will also be significantly affected. In addition, 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

**Risks Relating to the PRC**

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

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

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

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

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

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

Table of Contents

- the imposition of environmental tax for the discharge of waste materials;
- the government, in accordance with law, to order correction, suspend production and impose fines for unlicensed or uncertified pollution discharge;
- the government, at its discretion, to seal up or close down any facility which has cause or may cause severe environmental damage and require it to correct or stop operations; and
- litigations and liabilities arising from pollutions and damages to the environment and public interests.

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

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

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

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

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

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

- import of crude oil and other materials;
- debt service on foreign currency-denominated debt;
- purchases of imported equipment;
- payment of the principals and interests of bonds issued overseas; and
- payment of any cash dividends declared in respect of the H shares (including ADS).

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

Table of Contents

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

***Risks relating to enforcement of shareholder rights; Mandatory arbitration.***

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

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

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

Our independent registered public accounting firm that issued 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 subject to laws in the United States pursuant to which the PCAOB conducts regular inspections to assess its compliance with applicable professional standards. Because our auditor is located in China, a jurisdiction where PCAOB has been 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.



Table of Contents

On December 7, 2018, the SEC and the PCAOB issued a joint statement highlighting continued challenges faced by the U.S. regulators in their oversight of financial statement audits of U.S.-listed companies with significant operations in China. However, it remains unclear what further actions, if any, the SEC and PCAOB will take to address this issue.

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

In December 2012, the SEC brought administrative proceedings against the Big Four accounting firms in China, including our independent registered public accounting firm, alleging that these firms had refused to produce audit work papers and other documents related to certain other China-based companies whose securities are publicly traded in the United States. On January 22, 2014, an initial administrative law decision was issued, censuring these accounting firms and barring these firms from practicing before the SEC for a period of six months. The decision is neither final nor legally effective unless and until it is endorsed by the SEC. In February 2015, each of the four PRC-based accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The settlement required the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms' audit documents via the China Securities Regulatory Commission (CSRC) in response to future document requests by the SEC made through the CSRC. Under the terms of the settlement, the underlying proceeding against the four China-based accounting firms was deemed dismissed with prejudice for four years after entry of the settlement. The four-year mark occurred on February 6, 2019. We cannot predict if the SEC will further challenge the four China-based accounting firms' compliance with U.S. law in connection with U.S. regulatory requests for audit work papers or if the results of such a challenge would result in the SEC imposing penalties such as suspensions.

In the event that the Chinese affiliates of the Big Four become subject to additional legal challenges by the SEC or PCAOB, depending upon the final outcome, listed companies in the United States with PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act, and hence face delisting. Moreover, any negative news about the proceedings against these audit firms may cause investor uncertainty regarding China-based, U.S.-listed companies and the market price of our ADSs may be adversely affected.

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

**ITEM 4. INFORMATION ON THE COMPANY**

**A. HISTORY AND DEVELOPMENT OF THE COMPANY**

Our legal and commercial name is China Petroleum & Chemical Corporation. Our head office is located at 22 Chaoyangmen North Street, Chaoyang District, Beijing 100728, the People's Republic of China, our telephone number is (8610) 5996-0028 and our fax number is (8610) 5996-0386. We have appointed our representative office in the United States, located at 515 Madison Avenue, Suite 27 West, New York, NY

Edgar Filing: CHINA PETROLEUM & CHEMICAL CORP - Form 20-F

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. The SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding us that filed electronically with the SEC, which can be accessed at <http://www.sec.gov>. Information about the Company and documents the Company submitted to the SEC are available on the our investor relations website: [http://www.sinopec.com/listco/en/investor\\_centre/corporate\\_governance/](http://www.sinopec.com/listco/en/investor_centre/corporate_governance/).

