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刊發發售備忘錄

Sinopec Group Overseas Development (2018) Limited

(於英屬處女群島註冊成立的有限公司)

1,150,000,000美元1.450%二零二六年到期的優先票據(票據證券代號：40520)
1,200,000,000美元2.300%二零三一年到期的優先票據(票據證券代號：40521)
650,000,000美元3.100%二零五一年到期的優先票據(票據證券代號：40522)

(統稱「**票據**」)

由

China Petrochemical Corporation
中國石油化工集團公司

(於中華人民共和國註冊成立的國有企業)

提供無條件及不可撤回之擔保

本公告乃根據上市規則第37.39A條而刊發。

請參閱本公告所附日期為二零二一年一月五日有關發行票據的發售備忘錄(「**發售備忘錄**」)。

香港投資者提示:發行人及擔保人確認,票據擬僅供專業投資者(定義見上市規則第37章)購買,並已按此基礎於香港聯合交易所有限公司上市。因此,發行人及擔保人確認,票據並不適宜作為香港散戶的投資。投資者應審慎考慮所涉及的風險。

發售備忘錄並不構成向任何司法權區的公眾提呈出售任何證券的招股章程、通告、通函、宣傳冊或廣告,亦並非向公眾發出邀請以就認購或購買任何證券作出要約,此外亦非供傳閱以邀請公眾發出認購或購買任何證券的要約。

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香港,二零二一年一月十一日

於本公告日期,Sinopec Group Overseas Development (2018) Limited董事會由壽東華及趙立組成,中國石油化工集團公司董事會由張玉卓、馬永生、趙東、王麗麗、時歡、陳月明、張玉清及吳獻東組成。

IMPORTANT NOTICE
THIS OFFERING IS AVAILABLE ONLY TO INVESTORS WHO ARE EITHER (1) QIBS (AS DEFINED BELOW) OR (2) ADDRESSEES OUTSIDE OF THE UNITED STATES WHO ARE NON-U.S. PERSONS

IMPORTANT: You must read the following disclaimer before continuing. The following disclaimer applies to the attached offering memorandum (the "Offering Memorandum"). You are therefore advised to read this disclaimer carefully before reading, accessing or making any other use of the attached. In accessing the attached, you agree to be bound by the following terms and conditions, including any modifications to them from time to time, each time you receive any information from us as a result of such access.

Confirmation of your Representation: You have accessed the attached document on the basis that you have confirmed your representation to Citigroup Global Markets Inc., Goldman Sachs (Asia) L.L.C., J.P. Morgan Securities plc, Bank of China Limited, BOCI Asia Limited, CCB International Capital Limited, China Construction Bank (Asia) Corporation Limited, ICBC International Securities Limited, Merrill Lynch (Asia Pacific) Limited, Société Générale, Agricultural Bank of China Limited Hong Kong Branch, Bank of Communications Co., Ltd. Hong Kong Branch, China Merchants Securities (HK) Co., Limited, CMBC Securities Company Limited, DBS Bank Ltd., Morgan Stanley & Co. International plc and UBS AG Hong Kong Branch (collectively, the "Initial Purchasers") that (1) either (i) you and any customers you represent are non-U.S. persons (as defined in Regulation S under the U.S. Securities Act of 1933, as amended (the "Securities Act")) outside the United States and the electronic mail address that you gave us and to which this e-mail has been delivered is not located in the United States and, to the extent you purchase the securities described in the attached Offering Memorandum you will be doing so pursuant to Regulation S under the Securities Act, or (ii) you are acting on behalf of, or you are, a qualified institutional buyer ("QIB"), as defined in Rule 144A under the Securities Act, and (2) you consent to delivery of the attached Offering Memorandum and any amendments or supplements thereto by electronic transmission.

The attached document has been made available to you in electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of transmission and consequently none of the Initial Purchasers nor any of their respective employees, representatives or affiliates accepts any liability or responsibility whatsoever in respect of any discrepancies between the document distributed to you in electronic format and the hard copy version. We will provide a hard copy version to you upon request.

Restrictions: The attached Offering Memorandum is being furnished in connection with an offering exempt from registration under the Securities Act solely for the purpose of enabling a prospective investor to consider the purchase of the securities described in the Offering Memorandum. You are reminded that the information in the attached document is not complete and may be changed.

THE SECURITIES HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE SECURITIES ACT, OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER JURISDICTION AND THE SECURITIES MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

Except with respect to eligible investors in jurisdictions where such offer is permitted by law, nothing in this electronic transmission constitutes an offer or an invitation by or on behalf of either the issuer or guarantor of the securities or any Initial Purchaser to subscribe for or purchase any of the securities described therein, and access has been limited so that it shall not constitute a general advertisement or general solicitation (as those terms are used in Regulation D under the Securities Act) or directed selling efforts (within the meaning of Regulation S under the Securities Act) in the United States or elsewhere.

You are reminded that you have accessed the attached Offering Memorandum on the basis that you are a person into whose possession this Offering Memorandum may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not nor are you authorized to deliver or forward this document, electronically or otherwise, to any other person. If you have gained access to this transmission contrary to the foregoing restrictions, you will be unable to purchase any of the securities described therein.

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OFFERING MEMORANDUM

Sinopec Group Overseas Development (2018) Limited

(incorporated in the British Virgin Islands with limited liability)

US$1,150,000,000 1.450% Senior Notes Due 2026
US$1,200,000,000 2.300% Senior Notes Due 2031
US$650,000,000 3.100% Senior Notes Due 2051

unconditionally and irrevocably guaranteed by

CHINA PETROCHEMICAL CORPORATION
中國石油化工集團有限公司

(a state-owned limited liability company incorporated in the People's Republic of China)

The US$1,150,000,000 1.450% Senior Notes due 2026 (the "2026 Notes"), the US$1,200,000,000 2.300% Senior Notes due 2031 (the "2031 Notes") and the US$650,000,000 3.100% Senior Notes due 2051 (the "2051 Notes", and together with the 2026 Notes and the 2031 Notes, the "Notes") will be the unsubordinated senior obligations of Sinopec Group Overseas Development (2018) Limited (the "Issuer"). The 2026 Notes, the 2031 Notes and the 2051 Notes will bear interest at a rate of 1.450%, 2.300% and 3.100% per year, respectively.

Interest on the Notes will accrue from January 8, 2021. Interest will be paid on the Notes semi-annually in arrears on January 8 and July 8 of each year, beginning on July 8, 2021. Unless previously repurchased, cancelled or redeemed, the 2026 Notes, the 2031 Notes and the 2051 Notes will mature on January 8, 2026, January 8, 2031, and January 8, 2051, respectively.

Pursuant to the Notice on Promoting the Reform of the Filing and Registration System for Issuance of Foreign Debt by Corporates (《國家發展改革委員會關於推進企業發行外債備案登記制管理改革的通知》(發改外資[2015]2044號)) (the "NDRC Circular") issued by the NDRC on September 14, 2015, the Company is required to obtain the Enterprise Foreign Debt Pre-Issuance Registration Certificate in respect of the Notes before the issue of the Notes, which the Company has obtained on October 16, 2020 and remains valid as of now, and the Company is required to file with the NDRC the requisite information on the issuance of the Notes within 10 business days after the settlement of such Notes. The Company intends to provide the requisite information on the issuance of the Notes to the NDRC within the time period prescribed by the NDRC Circular and any relevant rules and regulations from time to time issued by the NDRC.

Under the Notice on the Promulgation of the Provisions on Foreign Exchange Administration of Cross-border Guarantee issued by the State Administration of Foreign Exchange (the "SAFE") on May 12, 2014, effective from June 1, 2014 (the "Cross-border Guarantee Provisions"), we are required to register the Guarantees with the Beijing Branch of the SAFE (the "Beijing Branch") within 15 Beijing business days after the date of execution of the Guarantees. We will use our commercially reasonable best efforts to complete the registration of the Guarantees with the Beijing Branch.

The Notes will be irrevocably and unconditionally guaranteed (the "Guarantees") by China Petrochemical Corporation (the "Company" or the "Guarantor").

The Issuer may redeem the Notes at any time upon the occurrence of certain tax events. The Issuer or the Company may, at the Company's option, redeem the 2026 Notes at any time prior to December 8, 2025, the 2031 Notes at any time prior to October 8, 2030, and the 2051 Notes at any time prior to July 8, 2050, in each case, in whole or in part, at a redemption price equal to 100% of the principal amount of the Notes redeemed plus the applicable premium as of, and accrued and unpaid interest, if any, to the redemption date. In addition, the Issuer or the Company may, at the Company's option, redeem the 2026 Notes at any time from or after December 8, 2025, the 2031 Notes at any time from or after October 8, 2030, and the 2051 Notes at any time from or after July 8, 2050, in each case, in whole or in part, at a redemption price equal to 100% of the principal amount of the applicable Notes redeemed plus accrued and unpaid interest, if any, to the date of redemption.

The Notes will rank *pari passu* with all of the Issuer's other existing and future unsubordinated obligations and will be effectively subordinated to its secured obligations. The Guarantees will rank pari passu with all of the Company's other existing and future unsubordinated obligations and will be effectively subordinated to its secured obligations and the obligations of its subsidiaries.

Investing in the Notes involves risks. Furthermore, investors should be aware that (i) the Issuer is a special purpose vehicle with no business activities of its own and will be dependent on funds from the Guarantor to make payments under the Notes and (ii) there is uncertainty relating to the enforceability of the Guarantees of the Notes. See "Risk Factors" beginning on page 14.

The Notes are expected to be assigned a rating of "A1" by Moody's Investors Service, Inc. ("Moody's") and "A+" by S&P Global Ratings, a division of S&P Global Inc. ("S&P"). A rating is not a recommendation to buy, sell or hold the Notes and may be subject to suspension, reduction or withdrawal at any time by Moody's. A suspension, reduction or withdrawal of the rating assigned to the Notes may adversely affect the market price of the Notes.

Application will be made to The Stock Exchange of Hong Kong Limited (the "SEHK") for the listing of the Notes by way of debt issues to professional investors (as defined in Chapter 37 of the Rules Governing the Listing of Securities on the SEHK, "Professional Investors") only. This document is for distribution to Professional Investors only.

Notice to Hong Kong investors: The Issuer and the Guarantor confirm that the Notes are intended for purchase by Professional Investors only and will be listed on the SEHK on that basis. Accordingly, the Issuer and the Guarantor confirm that the Notes are not appropriate as an investment for retail investors in Hong Kong. Investors should carefully consider the risks involved.

The SEHK has not reviewed the contents of this document, other than to ensure that the prescribed form disclaimer and responsibility statements, and a statement limiting distribution of this document to Professional Investors only have been reproduced in this document. Listing of the Notes on the SEHK is not to be taken as an indication of the commercial merits or credit quality of the Notes or the Issuer and the Guarantor or quality of disclosure in this document. Hong Kong Exchanges and Clearing Limited and the SEHK take no responsibility for the contents of this document, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this document.

The Issuer has received an eligibility letter from the SEHK for listing of, and permission to deal in, the Notes by way of debt issues to Professional Investors only. The SEHK assumes no responsibility for the correctness of any statements made, opinions expressed or reports contained in this offering memorandum. Listing of the Notes on the SEHK is not to be taken as an indication of the merits of the Notes, the Guarantees, the Issuer or the Company.

Offering Price for the 2026 Notes: 99.866% of principal amount plus accrued interest from January 8, 2021

Offering Price for the 2031 Notes: 99.486% of principal amount plus accrued interest from January 8, 2021

Offering Price for the 2051 Notes: 100.000% of principal amount plus accrued interest from January 8, 2021

The Notes and the Guarantees have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or the securities laws of any other place. Accordingly, the Notes and the Guarantees may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (as such terms are defined under the Securities Act) except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. The Notes and the Guarantees may be offered and sold only to (1) persons who are qualified institutional buyers ("Qualified Institutional Buyers") (as defined in Rule 144A under the Securities Act) purchasing for their own account or the account of a Qualified Institutional Buyer as to which the purchaser exercises sole investment discretion, in reliance on the exemption from the registration requirements of the Securities Act provided by Rule 144A; or (2) non-U.S. persons (as defined in the Securities Act) in offshore transactions in reliance on Regulation S under the Securities Act, and in accordance with any other applicable law. Prospective purchasers are hereby notified that the seller of the Notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. For a description of certain restrictions on resales and transfers of the Notes and the Guarantees, see "Plan of Distribution" and "Transfer Restrictions."

It is expected that delivery of the Notes will be made to investors in book-entry form through the facilities of the Depository Trust Company on or about January 8, 2021.

Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners

Citigroup **Goldman Sachs (Asia) L.L.C.** **J.P. Morgan** **Bank of China**

China Construction Bank **ICBC International** **BofA Securities** **Société Générale Corporate & Investment Banking**

Joint Lead Managers and Joint Bookrunners

Agricultural Bank of China Limited Hong Kong Branch **Bank of Communications** **China Merchants Securities (HK)** **CMBC Capital**

DBS Bank Ltd. **Morgan Stanley** **UBS**

Offering Memorandum dated January 5, 2021.

NOTICE TO INVESTORS

Hong Kong Exchanges and Clearing Limited and the SEHK take no responsibility for the contents of this document, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this document.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of MiFID II; or (ii) a customer within the meaning of Directive (EU) 2016/97 (the "**IDD**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

Consequently no key information document required by Regulation (EU) No 1286/2014 (the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

PROHIBITION OF SALES TO UK RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom ("**UK**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("**EUWA**"); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the "**FSMA**") and any rules or regulations made under the FSMA to implement IDD, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA.

Consequently no key information document required by the PRIIPs Regulation as it forms part of domestic law by virtue of the EUWA (the "**UK PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

In connection with Section 309B of the Securities and Futures Act (Chapter 289) of Singapore (the "SFA") and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the "CMP Regulations 2018"), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are 'prescribed capital markets products' (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

This offering memorandum has been prepared by the Issuer and the Company solely for use in connection with the proposed offering of the Notes. Both the Issuer and the Company, as well as Citigroup Global Markets Inc., Goldman Sachs (Asia) L.L.C., J.P. Morgan Securities plc, Bank of China Limited, BOCI Asia Limited, CCB International Capital Limited, China Construction Bank (Asia) Corporation Limited, ICBC International Securities Limited, Merrill Lynch (Asia Pacific) Limited, Société Générale, Agricultural Bank of China Limited Hong Kong Branch, Bank of Communications Co., Ltd. Hong Kong Branch, China Merchants Securities (HK) Co., Limited, CMBC Securities Company Limited, DBS Bank Ltd., Morgan Stanley & Co. International plc and UBS AG Hong Kong Branch (collectively, the "Initial Purchasers"), reserve the right to withdraw the offering of the Notes at any time or to reject any offer to purchase, in whole or in part, for any reason, or to sell less than all of the Notes offered hereby.

This offering memorandum is personal to the prospective investor to whom it has been delivered by the Initial Purchasers and does not constitute an offer to any other person or to the public in general to subscribe for or otherwise acquire the Notes. Distribution of this offering memorandum to any person other than the prospective investor and those persons, if any, retained to advise that prospective investor with respect thereto is unauthorized, and any disclosure of its contents without the Issuer's prior written consent is prohibited. The prospective investor, by accepting delivery of this offering memorandum, agrees to the foregoing and agrees not to make any photocopies of this offering memorandum.

This offering memorandum is intended solely for the purpose of soliciting indications of interest in the Notes from qualified investors and does not purport to summarize all of the terms, conditions, covenants and other provisions contained in the indentures governing the Notes (the "Indentures") and other transaction documents described herein. The information provided is not all-inclusive. The market information in this offering memorandum has been obtained by the Issuer from publicly available sources deemed by it to be reliable. The Issuer has accurately reproduced certain information, and as far as the Issuer is aware and able to ascertain third-party sources, no facts have been omitted which would render the reproduced information inaccurate or misleading. Notwithstanding any investigation that the Initial Purchasers may have conducted with respect to the information contained herein, the Initial Purchasers do not accept any liability in relation to the information contained in this offering memorandum or its distribution or with regard to any other information supplied by or on the Issuer's or the Company's behalf.

Each of the Issuer and the Company confirms that, after having made all reasonable inquiries, this offering memorandum contains all information with regard to it and the Notes which is material to the offering and sale of the Notes, that the information contained in this offering memorandum is true and accurate in all material respects and is not misleading in any material respect and that there are no omissions of any other facts from this offering memorandum which, by their absence herefrom, make this offering memorandum misleading in any material respect. Each of the Issuer and the Company accepts responsibility for the accuracy of the information contained in this offering memorandum. To the best of our knowledge, the information contained in this offering memorandum is in accordance with the facts and does not omit anything likely to affect the import of this offering memorandum.

You should rely only on the information contained in this offering memorandum. The Issuer and the Company have not authorized anyone to provide you with information that is different. This offering memorandum may only be used where it is legal to sell the Notes. The information in this document may only be accurate at the date of this offering memorandum. Neither the delivery of this offering memorandum nor any sale made hereunder shall under any circumstances imply that there has been no change in the Company's or the Issuer's affairs and those of each of their respective subsidiaries or that the information set forth herein is correct in all material respects as of any date subsequent to the date hereof.

This document includes particulars given in compliance with the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited for the purpose of giving information with regard to the Issuer and the Guarantor. Each of the Issuer and the Guarantor accepts full responsibility for the accuracy of the information contained in this document and confirms, having made all reasonable enquiries, that to the best of its knowledge and belief there are no other facts the omission of which would make any statement herein misleading.

Prospective investors hereby acknowledge that (i) they have not relied on the Initial Purchasers or any person affiliated with the Initial Purchasers in connection with any investigation of the accuracy of such information or their investment decision and (ii) no person has been authorized to give any information or to make any representation concerning the Issuer, the Company, the Notes or the Guarantees (other than as contained herein and information given by the Issuer's or the Company's duly authorized officers and employees, as applicable, in connection with investors' examination of the Issuer and the Company, and the terms of this offering) and, if given or made, any such other information or representation should not be relied upon as having been authorized by the Issuer, the Company or the Initial Purchasers.

In making an investment decision, prospective investors must rely on their examination of the Issuer and the Company and the terms of this offering, including the merits and risks involved. Neither the Notes nor the Guarantees have been approved or recommended by any United States federal or state securities commission or any other regulatory authority. Furthermore, the foregoing authorities have not passed upon or endorsed the merits of the offering or confirmed the accuracy or determined the adequacy of this offering memorandum. Any representation to the contrary is a criminal offense in the United States.

This offering memorandum does not constitute an offer to sell, or a solicitation of an offer to buy, any Note or Guarantee offered hereby by any person in any jurisdiction in which it is unlawful for such person to make an offer or solicitation.

In connection with this issue, Citigroup Global Markets Inc., Goldman Sachs (Asia) L.L.C., J.P. Morgan Securities plc, Bank of China Limited, BOCI Asia Limited, CCB International Capital Limited, China Construction Bank (Asia) Corporation Limited, ICBC International Securities Limited, Merrill Lynch (Asia Pacific) Limited and Société Générale (the "Stabilizing Managers"), or any of their affiliates (or any person acting on behalf of any of them) may, to the extent permitted by applicable laws and regulations, over-allot or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail for a limited period after the issue date. However, there is no obligation on the Stabilizing Managers, or any of their affiliates (or any person acting on behalf of any of them), to do this. Such stabilization, if commenced, may be discontinued at any time, and must be brought to an end after a limited period.

None of the Issuer, the Company or the Initial Purchasers, or any of its or their respective affiliates or representatives is making any representation to any offeree or purchaser of the Notes offered hereby regarding the legality of any investment by such offeree or purchaser under applicable legal investment or similar laws. The Initial Purchasers have not separately verified the information contained in this offering memorandum. None of the Initial Purchasers, the Trustee, Paying Agent, Transfer Agent or Registrar (each as defined below) makes any representation, warranty or undertaking, express or implied, or accepts any responsibility, with respect to the accuracy or completeness of any of the information in this offering memorandum. To the fullest extent permitted by law, none of the Initial Purchasers, the Trustee, Paying Agent, Transfer Agent or Registrar accepts any responsibility for the contents of this offering memorandum or for any other statement made or purported to be made by the Initial Purchasers, the Trustee, Paying Agent, Transfer Agent or Registrar or on their behalf in connection with the Issuer and the Company or the issue and offering of the Notes. Each of the Initial Purchasers, the Trustee, Paying Agent, Transfer Agent or Registrar accordingly disclaims all and any liability whether arising in tort or contract or otherwise which it might otherwise have in respect of this offering memorandum or any such statement. Each prospective investor should consult with its own advisors as to legal, tax, business, financial and related aspects of a purchase of the Notes.

The distribution of this offering memorandum and the offer and sale of the Notes may, in certain jurisdictions, be restricted by law. Each purchaser of the Notes must comply with all applicable laws and regulations in force in each jurisdiction in which it purchases, offers or sells the Notes or possesses or distributes this offering memorandum, and must obtain any consent, approval or permission required for the purchase, offer or sale by it of the Notes under the laws and regulations in force in any jurisdiction to which it is subject or in which it makes purchases, offers or sales. See "Plan of Distribution" for a description of certain restrictions on the offer and sale of the Notes, and the circulation of documents relating thereto, in certain jurisdictions.

AVAILABLE INFORMATION

At any time when we are not subject to Sections 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended, (the "Exchange Act"), or exempt from reporting pursuant to Rule 12g3-2(b) under the Exchange Act, we will furnish, upon request, to any holder or beneficial owner of the Notes, or any prospective purchaser designated by any such holder or beneficial owner, information satisfying the requirements of Rule 144A(d)(4)(i) under the Securities Act to permit compliance with Rule 144A in connection with resales of the Notes for so long as any of the Notes are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act. We will also furnish to each such holder or beneficial owner all notices of shareholders' meetings and other reports and communications that are made generally available to shareholders.

CERTAIN DEFINED TERMS AND CONVENTIONS

In this offering memorandum, references to:

- "Company," "Guarantor," "Sinopec Group," "we," "our" and "us" are to China Petrochemical Corporation, a PRC state-owned limited liability company (uniform social credit code 9111000010169286X1) (unless the context requires otherwise, including any subsidiaries of the Company), wholly owned by the SASAC;

- "CSG" are to coal seam gas, a form of natural gas extracted from coal beds;

- "CSRC" are to the China Securities Regulatory Commission of the State Council of China;

- "Issuer" are to Sinopec Group Overseas Development (2018) Limited;

- "LNG" are to liquefied natural gas, a form of natural gas that has been converted to liquid form for ease of storage or transport;

- "MOFCOM" are to the Ministry of Commerce of the PRC;

- "NDRC" are to the National Development and Reform Commission of the PRC;

- "PRC" or "China" are to the People's Republic of China, excluding, for the purpose of this offering memorandum only, the Hong Kong Special Administrative Region, the Macau Special Administrative Region and Taiwan;

- "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" or "Renminbi" are to the Renminbi, the official currency of the PRC;

- "SAFE" are to the State Administration of Foreign Exchange of the PRC;

- "SASAC" are to the State-owned Assets Supervision and Administration Commission of the State Council of China;

- "Sinopec Catalyst" are to Sinopec Catalyst Co. Ltd., a PRC joint stock limited company (unless the context requires otherwise, including any subsidiary of Sinopec Catalyst);

- "Sinopec Corp." are to China Petroleum & Chemical Corporation, a PRC joint stock limited company (unless the context requires otherwise, including any subsidiary of Sinopec Corp.);

- "Sinopec Engineering" are to Sinopec Engineering (Group) Co., Ltd., a PRC joint stock limited company (unless the context requires otherwise, including any subsidiary of Sinopec Engineering);

- "SIPC" are to Sinopec International Petroleum Exploration and Production Corporation, a PRC limited liability company (unless the context requires otherwise, including any subsidiary of SIPC);

- "Sinopec Lubricant" are to Sinopec Lubricant Co. Ltd., a PRC joint stock limited company (unless the context requires otherwise, including any subsidiary of Sinopec Lubricant);

- "Sinopec Oilfield Service" are to Sinopec Oilfield Service Corporation, a PRC joint stock limited company (unless the context requires otherwise, including any subsidiary of Sinopec Oilfield Service); and

- "US$" and "U.S. dollars" are to United States dollars, the official currency of the United States of America.

Solely for your convenience, this offering memorandum contains translations of certain Renminbi amounts into U.S. dollar amounts at specified rates. Unless indicated otherwise, the translation of Renminbi amounts into U.S. dollar amounts has been made at the rate of RMB6.7896 to US$1.00, the exchange rate set forth in the H.10 weekly statistical release (the "Noon Buying Rate") of the Board of Governors of the Federal Reserve System of the United States (the "Federal Reserve Board") on September 30, 2020. Further information on exchange rates is set forth in "Exchange Rates." You should not construe these translations as representations that the Renminbi amounts could actually be converted into any U.S. dollar amounts at the rates indicated or at all.

Market data and certain industry forecasts and statistics in this offering memorandum have been obtained from both public and private sources, including market research, publicly available information and industry publications. In many cases, there is no readily available external information (whether from trade associations, government bodies or other organizations) to validate market-related analyses and estimates, requiring us to rely on our own internally developed estimates regarding our industry, our position in the industry, our market and segment share and the market and segment shares of various industry participants based on experience, our own investigation of market conditions and our review of industry publications, including information made available to the public by our competitors. Although this information is believed to be reliable, it has not been independently verified by the Issuer, the Company or the Initial Purchasers or their respective directors and advisors, and none of the Issuer, the Company, the Initial Purchasers or their respective directors and advisors make any representation as to the accuracy or completeness of that information. Such information may not be consistent with other information compiled within or outside the PRC. In addition, third-party information providers may have obtained information from market participants and such information may not have been independently verified. This offering memorandum summarizes certain documents and other information, and investors should refer to them for a more complete understanding of what is discussed in those documents. In making an investment decision, each investor must rely on its own examination of the Issuer, the Company and the terms of the offering and the Notes, including the merits and risks involved.

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PRESENTATION OF INFORMATION

Financial Data

The Company's consolidated income statement, cash flow statement and balance sheet data for the years ended and as of December 31, 2017 and 2018 have been extracted from the consolidated financial statements audited by Grant Thornton Certified Public Accountants and included elsewhere in this offering memorandum. The Company's consolidated income statement, cash flow statement and balance sheet data for the year ended and as of December 31, 2019 have been extracted from the consolidated financial statements audited by BDO China Shu Lun Pan Certified Public Accountants LLP and included elsewhere in this offering memorandum. The Company's consolidated income statement and cash flow statement data for the nine months ended September 30, 2019 and 2020 and balance sheet data as of September 30, 2020 have been derived from its unaudited interim consolidated financial statements included elsewhere in this offering memorandum. Such financial statements are prepared in accordance with the requirements of Accounting Standards for Business Enterprises – Basic Standards, specific standards and relevant regulations issued by Ministry of Finance of the PRC on or after February 15, 2006, Application Guidance of Accounting Standards for Business Enterprises, Interpretation of Accounting Standards for Business Enterprises and other regulations issued thereafter ("PRC GAAP"). PRC GAAP differs in certain material respects from U.S. GAAP. For a discussion of certain differences between PRC GAAP and U.S. GAAP, see "Description of Certain Differences between PRC GAAP and U.S. GAAP."

Rounding

Certain amounts and percentages included in this offering memorandum have been rounded. Accordingly, in certain instances, the sum of the numbers in a column may not exactly equal the total figure for that column.

Oil and Gas Reserves

Oil and gas reserves are key elements in the Company's investment decision-making process in relation to its exploration and production business. The term "reserves" describes the recoverable quantity of oil and gas volumes that are commercially viable for development given the prevailing economic situation, in particular the prices of crude oil and natural gas, present at the time of estimation. Reserves are estimated using either a deterministic method, in which a single best estimate is made based on known geological, engineering and economic data, or a probabilistic method, in which known geological, engineering and economic data are used to generate a range of estimates and their associated probabilities. All oil and gas reserves data are estimates, which are revised when additional information becomes available (for example, when additional wells are drilled or when actual production commences). "Proved reserves" refers to the estimated quantities of crude oil and natural gas that geological and engineering data demonstrate have reasonable certainty of being recovered in future years from known reservoirs under existing economic and operating conditions (that is, prices and costs at the date the estimate is made). To qualify as proved reserves, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the proved estimate.

The Company's total estimated proved crude oil and natural gas reserves are located in the PRC as well as overseas. The Company's domestic crude oil and natural gas reserves accounted for more than 50% of the total reserves of the Company in each of 2017, 2018 and 2019. The Company manages its domestic reserves estimation as well as the reserves estimation for the Angola Block 18, the Kazakhstan-based Caspian Investment Resources Ltd., the Russia-based OAO Udmurt Oil Company, and the Colombia-based Mansarovar Energy Colombia Ltd. through Sinopec Corp., and its other overseas reserves estimation through SIPC. Each of Sinopec Corp. and SIPC has a two-tier reserve management system comprising (i) a reserve management committee at its headquarters level that oversees the overall reserves estimation process and reviews the reserves estimation; and (ii) reserve management offices at its production units or project companies that implement the reserves estimation process and reviews reserves estimation reports.

The Company's reserves estimation is guided by procedural manuals and technical guidance. Initial collection and compilation of reserves information is conducted internally. The reserve management offices then work with technical experts to perform peer reviews to ensure that the reserves estimation complies with relevant technical guidance qualitatively and quantitatively and is accurate and reasonable. The reserve management committee is primarily responsible for managing and coordinating the reserves estimation process, reviewing and approving annual changes to and results of reserves estimation and reporting proved reserves. The Company's reserves estimation process is further facilitated by a specialized reserves database which is improved and updated periodically. Sinopec Corp. engages independent engineering consultants who assist it in its reserves estimation process and to comply with relevant rules and regulations of the United States Securities and Exchange Commission (the "SEC"). In addition, a substantial majority of the Company's and SIPC's overseas oil and gas reserves estimation has been assessed by or with assistance from independent engineering consultants.

The Company believes that the methods it uses to estimate these reserves are consistent with the definitions and classifications in the Petroleum Resources Management System developed by internationally recognized organizations such as the Society of Petroleum Engineers, World Petroleum Congress, American Association of Petroleum Geologists and Society of Petroleum Evaluation Engineers, which serve as guidelines for the oil and gas industry. Sinopec Corp.'s reserve data for 2017, 2018 and 2019 were prepared in accordance with the SEC's final rules on "Modernization of Oil and Gas Reporting," which became effective on January 1, 2010.

Unless otherwise indicated, information regarding the Company's oil and gas reserves and production in this offering memorandum refers to the Company's share of reserves and production based on its percentage of equity interest in the relevant properties.

FORWARD-LOOKING STATEMENTS

Certain statements in this offering memorandum are not historical facts and are "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. This offering memorandum may contain words such as "believe," "could," "may," "will," "target," "estimate," "project," "predict," "forecast," "guideline," "should," "plan," "expect" and "anticipate" and similar expressions that are intended to identify forward-looking statements, but are not the exclusive means of identifying these statements. Particularly, statements under the captions "Summary," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" relating to the following matters may include forward-looking statements:

- the anticipated demand for oil and gas products and related capital expenditures and investments,
- projections of capital expenditures in general and other financial items,
- generation of future receivables,
- expected sales to customers and price levels,
- the expected results of exploration, production and refining activities and related capital expenditures and investments, and
- environmental compliance and remediation.

Such statements are subject to various risks and uncertainties, including, but not limited to:

- changes in global economic and social conditions,
- changes in the world political situation,
- changes in economic and political conditions and increases in regulatory burdens in the PRC and other countries in which we operate, transact business or have interests,
- changes in prices or demand for products or raw materials produced or used by us or our subsidiaries or affiliates, both in the PRC and in international markets, as a result of competitive actions or economic factors, such as inflation or exchange rate fluctuations,
- accidents, pandemic outbreaks and natural disasters,
- changes in import controls or import duties, levies or taxes, either in international markets or in the PRC,
- changes in laws, regulations, taxation or accounting standards or practices,
- currency, interest rate, price and credit risks,
- the risks of the increasing expenditures and investments,
- uncertainty of technological change,
- the technical limitations of our exploration and production of the oil and gas reserves,
- the ability of third parties to perform in accordance with contractual terms and specifications,
- acquisitions or divestitures,
- potential disputes with international and domestic joint venture partners, and
- other factors, including those discussed in "Risk Factors."

In addition, the expectations of management with respect to oil and gas exploration activities are subject to risks arising from the inherent difficulty of predicting the presence, yield or quality of oil and gas deposits, as well as unknown or unforeseen difficulties in extracting, transporting or processing any oil and gas found, or doing so on a commercial basis.

Forward-looking statements involve inherent risks and uncertainties. Should one or more of these or other uncertainties or risks materialize, actual results may vary materially from those estimated, anticipated or projected. Specifically, but without limitation, capital costs could increase, projects could be delayed and anticipated improvements in capacity, performance or profit levels might not be fully realized. Although we believe that the expectations of our management as reflected by such forward-looking statements are reasonable based on information currently available to it, no assurances can be given that such expectations will prove to have been correct. Accordingly, you are cautioned not to place undue reliance on the forward-looking statements and neither the Issuer nor the Company undertakes any obligation to update or revise any of them, whether as a result of new information, future developments or otherwise.

ENFORCEABILITY OF FOREIGN JUDGMENTS AND CIVIL LIABILITIES

We are a state-owned limited liability company incorporated in the PRC. Most of our assets are located in the PRC. In addition, all of our directors and officers are residents of the PRC, where substantially all of their assets may be located. As a result, it may be difficult for investors to effect service of process upon us or such persons, or to enforce against us or such persons judgments obtained in courts or arbitral tribunals outside the PRC, including judgments predicated upon the civil liability provisions of the U.S. federal or state securities laws.

Since 1979, the PRC government has promulgated laws and regulations in relation to general economic matters such as foreign investment, corporate organization and governance, commerce, taxation, foreign exchange and trade, with a view towards developing a comprehensive system of commercial law. In particular, legislation over the past 30 years has significantly enhanced the protections afforded to various forms of foreign investment in the PRC. Where adequate law exists in the PRC, the enforcement of existing laws or contracts based on existing law may be nevertheless uncertain or sporadic, and it may be difficult to obtain swift and equitable enforcement or to obtain enforcement of a judgment by a court of another jurisdiction. In addition, the PRC legal system is based on written statutes and their interpretations, and prior court decisions may be referenced but carry limited weight as precedents.

There is uncertainty as to whether the courts of the PRC would:

(1) enforce judgments of the U.S. courts obtained against us or our directors and officers predicated upon the civil liability provisions of the federal securities laws of the United States, or upon any other basis, as the PRC does not have treaties for the reciprocal enforcement of judgments with the United States; or

(2) entertain original actions brought in the courts of the PRC, against us or our directors and officers predicated solely upon the federal securities laws of the United States or the securities laws of any state or territory within the United States.

Furtherly the recognition and enforcement of foreign judgments are provided for under the PRC Civil Procedures Law. PRC courts may recognize and enforce foreign judgments in accordance with the requirements of the PRC Civil Procedures Law based either on treaties between the PRC and the country where the judgment is made or on reciprocity between jurisdictions. The PRC does not have any treaties or other agreements that provide for the reciprocal recognition and enforcement of foreign judgments with the United States. In addition, according to the PRC Civil Procedures Law, courts in the PRC will not enforce a foreign judgment against us or our directors and officers if they decide that the judgment violates the basic principles of PRC law or national sovereignty, security or public interest. Therefore, it is uncertain whether a PRC court would enforce a judgment rendered by a court in the United States.

The Issuer has been advised by Conyers Dill & Pearman, its British Virgin Islands legal advisors, that the courts of the British Virgin Islands would recognize as a valid judgment, a final and conclusive judgment in personam obtained in the foreign courts against the Issuer under which a sum of money is payable (other than a sum of money payable in respect of multiple damages, taxes or other charges of a like nature or in respect of a fine or other penalty) and would give a judgment based thereon provided that (a) such courts had proper jurisdiction over the parties subject to such judgment, (b) such courts did not contravene the rules of natural justice of the British Virgin Islands, (c) such judgment was not obtained by fraud, (d) the enforcement of the judgment would not be contrary to the public policy of the British Virgin Islands, (e) no new admissible evidence relevant to the action is submitted prior to the rendering of the judgment by the courts of the British Virgin Islands, and (f) there is due compliance with the correct procedures under the laws of the British Virgin Islands.

SUMMARY

This summary may not contain all of the information that may be important to you. You should read this entire offering memorandum before making an investment decision to purchase the Notes.

Overview

The Company

We are the largest integrated petroleum and petrochemical company in China and one of the largest in the world in terms of revenue, according to the "2020 Fortune Global 500." We are the largest refined oil producer in the world in terms of crude oil throughput in 2019. We are the second largest oil and gas producer in China in terms of production volume in 2019. We are also the largest distributor of refined oil products in China measured by sales volume in 2019, and the number of our service stations ranked first in China as of September 30, 2020. We ranked first in China in terms of production volume of major petrochemical products in 2019. We have been named in the "Fortune Global 500" since 2003 and ranked second in the "2020 Fortune Global 500" in terms of revenue.

We were established in July 1998 on the basis of the former China Petrochemical Corporation and converted into a limited liability company in 2018. We are a state-authorized and invested entity and one of China's key state-owned enterprises ("SOEs") under the supervision of the SASAC. Our telephone numbers are +86 (10) 5996 9300 and +86 (10) 5996 9298. We conduct the following key businesses:

- ***Exploration and Production***: We are China's second largest oil and gas producer based on production volume in 2019. We maintained a balanced portfolio of domestic and overseas resources, optimized our development programs in mature oilfields, and increased the production capacity in new fields. We made a number of new discoveries of oil and gas in the Sichuan Basin, Beibu Gulf of the South China Sea, the Ordos Basin, the Tarim Basin, the Junggar Basin, Yin'e Basin, Shengli Oil Field and the North Jiangsu Basin. As of December 31, 2019, we had 3,406 million barrels of oil equivalent ("boe") of proved reserves of crude oil and natural gas, including 2,016 million barrels of crude oil and 8,341 billion cubic feet ("bcf") of natural gas. In 2019 and for the nine months ended September 30, 2020, our production of crude oil and natural gas was 538 million and 392 million boe, respectively. We are also exploring the possibility of using unconventional oil and gas resources as a substitute for or supplement to conventional resources in order to provide a more sustainable supply of hydrocarbon energy. Our new energy operations include CSG, shale oil, shale gas, LNG, geothermal heating, solar photovoltaics and other unconventional energies. In 2019, the Fuling shale gas field reached an annual production capacity of 6.748 billion cubic meters.

- ***Refining***: We are the largest refined oil producer in the world in terms of crude oil throughput in 2019. In 2019 and for the nine months ended September 30, 2020, we processed 250 million tonnes and 176 million tonnes of crude oil, representing approximately 38.4% and 35.5%, respectively, of the total crude oil processed in China. We operate 33 refineries in China, including 16 with refining capacity of 10 million tonnes or more per annum, which are located in China's eastern and southeastern regions with more developed economies, higher population densities and larger numbers of oil product consumers than the other regions in China. We commenced production of our self-developed bio-jet fuel, which uses vegetable oils as feedstock, in 2011. It was successfully used in trial commercial flights in 2015, resulting in us receiving the first license to produce bio-jet fuel in China and China being the fourth country in the world to have proprietary technologies to produce bio-jet fuel.

- ***Chemicals***: We are the largest producer of major petrochemical products in China and one of the largest in the world in terms of production volume in 2019. We believe we have greater economies of scale in most of our production facilities and more extensive distribution channels in China than our competitors. We ranked second in C&EN's "Global Top 50 Chemical Companies" as released in July 2020 in terms of chemical sales. We produce a wide range of chemical products including intermediate petrochemicals, synthetic resins, synthetic fiber monomers and polymers, synthetic fiber, synthetic rubbers and synthetic ammonia. In 2019 and for the nine months ended September 30, 2020, we produced 12.5 million tonnes and 8.85 million tonnes of ethylene, the primary feedstock for our chemical production, respectively. Our chemical products are widely distributed throughout China and used in various industries including textiles, agriculture, construction, shoes, housewares, packaging, electronic appliances and automobiles.

- ***Marketing and Distribution***: We are the largest distributor of refined oil products in China measured by sales volume in 2019. In 2019, our domestic market share with respect to the sales of refined oil products was 56.0% as to major refined oil products, which include gasoline, diesel and kerosene (including jet fuel). We sell most of our major refined oil products through retail service stations that operate under the "Sinopec" brand. Our strong retail network provides extensive geographic coverage of retail sales across China. As of September 30, 2020, we had 30,727 service stations, representing the largest oil products distribution network in China. The retail sales volume of gasoline, diesel and kerosene (including jet fuel) through these service stations accounted for approximately 66.4% and 67.4% of our major refined oil products sales volume in China for the year of 2019 and the nine months ended September 30, 2020, respectively. As of September 30, 2020, we had more than 1,000 service stations in each of 14 provinces, most of which are located in China's eastern and southern regions. For the nine months ended September 30, 2019 and 2020, we sold 192.4 million and 162.3 million tonnes of major refined oil products, respectively. We have developed non-fuel businesses for our full-service stations to transform our network of traditional service stations into a comprehensive one-stop multifunctional integrated service platform that combines "fueling, shopping, dining and car services." The number of our Easy Joy convenience stores, most of which are located in our service stations, reached 27,508 as of September 30, 2020. In addition, we have expanded our business into electric vehicles charging market by co-operating with our business partners, such as Beijing Electric Vehicle Co., Ltd., to integrate charging and power stations for electric vehicles into our service stations.

- ***Oil and Petrochemical Engineering Technical Services***: We believe we are one of the largest refining and chemical engineering technical service providers in China measured by revenue, and we believe we have the most comprehensive capability in the design and construction of refineries and ethylene production facilities among the industry players in China. Equipped with our in-house technologies and patents, we are a technological leader in refining and chemical engineering design both in China and overseas. In 2019, the aggregate value of new contracts of our refining and chemical engineering technical services amounted to US$7.5 billion, including overseas new contracts with amount of US$1.0 billion. In 2019, the aggregate value of new contracts of our oil engineering technical services amounted to US$10.0 billion, including overseas oil engineering technical services with amount of US$2.4 billion.

- ***Others***: We also engage in international trade, research and development and other businesses, which are collectively referred to as our "Others" segment.

The following table sets forth our operating revenue by business segment for the periods presented.

	Year Ended December 31,				Nine Months Ended September 30,				
	2017	2018	2019		2019		2020		
							(unaudited)		
	RMB	*RMB*	*RMB*	*Percentage*[(2)]	*RMB*	*Percentage*	*RMB*	*US$*	*Percentage*
	(in millions, except for percentage data)								
Total Operating Revenue[(1)]:									
Exploration and Production	157,490	200,191	210,712	4.1%	152,408	4.0%	120,354	17,726	4.4%
Refining	1,011,848	1,263,408	1,224,156	23.9%	911,125	23.9%	687,285	101,226	24.9%
Chemicals	474,466	587,868	536,686	10.5%	410,033	10.8%	291,841	42,984	10.6%
Marketing and Distribution	1,224,197	1,446,637	1,430,963	27.9%	1,058,333	27.8%	818,400	120,537	29.7%
Oil & Petrochemical Engineering Technical Services	89,320	110,674	128,993	2.5%	89,512	2.3%	87,529	12,892	3.2%
Others	1,079,561	1,474,449	1,597,918	31.1%	1,188,774	31.2%	749,739	110,425	27.2%
Elimination of inter-segment	(1,636,601)	(2,146,386)	(2,126,011)		(1,544,876)		(1,174,017)	(172,915)	
Total	**2,400,281**	**2,936,841**	**3,003,417**	**100.0%**	**2,265,309**	**100.0%**	**1,581,131**	**232,875**	**100.0%**

Notes:

(1) Revenues breakdown by segments is calculated without taking into account inter-segment elimination.

(2) Percentage of revenues is based on total operating revenue before inter-segment elimination.

Sinopec Corp.

Sinopec Corp. is an integral and significant part of the Company. It was established as a joint stock company with limited liability under the Company Law of the PRC on February 25, 2000 as part of a restructuring in which the Company transferred to Sinopec Corp. the majority of its production operations. Sinopec Corp. mainly conducts domestic oil and gas exploration, development and production; crude oil refining; the marketing and distribution of refined oil products; and the production and sales of petrochemical products. Sinopec Corp. is the first company in China to have obtained a listing of its shares on four stock exchanges. Sinopec Corp.'s H shares and American Depositary Shares representing H shares were simultaneously listed on the SEHK (stock code: 0386), the New York Stock Exchange (stock code: SNP) and the London Stock Exchange (stock code: SNP) on October 18, 2000; and its A shares were listed on the Shanghai Stock Exchange (stock code: 600028) on August 8, 2001. Sinopec Corp. was awarded "Best Managed Company" by FinanceAsia in 2011, "Best Managed Company in China" by Euromoney in 2012, "Global Compact Best China Practice Award" by UN Global Compact Network in 2012, and "Crisis Management and CRS Gold Awards" by Asia-Pacific SABRE Awards in 2013, "Shale Oil and Gas International Pioneer" by International Gas Union and American Gas Association in 2014, as well as "Global Competitive Brands – Top 10 from China" by International Data Group for six consecutive years. As of September 30, 2020, the equity interest held by the Company, directly and indirectly, in Sinopec Corp. remained at 68.77%. Sinopec Corp. accounted for over 70% of the Company's total assets as of December 31, 2019 and over 90% of the Company's revenue for the year ended December 31, 2019, according to the audited consolidated financial statements of Sinopec Corp. and of the Company prepared in accordance with PRC GAAP. For more information of Sinopec Corp., see Sinopec Corp.'s periodic reports filed with the SEC on www.sec.gov. Sinopec Corp.'s periodic reports do not constitute part of this offering memorandum.

Sinopec Engineering

Sinopec Engineering is a subsidiary of the Company and focuses on providing integrated engineering and technical services for domestic and overseas refining and chemical engineering market. It is the largest refining and petrochemical engineering company in China. In May 2013, the H shares of Sinopec Engineering were successfully listed on the SEHK (stock code: 2386). Sinopec Engineering's periodic filings do not constitute part of this offering memorandum.

Sinopec Oilfield Service

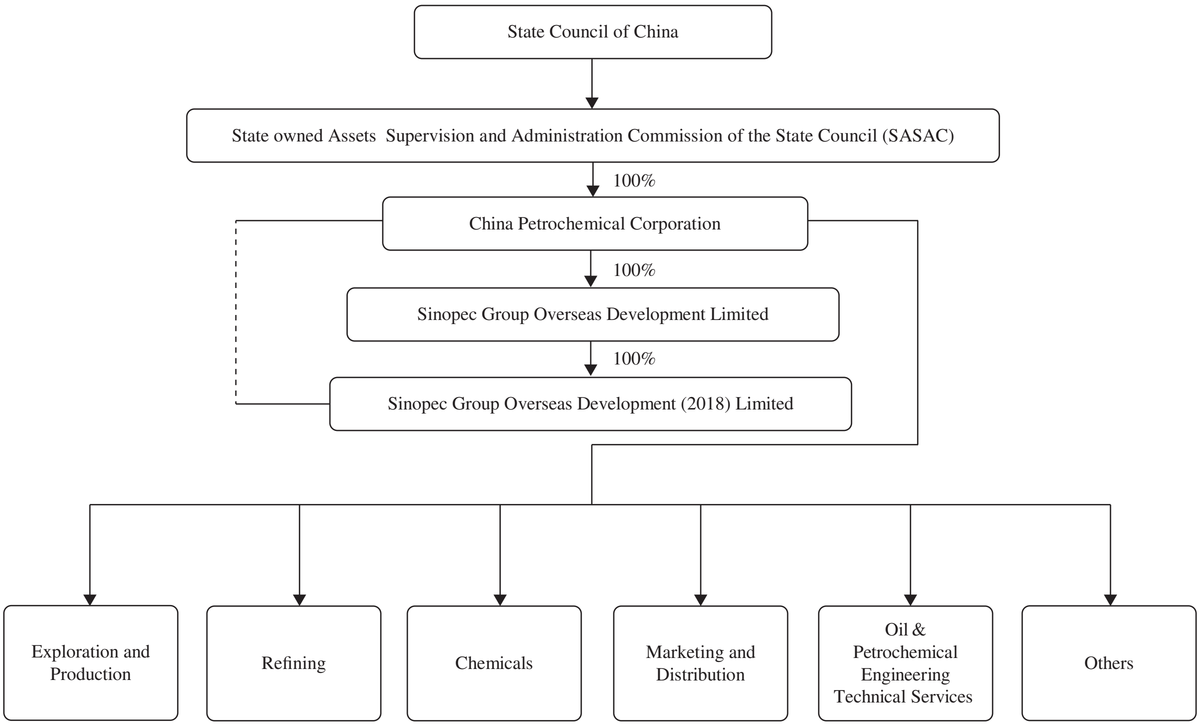
Sinopec Oilfield Service, formerly Sinopec Yizheng Chemical Fibre Company Limited ("Yizheng"), is a subsidiary of the Company focusing on providing petroleum engineering and technical services. Yizheng was a subsidiary of the Company that produced and sold chemical fibre and chemical fibre raw materials. A shares of Yizheng were listed on the Shanghai Stock Exchange (stock code: 600871) and H shares of Yizheng were listed on the SEHK (stock code: 1033). In December 2014, pursuant to a series of agreements entered into by the Company, Sinopec Corp. and Yizheng, Yizheng transferred all of its chemical fibre business to Sinopec Corp., and the Company injected its petroleum engineering business into Yizheng. In March 2015, Yizheng changed its name to Sinopec Oilfield Service. Sinopec Oilfield Service is the largest petroleum engineering and oilfield technology service provider in China, and an integrated contractor and technology service provider. Sinopec Oilfield Service's periodic filings do not constitute part of this offering memorandum.