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

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

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

## Edgar Filing: CHINA PETROLEUM & CHEMICAL CORP - Form 20-F

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

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

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

On August 2, 2016, our board of directors unanimously approved the proposal to introduce capitals from potential investors to invest in Sichuan-to-East China gas pipeline project, through our indirectly wholly-owned subsidiary Sinopec Sichuan-to-East China Natural Gas Pipeline Co., Ltd. ( Sichuan-to-East China Pipeline Co. ). On December 12, 2016, China Life Insurance Co., Ltd. ( China Life ) and SDIC Communications Holding Co., Ltd. ( SDIC Communications ) entered into the Capital Injection Agreement in relation to Sichuan-to-East China Pipeline Co. and agreed to collectively subscribe for 50% equity interest in Sichuan-to-East China Pipeline Co. for an aggregate amount of RMB 22.8 billion in cash. Upon completion of the capital injection, China Life, SDIC Communications and us hold 43.86%, 6.14% and 50% equity interest in Sichuan-to-East China Pipeline Co., respectively.

Table of Contents

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

Following the instruction by the State-owned Assets Supervision and Administration Commission of the State Council, on August 9, 2018, Sinopec Group Company gratuitously transferred 1,241,721,854 A shares of the Company to Beijing Chengtong Financial Control Investment Co., Ltd., and 1,241,721,854 A shares to Guoxin Investment Co., Ltd. Upon the completion of such transfers, Sinopec Group Company directly and indirectly held 83,862,377,393 shares of the Company.

**B. BUSINESS OVERVIEW**

**Exploration and Production**

*Overview*

We currently explore for, develop and produce crude oil and natural gas in a number of areas in China and overseas. As of December 31, 2018, we held 219 production licenses in China, with an aggregate acreage of 31,643 square kilometers and with terms ranging from 10 to 80 years. Our production licenses may be renewed upon our application at least 30 days prior to the expiration date, which are renewable for unlimited times. During the term of our production license, we pay an annual production license fee of RMB 1,000 per square kilometer.

As of December 31, 2018, we held 194 exploration licenses in China for various blocks in which we engaged in exploration activities, with an aggregate acreage of approximately 525,000 square kilometers.

As of December 31, 2018, our overseas subsidiary held one production licenses, with an acreage of 322.6 square kilometers. It currently does not have exploration licenses. Our overseas equity-accounted investments held 73 production licenses, with an aggregate acreage of 4,783.3 square kilometers, and no exploration license.

*Properties*

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

Shengli production field is our most important crude oil production field. It consists of 75 producing blocks of various sizes extending over an area of 2,577 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 2018, Shengli production field produced approximately 170 million barrels of crude oil and 16.94 billion cubic feet of natural gas, with an average daily production of 463 thousand BOE.

As of December 31, 2018, the total acreage of our oil and gas producing fields and blocks in China was 15,426 square kilometers, including 9,622 square kilometers of developed acreage, all of which were net developed acreage; and 5,804 square kilometers of gross undeveloped acreage, all of which were net undeveloped acreage.

As of December 31, 2018, the total acreage of our oil and gas producing fields and blocks of our overseas subsidiary was 322.6 square kilometers, including 169.2 square kilometers of developed acreage, of which 110 square kilometers were net developed acreage; and 153.4 square kilometers of gross undeveloped acreage, of which 31.8 square kilometers were net undeveloped acreage.

As of December 31, 2018, the total acreage of our oil and gas producing fields and blocks of our overseas equity-accounted investments was 1,700.7 square kilometers, including 1,626.5 square kilometers of developed acreage, of which 1,626.5 square kilometers were net developed acreage; and 74.2 square kilometers of gross undeveloped acreage, of which 74.2 square kilometers were net undeveloped acreage.

Table of Contents*Oil and Natural Gas Reserves*

As of December 31, 2018, our estimated proved reserves of crude oil and natural gas in China were 2,471 million BOE (including 1,339 million barrels of crude oil and 6,793 billion cubic feet of natural gas), and our estimated proved reserves of crude oil and natural gas outside of China, which included a share of the estimated proved reserves of our equity-accounted investments, were 329.2 million BOE. Our estimated proved reserves do not include additional quantities recoverable beyond the term of the relevant production licenses, or that may result from extensions of currently proved areas, or from application of improved recovery processes not yet tested and determined to be economical.

The following tables set forth our proved developed and undeveloped crude oil and natural gas reserves by region as of December 31, 2018.