The Issuer

The Issuer was incorporated with limited liability on 30 August, 2018 in the British Virgin Islands under the BVI Business Companies Act. It is wholly owned by us through our wholly owned subsidiary, Sinopec Group Overseas Development Limited, a company incorporated with limited liability in the British Virgin Islands. The Issuer has no material assets and will conduct no business except in connection with the issuance of the Notes and other notes described under "Description of the Issuer – Business Activity" and the advance of the net proceeds from their issuance to us and/or our subsidiaries. The registered address of the Issuer is Commerce House, Wickhams Cay 1, P.O. Box 3140, Road Town, Tortola, British Virgin Islands VG1110, British Virgin Islands. The telephone numbers of the Issuer are +86 (10) 5996 9300 and +86 (10) 5996 9298.

Corporate Structure

The following chart briefly illustrates the shareholding and group structure of the Company and the Issuer.



Competitive Strengths

- We are a global leader and the largest integrated petroleum and petrochemical company in China with strong government support.

- We operate effectively as an integrated petroleum and petrochemical company with a leading position in every segment along the oil and gas value chain.

- Our market-leading petroleum and petrochemical downstream businesses in China offer stable cash flow generation and growth potential.

- We develop our operational excellence by reducing operating costs, adjusting production to market demands and improving efficiency and reliability.

- We have prudent financial policies and an effective risk management system which contribute to our solid financial results.

- We have an experienced management team with a strong corporate governance system and a high performance corporate culture.

Strategy

- Our business objective is to build a world-leading energy and chemical company which is highly responsible, respected and well-regarded in its fields. To realize this goal, we will seek to implement the following strategies:

- Reinforce the advantages of our integrated business model with a value-oriented approach.

- Continue to stimulate the momentum of our operations through innovation.

- Improve our operational and financial efficiencies through optimizing resource allocation.

- Increase our cooperation with reputable partners.

- Emphasize low-carbon consumption and sustainable development.

Recent Developments

In the first three quarters of 2020, as a result of significant achievements made by China in control and prevention of COVID-19 outbreak, we have witnessed a stable and positive momentum of the China's economy. As a result, we expect that domestic demand in China for petroleum and petrochemical products will continue to witness a steady recovery. However, due to various external factors such as the COVID-19 pandemic and the global economic situation, we expect international oil prices to continue to fluctuate at a low level in the near term. Confronted with the present situation, the Company will focus on the vision of building a world-leading clean energy and chemical company, actively promote transformation and development, and continue the campaign of sustainable development and improving performance. The Company will coordinate efforts of improving performance, adjusting structure, promoting reform and preventing risks to achieve better performance. For more information on the impact of the COVID-19 pandemic on our business, please see "Business – Recent Developments."

SUMMARY FINANCIAL INFORMATION

Our summary historical consolidated income statement and cash flow statement data for the years ended December 31, 2017, 2018 and 2019 presented below and our summary historical consolidated balance sheet data as of December 31, 2017, 2018 and 2019 have been derived from our audited consolidated financial statements included elsewhere in this offering memorandum.

The audited consolidated financial statements include all adjustments, consisting only of normal recurring adjustments, which we consider necessary for a fair presentation of our financial position and results of operations for the periods presented.

Our summary historical consolidated income statement and cash flow statement data presented below for the nine months ended September 30, 2019 and 2020 and our summary historical consolidated balance sheet data as of September 30, 2020 have been derived from our unaudited interim consolidated financial statements included elsewhere in this offering memorandum. Our unaudited interim consolidated financial statements have been prepared on the same basis as our audited consolidated financial statements and include all normal recurring adjustments that we consider necessary for a fair presentation of our financial position and results of operations for the periods presented except as permitted for interim financial statements.

Other than disclosed herein, there has been no material adverse change in our prospects and the prospects of the Issuer since December 31, 2019, and there has been no significant change in our financial or trading position or the financial or trading position of the Issuer since September 30, 2020.

You should read the summary financial information below in conjunction with our consolidated financial statements and related notes and the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this offering memorandum. Our consolidated financial statements are prepared and presented in accordance with PRC GAAP. PRC GAAP differs in certain respects from U.S. GAAP. See "Description of Certain Differences between PRC GAAP and U.S. GAAP." Our historical results do not necessarily indicate results expected for any future period.

Consolidated Income Statement Data of the Company

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	**2018**	**2019(1)**	**2019**	**2020**	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Operating Revenue	**2,400,281**	**2,936,841**	**3,003,417**	**2,265,309**	**1,581,131**	**232,875**
Operating costs	1,920,377	2,425,746	2,497,875	1,893,422	1,277,742	188,191
Taxes and surcharges	239,627	251,393	247,174	185,177	174,833	25,750
Selling and distribution expenses	57,833	61,166	63,553	45,547	45,117	6,645
General and administrative expenses	73,530	81,145	79,576	46,606	50,768	7,477
Research and development expenses	8,248	11,340	13,690	8,574	10,030	1,477
Exploration expenses	11,120	10,753	10,520	6,623	6,109	900
Financial expenses	4,183	33	2,659	3,251	3,298	486
Assets impairment losses	43,089	16,172	–	–	–	–
Credit impairment losses	–	329	–	–	–	–
Operating Expenses	**2,358,007**	**2,858,077**	**2,915,047**	**2,189,200**	**1,567,897**	**230,926**
Assets impairment losses	–	–	(2,338)	(48)	(11,427)	(1,683)
Credit impairment losses	–	–	(1,991)	(262)	(917)	(135)
Gains (losses) from changes in fair value	(9)	2,028	(2,737)	(696)	2,019	297
Investment income	13,094	13,282	13,635	6,455	42,350	6,237
Gains (losses) from assets disposal	(2,222)	(847)	(871)	(56)	1,253	185
Other income	5,372	8,179	7,111	3,302	5,138	757
Operating Profit	**58,509**	**101,406**	**101,179**	**84,804**	**51,650**	**7,607**

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	2018	2019[(1)]	2019	2020	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Non-operating income	3,546	8,050	5,498	2,579	2,253	332
Non-operating expenses	3,850	12,718	5,803	5,171	3,164	466
Profit Before Income Tax	**58,205**	**96,738**	**100,874**	**82,212**	**50,739**	**7,473**
Income tax	19,245	24,253	21,773	16,147	7,678	1,131
Net Profit	**38,960**	**72,485**	**79,101**	**66,065**	**43,061**	**6,342**
Net profit attributable to parent company	10,393	38,663	46,930	41,802	27,542	4,056

Note:

(1) In September 2019, according to the Circular on Revising and Issuing the Format of Consolidated Financial Statements (Version 2019) as the issued by Ministry of Finance of China in connection with Accounting Standards for Business Enterprises No. 21-Leasing ("the New Lease Standard"), income statement items "Assets impairment losses" and "Credit impairment losses" are reclassified as decreases of operating profit and no longer as part of operating expenses. Sinopec Corp., Sinopec Oilfield Service and Sinopec Engineering have adopted the New Lease Standard from January 1, 2019 while Sinopec Group's other subsidiaries will not be adopting the New Lease Standard for the time being. The adoption of the New Lease Standard by Sinopec Oilfield Service and Sinopec Engineering did not have a significant impact on Sinopec Group's accounting policies. Sinopec Group did not restate the comparative amounts as at December 31, 2018. For presenting certain consolidated income statement data of the Company, we have reclassified certain income statement items for sole purpose of providing easier comparison between the financial data of the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2019 and 2020. For detailed information on such financial data, please refer to our audited consolidated financial statements included elsewhere in this offering memorandum.

Consolidated Balance Sheet Data of the Company

	As of December 31,		As of January 1,	As of December 31,	As of September 30,	
	2017	2018	2019[(1)]	2019	2020	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Total current assets	795,418	801,638	800,870	693,443	888,682	130,889
Total non-current assets	1,461,280	1,458,456	1,482,196	1,518,276	1,490,249	219,490
Total assets	2,256,698	2,260,094	2,283,066	2,211,719	2,378,931	350,379
Total current liabilities	842,428	783,801	795,553	729,738	859,929	126,654
Total non-current liabilities	335,704	387,689	398,909	363,215	379,952	55,961
Total liabilities	1,178,132	1,171,490	1,194,462	1,092,953	1,239,881	182,615
Total owners' equity attributable to parent company	740,482	722,145	722,145	750,501	770,828	113,531
Minority interest	338,084	366,459	366,459	368,265	368,222	54,233
Total owners' equity	1,078,566	1,088,604	1,088,604	1,118,766	1,139,050	167,764
Total liabilities and owners' equity	2,256,698	2,260,094	2,283,066	2,211,719	2,378,931	350,379

Note:

(1) In September 2019, according to the Circular on Revising and Issuing the Format of Consolidated Financial Statements (Version 2019) as the issued by Ministry of Finance of China in connection with Accounting Standards for Business Enterprises No. 21 – Leasing ("the New Lease Standard"), assets shall be recognized where the use right belongs as of the starting date of the lease term while the lease liabilities shall be recognized at the present value of the unpaid lease payment. Our subsidiaries including Sinopec Corp., Sinopec Oilfield Service and Sinopec Engineering have implemented the New Lease Standards as of January 1, 2019, while our other subsidiaries do not be implemented the same for the time being. The adoption of the New Lease Standards by Sinopec Corp., Sinopec Oilfield Service and Sinopec Engineering did not have significant impact on our accounting policies. For detailed information on such financial data, please refer to our audited consolidated financial statements included elsewhere in this offering memorandum.

Consolidated Cash Flows Data of the Company

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	2018	2019	2019	2020	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Net cash flows generated from operating activities	205,087	206,751	136,232	123,426	66,810	9,840
Net cash flows generated from (used in) investing activities	(148,303)	(58,332)	(72,339)	(78,608)	(102,872)	(15,151)
Net cash flows generated from (used in) financing activities	(23,120)	(119,747)	(112,683)	(43,567)	147,114	21,668
Effect of foreign exchange rate changes	(2,394)	2,278	28	2,576	(5,280)	(778)
Net increase in cash and cash equivalents	31,270	30,950	(48,762)	3,827	105,772	15,579
Cash and cash equivalents at the beginning of the year/period	164,825	169,228	200,178	200,178	151,416	22,301
Cash and cash equivalents at the end of the year/period..............	196,095	200,178	151,416	204,005	257,188	37,880

Other Financial Data of the Company

	As of and for the Year Ended December 31,			As of and for the Nine Months Ended September 30,
	2017	2018	2019	2020
				(unaudited)
EBITDA[(1)] (RMB in millions)	225,767	233,702	218,401	108,818
EBITDA margin[(2)].......................................	9.41%	8.00%	7.3%	6.9%
Total debt[(3)] (RMB in millions)....................	483,245	427,924	380,322	486,530
Net debt[(4)] (RMB in millions)......................	287,304	227,773	228,913	229,375
Total debt/EBITDA[(5)].................................	2.14	1.83	1.74	3.35
Net debt/EBITDA[(5)]....................................	1.27	0.97	1.05	1.58
EBITDA/Interest[(6)]......................................	23.98	26.94	22.05	12.28
Total debt/Total capitalization[(7)]...................	30.94%	28.22%	25.37%	29.93%
Cash/Short-term borrowings.........................	86.31%	145.84%	120.27%	114.75%

Notes:

(1) EBITDA for any period is calculated as operating profit adjusted for investment income and gains (losses) from changes in fair value, plus assets impairment losses, interest expenses and depreciation, depletion and amortization. EBITDA is a widely used financial indicator of a company's ability to service and incur debt. EBITDA should not be considered in isolation or construed as an alternative to cash flows, net profit or any other measure of performance or as an indicator of the Company's operating performance, liquidity, profitability or cash flows generated by operating, investing or financing activities. In evaluating EBITDA, the Company believes that investors should consider, among other things, the components of EBITDA such as sales and operating expenses and the amount by which EBITDA exceeds capital expenditures and other charges. The Company has included EBITDA because it believes that it is a useful supplement to the cash flow data as a measure of the Company's performance and its ability to generate cash flow from operations to cover debt service and taxes. EBITDA presented herein may not be comparable to similarly titled measures presented by other companies. Investors should not compare the Company's EBITDA to EBITDA presented by other companies because not all companies use the same definitions.

(2) EBITDA margin is calculated as EBITDA divided by operating revenue.

(3) Total debt consists of all short-term borrowings, long-term borrowings, borrowings from other financial institutions, long-term debt due within one year and bonds payable. It does not include amounts due to our subsidiaries.

(4) Net debt is calculated as total debt minus cash.

(5) When calculating total debt/EBITDA and net debt/EBITDA for the nine months ended September 30, 2020, the denominator is adjusted to 4/3 times of EBITDA for the nine months ended September 30, 2020.

(6) Interest is calculated as interest expenses plus capitalized interests.

(7) Total capitalization equals total debt plus total owners' equity.

THE OFFERING

The following is a brief summary of the terms of this offering and is qualified in its entirety by the remainder of this offering memorandum. For a more complete description of the terms of the Notes and Guarantees, see "Description of the Notes and Guarantees" in this offering memorandum. Terms used in this summary and not otherwise defined shall have the meanings given to them in "Description of the Notes and Guarantees."

Issuer	Sinopec Group Overseas Development (2018) Limited, a company incorporated with limited liability on August 30, 2018 in the British Virgin Islands under the BVI Business Companies Act (BVI Company No. 1990746).
Guarantor/The Company	China Petrochemical Corporation, a state-owned limited liability company incorporated in the PRC.
Notes Offered	US$1,150,000,000 aggregate principal amount of 1.450% senior notes due 2026 (the "2026 Notes").
	US$1,200,000,000 aggregate principal amount of 2.300% senior notes due 2031 (the "2031 Notes").
	US$650,000,000 aggregate principal amount of 3.100% senior notes due 2051 (the "2051 Notes").
Guarantees	Payment of principal of, interest and all other amounts payable on, the Notes is irrevocably and unconditionally guaranteed by the Guarantor.
Issue Price	2026 Notes: 99.866% of principal amount, plus accrued interest from January 8, 2021, to the issue date.
	2031 Notes: 99.486% of principal amount, plus accrued interest from January 8, 2021, to the issue date.
	2051 Notes: 100.000% of principal amount, plus accrued interest from January 8, 2021, to the issue date.
Maturity Date	2026 Notes: January 8, 2026
	2031 Notes: January 8, 2031
	2051 Notes: January 8, 2051
Interest Payment Dates	January 8 and July 8, commencing July 8, 2021
Interest	The 2026 Notes will bear interest from January 8, 2021 at the rate of 1.450% per annum, payable semi-annually in arrears from July 8, 2021. Interest will be calculated on the basis of a 360-day year, consisting of twelve 30-day months.
	The 2031 Notes will bear interest from January 8, 2021 at the rate of 2.300% per annum, payable semi-annually in arrears from July 8, 2021. Interest will be calculated on the basis of a 360-day year, consisting of twelve 30-day months.

	The 2051 Notes will bear interest from January 8, 2021 at the rate of 3.100% per annum, payable semi-annually in arrears from July 8, 2021. Interest will be calculated on the basis of a 360-day year, consisting of twelve 30-day months.
Further Issues	The 2026 Notes will be issued in an initial aggregate principal amount of US$1,150,000,000, the 2031 Notes will be issued in an initial aggregate principal amount of US$1,200,000,000 and the 2051 Notes will be issued in an initial aggregate principal amount of US$650,000,000. The Guarantor and the Issuer may, however, from time to time, without the consent of the holders of the Notes, create and issue, pursuant to the Indentures, additional notes, having the same terms and conditions under the Indentures as the previously outstanding Notes in all respects, except for issue date, issue price and amount of the first payment of interest thereon, and to the extent necessary, certain temporary securities law transfer restrictions. Additional notes issued may be consolidated with and form a single series with the previously outstanding Notes; *provided*, *however*, that such additional notes may have the same CUSIP, ISIN, Common Code or other identifying number as the outstanding Notes only if (i) such additional notes are fungible with such Notes for U.S. federal income tax purposes and (ii) registration with the Beijing Branch of the guarantees of such additional notes has been completed, prior to the additional notes being assigned the same CUSIP, ISIN, Common Code or other identifying number.
Ranking.......................................	The Notes will constitute direct, unsecured and unsubordinated obligations of the Issuer ranking pari passu, without any preference or priority of payment among themselves, with all other unsecured and unsubordinated indebtedness of the Issuer (except obligations preferred by applicable law). The Guarantees will constitute the Guarantor's direct, unsecured and unsubordinated obligations ranking pari passu (except obligations preferred by applicable law) with all our other unsecured and unsubordinated indebtedness, including such obligations incurred in connection with the senior notes issued by Sinopec Group Overseas Development (2017) Limited in 2017 and guaranteed by the Company and Sinopec Group Overseas Development (2018) Limited in 2018, in 2019 and in 2020 and guaranteed by the Guarantor.
Certain Covenants	The Guarantor has covenanted in the Indentures, with certain exceptions, not to incur certain liens or consolidate, merge or sell its assets substantially as an entirety unless certain conditions are satisfied. The Notes and the Indentures do not otherwise restrict or limit the Guarantor's ability to incur additional indebtedness by itself or its subsidiaries or its ability to enter into transactions with, or to pay dividends or make other payments to, affiliates. See "Description of the Notes and Guarantees – Certain Covenants – Limitation on Liens" and "Description of the Notes and Guarantees – Consolidation, Merger and Sale of Assets."

Additional Amounts.......................	In the event that withholding taxes are imposed by a Relevant Taxing Jurisdiction in respect of payments pursuant to the Notes or the Guarantees, the Guarantor or the Issuer, as the case may be, will, subject to certain exceptions, pay such Additional Amounts as will result, after deduction or withholding of such taxes, in receipt by each holder of such amounts as would have been received by such holder in respect of the Notes or Guarantees, as applicable, had no deduction or withholding been required. See "Description of the Notes and Guarantees – Additional Amounts."
Optional Redemption.....................	The Guarantor or the Issuer may, at the Guarantor's option, redeem the 2026 Notes at any time prior to December 8, 2025, the 2031 Notes at any time prior to October 8, 2030, and the 2051 Notes at any time prior to July 8, 2050, in each case, in whole or in part, on not less than 30 nor more than 60 days' prior notice. The applicable Notes will be redeemable at a redemption price equal to the greater of (1) 100% of the principal amount of the Notes and (2) the sum of the present values of the remaining scheduled payments of principal and interest on the Notes (not including interest accrued to the date of redemption), discounted to the date of redemption on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus 20 basis points in the case of the 2026 Notes, 25 basis points in the case of the 2031 Notes and 25 basis points in the case of the 2051 Notes, in each case plus accrued and unpaid interest on the applicable Notes to be redeemed, if any, to (but not including) the date of redemption. See "Description of the Notes and Guarantees – Redemption – Optional Redemption." In addition, the Guarantor or the Issuer may, at the Guarantor's option, on not less than 30 nor more than 60 days' prior notice, redeem the 2026 Notes at any time from or after December 8, 2025, the 2031 Notes at any time from or after October 8, 2030, and the 2051 Notes at any time from or after July 8, 2050, in each case, in whole or in part, at a redemption price equal to 100% of the principal amount of the applicable Notes to be redeemed plus accrued and unpaid interest, if any, on such Notes to (but not including) the date of redemption. See "Description of the Notes and Guarantees – Redemption – Optional Redemption."
Optional Tax Redemption	The Notes may be redeemed at the option of the Issuer, in whole but not in part, at the principal amount thereof, plus accrued and unpaid interest and Additional Amounts, if any, in the event the Guarantor or the Issuer becomes obligated to pay Additional Amounts in respect of the Notes or the Guarantees as a result of certain changes in tax laws; except for Additional Amounts payable in respect of a withholding tax at a rate of 10% or less solely as a result of the Guarantor, the Issuer or a successor person being, or being considered, a PRC tax resident under the PRC Enterprise Income Tax Law. See "Description of the Notes and Guarantees – Redemption – Optional Tax Redemption."

Repurchase upon a Change of Control Triggering Event	Upon the occurrence of a Change of Control Triggering Event, the Issuer will be required to make an offer to repurchase all of the Notes at a price in cash equal to 101% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest on the principal amount of the Notes being repurchased to but excluding the date of repurchase. See "Description of the Notes and Guarantees – Repurchase upon a Change of Control Triggering Event."
Completion of Registration of the Guarantees with the Beijing Branch	We intend to execute and register the Guarantees with the Beijing Branch as soon as reasonably practicable after the pricing date, and we will use our commercially reasonable best efforts to complete the registration of the Guarantees with the Beijing Branch. See "Description of the Notes and Guarantees – Completion of the Registration of the Guarantees with the Beijing Branch." However, we will not be required under the Indentures to make an offer to repurchase all of the Notes for which registration has not been completed.
Transfer Restrictions	The Notes have not been registered under the Securities Act, any state securities laws in the United States or the securities laws of any other jurisdiction. Unless they are registered, the Notes may not be sold except pursuant to an exemption from or in a transaction not subject to the registration requirements of the Securities Act, applicable state securities laws or the applicable securities laws of any other jurisdiction. See "Transfer Restrictions."
Use of Proceeds	The net proceeds we expect to receive from this offering, after deducting underwriting commissions and certain estimated offering expenses, will be approximately US$2,988.691 million. We intend to use the net proceeds of this offering to refinance our existing indebtedness and for general corporate purposes. See "Use of Proceeds."
Governing Law	The Notes, the Guarantees and the Indentures will be governed by, and construed in accordance with, the laws of the State of New York.
Denomination, Form and Registration	The Notes will be issued in minimum denominations of US$200,000 and integral multiples of US$1,000 in excess thereof. The Notes offered in the United States to Qualified Institutional Buyers in reliance on Rule 144A will be represented by one or more permanent global notes in fully registered form without interest coupons deposited with the custodian for, and registered in the name of, Cede & Co., as nominee of The Depository Trust Company ("DTC"). The Notes offered to non-U.S. persons outside the United States in reliance on Regulation S will be represented by one or more global notes in fully registered form without interest coupons deposited with the custodian for, and registered in the name of, Cede & Co., as nominee of DTC for the respective accounts of Euroclear Bank SA/NV, as operator of the Euroclear System ("Euroclear"), and Clearstream Banking, S.A. ("Clearstream, Luxembourg").

	DTC will credit the account of each of its participants, including Euroclear and Clearstream, Luxembourg, with the principal amount of the Notes being purchased by or through such participant. Beneficial interests in the global notes will be shown on, and transfers thereof will be effected only through, records maintained by DTC and its direct and indirect participants, including Euroclear and Clearstream, Luxembourg.
Ratings..	The Notes are expected to be rated "A1" by Moody's Investors Service, Inc. ("Moody's") and "A+" by S&P Global Ratings, a division of S&P Global Inc. ("S&P"). Security ratings are not recommendations to buy, sell or hold the Notes. Ratings are subject to revision or withdrawal at any time by the rating agency.
Risk Factors.................................	See "Risk Factors" and the other information in this offering memorandum for a discussion of factors that should be carefully considered before deciding to invest in the Notes.
Listing...	The Issuer has received an eligibility letter from the SEHK for the listing of, and permission to deal in, the Notes by way of debt issues to Professional Investors only as described in this offering memorandum.
Trustee	Citicorp International Limited.
Paying Agent, Transfer Agent and Registrar	Citibank N.A., London Branch.

You should consider carefully all of the information in this offering memorandum, including the risks and uncertainties described below, before investing in the Notes. Any of the following risks and uncertainties could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Risks Relating to Our Business Operation

Our business may be adversely affected by the fluctuation of crude oil, natural gas, and refined oil product prices.

We consume a large amount of crude oil to produce our refined oil products and chemical products. A decline in crude oil prices will reduce our crude oil revenues derived from external customers, and may cause us to incur impairment to our investments and assets. A sharp decline in crude oil and gas prices may impact our cash flow, profit, and our ability to maintain our long-term investment projects, and a prolonged period of low oil and gas prices may impact the base of our proved oil or natural gas reserves and we may have to write down assets and re-assess the viability of certain projects. An increase in crude oil prices may, however, increase the production costs of refined oil products, which we may not be able to pass on to customers in a timely manner or at all due in part to the control of retail prices by the PRC government. A decline in refined oil products prices will reduce our revenue derived from refining operations. An increase in the refined oil products prices, however, will increase the production costs of chemical products which use refined oil products as raw materials. Global oil prices have experienced and continue to experience considerable volatility, as a result of, among others, the oil price war between Saudi Arabia and Russia and the decreased demand for oil amid the COVID-19 outbreak. See "– Our operations may be adversely affected by global, regional and domestic economic conditions." We do not have, and will not have, control over the factors affecting international prices for crude oil and refined oil products. We use financial derivatives, including but not limited to commodity futures, to hedge applicable risks of the volatility in 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 results of operations. In low crude oil price environments, we may be negatively impacted by losses in the fair value of and increases in margin deposits required for our financial derivative instruments. While we try to adjust the sale price of our products to track international crude oil price fluctuations, our ability to pass on the increased cost resulting from crude oil price fluctuations to our customers may be limited, and is dependent on international and domestic market conditions as well as the PRC government's price controls over refined oil products. Due to the volatile prices on the international oil market in recent years, the NDRC promulgated a price-setting mechanism for domestic refined oil products so that domestic refined oil products prices are in line with those on the international markets. Although the current price-setting mechanism for refined oil products in China allows the PRC government to adjust prices 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 refined oil products prices.

The PRC government generally exercises certain price controls over refined oil products once international crude oil prices experience sustained rises or become significantly volatile. For example, effective November 20, 2020, the NDRC increased the retail prices of gasoline and diesel by RMB150 per tonne and RMB145 per tonne, respectively. Effective December 4, 2020, the NDRC increased the retail prices of gasoline and diesel by RMB250 per tonne and RMB240 per tonne, respectively. Effective December 18, 2020, the NDRC increased the retail prices of gasoline and diesel by RMB155 per tonne and RMB150 per tonne, respectively. As a result, our results of operations and financial condition may be materially and adversely affected by the fluctuation of crude oil, natural gas and refined oil product prices.

The recent COVID-19 pandemic has had and may continue to have a material and adverse effect on our business.

Starting from the beginning of 2020, the COVID-19 pandemic has caused substantial disruptions in economies and markets around the world, including the Chinese economy and other markets in which we operate. The World Health Organization declared the COVID-19 pandemic a global epidemic on March 11, 2020. Since then, there have been rapid and widespread increases in new infections in the United States, Europe and other parts of the world and increased fatality rates in many countries. Many countries have declared states of emergency, closed their borders to international travelers, and restricted the movements of their citizens with a view to contain the epidemic and there is no assurance that such measures will be effective. Citizens in many affected countries and areas are being advised or required to stay at their homes subject to limited exceptions. Reduced consumption, commercial activities and industrial production in the affected countries will severely disrupt their economies and the global supply chain and may result in recessions in these economies.

Even though China has made significant achievements in control and prevention of COVID-19 pandemic, we cannot assure you that there will not be an outbreak in China again, and there is significant uncertainty relating to the severity of the near-term or long-term impact of the global COVID-19 pandemic on volatility in domestic and global demand for refined oil products, natural gas and chemical products, and the continuous negative impact on our business operation. The outbreak of the coronavirus and other adverse public health developments have had and may continue to have certain adverse impacts for a period of time on the demand for our end products and on our normal operating activities, including disruptions from the temporary closure of offices, suspension of business travel or other disruptions on our normal working schedules, which, in aggregate, may have significant impacts on our business, financial condition and results of operations. In particular, the outbreak of the coronavirus has resulted in a significant decline in demand for gasoline, diesel and kerosene (including jet fuel) as China and other countries have implemented certain travel restrictions to address the spread of the coronavirus. We have taken measures in response to the outbreak, including the adoption of more stringent workplace sanitation measures, which may have negative impact on our results of operations and financial status. While such measures are expected to be temporary, the duration of the business disruption and related financial impact cannot be reasonably estimated at this time. The extent to which this outbreak impacts our results will depend on future developments of many highly uncertain and unpredictable factors and events, including new information which may emerge concerning the severity of this outbreak and the actions to contain this outbreak or treat its impact, among others. For more information on the impact of the COVID-19 pandemic on our business, please see "Business – Recent Developments."

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 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 estimation of our proved oil or natural gas reserves. In 2015, due to the capital restructuring of SIPC, our shareholding percentage in SIPC decreased to 30%. The restructuring was deemed to be effective as of January 1, 2015 and, consequently, the financial results of SIPC were not included in our consolidated financial statements as of and for the years ended December 31, 2017, 2018 and 2019 and our unaudited consolidated financial statements as of and for the nine months ended September 30, 2019 and 2020. In addition, our estimated proved reserves of crude oil and natural gas as of December 31, 2017, 2018 and 2019 only included a share of the estimated proved reserves of SIPC reflecting our percentage of equity interest in SIPC. There can be no assurance that we would continue to actively expand our exploration and production activities or to acquire additional oil and gas reserves. Without reserve additions through further exploration and development or acquisition activities, or if the prices of crude oil and natural gas fall sharply, our reserves and production will decline over time, which may materially and adversely affect our results of operations and financial condition.

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

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

We purchase a significant portion of our crude oil and other feedstock requirements from outside suppliers located in different countries and areas in the world, of which a small proportion of crude oil processed by our refinery business was sourced from countries, regions or entities that are the subject of various U.S. economic sanction regimes administrated by the Office of Foreign Assets Control, or OFAC, of the U.S. Department of Treasury. In addition, our continued development may require us to source an increasing amount of crude oil from outside suppliers. We are subject to the political, geographical, economic, regulatory and legal risks associated with certain of these countries and areas, including the following:

- changes in international political and economic conditions, as well as social conditions;
- military hostilities, war, political unrest or acts of terrorism;
- challenges caused by distance, language, local business customs and cultural differences;
- difficulty in obtaining licenses, permits or other regulatory approvals from local authorities and in enforcing the oil and gas segment's rights under contracts;
- with respect to those countries that are members of OPEC, the lowering of petroleum production volume pursuant to OPEC policy;
- changes in laws, regulations or government policies, or in the interpretation or enforcement of laws, regulations and government policies, including changes driven by resource nationalism, or uncertainties thereof;
- measures which may be introduced to control inflation or changes in the rate or method of taxation;
- imposition of additional restrictions on currency conversion and remittances abroad or reduction in tariff protection and other import restrictions;
- natural disasters and epidemics, pandemic outbreaks or pollution; and
- changes in the usage and costs of state-controlled transportation services.

If our contractual relationships with one or more outside suppliers were terminated or suspended due to any natural disasters, epidemics, other 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.

The oil and natural gas reserves data in this offering memorandum 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 offering memorandum 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:

- disruption caused by unexpected stratigraphic factors;
- pressure or irregularities in geological formations;
- equipment failures or accidents;
- 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.

In addition, 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.

As a guarantor of certain obligations and a creditor of SIPC, we are exposed to risk of loss if SIPC defaults.

As the former sole shareholder of SIPC, we have provided guarantees to SIPC to support its business operation, which include but are not limited to loan guarantees and performance guarantees. As of September 30, 2020, RMB108,191 million guarantees provided by us to SIPC have not expired. Although our equity interest in SIPC has decreased to 30%, we remain bound by such guarantees and our liabilities under such guarantees have not decreased proportionally with the decrease of our equity interest. If SIPC defaults for any reason, we may be obligated to perform the contracts as a primary obligor or make payments on behalf of SIPC. In addition, we have extended loans in an aggregate amount of RMB267,162 million to SIPC as of September 30, 2020, most of which are unsecured.

Due to the unprecedented volatility in the oil and gas industry over the last few years, SIPC has incurred significant losses in the past years and its repayment ability has been materially affected.

As a result, if SIPC has limited or no financial resources to make full payment, our return and results of operations could be materially and adversely affected.

Our business faces operational risks and natural disasters that may cause significant property damage, 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 and chemical products involves a number of operating hazards. Our operations are subject to significant hazards and risks inherent in refining operations and in transporting and storing crude oil, intermediate products and refined oil products. These hazards and risks include, but are not limited to, natural disasters, fires, explosions, pipeline ruptures and spills, third-party interference and mechanical failure of equipment at our or third-party facilities, any of which could result in production and distribution difficulties and disruptions, environmental pollution, personal injury or wrongful death claims and other damage to our properties and the property of others. There is also risk of mechanical failure and equipment shutdowns both in general and following unforeseen events. In such situations, undamaged refinery processing units may be dependent on or interact with damaged process units and, accordingly, are also subject to being shut down. Even though we have a strong institutional focus on the safety of our operations and have implemented health, safety and environment 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, personnel, plant, equipment and 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.

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

We incur, and expect to continue to incur, substantial capital, operating, maintenance and remediation costs relating to compliance with increasingly complex laws and regulations for the protection of the environment and human health and safety, including:

- costs of preventing, controlling, eliminating or reducing certain types of emissions to air and discharges to the sea, including costs incurred in connection with government action to address the risk of spills and concerns about the impacts of climate change;

- remediation of environmental contamination and adverse impacts caused by our activities or accidents at various facilities owned or previously owned by us and at third-party sites where our products or waste have been handled or disposed of;

- compensation of persons and/or entities claiming damages as a result of our activities or accidents; and

- costs in connection with the decommissioning of drilling platforms and other facilities.

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

- the imposition of fees for the discharge of waste substances;

- the levy of fines and payments for damages for serious environmental offenses;

- the government, at its discretion, to close any facility which fails to comply with orders and require it to correct or stop operations causing environmental damage; and

- litigations and liabilities arising from pollutions and damages to the environment and public interests.

Our production operations produce substantial amounts of wastewater, gas and solid waste materials. Although we believe we maintain waste materials treatment and pollution control systems in line with applicable laws and regulations, our production facilities require operating permits that are subject to renewal, modification and revocation. We have established a system to treat waste materials to prevent and reduce pollution. However, the PRC government has moved, and may move further, toward more rigorous enforcement of applicable laws, and toward the adoption of more stringent environmental standards, which, in turn, would require us to incur additional expenditures on environmental matters.

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

Furthermore, in countries where we operate or expect to operate in the near future, new laws and regulations, the imposition of stricter licensing requirements, increasingly strict enforcement of or new interpretations of existing laws and regulations, the remedial measures taken following operational catastrophes in which we or members of our industry are involved or the discovery of previously unknown contamination may require future expenditures in order to, among other things:

- modify operations;
- install pollution control equipment;
- implement additional safety measures;
- perform site cleanups;
- curtail or cease certain operations;
- temporarily shut down our facilities;
- meet technical requirements;
- increase monitoring, training, record-keeping and contingency planning; and
- establish credentials in order to be permitted to commence drilling.

Compliance with laws, regulations and obligations relating to climate change and environmental protection could result in substantial capital expenditures, reduced profitability as a result of increased operating costs, and adverse effects on revenue generation and strategic growth opportunities.

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

As the international community has 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. For example, the Paris Agreement became effective in November 2016, and many of the countries that have ratified the Paris Agreement are adopting domestic measures to meet the Paris Agreement goals, which include reducing their use of fossil fuels and increasing their use of alternative energy sources. The implementation of such measures in a number of countries and other potential legislation limiting emissions could affect the global demand for fossil fuels. If China or other countries in which we operate or desire to operate enact new laws that focus on limiting greenhouse gas emissions, it could result in substantial impact on capital expenditure from compliance with these laws, and revenue generation and strategic growth opportunities. In November 2014, China and the United States made joint announcement against the threat of climate change, whereby China undertook to peak CO_2 emissions by around 2030 or earlier if possible, and to increase the proportion of non-fossil fuel based energy to approximately 20 percent by 2030. China has also implemented a national carbon emissions trading scheme in 2017, power generation industry has been included initially. As most of our producing subsidiaries in China may be recognized as emission control enterprises, such change could materially and adversely affect our business and results of operations.

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

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

Our overseas exploration, development and operations are exposed to political, economic, regulatory and legal risks, and may be subject to additional compliance costs and risks.

We are subject to various political, legal and regulatory environments in foreign countries and regions where we and our affiliates operate, some of which are known to be unstable and differ in certain significant respects from those prevailing in developed countries. Some countries and regions where we have made significant investments are among the most undeveloped countries as defined by the United Nations, and their laws, regulations and policies are less established or predictable due to political and economic uncertainties. Furthermore, operations in foreign countries considered fragile states may face a number of obstacles, such as pressure from external or government groups, social unrest, general strikes and other labor disputes, crime and corruption, which could result in disruption, suspension or termination of our or our affiliates' operations. In addition, the results of our or our affiliates' operations may be adversely affected by a number of factors in the countries and regions in which we operate or have interests, including the same risks as those associated with certain countries and regions of our third-party suppliers, as set out in the risk factor "– We rely heavily on outside suppliers for crude oil and other raw materials, and we may experience disruption of our ability to obtain crude oil and other raw materials."

We have expanded our global footprints in many of our business segments in recent years through mergers and acquisitions, and we plan to continue to grow our business internationally. As our international operations expand into many foreign jurisdictions, we face new regulatory environment and compliance challenges that we may not have familiarity with. From time to time, our international operations and our foreign management personnel may be involved in governmental investigations and other legal proceedings for alleged illegal business, improper payments and/or personal conducts. Government investigations and legal proceedings against us or our affiliates regarding violations of law may lead to judgments, settlements, fines, penalties or other results adverse to us, which could materially and adversely affect our business, financial condition or results of operations, and cause serious reputational harm to us. In addition, future developments in the ongoing proceedings and other potential proceedings, such as responding to the requests of governmental authorities and cooperating with them, could divert our management's attention and resources from other issues facing our business. Furthermore, we may be required to devote significant additional resources to understanding, adapting and formulating our corporate governance and regulatory compliance framework to, and monitoring changes in, the laws and regulations in multiple foreign jurisdictions where have business operations, and incur high costs in structuring and operating our businesses to comply with such laws and regulations and implementing and administering related internal policies and procedures.

The Group may not be able to detect and/or prevent any prior or future fraud, corruption or other misconduct committed by its employees or third parties.

Despite the fact that the Group has in place relevant policies and mechanism to monitor the management system, and a supervisory body to oversee and inspect the system from time to time, fraud or other misconduct from the past or in the future by the Group's employees, such as bribery, unauthorised business transactions, breach of its internal policies and procedures and violation of law, or by third parties, may be difficult to detect or prevent. It could subject the Group to financial loss and sanctions imposed by governmental authorities while seriously damaging its reputation. It may also impair the Group's ability to effectively attract customers, obtain financing on favourable terms, compete in invitations to tender and conduct other business activities. While the Group's internal control policies and procedures are designed to punish employees that participate in bribery or otherwise obtaining improper benefits from their positions, such policies and procedures may not be effective or comprehensive, and thus it may be unable to prevent, identify, or address non-compliance and/or suspicious transactions in a timely manner or at all. Therefore, the Group will continue to face the risk that fraud, corruption and other misconduct may occur in the future, which may have an adverse effect on the Group's business reputation, financial condition and results of operations.

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

Our development projects and production activities may be curtailed, delayed or cancelled for many reasons, including equipment shortages or failures, natural hazards, unexpected drilling conditions or reservoir characteristics, pressure or irregularities in geological formations, accidents, mechanical and technical difficulties and industrial action. These projects and activities, which include projects focused on unconventional 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.

We may encounter problems with our joint projects and disputes with our joint venture and other business partners may adversely affect our business, financial condition and results of operations.

In the course of our business, we have in the past formed, and will in the future continue to form, joint ventures, consortiums or other cooperative relationships with other parties, including in some cases foreign governmental entities or foreign companies, to jointly engage in certain business activities, which include, among others, jointly operating the oilfields. We also rely on third-party operators to operate certain of our projects for our overseas business and we may be unable to control the actions of such third-party operators.

We may bear joint and several liabilities to the project owners or other parties with third-party operators, other consortium members or joint venture or business partners under the relevant consortium, joint venture or other agreements, and, as a result, we may incur damages and other liabilities for any defective work or other breaches by third-party operators, other consortium members or joint venture or business partners.

In addition, if there are disagreements between us and our joint venture partners regarding the business and operations of the joint projects, there can be no assurance that they will be able to resolve them in a manner that will be in our best interests. Certain major decisions, such as selling or refinancing these projects, may require the consent of all other partners. These limitations could adversely affect our ability to sell, refinance or otherwise operate and profit from these projects.

Any of these and other factors may have an adverse effect on the performance of our oil and gas joint projects and expose such projects to a number of risks, including the risk that these projects may not be able to fulfill their obligations under contracts with customers, resulting in disputes not only between us and our partners, but also between the joint ventures and their customers, or create unexpected complications. Such a material adverse effect on the performance of the joint projects may in turn adversely affect our business, financial condition and results of operations.

We are dependent upon subcontractors and other third parties for various services and products in our business.

We may from time to time subcontract portions of our engineering and construction projects to independent third-party subcontractors. In addition, if we need extra manpower due to a shortage of labor, or in order to accelerate the progress of project work, we may need to subcontract labor services internally, hire short-term temporary workers, or engage independent third-party subcontractors. We also rely on third-party manufacturers or other service providers for production and supply of certain parts, components and services in connection with our resources development, equipment manufacturing and property development operations. Outsourcing to subcontractors and other third parties supplements our capacity, reduces our need to employ a large workforce, including skilled and semi-skilled labor in different specialized areas, and increases our flexibility and cost effectiveness in carrying out contracts. We have established a system with respect to the selection and control of subcontractors in our engineering and construction business, which involves, among others, maintaining a regularly updated list of qualified subcontractors and entering into agreements with them to set forth each party's rights and obligations. In our other businesses, we also endeavor to source products and services from third-party manufacturers and service providers whom we believe are able to meet our quality, delivery schedule and other requirements. Nevertheless, we may not be able to monitor the performance of these subcontractors and other third parties as directly and efficiently as our own staff. In addition, qualified subcontractors and other third parties may not always be readily available when our needs for outsourcing arise. If we are unable to hire qualified subcontractors and other third parties, our ability to complete projects or other contracts could be impaired. If the amounts that we are required to pay to subcontractors and other third parties exceed what we have estimated, especially in the case of customer contracts with a pre-agreed price, we may suffer losses on those contracts. Outsourcing also exposes us to risks associated with non-performance, delayed performance or substandard performance by subcontractors or other third parties. As a result, we may experience a deterioration in the quality or late delivery of our construction projects, incur additional costs due to delays or higher prices in sourcing the services, equipment or supplies, or be subject to liability under the relevant contract for the nonperformance, delayed performance or substandard performance of our subcontractors or other third parties. Such events could have a material and adverse impact upon our profitability, financial performance and reputation, and may result in litigation or damage claims against us.

We face challenges in achieving our strategic objective of successfully exploiting growth opportunities.

An important element of our strategy is to continue to pursue attractive and profitable growth opportunities available to us, by both enhancing and repositioning our asset portfolio and expanding into new markets. The opportunities that we are actively pursuing may involve the acquisition of businesses or properties that complement or expand our existing portfolio.

Our ability to successfully implement this strategy will depend on a variety of factors, including our ability to:

- identify acceptable opportunities;
- negotiate favorable terms;
- develop new market opportunities or acquire properties or businesses promptly and profitably;
- integrate acquired properties or businesses into our operations;
- arrange financing, if necessary; and
- comply with legal regulations.

As we pursue business opportunities in new and existing markets, we anticipate significant investments and costs in connection with the development of such opportunities. We may incur or assume unanticipated liabilities, losses or costs associated with assets or businesses acquired. Any failure by us to successfully pursue and exploit new business opportunities could result in financial losses and inhibit growth.

Any such new projects that we acquire will require additional capital expenditure and will increase the cost of our discoveries and development. These projects may also have different risk profiles than our existing portfolio. These and other effects of such acquisitions could result in our having to revise either or both of our forecasts with respect to unit production costs and production. To the extent that some acquisitions may have operational complexities due to the nature of their business, the election to not fully integrate such acquisitions may be made if such integration does not quantitatively improve operational or financial efficiencies. Some integration efforts will be phased in to ensure that desired efficiencies are quickly and cost effectively realized. Any element of integration must be justified rationally on potential cost savings realized by the business. If we are unable to successfully integrate some or all of the operations of our acquired overseas businesses or future acquisitions, this could have a material adverse effect on our business and operations.

In addition, the pursuit of acquisitions or new business opportunities could divert financial and management resources away from our day-to-day operations to the integration of acquired operations or properties. We may require additional debt or equity financing to undertake or consummate future acquisitions or projects, and such financing may not be available on terms satisfactory to us, if at all, and it may, in the case of equity, be dilutive to our earnings per share.

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 our 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 our ability to influence or adjust plans for exploration and development related expenditures is limited under joint operating agreements for those projects in which we have partners;

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

- economic, political and other conditions in jurisdictions in which we conduct 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. Expansion and construction activities of this nature require substantial capital expenditures and investments, and 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 indebtedness level could have an adverse effect on our financial condition, diminish our ability to raise additional capital to fund our operations and limit our ability to explore business opportunities. We had net current liabilities at times during the past few years, which may expose us to liquidity risks.

We maintain a certain level of indebtedness to finance our operations and expect to incur significant capital expenditures for maintaining our existing facilities and investing in production capacity expansions and possible acquisitions. We recorded net current liabilities of RMB47,010 million as of December 31, 2017, net current assets of RMB17,837 million as of December 31, 2018, net current liabilities of RMB36,295 million as of December 31, 2019 and net current assets of RMB28,753 million as of September 30, 2020, respectively. We may continue to have net current liabilities in the future as our business expands and as part of our financial management strategies and we cannot assure you that we will not have net current liabilities position in the future. Our indebtedness could have an adverse effect on us, for example, by:

- increasing our vulnerability to adverse general economic or industry conditions;
- limiting our flexibility to plan for, or react to, changes in our business or the industry in which we operate;
- limiting our ability to raise additional debt or equity capital in the future or increasing the cost of such funding;
- restricting us from making strategic acquisitions or taking advantage of business opportunities; and
- making it more difficult for us to satisfy our obligations with respect to our debt.

Our indebtedness will require us to maintain an adequate level of cash flow to satisfy our debt obligations as they become due. Our primary sources of funding include cash inflow from operation activities and short-term and long-term borrowings. Cash inflow from our operating activities were RMB3,342 billion and RMB1,891 billion in 2019 and the nine months ended September 30, 2020, respectively. As of September 30, 2020, the total lines of credit available to us were approximately RMB2,026 billion, of which approximately RMB1,538 billion was unused. However, there can be no assurance that we will always be able to generate enough cash through operating activities or financing activities to repay or to refinance our indebtedness upon maturity. Any decrease in our cash flow from operating or financing activities in the future may have a material and adverse effect on our business, liquidity, financial condition, results of operations and our ability to repay our indebtedness, including the Notes.

Our activities in or related to certain countries or with certain individuals or entities that are the subject of U.S. sanctions could result in negative media and investor attention and materially and adversely affect investment in the Notes.

In recent years, the U.S. government has implemented a number of sanctions targeting non-U.S. companies that engage in certain Iran-related transactions and has broadened the range of sanctionable Iran-related transactions. For example, under the Iran Sanctions Act, or the ISA, which has been amended and expanded on several occasions since 1996, including by the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010, the President of the United States is authorized to initiate an investigation into the activities of non-U.S. companies in Iran's energy sector and to impose sanctions on companies that, among other things, make investments above certain thresholds that contribute to the development of Iranian petroleum resources (including natural gas resources); export certain levels of refined oil products to Iran; provide certain types and levels of assistance to Iran in developing petroleum resources, producing refined oil products, or importing refined oil products; transport crude oil from Iran; or conceal the Iranian origin of crude oil and refined petroleum products transported on vessels. In January 2016, the United States suspended most secondary sanctions (those designed to target the activities of 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. By November 5, 2018, all sanctions on Iran by the United States including those on the crude oil and petrochemical sectors had been re-imposed, with eight countries and regions including China granted temporary "significant reduction exceptions" by the United States as exemptions to certain sanctions to allow the importation of crude oil from Iran, which exemptions expired on May 2, 2019.