Crude Oil Proved Reserves	As of December 31, 2018 (in millions of barrels)
<b>Developed Subsidiaries</b>	
China	1,244
Shengli	910
Others	334
Overseas	27
Subtotal	1,271
<b>Equity-accounted investments</b>	
China	
Overseas	261
Subtotal	261
<b>Total Proved Developed</b>	<b>1,532</b>
<b>Undeveloped Subsidiaries</b>	
China	95
Shengli	16
Others	79
Overseas	1
Subtotal	96
<b>Equity-accounted investments</b>	
China	
Overseas	38
Subtotal	38
<b>Total Proved Undeveloped</b>	<b>134</b>
<b>Total Crude Oil Proved Reserves</b>	<b>1,666</b>

Natural Gas Proved Reserves	As of December 31, 2018 (in billions of cubic feet)
<b>Developed Subsidiaries</b>	
China	5,822
Puguang	1,904
Fuling	1,149
Others	2,769
Overseas	
Subtotal	5,822
<b>Equity-accounted investments</b>	
China	
Overseas	13
Subtotal	13

<b>Total Proved Developed</b>	5,835
<b>Undeveloped Subsidiaries</b>	
China	971
Puguang	
Fuling	195
Others	776
Overseas	
Subtotal	971
<b>Equity-accounted investments</b>	
China	
Overseas	
Subtotal	
<b>Total Proved Undeveloped</b>	971
<b>Total Natural Gas Proved Reserves</b>	6,806



Table of Contents

As of December 31, 2018, approximately 96 million barrels of our crude oil proved reserves and 971 billion cubic feet of our natural gas proved reserves were classified as proved undeveloped reserves in China and overseas. 2.2 million barrels of crude oil and 32.6 billion cubic feet natural gas proved reserves in China have been classified as proved undeveloped for more than five years, mainly under Sinopec Shanghai Offshore Petroleum Company, one of our subsidiaries.

During 2018, a total of 391 wells were drilled by us in China and 70 wells were drilled overseas. We converted 41.9 million barrels of proved undeveloped crude oil reserves and 117.4 billion cubic feet of proved undeveloped natural gas reserves into proved developed reserves in 2018. Total capital expenditure incurred in converting proved undeveloped reserves into proved developed reserves amounted to RMB 7,970 million, including RMB 7,740 million and RMB 230 million incurred in connection with our operations in China and overseas, respectively, in 2018.

Our reserves estimation is managed by a two-tier management system. The Oil and Natural Gas Reserves Management Committee, or the RMC, at our headquarters level, organizes, coordinates and oversees the overall reserves estimation, and is in charge of the major issues in reserves estimation and approving the reserves estimation report of our company. Each of our Branches has a reserves management committee that manages and coordinates the reserves estimation process, organizes the evaluators to do reserves estimation, reviews and inspects the evaluation materials and results at the branches level, and reports to the RMC of the Company.

Our RMC consists of our president, the senior management of related divisions at our headquarters level, our exploration and production institution and our Branches in each oil field. The current chairman of our RMC, Mr. Ma Yongsheng, is a member of China Engineering Academy and has over 30 years of experience in the oil and gas industry. 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, development and economics.

Our reserves estimation is guided by procedural manuals and technical guidance. Initial collection and compilation of reserves information are conducted by different working divisions, including exploration, development and financial divisions, at production bureau level. Technical experts in exploration, development and economics divisions of our Branches in each oil field collectively prepare the initial report on reserves estimation. The reserves management committees at production bureau level then review to ensure the qualitative and quantitative compliance with technical guidance and accuracy and reasonableness of the reserves estimation. We also engage outside consultants who assist us to be in compliance with the U.S. Securities and Exchange Commission rules and regulations. Our reserves estimation process is further facilitated by a specialized reserves database which is reviewed and updated periodically.

***Oil and Natural Gas Production***

In 2018, we produced an average of 1,126.6 thousand BOE per day in China, of which approximately 60.5% was crude oil and 39.5% was natural gas. We produced an average of 110 thousand BOE per day overseas, of which 98.2% was crude oil and 1.8% was natural gas.

The following tables set forth our average daily production of crude oil and natural gas for the years ended December 31, 2016, 2017 and 2018. The production of crude oil includes condensate.