In November 2020, the President of the United States issued an executive order, which prohibits U.S. persons from making investments in certain Chinese companies that are identified by the Secretary of Defense and/or the Secretary of Treasury as "Communist Chinese military companies." While we are not recognized as a "Communist Chinese military company," there is no assurance that we may not become subject to this executive order. Furthermore, we cannot assure you that we will not be subject to similar executive orders as there is significant amount of uncertainty about the policies and the future actions that may be taken by the government of the United States. If we are subject to similar regulations or executive orders prohibiting U.S. investors from investing in the Notes, the liquidity of the market and the trading price of the Notes will be adversely impacted.

We engage in certain business activities in or related to Iran that could be interpreted as activities targeted by the ISA or other U.S. sanctions. In addition, we engage, or have engaged, through various group entities in limited international oil and gas production investment and related services, petrochemical engineering technical services, and international oil and gas trading activities with certain individuals or entities and in countries that are the subject of other U.S. economic sanctions regimes, including Syria and Russia.

Although our overall operations and activities in or related to those countries and with those individuals or entities that are the subject of any U.S. sanction regimes represent only a small percentage of our consolidated assets, revenues and net profit, we cannot predict the interpretation or implementation of the sanction-related government policies by the U.S. government with respect to any current or future activities by us or our affiliates in these countries or with these individuals or entities. If it is determined that we engage in activities targeted by the ISA or certain other U.S. sanctions laws, regulations or executive orders, we could be subject to secondary sanctions ranging from restrictions on U.S. exports or bank financing to outright blocking of our property within the U.S. jurisdiction or held or controlled by U.S. persons. If the most extreme sanction, blocking, were applied to our property, including property of the affiliates we own 50% or more, we and the Issuer could be prohibited from engaging in business activities in the United States or with U.S. individuals or entities, and U.S. transactions in the Notes and distributions to U.S. individuals and entities with respect to the Notes could also be prohibited. We cannot assure you that we will not be the subject of sanctions under the ISA or other U.S. laws in the future due to our activities in or related to Iran or other sanctioned countries or with any sanctioned individuals or entities. If we were sanctioned under any such laws, it could materially and adversely affect the market price of the Notes and you might be unable to sell, or receive distributions with respect to, the Notes. 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, such as Iran. These investors may not wish to invest, and may divest their investment in us because of our investments and activities in the OFAC sanctioned countries. It is possible that, as a result of activities by us or our affiliates in these countries and with these individuals or entities, we may be subject to negative media or investor attention, which may distract management, consume internal resources and negatively affect investors' perception of our company.

Our auditors were subject to investigation initiated by relevant PRC authorities.

BDO China Shu Lun Pan Certified Public Accountants LLP, or BDO, our independent auditors, is a registered accounting firm in the PRC supervised by relevant PRC regulatory agencies, including the Ministry of Finance and the CSRC. During the past few years, regulatory authorities including CSRC and its local counterparts announced certain administrative measures against BDO in relation to its services provided to various companies. These companies were all unrelated to us. The measures involved confiscation of revenue, temporary suspension of certain business operations, requirements to rectify any audit irregularities and fines. BDO has confirmed that they have taken the required rectification measures and made the required written report to the relevant regulatory authorities. As of the date of this offering memorandum, BDO is not being suspended with respect to any part of its business. If BDO is found to be deficient in performing its audit tasks for other companies, it could affect investors' confidence in all companies and their financial statements audited by BDO. There is no assurance that there will be no new investigations or administrative measures taken by relevant regulatory authorities against BDO in the future, nor can there be any assurance that further negative news about BDO would not have a material and adverse effect on us.

Risks Relating to Our Industry

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

Our results of operations are materially affected by economic conditions in China and elsewhere around the world. Although nations around the world have adopted various economic policies to mitigate the adverse influences caused by factors such as the slowdown of world economy, the European financial crisis, the U.S.-China trade conflicts and the recent COVID-19 pandemic, it is uncertain how quickly the world economy will grow going forward.

The economic recovery since the 2008 global financial crisis has been slow, with economic growth rates in major economies such as Europe, the United States, Japan and China generally remaining persistently lower than pre-crisis levels. Global economic conditions have been, and are likely to continue to be, affected by concerns over increased geopolitical tensions, including the ongoing U.S.-China trade conflicts. While we do not source any amount of significance of crude oil or other supplies from the U.S., nor do we derive any significant revenues from exports to the U.S. market, the increased tariffs, along with any additional tariffs or other trade actions that may be implemented by each of the U.S. and China, may increase the cost of certain materials and/or products that we import from the U.S., and make our products in the U.S. less competitive, thereby adversely affecting our profitability and our business. It is uncertain as to when the trade tension between the U.S. and China will ease. An escalation of the trade war between the U.S. and China would likely have a material and adverse impact on the global economy. In addition, recent events like Brexit and other evolving situations and social unrest in different regions of the world may impact the stability of the political, social and economic conditions globally or regionally. In the first three quarters of 2020, there has been and continues to be considerable volatility in the global markets as a result of the COVID-19 pandemic across all asset classes, including stocks, bonds, oil and metals, and these volatilities may continue. Global crude oil prices have experienced extreme volatility in the first quarter of 2020, driven by disagreements between Saudi Arabia and Russia over their daily production outputs of crude oil and the reduction in demand for oil as a result of the COVID-19 pandemic. In March 2020, the global price for a barrel of oil tumbled by 25% within one day shortly after Saudi Arabia announced its intention to continue to significantly increase its daily output of oil in the coming months. Although a deal was reached in early April 2020 by the OPEC+ group, an alliance between OPEC and other oil producers including Russia, to cut oil production by 9.7 million barrels a day, the precipitous decline in demand for crude oil amid the COVID-19 pandemic has led to excess supply in oil markets and concerns that global oil storage may reach maximum capacity imminently. Prompted by such concerns, U.S. oil prices fell into negative territory, with the price of May 2020 futures for WTI, the benchmark for U.S. oil, trading below zero bbl on April 20, 2020. In the first three quarters of 2020, the average spot price of Platts Brent was USD42.5 per barrel, down by 34.4% on a year-on-year basis. Although the oil prices staged a slight recovery since late April, 2020, it is expected that the international oil price may continue to fluctuate at low level. The volatility in oil prices, if sustained, may have a material and adverse impact on our revenues and financial condition. Although we use financial derivatives, including but not limited to commodity futures, to hedge the risks of volatility in crude oil prices, there is no guarantee that such financial derivatives can successfully hedge all such risks. See also "– Our business may be adversely affected by the fluctuation of crude oil, natural gas, and refined oil product prices."

Given the recent events, various governments and other observers have predicted substantially lower economic growth for 2020. China's first quarter GDP has contracted by 6.8% in 2020 as compared to 2019, largely as a result of the impact of the COVID-19 pandemic. Though the growth of China's economy turned positive quarter on quarter, showing a growth in GDP by 0.7% on a year-on-year basis in the first three quarters, in particular with an increase of 4.9% in the third quarter on a year-on-year basis, the economic hardship brought by the COVID-19 pandemic may continue to influence the business and operations of the Company. Governments and central banks around the globe have introduced or are planning fiscal and monetary stimulus measures including tax cuts, direct subsidies, rate cuts, bond repurchase programs and the suspension or relaxation of prudential bank capital requirements. These measures aim to contain the economic impact of the epidemic, stabilize the markets and provide liquidity easing to the markets. There is no assurance that such measures will be introduced in time or will be sufficient or effective in delivering their policy objectives or be successful in containing the economic impact of the epidemic or stabilizing the markets. As a result, the global economy is facing significant uncertainties and the global financial markets are experiencing significant volatilities which may adversely affect the economies of the countries in which we operate, and in turn, have a material adverse impact on our business and financial condition and the value of the Notes. Investors must exercise caution before making any investment decisions.

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 chemical 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 changes in consumer demand. Although we are an integrated company with upstream, midstream and downstream businesses, we have limited ability to mitigate the adverse impact 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. The PRC government has gradually eased the restrictions on the right to use imported crude oil and relaxed control over the right to import refined oil products.

This development may lead to refining overcapacity in China and intensify competition among local refineries. The relaxation of import control may drive up cost of crude oil imports and reduce the prices of refined oil products, thus adversely impact our refining margin. The Chinese crude oil and refined oil product markets are becoming increasingly dynamic and internationalized with implementation of tariff concessions and relaxation of market access as part of China's commitment for its accession to the WTO. The potential trade conflict and increased trade protection measures implemented by several countries may adversely affect the production, trade or demand in petroleum and petrochemical industries, and may have a significant impact on our results of operations. In the current wholesale market of refined oil products, which was 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 Doing Business in the PRC

The insolvency laws of the PRC may differ from those of other jurisdictions with which the holders of the Notes are familiar.

Because the Company is incorporated under the laws of the PRC, any insolvency proceeding relating to the Company would likely involve PRC insolvency laws, the procedural and substantive provisions of which may differ from comparable provisions of the local insolvency laws of jurisdictions with which the holders of the Notes are familiar.

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 licenses to explore and produce crude oil and natural gas, granting licenses to market and distribute crude oil and refined petroleum products, adjusting upper limit of the retail prices for gasoline and diesel; collecting special gain levies, formulating import and export quotas and procedures, imposing safety, environmental and quality standards, and promulgating policies to conserve 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 resource tax and environmental tax, which could affect our production and operations. Such control mechanisms may have material adverse effects on our operations and profitability.

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

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 governmental authorities and general economic conditions 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.

We are subject to extensive control and supervision by various PRC governmental authorities and our activities and business operations may be limited or adversely affected by government actions.

We, as one of the key SOEs under the direct supervision of the SASAC, are subject to various inspections, examinations, audits, inquiries or similar actions by other PRC governmental authorities. While we operate our business pursuant to applicable laws and regulations, we cannot predict the outcome of such governmental audits and inspections. For examples of findings of audits and governmental actions that have affected our results, see the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies, Judgments and Estimates – Restatement of Certain Line Items." If we are found to have material misstatements or omissions in our financial reports or material incompliance with laws or other irregularities in our operation, we may be subject to fines and other disciplinary actions imposed by such government authorities, and our reputation, business and financial conditions may be materially and adversely affected.

In addition, the PRC government has identified the reform of SOEs as an essential step in the structural transformation of China's economy in recent years, with a goal to increase the competitiveness and promote the growth of SOEs. Such reform is taking place by various means, such as requiring the SOEs to bring in multiple types of investors or sell stake to their employees, promoting mergers and acquisitions among the large SOEs, and forcing the merger of underperforming and smaller SOEs into other centrally owned SOEs. If we or any of our subsidiaries are required by the PRC government to participate in the reform, our activities and business operations may be materially affected.

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; and
- payment of the principal and interest on bonds issued overseas.

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 foreign exchange controls and require the approval or registration of the SAFE. 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 or when the PRC government will allow free conversion of Renminbi.

The exchange rate of the Renminbi against the U.S. dollar and other foreign currencies fluctuates and is affected by, among other things, the changes in the PRC's and international political and economic conditions. On July 21, 2005, the PRC government introduced a floating exchange rate system to allow the value of the Renminbi to fluctuate within a regulated band based on market supply and demand and by reference to a basket of foreign currencies. On June 19, 2010 and August 11, 2015, respectively, the People's Bank of China (the "PBOC") decided to further promote the reform of exchange rate regime and enhance the flexibility of Renminbi exchange rate. Most of our crude oil purchases are settled in foreign currencies calculated on the basis of prices in U.S. dollar. Fluctuations in the exchange rate of the Renminbi against the U.S. dollars and certain other foreign currencies may adversely affect our oil and gas business, financial condition and results of operations. Meanwhile, the PRC-government-implemented pricing mechanism of refined oil products is pegged to the exchange rate of the Renminbi against the U.S. dollar. Thus the prices of domestic refined oil products fluctuate with Renminbi exchange rate and the prices of other domestic refined and chemical products would also be influenced by fluctuation of Renminbi exchange rate, which largely offsets the impact of Renminbi exchange rate fluctuation on the purchase cost of crude oil.

Uncertainties with respect to the PRC legal system could limit the protections available to the Company.

The PRC legal system is a civil law system based on written statutes. Unlike in common law systems, prior court decisions may be cited for reference but have limited precedential value. Since 1979, PRC legislation and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China. However, since many laws, rules and regulations are relatively new and the PRC legal system continues to rapidly evolve, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involve uncertainties, which may limit legal protections available to us. For example, we may have to resort to administrative and court proceedings to enforce the legal protections that we enjoy either by law or contract. Since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory and contractual terms, it may be more difficult to evaluate and predict the outcome of PRC administrative and court proceedings and the level of legal protection we enjoy in China as compared to more developed legal systems. These uncertainties may impede our ability to enforce our contracts with future partners, service providers and suppliers. The effect of future developments in the PRC legal system cannot be predicted, particularly with regard to the oil and gas industry in China, including the promulgation of new laws, changes to existing laws or the interpretation or enforcement thereof, or the preemption of local regulations by national laws. These uncertainties could limit the legal protections available to us and other foreign investors. In addition, any litigation in China may be protracted and result in substantial costs and diversion of our resources and management attention.

Various legislative and regulatory developments related to U.S.-listed China-based companies may have a material adverse impact on the listing and trading in the U.S. of our subsidiary, Sinopec Corp.

On December 18, 2020, the Holding Foreign Companies Accountable Act ("HFCAA") was signed into law by the President of the United States. In essence, HFCAA requires the SEC to prohibit foreign companies from listing securities on U.S. securities exchanges or trading "over-the-counter" if a U.S. listed company retains a foreign accounting firm that cannot be inspected by the Public Company Accounting Oversight Board ("PCAOB") for three consecutive years, beginning in 2021. Sinopec Corp., like all other U.S. listed China-based companies, is prohibited by current PRC Securities Law from providing materials in relation to its securities to any persons overseas without the consent of the securities regulatory agency of the State Council and the relevant competent department of the State Council. As a result, the enactment of HFCAA and any additional rule making efforts to increase U.S. regulatory access to audit information in China may cause investor uncertainty for affected SEC registrants, including our subsidiary, Sinopec Corp., and Sinopec Corp. could be delisted if it is unable to meet the PCAOB inspection requirement in time.

Acts of God, epidemics and other disasters could affect our business.

Our business is subject to general and social conditions. Natural disasters, epidemics, acts of God and other events and disasters that are beyond our control may materially and adversely affect the economy, infrastructure and livelihoods of people in China. Some cities in China are under the threat of flood, typhoon, earthquake or drought. Our business, financial condition and results of operations may be materially and adversely affected if natural disasters or other such events occur. An outbreak of a health epidemic or contagious disease, including the coronavirus, avian influenza, Severe Acute Respiratory Syndrome ("SARS"), Ebola virus disease ("Ebola"), Middle East Respiratory Syndrome ("MERS"), H5N1 influenza, H1N1 influenza or H7N9 influenza, could result in a widespread health crisis and restrict the level of business activity in affected areas, which may in turn adversely affect our business, financial condition and results of operations. In particular, the ongoing coronavirus epidemic has resulted in many countries, including China, the United States, Germany, the United Kingdom and many other countries in Europe, declaring states of emergency and imposing extensive business and travel restrictions with a view to containing the epidemic. For more information on the impact of the COVID-19 pandemic on our business, please see "– The recent COVID-19 pandemic has had and may continue to have a material and adverse effect on our business." and "Business – Recent Developments."

Risks Relating to the Notes and the Guarantees

Certain facts and statistics are derived from publications not independently verified by us, the Initial Purchasers or their respective advisors.

Facts and statistics in this offering memorandum relating to China's economy and the industries in which we operate are derived from publicly available sources. While we have taken reasonable care to ensure that the facts and statistics presented are accurately reproduced from such sources, they have not been independently verified by us, the Initial Purchasers or their respective advisors and, therefore, we make no representation as to the accuracy of such facts and statistics, which may not be consistent with other information compiled within or outside China. If the calculation and collection methods are ineffective or there are other problems, the facts and statistics herein may be inaccurate or may not be comparable to facts and statistics produced for other economies and should not be unduly relied upon.

Developments in other markets may adversely affect the market price of the Notes.

The market price of the Notes may be adversely affected by declines in the international financial markets and world economic conditions. The market for Chinese securities is, to varying degrees, influenced by economic and market conditions in other markets, especially those in other regions in Asia. Although economic conditions are different in each country, investors' reactions to developments in one country can affect the securities markets and the securities of issuers in other countries, including China. Since the sub-prime mortgage crisis in 2008, the international financial markets have experienced significant volatility. If similar developments occur in the international financial markets in the future, the market price of the Notes could be adversely affected.

The Issuer is a special purpose vehicle with no business activities of its own and will be dependent on funds from the Guarantor to make payments under the Notes. The Issuer and Guarantor will not receive financial support from SASAC with respect to the Notes.

The Issuer was established by the Guarantor specifically for the purpose of raising funds through the issuance of the Notes and other notes described under "Description of the Issuer – Business Activity" and will on-lend the net proceeds from their issuance to the Guarantor and/or its subsidiaries. The Issuer does not and will not have any material assets but it will receive repayments from the Guarantor and/or its subsidiaries in respect of loans made by the Issuer to those companies, which will be the only material sources of funds available to meet the claims of holders of the Notes. The Notes are unconditionally and irrevocably guaranteed by the Guarantor, which is a state-owned limited liability company incorporated in the PRC. The Guarantees will constitute the Guarantor's direct, unsecured and unsubordinated obligations ranking *pari passu* (except obligations preferred by applicable law) with all our other unsecured and unsubordinated indebtedness, including such obligations incurred in connection with the senior notes issued by Sinopec Group Overseas Development (2017) Limited in 2017 and guaranteed by the Guarantor and Sinopec Group Overseas Development (2018) Limited in 2018, in 2019 and in 2020 and guaranteed by the Guarantor. As a result, the Issuer is subject to all the risks to which the Guarantor is subject, to the extent that such risks could limit their ability to satisfy in full and on a timely basis their respective obligations to the Issuer under any such loans. Further, while the Guarantor is a state-owned limited liability company, investors should note that ownership or control of the Guarantor by SASAC does not necessarily correlate to, or provide any assurance as to, the Guarantor's financial condition. As the Issuer and the Guarantor will not receive financial support from SASAC with respect to the Notes, the Notes will remain the sole obligation of the Issuer and the Guarantor.

The Notes will be structurally subordinated to the existing and future indebtedness and other liabilities of the Issuer's and our existing and future subsidiaries, other than the Issuer, and effectively subordinated to the Issuer's and our secured debt to the extent of the value of the collateral securing such indebtedness.

The Notes will be structurally subordinated to any debt and other liabilities and commitments, including trade payables and lease obligations, of the Issuer's and our existing and future subsidiaries, whether or not secured. The Notes will not be guaranteed by any of the Issuer's and our subsidiaries, and the Issuer and we may not have direct access to the assets of such subsidiaries unless these assets are transferred by dividend or otherwise to the Issuer or us. The ability of such subsidiaries to pay dividends or otherwise transfer assets to the Issuer and us is subject to various restrictions under applicable law. Each of the Issuer and our subsidiaries are separate legal entities, and our subsidiaries (including any subsidiaries of the Issuer that may be established in the future) have no obligation to pay any amounts due under the Notes or make any funds available therefor, whether by dividends, loans or other payments. The Issuer's and our right to receive assets of any of the Issuer's and our subsidiaries, respectively, upon that subsidiary's liquidation or reorganization will be effectively subordinated to the claim of that subsidiary's creditors (except to the extent that the Issuer or we are creditors of that subsidiary). Consequently, the Notes will be effectively subordinated to all liabilities, including trade payables and lease obligations, of any of the Issuer's and our subsidiaries and any subsidiaries that the Issuer or we may in the future acquire or establish.

The Notes are the Issuer's and our unsecured obligations and will (i) rank equally in right of payment with all the Issuer's and our other present and future senior unsecured indebtedness; (ii) be effectively subordinated to all of the Issuer's and our present and future secured indebtedness to the extent of the value of the collateral securing such obligations; and (iii) be senior to all of the Issuer's and our present and future subordinated obligations. As a result, claims of secured lenders, whether senior or junior, with respect to assets securing their loans or bonds will be prior with respect to those assets. The Indentures will permit the Guarantor to incur the secured Relevant Indebtedness up to 20% of the Guarantor's Adjusted Consolidated Net Worth without sharing the collateral with the Notes. In the event of the Issuer's or our bankruptcy, insolvency, liquidation, reorganization, dissolution or other winding up, or upon any acceleration of the Notes, these assets will be available to pay obligations on the Notes only after all other debt secured by these assets has been repaid in full. Any remaining assets will be available to you ratably with all of our other unsecured and unsubordinated creditors, including trade creditors. If there are not sufficient assets remaining to pay all these creditors, then all or a portion of the Notes then outstanding would remain unpaid. The Issuer does not have any subsidiary and does not have any indebtedness, other than the Notes.

There is uncertainty relating to the enforceability of the Guarantees of the Notes.

We will unconditionally and irrevocably guarantee the due payment of all sums expressed to be payable by the Issuer under the Notes. The guarantee of foreign indebtedness by a PRC-incorporated entity is no longer subject to approval by the SAFE. Pursuant to the Notice on the Promulgation of the Provisions on Foreign Exchange Administration of Cross-border Guarantee issued by the SAFE on May 12, 2014, effective from June 1, 2014 (the "Cross-border Guarantee Provisions"), any guarantee provided by PRC-incorporated entities in favor of offshore creditors in connection with debt financing granted to offshore debtors is required to be registered with the local branch of the SAFE. Under the Cross-border Guarantee Provisions, we are required to submit the Guarantees to the Beijing Branch of the SAFE (the "Beijing Branch") as a procedural matter within 15 Beijing business days after the date of execution of the Guarantees of the Notes.

In the event that we are required to perform our payment obligations under the Guarantees of the Notes, we shall submit the registration documents issued by the Beijing Branch to banks, which upon reviewing such registration documents shall process our remittance request directly. We intend to execute and register the Guarantees with the Beijing Branch as soon as reasonably practicable after the pricing date, and we will use our commercially reasonable best efforts to complete the registration of the Guarantees with the Beijing Branch as described under "Description of the Notes and Guarantees – Completion of the Registration of the Guarantees with the Beijing Branch." However, we will not be required under the Indentures to make an offer to repurchase all of the Notes for which registration has not been completed.

Pursuant to the Cross-border Guarantee Provisions, the registration or record-filing of a cross-border guarantee contract by a local branch of the SAFE, and other administrative matters and requirements specified therein, shall not constitute prerequisites for the cross-border guarantee contract to enter into effect. However, failure to complete the registration as required may result in a fine up to RMB300,000 under the Cross-border Guarantee Provisions. In addition, in the event the Guarantor fails to complete the registration with the Beijing Branch, the Guarantor shall, before performing the obligations under the Guarantees of the Notes, complete a remedial registration with the Beijing Branch. Only by submitting the registration documents or remedial registration documents to banks may the Guarantor be able to remit funds outside PRC in order to perform its payment obligations under the Guarantees. If the guarantor fails to complete the registration, guarantees with respect to the Notes may encounter uncertainty under PRC law against the assets of the Guarantor within the PRC. The Cross-border Guarantee Provisions may be subject to a degree of executive and policy discretion and interpretation by the SAFE. See "Description of the Notes and Guarantees."

The Guarantees and the Indentures, which set out the terms of the Guarantees, are governed by the laws of the State of New York. Judgments of foreign courts, including New York courts, are unlikely to be recognized or enforced in the PRC unless there is a treaty between the PRC and the country where the judgment is made or on reciprocity between jurisdictions. The PRC does not have any treaties or other agreements that provide for reciprocal recognition and enforcement of foreign judgments with the United States. As a result, you may need to pursue claims based on the Guarantees and the Indentures in the PRC courts. See "Enforceability of Foreign Judgments and Civil Liabilities."

If the Company fails to complete the post-issuance report to the NDRC in connection with the Notes, NDRC may impose penalties or other administrative procedures on the Company.

On September 14, 2015, the NDRC promulgated the NDRC Circular, pursuant to which if a PRC enterprise or an offshore enterprise controlled by a PRC enterprise wishes to issue bonds outside of the PRC with a maturity of more than one year, such PRC enterprise must in advance of issuing such bonds, file certain prescribed documents with the NDRC and obtain a registration certificate from the NDRC in respect of such issue. According to the NDRC Circular, the NDRC will decide whether to accept a submission within five working days upon receipt of the submission and is expected to issue a decision on the submission within seven working days after it accepts the submission. The enterprise must also report certain details of the bonds to the NDRC within 10 business days upon the completion of the bond issue. The NDRC Circular is silent on the legal consequences of non-compliance with the pre-issue registration requirement. In the worst case scenario, it might become unlawful for the Issuer to perform or comply with any of its obligations under the Notes. Similarly, there is no clarity on the legal consequences of non-compliance with the post-issue notification requirement under the NDRC Circular.

On June 15, 2018, the officer from the NDRC answered reporter's questions on the issue of foreign debts issued by enterprises (the "Answers"). According to the Answers, in order to further standardize market behavior, promote the enterprises to comply with the relevant rules of foreign debts registration and prevent the risk of foreign debts, NDRC intends to implement "three warnings" to further standardize the foreign debts registration: (i) if the enterprise issued foreign debts without prior registration or violated other relevant provisions of the NDRC Circular for the first time, the NDRC will interviewed the enterprises, relevant underwriters, law firms and other intermediaries, and issued warning notices on the official website of the NDRC; (ii) if such violations occurred again, NDRC will warn the relevant enterprises and intermediaries in real name on the official website of the NDRC; (iii) if such violations occurred for the third time, NDRC will blame the relevant enterprises and intermediaries together with relevant departments, suspend the foreign debts registration of the violating enterprises and suspend relevant intermediaries to involve in the deals of foreign debts issuance. The Company has undertaken to notify the NDRC of the particulars of the issue of the Notes within the prescribed period under the NDRC Circular. Since the NDRC Circular is without any detailed implementation procedures, there is no assurance that the NDRC will not issue further implementation rules or notices which may require additional steps in terms of the registration or provide sanctions or other administrative procedures the NDRC may impose in case of failure of such registration with, or post-issuance report to, the NDRC. The Company has obtained the Enterprise Foreign Debt Pre-Issuance Registration Certificate in respect of the issuance of the Note on October 16, 2020 and such certificate remains valid as of now and it still has to make the post-issuance filing with the NDRC within 10 business days after the settlement of the Notes. If the Company does not report the post-issuance information with respect to the Notes within the timeframe as provided under the NDRC Circular, the NDRC may impose sanctions or other administrative procedures on the Company which may have a material adverse impact to its business, financial condition or results of operations.

The Notes and the Guarantees are unsecured obligations.

As the Notes and the Guarantees are unsecured obligations, their repayment may be compromised if:

- the Company or the Issuer enter into bankruptcy, liquidation, reorganization or other winding-up proceedings;

- there is a default in payment under the Issuer's or our future secured indebtedness or other unsecured indebtedness; or

- there is an acceleration of any of the Issuer's or our indebtedness.

Although we do not expect any of these events to occur with respect to the Issuer, since it is not permitted under the terms of the Indentures to carry on any business activities other than in connection with the issuance of the Notes and advance of the proceeds therefrom to us or our subsidiaries, if any of these events occur, the Issuer's and our assets and any amounts received from the sale of such assets may not be sufficient to pay amounts due on the Notes.

An active trading market may not develop for the Notes and the trading price of the Notes could be materially and adversely affected.

The Notes are a new issue of securities with no established trading market. The Issuer has received an eligibility letter from the SEHK for listing of, and permission to deal in, the Notes by way of debt issues to Professional Investors only. However, we cannot assure you that the Notes will be or remain listed. We do not intend to apply for listing of the Notes on any U.S. securities exchange or for quotation through an automated dealer quotation system. The Initial Purchasers have advised us that they presently intend to make a market in the Notes as permitted by applicable laws. However, the Initial Purchasers are not obligated to make a market in the Notes and may discontinue their market-making activities at any time at their discretion without notice. In addition, the liquidity of the trading market in the Notes, and the market price quoted for the Notes, may be adversely affected by changes in the overall market for securities and by changes in our financial performance or prospects of companies in our industry in general. As a result, we cannot assure you that an active trading market will develop or be maintained for the Notes. If a market for the Notes does not develop or is not maintained, the market price and liquidity of the Notes may be adversely affected.

In addition, the Notes may trade at prices that are higher or lower than the price at which the Notes have been issued. The price at which the Notes trade depends on many factors, including:

- prevailing interest rates and interest rate volatility;

- our results of operations, financial condition and future prospects;

- changes in our industry and competition;

- the market conditions for similar securities; and

- general economic conditions such as the recent downgrade of the long-term sovereign credit rating of the U.S. and the ongoing European debt crisis, almost all of which are beyond our control.

As a result, there can be no assurance that you will be able to resell the Notes at attractive prices or at all.

Holders of the Notes will not be entitled to registration rights, and we do not currently intend to register the Notes under applicable securities laws. There are restrictions on your ability to transfer or resell the Notes.

The Notes are being offered and sold pursuant to an exemption from registration under the Securities Act and applicable securities laws, and we do not currently intend to register the Notes in any jurisdiction. The holders of the Notes will not be entitled to require the Issuer to register the Notes for resale or otherwise. Therefore, you may transfer or resell the Notes only in a transaction registered under or exempt from the registration requirements of the Securities Act and applicable securities laws of your jurisdiction and/or state, and you may be required to bear the risk of your investment for an indefinite period of time. See "Transfer Restrictions."

The rating of the Notes may be lowered, suspended or withdrawn; changes in such credit rating may adversely affect the value of the Notes.

The Notes are expected to be assigned a rating of "A1" by Moody's Investors Service, Inc. ("Moody's") and "A+" by S&P Global Ratings, a division of S&P Global Inc. ("S&P"). Ratings are limited in scope, and do not address all material risks relating to an investment in the Notes, but rather reflect only the view of each rating agency at the time the rating is issued. An explanation of the significance of a rating may be obtained from the relevant rating agency. Ratings are not recommendations to buy, sell or hold securities, and there can be no assurance that ratings will remain in effect for any given period of time or that ratings will not be lowered, suspended or withdrawn entirely by the rating agencies, if, in each rating agency's judgment, circumstances so warrant. Each rating should be evaluated independently of any other rating. Actual or anticipated changes or downgrades in our credit ratings, including any announcement that our ratings are under further review for a downgrade, could affect the market value of your Notes and increase our corporate borrowing costs.

The Issuer may be deemed to be a PRC tax resident enterprise by the PRC tax authorities and certain PRC withholding taxes may be applicable to interest payments on the Notes and gains realized on disposition of the Notes may be subject to PRC tax.

The Issuer is incorporated under the laws of the British Virgin Islands. Pursuant to the Enterprise Income Tax Law of the PRC, (the "EIT Law"), effective as of January 1, 2008 and as further revised on February 24, 2017 and December 29, 2018, and its implementation regulations effective as of January 1, 2008 and as further revised on April 23, 2019, enterprises that are established under the laws of foreign countries and regions but whose "de facto management bodies" are within the territory of the PRC are treated as PRC tax resident enterprises for the purpose of the EIT Law and must pay enterprise income tax at the rate of 25% in respect of their income sourced from both within and outside China. If the relevant PRC tax authorities decide, in accordance with applicable tax rules and regulations, that the "de facto management body" of the Issuer is within the territory of the PRC, the Issuer may be held to be a PRC tax resident enterprise for the purpose of the EIT Law and be subject to enterprise income tax at the rate of 25% on its income sourced from both within and outside the PRC.

Pursuant to the EIT Law and its implementation regulations, a non-resident enterprise without establishment within the PRC or whose income has no actual connection to its establishment or place of business within the PRC generally must pay enterprise income tax at the rate of 10% or a lower rate if tax treaty benefits are available on its income sourced inside the PRC, and such income tax must be withheld by the PRC payor. In the event the Issuer is deemed to be a PRC tax resident enterprise by the PRC tax authorities in the future, interest paid on the Notes may be considered to be PRC source, in which case the Issuer would be required to withhold income tax at a rate of 10% from payments of interest in respect of the Notes to any non-PRC enterprise holders of the Notes. Any capital gain realized by a non-PRC enterprise from the transfer of the Notes may also be regarded as being derived from sources within the PRC and accordingly may be subject to a PRC tax of up to 10% if the Issuer is treated as a PRC tax resident enterprise. In accordance with the Individual Income Tax Law of the PRC which was latest amended on August 31, 2018 and took effect on January 1, 2019 and its implementation regulations which was latest amended on December 18, 2018 and took effect on January 1, 2019, if the Issuer is considered to be a PRC tax resident enterprise, interest payable to non-resident individual holders of the Notes may be treated as income derived from sources within the PRC and be subject to a 20% individual income tax; accordingly, the Issuer may be obliged to withhold such individual income tax on payments of interests to non-resident individual holders of the Notes. In addition, any capital gain realized by a non-resident individual holder from transfer of the Notes may be regarded as being derived from sources within the PRC and be subject to PRC tax of up to 20%. The rates of PRC tax on interest and capital gains may be reduced under an applicable income tax treaty. See "Taxation – PRC."

If the Issuer is required to withhold PRC tax on interest payable to non-resident holders of the Notes, the Issuer would be required, subject to certain exceptions, to pay such Additional Amounts as would result in receipt by a holder of a Note of such amounts as would have been received by such holder had no such withholding be required. The requirement to pay Additional Amounts will increase the cost of servicing interest payments on the Notes, and could have a material adverse effect on the Issuer's ability to pay interest on, and repay the principal amount of, the Notes.

If the Issuer is not a PRC tax resident, non-resident holders of the Notes will not be subject to tax imposed by any governmental authority in the PRC in respect of the holding of the Notes or any repayment of principal and payment of interest made thereon. However, there is no assurance that the Issuer will not be treated as a PRC tax resident enterprise under the EIT Law and related implementation regulations in the future.

The Issuer or the Guarantor may be able to redeem the Notes in whole at a redemption price equal to 100% of the principal amount plus accrued and unpaid interest in the event it is required to pay Additional Amounts in respect of (i) PRC income tax in excess of 10% or (ii) value-added tax and related surtaxes, if, in either case, the requirement to pay Additional Amounts results from certain changes in PRC tax law.

The Guarantor is a PRC "resident enterprise" and required to withhold PRC income tax on interest paid to certain non-resident investors, which would include interest payable in respect of the Notes pursuant to the Guarantee. In addition, if the Issuer is treated as a PRC "resident enterprise," the Issuer may be required to withhold PRC tax from interest paid to non-resident investors if the interest is treated as PRC source income. Moreover, there is uncertainty as to whether interest paid on the Notes might be subject to PRC value-added tax (currently at a rate of 6%) and relevant surcharges if the interest is paid under the Guarantee, or is paid by the Issuer and is treated as PRC source income.

As described under "Description of the Notes and Guarantees – Redemption – Optional Tax Redemption," in the event the Issuer (or the Guarantor) is required to pay Additional Amounts as a result of certain changes in or interpretations of tax law that result in it being required to withhold income tax at a rate in excess of 10% (the current PRC income tax rate applicable to non-resident enterprise holders) on interest payments as a result of the Issuer (or the Guarantor) being treated as a PRC "resident enterprise," the Issuer may redeem the Notes in whole at a redemption price equal to 100% of the principal amount plus accrued and unpaid interest. In addition, if the Issuer or Guarantor is required to pay Additional Amounts with respect to PRC value-added tax and the requirement to pay such Additional Amounts results from a change in or interpretation of PRC tax law, the Issuer may be able to redeem the Notes in whole at a redemption price equal to 100% of the principal amount plus accrued and unpaid interest. See "Description of the Notes and Guarantees."

You may experience difficulties in effecting service of legal process and enforcing judgments against us, our directors, supervisors or senior management.

We are a company incorporated under the laws of the PRC and most of our assets and subsidiaries are located in China. All of our directors and senior management reside within the PRC. The assets of these directors and senior management also may be located within the PRC. As a result, it may not be possible to effect service of process upon most of our directors and senior management outside the PRC. Moreover, the PRC does not have treaties providing for reciprocal recognition and enforcement of court judgments in the United States, the United Kingdom, Japan or most other countries. As a result, in the PRC, recognition and enforcement of court judgments from the jurisdictions mentioned above may be difficult or impossible in relation to any matter that is not subject to a binding arbitration provision. See "Enforceability of Foreign Judgments and Civil Liabilities."

If we are unable to comply with the restrictions and covenants in our debt agreements, the indentures or the Indentures, there could be a default under the terms of these agreements, the indentures or the Indentures, which could cause the repayment of our debt to be accelerated.

We are subject to certain restrictions and covenants in our debt agreements and the indentures governing the existing senior notes. From time to time we have had to seek amendments, waivers and consents in connection with covenants and breaches under our debt facilities. Such amendments, waivers and consents have all been granted by the applicable creditors to date. There is no assurance that we will not need to seek such amendments, waivers or consents in the future.

If we are unable to comply with the restrictions and covenants in the indentures and the Indentures, or our current or future financing and other agreements, there could be a default under the terms of these agreements. In the event of a default under these agreements, the holders of the relevant debt could terminate their commitments to lend to us, accelerate the debt obligation and declare all amounts borrowed due and payable or terminate the agreements, as the case may be. Furthermore, certain debt agreements, including the Indentures, contain cross-acceleration or cross-default provisions. As a result, default under one debt agreement may cause the acceleration of repayment of not only such debt but also other debt, including the Notes, or result in a default under other debt agreements, including the trust deeds relating to the Indentures. If any of these events should occur, there can be no assurance that our assets and cash flow would be sufficient to repay in full all indebtedness, or that alternative financing could be found. Even if alternative financing can be obtained, there can be no assurance that it would be on terms that are favorable or acceptable to us.

PRC corporate disclosure and accounting standards differ from U.S. GAAP.

We are a private company not listed on any stock exchange. There may be less publicly available information about us and our subsidiaries than is regularly made available by public companies in certain other countries, including the United States. In addition, our financial statements are prepared and presented in accordance with PRC GAAP. PRC GAAP differs in certain respects from U.S. GAAP. See "Description of Certain Differences Between PRC GAAP and U.S. GAAP."

The Issuer and the Company will follow the applicable corporate disclosure standards for debt securities listed on the SEHK, which standards may be different from those applicable to companies in certain other countries.

The Issuer has received an eligibility letter from the SEHK for listing of and permission to deal in the Notes by way of debt issues to Professional Investors only. Upon the granting of the approvals by the SEHK, the Issuer will be subject to the applicable corporate disclosure standards for debt securities listed on the SEHK. The disclosure standards imposed by the SEHK may be different than those imposed by securities exchanges in other countries or regions such as the United States or Singapore. As a result, the level of information that is available may not correspond to what investors in the Notes are accustomed to.

We may elect to redeem the Notes prior to their maturity.

Pursuant to terms of the Notes, we may elect to redeem the Notes prior to their maturity in whole or in part at the price specified in the section entitled "Description of the Notes and Guarantees – Redemption – Optional Redemption." The date on which we elect to redeem the Notes may not accord with the preference of particular noteholders. In addition, a noteholder may not be able to reinvest the redemption proceeds in comparable securities at the same rate of return of the Notes.

Also, as described under "Description of the Notes and Guarantees – Redemption – Optional Tax Redemption," in the event we are required to pay Additional Amounts with respect to any payment due or to become due under the Notes as a result of (i) any change in or amendment to the laws of a Relevant Jurisdiction (as defined herein) or any regulations or rulings promulgated thereunder affecting taxation, or (ii) any change in the official interpretation or official application of such laws, regulations or rulings, which change or amendment and such requirement cannot be avoided by the taking of reasonable measures by us, then subject to certain conditions, we may redeem the Notes, as a whole but not in part, at a redemption price equal to 100% of the principal amount plus accrued and unpaid interest (including any Additional Amounts).

An optional redemption feature is likely to limit the market value of the Notes. During any period when we may elect to redeem Notes, the market value of the Notes generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period. We may be expected to redeem Notes when its cost of borrowing is lower than the interest rate on the Notes. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Notes being redeemed and may only be able to do so at a significantly lower rate. Potential investors should consider reinvestment risk in light of other investments available at that time.

The Trustee may request Noteholders to provide an indemnity, security and/or pre-funding to its satisfaction.

Under certain circumstances, including without limitation giving notice to the Issuer upon an event of default and taking enforcement steps pursuant to the terms of the Indentures, the Trustee may, at its sole discretion, request noteholders to provide an indemnity, security and/or pre-funding to its satisfaction before it takes actions on behalf of noteholders. The Trustee will not be obliged to take any such actions if not indemnified, secured and/or pre-funded to its satisfaction. Negotiating and agreeing to an indemnity, security and/or pre-funding can be a lengthy process and may impact on when such actions can be taken. The Trustee may not be able to take actions, notwithstanding the provision of an indemnity, security and/or pre-funding to it, in breach of the terms of the Indentures and in circumstances where there is uncertainty or dispute as to the applicable laws or regulations and, to the extent permitted by the agreements and the applicable law, it will be for the noteholders to take such actions directly.

CAPITALIZATION AND INDEBTEDNESS

The following table sets forth our capitalization and indebtedness as of September 30, 2020 and as adjusted to give effect to this offering. You should read this table in conjunction with our unaudited consolidated financial statements as of and for the nine months ended September 30, 2020, and related notes included elsewhere in this offering memorandum.

	As of September 30, 2020			
	Actual		As Adjusted	
	(unaudited)		*(unaudited)*	
	RMB	*US$*	*RMB*	*US$*
	(in millions)			
Indebtedness[1]				
Indebtedness – due within one year	224,099	33,006	224,099	33,006
Indebtedness – due after one year	262,431	38,652	262,431	38,652
Notes offered hereby			20,369	3,000
Total indebtedness	486,530	71,658	506,899	74,658
Owner's equity				
Paid-in capital	325,547	47,948	325,547	47,948
Capital reserve	52,207	7,689	52,207	7,689
Other comprehensive income	(30,541)	(4,498)	(30,541)	(4,498)
Specific reserves	3,172	468	3,172	468
Surplus reserves	223,474	32,914	223,474	32,914
General risk reserve	1,766	260	1,766	260
Retained profit	195,203	28,750	195,203	28,750
Minority interest	368,222	54,233	368,222	54,233
Total owners' equity	1,139,050	167,764	1,139,050	167,764
Total capitalization[2]	1,625,580	239,422	1,645,949	242,422

Notes:

(1) Indebtedness does not include amounts due to our subsidiaries.

(2) Total capitalization equals total indebtedness plus total owners' equity.

Except as disclosed herein, there have been no material changes in the Company's total capitalization since September 30, 2020.

DESCRIPTION OF THE ISSUER

Formation

The Issuer was incorporated with limited liability on August 30, 2018 in the British Virgin Islands under the BVI Business Companies Act. Its registered office is located at Commerce House, Wickhams Cay 1, P.O. Box 3140, Road Town, Tortola, British Virgin Islands VG1110, British Virgin Islands. The Issuer is wholly owned by us through our wholly owned subsidiary, Sinopec Group Overseas Development Limited, a company incorporated with limited liability in the British Virgin Islands. Both the Issuer and Sinopec Group Overseas Development Limited have elected to be treated as disregarded entities for U.S. federal income tax purposes.

Business Activity

Under the Issuer's memorandum of association, the Issuer has full capacity to carry on or undertake any business or activity, do any act or enter into any transaction that is not prohibited under any law for the time being in force in the British Virgin Islands. However, so long as the Notes are outstanding, the Issuer will limit its permitted activities as described under "Description of the Notes and Guarantees – Certain Covenants – Further Limitation on Issuer's Activities and Related Matters." The Issuer's primary purpose is to act as one of our financing subsidiaries to issue and hold the Notes and other notes as described below. The Issuer has no material business nor assets and does not have any employees. In the future, the Issuer may, either itself or through direct and indirect subsidiaries and associated companies, issue further bonds and engage in other business activities related to us and may incur substantial liabilities and indebtedness.

In 2018, the Issuer issued the following notes:

- US$750,000,000 aggregate principal amount of 3.750% senior notes due 2023;
- US$500,000,000 aggregate principal amount of 4.125% senior notes due 2025;
- US$750,000,000 aggregate principal amount of 4.250% senior notes due 2028; and
- US$400,000,000 aggregate principal amount of 4.600% senior notes due 2048.

In 2019, the Issuer issued the following notes:

- US$800,000,000 aggregate principal amount of 2.500% Senior Notes Due 2024;
- US$700,000,000 aggregate principal amount of 2.950% Senior Notes Due 2029;
- US$500,000,000 aggregate principal amount of 3.680% Senior Notes Due 2049;
- US$700,000,000 aggregate principal amount of 2.500% senior notes due 2024;
- US$1,000,000,000 aggregate principal amount of 2.950% senior notes due 2029; and
- US$300,000,000 aggregate principal amount of 3.440% senior notes due 2049.

In 2020, the Issuer issued the following notes:

- US$1,000,000,000 aggregate principal amount of 2.150% senior notes due 2025;
- US$1,500,000,000 aggregate principal amount of 2.700% senior notes due 2030; and
- US$500,000,000 aggregate principal amount of 3.350% senior notes due 2050.

Directors and Officers

The directors of the Issuer are Shou Donghua and Zhao Li. The directors of the Issuer do not hold any shares or options to acquire shares of the Issuer. The business address of the directors is 22 Chaoyangmen North Street, Chaoyang District, Beijing, 100728, PRC.

There are no potential conflicts of interest between any duties of any of the management of the Issuer or the Guarantor to the Issuer or the Guarantor, respectively, and their private interests and/or other duties.

Share Capital

The Issuer is authorized to issue up to a maximum of 50,000 ordinary shares of a single class of US$0.0002 each, all of which have been issued and are fully paid. No part of the equity securities of the Issuer is listed or dealt in on any stock exchange and no listing or permission to deal in such securities is being or is proposed to be sought.

Summary Financial Information of the Issuer

The Issuer has not engaged, since its incorporation, in any activities other than those incidental to its incorporation, the authorization, execution and issue of the Notes, and the documents and matters referred to or contemplated in this offering memorandum to which the Issuer is or will be a party and matters which are incidental or ancillary to the foregoing.

Except as disclosed elsewhere in this offering memorandum, at the date of this offering memorandum, the Issuer has no borrowings or indebtedness in the nature of borrowings (including loan capital issued or created but unused), term loans, liabilities under acceptances or acceptance credits, mortgages, charges or guarantees or other contingent liabilities.

There are no other outstanding loans or subscriptions, allotments or options in respect of the Issuer.

The financial year of the Issuer runs from January 1 to December 31. There has been no material change in the activities of the Issuer since its incorporation.

The Issuer has not prepared any financial statements since its incorporation.

USE OF PROCEEDS

The net proceeds we expect to receive from this offering, after deducting underwriting commissions and certain estimated offering expenses, will be approximately US$2,988.691 million. We intend to use the net proceeds of this offering to refinance our existing indebtedness and for general corporate purposes.

The foregoing represents our current intentions based upon our present plans and business conditions to use and allocate the net proceeds of this offering. Our management, however, will have significant flexibility and discretion to apply the net proceeds of this offering subject to the applicable PRC laws and regulations. If an unforeseen event occurs or business conditions change, we may use the proceeds of this offering differently than as described in this offering memorandum subject to the applicable PRC laws and regulations.

OUR HISTORY AND CORPORATE STRUCTURE

Our History

Our predecessor was the former China Petrochemical Corporation ("Old Sinopec") founded in 1983 by the PRC State Council as a ministerial level enterprise. Old Sinopec was historically the dominant force in the refining and petrochemical industry in China. It was primarily responsible for the development and administration of the refining and petrochemical industry in China, including formulating industrial policies for the refining and petrochemical industry and supervising the construction and operation of refineries.

In December 1984, Old Sinopec set up a sales subsidiary, and became responsible for the administration of the marketing and distribution of refined oil products in China.

On July 25, 1998, the restructuring of the petroleum and petrochemical industry reorganized Old Sinopec into the Company, a large, vertically integrated petroleum and petrochemical enterprise with commercial operations concentrated in the eastern and southern regions of China.

On February 28, 2000, Sinopec Corp. was established as a joint stock company with limited liability under the Company Law of the PRC as part of a restructuring in which we transferred to Sinopec Corp. the majority of our production operations consisting of most of our petroleum and petrochemical operations, while retaining within Sinopec Group most of the social and ancillary services and certain production assets and retail service stations. As a result of the transfer, Sinopec Corp. conducts the following businesses:

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

On October 18, 2000, the H shares and American Depositary Shares of Sinopec Corp. were simultaneously listed on the SEHK, the New York Stock Exchange and the London Stock Exchange.

In January 2001, we incorporated SIPC as an integrated strategic business unit to implement our overseas expansions in oil and gas exploration and production investments and operations.

On August 8, 2001, the A shares of Sinopec Corp. were successfully listed on the Shanghai Stock Exchange.

In May 2013, the H shares of Sinopec Engineering (Group) Co., Ltd. ("Sinopec Engineering"), a subsidiary of the Company, were successfully listed on the SEHK.

In May 2013, we incorporated Sinopec Catalyst Co. Ltd., one of our indirect wholly-owned subsidiaries and an investment platform for the production, marketing and management of catalysts.

By April 2014, Sinopec Corp. had injected its assets in the marketing and distribution segment into Sinopec Marketing, a wholly-owned subsidiary of Sinopec Corp. On September 12, 2014, Sinopec Marketing entered into a capital injection agreement with 25 domestic and foreign investors, pursuant to which the investors agreed to subscribe for certain equity interest in Sinopec Marketing. As of March 6, 2015, the 25 investors had made an aggregate capital contribution of RMB105.04 billion, representing 29.58% of the equity interest in Sinopec Marketing.

In July 2014, we incorporated Sinopec Lubricant Co. Ltd., one of our indirect wholly-owned subsidiaries, specializing in the research and development, production and marketing of lubricant products and services.

In December 2014, pursuant to a series of agreements entered into by the Company, Sinopec Corp. and Sinopec Yizheng Chemical Fibre Company Limited, a subsidiary of the Company whose A shares were listed on the Shanghai Stock Exchange and whose H shares were listed on the SEHK ("Yizheng"), Yizheng transferred all of its business to Sinopec Corp., and the Company injected its petroleum engineering business into Yizheng. In March 2015, Yizheng changed its name to Sinopec Oilfield Service Corporation.

In November 2015, pursuant to the SASAC's Special Coordination Meeting Minutes of Reorganization of Sinopec International Petroleum Exploration and Production Corporation (SASAC Special Coordination Meeting Minutes [2015] No. 54, the "SASAC Meeting Minutes"), we entered into a restructuring plan (the "SIPC Restructuring") with two government asset management firms, China Chengtong Holdings Group Ltd. ("Chengtong Group") and China Reform Holdings Co., Ltd. ("CRHC"), to optimize SIPC's capital structure by increase of its share capital. In December 2015, each of Chengtong Group and CRHC, through its respective subsidiary, purchased 40% and 30% of SIPC's newly issued equity, respectively, for a consideration of RMB6.7 billion and RMB5 billion, respectively. Each of Chengtong Group, CRHC and us has the right to nominate three, two and two directors to the board of SIPC, respectively. Pursuant to the SASAC Meeting Minutes, Chengtong Group and CRHC borrowed the proceeds from Sinopec Asset Management Co., Ltd. As a result of the SIPC Restructuring, our equity interest in SIPC decreased from 100% to 30%. The day-to-day management and operation of SIPC has been handed over to its newly established board of directors while we continue to provide advice and guidance on SIPC's operations through the two directors appointed by us. The SIPC Restructuring was deemed to be effective as of January 1, 2015 and, consequently, the financial results of SIPC were not included in our consolidated financial statements as of and for the years ended December 31, 2017, 2018 and 2019 and our unaudited consolidated financial statements as of and for the nine months ended September 30, 2019 and 2020.

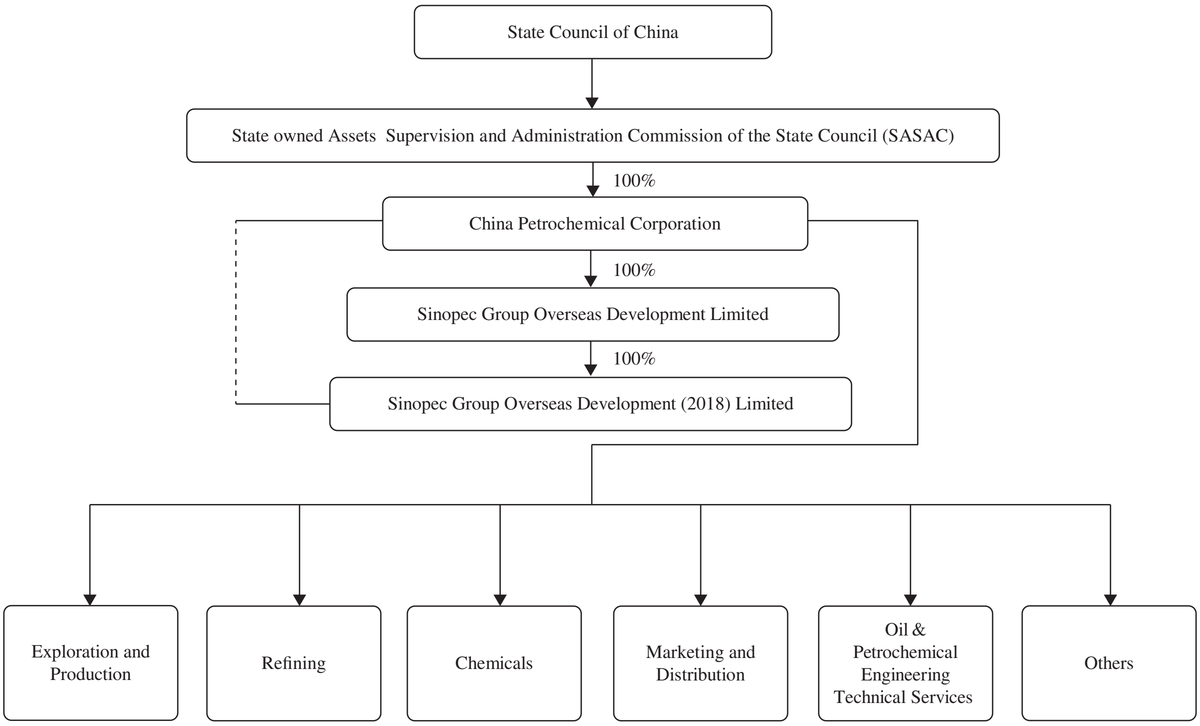
In June 2017, the shareholders of Sinopec Corp. passed the resolutions in relation to the plan of overseas listing of Sinopec Marketing (the "Plan") at the annual general meeting for 2016. According to the Plan, Sinopec Marketing will carry out overseas listing of its shares (the "Overseas Listing") after its conversion into a joint stock limited liability company. Upon the completion of the Overseas Listing, Sinopec Corp. is expected to retain a majority shareholding in Sinopec Marketing and continue to consolidate the results of Sinopec Marketing in its financial statements. The Plan remains subject to the approvals by Sinopec Marketing's board of directors and shareholders, as well as the approvals by domestic and overseas regulatory authorities including, without limitation, SASAC and CSRC.

On August 20, 2018, the Administration Bureau of Industry & Commerce of Beijing registered the change of the corporate form of the Company from "an enterprise owned by the whole people" to a "wholly state-owned limited liability company". The same authority also registered a change of corporate name of the Company from "中國石油化工集團公司" to "中國石油化工集團有限公司". The registered capital of the Company was increased from RMB274.87 billion to RMB274.90 billion at the same time. On September 16, 2019, the registered capital of the Company is increased to RMB326.55 billion.

To promote the operation efficiency and better manage our future growth, we restructured our business operations into four sectors for management purpose at the end of 2018, namely, Oil & Gas and New Energy sector, Refining and Marketing sector, Chemicals and Materials sector and Capital and Finance sector. The segments for our financial reporting remain unchanged.

In July 2020, Sinopec Corp. and certain of its subsidiaries entered into transactions with China Oil & Gas Pipeline Network Corporation ("PipeChina") to transfer their equity interests in relevant companies, oil and gas pipeline assets and other facilities to PipeChina in exchange for approximately 14% of registered capital of and cash paid by PipeChina as consideration (the "Pipeline Transactions"). The ownership, obligations, responsibilities and risks of the relevant target assets were transferred to PipeChina from 24:00 on September 30, 2020. In accordance with the arrangements of the Pipeline Transactions, Sinopec Corp. and PipeChina have entered into agreements for the continuous use of relevant oil and gas pipeline facilities in the future on the terms and subject to conditions set forth therein.

The following chart briefly illustrates the shareholding and group structure of the Company and the Issuer.



SELECTED FINANCIAL INFORMATION

Our selected historical consolidated income statement and cash flow statement data presented below for the years ended December 31, 2017, 2018 and 2019 and our selected historical consolidated balance sheet data as of December 31, 2017, 2018 and 2019 have been derived from our audited consolidated financial statements included elsewhere in this offering memorandum. The audited financial statements include all adjustments, consisting only of normal recurring adjustments, which we consider necessary for a fair presentation of our financial position and results of operations for the periods presented.

Our selected historical consolidated income statement and cash flow statement data presented below for the nine months ended September 30, 2019 and 2020 and our selected historical consolidated balance sheet data as of September 30, 2020 have been derived from our unaudited interim consolidated financial statements included elsewhere in this offering memorandum. Our unaudited interim consolidated financial statements have been prepared on the same basis as our audited consolidated financial statements and include all normal recurring adjustments that we consider necessary for a fair presentation of our financial position and results of operations for the periods presented except as permitted for interim financial statements.

You should read the selected consolidated financial information in conjunction with our audited consolidated financial statements and related notes and the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this offering memorandum. Our consolidated financial statements are prepared and presented in accordance with PRC GAAP. PRC GAAP differs in certain material respects from U.S. GAAP. For a discussion of certain differences between PRC GAAP and U.S. GAAP, see "Description of Certain Differences between PRC GAAP and U.S. GAAP." Our historical results do not necessarily indicate our results expected for any future period.

Consolidated Income Statement Data of the Company

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	**2018**	**2019[1]**	**2019**	**2020**	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Operating Revenue	**2,400,281**	**2,936,841**	**3,003,417**	**2,265,309**	**1,581,131**	**232,875**
Operating costs	1,920,377	2,425,746	2,497,875	1,893,422	1,277,742	188,191
Taxes and surcharges	239,627	251,393	247,174	185,177	174,833	25,750
Selling and distribution expenses	57,833	61,166	63,553	45,547	45,117	6,645
General and administrative expenses	73,530	81,145	79,576	46,606	50,768	7,477
Research and development expenses	8,248	11,340	13,690	8,574	10,030	1,477
Exploration expenses	11,120	10,753	10,520	6,623	6,109	900
Financial expenses	4,183	33	2,659	3,251	3,298	486
Assets impairment losses	43,089	16,172	–	–	–	–
Credit impairment losses	–	329	–	–	–	–
Operating Expenses	**2,358,007**	**2,858,077**	**2,915,047**	**2,189,200**	**1,567,897**	**230,926**
Assets impairment losses	–	–	(2,338)	(48)	(11,427)	(1,683)
Credit impairment losses	–	–	(1,991)	(262)	(917)	(135)
Gains (losses) from changes in fair value	(9)	2,028	(2,737)	(696)	2,019	297
Investment income	13,094	13,282	13,635	6,455	42,350	6,237
Gains (losses) from assets disposal	(2,222)	(847)	(871)	(56)	1,253	185
Other income	5,372	8,179	7,111	3,302	5,138	757
Operating Profit	**58,509**	**101,406**	**101,179**	**84,804**	**51,650**	**7,607**
Non-operating income	3,546	8,050	5,498	2,579	2,253	332
Non-operating expenses	3,850	12,718	5,803	5,171	3,164	466
Profit Before Income Tax	**58,205**	**96,738**	**100,874**	**82,212**	**50,739**	**7,473**
Income tax	19,245	24,253	21,773	16,147	7,678	1,131
Net Profit	**38,960**	**72,485**	**79,101**	**66,065**	**43,061**	**6,342**
Net profit attributable to parent company	10,393	38,663	46,930	41,802	27,542	4,056

Note:

(1) In September 2019, according to the Circular on Revising and Issuing the Format of Consolidated Financial Statements (Version 2019) as the issued by Ministry of Finance of China in connection with Accounting Standards for Business Enterprises No. 21 – Leasing ("the New Lease Standard"), income statement items "Assets impairment losses" and "Credit impairment losses" are reclassified as decreases of operating profit and no longer as part of operating expenses. Sinopec Corp., Sinopec Oilfield Service and Sinopec Engineering have adopted the New Lease Standard from January 1, 2019 while Sinopec Group's other subsidiaries will not be adopting the New Lease Standard for the time being. The adoption of the New Lease Standard by Sinopec Oilfield Service and Sinopec Engineering did not have a significant impact on Sinopec Group's accounting policies. Sinopec Group did not restate the comparative amounts as at December 31, 2018. For presenting certain consolidated income statement data of the Company, we have reclassified certain income statement items for sole purpose of providing easier comparison between the financial data of the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2019 and 2020. For detailed information on such financial data, please refer to our audited consolidated financial statements included elsewhere in this offering memorandum.

Consolidated Balance Sheet Data of the Company

	As of December 31,		As of January 1,	As of December 31,	As of September 30,	
	2017	2018	2019(1)	2019	2020	
					(unaudited)	
	RMB	RMB	RMB	RMB	RMB	US$
	(in millions)					
Total current assets	795,418	801,638	800,870	693,443	888,682	130,889
Total non-current assets	1,461,280	1,458,456	1,482,196	1,518,276	1,490,249	219,490
Total assets	2,256,698	2,260,094	2,283,066	2,211,719	2,378,931	350,379
Total current liabilities	842,428	783,801	795,553	729,738	859,929	126,654
Total non-current liabilities	335,704	387,689	398,909	363,215	379,952	55,961
Total liabilities	1,178,132	1,171,490	1,194,462	1,092,953	1,239,881	182,615
Total owners' equity attributable to parent company	740,482	722,145	722,145	750,501	770,828	113,531
Minority interest	338,084	366,459	366,459	368,265	368,222	54,233
Total owners' equity	1,078,566	1,088,604	1,088,604	1,118,766	1,139,050	167,764
Total liabilities and owners' equity	2,256,698	2,260,094	2,283,066	2,211,719	2,378,931	350,379

Note:

(1) In September 2019, according to the Circular on Revising and Issuing the Format of Consolidated Financial Statements (Version 2019) as the issued by Ministry of Finance of China in connection with Accounting Standards for Business Enterprises No. 21 – Leasing ("the New Lease Standard"), assets shall be recognized where the use right belongs as of the starting date of the lease term while the lease liabilities shall be recognized at the present value of the unpaid lease payment. Our subsidiaries including Sinopec Corp., Sinopec Oilfield Service and Sinopec Engineering have implemented the New Lease Standards as of January 1, 2019, while our other subsidiaries do not be implemented the same for the time being. The adoption of the New Lease Standards by Sinopec Corp., Sinopec Oilfield Service and Sinopec Engineering did not have significant impact on our accounting policies. For detailed information on such financial data, please refer to our audited consolidated financial statements included elsewhere in this offering memorandum.

Consolidated Cash Flows Data of the Company

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	2018	2019	2019	2020	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
	(in millions)					
Net cash flows generated from operating activities	205,087	206,751	136,232	123,426	66,810	9,840
Net cash flows generated from (used in) investing activities	(148,303)	(58,332)	(72,339)	(78,608)	(102,872)	(15,151)
Net cash flows generated from (used in) financing activities	(23,120)	(119,747)	(112,683)	(43,567)	147,114	21,668
Effect of foreign exchange rate changes	(2,394)	2,278	28	2,576	(5,280)	(778)
Net increase in cash and cash equivalents	31,270	30,950	(48,762)	3,827	105,772	15,579
Cash and cash equivalents at the beginning of the year/period	164,825	169,228	200,178	200,178	151,416	22,301
Cash and cash equivalents at the end of the year/period	196,095	200,178	151,416	204,005	257,188	37,880

Other Financial Data of the Company

	As of and for the Year Ended December 31,			As of and for the Nine Months Ended September 30,
	2017	2018	2019	2020
				(unaudited)
EBITDA[(1)] (RMB in millions)	225,767	233,702	218,401	108,818
EBITDA margin[(2)]	9.41%	8.00%	7.3%	6.9%
Total debt[(3)] (RMB in millions)	483,245	427,924	380,322	486,530
Net debt[(4)] (RMB in millions)	287,304	227,773	228,913	229,375
Total debt/EBITDA[(5)]	2.14	1.83	1.74	3.35
Net debt/EBITDA[(5)]	1.27	0.97	1.05	1.58
EBITDA/Interest[(6)]	23.98	26.94	22.05	12.28
Total debt/Total capitalization[(7)]	30.94%	28.22%	25.37%	29.93%
Cash/Short-term borrowings	86.31%	145.84%	120.27%	114.75%

Notes:

(1) EBITDA for any period is calculated as operating profit adjusted for investment income and gains (losses) from changes in fair value, plus assets impairment losses, interest expenses and depreciation, depletion and amortization. EBITDA is a widely used financial indicator of a company's ability to service and incur debt. EBITDA should not be considered in isolation or construed as an alternative to cash flows, net profit or any other measure of performance or as an indicator of the Company's operating performance, liquidity, profitability or cash flows generated by operating, investing or financing activities. In evaluating EBITDA, the Company believes that investors should consider, among other things, the components of EBITDA such as sales and operating expenses and the amount by which EBITDA exceeds capital expenditures and other charges. The Company has included EBITDA because it believes that it is a useful supplement to the cash flow data as a measure of the Company's performance and its ability to generate cash flow from operations to cover debt service and taxes. EBITDA presented herein may not be comparable to similarly titled measures presented by other companies. Investors should not compare the Company's EBITDA to EBITDA presented by other companies because not all companies use the same definitions.

(2) EBITDA margin is calculated as EBITDA divided by operating revenue.

(3) Total debt consists of all short-term borrowings, long-term borrowings, borrowings from other financial institutions, long-term debt due within one year and bonds payable. It does not include amounts due to our subsidiaries.

(4) Net debt is calculated as total debt minus cash.

(5) When calculating total debt/EBITDA and net debt/EBITDA for the nine months ended September 30, 2020, the denominator is adjusted to 4/3 times of EBITDA for the nine months ended September 30, 2020.

(6) Interest is calculated as interest expenses plus capitalized interests.

(7) Total capitalization equals total debt plus total owners' equity.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the financial statements and the related notes contained therein. The consolidated financial statements of the Company have been prepared in accordance with PRC GAAP. PRC GAAP differs in certain material respects from U.S. GAAP. For a summary of certain differences between PRC GAAP and U.S. GAAP, see "Description of Certain Differences Between PRC GAAP and U.S. GAAP." The discussion in this section contains forward-looking statements that involve risks and uncertainties. The Company's actual results and timing of selected events could differ from those anticipated in these forward-looking statements as a result of various factors including those set forth under "Risk Factors" and elsewhere in this offering memorandum.

Overview

We are the largest integrated petroleum and petrochemical company in China and one of the largest in the world in terms of revenue, according to the "2020 Fortune Global 500." We are the largest refined oil producer in the world in terms of crude oil throughput in 2019. We are the second largest oil and gas producer in China in terms of production volume in 2019. We are also the largest distributor of refined oil products in China measured by sales volume in 2019, and the number of our service stations ranked first in China as of September 30, 2020. We ranked first in China in terms of production volume of major petrochemical products in 2019. We have been named in the "Fortune Global 500" since 2003 and ranked second in the "2020 Fortune Global 500" in terms of revenue. We principally engage in the exploration, development and production of crude oil and natural gas, the operation of refineries and petrochemical facilities and the marketing of crude oil, natural gas, refined oil products and chemical products. We have reported our consolidated financial results according to the following six principal business segments.

Exploration and Production Segment, which consists of exploring for, developing, producing and selling crude oil and natural gas;

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

Chemicals Segment, which consists of purchasing chemical feedstock principally from the refining segment and producing, marketing, selling and distributing chemical products;

Marketing and Distribution Segment, which consists of purchasing refined oil products from our refining segment and third parties, and marketing, selling and distributing refined oil products by wholesale to large customers and independent distributors and by retail through our retail network;

Oil & Petrochemical Engineering Technical Services Segment, which consists of providing a range of oilfield services including geophysical exploration, drilling, well logging, mud logging and downhole operations under various geologic and engineering conditions as well as designing and constructing large-scale refining and petrochemical projects; and

Others Segment, which consists principally of international trade, research and development as well as other businesses, which are collectively referred to as our "Others" segment.

Factors Affecting Results of Operations

Our results of operations are primarily affected by the following factors:

Macroeconomic Environment

Changes in the macroeconomic environment have affected and will continue to affect our business and operations. The recent global recession, the COVID-19 outbreak and other adverse public health developments and the more moderate economic growth in China may lower oil and gas demand and adversely affect us. As the oil and gas industry is sensitive to macroeconomic trends and oil and gas prices tend to fall in recessionary periods, we may experience pricing pressure on our refined oil products, which may adversely affect profitability. The financial and economic situation may also have a negative impact on third parties with whom we do, or may do, business. Any of these factors may affect our financial condition and results of operations.

Commodity and Product Prices

Crude oil and natural gas prices

Our results of operations are substantially affected by crude oil and natural gas prices. We produce and purchase crude oil and natural gas for our internal use in refining and chemical productions as well as for sale to external customers. Changes in the prices of crude oil and natural gas in China may have a significant effect on, among other things, (i) the revenue from our exploration and production segment and our oil and gas trading business and (ii) the costs of our refining segment, chemical segment and our oil and gas trading business, and we may not succeed in offsetting such effect by adjusting the price of our refined oil products, which may in turn have an effect on our operating margin. Crude oil and natural gas prices are subject to fluctuations due to market uncertainty, crude oil price fluctuations and various other factors that are beyond our control, including, but not limited to, government controls, overall economic conditions, supply and demand dynamics for crude oil and natural gas, political developments, the ability of petroleum producing nations to set and maintain production levels and prices, the price and availability of other energy sources, as well as weather conditions.

In addition, our typical contracts with natural gas buyers include provisions for price adjustments which may result in selling price fluctuations. In addition to directly affecting our revenues and profits, declines in crude oil and/or natural gas prices may also result in the write-off of higher cost reserves and other assets.

Prices of refined oil products and chemical products

Our refining segment and marketing and distribution segment engage in the sales to third parties of refined oil products (mainly gasoline, diesel and kerosene (including jet fuel)). Our chemicals segment engages in the sales of chemical products. Our results of operations are significantly affected by the prices of refined oil products and chemical products.

Beginning from December 2008, the PRC government has set upper limits for the retail prices of various refined oil products. We determine the prices of other refined oil products with reference to the published median guidance prices of gasoline and diesel. The government regulation of refined oil product prices has a material impact on our results of operations.

Production, Sales Volumes and Product Mix

Our results of operations are also affected by production and sales volumes as well as our product mix. Our crude oil and natural gas production volumes depend primarily on the level of our reserve base, the development plan regarding the reserve base, as well as other factors. The production volumes of our refining and chemicals segments depend primarily on the capacities and utilization of our refining and chemical facilities, as well as market conditions. We produce and sell different mixes of crude oil and natural gas, each having different market prices, as well as a variety of refined oil and chemical products. Therefore, in any given period, our product mix is subject to change, which will also affect our results of operations.

Regulatory Environment

Our operating activities are subject to extensive regulations and control by the PRC government, including the issuance of exploration and production licenses, the imposition of industry-specific taxes and levies and the implementation of environmental policies and safety standards. Our results of operations will be affected by any future changes of such regulatory environment.

We are subject to various taxes, fees and royalties. Changes in tax rules and regulations applicable to us may affect our results of operations. For example, since March 26, 2006, we have been subject to a crude oil special levy on the sale of domestic oil imposed by the PRC government. Prior to November 1, 2011, the special levy of 20%-40% became applicable if the sales price of domestic oil reached US$40 per barrel. Effective from November 1, 2011, the sales price triggering the special levy was increased to US$55 per barrel. Effective from January 1, 2015, the sales price triggering the special levy was increased to US$65 per barrel. In addition, a resource tax regulation became effective on June 1, 2010, and has been applicable across China generally since November 1, 2011. Under this regulation, the resource tax payable by taxpayers in connection with their extraction of crude oil and natural gas will be collected based on value instead of volume. Effective from December 1, 2014, the rate of mineral resource compensation charges on crude oil and natural gas is reduced to zero, and the applicable resource tax rate is correspondingly increased from 5% to 6%. The amount of crude oil special levy and resource tax we pay have significantly affected our results of operations. See "Summary of Relevant PRC Laws and Regulations – Regulation of Crude Oil and Refined Oil Products Market – Taxation, Fees and Royalties" for a more detailed description of current PRC taxation, fees and royalties payable by us. Driven by environmental and efficiency concerns, the PRC government has been increasingly encouraging industrial and residential use of natural gas to meet primary energy and environmental protection needs.

In addition, the China National Energy Administration released the first Shale Gas Industry Policy on October 22, 2013 to call for more financial support from the government for shale gas development and exploration. In particular, subsidies should be given directly to a shale gas production company according to the amount of its shale gas development and utilization, provided that certain conditions are met. Local governments are also encouraged to provide subsidies, with the amount to be determined by local financial authorities. The policy also calls for waive or reduction of compensatory fee for mineral resources and royalty fee, as well as new incentive policies for value-added tax, resources tax, enterprise income tax, and customs duties for imports of production equipment. In April 2015, to facilitate the development of the shale gas industry, the Ministry of Finance of China and the China National Energy Administration issued the Notice on Fiscal Subsidies for Shale Gas Development and Utilization (No. 112 [2015] of the Ministry of Finance) to further implement the policy of fiscally subsidizing the shale gas industry during the period of the thirteenth "five-year" plan. The subsidy will be RMB0.3 per cubic meter of shale gas produced and RMB0.2 per cubic meter of shale gas produced from 2016 to 2018 and from 2019 to 2020, respectively.

Competition

Among our competitors, some are major integrated petroleum and petrochemical companies within and outside the PRC, which have recently become more significant participants in the petroleum and petrochemical industry in China. Since 2007, the PRC government gradually opened the wholesale market of crude oil and refined oil products to new market entrants including local refineries. As a result, we face more competition in both crude oil and refined oil product markets. We also expect to face competition in both domestic and international petrochemical product markets as a result of our domestic and international competitors' increasing production capacity. Increased competition may have an adverse effect on our financial condition and results of operations.

Critical Accounting Policies, Judgments and Estimates

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

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

Oil and Gas Properties and Reserves

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

The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense as they are incurred. These costs primarily include dry hole costs, seismic costs and other exploratory costs. Under the full cost method, these costs are capitalized and written-off (depreciated) over time.

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

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

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

Impairment for Long-lived Assets

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

Impairment losses recognized for the periods presented in our statement of income on long-lived assets are summarized as follows:

	Year Ended December 31,		
	2017	**2018**	**2019**
	(RMB in millions)		
Long-term equity investment impairment loss	936	8	–
Fixed assets impairment loss	14,565	4,131	694
Oil and gas assets impairment loss	8,875	4,027	11
Intangible assets impairment loss	19	–	0
Construction supplies impairment loss	–	–	–
Construction in progress impairment loss	252	27	120
Total impairment loss on long-lived assets	24,647	8,193	825

Depreciation

Property, plant and equipment (other than oil and gas properties) are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. We review the estimated useful lives of the assets regularly in order to determine the amount of depreciation expense to be recorded during any reporting period. The useful lives are based on our historical experience with similar assets and take into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates. There have been no significant changes to the estimated useful lives and residual values during each of the three years ended December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2020.

Impairment of Accounts Receivable for Bad and Doubtful Debts

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

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	**2018**	**2019**	**2019**	**2020**
				(unaudited)	
	(RMB in millions)				
Impairment losses for bad and doubtful accounts	1,552	79	1,354	(155)	760

Allowance for Diminution in Value of Inventories

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

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

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	
			(RMB in millions)		
Allowance for diminution in value of inventories	16,654	7,979	1,482	17	11,329

Results of Operations of the Company

The following table sets forth, for the periods indicated, our consolidated results of operations.

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	2018	2019[1]	2019	2020	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Operating Revenue	**2,400,281**	**2,936,841**	**3,003,417**	**2,265,309**	**1,581,131**	**232,875**
Operating costs	1,920,377	2,425,746	2,497,875	1,893,422	1,277,742	188,191
Taxes and surcharges	239,627	251,393	247,174	185,177	174,833	25,750
Selling and distribution expenses	57,833	61,166	63,553	45,547	45,117	6,645
General and administrative expenses	73,530	81,145	79,576	46,606	50,768	7,477
Research and development expenses	8,248	11,340	13,690	8,574	10,030	1,477
Exploration expenses	11,120	10,753	10,520	6,623	6,109	900
Financial expenses	4,183	33	2,659	3,251	3,298	486
Assets impairment losses	43,089	16,172	–	–	–	–
Credit impairment losses	–	329	–	–	–	–
Operating Expenses	**2,358,007**	**2,858,077**	**2,915,047**	**2,189,200**	**1,567,897**	**230,926**
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Credit impairment losses	–	–	(1,991)	(262)	(917)	(135)
Gains (losses) from changes in fair value	(9)	2,028	(2,737)	(696)	2,019	297
Investment income	13,094	13,282	13,635	6,455	42,350	6,237
Gains (losses) from assets disposal	(2,222)	(847)	(871)	(56)	1,253	185
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Non-operating expenses	3,850	12,718	5,803	5,171	3,164	466
Profit Before Income Tax	**58,205**	**96,738**	**100,874**	**82,212**	**50,739**	**7,473**
Income tax	19,245	24,253	21,773	16,147	7,678	1,131
Net Profit	**38,960**	**72,485**	**79,101**	**66,065**	**43,061**	**6,342**
Net profit attributable to parent company	10,393	38,663	46,930	41,802	27,542	4,056

Note:

(1) In September 2019, according to the Circular on Revising and Issuing the Format of Consolidated Financial Statements (Version 2019) as the issued by Ministry of Finance of China in connection with Accounting Standards for Business Enterprises No. 21 – Leasing ("the New Lease Standard"), income statement items "Assets impairment losses" and "Credit impairment losses" are reclassified as decreases of operating profit and no longer as part of operating expenses. Sinopec Corp., Sinopec Oilfield Service and Sinopec Engineering have adopted the New Lease Standard from January 1, 2019 while Sinopec Group's other subsidiaries will not be adopting the New Lease Standard for the time being. The adoption of the New Lease Standard by Sinopec Oilfield Service and Sinopec Engineering did not have a significant impact on Sinopec Group's accounting policies. Sinopec Group did not restate the comparative amounts as at December 31, 2018. For presenting certain consolidated income statement data of the Company, we have reclassified certain income statement items for sole purpose of providing easier comparison between the financial data of the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2019 and 2020. For detailed information on such financial data, please refer to our audited consolidated financial statements included elsewhere in this offering memorandum.

Nine Months Ended September 30, 2019 Compared to Nine Months Ended September 30, 2020

Operating revenue

Operating revenue decreased by 30.2% from RMB2,265,309 million for the nine months ended September 30, 2019 to RMB1,581,131 million for the nine months ended September 30, 2020. All of our business segments experienced a decrease in operating revenue in the nine months ended September 30, 2020. This decrease was mainly attributable to the decrease of total business volume and realized price resulting from the impact of COVID-19 and slump of international crude oil price.

The decrease in sales revenue realized by our exploration and production segment was mainly due to the decrease of the realized price and sales volume of the natural gas and decrease of the realized price of crude oil.

The decrease in sales revenue realized by our marketing and distribution segment, which sells refined oil products externally, was mainly due to the decrease in the price and sales volume of refined oil products.

The decrease in sales revenue of our chemicals segment was mainly due to decreased price of chemical products and sales volume of basic organic chemicals and synthetic fibre monomer and polymer.

The decrease in sales revenue of our engineering segment was mainly due to decrease in oil engineering technical services and refining and chemical engineering technical services activities resulting from the impact of COVID-19.

The decrease in the sales revenue of our others segment was mainly attributable to decrease of international crude oil price and refined oil product trading volume.

Operating costs

Operating costs decreased by 32.5% from RMB1,893,422 million for the nine months ended September 30, 2019 to RMB1,277,742 million for the nine months ended September 30, 2020. This decrease was primarily due to the decrease of throughput, trading volume and feedstock price.

Taxes and surcharges

Taxes and surcharges decreased by 5.6% from RMB185,177 million for the nine months ended September 30, 2019 to RMB174,833 million for the nine months ended September 30, 2020.

Selling and distribution expenses

Selling and distribution expenses decreased by 0.9% from RMB45,547 million for the nine months ended September 30, 2019 to RMB45,117 million for the nine months ended September 30, 2020.

General and administrative expenses

General and administrative expenses increased by 8.9% from RMB46,606 million for the nine months ended September 30, 2019 to RMB50,768 million for the nine months ended September 30, 2020, primarily due to the increase in the personnel expenses.

Research and development expenses

Research and development expenses increased by 17.0% from RMB8,574 million for the nine months ended September 30, 2019 to RMB10,030 million for the nine months ended September 30, 2020, primarily due to the increased input in research and development activities.

Exploration expenses

Exploration expenses decreased by 7.8% from RMB6,623 million for the nine months ended September 30, 2019 to RMB6,109 million for the nine months ended September 30, 2020, primarily due to the decreased input in exploration activities as a result of low crude oil price.

Financial expenses

Financial expenses increased by 1.4% from RMB3,251 million for the nine months ended September 30, 2019 to RMB3,298 million for the nine months ended September 30, 2020, primarily due to the increase in the interest expense, which was partially offset by net gains in foreign exchange.

Assets impairment losses

We incurred loss from assets impairment of RMB11,427 million for the nine months ended September 30, 2020, as compared to RMB48 million for the nine months ended September 30, 2019 to, primarily due to the increase in the loss in inventory as a result of the low crude oil price.

Other income

Other income increased by 55.6% from RMB3,302 million for the nine months ended September 30, 2019 to RMB5,138 million for the nine months ended September 30, 2020, primarily due to the increase in refund of value-added tax for international trading.

Investment income

Investment income increased by 556.1% from RMB6,455 million for the nine months ended September 30, 2019 to RMB42,350 million for the nine months ended September 30, 2020, primarily due to the disposal of certain pipeline network assets of crude oil, natural gas and refined oil products and external investments in the Pipeline Transactions.

Gain (loss) from changes in fair value

Our gain from changes in fair value was RMB2,019 million for the nine months ended September 30, 2020, as compared to a loss from changes in fair value of RMB696 million for the nine months ended September 30, 2019, primarily due to increase in the gains from the variation of fair values of derivative financial instruments.

Gain (loss) from assets disposal

Our gain from assets disposal was RMB1,253 million for the nine months ended September 30, 2020, as compared to a loss from assets disposal of RMB56 million for the nine months ended September 30, 2019, primarily due to the adoption and execution of a more proactive assets disposal policy of the Company.

Operating profit

As a result of the foregoing, operating profit decreased by 39.1% from RMB84,804 million for the nine months ended September 30, 2019 to RMB51,650 million for the nine months ended September 30, 2020.

Non-operating income

Non-operating income decreased by 12.6% from RMB2,579 million for the nine months ended September 30, 2019 to RMB2,253 million for the nine months ended September 30, 2020, primarily due to the decrease in the government grants and subsidies not relating to our daily business activities.

Non-operating expenses

Non-operating expenses decreased by 38.8% from RMB5,171 million for the nine months ended September 30, 2019 to RMB3,164 million for the nine months ended September 30, 2020, primarily due to decrease in expense relating to asset retirement and maintenance.

Income tax

Income tax decreased by 52.4% from RMB16,147 million for the nine months ended September 30, 2019 to RMB7,678 million for the nine months ended September 30, 2020, primarily due to the decrease in the Company's profits.

Net profit

As a result of the foregoing, net profit decreased by 34.8% from RMB66,065 million for the nine months ended September 30, 2019 to RMB43,061 million for the nine months ended September 30, 2020.

Year Ended December 31, 2019 Compared to Year Ended December 31, 2018

Operating revenue

Operating revenue increased by 2.3% from RMB2,936,841 million for the year ended December 31, 2018 to RMB3,003,417 million for the year ended December 31, 2019. This increase was mainly attributable to the increase in revenue of oil engineering technical services and refining and chemical engineering technical services, and the increase in sales revenue realized by our exploration and production segment, which was in turn mainly due to the rise of realized price of, and sales volume in natural gas.

The increase in sales revenue realized by our exploration and production segment was mainly due to the rise of realized price of, and sales volume in, natural gas as a result of the expansion of our natural gas business. Our average realized prices of natural gas increased from RMB1,400 per thousand cubic meters in 2018 to RMB1,566 per thousand cubic meters in 2019. Our sales volume of natural gas increased by 11.9% from 24,197 million cubic meters in 2018 to 27,073 million cubic meters in 2019.

The slight decrease in sales revenue realized by our marketing and distribution segment, which sells refined oil products externally, was mainly due to the decrease in prices of various refined oil products. Our average realized prices of gasoline, diesel and kerosene (including jet fuel) decreased from RMB7,870 per tonne, RMB5,996 per tonne and RMB4,562 per tonne in 2018 to RMB7,387 per tonne, RMB5,812 per tonne and RMB4,297 per tonne in 2019, respectively. Our aggregate sales volumes of gasoline, diesel and kerosene (including jet fuel) increased from 88,057 thousand tonnes, 84,630 thousand tonnes and 25,787 thousand tonnes in 2018 to 92,233 thousand tonnes, 87,083 thousand tonnes and 27,041 thousand tonnes in 2019.

The decrease in sales revenue of our chemicals segment was mainly due to sharp decrease in prices of chemical products as a result of the concentrated release of new capacity, as well as the change of supply-demand structure.

The increase in sales revenue of our engineering segment was mainly due to the increase of revenue of oil engineering technical services and refining and chemical engineering technical services.

The increase in the sales revenue of our others segment was mainly attributable to the increase in trade amount of both crude oil and overseas refined oil, and the high increase of our business on EPEC platform.

Operating costs

Operating costs increased by 3.0% from RMB2,425,746 million for the year ended December 31, 2018 to RMB2,497,875 million for the year ended December 31, 2019. This increase was primarily due to the increase in the trade volume of our petroleum and petrochemical products.

Taxes and surcharges

Taxes and surcharges decreased by 1.7% from RMB251,393 million for the year ended December 31, 2018 to RMB247,174 million for the year ended December 31, 2019.

Selling and distribution expenses

Selling and distribution expenses increased by 3.9% from RMB61,166 million for the year ended December 31, 2018 to RMB63,553 million for the year ended December 31, 2019, primarily as a result of the increases in sales volume which in turn generate a rise in freight and miscellaneous fee.

General and administrative expenses

General and administrative expenses decreased by 1.9% from RMB81,145 million for the year ended December 31, 2018 to RMB79,576 million for the year ended December 31, 2019, primarily as a result of adjusted accounting of some of the service station, land and other rental expenses to depreciation as required by the New Lease Standard.

Research and development expenses

Research and development expenses increased by 20.7% from RMB11,340 million for the year ended December 31, 2018 to RMB13,690 million for the year ended December 31, 2019, primarily due to the increase in the research and development related fixed assets depreciation and personnel expenses.

Exploration expenses

Exploration expenses decreased by 2.2% from RMB10,753 million for the year ended December 31, 2018 to RMB10,520 million for the year ended December 31, 2019.

Financial expenses

Financial expenses increased from RMB33 million for the year ended December 31, 2018 to RMB2,659 million for the year ended December 31, 2019, primarily due to the increase in the net amount of interest payment.

Assets impairment losses

Assets impairment losses decreased by 85.5% from RMB16,172 million for the year ended December 31, 2018 to RMB2,338 million for the year ended December 31, 2019, due to the decrease of allowance for diminution in value of inventories, oil and gas assets and fixed assets impairment loss.

Gain (loss) from changes in fair value

Our loss from changes in fair value was RMB2,737 million for the year ended December 31, 2019, as compared to gain from changes in fair value of RMB2,028 million for the year ended December 31, 2018, primarily as a result of changes in fair value of financial assets held for trading, especially the increase in trading financial assets and the decrease in derivative financial instruments.

Investment income

Investment income increased by 2.7% from RMB13,282 million for the year ended December 31, 2018 to RMB13,635 million for the year ended December 31, 2019.

Operating profit

As a result of the foregoing, operating profit stayed stable with a slight decrease by 0.2% from RMB101,406 million for the year ended December 31, 2018 to RMB101,179 million for the year ended December 31, 2019.

Non-operating income

Non-operating income decreased by 31.7% from RMB8,050 million for the year ended December 31, 2018 to RMB5,498 million for the year ended December 31, 2019, due to the decrease in government grants and subsidies not relating to our daily business activities.

Non-operating expenses

Non-operating expenses decreased by 54.4% from RMB12,718 million for the year ended December 31, 2018 to RMB5,803 million for the year ended December 31, 2019, primarily as a result of the completion of our transfer and separation of water/electricity/gas supply and property management functions in our employee living areas in 2018.

Income tax

Income tax decreased by 10.2% from RMB24,253 million for the year ended December 31, 2018 to RMB21,773 million for the year ended December 31, 2019, primarily due to the adjustment in deferred income tax.

Net profit

As a result of the foregoing, net profit increased by 9.1% from RMB72,485 million for the year ended December 31, 2018 to RMB79,101 million for the year ended December 31, 2019.

Net profit attributable to minority interests

Net profit attributable to minority interest decreased by 4.9% from RMB33,822 million for the year ended December 31, 2018 to RMB32,171 million for the year ended December 31, 2019.

Share of Profits/Loss from associates

Net loss attributable to SIPC was RMB nil for the year ended December 31, 2019; net profit attributable to SIBUR was RMB65.1 million for the year ended December 31, 2019; net profit attributable to Sinopec Sichuan-to-East China Natural Gas Pipeline Co., Ltd was RMB109.6 million for the year ended December 31, 2019; and net profit attributable to Caspian Investments Resources Ltd. was RMB21.2 million for the year ended December 31, 2019.

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

Operating revenue

Operating revenue increased by 22.4% from RMB2,400,281 million for the year ended December 31, 2017 to RMB2,936,841 million for the year ended December 31, 2018. All of our business segments experienced an increase in operating revenue in 2018. This increase was mainly attributable to the prices increase of major products.

The increase in sales revenue realized by our exploration and production segment was mainly due to the rise of realized price of both crude oil and the natural gas and the increased sales volume of natural gas. Our average realized prices of crude oil and natural gas increased from RMB2,390 per tonne and RMB1,290 per thousand cubic meters in 2017 to RMB3,100 per tonne and RMB1,400 per thousand cubic meters in 2018. Our sales volume of natural gas increased by 7.4% from 22,529 million cubic meters in 2017 to 24,197 million cubic meters in 2018, and the sales volume of crude oil increased by 0.4% from 6,567 thousand tonnes in 2017 to 6,595 thousand tonnes in 2018.

The increase in sales revenue realized by our marketing and distribution segment, which sells refined oil products externally, was mainly due to the increase in prices of various refined oil products. Our average realized prices of gasoline, diesel and kerosene (including jet fuel) increased from RMB6,941 per tonne, RMB5,038 per tonne and RMB3,531 per tonne in 2017 to RMB7,870 per tonne, RMB5,996 per tonne and RMB4,562 per tonne in 2018, respectively. Our aggregate sales volumes of gasoline and kerosene (including jet fuel) increased from 83,933 thousand tonnes and 25,557 thousand tonnes in 2017, respectively, to 88,057 thousand tonnes and 25,787 thousand tonnes in 2018, while the sales volume of diesel decreased from 88,848 thousand tonnes in 2017 to 84,630 thousand tonnes in 2018.

The increase in sales revenue of our chemicals segment was mainly due to the increase in price and sales volume of chemical products, which resulting from the Company seized good market opportunities and strengthened the coordination between production and marketing to positively expand market share and trading scale.

The increase in sales revenue of our engineering segment was mainly due to the increase of revenue of oil engineering technical services and refining and chemical engineering technical services.

The increase in the sales revenue of our others segment was mainly attributable to the increase in trade amount of both crude oil and overseas refined oil, and the high increase of our business on EPEC platform.

Operating costs

Operating costs increased by 26.3% from RMB1,920,377 million for the year ended December 31, 2017 to RMB2,425,746 million for the year ended December 31, 2018. This increase was primarily due to the increase in the trade volume of our petroleum and petrochemical products.

Taxes and surcharges

Taxes and surcharges increased by 4.9% from RMB239,627 million for the year ended December 31, 2017 to RMB251,393 million for the year ended December 31, 2018.

Selling and distribution expenses

Selling and distribution expenses increased by 5.8% from RMB57,833 million for the year ended December 31, 2017 to RMB61,166 million for the year ended December 31, 2018, primarily as a result of the increases in sales volume which in turn generate a rise in freight and miscellaneous fee.

General and administrative expenses

General and administrative expenses increased by 10.4% from RMB73,530 million for the year ended December 31, 2017 to RMB81,145 million for the year ended December 31, 2018, primarily as a result of increase in employ benefits and repairs expense.

Research and development expenses

Research and development expenses increased by 37.5% from RMB8,248 million for the year ended December 31, 2017 to RMB11,340 million for the year ended December 31, 2018, primarily due to the increased input in research and development activities.

Exploration expenses

Exploration expenses decreased by 3.4% from RMB11,120 million for the year ended December 31, 2017 to RMB10,753 million for the year ended December 31, 2018.

Financial expenses

Financial expenses decreased by 99.2% from RMB4,183 million for the year ended December 31, 2017 to RMB33 million for the year ended December 31, 2018, primarily due to increases in interests income.

Assets impairment losses

Assets impairment losses decreased by 62.5% from RMB43,089 million for the year ended December 31, 2017 to RMB16,172 million for the year ended December 31, 2018 due to the decrease of allowance for diminution in value of inventories and fixed assets impairment loss.

Gain from changes in fair value

Our gain from changes in fair value was RMB2,028 million for the year ended December 31, 2018, as compared to a loss from changes in fair value of RMB9 million for the year ended December 31, 2017, primarily as a result of changes in fair value of financial assets held for trading.

Investment income

Investment income increased by 1.4% from RMB13,094 million for the year ended December 31, 2017 to RMB13,282 million for the year ended December 31, 2018.

Operating profit

As a result of the foregoing, operating profit increased by 73.3% from RMB58,509 million for the year ended December 31, 2017 to RMB101,406 million for the year ended December 31, 2018.

Non-operating income

Non-operating income increased by 127.0% from RMB3,546 million for the year ended December 31, 2017 to RMB8,050 million for the year ended December 31, 2018 due to the increase in government grants and subsidies not relating to our daily business activities.

Non-operating expenses

Non-operating expenses increased by 230.3% from RMB3,850 million for the year ended December 31, 2017 to RMB12,718 million for the year ended December 31, 2018, primarily as a result of our transfer and separation of water/electricity/gas supply and property management functions in our employee living areas.

Income tax

Income tax increased by 26.0% from RMB19,245 million for the year ended December 31, 2017 to RMB24,253 million for the year ended December 31, 2018, primarily due to the increase in our profits.

Net profit

As a result of the foregoing, net profit increased by 86.0% from RMB38,960 million for the year ended December 31, 2017 to RMB72,485 million for the year ended December 31, 2018.

Net profit attributable to minority interests

Net profit attributable to minority interest increased by 18.4% from RMB28,567 million for the year ended December 31, 2017 to RMB33,822 million for the year ended December 31, 2018.

Share of Profits/Loss from associates

Net loss attributable to SIPC was RMBnil for the year ended December 31, 2018; net profit attributable to SIBUR was RMB1,040 million for the year ended December 31, 2018; net profit attributable to Sinopec Sichuan-to-East China Natural Gas Pipeline Co., Ltd was RMB1,011 million for the year ended December 31, 2018; and net profit attributable to Caspian Investments Resources Ltd. was RMB291 million for the year ended December 31, 2018.

Segment Information

The following table sets forth our operating revenue, operating expenses and operating profits by business segment for the periods presented.