Table of Contents

	2016	Year Ended December 31, 2017 (in thousands of barrels)	2018
<b>Average Daily Crude Oil Production</b>			
China	692	682	682
Subsidiaries	692	682	682
Shengli	464	455	455
Others	228	227	227
Overseas	138	122	107
Subsidiary	51	41	30
Equity-accounted investments	87	81	77
<b>Total Crude Oil Production</b>	<b>830</b>	<b>804</b>	<b>789</b>

	2016	Year Ended December 31, 2017 (in millions of cubic feet)	2018
<b>Average Daily Natural Gas Production</b>			
China	2,083	2,490	2,668
Subsidiaries	2,083	2,490	2,668
Puguang	362	558	615
Fuling	486	581	582
Others	1,235	1,351	1,471
Overseas	10	10	8
Equity-accounted investments	10	10	8
<b>Total Natural Gas Production</b>	<b>2,093</b>	<b>2,500</b>	<b>2,676</b>

*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, 2016, 2017 and 2018.

	Weighted Average	China (RMB)	Overseas(1)
<b>For the year ended December 31, 2018</b>			
Average petroleum lifting cost per BOE	112.45	111.75	116.90
Average realized sales price			
Per barrel of crude oil	432.32	426.81	467.11
Per thousand cubic meters of natural gas	1,263.41	1,263.41	
<b>For the year ended December 31, 2017</b>			
Average petroleum lifting cost per BOE	107.53	111.47	85.52
Average realized sales price			
Per barrel of crude oil	332.60	327.06	363.60
Per thousand cubic meters of natural gas	1,185.53	1,185.53	
<b>For the year ended December 31, 2016</b>			
Average petroleum lifting cost per BOE	108.21	112.19	77.62
Average realized sales price			
Per barrel of crude oil	240.70	246.10	213.41
Per thousand cubic meters of natural gas	1,266.03	1,266.03	

(1) The exchange rates we used for overseas data in this table were exchange rates for each year ended December 31, 2016, 2017 and 2018, which were RMB 6.6400 to US\$1.00, RMB 6.7518 to US\$ 1.00 and RMB 6.6204 to US\$ 1.00, respectively.

Table of Contents*Exploration and Development Activities*

In the low oil price environment in 2018, we prioritized low-cost and high-quality exploration activities. We continued our efforts in exploration activities, focused on increasing efficiency and effectiveness, continuously reducing our inefficient crude oil production and high cost activities, and completed the construction of the second phase of our Fuling shale gas project.

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, 2016, 2017 and 2018.

Number of Drilled Wells	As of December 31,											
	2016				2017				2018			
	Exploratory		Development		Exploratory		Development		Exploratory		Development	
	Productive	Dry	Productive	Dry	Productive	Dry	Productive	Dry	Productive	Dry	Productive	Dry
China	266	149	801	6	266	149	1,442	9	286	131	1,941	6
Subsidiaries	266	149	801	6	266	149	1,442	9	286	131	1,941	6
Shengli	166	73	462	5	151	71	845	1	149	71	1,201	5
Others	100	76	339	1	115	78	597	8	137	60	740	1
Overseas Subsidiaries	2	1	99		2	1	119				70	
Equity-accounted investments	2	1	99		2	1	119				70	
<b>Total</b>	<b>268</b>	<b>150</b>	<b>900</b>	<b>6</b>	<b>268</b>	<b>150</b>	<b>1,561</b>	<b>9</b>	<b>286</b>	<b>131</b>	<b>2,011</b>	<b>6</b>

Edgar Filing: CHINA PETROLEUM & CHEMICAL CORP - Form 20-F

Table of Contents

The following table sets forth the number of wells being drilled by us as of December 31, 2016, 2017 and 2018:

Number of Drilling Welling	2016				As of December 31, 2017				2018		
	Gross		Net		Gross		Net		Gross		
	Exploratory	Development	Exploratory	Development	Exploratory	Development	Exploratory	Development	Exploratory	Development	Exp
China	78	138	78	138	62	147	62	147	69		277
Subsidiaries	78	138	78	138	62	147	62	147	69		277
Shengli	28	21	28	21	19		19		25		72
Others	50	117	50	117	43	147	43	147	44		205
Overseas			2				5		5		