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	2018	2019	2019	2020	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Total Operating Revenue:						
Exploration and Production	157,490	200,191	210,712	152,408	120,354	17,726
Refining	1,011,848	1,263,408	1,224,156	911,125	687,285	101,226
Chemicals	474,466	587,868	536,686	410,033	291,841	42,984
Marketing and Distribution	1,224,197	1,446,637	1,430,963	1,058,333	818,400	120,537
Oil & Petrochemical Engineering Technical Services	89,320	110,674	128,993	89,512	87,529	12,892
Others	1,079,561	1,474,449	1,597,918	1,188,774	749,739	110,425
Elimination of inter-segment	(1,636,601)	(2,146,386)	(2,126,011)	(1,544,876)	(1,174,017)	(172,915)
Total	**2,400,281**	**2,936,841**	**3,003,417**	**2,265,309**	**1,581,131**	**232,875**

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	2018	2019	2019	2020	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Total Operating Expenses:						
Exploration and Production	209,240	215,737	201,059	145,113	130,080	19,159
Refining	948,179	1,208,420	1,188,790	889,680	703,169	103,566
Chemicals	453,474	563,297	506,811	394,608	286,546	42,204
Marketing and Distribution	1,191,026	1,421,371	1,370,185	1,035,194	803,766	118,382
Oil & Petrochemical Engineering Technical Services	98,925	108,397	126,055	87,353	85,799	12,637
Others	1,091,873	1,484,656	1,592,076	1,185,402	741,436	109,202
Elimination of inter-segment	(1,634,710)	(2,143,801)	(2,070,014)	(1,548,150)	(1,182,899)	(174,224)
Total	**2,358,007**	**2,858,077**	**2,914,962**	**2,189,200**	**1,567,897**	**230,926**
Total Operating Profit/(Loss):						
Exploration and Production	(48,629)	(8,954)	5,581	7,295	(9,726)	(1,432)
Refining	65,462	56,320	30,015	21,445	(15,884)	(2,339)
Chemicals	34,543	32,472	21,281	15,576	5,605	826
Marketing and Distribution	36,071	28,202	30,259	23,139	14,634	2,155
Oil & Petrochemical Engineering Technical Services	(8,871)	3,607	4,049	3,167	2,619	386
Others	(15,620)	600	41,250	46,589	64,955	9,567
Elimination of inter-segment	(4,447)	(10,841)	(31,256)	(32,407)	(10,553)	(1,556)
Total	**58,509**	**101,406**	**101,179**	**84,804**	**51,650**	**7,607**

Liquidity and Capital Resources of the Company

Our primary sources of funding have been cash provided by our operating activities as well as short-term and long-term bank loans, including syndicated loans and the issuance of corporate bonds.

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

Cash Flows

The following table sets forth a summary of our consolidated cash flows for the periods presented.

	Year Ended December 31,			Nine Months Ended September 30,		
	2017	2018	2019	2019	2020	
					(unaudited)	
	RMB	*RMB*	*RMB*	*RMB*	*RMB*	*US$*
			(in millions)			
Net cash flows generated from operating activities	205,087	206,751	136,232	123,426	66,810	9,840
Net cash flows generated from (used in) investing activities	(148,303)	(58,332)	(72,339)	(78,608)	(102,872)	(15,151)
Net cash flows generated from (used in) financing activities	(23,120)	(119,747)	(112,683)	(43,567)	147,114	21,668
Effect of foreign exchange rate changes	(2,394)	2,278	28	2,576	(5,280)	(778)
Net increase in cash and cash equivalents	31,270	30,950	(48,762)	3,827	105,772	15,579
Cash and cash equivalents at the beginning of the year/period	164,825	169,228	200,178	200,178	151,416	22,301
Cash and cash equivalents at the end of the year/period	196,095	200,178	151,416	204,005	257,188	37,880

Operating activities

Our cash inflows from operating activities consist of cash received from sale of goods or rendering services, refund of tax and levy, and other cash received relating to operating activities.

Our cash outflows used in operating activities consist of cash paid for goods and services, cash paid to and on behalf of employees, cash paid on taxes and levy and other cash paid relating to operating activities.

The net cash generated from our operating activities amounted to RMB66,810 million for the nine months ended September 30, 2020, compared to the net cash of RMB123,426 million generated from our operating activities for the nine months ended September 30, 2019, primarily as a result of the decrease in the cash received for goods sold and services provided, which was partially offset by the increase in the cash received for other activities in relation to the operations and the decrease in the cash paid for good purchase and service received.

The net cash generated from our operating activities in 2019 was RMB136,232 million, compared to the net cash generated from our operating activities in 2018 of RMB206,751 million, primarily as a result of the increase in the cash paid for goods purchased and services received, net increase in loans and advances to customers and cash paid for interests, handling charges and commissions.

The net cash generated from our operating activities in 2018 was RMB206,751 million, primarily as a result of net profit of RMB72,485 million, as adjusted mainly by depreciation and amortization of RMB122,889 million, financial expenses of RMB7,495 million, exploration expenses of RMB10,753 million and the effects of changes in working capital. Changes in working capital mainly included an increase in operating payables of RMB4,237 million, an increase in inventories of RMB711 million, an increase in operating receivables of RMB7,654 million and a decrease in deferred income tax liabilities of RMB1,169 million, which were primarily due to the increased receivables from our customers.

The net cash generated from our operating activities in 2017 was RMB205,087 million, primarily as a result of net profit of RMB38,960 million, as adjusted mainly by depreciation and amortization of RMB128,633 million, financial expenses of RMB8,843 million, exploration expenses of RMB11,120 million and the effects of changes in working capital. Changes in working capital mainly included an increase in operating payables of RMB39,937 million, an increase in inventories of RMB28,854 million and an increase in operating receivables of RMB15,154 million, which were primarily due to the increased payables to our suppliers.

Investing activities

Our cash outflows used in investing activities consist of cash paid for purchasing fixed assets, oil and gas assets, intangible assets and other long-term assets, cash paid for investment, net cash paid to acquire subsidiaries and other operating units and other cash paid relating to investing activities. Our cash inflows generated by investing activities include cash received from disposal of investments, cash received from investment income, net cash received from disposal of fixed assets, oil and gas assets, intangible assets and other long-term assets, net cash received from disposal of subsidiaries and other operating units and other cash received relating to investing activities.

The net cash used in our investing activities in the nine months ended September 30, 2020 was RMB102,872 million, consisting primarily of cash paid for fixed assets, intangible assets and other long-term assets of RMB85,675 million and for investment activities of RMB56,077 million, partially offset by cash received from disposal of investments of RMB35,845 million.

The net cash used in our investing activities in 2019 was RMB72,339 million, consisting primarily of cash paid to acquire and construct fixed assets, intangible assets and other long-terms assets of RMB151,309 million and cash paid for investments of RMB101,357 million, partially offset by cash received from disposal of investments of RMB150,849 million and cash received from other investing activities of RMB19,423 million.

The net cash used in our investing activities in 2018 was RMB58,332 million, consisting primarily of cash paid for purchasing fixed assets, oil and gas assets, intangible assets and other long-term assets of RMB110,401 million, cash paid for acquisition of investments of RMB100,655 million, other cash paid relating to investing activities of RMB30,166 million, which were partially offset by cash received from disposal of investments of RMB142,799 million, other cash received from investing activities of RMB21,315 million and cash received from investment income of RMB11,862 million.

The net cash used in our investing activities in 2017 was RMB148,303 million, consisting primarily of cash paid for purchasing fixed assets, oil and gas assets, intangible assets and other long-term assets of RMB78,584 million, cash paid for acquisition of investments of RMB94,540 million, other cash paid relating to investing activities of RMB11,226 million, which were partially offset by cash received from disposal of investments of RMB16,904 million, other cash received from investing activities of RMB3,484 million and cash received from investment income of RMB10,292 million.

Financing activities

Our cash inflows from financing activities consist of cash received from investment, cash received from borrowings and other cash received relating to financing activities. Our cash outflows in financing activities include cash repayments of amounts borrowed, cash repayments for distribution or dividends, profit or interest expenses and other cash payments relating to financing activities.

Our net cash generated from financing activities in the nine months ended September 30, 2020 was RMB147,114 million, primarily consisting of cash received from borrowings of RMB666,780 million, partially offset by cash repayments of borrowings of RMB499,283 million and cash paid for dividends, profits distribution or interest of RMB21,207 million.

Our net cash used in financing activities in 2019 was RMB112,683 million, primarily consisting of cash paid for debts repayments of RMB1,088,630 million, which was partially offset by cash received from borrowings of RMB1,027,778 million. Our net cash used in financing activities in 2018 was RMB119,747 million, primarily consisting of cash repayments of amounts borrowed of RMB1,111,706 million, which was partially offset by cash received from borrowings of RMB1,037,101 million. Our net cash used in financing activities in 2017 was RMB23,120 million, primarily consisting of cash repayments of amounts borrowed of RMB890,258 million, which was offset by cash received from borrowings of RMB898,205 million.

Borrowings and Indebtedness

The following table sets forth the breakdown of our borrowings and indebtedness by types.

	As of December 31, 2019	**As of September 30, 2020**	
		(unaudited)	
	RMB	*RMB*	*US$*
		(in millions)	
Bank borrowings	136,535	190,544	28,064
Bonds	243,787	295,986	43,594
Total indebtedness[1]	380,322	486,530	71,658

Note:

(1) See Note V.5 to our consolidated financial statement included elsewhere in this offering memorandum for details of our outstanding senior notes.

The following table sets forth the breakdown of our bank borrowings by maturity.

	As of December 31, 2019	As of September 30, 2020	
		(unaudited)	
	RMB	*RMB*	*US$*
		(in millions)	
One year or less	125,895	224,099	33,006
Over one year to five years	145,126	173,613	25,570
Over five years	109,301	88,818	13,082
Total indebtedness	380,322	486,530	71,658

The following table sets forth the breakdown of our borrowings and indebtedness by security interest.

	As of December 31, 2019	As of September 30, 2020	
		(unaudited)	
	RMB	*RMB*	*US$*
		(in millions)	
Secured	97	58	9
Unsecured	380,225	486,472	71,649
Total indebtedness	380,322	486,530	71,658

As of September 30, 2020, 47.7% of our borrowings and indebtedness were denominated in Renminbi and 52.3% were denominated in foreign currency; 86.5% of our borrowings and indebtedness were fixed rate and 13.5% were floating rate. Our bank borrowings consist mainly of short-term loans, long-term borrowings due within one year and long-term loans due in more than one year. Included in secured borrowings and indebtedness are bank loans guaranteed by third parties or secured through mortgage or pledge. As of September 30, 2020, the total lines of credit available to us were approximately RMB2,026 billion, of which approximately RMB1,538 billion was unused. Our bonds payable consists of long-term corporate bonds and short-term financing bills, substantially all of which were unsecured.[1]

Contractual Obligations and Commercial Commitments

The following table sets forth our obligations and commitments to make future payments under contracts and commercial commitments as of September 30, 2020.

	As of September 30, 2020			
	Total	**Less than 1 year**	**1-5 years**	**After 5 years**
		(RMB in billions)		
Contractual obligations[(1)]				
Short-term debt	224.1	224.1	–	–
Long-term debt	262.4	–	173.6	88.8

Note:

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

1 For a description of our corporate and convertible bonds, please see Note VIII.33 to the Auditor's Report included in this offering memorandum.

	As of December 31, 2019
	(RMB in millions)
Total contractual obligations[1]	
Capital commitments	202.1
Exploration and production licenses	1.3
Guarantees[2]	135.6

Notes:

(1) Not including intra-group transactions. As required by the New Lease Standard, all the leases (except for short-term and low-value assets selected for simplified treatment) were recognized as "Right-of-use assets" and no longer disclosed as "Lease commitments".

(2) See Note IX.1 to the Auditor's Report included in this offering memorandum for further information of the guarantees.

Capital Expenditure

The following table sets forth our capital expenditure by segment for the periods presented and the capital expenditure in each segment as a percentage of our total capital expenditure for such period.

	2017		2018		2019		Nine months ended September 30, 2020	
							(unaudited)	
	RMB	*Percent*	*RMB*	*Percent*	*RMB*	*Percent*	*RMB*	*Percent*
	(in millions, except percentage data)							
Exploration and production	31,343	28.8%	42,155	34.5%	61,739	41.0%	32,172	40.1%
Refining	21,075	19.4%	27,908	22.9%	31,372	20.0%	13,819	17.2%
Chemicals	24,051	22.1%	21,140	17.3%	23,794	15.8%	11,503	14.3%
Marketing and Distribution	21,539	19.8%	21,429	17.6%	29,566	19.7%	13,768	17.1%
Oil and Petrochemical Engineering Technical Service	2,974	2.7%	134	0.1%	265	0.2%	97	1.2%
Others	7,725	7.1%	9,303	7.6%	3,709	2.5%	8,065	10.0%
Elimination of inter-segment	–	–	–	–	–	–	–	–
Total	108,708	100.0%	122,069	100.0%	150,445	100.00%	80,298	100%

Off-Balance Sheet Arrangement

As of the date of the offering memorandum, we had no off-balance sheet arrangements as determined for purposes of PRC GAAP other than the contingent liabilities discussed below. For a discussion of certain differences between PRC GAAP and U.S. GAAP, see "Description of Certain Differences between PRC GAAP and U.S. GAAP."

Contingent Liabilities from Guarantees

As of September 30, 2020, the total amount of external guarantees provided by us was RMB123,894 million, a majority of which were related to loans. As the former sole shareholder of SIPC, we have provided guarantees in an aggregate amount of RMB108,191 million to SIPC as of September 30, 2020 to support its business operation, which include but are not limited to loan guarantees and performance guarantees. See Note IX.1 to the Auditor's Report included in this offering memorandum for further information on the guarantees. We expect that no material liabilities will arise from our guarantees or legal proceedings.

Dividends

As a state-owned limited liability company incorporated in China, we distribute profits to the relevant PRC authorities from time to time. In 2019, we distributed RMB18.95 billion to the relevant PRC authorities.

Market Risks

Currency Risk

We conduct our businesses primarily in Renminbi. However, there are also foreign currency-denominated transactions arising from our foreign operations. We are exposed to U.S. dollar/Renminbi exchange rate risk as our revenue is principally generated in Renminbi and we have issued debt obligations that require us to make interest and principal payments in U.S. dollars. Currently, the PRC government has implemented a regulated floating exchange rate regime based on market supply and demand with reference to a basket of currencies. However, Renminbi is still regulated in capital projects. The exchange rates of Renminbi are affected by domestic and international economic and political changes, and demand and supply for Renminbi. Future exchange rates of Renminbi against other currencies may vary significantly from the current exchange rates, which in turn would affect our operating results and financial position as well as our ability to service our foreign currency-denominated debt obligations.

Interest Rate Risk

Our interest rate risk exposure arises from changing interest rates on our debt, including fair value interest rate risk in relation to our fixed-rate debt and cash flow interest rate risk in relation to variable-rate bank balances and borrowings. We undertake debt obligations to support general corporate purposes including capital expenditures and working capital needs. The management monitors interest rates and may consider hedging significant interest rate exposure if needed.

Price Risk

We are engaged in the oil and gas business and changes in prices of oil and gas products, which are beyond our control, will positively or negatively affect our results of operations. We are also exposed to equity price risk either through our long-term equity investments, other creditor's right investment or investment in other equity instruments in respect of equity securities listed in the respective stock exchanges. Management manages equity price risk arising from these investments by closely monitoring the performance of respective listed equity securities and market conditions. Management will consider diversifying the portfolio of these investments as appropriate.

Inflation

In 2017, 2018 and 2019, the Consumer Price Index increased by 1.6%, 2.1% and 2.9%, respectively, from the previous year, according to the PRC National Bureau of Statistics. Although we have not historically been materially affected by inflation since our inception, our results of operations may in the future be adversely affected by higher inflation rates in China.

The information in the section below has been derived, in part, from various public and government publications unless otherwise indicated. This information has not been independently verified by the Issuer, the Company, the Joint Global Coordinators or the Initial Purchasers or any of their respective affiliates or advisors. The information may not be consistent with other information compiled within or outside the PRC.

Overview of the Global Oil and Gas Market

Oil and Gas Consumption

Global oil demand has been steady in recent years, with consumption tripled over the past fifty years. According to the BP Statistical Review of World Energy June 2020 (the "BP Review"), global oil consumption grew from 84.1 million barrels per day ("million bpd") in 2009 to 98.3 million bpd in 2019, representing a compound annual growth rate ("CAGR") of 1.6%.

The growth in global oil consumption is driven primarily by developing country economies, among which China has been the primary contributor with ever-increasing import demands. According to the BP Review, China's oil consumption has grown from 8.2 million bpd in 2009 to 14.1 million bpd in 2019, representing a CAGR of 5.5%. In contrast, oil consumption in major economies, such as the United States and Russia, grew at CAGRs of 0.7% and 1.8%, respectively, over the same period.

Similar to oil demand, global natural gas demand has also grown steadily in recent years, with consumption expanding over five times over the past fifty years. According to the BP Review, global natural gas demand grew from 284.6 billion cubic feet per day ("bcf/d") in 2009 to 380.2 bcf/d in 2019, representing a CAGR of 2.9%.

The growth in global natural gas consumption has been driven primarily by countries that are not members of the Organization for Economic Co-operation and Development ("OECD") and developing economies. In particular, China has been the key contributor to natural gas consumption growth in the past decade. According to the BP Review, China's natural gas consumption grew from 8.7 bcf/d in 2009 to 29.7 bcf/d in 2019, representing a CAGR of 13.0%.

Oil and Gas Production

On the supply side, according to the BP Review, global oil production decreased by 0.1% from 2018 to 2019 and reached 95.2 million bpd in 2019. OPEC countries decreased their production by 2.0 million bpd in 2019, representing a 5.3% decrease from 2018. According to the BP Review, global natural gas production increased by 3.4% from 2018 to 2019 and reached 386.0 bcf/d in 2019. The United States and Russia are the two largest natural gas producers in the world. The United States recorded a production increase of 10.2% or 8.2 bcf/d, and Russia recorded a production increase of 1.5% or 1.0 bcf/d from 2018 to 2019. Natural gas was the largest source of energy growth, boosted by a massive programme of coal-to-gas switching in industrial and residential sectors in China. Unconventional gas resources such as shale gas, coal bed methane and tight gas are expected to play an increasingly important role in the world's future energy supply.

Currently, many of the conventional oil-and gas-producing countries have passed their peak production level based on the current oil and gas reserves and available extraction and drilling technologies.

Oil and Gas Prices

The global economic downturn and subsequent recovery have resulted in unprecedented volatility in the oil and gas industry over the last few years. The West Texas Intermediate ("WTI") and the Brent crude oil prices increased from US$101/bbl and US$106/bbl, respectively, on April 1, 2008 to a record high of US$145/bbl and US$146/bbl, respectively on July 3, 2008 as a result of strong oil demand combined with limited supply due to limited spare production capacity in OPEC countries as well as constant supply disruptions in key regions such as Russia, the Middle East and West Africa. This was followed by a sharp decrease in the oil prices to US$40/bbl and US$41/bbl on December 22, 2008, with the collapse of major financial institutions and a slowdown in economic activity throughout the globe.

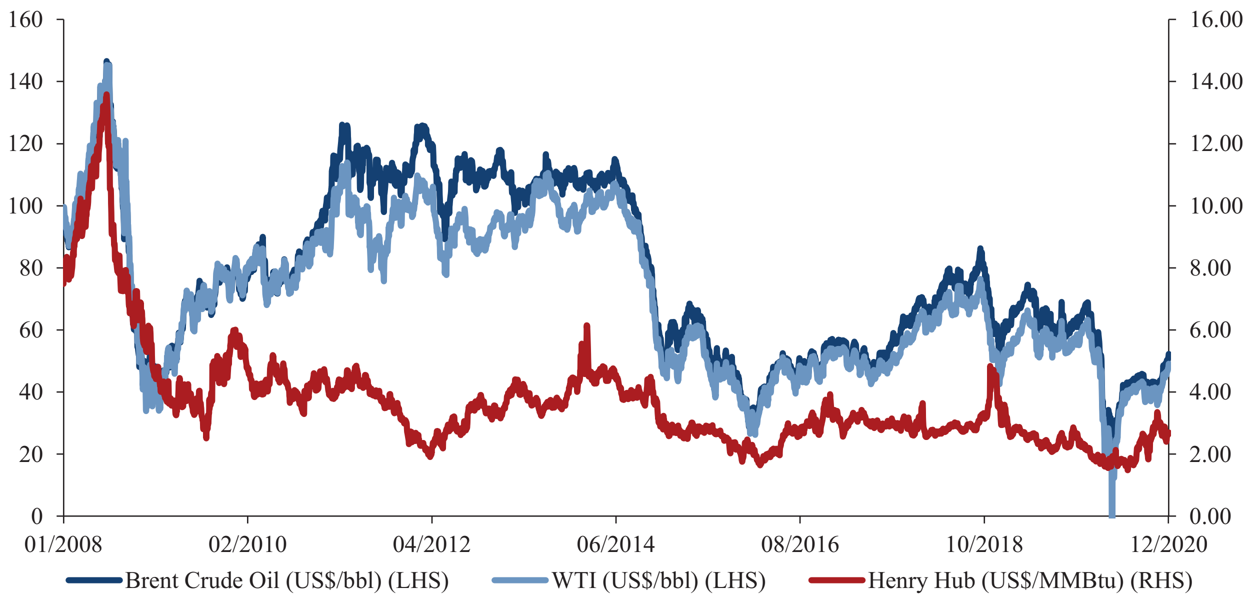
Since then, oil prices have rebounded significantly due to oil being bought and held in storage and sold at higher forward prices, a rebound in global economic activity and China's continued growth in oil demand. As a result, WTI and Brent crude oil prices have recovered and stayed above US$100/bbl in February 2014. Since the third quarter of 2014, as a result of weak demand growth in the global oil market coupled with a substantial increase of supply from North America shale, as well as the negative demand impact from the unprecedented global COVID-19 outbreak in 2020, WTI and Brent crude oil prices have decreased to US$49/bbl and US$52/bbl, respectively, as of December 18, 2020.

Oil prices are affected by a number of factors, including changes in supply and demand fundamentals, OPEC regulations, weather conditions, government regulations, as well as political and economic conditions. Moreover, the price and availability of various alternative energy substitutes increasingly affecting oil prices. Extended periods of high oil prices can therefore lead to increased usage of alternative energies at the cost of demand for oil.

According to the U.S. Energy Information Administration (EIA)'s Annual Energy Outlook 2020, WTI and Brent crude oil prices are expected to increase in the long term and reach US$65/bbl and US$69/bbl in 2025 respectively and US$101/bbl and US$105/bbl in 2050 respectively, in real terms. On the other hand, natural gas prices in certain regions such as the U.S. have witnessed a decoupling from oil prices. Prior to the global economic recession in 2010, natural gas prices were positively correlated with oil prices, evidenced by Henry Hub natural gas price peaking on July 2, 2008 at US$13.31 per million British Thermal Units ("MMBtu"). Following the peak, Henry Hub natural gas prices fell sharply as the global recession began. As oil prices rebounded since 2009, Henry Hub natural gas prices continued to fall and decreased to US$1.83/MMBtu on September 4, 2009. The decoupling of oil and natural gas price is largely due to the discovery of gas from previously untapped unconventional gas resources such as the North America shale. On December 18, 2020, Henry Hub price reached to US$2.70/MMBtu.

According to EIA's Annual Energy Outlook 2020, Henry Hub natural gas price will increase in the long term and reach US$2.84/MMBtu in 2025 and US$3.69/MMBtu in 2050 in real terms.

Historical WTI Oil, Brent Oil and Henry Hub Natural Gas Prices



Source: EIA. Commodity prices up to December 18, 2020.

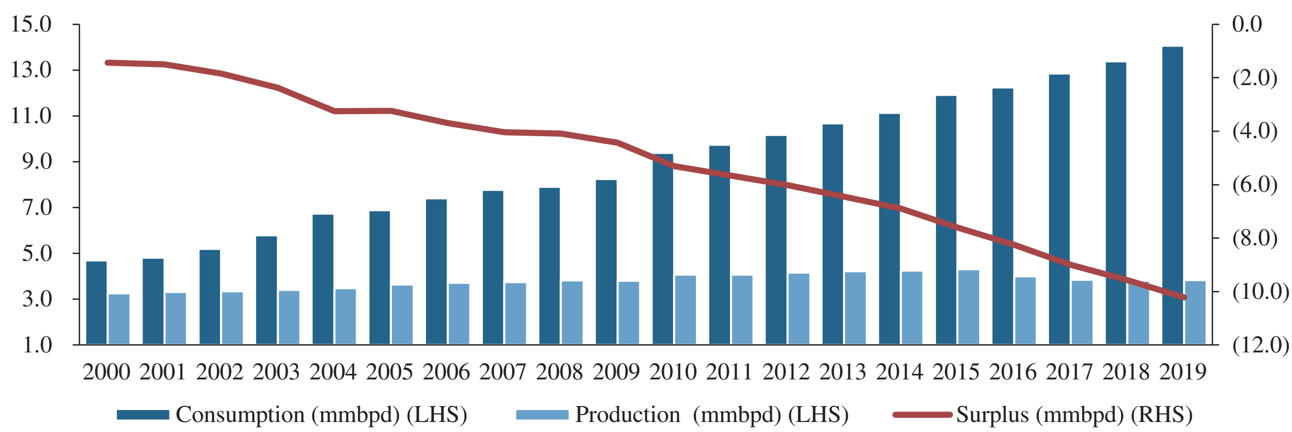
Overview of the Chinese Oil and Gas Market

Despite increasing participation from independent oil companies, China's oil and gas industry remains dominated by three key state-owned oil and gas companies: the Company, China National Petroleum Corporation ("CNPC") and China National Offshore Oil Corporation ("CNOOC"). The Company is the leading integrated energy and chemical company with businesses across the entire oil and gas value chain. As of December 31, 2019, the Company is the largest refined oil and chemical product producer and supplier in terms of refinery throughput and one of the largest oil and gas producers in China. CNPC is the largest among the three in terms of proved oil and gas reserves and production. Together with its listed subsidiary PetroChina, CNPC accounts for the bulk of China's domestic oil and gas production. CNOOC, on the other hand, is the largest producer of China's offshore crude oil and natural gas. Apart from the three major oil companies, Sinochem Corporation ("Sinochem"), which has a strong position in the oil trading business, has been expanding its upstream operations primarily through acquisitions of overseas oil and gas assets. However, Sinochem's oil and gas reserves and production are still relatively small compared to the other three national oil companies.

Oil and Gas Consumption and Production in China

Strong economic growth in the past three decades has transformed China into the world's largest energy consumer and largest net importer of oil. According to the BP Review, oil consumption in China increased from 8.2 million bpd in 2009 to 14.1 million bpd in 2019, representing a CAGR of 5.5%. In contrast, China's oil production slightly increased from 3.81 million bpd in 2009 to 3.84 million bpd in 2019, representing a CAGR of 0.1%. According to EIA Short-Term Energy Outlook in December 2020, China's oil consumption is estimated to reach 15.1 million bpd by 2021.

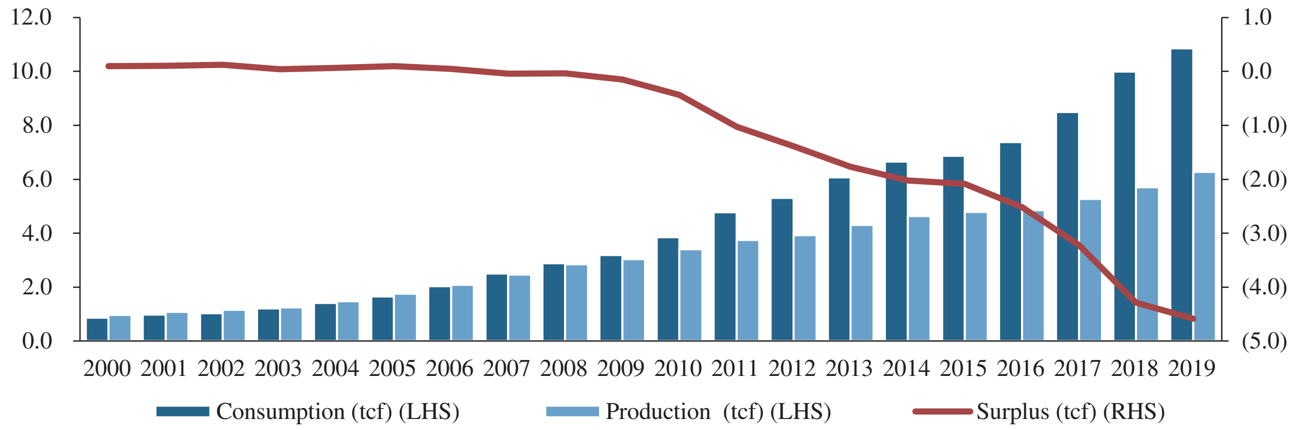
China Oil Supply and Demand



Source: BP Statistical Review of World Energy June 2020.

According to BP Review, natural gas consumption in China has grown from 3.2 trillion cubic feet ("tcf") in 2009 to 10.9 tcf in 2019, representing a CAGR of 13.0%. In contrast, natural gas production grew at a relatively slower pace, reaching 6.3 tcf from 3.0 tcf during the same period, representing a CAGR of 7.5%. The increase in domestic production alone is not sufficient to meet demand and China has become a net importer of natural gas since 2007 and is expected to continue to rely on imports to meet domestic demand in the near future.

China Natural Gas Supply and Demand



Source: BP Statistical Review of World Energy June 2020.

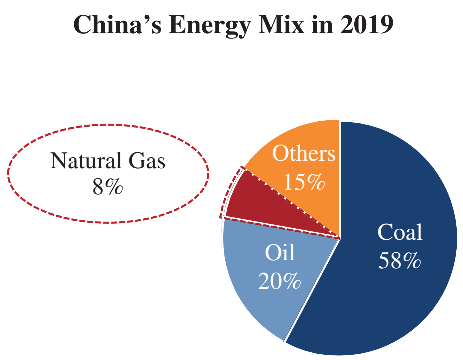
The rising demand for oil and gas in China, along with the declining production capacity of oil and the expected shortfall of domestic gas production, has resulted in a large and growing supply gap in China's domestic oil and gas market.

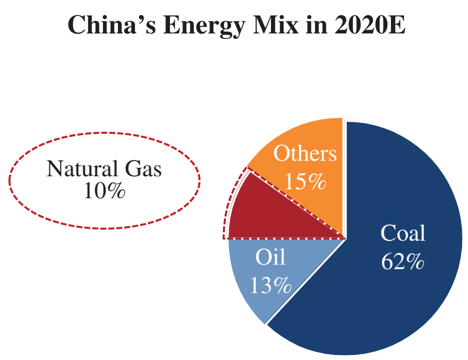
Chinese Natural Gas Market Overview

Because of insufficient oil production capacity, growing concerns about environmental issues, and rising oil prices, China has been active in searching for alternative energy sources. Natural gas is the preferred choice as existing infrastructures, technology restrictions and scale limitation make most of the other choices unviable. In addition, the Chinese government has released policy guidelines to increase consumption of natural gas in order to diversify China's energy mix and reduce pollution. Based on the BP Review, natural gas only accounted for approximately 7.8% of China's energy consumption in 2019, which was much lower than the world average level of 24.2% in 2019. According to the State Council's Energy Development Strategy Plan (2014-2020), this proportion is expected to increase to at least 10% by 2020, with the continuous improvement of energy infrastructure.

China is more resourceful in both conventional gas and unconventional gas (including coal bed methane and shale gas) than in oil. However, China's natural gas market is still in short supply and the gap between demand and supply is expected to broaden. To meet the increasing demand for natural gas, China has been aggressively importing long-distance piped gas from gas-rich regions such as Russia and Central Asia, as well as LNG from Qatar, Australia, Malaysia and Indonesia. The PRC government is planning cross-border, long-distance pipelines and having a number of LNG regasification terminals under construction or in the planning stage.

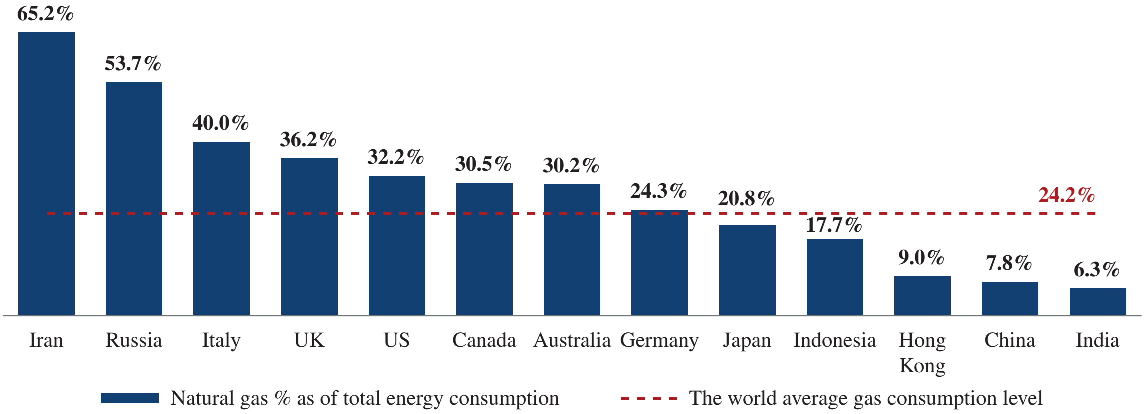
Change in China's Primary Energy Consumption Composition





Source: BP Statistical Review of World Energy June 2020; the State Council's Energy Development Strategy Plan (2014-2020).

Comparison of Natural Gas Consumption Levels (2019)



Source: BP Statistical Review of World Energy June 2020.

In addition, China National Energy Administration released the first Shale Gas Industry Policy on October 22, 2013 to call for more financial support from the government for shale gas development and exploration. In particular, subsidies should be given directly to a shale gas production company according to the amount of its shale gas development and utilization, provided that certain conditions are met. Local governments are also encouraged to provide subsidies, with the amount to be determined by local financial authorities. The policy also calls for waive or reduction of compensatory fee for mineral resources and royalty fee, as well as new incentive policies for value-added tax, resources tax, enterprise income tax, and customs duties for imports of production equipment. Furthermore, according to the Circular of the National Energy Administration on Issuing the Development Plan for Shale Gas (2016-2020), China targets to achieve a shale gas production goal of 30 billion cubic meters in 2020 and 80 billion to 100 billion cubic meters in 2030.

Driven by environmental and efficiency concerns, the PRC government has been increasingly encouraging industrial and residential use of natural gas to meet primary energy and environmental protection needs. The PRC government has adopted a preferential value-added tax rate of 11% (10% effective from May 1, 2018 and 9% effective from April 1, 2019) for natural gas sales as compared to a 17% value-added tax rate for crude oil production (16% effective from May 1, 2018 and 13% effective from April 1, 2019). In addition, the NDRC launched pilot reforms on natural gas pricing in Guangdong Province and Guangxi Zhuang Autonomous Region in December 2011, marking the PRC government's efforts to shift natural gas pricing toward a more market-oriented system. Under the pilot reforms, the prices of natural gas were pegged to the prices of alternative energies to better trace and reflect market demand and supplies, as well as guide reasonable distributions. On June 28, 2013, the NDRC lifted wellhead natural gas prices for non-residential users by 15%, from RMB1.69 per cubic meter to RMB1.95 per cubic meter, effective from July 10, 2013. On September 1, 2014, the NDRC applied a RMB0.40 per cubic meter upward adjustment to regulated price ceilings for base gas across the country except Guangdong and Guangxi to close the gap between regulated base and incremental price ceilings. Further in late February 2015, the NDRC announced that effective from April 1, 2015, China's non-residential gas citygate price ceilings for incremental gas (additional consumption beyond 2012 level) will be lowered by RMB0.44 per cubic meter, and that for base gas (2012 non-residential consumption) will be raised by RMB0.04 per cubic meter. The latest non-residential gas price adjustment makes the end of the two-tier non-residential gas pricing system. In addition, the NDRC also announced that for direct-supply of natural gas to industrial end users, such as gas fired power generators, energy projects, large petrochemical projects, citygate price will no longer be subject to government set price ceilings, and can be negotiated directly by sellers and buyers starting April 1, 2015. On November 18, 2015, the NDRC announced that effective from November 20, 2015, non-residential gas citygate price ceiling was lowered by RMB0.7 per cubic meter. Moreover, according to the latest notice, city-gate price would no longer be the ceiling price but it would become a benchmark price, meaning that it could be subject to negotiation between suppliers and buyers, and any upward adjustment not exceeding 20% or floorless downward adjustment could be made. On August 29, 2017, the NDRC announced that effective from September 1, 2017, non-residential gas benchmark price was lowered by RMB0.1 per cubic meter. On March 27, 2019, the NDRC announced that effective from April 1, 2019, the gas benchmark price was adjusted accordingly to the adjustment of the value-added tax rate for natural gas sales. On February 22, 2020, the NDRC announced that, non-residential gas benchmark price shall be applied to the off-season policy ahead of schedule and be lowered to support enterprises to resume work and production. On July 1, 2020, the NDRC announced that, the price of the natural gas transmission and distribution shall be in accordance with the principle "the Permitted cost plus the Reasonable profit" and the permitted rate of profit shall not exceed 7%.

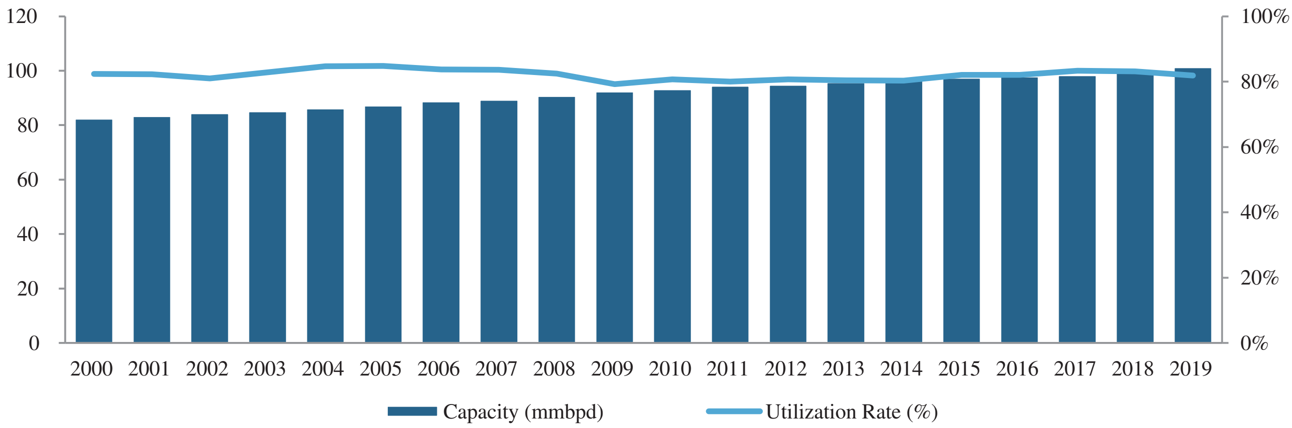
Global Refining Market Overview

The global refining sector has been supported by the recovery of global economic growth and oil demand in the past four years. Increasing demand for refined oil products from non-OECD countries and regions such as China, India, the Middle East and Latin America is expected to continue driving global oil consumption in the foreseeable future.

The ongoing industry consolidation has resulted in larger and fewer refineries worldwide. Despite current capacity surplus, capacity additions will likely to continue as a result of demand growth, a shift towards low cost producing region and higher complexity. China, India and the Middle East are expected to drive capacity buildup in the near future.

Global refining utilization rates were consistently around 80% since 1988. The utilization rate dropped to 79.2% in 2009 after the financial recession and slowly recovered afterwards. Refining margins have remained relatively steady since mid-2010 despite some volatility and peripheral concerns over the European economy. Margins in 2009 were hit particularly hard due to a slowdown in global economy and overcapacity from overexpansion as refiners attempted to capitalize on previously wide light-heavy differentials. In Asia, refining margins were well supported by healthy product markets and relatively eased crude prices on expectations of improved supply and remained stable.

Global Refining Capacity and Utilization Rate



Source: BP Statistical Review of World Energy June 2020.

Chinese Refining Market Overview

China's demand for petroleum products, in particular light and medium distillates, is expected to continue, mainly driven by sustained economic growth and a steady rise in automobile ownership. Improving industrial activities and highway networks should also increase the demand for trucks.

At the same time, stronger demand for refining feedstock such as naphtha is expected going forward, mainly driven by incremental ethylene capacity and higher consumption of petrochemical products.

On the supply side, China's refining capacity is expected to continue to outpace domestic demand growth, which would potentially reduce the country's reliance on oil product import. According to the IEA, China's capacity will reach 17.0 million bpd in 2023.

China's refining sector has undergone modernization and consolidation in recent years. Currently, most of the refining capacity in China is held by Sinopec and CNPC. In addition, both companies are having a number of major project commissions in the next few years. CNOOC has also entered the downstream arena recently and commissioned its first refinery in 2009 to process the high-sulfur crudes from its Bohai Bay fields. Sinochem has also proposed a number of new refineries through potential partnerships with national oil companies from Kuwait and Saudi Arabia.

China's refineries are adjusting to the changing crude slate. Traditionally, many of China's refineries were built to handle relatively light and sweet crude oils. In recent years, refiners have built or upgraded facilities to support more crude oil imported from Middle East, which tend to be heavy and sour and more recently, for high-acid and high-sulfur crude oil streams.

The NDRC has the authority to adjust the sale prices of refined oil products in China based on market price fluctuations and macroeconomic conditions. In 2013, the NDRC adjusted the sale prices of gasoline and diesel 15 times to reflect the global market dynamics of crude oil prices. Previously, these prices in China were based on the crude oil benchmark prices of Brent, Dubai and Cinta. However, on March 26, 2013, the NDRC announced further steps to adjust the existing refined oil pricing mechanism. The adjustments to oil pricing mechanism include, among other things, (i) shortening of price reference period from 22 working days to 10 working days and lifting the 4% downward and upward fluctuation cap on benchmark crude oil prices; (ii) changing the composing types of benchmark crude oil in response to the changes taking place with respect to composition of imported crude oil and crude oil trading in the overseas market; and (iii) issuing additional procedural guidelines, such as implementing ad hoc suspension or delay of price adjustment upon the approval by the State Council, to regulate significant fluctuations of crude oil price. In 2015, the NDRC adjusted the sale prices of refined oil products 37 times to reflect the global market dynamics of crude oil prices. On January 13, 2016, the NDRC announced that the price of refined oil products will not be adjusted as long as the price of crude oil is below $40/bbl. Profits from refined oil products sales below the $40 level will be deposited in a fund to promote energy conservation and security and improve fuel quality, according to the NDRC. In 2019 and 2020 year to date, the NDRC adjusted the sale prices of refined oil products 22 times and 12 times respectively to reflect the global market dynamics of crude oil prices.

Global Petrochemical Market Outlook

Global demand for petrochemical products is expected to grow following the continued economic recovery, with Asia and the Middle East serving as the main driving force. Based on sustained strong economic growth, petrochemical markets in China, India and Southeast Asia are to see a demand surge in the next five years, and Asia is expected to contribute the majority of the total incremental global petrochemical demand. Due to close proximity to vast hydrocarbon resources, Middle East ethylene producers will continue to benefit from a substantial raw material cost advantage.

Chinese Petrochemical Market Overview

As a result of rapid industrialization and continued economic growth, China has become the world's largest petrochemical market in terms of both production capacity and consumption. Demand for key petrochemical products, such as ethylene, is expected to remain robust. The significant addition of new ethylene and derivative projects announced in China over the next few years is in tandem with the strong expectation in demand growth. In general, large-scale capacity expansion and new investments across China's petrochemical sector is expected in the foreseeable future, as China's self-sufficiency rate in petrochemicals remains low, particularly of high-value added products.

Overview

The Company

We are the largest integrated petroleum and petrochemical company in China and one of the largest in the world in terms of revenue, according to the "2020 Fortune Global 500." We are the largest refined oil producer in the world in terms of crude oil throughput in 2019. We are the second largest oil and gas producer in China in terms of production volume in 2019. We are also the largest distributor of refined oil products in China measured by sales volume in 2019, and the number of our service stations ranked first in China as of September 30, 2020. We ranked first in China in terms of production volume of major petrochemical products in 2019. We have been named in the "Fortune Global 500" since 2003 and ranked second in the "2020 Fortune Global 500" in terms of revenue.

We were established in July 1998 on the basis of the former China Petrochemical Corporation. We are a sate authorized and invested entity and one of China's key SOEs under the supervision of the SASAC. We conduct the following key businesses:

- ***Exploration and Production***: We are China's second largest oil and gas producer based on production volume in 2019. We maintained a balanced portfolio of domestic and overseas resources, optimized our development programs in mature oilfields, and increased the production capacity in new fields. We made a number of new discoveries of oil and gas in the Sichuan Basin, Beibu Gulf of the South China Sea, the Ordos Basin, the Tarim Basin, the Junggar Basin, Yin'e Basin, Shengli Oil Field and the North Jiangsu Basin. As of December 31, 2019, we had 3,406 million boe of proved reserves of crude oil and natural gas, including 2,016 million barrels of crude oil and 8,341 bcf of natural gas. In 2019 and for the nine months ended September 30, 2020, our production of crude oil and natural gas was 538 million and 392 million boe, respectively. We are also exploring the possibility of using unconventional oil and gas resources as a substitute for or supplement to conventional resources in order to provide a more sustainable supply of hydrocarbon energy. Our new energy operations include CSG, shale oil, shale gas, LNG, geothermal heating, solar photovoltaics and other unconventional energies. In 2019, the Fuling shale gas field reached an annual production capacity of 6.748 billion cubic meters.

- ***Refining***: We are the largest refined oil producer in the world in terms of crude oil throughput in 2019. In 2019 and for the nine months ended September 30, 2020, we processed 250 million tonnes and 176 million tonnes of crude oil, representing approximately 38.4% and 35.5%, respectively, of the total crude oil processed in China. We operate 33 refineries in China, including 16 with refining capacity of 10 million tonnes or more per annum, which are located in China's eastern and southeastern regions with more developed economies, higher population densities and larger numbers of oil product consumers than the other regions in China. We commenced production of our self-developed bio-jet fuel, which uses vegetable oils as feedstock, in 2011. It was successfully used in trial commercial flights in 2015, resulting in us receiving the first license to produce bio-jet fuel in China and China being the fourth country in the world to have proprietary technologies to produce bio-jet fuel.

- ***Chemicals***: We are the largest producer of major petrochemical products in China and one of the largest in the world in terms of production volume in 2019. We believe we have greater economies of scale in most of our production facilities and more extensive distribution channels in China than our competitors. We ranked second in C&EN's "Global Top 50 Chemical Companies" as released in July 2020 in terms of chemical sales. We produce a wide range of chemical products including intermediate petrochemicals, synthetic resins, synthetic fiber monomers and polymers, synthetic fiber, synthetic rubbers and synthetic ammonia. In 2019 and nine months ended September 30, 2020, we produced 12.5 million tonnes and 8.85 million tonnes of ethylene, the primary feedstock for our chemical production, respectively. Our chemical products are widely distributed throughout China and used in various industries including textiles, agriculture, construction, shoes, housewares, packaging, electronic appliances and automobiles.

- ***Marketing and Distribution***: We are the largest distributor of refined oil products in China measured by sales volume in 2019. In 2019, our domestic market share with respect to the sales of refined oil products was 56.0% as to major refined oil products, which include gasoline, diesel and kerosene (including jet fuel). We sell most of our major refined oil products through retail service stations that operate under the "Sinopec" brand. Our strong retail network provides extensive geographic coverage of retail sales across China. As of September 30, 2020, we had 30,727 service stations, representing the largest oil products distribution network in China. The retail sales volume of gasoline, diesel and kerosene (including jet fuel) through these service stations accounted for approximately 66.4% and 67.4% of our major refined oil products sales volume in China for the year of 2019 and for the nine months ended September 30, 2020, respectively. As of September 30, 2020, we had more than 1,000 service stations in each of 14 provinces, most of which are located in China's eastern and southern regions. For the nine months ended September 30, 2019 and 2020, we sold 192.4 million and 162.3 million tonnes of major refined oil products, respectively. We have developed non-fuel businesses for our full-service stations to transform our network of traditional service stations into a comprehensive one-stop multifunctional integrated service platform that combines "fueling, shopping, dining and car services." The number of our Easy Joy convenience stores, most of which are located in our service stations, reached 27,508 as of September 30, 2020. In addition, we have expanded our business into electric vehicles charging market by co-operating with our business partners, such as Beijing Electric Vehicle Co., Ltd., to integrate charging and power stations for electric vehicles into our service stations.

- ***Oil and Petrochemical Engineering Technical Services***: We believe we are one of the largest refining and chemical engineering technical service providers in China measured by revenue, and we believe we have the most comprehensive capability in the design and construction of refineries and ethylene production facilities among the industry players in China. Equipped with our in-house technologies and patents, we are a technological leader in refining and chemical engineering design both in China and overseas. In 2019, the aggregate value of new contracts of our refining and chemical engineering technical services amounted to US$7.5 billion, including overseas new contracts with amount of US$1.0 billion. In 2019, the aggregate value of new contracts of our oil engineering technical services amounted to US$10.0 billion, including overseas oil engineering technical services with amount of US$2.4 billion.

- ***Others***: We also engage in international trade, research and development and other businesses, which are collectively referred to as our "Others" segment.

The following table sets forth our operating revenue by business segment for the periods presented.

	Year Ended December 31,				**Nine Months Ended September 30,**				
	2017	**2018**	**2019**		**2019**		**2020**		
							(unaudited)		
	RMB	*RMB*	*RMB*	*Percentage*[2]	*RMB*	*Percentage*	*RMB*	*US$*	*Percentage*
	(in millions, except for percentage data)								
Total Operating Revenue[1]**:**									
Exploration and Production	157,490	200,191	210,712	4.1%	152,408	4.0%	120,354	17,726	4.4%
Refining	1,011,848	1,263,408	1,224,156	23.9%	911,125	23.9%	687,285	101,226	24.9%
Chemicals	474,466	587,868	536,686	10.5%	410,033	10.8%	291,841	42,984	10.6%
Marketing and Distribution	1,224,197	1,446,637	1,430,963	27.9%	1,058,333	27.8%	818,400	120,537	29.7%
Oil & Petrochemical Engineering Technical Services	89,320	110,674	128,993	2.5%	89,512	2.3%	87,529	12,892	3.2%
Others	1,079,561	1,474,449	1,597,918	31.1%	1,188,774	31.2%	749,739	110,425	27.2%
Elimination of inter-segment	(1,636,601)	(2,146,386)	(2,126,011)		(1,544,876)		(1,174,017)	(172,915)	
Total	**2,400,281**	**2,936,841**	**3,003,417**	**100.0%**	**2,265,309**	**100.0%**	**1,581,131**	**232,875**	**100.0%**

Notes:

(1) Revenues breakdown by segments is calculated without taking into account inter-segment elimination.

(2) Percentage of revenues is based on total operating revenue before inter-segment elimination.

Sinopec Corp.

Sinopec Corp. is an integral and significant part of the Company. It was established as a joint stock company with limited liability under the Company Law of the PRC on February 25, 2000 as part of a restructuring in which the Company transferred to Sinopec Corp. the majority of our production operations. Sinopec Corp. mainly conducts domestic oil and gas exploration, development and production; crude oil refining; the marketing and distribution of refined oil products; and the production and sales of petrochemical products. Sinopec Corp. is the first company in China to have obtained a listing of its shares on four stock exchanges. Its H shares and American Depositary Shares representing H shares were simultaneously listed on the SEHK (stock code: 0386), the New York Stock Exchange (stock code: SNP) and the London Stock Exchange (stock code: SNP) on October 18, 2000; and its A shares were listed on the Shanghai Stock Exchange (stock code: 600028) on August 8, 2001. Sinopec Corp. was awarded "Best Managed Company" by FinanceAsia in 2011, "Best Managed Company in China" by Euromoney in 2012, "Global Compact Best China Practice Award" by UN Global Compact Network in 2012, and "Crisis Management and CRS Gold Awards" by Asia-Pacific SABRE Awards in 2013, "Shale Oil and Gas International Pioneer" by International Gas Union and American Gas Association in 2014, as well as "Global Competitive Brands – Top 10 from China" by the International Data Group for six consecutive years. As of September 30, 2020, the equity interest held by the Company, directly and indirectly, in Sinopec Corp. remained at 68.77%. Sinopec Corp. accounted for over 70% of the Company's total assets as of December 31, 2019 and over 90% of the Company's revenue for the year ended December 31, 2019, according to the audited consolidated financial statements of Sinopec Corp. and of the Company prepared in accordance with PRC GAAP. For more information of Sinopec Corp., see Sinopec Corp.'s periodic reports filed with the SEC on www.sec.gov. Sinopec Corp.'s periodic reports do not constitute part of this offering memorandum.

Sinopec Engineering

Sinopec Engineering is a subsidiary of the Company and focuses on providing integrated engineering and technical services for domestic and overseas refining and chemical engineering market. It is the largest refining and petrochemical engineering company in China. In May 2013, the H shares of Sinopec Engineering were successfully listed on the SEHK (stock code: 2386). Sinopec Engineering's periodic filings do not constitute part of this offering memorandum.

Sinopec Oilfield Service

Sinopec Oilfield Service, formerly Sinopec Yizheng Chemical Fibre Company Limited ("Yizheng"), is a subsidiary of the Company focusing on providing petroleum engineering and technical services. In December 2014, pursuant to a series of agreements entered into by the Company, Sinopec Corp. and Yizheng, Yizheng transferred all of its chemical fibre business to Sinopec Corp., and the Company injected its petroleum engineering business into Yizheng. In March 2015, Yizheng changed its name to Sinopec Oilfield Service. Sinopec Oilfield Service is the largest petroleum engineering and oilfield technology service provider in China, and an integrated contractor and technology service provider. On March 3, 2015, Sinopec Oilfield Service raised approximately RMB6 billion from a nonpublic issuance of new A-shares to investors. Sinopec Oilfield Service's periodic filings do not constitute part of this offering memorandum.

Competitive Strengths

We are a global leader and the largest integrated petroleum and petrochemical company in China with strong government support.

We are the largest integrated petroleum and petrochemical company in China and one of the largest in the world in terms of operating revenue, according to the "2020 Fortune Global 500." In 2019, we reported an operating revenue of RMB3.00 trillion, which ranked second among "2020 Fortune Global 500" companies.

We maintain a leading position in China's petroleum and petrochemical industry. In 2019, we accounted for approximately 38.4% of crude oil processed, 66.4% of major refined oil products sales volume and 60.9% of ethylene production in China.

We play a broad and strategically important role in facilitating China's overall economic growth and development, and we benefit from strong government support. We are 100% owned and controlled by the SASAC and operate under the supervision of the SASAC. The PRC government has designated us to establish China's National Strategic Crude Oil Storage. The energy industry we operate in is strategically important to China's economic growth, and we have important responsibilities in implementing national energy policies and securing refined oil products supplies necessary for China's continued economic growth.

In 2019, our operating revenue accounted for approximately 3.03% of China's GDP. Our 2019 consolidated tax payments in China accounted for approximately 1.64% of China's total government fiscal income in 2019.

We operate effectively as an integrated petroleum and petrochemical company with a leading position in every segment along the oil and gas value chain.

Our core business covers all segments of the oil and gas value chain from upstream and midstream to downstream. Our integrated operations generate substantial synergies which we believe both facilitate value maximization and resources sharing along the petroleum and petrochemical business chain as well as enhance our risk management and capability to sustain market volatility.

We are the second largest oil and gas producer in China in terms of 2019 production volume. In 2019, we reported total proved oil and gas reserves of 3,406 million boe and total oil and gas production of 193 million boe.

We are the largest refined oil products producer in the world, with an annual primary distillation capacity of 293 million tonnes as of December 31, 2019. We processed 250 million tonnes of crude oil in 2019 and 176 million tonnes in the nine months ended September 30, 2020, respectively.

We have established a nationwide refined oil products distribution network comprising 30,727 service stations as of September 30, 2020, representing the largest station network in China. In addition, we are the largest distributor of major refined oil products and various other refined oil products in China by volume.

We are the largest chemical products producer in China in terms of 2019 production volume, with ethylene, polypropylene, polyethylene and synthetic rubber production capacity and output that place us among the top global petrochemical companies. Our total ethylene production in 2019 was 12.5 million tonnes, representing approximately 60.9% of total domestic production, respectively.

We are one of the largest providers of refining and petrochemical engineering technical services in China measured by revenue in 2019. We leverage our refinery and ethylene unit design and construction capabilities and portfolio of patented technologies to complete large-scale refining and petrochemical construction projects. We are committed to becoming a best-in-class global technology and service provider.

We also operate the leading crude oil trading business in China and have consistently been the leading crude oil trading company by volume.

Our market-leading petroleum and petrochemical downstream businesses in China offer stable cash flow generation and growth potential.

As the largest refiner and chemical products supplier in China, we have an attractive business position in the downstream segments of China's expanding energy industry.

As China's economy continues to expand, we expect our strong downstream oil and gas businesses to perform well as economic growth tends to increase the overall demand for downstream oil and gas products. Because we have significant existing advantages in both the refinery and oil and gas products distribution segments, we expect that, as China further grows its economy and liberalizes its refined oil products and gas pricing mechanisms, we will also be well positioned to benefit from increasing cash flows and attractive levels of growth and profitability. In the refining and chemicals segments, our significant advantages include:

- ***Scale***. We had an annual primary distillation capacity of 293 million tonnes as of December 31, 2019. During the nine months ended September 30, 2020, we processed 176 million tonnes of crude oil. We have consistently accounted for over 35% of oil processed in China in recent years. Our aggregate production of gasoline, diesel, kerosene (including jet fuel) and other refined oil products, as well as ethylene and some other chemical products, is the largest in China by volume. We own a total of 16 ten-million-tonne refineries.

- ***Locations***. Most of our refineries and petrochemical plants are located in the eastern and southern regions of China, particularly in the Bohai Rim, the Yangtze River Delta and the Pearl River Delta regions, where higher population levels and higher average family income support greater consumption of refined oil products. Our refineries are located in strategic locations close to our end-users and port facilities, thus reducing transportation costs as compared to our competitors.

- ***Advanced Technologies***. We have developed the capability to construct large-scale refining and petrochemical facilities using our proprietary technologies. We have also been increasingly seeking to develop our own proprietary high-sulfur, high-acid heavy crude oil processing techniques so that we can be adaptable to a wider selection of feedstock for our refineries and improve the economics of our refining business. Thanks to the advanced technologies, our refined oil products are of high standards. We believe our advances in this area represent the highest level of technology in use in this industry segment in China.

In the marketing and distribution segment, our significant advantages include:

- ***Broad Network***. We operate the largest retail distribution network in China as of September 30, 2020, comprising a network of 30,727 service stations nationwide. The number of our Easy Joy convenience stores, most of which are located in our service stations, reached 27,508 as of September 30, 2020.

- ***Strategic Locations***. A large percentage of our service stations are located in the eastern and southern parts of China where economies are more developed and vehicle ownership is higher. We also own a large number of stations in locations near expressway access points and transportation hubs with high transaction volume. Because of the strategic locations of our service stations, we achieved an annual average sales volume of 3,605 tonnes per station in the nine months ended September 30, 2020.

- ***Integrated Ecosystem***. As of September 30, 2020, our EPEC platform had approximately 79,560 registered enterprises and approximately 236,100 registered users, with a total transaction amount of more than RMB318.4 billion in the nine months ended September 30, 2020. As of September 30, 2020, our Chememall.com platform had 11,200 registered customers, with a gross market volume of 40.8 million tonnes of products and a transaction value of approximately RMB211.2 billion for the nine months ended September 30, 2020. We have also been making efforts on building an internet ecosystem based on our gas retail and convenience stores network, especially the smart gas stations featuring cellphone apps and touchless operations, which can integrate our broad offline retail distribution network and provide customers with eximious service experience.

- ***Well-known Brands***. Our "Sinopec" brand was worth RMB144.5 billion and RMB157.1 billion in 2018 and 2019, respectively, according to World Brand Lab. We also own and promote a range of well-recognized brands for our products and services. For example, our "Great Wall" lubricant oil brand embeds our industry-leading quality and technology and has been designated as the official lubricant oil for China's aerospace programs. In 2018 and 2019, our "Great Wall" brand was worth RMB31.8 billion and RMB30.7 billion, respectively, according to World Brand Lab.

We develop our operational excellence by reducing operating costs, adjusting production to market demands and improving efficiency and reliability.

We have taken advantage of our integrated business model to implement measures to drive the growth of new resources while reducing our expenditures and we have continued to make structural adjustments and enhance efficiency.

We closely monitor and adjust our feedstock structure and product sales portfolio in our refining and chemicals segments in response to changes in market demands. Recently, we took advantage of the low crude oil price to increase the margin of our refined oil products and chemicals. For example, we increased production of high value-added refined oil products, maintained stable refinery throughputs and further upgraded the quality of our refined oil products. The rapid development of our non-fuel businesses such as convenience stores, branded credit cards for use at our service stations and e-commerce devices is also a significant contribution to the growth of our downstream businesses. In 2017, we launched our online "supply chain-to-business" platform "EPEC", China's first e-commerce platform for the petrochemical sector.

By September 30, 2020, EPEC platform had approximately 79,560 registered enterprises and approximately 236,100 registered users, with products in approximately 2.7 million categories available for online sale. In 2019, EPEC platform had a total transaction amount of more than RMB478.4 billion and a total on-line payment amount of more than RMB180.2 billion. As of September 30, 2020, our chemical products e-commerce platform, "chememall.com," had 11,200 registered customers, with a gross market volume of 40.8 million tonnes of products and a transaction value of approximately RMB211.2 billion for the nine months ended September 30, 2020.

We have prudent financial policies and an effective risk management system which contribute to our solid financial results.

We have prudent financial policies and are implementing centralized management of our financial and treasury functions to manage our financial resources and risks more effectively.

- ***Debt and Leverage Management.*** As our business has expanded, we have increased our focus on managing leverage, including setting appropriate target leverage ratios and enhancing our debt maturities profile and currencies structure to reduce risk and diversify our financing channels.

- ***Treasury Management.*** We operate a highly-centralized treasury management system which uses centrally controlled collections and payments and internal closed-end settlements and funding allocations with a goal to reducing our overall funding costs and improving our use of capital.

- ***Risk Management and Internal Controls.*** We have established comprehensive risk management and internal control systems. The Risk Management Group and the Risk Management Office at the group level work closely with the various business units to enhance real-time risk identification, measurement, supervision and prevention in operations. Our internal control system extends across and through both company structures and business lines.

We believe our sustained attention to our financial policies and initiatives will help us to reduce our potential risks and maintain a prudent and stable financial profile as we expand globally. We maintained a total debt to total assets ratio of 20.5% and a total debt to total capitalization ratio of 29.9% as of September 30, 2020. For the calculation of total debt, see "Capitalization and Indebtedness" and note (3) to "Selected Financial Information."

We have an experienced management team with a strong corporate governance system and a high performance corporate culture.

Our Chairman and General Manager were appointed by the State Council, the highest level administrative body in the PRC government, and our other senior executives were also appointed through a rigorous selection process. Our senior management team consists of highly experienced and widely respected professionals with strong experience in the energy and chemical industries and extensive experience in exploration and production, refining, distribution and human resources management. Our major subsidiary Sinopec Corp. is a public company with its shares listed on the stock exchanges in Hong Kong, London, New York and Shanghai. It is the first Chinese company to have obtained a listing of its shares on four stock exchanges and, as a result, is subject to high international standards of corporate governance.

We are seeking to build a high performance corporate culture based on the principles of unity, entrepreneurship and diligence. Our internal management policies are geared toward promoting innovation, teamwork and risk prevention. Our business philosophy is founded on integrity and trustworthiness. We give high priority to the well-being of our employees to enhance cohesion and loyalty and promote the sustainable development of our businesses and companies.

Strategy

Our business objective is to build a world-leading energy and chemical company which is highly responsible, respected and well regarded in its fields. To realize this goal, we seek to implement the following strategies:

Reinforce the advantages of our integrated business model with a value-oriented approach

We intend to reinforce the advantages that come from being an integrated petroleum and petrochemical company. We will balance the development and investment across the upstream, midstream and downstream businesses with a focus on value creation. Since we have a long value chain from oil and gas production, refining, further down to basic chemicals and specialty chemicals production and marketing and distribution of refined oil products, we will selectively increase or decrease the production of certain products according to market conditions and industrial trends. We will continue to grow our oil and petrochemical engineering technical services segment as a separate business and at the same time benefit from the synergies resulted from integrated technological advancement to support our upstream and downstream production businesses.

Continue to stimulate the momentum of our operations through innovation

We plan to continue to stimulate the momentum of our operations by encouraging innovation in technologies, management, product and service development and business models with an aim to make further growth through improved systems and policies. We will focus on developing technology to lower our costs and produce high value-added, high performance products. We believe our proprietary technologies combined with our strong research and development capabilities will support us to implement such a strategy. In addition, we will actively explore new business models and selectively develop market segments with strong market supply and demand dynamics and potentially attractive margins. For example, we have established operating units to develop and sell high-quality lubricant oil and vessel lubricant because of high demand for and limited supply of such products in China. Furthermore, we intend to further diversify the types of our services to benefit our customers with services that are differentiated from our competitors, and shift the focus of our value creation model from manufacturing to innovation and services. In addition to our EPEC and Chememall.com platforms, we have been making efforts on building an internet ecosystem based on our gas retail and convenience stores network, especially the smart gas stations featuring cellphone apps and touchless operations. We also focus on the transformation and expansion into new energy sector such as hydrogen, electric vehicles and bio-fuel.

Improve our operational and financial efficiencies through optimizing resource allocation

As an integrated petroleum and petrochemical company, we have been benefitting from resource sharing along the petroleum and petrochemical business chain. We will continue to take advantage of the synergies between our petroleum and petrochemical businesses and optimize the allocation of our resources, including operational networks, marketing channels, financial, human and information resources, throughout the Company and our businesses. We will continue to focus on quality and efficiency and strengthen our dominant position in the downstream businesses and to enhance profitability. We plan to further optimize our feedstock structure, enhance the differentiation of chemical products and materials and focus our product development on consumer needs, all with a view to continuing to provide our large client base with industry-leading products and services. In addition, we will continue to improve the operational and marketing channels for our oil products, consolidate the development of the end-market for our products and enhance end-market penetration by opening more service stations. Through these policies we seek to further increase our market share, increase the overall scale of our businesses and improve profitability along our business value chain.

Increase our cooperation with reputable partners

Leveraging an established international presence, we will continue to invite and cooperate with reputable partners to enhance and broaden our operating expertise and mitigate operational risks. In March 2015, we have attracted over RMB105 billion investment in Sinopec Marketing from 25 domestic and foreign investors, which brought us not only financial resources but also business opportunities across various sectors. In 2016, we took our indirectly wholly-owned subsidiary Sichuan Pipeline Company, as the platform to introduce capital and attracted RMB22.8 billion investments from China Life Insurance Co., Ltd. and

SDIC Communications Holding Co., Ltd. In 2016, we entered into strategic co-operations with the governments of Shaanxi Province and Chongqing Municipality and China Post Group Co., Ltd., respectively, to cooperate in a number of areas across our upstream and downstream businesses as well as our non-fuel business. In April 2017, we entered into a strategic cooperation framework agreement and a purchase and sale agreement of natural gas with China Huadian Corporation to enhance energy cooperation between the parties. We also intend to capture the strategic opportunities arising from the One Belt and One Road Initiative to actively participate in overseas oil and gas exploration and production, refining and chemical operation and trading, with a view to improving our international operation and management excellence. In December 2015, Sinopec Corp. completed its investment in SIBUR, Russia's largest gas processing and petrochemicals company, as a strategic investor. This partnership will help us diversify and secure our long-term sourcing of refined oil products. In January 2016, the Yanbu refinery project in Saudi Arabia was officially on stream and inaugurated and we entered into a strategic cooperation framework agreement with Saudi Arabian Oil Company. The Yanbu refinery project is our first overseas refinery project with a designed processing capability of 400 thousand barrels per day, operating by Yanbu Aramco Sinopec Refining Company (YASREF) Limited. Such expansion will include developing and implementing management concepts and systems that meet world class standards and attracting top international talents, and will contribute to realizing our strategy of establishing Sinopec as a global brand.

Emphasize low-carbon consumption and sustainable development

As a state-owned limited liability company, we see ourselves as a corporate citizen that is charged with the social responsibility to promote sustainable economic development. We support the PRC government's programs in promoting low-carbon consumption. In addition to accelerating the development of our natural gas assets, we are actively exploring alternative sources of energy including unconventional oil and gas resources such as CSG, shale gas, shale oil and bio-energy such as bio-diesel, bio-coal and bio-jet fuel. We continue to promote energy saving and emissions reduction as well as low-carbon production at all of our production facilities. As one of the largest employers in China, we have comprehensive programs across all of our operating units and segments to promote the efficient use of energy.

Recognizing that the petrochemical business entails inherent environmental risks, we will continue to emphasize the importance of environmental protection in all of our operations. We strictly implement health, safety and environmental measures across our entire supply chain and operations.

Recent Developments

In the first three quarters of 2020, as a result of significant achievements made by China in control and prevention of COVID-19 outbreak, we have witnessed a stable and positive momentum of the China's economy. As a result, we expect that domestic demand in China for petroleum and petrochemical products will continue to witness a steady recovery. However, due to various external factors such as the COVID-19 pandemic and the global economic situation, we expect international oil prices to continue to fluctuate at a low level in the near term. Confronted with the present situation, the Company will focus on the vision of building a world-leading clean energy and chemical company, actively promote transformation and development, and continue the campaign of sustainable development and improving performance. The Company will coordinate efforts of improving performance, adjusting structure, promoting reform and preventing risks to achieve better performance.

Exploration and Production

Overview

We are China's second largest oil and gas producer based on production volumes in 2019. In recent years, we have successfully expanded our exploration and production segment by leveraging our domestic and overseas resources to achieve effective control and replacement of significant oil and gas reserves. Globally, we had 3,406 million boe of proved reserves of crude oil and natural gas, including 2,016 million barrels of crude oil and 8,341 bcf of natural gas as of December 31, 2019. In 2019, our production of crude oil and natural gas was 538 million boe.

Our domestic exploration and production activities are mainly conducted through Sinopec Corp. We have implemented a clear strategy with respect to our domestic resources. We have been maintaining a stable output from our oil and gas fields in the eastern region, expanding production from western areas, accelerating development of natural gas in the southern region, advancing offshore exploration and production and achieving breakthroughs in the development of unconventional resources such as coal-bed methane, shale oil and gas. We have been striving to utilize advanced technology to further develop our upstream business. In China, we had 2,636 million boe of proved reserves of crude oil and natural gas, including 1,433 million barrels of crude oil and 7,216 bcf of natural gas as of December 31, 2019.

We have historically conducted our overseas exploration and production activities mainly through SIPC. As a result of the SIPC Restructuring, we no longer treat SIPC as our consolidated subsidiary. The day-to-day management and operation of SIPC has been handed over to its newly established board of directors while we continue to provide advice and guidance on its operation through the two directors appointed by us. Consequently, our estimated proved reserves and production of crude oil and natural gas as of and for the years ended December 31, 2017, 2018 and 2019 only include a share of the estimated proved reserves and production of SIPC reflecting our percentage of equity interest in SIPC. In 2019, our overseas crude oil and gas production was 95.4 million boe, accounting for 27.6% of our total crude oil and gas production. As of December 31, 2019, our overseas proved crude oil and natural gas reserves amounted to 770 million boe, accounting for 22.6% of our total crude oil and natural gas reserves.

Exploration and Development Activities

During the years ended December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2020, we made progress with our key exploration and development projects in Jiyang, Shunbei, Hangjinqi, Yuanba gas field and Fuling shale gas field. We had new breakthroughs in our exploration of oil and gas in the Sichuan Basin, Beibu Gulf of the South China Sea, the Ordos Basin, the Tarim Basin, the Junggar Basin, Yin'e Basin, Shengli Oil Field and the North Jiangsu Basin. We made a number of technological breakthroughs in our exploration of the Fuling marine-facies shale gas field. In 2019, the Fuling shale gas field reached an annual production capacity of 6.748 billion cubic meters. We made two-dimensional seismic exploration of 1,943 kilometers, three-dimensional seismic exploration of 7,475 square kilometers, and drill footage of 1,530 kilometers, respectively, in 2019.

We continued to increase our domestic crude oil production through an enhanced oil recovery rate. We have stabilized our crude oil output in eastern China, increased crude oil output in western China and continued our accelerated development in blocks in southern China. We made rapid progress in research and experimentation in relation to staged fracturing of horizontal wells. We kept rapid growth in natural gas development. We developed most of our natural gas in Sichuan Basin and Erdos Basin and improved our production capacity. In 2019, our production capacity of conventional natural gas increased by 2.2 billion cubic meters per annum and our production capacity of shale gas increased by 1.7 billion cubic meters per annum.

Oil and Natural Gas Reserves

As of December 31, 2019, our estimated proved reserves of crude oil and natural gas were 3,406 million boe, including 2,016 million barrels of crude oil and 8,341 bcf of natural gas, representing an increase of 2.8% from December 31, 2018. 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 table sets forth our estimated proved reserves of crude oil and natural gas as of December 31, 2017, 2018 and 2019, respectively.

	Crude Oil	Natural Gas	Combined
	(million barrels)	*(billion cubic feet)*	*(million boe)*
Proved reserves			
As of December 31, 2017			
Total	1,935	8,214	3,304
PRC	1,261	6,985	2,425
Overseas	674	1,229	879
Sinopec Corp.	338	12	340
SIPC(1)	336	1,217	539
As of December 31, 2018			
Total	1,977	8,011	3,312
PRC	1,339	6,793	2,471
Overseas	638	1,218	841
Sinopec Corp.	327	13	329
SIPC(1)	311	1,205	512
As of December 31, 2019			
Total	2,016	8,341	3,406
PRC	1,433	7,216	2,636
Overseas	583	1,125	770
Sinopec Corp.	307	9	309
SIPC(1)	276	1,116	462

Note:

(1) Represents 30% of the estimated proved reserves of SIPC due to the capital restructuring of SIPC.

We manage our domestic reserves estimation internally, and SIPC manages most of our overseas reserves estimation, both with support from external technical experts. Please refer to the section in this offering memorandum entitled "Presentation of Information – Oil and Gas Reserves" for further information.

Oil and Gas Fields

PRC

We currently operate 12 oil and gas operating units managing our oil and gas fields across China, each of which consists of many oil and gas producing blocks. As of December 31, 2019, the total acreage of our oil and gas producing fields and blocks in China was 505,000 square kilometers, including 33,500 square kilometers of developed acreage, all of which were net developed acreage; and 472,000 square kilometers of gross undeveloped acreage, all of which were net undeveloped acreage.

Shengli production field is our most important crude oil production field in China. As of December 31, 2019, it consisted of 75 producing blocks of various sizes extending over an area of 6,500 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 2019, Shengli production field produced approximately 160 million barrels of crude oil and 18 billion cubic feet of natural gas, with an average daily production of 445 thousand boe, accounting for approximately 37% of our total crude oil and natural gas production for the year.

Northwest oilfield is our second largest oilfield, which has an output exceeding 57.3 million boe in 2019. It is the first large Paleozoic marine carbonates oilfield with up to 1.5 billion tons of proved petroleum reserves and one of the top ten onshore fields in China.

Yuanba gas field is the deepest buried marine-based gas field in China. Its purified gas production capacity was 129 billion cubic meters per year. In 2014, we commenced construction of LNG wharfs in Shandong, Guangxi and Tianjin, each with an annual capacity of 3 million tonnes. The two projects in Shandong and Guangxi were completed in 2014 and 2016, respectively. The project in Tianjin, with an annual unloading capacity of 3 million tonnes, was completed and operational in early 2018.

Overseas

Our overseas oil and gas properties are mainly held by SIPC and Sinopec International Petroleum E&P Hongkong Overseas Limited ("SIPOL"), a joint venture owned by Sinopec Corp. and SIPC on an equal basis, respectively. As of December 31, 2019, SIPC's overseas oil and gas production fields and blocks are located in 25 countries. SIPOL has a 50% interest in Kazakhstan-based Caspian Investment Resources Ltd., 49% interest in Russia-based Taihu Limited, and 50% interest in Colombia-based Mansarovar Energy Colombia Ltd. In addition to the oil and gas properties in which SIPC or SIPOL holds an interest, Sinopec Corp. also holds a 25.3% interest in Angola Block 18.

Oil and Natural Gas Production

The following tables set forth our average daily production of crude oil and natural gas sold for the periods indicated. The production of crude oil includes condensed oil.

	Year Ended December 31,		
	2017	**2018**	**2019**
Crude oil production			
Daily production (thousand barrels)	970	956	945
Total production (million barrels)	355	349	345
Sinopec Corp	294	289	284
SIPC(1)	61	60	61
Average realized sales price (US$ per barrel)(2)	48.8	64.8	58.4
Natural gas production			
Daily production (mmcf)	2,802	2,997	3,176
Total production (bcf)	1,025	1,094	1,159
Sinopec Corp	905	977	1,048
SIPC(1)	120	117	111
Average realized sales price (US$ per kcf)(2)	5.4	6.0	6.4
Total crude oil and natural gas production			
Daily production (thousand boe)	1,435	1,455	1,474
Total production (million boe)	525	531	538
PRC	400	411	424
Overseas	125	120	115
Sinopec Corp.	45	40	35
SIPC(1)	77	80	79

Notes:

(1) Represents 30% of SIPC's production due to the capital restructuring of SIPC.

(2) Represents only the average realized sales price of Sinopec Corp. due to the capital restructuring of SIPC.

New Energy Development

The development and utilization of new energy play an increasingly important role in optimizing energy resources, coping with energy and environment challenges and achieving sustainable development. We are exploring the possibility of using unconventional oil and gas resources as a substitute for or supplement to conventional resources in order to provide more sustainable supply of hydrocarbon energy. Our new energy operations include CSG, shale oil, shale gas, coalbed methane, LNG, geothermal heating, solar photovoltaics and other unconventional energies. For example, we launched the South Yanchuan coalbed methane project in 2013. By the end of December 2018, our geothermal heating scope has expanded to 25 municipalities and regions in China, with geothermal heating capacity reaching 50 million square meters and accounting for

40% of China's conventional geothermal heating. In the past two years, by utilizing our world-leading fracturing and fast drilling technologies, we made significant progress in the exploration and development of our, and China's, first shale gas field in Fuling, and had new discovery of shale gas in Yongchuan, each of which is located in the Sichuan Basin. We made a number of technological breakthroughs and achieved satisfactory development results, allowing us to commence commercial production in our Fuling shale gas field ahead of schedule, and made China the third country in the world to commence commercial production of shale gas. In 2019, the Fuling shale gas field reached an annual production capacity of 6.748 billion cubic meters. We were awarded the "Shale Oil and Gas International Pioneer Award" by International Gas Union and American Gas Association in 2014.

We also seek to gain access to new technology and operational expertise with regard to unconventional resources through international partnerships and acquisitions. In June 2013, SIPC acquired a 50% undivided interest in 850,000 net leasehold acres in the Mississippi Lime play in northern Oklahoma for approximately US$1 billion from Chesapeake Energy. In July 2014, SIPC acquired from PETRONAS a 10% equity interest in the Pacific Northwest LNG project located on Canada's west coast near Prince Rupert, British Columbia.

Refining

Overview

In 2017, 2018 and 2019, our refinery throughputs were approximately 242 million tonnes, 246 million tonnes and 250 million tonnes, respectively, representing a market share of approximately 42.3%, 40.8% and 38.4% of the total crude oil processed in China for 2017, 2018, 2019, respectively. We produce a full range of refined oil products. In 2015, we developed the integrated technology of catalytic hydrogenation of light oil (IHCC), and realized industrial conversion of catalyzed diesel and high-octane gasoline, which ensured the optimization of our product structure and the upgrade of the quality of our produced refined oil. We built a pilot plant in China to produce bio-jet fuel using vegetable oils as feedstock in 2011 and our bio-jet fuel was successfully used in trial commercial flights in 2015, resulting in us receiving the first license to produce bio-jet fuel in China. Further improved technologies allow us to increase our production of high value-added and high grade refined oil products. The gasoline and diesel we produced and distributed have met the highest national standard.

The following table sets forth the production of our principal refined oil products for periods indicated.

	Year Ended December 31,		
	2017	2018	2019
	(in million tonnes)		
Gasoline	57.0	61.2	62.8
Diesel	66.8	64.7	66.1
Kerosene (including jet fuel)	26.9	28.9	31.2
Light chemical feedstock	39.0	39.0	40.2
Lubricant	1.1	1.1	1.2
Liquefied petroleum gas	14.3	15.1	14.8
Fuel oil	1.5	2.2	2.3

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 for our own chemical operations. Most of our refined oil products was sold domestically to a wide variety of industrial and agricultural customers, with the remaining amount exported.

On January 13, 2016, the NDRC promulgated the Notice of Further Improving the Price Formation Mechanism of Refined Oil (Fa Gai Jia Ge [2016] No. 64). The notice provides that, if the price of the crude oil in the international oil markets which the domestic refined oil products prices is related to is less than 40 dollars per barrel, then the domestic refined oil products prices will not be adjusted. The notice also provides for the establishment of a risk reserve for refined oil price adjustments and relaxing control over the ex-works prices of liquefied petroleum gas.

Refining Facilities

Currently we operate 33 refineries in China and have invested in one refinery overseas. Our refineries in China are mainly located in China's coastal regions, including the Bohai Rim cluster, the Yangtze River Delta cluster and the Pan-Pearl River Delta cluster, which have more developed economies, higher population densities and larger numbers of oil product consumers than the other regions of China. The strategic locations of our coastal refineries also reduce the transportation costs on shipments from the crude oil import markets. We have also been increasingly seeking to develop our own proprietary high-sulfur, high-acid heavy crude oil processing techniques, which we believe represent the most advanced technology in use in China.

As of December 31, 2019, our total primary distillation capacity in China was 293 million tonnes per annum. In line with the global oil and gas industry's focus on large-scale, base-load and integrated refinery developments, our refineries have an average capacity of 9.2 million tonnes, significantly higher than the average capacity of any stand-alone refinery in the world and in China. As of December 31, 2019, 15 of our refineries in China reached a primary distillation capacity of ten million tonnes or more per annum, while our largest refinery, Zhenhai refinery, had a primary distillation capacity of 23 million tonnes per annum. In addition, we own eleven integrated refining and chemical production facilities. Our refinery throughputs were 241.9 million tonnes, 246.0 million tonnes, 250 million tonnes and 176 million tonnes for the years ended December 31, 2017, 2018 and 2019, and for the nine months ended September 30, 2020, respectively. We are planning to build four world-class refining and chemical bases in Maozhan, Zhenhai, Shanghai and Nanjing by 2020, with the aim to further enhance our competitiveness.

The following table sets forth our total primary distillation capacity per annum of crude oil and refinery throughputs as of and for the periods indicated.

	As of and for the Year Ended December 31,		
	2017	**2018**	**2019**
		(in million tonnes)	
Primary distillation capacity per annum[1]	296.5	294.7	292.7
Refinery throughputs	241.9	246.0	250.4

(1) These numbers reflect the actual distillation capacity and refinery throughputs of our joint ventures, without regarding our ownership therein.

For the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2020, our overall yield for all refined oil products at our refineries remained at approximately 95%.

Sources of Crude Oil

Crude oil is our most important raw material. The following table sets forth the sources of our crude oil supply for the periods indicated.

	Year Ended December 31,		
	2017	**2018**	**2019**
		(in million tonnes)	
Source of Supply			
Self-supply in China	22.9	23.0	23.2
PetroChina Company Ltd	1.2	0.9	0.8
CNOOC Ltd	0.9	0.2	0.8
Import	210.7	217.6	220.8
Others	6.2	4.3	4.8
Total	241.9	246.0	250.4

Chemicals

Overview

We are the largest chemicals producer in China measured by production. We produce a full range of chemical products including intermediate petrochemicals, synthetic resins, synthetic fiber monomers and polymers, synthetic fibers, synthetic rubber and chemical fertilizers. As a result of our continuing efforts in enhancing products differentiation, we have been able to produce greater high value-added and high performance products. In 2019, following the "basic plus high-end" development philosophy, we built up our capacity to produce these high-end products, optimized our business portfolio layout and continuously fine-tuned our chemical feedstock mix to increase the yield at lower cost. We also enhanced integration among production, marketing, R&D and its application, further adjusted facility structures to enhance the dynamic optimization of facilities and product chain, and improved the utilization based on market demand. In 2019, over 65.3% of synthetic resins and over 90% of synthetic fibers we produced were among those high-end products, many of which were specifically customized to the needs of our customers.

Synthetic resins, synthetic fibers, synthetic rubber, chemical fertilizers and some intermediate petrochemicals comprise a significant majority of our external sales. Synthetic fiber monomers and polymers and intermediate petrochemicals, on the other hand, are mostly internally consumed as feedstock for the production of other chemical products. Our chemicals operations are integrated with our refining businesses, which supply a significant portion of our chemical feedstock such as naphtha. Our total sales volume of chemical products was 79 million tonnes, 87 million tonnes, 90 million tonnes and 62 million tonnes, in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively. Because of the strong domestic demand, most of our chemical products are sold in China's domestic market. In December 2015, Sinopec Corp. completed its investment in SIBUR, Russia's largest gas processing and petrochemicals company, as a strategic investor. We believe that this partnership will help to diversify and secure our long-term sourcing of refined oil products.

Products

Intermediate petrochemicals

We are the largest ethylene producer in China. We have developed our proprietary technology to design and construct one-million tpa ethylene production facilities which we believe are among the most technologically advanced ethylene production facilities in the world. We continue optimizing our feedstock structure by the full utilization of refinery by-product gas, heavy vacuum gas oil and other resources as feedstock. The amount of naphtha used in our total feedstock for the production of ethylene was maintained at a low percentage. We produced approximately 11.6 million tonnes, 11.5 million tonnes and 12.5 million tonnes of ethylene, representing a market share of 63.7%, 62.5% and 60.9% with respect to domestic ethylene production for the years ended December 31, 2017, 2018 and 2019, respectively. Nearly all of our ethylene produced are used as feedstock for our chemicals production.

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

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

The following table sets forth our production volume for each of our principal intermediate petrochemical products for the periods indicated.

	Year Ended December 31,		
	2017	2018	2019
	(in thousand tonnes)		
Ethylene	11,609	11,512	12,493
Propylene	9,479	9,731	10,586
Total	21,088	21,243	23,079

Synthetic resins

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

The following table sets forth our production volumes for each of our principal synthetic resins for the periods indicated.

	Year Ended December 31,		
	2017	2018	2019
	(in thousand tonnes)		
Polyethylene	7,486	7,309	8,079
Polypropylene	7,163	7,476	7,895
Polyvinyl chloride	203	232	239
Polystyrene	629	583	674
Others	734	644	660
Total	16,215	16,244	17,548

Synthetic fiber monomers and polymers

Our principal synthetic fiber monomers and polymers are purified teraphthalic acid, ethylene glycol, acrylonitrile, caprolactam, polyester, polyethylene glycol and polyamide fiber. Based on our 2019 production volume, we are the largest producer of ethylene glycol and the major producer of purified teraphthalic acid and caprolactam in China. Most of our production of synthetic fiber monomers and polymers are used as feedstock for synthetic fibers.

The following table sets forth our production volume for each of our principal synthetic fiber monomers and polymers for the periods indicated.

	Year Ended December 31,		
	2017	2018	2019
	(in thousand tonnes)		
Purified teraphthalic acid	2,248	2,063	2,780
Ethylene glycol	2,690	2,751	2,506
Acrylonitrile	979	820	933
Caprolactam	589	716	753
Polyester	2,722	2,754	2,792
Others	456	484	547
Total	9,684	9,588	10,311

Synthetic fibers

Our principal synthetic fiber products are polyester fiber and acrylic fiber.

The following table sets forth our production volume for each of our principal synthetic fibers for the periods indicated.

	Year Ended December 31,		
	2017	**2018**	**2019**
	(in thousand tonnes)		
Polyester fiber	1,006	1,020	1,067
Acrylic fiber	208	193	216
Others	26	25	18
Total	1,240	1,238	1,301

Synthetic rubbers

Our principal synthetic rubbers are cis-polybutadiene rubber, styrene butadiene rubber ("SBR"), styrene butadiene-styrene thermoplastic elastomer and isobutadiene isoprene rubber ("IIR") and styreneic block copolymers (SBCs). Based on our production in 2019, we are the largest producer of cis-polybutadiene rubber in China.

The following table sets forth our production volume for each of our principal synthetic rubbers for the periods indicated.

	Year Ended December 31,		
	2017	**2018**	**2019**
	(in thousand tonnes)		
Cis-polybutadiene rubber	363	431	453
Styrene butadiene rubber	317	269	386
Isobutadiene isoprene rubber	13	27	26
Others	408	452	495
Total	1,101	1,179	1,363

Chemical fertilizers

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

The following table sets forth our production volume for each of our principal chemical fertilizers for the periods indicated.

	Year Ended December 31,		
	2017	**2018**	**2019**
	(in thousand tonnes)		
Synthetic ammonia	1,101	1,026	1,184
Nitrogen	183	184	199
Total	1,284	1,210	1,383

Marketing and Sales of Chemical Products

The price and sales volume of chemical products are primarily market driven. The southern and eastern regions in China, where most of our chemical plants are located, constitute the major chemical market in China. Our proximity to the major chemical market gives us a geographic advantage over our competitors.

Our principal sales and distribution channels consist of direct sales to end-users, most of which are large and medium-sized manufacturing enterprises, and sales to distributors in our national sales network. In 2016, we established our e-commerce platform "Chem e-Mall," our proprietary online distribution channel of chemical products, which is an effective complement to our traditional sales channels. We had 11,200 customers registered with Chem e-Mall platform as of September 30, 2020, as compared to 9,992 customers as of December 31, 2019. In the nine months ended September 30, 2020, Chem e-Mall platform had a total transaction volume of approximately 40.8 million tonnes and a total transaction amount of approximately RMB211.2 billion. We also provided after-sale services to our customers, including technical support. For example, we set up the customer service hotline 95388 to fairly address customer complaints and to consistently improve customer satisfaction. We continuously strive to improve our product mix and enhance our product quality to meet market needs.

Marketing and Distribution

Overview

We operate the largest sales and distribution network for refined oil products in China with 30,727 service stations under Sinopec brand as of September 30, 2020, 30,721 of which were self-operated service stations. The total amount of gasoline, diesel and kerosene (including jet fuel) that we distributed and sold in China was 177.8 million tonnes, 180.2 million tonnes, 184.5 million tonnes and 123.2 million tonnes in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively, representing a market share of approximately 58.0%, 55.4%, 56.0% and 49.4% of refined oil products distributed and sold in China, respectively. Most of the refined oil products sold by us are produced internally.

In 2017, 2018, 2019 and the nine months ended September 30, 2020, we sold approximately 122 million tonnes, 122 million tonnes, 123 million tonnes and 83 million tonnes of gasoline, diesel and kerosene (including jet fuel) in China, respectively, through our retail network, representing approximately 68.4%, 67.5%, 66.4% and 67.4% of the total gasoline, diesel and kerosene (including jet fuel) sales volume in China for 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively.

- We have a dominant position in the oil and gas fueling market in China.

- We have expanded our CNG business by leveraging our extensive service station network.

- We have issued a total of 168 million loyalty fuel cards which can be used in over 30,000 of our service stations.

- The Great Wall lubricant oil is one of our high-tech and premium quality signature products. It was named as the designated oil in the Beijing Olympic Games 2008, enhancing our brand name.

The table below sets forth a summary of key data in the marketing and sales of refined oil products for the periods indicated.

	Year Ended December 31,		
	2017	2018	2019
Total sales volume of refined oil products (in million tonnes)	198.8	198.3	203.7
Sales volume of refined oil products in China (in million tonnes)	177.8	180.2	184.5
Of which:			
Retail	121.6	121.6	122.5
Direct Sales and wholesale	56.2	58.6	61.9
Average annual throughput of service stations (in tonnes per station)	3,969	3,979	3,992

	Year Ended December 31,		
	2017	2018	2019
Total number of service stations under Sinopec brand	30,633	30,661	30,702
Of which: Self-operated service stations	30,627	30,655	30,696
Franchised service stations	6	6	6

Retail

In 2017, 2018, 2019 and the nine months ended September 30, 2020, we sold approximately 122 million tonnes, 122 million tonnes, 123 million tonnes and 83 million tonnes of gasoline, diesel and kerosene (including jet fuel) in China, respectively, through our retail network, representing approximately 68.4%, 67.5%, 66.4% and 67.4% of the total gasoline, diesel and kerosene (including jet fuel) sales volume in China for 2017, 2018 and 2019 and the nine months ended September 30, 2020, respectively.

All of our retail sales are made through a network of service stations and petroleum shops operated under the "Sinopec" brand. As of September 30, 2020, we had a total of 30,727 service stations, far exceeding our domestic competitors. Through this unified network we are more able to implement consistent pricing policies, maintain both product and service quality standards and more efficiently deploy our retail network.

Though we franchise the Sinopec brand to third-party service stations, service stations that are operated by us account for over 99.9% of the Sinopec-branded service stations. The locations and brand advantages of our service stations are increasingly being evident, with rising throughput per station enhancing profitability of our retail business. The average annual throughput per station for 2017, 2018 and 2019 and the nine months ended September 30, 2020 was 3,969 tonnes, 3,979 tonnes, 3,992 tonnes and 3,605 tonnes, respectively.

Our strong retail network provides extensive geographic coverage of retail sales across China. We continue optimizing the coverage of and accelerating the development of retail outlets, especially service stations in expressway service areas, urban centers, new urban areas, transportation hubs and other key locations. Our retail network occupies a dominant position in China's eastern and southern regions, which consist of the more densely populated and economically developed provinces in China. As of September 30, 2020, we had more than 1,000 service stations in each of 14 provinces, most of which are located in China's eastern and southern regions.

We have developed non-fuel businesses for our full-service stations to transform our network of traditional service stations into a comprehensive one-stop multifunctional integrated service platform that combines "fueling, shopping, dining and car services." The number of our Easy Joy convenience stores reached 27,508 as of September 30, 2020.

We are a leader in China in building self-service petrol stations. We are also a leader in China in promoting the use of pre-paid fuel cards to enhance our customer loyalty. As of September 30, 2020, we have issued 168 million loyalty fuel cards. We have worked with commercial banks, telecom companies and network payment service providers to enable our customers to make convenient prepayments on our fuel cards.

In addition, we have expanded our business into electric vehicles charging market by co-operating with our business partners, such as Beijing Electric Vehicle Co., Ltd., to integrate charging and power stations for electric vehicles into our service stations.

Direct Sales and Wholesale

In 2017, 2018 and 2019 and the nine months ended September 30, 2020, we sold approximately 56.2 million tonnes, 58.6 million tonnes, 61.9 million tonnes, and 40.1 million tonnes of major refined oil products in China, respectively, through direct sales and wholesale, representing approximately 31.6%, 32.5%, 33.6% and 32.6% of our total sales volume of major refined oil products in China for 2017, 2018 and 2019 and the nine months ended September 30, 2020, respectively.

Our direct sales include sales to commercial customers such as industrial enterprises, hotels, restaurants and agricultural producers in China. Our wholesale sales include sales to large commercial or industrial customers and independent distributors as well as sales to certain long-term customers such as railway, airlines, shipping and public utilities. As of December 31, 2019, through our wholesale centers, we operate 334 storage facilities with a total capacity of approximately 18.8 million cubic meters, substantially all of which are wholly owned by us. Our wholesale centers are connected to our refineries by railway, waterway and, in some cases, by pipelines. We also own dedicated railways, oil wharfs and oil barges, as well as rail tankers and oil trucks.

Oil and Petrochemical Engineering Technical Services

Refining and Chemical Engineering Technical Services

We conduct our refining and chemical engineering technical services primarily through Sinopec Engineering. In May 2013, the H shares of Sinopec Engineering were successfully listed on the SEHK (stock code: 2386). We provide technical engineering services for refining and chemical businesses with a full range of services that include technology licensing, consulting, financing assistance, engineering, procurement, construction and pre-commissioning/start-up services.

In 2019, the aggregate value of new contracts of our refining and chemical engineering technical services amounted to US$7.5 billion, including overseas new contracts with amount of US$1.0 billion. In June 2017, the consortium of Sinopec Engineering and Maire Tecnimont SpA, an Italian company, signed an engineering, procurement and construction contract for the Package 3 of the project in relation to the 42 billion cubic meters per annum Amur Gas Processing Plant with Public Joint Stock Company Gazprom.

Some of our landmark projects in 2019 included the Fujian Gulei Refining and Petrochemical Integration Project, Sinopec Tianjin Oil Product Upgrade Project, Tianjin Bohai Chemical DMTO Relocation and Transformation Project, Sinochem Quanzhou Oil Refining Reconstruction and Expansion Project. Representative overseas projects that were entered into by the Group include Saudi Aramco Overhaul and Renovation Project, BASF USA Pipeline Prefabrication Project, Saudi Aramco Marjan Oil and Gas Increase and Expansion Project.

Oil Engineering Technical Services

We conduct our oil engineering technical services primarily through Sinopec Oilfield Service. Our well-trained service teams are equipped with specialty techniques and skills to provide a number of oilfield services, including geophysical exploration, drilling, well logging, mud logging and downhole operations under various geologic and engineering conditions of land, including tidal zones, shallow water areas, mountains, plateaus, deserts and swamps. More than 200 oil and gas projects that we undertook in China have commenced production since 2010. We also actively explore overseas markets to expand our service reach. For example, we are regarded as a preferred drilling service provider by the oil and gas companies in Saudi Arabia and Kuwait. As of December 31, 2019, our engineering technical service teams provided services in 37 countries and regions outside China in relation to 360 oil engineering technical service contracts.

In 2019, the aggregate value of new contracts of our oil engineering technical services amounted to US$10.0 billion, including overseas oil engineering technical services with amount of US$2.4 billion.

Others

International Trade

Our international trade business primarily consists of the international trading activities of our subsidiary, China International United Petroleum & Chemical Co., Ltd. Major items that we import and export include crude oil, refined oil, petrochemicals and equipment and we have a global distribution plan for each product line. We were China's largest crude oil trading company in terms of annual crude oil import and export volume in 2019, with total crude oil international trade volume reaching 342 million tonnes. In addition, we have increased our international trading activities for catalyzers and have enlisted major international oil companies as our customers.

Research and Development

Our research and development division comprises research and development institutes focusing on research and development in the upstream, refining and chemicals segments as well as production safety. The PRC government has granted us a special fund to support our research and development on technological innovation, energy conservation and emission reduction. With respect to exploration and production, we achieved significant breakthroughs in shale gas technologies in Fuling, our first shale gas field, and Yongchuan, each of which is located in the Sichuan Basin. We also made progress on our theoretical study and exploration technologies in relation to Ordovician petroleum accumulation system in the Tarim Basin. In addition, we further developed our high-end measurements-while-drilling tools, such as the high temperature MWD system that can withstand high temperature up to 175ºC. We also broadly promoted the high-efficient vibroseis acquisition technology and significantly improved the quality of seismic data. In 2016, our Yuanba natural gas purification technology was used on an industrial scale and our products applied with this technology could reach Class 1 natural gas standard.

With respect to the refining and chemicals segments, we continued to reinforce development of production technologies for clean products. For example, our fluidized bed resid hydrotreating demonstration devices achieved long-cycle stable operation, and our technologies for production of high-quality needle-like coke with low quality oil slurry was used on an industrial scale. To meet the market needs, we have developed new chemical products, including environment-friendly polypropylene resin with high stiffness and tenacity and a specialty resin used in high-performance medical spun-bond nonwoven fabrics. In addition, we commercialized

(i) the looping process for PP production and a technology for rare-earth isoprene rubber;

(ii) the integrated hydrogenation-FCC process for maximizing light oil products and high octane gasoline from catalytic diesel process, which will optimize our product mix and improve the quality of oil products;

(iii) the method for producing low-carbon olefins by cracking petroleum hydrocarbon; and

(iv) a number of technologies and products, including the gas-liquid polyethylene process, optical-film-grade polyester performance compounds, and styrene-butyl-rubber for high-performance tires, strongly facilitating the Company to produce high-value-added products. In addition, we realized industrial application of our syngas-to-ethylene glycol technology, double-hearth cracking furnace, selective hydrogenation of butadiene and other technologies.

With respect to new energy technologies, we built a pilot plant to produce bio-jet fuel using vegetable oils as feedstock. Our self-developed MTO technology is being commercialized. With the successful trial use of our self-developed bio-jet fuel in commercial flights in 2015, we received the first license to produce bio-jet fuel in China, and made China the fourth country in the world to have proprietary technologies to produce bio-jet fuel.

As of December 31, 2019, we owned more than 43,000 patents in China and overseas. One of our employees won the Top National Science and Technology Award in 2008. In 2019, one of our research and development projects were awarded the National Technological Invention Prize. In addition, six of our research and development projects won the China Technology Advancement Award, and one, three and six of our research and development projects won the China Patent Gold Award, China Patent Silver Award and China Patent Merit Award, respectively.

Property

We own land use rights, buildings, service stations and other properties across China. Our corporate headquarters are located at 22 Chaoyangmen North Street, Chaoyang District, Beijing, 100728, PRC.

Employees

As of December 31, 2019, we had over 400,000 employees. Our employees participate in various basic social insurance plans organized by municipal and provincial governments whereby we are required to make monthly contributions to these plans at certain rates of the employees' salary as stipulated by relevant local regulations. Expenses incurred by us in connection with the retirement benefit plans were approximately RMB6,975 million, RMB8,374 million, RMB8,008 million, and RMB4,936 million, respectively, for the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2020.

Since 2009, we and our subsidiaries have not experienced any strikes, work stoppages, labor disputes or actions which adversely affected the operation of any of their respective businesses in all material aspects. We believe that we and our subsidiaries maintain good relationships with our and their respective employees in all material aspects.

Risk Management

We are exposed to a variety of risks associated with oil and gas and other business operations and financing activities. Our goal in risk management is to ensure that we understand, measure, monitor and mitigate the various risks that arise in connection with our operations. We have established an integrated risk management system through which we seek to manage the risks. Policies and guidelines have been developed to identify, analyze, appraise and monitor the changing risks that we face. We have established a Risk Management Committee to supervise the overall risk management work. Under the Risk Management Committee, there is an Internal Control and Risk Management Department to formulate key internal control and risk management policies, design risk management systems, organize risk assessment work, provide training on risk control and management as well as oversee the implementation of the risk management policies of each of our departments and subsidiaries.

Crude Oil Resource and Sustainable Development Policy: We intend to proactively identify, monitor and manage crude oil supply risk to achieve sustainable development of our business operations. We pursue sustainability through increasing our crude oil supply, strengthening our resource base, acquiring unconventional resources, shaping an integrated value chain and developing cutting-edge technologies.

Debt Management Policy: We have centralized the financing management of our group entities and have diversified our financing sources to include international debt capital markets. Our total debt to total capitalization ratio and total debt/EBITDA ratio remained at approximately 29.93% and 3.35, respectively, as of September 30, 2020, which were consistent with our internal policies to maintain such ratios at a low level. We believe that such ratios will continue to remain at a reasonable level in the foreseeable future. We also endeavor to maintain reasonable debt maturities and currency structure. For the calculation of EBITDA, see note (1) to "Selected Financial Information."

Working Capital Policy: We maintain sufficient cash flow to meet our payment needs. We also maintain a centralized management of funds in order to operate the cash pools of our group entities in an efficient manner.

Investment Policy: The key factors we take into consideration when making investment decisions include investment return, resources acquisition, synergy and integration with our existing key businesses, improvement of service and technical capabilities as well as the various investment risks involved. In addition, we have internal guidelines that specify the minimum return rates for each type of investment.

Health, Safety and Environmental Policy: We have developed a Health, Safety and Environmental ("HSE") management system to strengthen accountability and adopt measures to target root causes rather than symptoms. In accordance with our HSE guideline and strategic goals, we provide HSE training throughout the entire organization, which covers the whole production process and everyone from top management to grassroots operators. We have also issued the Principles of HSE Management, outlining the basic requirements and behavior codes for all managers and organized annual HSE examination and ad hoc inspection to review HSE performance of key subsidiaries.

Legal Risk Management Policy: Our legal risk management system aims to identify and manage risk relating to the entering into and performance of contracts, risk relating to intellectual property rights, employment-related risk and other regulatory risks. The Legal Affairs Department is charged with direct responsibility to oversee and manage legal risk.

Insurance

Through our Safety Production Insurance Fund and other insurance arrangements, we have insurance coverage for our property, personnel, plant, equipment and certain assets that are subject to significant operating risks, third-party liability insurance against claims relating to personal injury, property and environmental damages that result from accidents and employer liabilities insurance. We believe that our insurance coverage is comparable to that of other companies engaged in similar businesses. Our oil and gas operations are subject to hazards and risks inherent in the trading, drilling and production of petroleum products. As protection against these operational risks, we maintain insurance coverage against most potential losses, including the loss of wells, as well as liabilities related to costs of pollution control and environmental compliance. Additionally, we purchase insurance to cover credit risks relating to our international trading business.

Intellectual Property

We rely on a variety of patents, copyrights, trade secrets, trademarks and proprietary information to maintain and enhance our competitive position. In 2019, we applied for 7,439 patents in China and overseas, 4,843 of which were granted. As of December 31, 2019, we owned more than 43,000 patents in China and overseas, and the number of our owned patents ranks first among SOEs in China. We do not believe that any individual property right or related group of intellectual property rights is of such importance that its expiration or termination would materially affect our business.

Legal Proceedings

We and our subsidiaries are involved in certain legal proceedings concerning matters arising in the ordinary course of their business. We believe, based on currently available information, that these proceedings, individually or in the aggregate, will not have a material adverse effect on our results of operations or financial condition.

Environmental Matters

We are subject to various PRC national environmental laws and regulations and also environmental regulations promulgated by the local governments in whose jurisdictions we have operations. China has adopted extensive environmental laws and regulations that affect the operation of the oil and gas industry. There are national and local standards applicable to emissions control, discharges to surface and subsurface water and disposal, and the generation, handling, storage, transportation, treatment and disposal of solid waste materials. The environmental regulations require us to register or file an environmental impact report with the relevant environmental bureau for approval before we undertake any construction of a new production facility or any major expansion or renovation of an existing production facility. The new facility or the expanded or renovated facility will not be permitted to operate unless the relevant environmental bureau has inspected to its satisfaction that the environmental equipment installed in the facility satisfies environmental requirements. Our Health, Safety and Environment Department is responsible for the management and monitoring of environmental matters directly.

We have completed the "Clear Water, Blue Sky" project, which started in 2013. As of December 31, 2019, we had completed the project with a total earmarking investment of RMB20.9 billion and implemented an aggregate of 870 environmental improvement measures. We have also constructed 34 waste water treatment plants and 36 waste gas treatment plants. In 2014, we launched the "Energy Efficiency Doubling" initiative to further integrate our efforts in energy conservation, emissions control and carbon reduction, with a goal to double our energy efficiency by the end of 2025, to reduce our coal consumption by 42 million tonnes, and to reduce the emissions of carbon dioxide, sulfur dioxide and nitrogen oxides by 81 million tonnes, 150 thousand tonnes and 100 thousand tonnes, respectively. In 2019, we recycled 397 million cubic meters of methane gas.

We implemented the "Energy Efficiency Improvement Plan" to reduce resources consumption and control greenhouse gas emissions. In 2019, we completed 438 projects, saving energy equivalent to that produced by 370 thousand tonnes of standard coal per year. The comprehensive energy consumption of was 0.494 tonnes of standard coal per RMB10,000 of our output. We instituted six key energy-saving projects, including energy efficiency improvement through integration of injection, production and transportation, energy system optimization, comprehensive utilization of low-temperature heat, energy efficiency improvement in coal-fired power plants, energy conservation monitoring and diagnosis, and energy conservation and consumption reduction in water circulation systems. We also actively promoted clean energy such as solar energy and geothermal energy. For example, Sinopec Zhenhai's fishery-solar hybrid photovoltaics project has an annual power output of 210 million KWHs, saving 59,800 tonnes of standard coal per year. We have also finished installing solar photovoltaics in 140 service stations, generating 2.12 million KWHs/year.

We believe that our businesses are in compliance with currently applicable national, local and foreign environmental laws and regulations in all material aspects. In addition, with improved management of and supervision on our industrial water consumption level as well as enhanced efficiency in water recycling, our overall industrial water consumption has been reduced by 46 million cubic meters. During the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2020, we did not encounter any material issues relating to environmental matters and were not subject to any material administrative penalties due to any activities that may cause pollution to the environment.

Overview

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

National Development and Reform Commission

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

- formulating a guidance plan for annual production, import and export amount of crude oil, natural gas and gasoline nationwide based on its forecast on macroeconomic conditions in China;

- setting the pricing policy for refined oil and natural gas products;

- approving certain domestic and overseas resource investment projects which are subject to the NDRC's approval as required by the Catalogue of Investment Projects Approved by the Government (2016); and

- approving foreign investment-involved projects that are in excess of certain investment limits. The Ministry of Commerce

The MOFCOM is responsible for examining, approving, record-filing of contracts allocating production quotas for oil and gas development within the PRC, Sino-foreign equity joint venture contracts and Sino-foreign cooperation joint venture contracts for oil and gas development within the PRC. It is also responsible for issuing quotas and licenses for import and export of crude oil and refined oil products.

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

Ministry of Natural Resources

The Ministry of Natural Resources (the "MNR", former the ministry of Land and Resources, the "MLR") is responsible for approving, issuing and registering the licenses that are required to explore and produce crude oil and natural gas in China and approving the transfer of these exploration rights and production rights.

National Energy Administration

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

Regulation of Exploration and Production

Exploration and Production Rights

The PRC Constitution provides that all mineral and oil resources belong to the state. In 1986, the Standing Committee of the National People's Congress passed the Mineral Resources Law (amended in 1996 and 2009, respectively) which authorizes the MNR to exercise administrative authority over the exploration and production of the mineral and oil resources within the PRC, including its territorial waters. The Mineral Resources Law and its supplementary regulations provide the basic legal framework under which exploration licenses and production licenses are granted.

On September 22, 2017, the geological survey qualification examination and approval is cancelled pursuant to the *Decision of the State Council on Canceling a Number of Administrative Licensing Items (No. 46 [2017] of the State Council)*. According to the Announcement of the Ministry of Land and Resources on Strengthening Post-event Supervision after Cancellation of Geological Exploration Qualification Approval published on October 31, 2017, after the cancel of the geological survey qualification examination and approval, MLR shall establish a national geological exploration information publicity platform, which shall be independently reported by the geological exploration unit, and its performance and exploration activities shall be updated regularly, and publicized to the public to provide services for investors to select geological exploration units. At the same time, the platform shall accept the supervision of the competent government departments and the society. Through the supervision and inspection of the government departments and social supervision, the geological exploration units that have verified the false information will be included in the anomaly list, and the geological exploration units that have verified the violations will be blacklisted. Geological exploration units that are included in the list of abnormalities and blacklists shall be subject to restrictions in accordance with the law in matters such as contracting financial funds projects and applying for mining rights.

Incentives for Shale Gas Development

In order to incentivize the exploration, discovery and development of China's shale gas reserves and to increase the supply of natural gas and relieve imbalance between supply and demand of natural gas, the Ministry of Finance of China and the NEA issued the *Notice on Subsidy for Shale Gas Development and Utilization (No. 847 [2012] of the Ministry of Finance)*, pursuant to which the central government will subsidize shale gas production companies at a rate of RMB0.4 per cubic meter from 2012 to 2015.

The NEA issued the *Shale Gas Industry Policy* (the "Policy") on October 22, 2013, which classifies shale gas as a "national strategic new industry" and calls for more fiscal support for exploration and development of shale gas. In particular, subsidies should be given directly to a shale gas production company according to the amount of its shale gas development and utilization. Local governments are also encouraged to provide subsidies to shale gas production companies, with the subsidy amount to be determined by local fiscal authorities. The Policy also reduces or waives compensatory fee for mineral resources, license and royalty fees for shale gas production companies. For encouraged projects like shale gas exploration and discovery, the policy waives customs duty for the imported equipment and machineries that cannot be manufactured domestically, in accordance with relevant regulations. The PRC government also proposed to implement tax incentive programs for shale gas exploration and discovery with respect to resource tax, value added tax and income tax, etc.

In April 2015, to facilitate the development of the shale gas industry, the Ministry of Finance of China and the NEA issued the *Notice on Fiscal Subsidies for Shale Gas Development and Utilization (No. 112 [2015] of the Ministry of Finance)* to further implement the policy of fiscally subsidizing the shale gas industry during the period of the thirteenth "five-year" plan, and the subsidy will be RMB0.3 per cubic meter and RMB0.2 per cubic meter from 2016 to 2018 and from 2019 to 2020, respectively.

Price Controls on Crude Oil

According to the Price Reform Plan of the Crude Oil and Refined Oil promulgated on June 3, 1998, the price of crude oil purchased and sold between the Petroleum and Natural Gas Group Corporation and the Petrochemical Group Company is determined through negotiation between the two parties. The basic principle of negotiation between the buyer and seller is that the cost of domestic onshore crude oil to reach the refinery is basically the same as the cost of imported crude oil to the plant. On January 13, 2016, the NDRC issued the Measures for Administration of Petroleum Products Price, which clearly stipulate that crude oil prices are subject to market-adjusted prices.

Price Controls on Natural Gas

In June, 2013, the NDRC released the *Circular on Adjustment of the Price of Natural Gas (Fa Gai Jia Ge [2013] No. 1246)*. Pursuant to the circular, a dynamic adjustment mechanism shall be established by linking prices of natural gas to the prices of alternative energy to reflect market demands. A reference ceiling price is set by the government bench-marked against city-gate price, and suppliers and buyers may determine the specific prices through negotiations below the price ceiling. The natural gas prices of stock gas and incremental gas shall be differentiated, and the price of incremental gas shall be adjusted in one-go to maintain a reasonable correlations with such alternative energies as fuel oil and liquefied petroleum gas (with the weight of 60% and 40%); stock gas shall refer to the 2012 actual consumption amount, the price of stock gas shall be adjusted step by step to be on par with the price of incremental gas. City-gate prices shall be applied to domestic onshore natural gas and imported pipeline natural gas. Control over the ex-factory prices of shale gas, coal-bed gas, and coal gas and the gas source price of liquefied natural gas shall be lifted and such prices shall be determined by both the supplier and the buyer through negotiation. Where it is necessary to transmit such gases in a mixed manner in long-distance pipelines and sell them together, the uniform city-gate price shall be implemented; where such gases are transmitted in a mixed manner in long-distance pipelines, but are sold separately, the gas source price shall be determined by the supplier and the buyer through negotiation and transportation expenses shall be paid to the pipeline transportation service provider at the pipeline transportation price as prescribed by the state.

In February 2015, with the goal of unifying stock gas and incremental gas prices, the NDRC released the *Circular on Rationalizing the Price of Non-Residential Natural Gas (Fa Gai Jia Ge [2015] No. 351)*, which calls for rationalizing the price of non-residential natural gas, implementing pilot programs for price liberalization of directly supplied gas for end-users. Based on the price fluctuation of the prices of alternative energies such as fuel oil and liquefied petroleum gas, and in accordance with the pricing mechanism of natural gas then in place, ceiling city-gate prices for incremental non-residential natural gas will be decreased by RMB0.44 per cubic meter, the ceiling city-gate prices for stock gas will be increased by RMB0.04 per cubic meter to unify gas prices. This circular will be implemented from April 2015.

In November 2015, pursuant to the general guideline of furthering the price reform of resources products, the NDRC released the *Circular on Adjustment of the City-Gate Price of Non-Residential Stock Natural Gas (Fa Gai Jia Ge [2015] No. 2688)*, in order to further liberalize the pricing of natural gas, replacing the reference ceiling price for city-gate prices of non-residential stock natural gas with a reference base rate, which is set at RMB700 below the reference ceiling price. With reference to the reference base rate, suppliers and buyers may determine the specific prices through negotiations below 120% of the reference base rate; to continue the existing subsidy program for fertilizer gas price and the fertilizer gas price will remain unchanged. This circular was implemented from November 2015.

In August 2017, pursuant to the reform of the supply side and the adjustment of value-added tax, the NDRC released the *Circular on Adjustment of the Benchmark Price of Non-Residential Stock Natural Gas (Fa Gai Jia Ge Gui [2017] No. 1582)*, in order to implement the requirements of the supply side reform and with reference to the decrease of value-added tax, non-residential gas benchmark price was lowered by RMB0.1 per cubic meter, effective from September 1, 2017.

On March 27, 2019, the NDRC announced that the Gas Benchmark Price was adjusted accordingly to the adjustment of the value-added tax rate for natural gas sales, effective from April 1, 2019.

On February 22, 2020, the NDRC announced that, non-residential gas benchmark price shall be applied to the off-season policy ahead of schedule and be lowered to support enterprises to resume work and production, which was invalid on June 30, 2020.

On March 3, 2020, the NDRC released the Catalogue of Pricing by the Central Government, the city-gate prices of natural gas is deleted from the Catalogue and will not be set by the central government in some competitive provinces and cities, effective from May 1, 2020.

On July 1, 2020, the NDRC announced that, the price of the natural gas transmission and distribution shall be in accordance with the principle of "the permitted cost plus the reasonable profit" and the upper limit of the rate of profit shall not exceed 7%.

Regulation of Pipelines Networks

According to the *Measures for Regulation of Fair and Open Access to Oil and Gas Pipeline Networks (Trial) (NEA No. 84 [2014])* which expired in May 2019, pipeline and facility operators shall equally open pipeline networks and associated facilities to third parties and provide transportation, storage, gasification, liquefaction and compression and other services, if they have surplus capacity. The price for services will be determined by the PRC pricing authorities. Operators will be required to publish information in relation to access standards, service price, conditions and procedures for application regularly, through their own website or other platform recognized by the NEA. Operators should also report to the NEA or its local branches in relation to the status of the facilities, the delivery points, outstanding capacity and scheduled maintenance.

In October 2016, the NDRC issued the Interim Provisions for Management Measures of Natural Gas Pipeline Transmission Prices (Trial) and the Interim Provisions for Supervision and Review of Natural Gas Pipeline Transmission Cost (Trial). The provisions stipulate that (1) the pricing method shall follow the principle of "permitted cost plus reasonable income" and the method and procedures for determining and adjusting prices and the related core indexes such as permitted income rate and load rate are also defined; (2) it is required that independent accounting should be conducted in respect of the natural gas transportation business with the related costs to be calculated separately, and the standards for determining the major indexes constituting costs are also defined; and (3) appropriate public disclosure of cost related information is required.

According to the *Measures for Regulation of Fair and Open Access to Oil and Gas Pipeline Networks (Fa Gai Neng Yuan Gui No. 916[2019])*, operators of the oil and gas pipeline facilities shall provide the oil and gas transportation, storage, gasification, loading and unloading, transshipment and other services without discrimination to all users who meet the conditions for access ("Qualified Users"). Operators shall not refuse to enter, or delay entering, service contracts with the Qualified Users without justification, or have unreasonable requirements thereunder. Where the prices for services are determined or guided by the relevant pricing authorities, operators shall charge the users in accordance with the prescribed price policies; while where market-oriented pricing regime is adopted, the service price shall be determined by contracting parties through consultation. Operators will be required to publish information in relation to access standards, service price, conditions and procedures for application, regularly through their own website or other platforms as recognized by the NEA. Operators should also report to the NEA or its local branches in relation to the status of the facilities, the delivery points, outstanding capacity and scheduled maintenance.

Regulation of Refining and Marketing of Refined Oil Products

Volume and Price Controls on Gasoline Diesel and Jet Fuels

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

According to the *Notice on Implementing Reforms on Prices of Refined Oil Products and Tax* promulgated by the State Council on December 18, 2008 and the *Measures for Administration of Petroleum Products Price* issued by the NDRC on January 13, 2016, the sale price for refined oil products in the PRC market shall be adjusted with reference to international crude oil price fluctuations, subject to governmental control. The NDRC will set the maximum retail price and the provincial price bureaus have the authority to set the maximum wholesale prices for gasoline and diesel. As a principle, the maximum retail price for gasoline and diesel in the Chinese market shall be decided with reference to the international crude oil price plus the average domestic processing costs, tax levies, reasonable sales and marketing expenses and appropriate profit. Gasoline and diesel prices shall be adjusted once every 10 business days according to the changes in crude oil prices on the international market. Price adjustments shall come into effect at 24:00 on the date when such adjustments are announced. If the international crude oil prices experience sustained increase or radical fluctuation, the price of refined oil products, including gasoline and diesel products, will be controlled by the government to reduce the oil price fluctuation impact upon the PRC market. In addition, the ex-factory price of the jet fuels (standard) will be determined by the buyers and the sellers, subject to a limit of no more than the import parity price in the Singapore market. The NDRC will regularly release the import parity price for jet fuels in the Singapore market. On September 16, 2013, a Circular of Relevant Opinions on Price Policies for Upgrading Oil Quality was promulgated by the NDRC, pursuant to which the upper limit of the prices for automotive gasoline and diesel that meet the National IV standards and National V standards can be raised respectively.

On February 15, 2015, the NDRC released the *Notice on Market-oriented Reform on Ex-factory Price of the Jet Fuels (Fa Gai Jia Ge [2015] No. 329)*. Pursuant to the Notice, the NDRC will no longer release the import parity price for jet fuels in the Singapore market. The price of jet fuels shall still be determined by buyers and sellers without a cap. However, when supplying jet fuels for General Logistics Department of the Chinese People's Liberation Army, the price shall still be the import parity price in the Singapore market.

On May 8, 2019, the Civil Aviation Administration of China issued the *Implementing Opinions on Overall Promotion of Civil Aviation Cost Reduction*. Pursuant to the Opinions, the Civil Aviation Administration of China implement the policy adjustment of reducing the national VAT tax rate from 16% to 13% and reduce the price gap between cost price and sale price of jet fuel. At the same time, the Civil Aviation Administration of China also announced that it would closely focus on reducing the cost of enterprises, and carry out supervision on determining the cost for pricing of the air traffic control fees and the price gap between cost price and sale price of jet fuel.

Regulation of Crude Oil and Refined Oil Products Market

On December 4, 2006, the Ministry of Commerce of the PRC promulgated the *Administrative Rules for Crude Oil Market and Administrative Rules for Refined Oil Products Market*, which was amended on October 28, 2015 and invalid on July 1, 2020 to open the wholesale market of crude oil and refined oil products to new market entrants, respectively, and expired on July 1, 2020. Foreign enterprises' rapid entrance into Chinese petroleum and chemical products markets may change the current market status for petroleum and chemical products market.

On March 26, 2013, the NDRC announced adjustments to the existing refined oil pricing mechanism, which included, among other things, (i) shortening the price adjustment period from 22 business days to 10 business days; (ii) lifting the 4% downward and upward fluctuation cap of the price adjustments; (iii) adjusting the composition of domestic benchmark crude oil types in response to changes of types of imported crude oil and crude oil trading in the overseas market. Under certain extreme circumstances, such as sharp rises in domestic inflation or dramatic fluctuations of international crude oil prices, the NDRC may issue additional procedural guidelines, such as implementing ad hoc suspension or delay of price adjustments upon the approval by the State Council.

On January 13, 2016, the NDRC announced further adjustments to the refined oil pricing mechanism, which included, among other things, (i) set up the minimum adjusted price for refined oil which is US$40 per barrel, (ii) establish a risk reserve for oil price adjustments, (iii) lift the control on the factory price of liquefied petroleum gas, (iv) simplify the procedures on adjusting the refined oil price.

On August 16, 2019, the General Office of the State Council released the *Opinions on Accelerating the Development of Circulation Industry and Promoting Consumer Spending (Guo Ban Fa[2019] No. 42)* to adopt certain methods to expand the market access of refined oil industry, such as (i) to cancel the approval procedure for qualification for wholesale and storage operation of refined oil products; (ii) to delegate the approval authority of qualification for retail operation of refined oil products to the prefectural (municipal) people's governments; and (iii) to strengthen the interim and ex-post supervision of the circulation of refined oil products and the implementation of security protection measures. The rural areas below township level that meet certain conditions may use the existing collective construction land to build petrol service stations, gas service stations, or electric recharge stations and may expand consumer market of refined oil products.

Investment

Under the State Council's Decision on Investment System Reform, investments without the use of government funds are only subject to a licensing system or a registration system, as the case may be. Under the current system, only significant projects involved in the Catalogue of Investment Projects Approved by the Government (2016) are subject to approval so as to maintain social and public interests. The scope to which the government approval system is applicable shall be observed and adjusted where necessary. All other projects of any investment scale are only subject to a registration system.

Pursuant to the Measures for the *Administration of Overseas Investment of Enterprises (No. 11 of NDRC)* issued by the NDRC on December 26, 2017 and effective as of March 1, 2018, projects subject to approval are sensitive projects to be carried out by investors either directly or through overseas enterprises controlled thereby and the approval authority is NDRC. Projects subject to filing are non-sensitive projects directly carried out by investors, namely the non-sensitive projects involving the direct investment of assets and equities or the provision of financing or guarantees. For a project requiring filing, the authority in charge of filing is (i) NDRC, if the investor is a centrally administered enterprise (a centrally administered financial enterprise or an enterprise directly subordinate to the administration by the State Council or its subordinate organ, the same below); (ii) NDRC, if the investor is a local enterprise and the amount of Chinese investment is US$0.3 billion or above; and (iii) the provincial development and reform authority at the place where the investor is registered, if the investor is a local enterprise and the amount of Chinese investment is less than US$0.3 billion.

On January 7, 2017, the SASAC issued the *Measures for the Supervision and Administration of the Outbound Investment by Central Enterprises* ("Outbound Investment Measures") to strengthening the supervision and administration of the outbound investment by central enterprises, which shall refer to State-funded enterprises in which the SASAC performs the responsibilities of an investor on behalf of the State Council. Under the Outbound Investment Measures, The SASAC shall formulate a negative list of outbound investment projects by central enterprises; regulate such projects in a classified manner. Where an outbound investment project is classified as being subject to special regulation under the negative list, a central enterprise shall submit the said project to the SASAC for going through the procedures of review and control in the capacity as an investor after central enterprise decision-making procedures but before submitting documents to relevant State departments for the first time.

In accordance with the Administrative Measures for Overseas Investments issued by the MOFCOM, overseas investments involving sensitive countries (regions) and sensitive shall be approved by the MOFCOM. All other investments shall be filed with the MOFCOM.

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

On December 19, 2020, the NDRC and the MOFCOM jointly issued the *Measures for the Security Review of Foreign Investments* ("Foreign Investment Measures"), pursuant to which any investment made directly or indirectly by a foreign investor within China that is deemed to have impacted or may impact the national security of China will be subject to a security review through a foreign investment security review regime. A special office under the joint purview of NDRC and MOFCOM will be responsible for organizing, coordinating and directing the security review work. The Foreign Investment Measures will come into effect on January 18, 2021.

Taxation, Fees and Royalties

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

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

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

From November 29, 2014 to January 12, 2015, the unit tax amount of consumption tax on gasoline, naphtha, solvent and lubricant have been adjusted three times and the current applicable consumption tax rates are set forth in the table below.

On March 23, 2016, the Ministry of Finance and the State Administration of Taxation jointly issued the Circular of Full Implementation of Business Tax to Value-added Tax Reform, which provides that effective from May 1, 2016, value-added tax completely replaced business tax to cover all the business sectors that used to fall under the business tax regime.

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

The Environmental Protection Tax Law was promulgated on December 25, 2016 and effective as of January 1, 2018, which was amended on October 26, 2018. According to Environmental Protection Tax Law, the enterprises, public institutions and other producers/operators that discharge taxable pollutants directly to the environment within the territorial areas of PRC and other sea areas under the jurisdiction of the PRC are the taxpayers of environmental protection tax and shall pay such tax in accordance with the provisions of this Law, and the air pollutants, water pollutants, solid wastes and noise stipulated in the Table of Items and Amounts of Environmental Protection Tax and the Table of Taxable Pollutants and Equivalent Values annexed to the Environmental Protection Tax Law are the taxable pollutants.

On September 22, 2017, the geological survey qualification examination and approval is cancelled pursuant to the Decision of the State Council on Canceling a Number of Administrative Licensing Items (No. 46 [2017] of the State Council). According to the Announcement of the Ministry of Land and Resources on Strengthening Post-event Supervision after Cancellation of Geological Exploration Qualification Approval published on October 31, 2017, after the cancel of the geological survey qualification examination and approval, MLR shall establish a national geological exploration information publicity platform, which shall be independently reported by the geological exploration unit, and its performance and exploration activities shall be updated regularly, and publicized to the public to provide services for investors to select geological exploration units. At the same time, the platform shall accept the supervision of the competent government departments and the society. Through the supervision and inspection of the government departments and social supervision, the geological exploration units that have verified the false information will be included in the anomaly list, and the geological exploration units that have verified the violations will be blacklisted. Geological exploration units that are included in the list of abnormalities and blacklists shall be subject to restrictions in accordance with the law in matters such as contracting financial funds projects and applying for mining rights.

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

Tax Item	Tax Base	Tax Rate
Enterprise income tax	Taxable income	25% effective from January 1, 2008.
Value-added tax	Revenue	10% (9% effective from April 1, 2019) for liquefied petroleum gas, natural gas, and low-density polyethylene for production of agricultural film and fertilizers, 16% (13% effective from April 1, 2019) for other items commodities and 6%, 10% (9% effective from April 1, 2019) and 16% (13% effective from April 1, 2019) for the taxable service. On behalf of the tax authorities, We generally charge value-added tax to our customers at the time of settlement on top of the selling prices of our products on behalf of the taxation authority. We may directly claim a refund from the value-added tax collected from our customers of any value-added tax that we paid for (i) purchasing materials consumed during the production process; and (ii) charges paid for drilling and other engineering services. we collect value-added tax from users other than the selling price of the products when settling payments with users. The value-added tax paid by us when purchasing raw materials for production, and the payment of drilling and other engineering service fees may be deducted from the value-added tax collected by us from users.

Tax Item	Tax Base	Tax Rate
Consumption tax	Aggregate volume sold or self-consumed	Effective from January 13, 2015, RMB1.52 per liter for gasoline, naphtha, solvent and lubricant, and RMB1.2 per liter for diesel, fuel oil and jet kerosene.
Import tariff	CIF China price	5% for gasoline, 6% for diesel, 9% for jet kerosene and 6% for fuel oil. In 2017, the applicable tax rate for motor gasoline and aviation gasoline, No. 5-7 fuel oil and diesel is 1% and 0% for jet kerosene and naphtha.
Resource tax	Aggregate Sales Revenue	Effective from December 1, 2014, for domestic production of crude oil and natural gas, the applicable tax rate is increased from 5% to 6% of the sales revenue, exemption or deduction may apply if qualified.
Exploration license fee	Area	RMB100 to RMB500 per square kilometer per annum.
Production license fee	Area	RMB1,000 per square kilometer per annum.
Royalty fee(1)	Production volume	Progressive rate of 0-12.5% for crude oil and 0-3% for natural gas.
City construction tax	Total payment of value-added tax and consumption tax	7%, 5% and 1%.
Education surcharge and local education surcharge	Total payment of value-added tax and consumption tax	3% for education surcharge and 2% for local education surcharge.
Special oil income levy	Any revenue derived from sale of domestically produced crude oil when the realized crude oil price exceeds US$65 per barrel	Progressive rate of 20% to 40% for revenues derived from crude oil with realized price in excess of US$65 per barrel.
Environmental Protection Tax Law	Pollution equivalent quantity; the quantity of discharged solid waste; the decibels in excess of the national standards	Specified in the Table of items and Amounts of Environmental Protection Tax annexed to the Environmental Protection Tax Law, and the applicable tax amounts of the taxable air pollutants and water pollutants shall be determined and adjusted by the people's government of a province, autonomous region or centrally-administered municipality.

Note:

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

MANAGEMENT

General

Our business and operations are managed by our senior management through our board of directors ("Board"). Our Board has been established pursuant to the approval of the SASAC dated April 13, 2012.

Directors and Senior Management

The table below sets forth information regarding our Directors and their concurrent positions at Sinopec Corp.

Name	Age	Position
Zhang Yuzhuo	58	Chairman and Secretary of Party Leadership Group of the Company, Chairman of Sinopec Corp.
Ma Yongsheng	58	Director, President and Deputy Secretary of Party Leadership Group of the Company, Director and President of Sinopec Corp.
Zhao Dong	50	Director and Deputy Secretary of Party Leadership Group of the Company
Wang Lili	69	External Director of the Company
Shi Huan	68	External Director of the Company
Chen Yueming	63	External Director of the Company
Zhang Yuqing	64	External Director of the Company
Wu Xiandong	56	External Director of the Company

The table below sets forth information regarding our other senior management and their concurrent positions at Sinopec Corp.

Name	Age	Position
Yu Baocai	55	Member of Party Leadership Group, Vice President, Director and Senior Vice President of Sinopec Corp.
Jiang Liangping	55	Member of Party Leadership Group, Team Leader of Party Discipline Inspection and Supervision
Liu Hongbin	57	Member of Party Leadership Group, Vice President, Director and Senior Vice President of Sinopec Corp.
Ling Yiqun	57	Member of Party Leadership Group, Vice President, Director and Senior Vice President of Sinopec Corp.
Zhang Shaofeng	50	Member of Party Leadership Group, Chief Financial Officer, Director of Sinopec Corp.
Li Yonglin	54	Member of Party Leadership Group, Vice President

The business address of our Directors is 22 Chaoyangmen North Street, Chaoyang District, Beijing, 100728, China.

Zhang Yuzhuo, aged 58. Chairman of the Board of Directors of our Company and Sinopec Corp. Mr. Zhang is Ph.D. in engineering, Research Fellow and Academician of the Chinese Academy of Engineering. Mr. Zhang is an alternate member of the nineteenth Central Committee of the Communist Party of China. In January 1997, he was appointed as Vice President of China Coal Research Institute. In February 1998, he temporarily served as Deputy General Manager of Yankuang Group Co. Ltd. In July 1998, he was appointed as Vice President of China Coal Research Institute, Director and Deputy General Manager of China Coal Technology Corporation. In March 1999, he served as President of China Coal Research Institute and Chairman of China Coal Technology Corporation. In June 1999, he was appointed as President and Deputy Secretary of CPC Committee of China Coal Research Institute, Chairman and Deputy Secretary of CPC Committee of China Coal Technology Corporation. In January 2002, he was appointed as Deputy General Manager of Shenhua Group Corporation Limited, and served concurrently as Chairman and General Manager of China Shenhua Coal Liquefaction Company Limited. In August 2003, he was appointed as Deputy

General Manager and Member of the Leading Party Member Group of Shenhua Group Corporation Limited, and served concurrently as Chairman of China Shenhua Coal Liquefaction Company Limited. In December 2008, he was appointed as Director, General Manager and Member of the Leading Party Member Group of Shenhua Group Corporation Limited. In July 2009, he served concurrently as Vice Chairman of All-China Federation of Returned Overseas Chinese. In May 2014, he was appointed as Chairman and Secretary of the Leading Party Member Group of Shenhua Group Corporation Limited, and served concurrently as Chairman of China Shenhua Energy Company Limited. In March 2017, he served as a member of the Standing Committee of the CPC Tianjin Municipal Committee and Secretary of the CPC Binhai New Area Committee. In July 2017, he served concurrently as Chairman of Sino-Singapore Tianjin Eco-City Investment & Development Co., Ltd. In May 2018, he served concurrently as Director of China (Tianjin) Pilot Free Trade Zone Administration. In January 2020, he was appointed as Chairman and Secretary of the Leading Party Member Group of China Petrochemical Corporation; in March 2020, he was appointed as the Chairman of the Board of Directors of Sinopec Corp.

Ma Yongsheng, aged 58, is Director, President and Deputy Secretary of the CPC Committee of the Company. He is also Director and President of Sinopec Corp. Mr. Ma is a professor level senior engineer with a Ph.D. degree and an academician of the Chinese Academy of Engineering. Mr. Ma is the member of the thirteenth national committee of CPPCC. In April 2002, he was appointed as Chief Geologist of Sinopec Southern Exploration and Production Company; in April 2006, he was appointed as Executive Deputy Manager (in charge of overall management), Chief Geologist of Sinopec Southern Exploration and Production Company; in January 2007, he was appointed as General Manager and Party Secretary of CPC Committee of Sinopec Southern Exploration and Production Company; in March 2007, he served as General Manager and Deputy Party Secretary of CPC Committee of Sinopec Exploration Company; in May 2007, he was appointed as Deputy Commander of Sichuan-East China Gas Pipeline Project Headquarter of Sinopec Corp., General Manager and Deputy Secretary of CPC Committee of Sinopec Exploration Company; in May 2008, he was appointed as Deputy Director General of Exploration and Production Department of Sinopec Corp. (Director General Level) and Deputy Commander of Sichuan-East China Gas Pipeline Project Headquarter; in July 2010, he served as Deputy Chief Geologist of Sinopec Corp.; in August 2013, he was appointed as Chief Geologist of Sinopec Corp.; in December 2015, he served as Vice President of China Petrochemical Corporation and appointed as Senior Vice President of Sinopec Corp.; in January 2017, he was appointed as Member of the Leading Party Member Group of China Petrochemical Corporation; in April 2019, he was appointed as director, president and vice Secretary of the Leading Party Member Group of China Petrochemical Corporation; in October 2018, he was appointed as President of Sinopec Corp. In February 2016, he was elected as Director of Sinopec Corp.

Zhao Dong, aged 50, is Director, Deputy Secretary of Party Leadership Group of the Company. Zhao Dong is a professor-level senior accountant with a doctor's degree. Dr Zhao served as chief financial officer and a member of the party committee of China National Oil & Gas Exploration and Development Corporation (CNODC) from June 2008 to October 2009. From October 2009 to September 2012, he was chief financial officer and a member of the party committee of CNODC, also serving as chief financial officer of PetroChina International Investment Company Limited. He was appointed as the vice president, deputy secretary of the party committee, secretary of the discipline inspection commission and president of the trade unions of CNPC Nile Company in September 2012. He became the president, secretary of the party committee, secretary of the discipline inspection commission and president of the trade unions of CNPC Nile Company in August 2013. He was the president and the deputy secretary of the party committee of CNPC Nile Company from July 2014 to November 2015. Dr Zhao was appointed as chief financial officer of PetroChina Company Limited in November 2015. He was appointed as Party Leadership Group Member and Chief Accountant of Sinopec Group in November 2016. He was appointed as Director of the Board and Deputy Secretary of Party Leadership Group of Sinopec Group in May 2020.

Yu Baocai, aged 55, is Deputy General Manager and CPC Committee Member of the Company and Director and Senior Vice President of Sinopec Corp. He is also Director of Sinopec Corp. Mr. Yu is a senior engineer and master in economics. In September 1999, Mr. Yu was appointed as the Deputy General Manager of Daqing Petrochemical Company; In December 2001, he was appointed as the General Manager and Deputy Secretary of CPC Committee of Daqing Petrochemical Company; In September 2003, he was appointed as the General Manager and Secretary of CPC Committee of Lanzhou Petrochemical Company; In June 2007, he was appointed as the General Manager and Deputy Secretary of CPC Committee of Lanzhou Petrochemical Company and the General Manager of Lanzhou Petroleum & Chemical Company; He had been a member of the Leading Party Member Group and the Deputy General Manager of China National Petroleum Corporation since September 2008 and had been acting concurrently as director of PetroChina Company Limited since May 2011; Since June 2018, he has been a member of the Leading Party Member Group and the Vice President of China Petrochemical Corporation. Mr. Yu has been the Director of Sinopec Corp. since October 2018 and the Senior Vice President of Sinopec Corp. since September 2020.

Jiang Liangping, aged 55, is Member of Party Leadership Group, Team Leader of Party Discipline Inspection and Supervision. Dr Jiang Liangping served as director and deputy secretary general of China Association of Peaceful User of Military Industrial Technology in December 2000. He became vice director of General Office of China Shipbuilding Industry Corporation (CSIC) in January 2002, serving concurrently as director of Economic Research Center of CSIC concurrently in June of the same year. He served as director of General Office of CSIC and director of Economic Research Center of CSIC in February 2003. In January 2006, he served as director of General Office of CSIC and secretary of the Party committee of China Shipbuilding Equipment and Materials Corporation (CSEMC), a wholly-owned subsidiary of CSIC. He served as director of General Office of CSIC in February 2008. He was appointed Party Leadership Group Member of China Huadian Corporation (CHD) and Chief of Discipline Inspection Group of CHD in October 2008. He also held a concurrent post as vice president of CHD from July 2012 to June 2014. He was appointed Party Leadership Group Member and Team Leader of Party Discipline Inspection of Sinopec Group in December 2016. In January 2019, he was appointed Party Leadership Group Member and Team Leader of Party Discipline Inspection and Supervision of Sinopec Group.

Liu Hongbin, aged 57, is CPC Committee Member of the Company and Director and Senior Vice President of Sinopec Corp. Mr. Liu is also Senior Vice President of Sinopec Corp. Mr. Liu is a senior engineer with a bachelor degree. In June 1995, he was appointed as the chief engineer of Tuha Petroleum Exploration & Development Headquarters; in July 1999, he was appointed as the deputy general manager of PetroChina Tuha Oilfield Company; in July 2000, he was appointed as the commander and Deputy Secretary of CPC Committee of Tuha Petroleum Exploration & Development Headquarters; in March 2002, he served as the general manager of the Planning Department of PetroChina Company Limited ("PetroChina"); in September 2005, he served as the director of the Planning Department of China National Petroleum Corporation ("CNPC"); in June 2007, he was appointed as the Vice President of PetroChina, and in November 2007, he served concurrently as the general manager and Secretary of CPC Committee of the Marketing Branch of PetroChina; in June 2009, he served concurrently as the general manager and Deputy Secretary of CPC Committee of the Marketing Branch of PetroChina; in July 2013, he was appointed as Member of the Leading Party Member Group and the deputy general manager of CNPC and in August 2013, he served concurrently as an executive director and general manager of Daqing Oilfield Company Limited, director of Daqing Petroleum Administration Bureau and Deputy Secretary of CPC Committee of Daqing Oilfield; in May 2014, he served concurrently as a director of PetroChina; in November 2019, he was appointed as Member of the Leading Party Member Group and Vice President of China Petrochemical Corporation; in March 2020, he was concurrently appointed as the Senior Vice President of Sinopec Corp. Mr. Liu has been the Senior Vice President of Sinopec Corp. since March 2020 and the Director of Sinopec Corp. since May 2020.

Ling Yiqun, aged 57, is Member of Party Leadership Group, Vice President as well as Director and Senior Vice President of Sinopec Corp. Mr. Ling is a professor level senior engineer with a Ph.D. degree. From 1983, he worked in the refinery of Beijing Yanshan Petrochemical Company and the Refining Department of Beijing Yanshan Petrochemical Company Ltd. In February 2000, he was appointed as the Deputy Director General of Refining Department of Sinopec Corp.; in June 2003, he was appointed as the Director General of Refining Department of Sinopec Corp.; in July 2010, he was appointed as Vice President of Sinopec Corp.; in May 2012, he was appointed concurrently as Executive Director, President and Secretary of CPC Committee of Sinopec Refinery Product Sales Company Limited; in August 2013, he was appointed concurrently as the President of Sinopec Qilu Company; in March 2017, he was appointed as Vice President of China Petrochemical Corporation; Since April 2019, he has been a member of the Leading Party Member Group of China Petrochemical Corporation; in February 2018, he was appointed as Senior Vice President of Sinopec Corp. In May 2018, he was elected as Director of Sinopec Corp.

Zhang Shaofeng, aged 50, is Member of Party Leadership Group, Chief Financial Officer of the Company and Director of Sinopec Corp. Mr. Zhang is a professor level senior accountant and holds an MBA degree. In December 2008, he was appointed as Chief Accountant of Trans-Asia Gas Pipeline Company Limited of CNPC and Member of the CPC Committee of Trans-Asia Gas Pipeline Company Limited. In July 2017, he was appointed as General Manager of Finance Department of CNPC (PetroChina). In July 2020, he was appointed as Member of the Leading Party Member Group and Chief Accountant of Sinopec Group.

Li Yonglin, aged 54, is Member of Party Leadership Group, Vice President of the Company. Mr. Li is a senior engineer with a Ph.D. degree. He was appointed as Vice President of Sinopec Maoming Petrochemical Company in March 2003. In July 2009, he was appointed as Chief of Preparatory Group for the Beihai Refining Off-Site Reconstruction Project. He was appointed President and Deputy Party Secretary of Sinopec Beihai Refining & Chemical Co., Ltd. in November 2011. He was appointed as Vice President of Refining Division of Sinopec Corp. (Director General Level) in March 2015. He was appointed as President and Deputy Party Secretary of Sinopec Tianjin Petrochemical Company, President of Sinopec Tianjin Company and Vice Chairman of SINOPEC SABIC Tianjin Petrochemical Co., Ltd. in December 2016. He was appointed as Party Secretary of Sinopec Tianjin Petrochemical Company and Corporate Representative to Sinopec Tianjin Company for Sinopec Corp. in October 2019. He was appointed as Assistant to the President of Sinopec Group, servicing as President of Human Resource Dept and Head of Organizational Dept in July 2020. He was appointed as Party Leadership Group Member and Vice President of Sinopec Group in November 2020.

DESCRIPTION OF THE NOTES AND GUARANTEES

Each series of the Notes will be issued pursuant to a separate Indenture (each an "Indenture" and together the "Indentures") to be dated as of January 8, 2021 among the Guarantor, the Issuer and Citicorp International Limited as trustee (the "Trustee") and Citibank N.A., London Branch as paying agent, transfer agent and registrar. A copy of this offering memorandum, the Notes, the Guarantees and the Indenture will be available for inspection at the registered office of the Trustee. The holders of the Notes will be bound by, and be deemed to have notice of, all the provisions of the related Indenture.

The following summaries of certain provisions of the Notes, the Guarantees and the Indentures are subject to, and are qualified in their entirety by reference to, the detailed provisions of the Notes, the Guarantees and the Indentures. Terms and expressions used in this section and not otherwise defined shall have the meanings given to such terms in the Notes and the Indentures. This section does not restate those agreements in their entirety. Whenever particular sections or defined terms of the Indentures not otherwise defined herein are referred to, such sections or defined terms are incorporated herein by reference.

General

The 2026 Notes will be issued in an initial aggregate principal amount of US$1,150,000,000 and will mature on January 8, 2026, the 2031 Notes will be issued in an initial aggregate principal amount of US$1,200,000,000 and will mature on January 8, 2031 and the 2051 Notes will be issued in an initial aggregate principal amount of US$650,000,000 and will mature on January 8, 2051.

The 2026 Notes will bear interest at the rate of 1.450% per annum. The 2031 Notes will bear interest at the rate of 2.300% per annum. The 2051 Notes will bear interest at the rate of 3.100% per annum. Interest on the Notes will accrue from January 8, 2021 or from and including the most recent Interest Payment Date (as defined below) to which interest has been paid or provided for, to and excluding the next Interest Payment Date or the maturity date, payable semi-annually in arrears on January 8 and July 8 in each year (each, an "Interest Payment Date"), commencing on July 8, 2021, to the persons in whose names the Notes are registered at the close of business (whether or not a Business Day) on December 24 and June 23, respectively (each an "Interest Record Date") immediately preceding an Interest Payment Date. Interest shall be calculated on the basis of a 360-day year consisting of twelve 30-day months.

In any case where the due date of payment of the principal of or interest on the Notes or the date fixed for redemption of the Notes is not a Business Day (as defined below), then payment of principal or interest shall be made on the next succeeding Business Day, with the same force and effect as if made on the due date of payment or the date fixed for redemption, as the case may be, and no interest shall accrue for the period after such date. "Business Day" means a day in The City of New York, Hong Kong and the applicable place of payment other than a Saturday, Sunday or a day on which banking institutions are authorized or obligated by law or executive order to remain closed.

The Notes will not be entitled to the benefit of any sinking fund. The Notes shall be denominated in minimum principal amounts of US$200,000 and in integral multiples of US$1,000 in excess thereof.

The Notes will be the direct, unconditional, unsubordinated and unsecured obligations of the Issuer, and rank pari passu with all other unsecured and unsubordinated obligations of the Issuer (other than obligations preferred by applicable law) and senior in priority of payment and in all other respects to all other indebtedness of the Issuer that is designated as subordinate or junior in right of payment to the Notes.

The Notes are unconditionally guaranteed as to the payment of the principal and interest in respect thereof and all other amounts payable thereunder as evidenced by the Guarantees and related provisions set forth in each respective Indenture. The Guarantees are the Guarantor's direct, unconditional, unsubordinated and unsecured obligations and will rank pari passu with all of the Guarantor's other unsecured and unsubordinated obligations (other than obligations preferred by applicable law) and senior in priority of payment and in all other respects to all the Guarantor's other indebtedness that is designated as subordinate or junior in right of payment to the Guarantees.

The principal of, interest on, and all other amounts payable under, the Notes will be payable, and the Notes may be exchanged or transferred, at the office or agency of the Issuer, which initially will be the corporate trust office of the Trustee currently located at 20/F, Citi Tower, One Bay East, 83 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong, or at such other location or locations as the Issuer, in consultation with the Trustee, may designate.

The principal of and interest on the Notes will be made by wire transfer or otherwise in immediately available funds and payable in U.S. dollars or in such other coin or currency of the United States of America as of the time of payment is legal tender for the payment of public and private debts.

Payment of the principal of and interest on the Notes held through The Depository Trust Company ("DTC") will be credited to the respective accounts of the holders of the Notes with DTC or its participants, including Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking, S.A. ("Clearstream, Luxembourg"). See "– Notes; Delivery and Form."

Guarantees

Under the Indentures, the Guarantor will irrevocably and unconditionally guarantee the due and punctual payment of the principal of and interest on, and all other amounts payable under (including any Additional Amounts payable in respect of), the Notes when and as the same shall become due and payable, whether on the stated maturity, upon acceleration, by call for redemption or otherwise. The Guarantor has (i) agreed that its obligations under the Guarantees will be as if the Guarantor were principal obligor and not merely surety, and will be enforceable irrespective of any invalidity, irregularity or unenforceability of the Notes or the Indentures (other than in respect of the Guarantees) and (ii) waived the Guarantor's right to require the Trustee and the holders of the Notes to pursue or exhaust their legal or equitable remedies against the Issuer prior to exercising its rights under the Guarantees. The Guarantees will not be discharged with respect to any Note except by payment in full of the principal thereof, interest thereon and all other amounts payable thereunder (including any Additional Amounts payable in respect thereof). Moreover, if at any time any amount paid under a Note is rescinded or must otherwise be restored, the rights of the holder of the Note under the Guarantees will be reinstated with respect to such payment as though such payment had not been made. All payments under the Guarantees will be made in U.S. dollars.

Guarantees of foreign indebtedness arising from offshore bond issuances by a PRC-incorporated entity are subject to registration by the State Administration of Foreign Exchange of the PRC (the "SAFE"). The Guarantor plans to undertake the SAFE registration.

The Guarantor understands from its discussion with the SAFE that under PRC law:

(i) the Guarantees will be legal, valid and binding obligations of the Guarantor upon execution;

(ii) the Guarantor is required to submit the Guarantees to the Beijing Branch of the SAFE (the "Beijing Branch") as soon as possible and in any event before the date 15 Beijing Business Days after the execution of the Guarantees. The Guarantees will be enforceable within the PRC against the assets of the Guarantor only upon the completion of administrative registration procedures with the Beijing Branch. See "Risk Factors – Risks Relating to the Notes and the Guarantees – There is uncertainty relating to the enforceability of the Guarantees of the Notes" and "Enforceability of Foreign Judgments and Civil Liabilities"; and

(iii) the Guarantees will cover all sums due under the Notes (including any principal, interest and related financial obligations).

Pursuant to the Notice on the Promulgation of the Provisions on Foreign Exchange Administration of Cross-border Guarantee issued by the SAFE on May 12, 2014, which became effective on June 1, 2014 (the "Cross-border Guarantee Provisions"), without obtaining the SAFE's approval, no proceeds raised by the Issuer under the Notes outside the PRC may be remitted into the PRC directly or indirectly for use by way of securities investment. In addition, if the guarantee liability is the repayment responsibility of the offshore debtor under the note issuance, the offshore debtor shall be under direct or indirect shareholding by the domestic institution, and the income from the overseas note issuance shall be used for the overseas investment project that has equity affiliation with the domestic institution. Furthermore, the Cross-border Guarantee Provisions provide that, without obtaining the SAFE's approval, proceeds raised by the Issuer under the Notes may only be used for the purposes of overseas projects and may not be used to support the Issuer to engage in transactions beyond its normal scope of business, to fabricate a scope of business for the purposes of interest arbitrage, or for other forms of speculative transactions.

On 26 January 2017, SAFE issued the Circular on Further Promoting the Reform of Foreign Exchange Administration and Improving the Genuineness and Compliance Review and Verification Process (the "SAFE Circular 3"), which eases certain restrictions on the use of proceeds raised under a Neibao Waidai structure and generally allows the proceeds raised under a Neibao Waidai structure to be repatriated onshore and used in the PRC by way of loans and equity investments. The second series of the Policy Q&As in relation to the SAFE Circular 3 (the "Policy Q&As in relation to the SAFE Circular 3") published by SAFE on its official website on 27 April 2017 further clarified that, for offshore note issuance by offshore entities which is secured by PRC onshore guarantees, the restrictions on the remittance of use of proceeds for offshore note issuance as mentioned in the Cross-border Guarantee Provisions above still apply despite the SAFE Circular 3. However, in practice, application or exemption of such restrictions on the use of proceeds to a large extent remains subject to SAFE's discretion on a case-by-case basis.

The Guarantees will be governed by the laws of the State of New York.

The Guarantor intends to execute and register the Guarantees as soon as reasonably practicable after the closing date of the offering.

Further Issues

The 2026 Notes will be issued in an initial aggregate principal amount of US$1,150,000,000, the 2031 Notes will be issued in an initial aggregate principal amount of US$1,200,000,000 and the 2051 Notes will be issued in an initial aggregate principal amount of US$650,000,000. The Guarantor and the Issuer may, however, from time to time, without the consent of the holders of the Notes, create and issue pursuant to the Indentures, additional notes of a series having the same terms and conditions under each respective Indenture as the previously outstanding Notes of the relevant series in all respects, except for issue date, issue price, and amount of the first payment of interest thereon, and to the extent necessary, certain temporary securities law transfer restrictions. Additional notes issued may be consolidated with and form a single series with the previously outstanding Notes of the relevant series; provided, however, that such additional notes may have the same CUSIP, ISIN, Common Code or other identifying number as the outstanding Notes of a relevant series only if (i) such additional notes are fungible with such Notes for U.S. federal income tax purposes and (ii) registration with the Beijing Branch of the guarantees of such additional notes has been completed, prior to the additional notes being assigned the same CUSIP, ISIN, Common Code or other identifying number.

Additional Amounts

All payments of principal, premium and interest in respect of the Notes and/or the Guarantees will be made free and clear of, and without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature ("Taxes") imposed, levied, collected, withheld or assessed by or on behalf of the British Virgin Islands, the PRC, Hong Kong, the Cayman Islands or any other jurisdiction in which the Guarantor or the Issuer (or any successor to the Guarantor or the Issuer) is organized or tax resident, in each case including any political subdivision, territory or possession thereof, any authority therein having power to tax or any area subject to its jurisdiction (each, a "Relevant Jurisdiction") or any jurisdiction from or through which any payment is made (together with Relevant Jurisdictions, each, a "Relevant Taxing Jurisdiction") unless such Taxes are required by law to be withheld or deducted. If any deduction or withholding for any present or future Taxes of the applicable Relevant

Taxing Jurisdiction shall at any time be so required, the Guarantor or the Issuer, as the case may be, shall pay such additional amounts ("Additional Amounts") as will result (after deduction of such Taxes, including Taxes payable in respect of such Additional Amounts) in receipt by each holder of any Note of such amounts as would have been received by such holder with respect to such Note or Guarantee, as applicable, had no such withholding or deduction been required; provided, however, that no Additional Amounts shall be payable in respect of any Note:

(i) to a holder (or to a third party on behalf of a holder) who is liable to such Taxes in respect of such Note by reason of his having some connection with the Relevant Taxing Jurisdiction other than the mere holding of the Note;

(ii) which is surrendered (where required to be surrendered) more than 30 calendar days after the Relevant Date, except to the extent that the holder of it would have been entitled to such Additional Amounts on surrender of such Note for payment on the last day of such period of 30 calendar days. "Relevant Date" means whichever is the later of (a) the date on which such payment first becomes due and (b) if the full amount payable has not been received by the Trustee on or prior to such due date, the date on which, the full amount having been so received, notice to that effect shall have been given to the holders of the Notes;

(iii) to a holder (or to a third party on behalf of a holder) who would have been able to avoid such

(iv) withholding or deduction by duly presenting the Note (where presentation is required) to another paying agent;

(v) with respect to any Taxes that would not have been imposed but for the failure of the holder or beneficial owner to comply with a timely request of the Issuer or the Guarantor addressed to the holder to provide certification or information concerning the nationality, residence or identity of the holder or beneficial owner of the Note, if due and timely compliance is required as a precondition to relief or exemption from the tax, duty assessment or governmental charge under the laws (not including treaties) of the Relevant Taxing Jurisdiction;

(vi) any estate, inheritance, gift, sale, transfer, personal property or similar tax, assessment or other similar governmental charge;

(vii) any such Taxes payable otherwise than by deduction or withholding from payments under or with respect to any Note or Guarantee;

(viii) any tax, assessment, withholding or deduction required by sections 1471 through 1474 of the United States Internal Revenue Code of 1986, as amended ("FATCA"), any current or future Treasury Regulations or rulings promulgated thereunder, any law, regulation or other official guidance enacted in any jurisdiction implementing FATCA, any intergovernmental agreement between the United States and any other jurisdiction to implement FATCA or any law enacted by such other jurisdiction to give effect to such agreement, or any agreement with the U.S. Internal Revenue Service under FATCA; or

(ix) any combination of taxes, duties, assessments or other governmental charges referred to in the preceding items (i) through (vii) above.

Additional Amounts will not be paid with respect to any payment of the principal of or any premium or interest on the Notes or under the Guarantees to any holder of a Note who is a fiduciary or partnership or other than the sole beneficial owner of such payment to the extent that payment would be required by the laws of the Relevant Taxing Jurisdiction to be included in the income of a beneficiary or settlor with respect to the fiduciary, a member of that partnership or a beneficial owner who would not have been entitled to the Additional Amounts had that beneficiary, settlor, member or beneficial owner been the holder.

Whenever there is mentioned, in any context, the payment of principal, premium or interest in respect of any Note or Guarantee, such mention shall be deemed to include the payment of Additional Amounts provided for in each respective Indenture to the extent that, in such context, Additional Amounts are, were or would be payable in respect thereof pursuant to the Indenture.

Redemption

Unless earlier redeemed in the limited circumstances set forth below under "– Optional Redemption" and "– Optional Tax Redemption," the 2026 Notes will mature on January 8, 2026, the 2031 Notes will mature on January 8, 2031 and the 2051 Notes will mature on January 8, 2051, at a price equal to 100% of the principal amount thereof and the Notes will not be otherwise redeemable at the option of the Issuer.

Optional Redemption

The Guarantor or the Issuer may, at the Guarantor's option, redeem the 2026 Notes at any time prior to December 8, 2025, the 2031 Notes at any time prior to October 8, 2030, and the 2051 Notes at any time prior to July 8, 2050, in each case, in whole or in part, on not less than 30 nor more than 60 days' prior notice. The applicable Notes will be redeemable at a redemption price equal to the greater of (1) 100% of the principal amount of the applicable Notes to be redeemed and (2) the sum of the present values of the remaining scheduled payments of principal and interest on the applicable Notes to be redeemed (not including interest accrued to the date of redemption), discounted to the date of redemption on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus 20 basis points in the case of the 2026 Notes, 25 basis points in the case of the 2031 Notes and 25 basis points in the case of the 2051 Notes, in each case plus, accrued and unpaid interest on the applicable Notes to be redeemed, if any, to (but not including) the date of redemption.

In addition, the Guarantor or the Issuer may, at the Guarantor's option, on not less than 30 nor more than 60 days' prior notice, redeem the 2026 Notes at any time from or after December 8, 2025, the 2031 Notes at any time from or after October 8, 2030, and the 2051 Notes at any time from or after July 8, 2050, in each case, in whole or in part, at a redemption price equal to 100% of the principal amount of the applicable Notes to be redeemed plus accrued and unpaid interest, if any, on such Notes to (but not including) the date of redemption.

"Comparable Treasury Issue" means the United States Treasury security selected by an Independent Investment Banker that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Notes to be redeemed. "Independent Investment Banker" means one of the Reference Treasury Dealers appointed by the Guarantor.

"Comparable Treasury Price" means, with respect to any redemption date, if clause (ii) of the definition of "Treasury Rate" below is applicable, the average of three (or such lesser number as is obtained by the Guarantor) Reference Treasury Dealer Quotations for such redemption date.

"New York Business Day" means a day in The City of New York other than a Saturday, Sunday or a day on which banking institutions are authorized or obligated by law or executive order to remain closed.

"Reference Treasury Dealer" means each of any three investment banks of recognized standing that is a primary U.S. government securities dealer in the United States, selected by the Guarantor in good faith.

"Reference Treasury Dealer Quotations" means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the Guarantor, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Guarantor by such Reference Treasury Dealer as of 5:00 p.m., New York City time, on the third New York Business Day preceding such date of redemption.

"Treasury Rate" means, with respect to any date of redemption, (i) the yield, under the heading which represents the average for the immediately preceding week, appearing in the most recently published statistical release designated "H.15(519)" or any successor publication which is published weekly by the Board of Governors of the Federal Reserve System and which establishes yields on actively traded United States Treasury securities adjusted to constant maturity under the caption "Treasury Constant Maturities," for the maturity corresponding to the Comparable Treasury Issue (if no maturity is within three (3) months before or the maturity date for the Notes to be redeemed, yields for the two published maturities most closely corresponding to the Comparable Treasury Issue shall be determined and the Treasury Rate shall be interpolated or extrapolated from such yields on a straight line basis, rounding to the nearest month) or (ii) if such release (or any successor release) is not published during the week preceding the calculation date or does not contain such yields, the rate per year equal to the semi-annual equivalent yield to maturity of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such date of redemption, in each case calculated on the third New York Business Day immediately preceding such redemption date.

Optional Tax Redemption

Each series of the Notes may be redeemed, at the option of the Issuer, in whole but not in part, upon notice as described below, at a redemption price equal to 100% of the principal amount thereof, together with accrued interest to the date fixed for redemption and Additional Amounts, if any, if, as a result of any change in or amendment to the laws of a Relevant Jurisdiction or any regulations or rulings promulgated thereunder, or any change in the official interpretation or official application of such laws, regulations or rulings, which change or amendment (i) in the case of the Guarantor or the Issuer is announced and becomes effective on or after the date of this offering memorandum and (ii) in the case of any successor to the Guarantor or the Issuer that is organized or tax resident in a jurisdiction that is not a Relevant Jurisdiction as of the original issue date of the Notes is announced and becomes effective on or after the date such successor assumes the Guarantor's or the Issuer's obligations, as applicable, under the Notes and the Indentures,

(1) the Issuer is or would be required on the next succeeding due date for a payment with respect to such Notes, to pay Additional Amounts with respect to the Notes as described above under "– Additional Amounts"; or

(2) the Guarantor is or would be unable, for reasons outside its control, on the next succeeding due date for a payment with respect to such Notes to procure payment by the Issuer, and with respect to a payment due or to become due under the relevant Guarantee or the Indenture, as the case may be, the Guarantor is or would be required on the next succeeding due date for a payment with respect to such Notes to pay Additional Amounts as described above under "– Additional Amounts."

and such obligation cannot be avoided by the use of reasonable measures available to the Guarantor or the Issuer or any successor person, as the case may be.

Notwithstanding anything to the contrary herein, the Guarantor, the Issuer or any successor person may not redeem any series of the Notes in the case that Additional Amounts are payable in respect of PRC withholding tax at the Applicable Rate (as defined below) or less solely as a result of the Guarantor, the Issuer, or a successor person being considered a PRC tax resident under the PRC Enterprise Income Tax Law.

Notice of redemption of the relevant series of the Notes as provided above shall be given not less than 30 nor more than 60 calendar days prior to the date fixed for redemption. Notice having been given, the Notes of such series shall become due and payable on the date fixed for redemption and will be paid at the redemption price, together with accrued interest to the date fixed for redemption and any Additional Amounts, at the place or places of payment and in the manner specified in the notice. From and after the date fixed for redemption, if moneys sufficient for the redemption of such Notes shall have been made available as provided in each respective Indenture for redemption on the date fixed for redemption, the Notes shall cease to bear interest, and the only right of the holders of the Notes shall be to receive payment of the redemption price, interest accrued to the date fixed for redemption and Additional Amounts, if any.

"Applicable Rate" means the aggregate applicable rate on January 8, 2021, up to which withholding or deduction of Taxes is made by the Issuer or, as the case may be, the Guarantor, with respect to payments under the Notes or the Guarantees if required by law, by or within the PRC.

Repurchase upon a Change of Control Triggering Event

Upon a Change of Control Triggering Event (as defined below), the Issuer will be required to make an offer to repurchase all of the Notes at a price in cash equal to 101% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest on the principal amount of the Notes being repurchased to but excluding the date of repurchase (a "Change of Control Offer").

Within 30 calendar days following any Change of Control Triggering Event, the Issuer will be required to give written notice to holders describing the transaction or transactions that constitute the Change of Control Triggering Event and offering to repurchase all of the Notes on the date specified in the notice, which date will be no earlier than 30 calendar days and no later than 60 calendar days from the date such notice is given.

The Issuer will not be required to make a Change of Control Offer upon a Change of Control Triggering Event if a third party makes such an offer substantially in the manner, at the times and in compliance with the requirements for a Change of Control Offer (and for at least the same purchase price payable in cash) and such third party purchases all Notes properly tendered and not withdrawn under its offer.

A holder of the Notes will have no right to require the Issuer to repurchase portions of the Notes if it would result in the issuance of new Notes, representing the portion not repurchased, in an amount of less than US$200,000.

The Issuer will comply, to the extent applicable, with the requirements of applicable securities laws or regulations in connection with the repurchase of the Notes pursuant to this covenant.

"Change of Control" means the occurrence, at any time, of any of the following:

(i) the Guarantor ceasing to own and control directly or indirectly 100% of the Voting Shares of the Issuer; or

(ii) the government of the People's Republic of China or Persons controlled by the government of the People's Republic of China ceasing to own and control directly or indirectly or in combination (through controlled entities) 100% of the Voting Shares of the Guarantor.

"Change of Control Triggering Event" means the occurrence of both a Change of Control and a Rating Decline (as defined below). No Change of Control Triggering Event will be deemed to have occurred in connection with any particular Change of Control unless and until such Change of Control has actually been consummated.

"Investment Grade" means a rating of "AAA," "AA," "A" or "BBB," as modified by a "+" or "-" indication, or an equivalent rating representing one of the four highest rating categories, by S&P or any of its successors or assigns; a rating of "Aaa," "Aa," "A" or "Baa," as modified by a "1," "2" or "3" indication, or an equivalent rating representing one of the four highest rating categories, by Moody's or any of its successors or assigns; a rating of "BBB-" or better by Fitch or any of its successors or assigns; or the equivalent ratings of any United States nationally recognized rating agency or agencies, as the case may be, which shall have been designated by the Company as having been substituted for S&P, Moody's, or Fitch or any combination thereof, as the case may be.

"Rating Agencies" means (i) S&P Global Ratings, a division of S&P Global Inc., and its successors ("S&P"); (ii) Moody's Investors Service, Inc., a subsidiary of Moody's Corporation, and its successors ("Moody's"); (iii) Fitch Inc., a subsidiary of Fimalac, S.A., and its successors ("Fitch"); and (iv) if one or more of S&P, Moody's or Fitch shall not make a rating of the Notes publicly available, any United States nationally recognized securities rating agency or agencies, as the case may be, selected by the Company, which shall be substituted for S&P, Moody's or Fitch or any combination thereof, as the case may be.

"Rating Category" means (1) with respect to S&P, any of the following categories: "BB," "B," "CCC," "CC," "C" and "D" (or equivalent successor categories); (2) with respect to Moody's, any of the following categories: "Ba," "B," "Caa," "Ca," "C" and "D" (or equivalent successor categories); (3) with respect to Fitch, any of the following categories: "BB," "B," "CCC," "CC," "C" and "D" (or equivalent successor categories); and (4) the equivalent of any such category of S&P, Moody's or Fitch used by another Rating Agency. In determining whether the rating of the Notes has decreased by one or more gradations, gradations within Rating Categories ("+" and "-" for S&P; "1," "2" and "3" for Moody's and "+" and "-" for Fitch; or the equivalent gradations for another Rating Agency) shall be taken into account (e.g., with respect to S&P, a decline in a rating from "BB+" to "BB," as well as from "B-" to "B+," will constitute a decrease of one gradation).

"Rating Date" means, in connection with a Change of Control Triggering Event, that date which is 90 days prior to the earlier of (i) a Change of Control and (ii) a public notice of the occurrence of a Change of Control or of the intention by the Company or any other Person or Persons to effect a Change of Control.

"Rating Decline" means, in connection with a Change of Control Triggering Event, the occurrence on, or within six months after, the date, or public notice of the occurrence of, a Change of Control or the intention by the Company or any other person or persons to effect a Change of Control (which period shall be extended (by no more than an additional three months after the consummation of the Change of Control) so long as the rating of the Notes is under publicly announced consideration for possible downgrade by any of the Rating Agencies) of any of the events listed below: in the event the Notes are on the Rating Date (i) (a) (x) rated by three Ratings Agencies and (y) rated Investment Grade by at least two of such Rating Agencies, and (b) cease to be rated Investment Grade by at least two of such Rating Agencies; (ii) (a) (x) rated by two but not more Ratings Agencies and (y) rated Investment Grade by each such Rating Agency, and (b) cease to be rated Investment Grade by both such Rating Agencies; (iii) (a) (x) rated by one Ratings Agency and (y) rated Investment Grade by such Rating Agency, and (b) cease to be rated Investment Grade by such Rating Agency; (iv) (a) (x) rated by three Ratings Agencies and (y) rated below Investment Grade by at least two such Rating Agencies, and (b) the rating by at least two of such Rating Agencies shall be decreased by one or more gradations (including gradations within Rating Categories as well as between Rating Categories); (v) (a) (x) rated by two but not more Ratings Agencies and (y) rated below Investment Grade by any such Rating Agency, and (b) the rating by such Rating Agency shall be decreased by one or more gradations (including gradations within Rating Categories as well as between Rating Categories); (vi) (a) (x) rated by one Ratings Agency and (y) rated below Investment Grade by such Rating Agency, and (b) the rating by such Rating Agency shall be decreased by one or more gradations (including gradations within Rating Categories as well as between Rating Categories); or (vii) not rated by any Rating Agency.

Certain Covenants

Limitation on Liens

The Indentures provide that the Guarantor will not, and will not permit the Issuer or any Principal Subsidiary to, create, incur, assume or permit to exist any Lien upon any of its property or assets, now owned or hereafter acquired, to secure any Relevant Indebtedness of the Guarantor, the Issuer or such Principal Subsidiary (or any guarantee or indemnity in respect thereof) without, in any such case, making effective provision whereby the Notes and the Guarantees will be secured either at least equally and ratably with such Relevant Indebtedness or by such other Lien as shall have been approved by the holders of the Notes as provided in the Indentures, for so long as such Relevant Indebtedness will be so secured; provided that, the Guarantor or any such Principal Subsidiary may issue secured Relevant Indebtedness so long as after giving effect to the issuance thereof, the aggregate outstanding principal amount of all such secured Relevant Indebtedness of the Guarantor and the Principal Subsidiaries entered into after the date of the Indentures does not exceed 20% of the Guarantor's Adjusted Consolidated Net Worth.

The foregoing restriction will not apply to:

(i) any Lien which is in existence prior to the date of the Indentures and any replacement thereof created in connection with the refinancing (together with interest, fees and other charges attributable thereto) of the Relevant Indebtedness originally secured (but the principal amount secured by any such Lien may not be increased);

(ii) any Lien arising or already arisen automatically by operation of law which is promptly discharged or disputed in good faith by appropriate proceedings;

(iii) any Lien either over any asset acquired after the date of the Indentures which is in existence at the time of such acquisition or in respect of the obligations of any Person which becomes the Guarantor's Subsidiary or which merges with and into the Guarantor after the date of the Indentures which is in existence at the date on which it becomes the Guarantor's Subsidiary and in both cases any replacement thereof created in connection with the refinancing (together with interest, fees and other charges attributable thereto) of the Relevant Indebtedness originally secured (but the principal amount secured by any such Lien may not be increased); provided that any such Lien was not incurred in anticipation of such acquisition or of such company becoming the Guarantor's Subsidiary;

(iv) any Lien created on any property or asset acquired, leased or developed (including improved, constructed, altered or repaired) after the date of the Indentures; provided, however, that (a) any such Lien shall be confined to the property or asset acquired, leased or developed (including improved, constructed, altered or repaired); and (b) any such Lien shall be created concurrently with or within two years following the acquisition, lease or development (including construction, improvement, repair or alteration) of such property or asset;

(v) any Lien created or outstanding in favor of the Guarantor or any of the Guarantor's Subsidiaries;

(vi) any Lien on any property or asset to secure all or part of the cost of exploration, drilling, development, production, gathering, processing, marketing of such property or asset or to secure Relevant Indebtedness incurred to provide funds for any such purpose;

(vii) any Lien arising in connection with industrial revenue, development or similar bonds or other Relevant Indebtedness or means of project financing (not to exceed the value of the project financed and limited to the project financed);

(viii) any Lien in respect of Relevant Indebtedness of the Guarantor or any of the Guarantor's Subsidiaries with respect to which the Guarantor or such Subsidiary has paid money or deposited money or securities with a fiscal agent, trustee or depository to pay or discharge in full the obligations of the Guarantor and the Guarantor's Subsidiary in respect thereof (other than the obligation that such money or securities so paid or deposited, and the proceeds therefrom, be sufficient to pay or discharge such obligations in full); or

(ix) any Lien arising out of the refinancing, extension, renewal or refunding of any Relevant Indebtedness secured by any Lien permitted by any of the foregoing clauses; provided that such Relevant Indebtedness is not increased and is not secured by any additional property or assets.

Consolidation, Merger and Sale of Assets

The Indentures provide that neither the Guarantor nor the Issuer may consolidate with or merge into any other Person in a transaction in which the Guarantor or the Issuer, as the case may be, is not the surviving entity, or convey, transfer or lease our properties and assets (computed on a consolidated basis) substantially as an entirety to any Person unless:

(i) any Person formed by such consolidation or into which the Guarantor or the Issuer, as the case may be, is merged or to whom the Guarantor or the Issuer, as the case may be, has conveyed, transferred or leased its properties and assets substantially as an entirety is a corporation validly existing under the laws of the People's Republic of China, Hong Kong, the Cayman Islands or the British Virgin Islands and such Person expressly assumes by indentures supplemental to the Indentures all the obligations of the Guarantor or the Issuer under the Indentures, the Notes or the Guarantees, as the case may be;

(ii) immediately after giving effect to such transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing;

(iii) any such Person not organized and validly existing under the laws of (or any such Person resident for tax purposes in a jurisdiction other than) the People's Republic of China (in the case of the Guarantor) or the British Virgin Islands or any successor jurisdiction (in the case of the Issuer) shall expressly agree in a supplemental indenture that its jurisdiction of organization or tax residence (or any political subdivision, territory or possession thereof, any taxing authority therein or any area subject to its jurisdiction) will be added to the list of Relevant Taxing Jurisdictions; and

(iv) if, as a result of the transaction, any property or asset of the Guarantor or any of the Guarantor's Principal Subsidiaries would become subject to a Lien that would not be permitted under "– Certain Covenants – Limitation on Liens" above, the Guarantor, the Issuer or such successor Person takes such steps as shall be necessary to secure the Notes and the Guarantees at least equally and ratably with the Indebtedness secured by such Lien or by such other Lien as shall have been approved by holders of the Notes pursuant to the Indentures.

Further Limitation on Issuer's Activities and Related Matters

For so long as the Notes are outstanding:

(i) the Issuer will conduct no business or any other activities other than to finance the business operations of the Guarantor or one or more companies controlled by the Guarantor through the offering, sale or issuance of securities and borrowings of indebtedness and investing in or lending the proceeds thereof to the Guarantor or a company controlled by the Guarantor, and any other activities in connection therewith;

(ii) the Guarantor will cause Sinopec Group Overseas Development Limited ("Holdings") to remain a "company controlled by the parent company" with respect to the Guarantor as such term is defined in Rule 3a-5 under the U.S. Investment Company Act of 1940, as amended;

(iii) the Guarantor will cause Holdings to maintain 100% equity ownership of the Issuer; and

(iv) the Guarantor will ensure each of the Issuer and Holdings' previous election to be treated as a disregarded entity for U.S. federal income tax purposes continues to be in effect, and neither the Issuer, Holdings nor the Guarantor will take any action that is inconsistent with the Issuer or Holdings being treated as a disregarded entity for U.S. federal income tax purposes.

Reports, Statements as to Compliance, and Notices of Default

For so long as the Notes are outstanding, the Guarantor will agree in the Indentures to file with the Trustee:

(i) as soon as they are available, but in any event within 180 calendar days after the end of each fiscal year of the Guarantor, copies of its financial statements in the English language (on a consolidated basis) in respect of such financial year (including a statement of income, balance sheet and cash flow statement) audited by a member firm of independent accountants; and

(ii) as soon as they are available, but in any event within 120 calendar days after the end of each first semiannual fiscal period of the Guarantor, copies of its unaudited financial statements in the English language (on a consolidated basis) in respect of such semi-annual period (including a statement of income, balance sheet and cash flow statement) prepared on a basis consistent with the audited financial statements of the Guarantor, together with a certificate signed by the person then authorized to sign financial statements on behalf of the Guarantor, to the effect that such financial statements are true in all material respects and present fairly the financial position of the Guarantor, as at the end of, and the results of its operations for, the relevant semi-annual period;

provided that, if at any time the Capital Stock of the Guarantor is listed for trading on a recognized stock exchange, the Guarantor will file with the Trustee, as soon as they are available but in any event not more than 10 calendar days after any financial or other reports of the Guarantor are filed with any recognized exchange on which the Guarantor's capital stock is at any time listed for trading, true and correct copies of any financial or other report filed with such exchange in lieu of the reports identified in clauses (i) and (ii) above, if such financial or other report is in the English language.

So long as any of the Notes remain outstanding, the Guarantor will file with the Trustee, as soon as possible and in any event within 10 calendar days after the Guarantor becomes aware of the occurrence thereof, written notice of the occurrence of any event or condition which constitutes, or which, after notice or lapse of time or both, would become, an Event of Default and an officer's certificate of the Guarantor setting forth the details thereof and the action the Guarantor is taking or proposes to take with respect thereto.

The Guarantor will agree in the Indentures that, so long as the Notes remain outstanding and are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, the Guarantor, during any period in which it is not subject to and in compliance with Section 13 or 15(d) of the Exchange Act or it is not exempt from such reporting requirements pursuant to and in compliance with Rule 12g3-2(b) under the Exchange Act, will furnish, upon the request of any holder of a Note or of a beneficial interest in a Note, such information as is specified in paragraph (d)(4) of Rule 144A, to such holder or beneficial owner or to a prospective purchaser of a Note or a beneficial interest in a Note who is a qualified institutional buyer within the meaning of Rule 144A, in order to permit compliance by the holder or beneficial owner with Rule 144A in connection with the resale of the Note or beneficial interest in the Note in reliance on Rule 144A.

Filing of the Notes with the NDRC

The Guarantor will file or cause to be filed with the NDRC, within 10 Beijing Business Days after the settlement date, the information required under the Notice on Promoting the Reform of the Filing and Registration System for Issuance of Foreign Debt by Corporates (《國家發展改革委員會關於推進企業發行外債備案登記制管理改革的通知》(發改外資[2015]2044號)) issued by the NDRC on September 14, 2015, or the NDRC Circular (the "NDRC Post-issue Filing"). The Guarantor shall, within five Beijing Business Days after submission of the NDRC Post-issue Filing, provide the Trustee with a certificate signed by any authorized signatory of the Guarantor confirming the submission of the NDRC Post-issue Filing. The Trustee shall have no obligation to monitor or ensure the completion of the NDRC Post-issue Filing within the time period prescribed by the NDRC Circular, and shall not be liable to the holders of the Notes or any other person for not doing so.

Completion of the Registration of the Guarantees with the Beijing Branch

The Guarantor will use its commercially reasonable best efforts to complete the registration of the Guarantees with the Beijing Branch.

Other Covenants

In addition, the Indentures will (subject to exceptions, qualifications and materiality thresholds, where appropriate) contain covenants regarding the Issuer's and Guarantor's payment of taxes and other claims and the maintenance of an agent for service of process in the Borough of Manhattan, The City of New York.

Events of Default

Each of the following shall constitute an "Event of Default" under the Indentures for the Notes:

(i) failure to pay principal of or premium on any Note of that series on the date such amount is due and payable, upon optional redemption, acceleration or otherwise;

(ii) failure to pay interest on any Note of that series within 30 calendar days after the due date for such payment;

(iii) failure by the Issuer or the Guarantor to comply with (A) its obligations under the covenant described under – Certain Covenants – Consolidation, Merger and Sale of Assets" or (B) its repurchase obligations under the covenant described under "– Repurchase upon a Change of Control Triggering Event";

(iv) failure to perform any other covenant or agreement of the Guarantor or the Issuer under the Indentures, and such failure continues for 60 calendar days after there has been given, by registered or certified mail, to the Guarantor or the Issuer, as the case may be, by the Trustee or by the holders of at least 25% in aggregate principal amount of the Notes of that series then outstanding (with a copy to the Trustee) a written notice specifying such failure and requiring it to be remedied and stating that such notice is a "Notice of Default" under the relevant Indenture;

(v) the Guarantees shall cease to be in full force or effect or the Guarantor shall deny or disaffirm its obligations under the Guarantees;

(vi) if any regulatory, legislative, executive, judicial or constitutional authorization necessary to enable the Issuer or the Guarantor to perform their respective obligations under the Notes and the Guarantees or the Indentures cease to remain in full force and effect or at any time it otherwise becomes unlawful for the Guarantor or the Issuer to perform any of its payment obligations under the Indentures, the Guarantees or the Notes (a) failure to pay upon final maturity (after giving effect to the expiration of any applicable grace period therefor) the principal of any Indebtedness of the Guarantor, the Issuer or any Principal Subsidiary, (b) acceleration of the maturity of any Indebtedness of the Guarantor, the Issuer or any Principal Subsidiary following a default by the Guarantor, the Issuer, or such Principal Subsidiary, if such Indebtedness is not discharged, or such acceleration is not annulled, within 10 calendar days after receipt by the Trustee of the written notice from the Guarantor or the Issuer as provided in each respective Indenture, or (c) failure to pay any amount payable by the Guarantor, the Issuer or any Principal Subsidiary under any guarantee or indemnity in respect of any Indebtedness of any other Person if such obligation is not discharged or otherwise satisfied within 10 calendar days after receipt by the Trustee of written notice as provided in each respective Indenture; provided, however, that no such event set forth in clause (a), (b) or (c) shall constitute an Event of Default unless the aggregate outstanding Indebtedness to which all such events relate exceeds US$100,000,000 (or its equivalent in any other currency);

(vii) one or more final judgments or orders for the payment of money are rendered against the Guarantor, the Issuer or any Principal Subsidiary and are not paid or discharged, and there is a period of 30 consecutive days following entry of the final judgment or order that causes the aggregate amount for all such final judgments or orders outstanding and not paid or discharged against all such Persons to exceed US$100,000,000 (or its equivalent in any other currency) during which a stay of enforcement, by reason of a pending appeal or otherwise, is not in effect; or

(viii) certain events in bankruptcy, insolvency or reorganization in respect of the Guarantor, the Issuer or any Principal Subsidiary as provided in each respective Indenture.

If an Event of Default (other than an Event of Default described in clause (ix) above) with respect to the Notes of that series shall occur and be continuing, either the Trustee or the holders of at least 25% in aggregate principal amount of the Notes of that series then outstanding by notice as provided in each respective Indenture may declare the principal amount of the Notes of that series and any accrued and unpaid interest thereon to be due and payable immediately. If an Event of Default in clause (ix) above with respect to the Notes shall occur, the unpaid principal amount of all the Notes of that series and any accrued and unpaid interest thereon will automatically, and without any action by the Trustee or any holder of the Notes of that series, become immediately due and payable. After any such acceleration but before a judgment or decree based on acceleration has been obtained, the holders of at least a majority in aggregate principal amount of the Notes of that series then outstanding may, under certain circumstances, rescind and annul such acceleration if all Events of Default, other than the nonpayment of accelerated principal, have been cured or waived as provided in each respective Indenture.

Subject to the provisions of the Indentures relating to the duties of the Trustee, in case an Event of Default shall occur and be continuing, the Trustee will be under no obligation to exercise any of its rights or powers under the Indentures at the request or direction of any of the holders of the Notes unless such holders shall have offered to the Trustee security and/or indemnity satisfactory to the Trustee. Subject to certain provisions, including those requiring security and/or indemnification of the Trustee, the holders of a majority in aggregate principal amount of the Notes of a series then outstanding will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the Notes. However, the Trustee may refuse to follow any direction that conflicts with applicable law or the Indentures, that may involve the Trustee in personal liability or cause it to expend or risk its own funds or otherwise incur any financial liability in following such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders. No holder of any Notes of any series will have any right to institute any proceeding, judicial or otherwise, with respect to the Indentures, or for the appointment of a receiver or a trustee, or for any other remedy thereunder unless (i) such holder has previously given to the Trustee written notice of a continuing Event of Default with respect to the Notes of that series, (ii) the holders of at least 25% in aggregate principal amount of the Notes of that series then outstanding have made written request, and such holder or holders have offered to the Trustee indemnity and/or security satisfactory to the Trustee, to institute such proceeding as trustee and (iii) the Trustee has failed to institute such proceeding, and has not received from the holders of a majority in aggregate principal amount of the Notes of that series then outstanding a direction inconsistent with such request, within 60 days after such notice, request or offer. However, such limitations do not apply to a suit instituted by a holder of a Note for the enforcement of the right to receive payment of the principal of or interest on such Note on or after the applicable due date specified in such Note.

The Trustee need not do anything to ascertain whether any Event of Default has occurred or is continuing and will not be responsible to holders or any other person for any loss arising from any failure by it to do so, and the Trustee may assume that no such event has occurred and that each of the Guarantor and the Issuer is performing all their respective obligations under the Indentures and the related Notes and Guarantees unless the Trustee has received written notice of the occurrence of such event or facts establishing that the Guarantor or the Issuer, as the case may be, is not performing all of its obligations under the Indentures, the Notes and the Guarantees, as the case may be.

Payments for Consent

Neither the Guarantor nor any of its Subsidiaries will, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee or otherwise, to any holder of any Notes of any series for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of the Indentures or the Notes of that series unless such consideration is offered to be paid or agreed to be paid to all holders of the Notes of that series that consent, waive or agree to amend in the time frame set forth in the solicitation documents relating to such consent, waiver or agreement.

Modification and Waiver

The Indentures contain provisions permitting the Guarantor, the Issuer and the Trustee, without the consent of the holders of the Notes, to execute supplemental indentures for certain enumerated purposes, including any amendment solely to conform the Indentures to this offering memorandum (as amended and supplemented) and, with the consent of the holders of not less than a majority in aggregate principal amount of the applicable series of the Notes then outstanding under each respective Indenture, to change or modify in any manner the rights of the holders of the Notes of the applicable series, provided that no such modification or amendment may, without the consent of all holders of the applicable series of the Notes, among other things:

(i) change the stated maturity of the Notes;

(ii) reduce the principal amount of or payments of interest on any such Note;

(iii) change any obligation of the Guarantor or the Issuer to pay Additional Amounts;

(iv) change the currency or place of payment of the principal of or interest on any such Note;

(v) impair the right to institute suit for the enforcement of any payment due on or with respect to any such Note;

(vi) reduce the above stated percentage of outstanding Notes necessary to modify or amend the each respective Indenture;

(vii) reduce the percentage of the aggregate principal amount of outstanding Notes necessary for waiver of compliance with certain provisions of the Indentures or for waiver of certain defaults;

(viii) change, in any manner adverse to the interest of holders of the Notes, the terms and provisions of the Guarantees in respect of the due and punctual payment of principal of and interest on the Notes;

(ix) reduce the premium payable upon the redemption or repurchase of any Note;

(x) modify such provisions with respect to limitations on the Issuer's activities; or

(xi) modify such provisions with respect to modification and waiver, which require the consent of the holders of the Notes as provided in each respective Indenture.

The holders of not less than a majority in aggregate principal amount of the Notes of a series then outstanding may, on behalf of holders of all the Notes of that series, waive compliance by the Guarantor or the Issuer with certain restrictive provisions of each respective Indenture. The holders of not less than a majority in aggregate principal amount of the Notes of a series may on behalf of all holders of the Notes of such series waive any existing or past default under the respective Indenture for the Notes of such series, except a continuing default in the payment of principal of, or interest on, any Note of such series then outstanding or in respect of a covenant or provision which under such Indenture cannot be modified or amended without the consent of the holder of each Note of such series then outstanding affected thereby. Any such waivers will be conclusive and binding on all holders of the Notes of a series, whether or not they have given consent to such waivers, and on all future holders of such Notes, whether or not notation of such waivers is made upon such Notes. Any instrument given by or on behalf of any holder of a Note in connection with any consent to any such waiver will be irrevocable once given and will be conclusive and binding on all subsequent holders of such Note.

The consent of the holders of any series of the Notes is not necessary to approve the particular form of any proposed amendment.

It is sufficient if such consent approves the substance of the proposed amendment. After an amendment described in the preceding paragraph becomes effective, the Issuer or the Guarantor will deliver to the holders of such Notes and the Trustee a notice briefly describing such amendment. However, the failure to give such notice to all holders of such Notes, or any defect therein, will not impair or affect the validity of the amendment.

Defeasance and Discharge

The Indentures provide that, upon the conditions set forth therein, the Guarantor and the Issuer (i) may each be discharged from all their respective obligations with respect to Notes (except for certain obligations to exchange or register the transfer of the Notes, to replace stolen, lost or mutilated Notes, to maintain paying agencies and to hold moneys for payment in trust and to pay Additional Amounts), or (ii) need not comply with certain restrictive covenants of the Notes (including those described under "– Certain Covenants" (other than as described in "– Further Limitations on Issuer's Activities and Related Matters") and the events under paragraphs (iii), (iv), (vii) and (viii) under "– Events of Default") shall not constitute an Event of Default under the Indenture), in each case upon the deposit in trust with the Trustee for the benefit of the holders of such Notes of money in U.S. dollars or U.S. Government Obligations (as defined below), or both, which, through the payment of principal and interest thereon in accordance with their terms, will provide money in an amount sufficient to pay the principal of and interest on the Notes (and any Additional Amounts in respect thereof) in accordance with the terms of the Indenture and the Notes. Such defeasance or discharge pursuant to clauses (i) and (ii) above may occur only if, among other things, the Guarantor and the Issuer have delivered to the Trustee an opinion of independent legal counsel of recognized standing licensed to practice law in the United States to the effect that beneficial owners of such Notes will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit, defeasance or discharge and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such deposit, defeasance or discharge had not occurred, which opinion of counsel in the case of defeasance described in (i) above must be based on a ruling received by the Guarantor or the Issuer from the U.S. Internal Revenue Service or a published ruling of the U.S. Internal Revenue Service or other change in applicable U.S. federal income tax law after the original issue date of the Notes.

"U.S. Government Obligations" means direct obligations (or certificates representing an ownership interest in such obligations) of the United States of America (including any agency or instrumentality thereof) for the payment of which the full faith and credit of the United States of America is pledged and which are not callable at the issuer's option.

Prescription

Any moneys deposited with or paid to the Trustee or any paying agent of the Notes, or then held by the Issuer, in trust, for the payment of the principal of or interest on (or any Additional Amount payable in respect of) any Note and not applied but remaining unclaimed for two years after the date upon which such principal or interest shall have become due and payable, shall, upon the written request of the Guarantor or the Issuer be repaid to the Guarantor or the Issuer, as the case may be, by the Trustee or such paying agent or (if then held by the Issuer) be discharged from such trust, unless otherwise required by mandatory provisions of applicable escheat or abandoned or unclaimed property law, and the holder of such Note shall, unless otherwise required by mandatory provisions of applicable escheat or abandoned or unclaimed property laws, thereafter look only to the Guarantor or the Issuer for any payment which such holder may be entitled to collect, and all liability of the Trustee or any paying agent of the Notes with respect to such moneys shall thereupon cease.

Under New York law, any legal action upon the Notes or Guarantees must be commenced within six years after the payment thereof is due. Thereafter, the Notes or Guarantees will generally become unenforceable.

Concerning the Trustee

Citicorp International Limited will be the Trustee under the Indentures. The corporate trust office of Citicorp International Limited is currently located at 20/F, Citi Tower, One Bay East, 83 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong. The Issuer will appoint Citibank, N.A., London Branch as Paying Agent, Transfer Agent and Registrar, located at c/o 1 North Wall Quay, Dublin 1, Ireland.

The Indentures provide that the Trustee, except during the continuance of an Event of Default, undertakes to perform such duties and only such duties as are specifically set forth in the Indentures. If an Event of Default has occurred and is continuing, the Trustee will use the same degree of care and skill in its exercise of the rights and powers vested in it by the Indentures as a prudent person would exercise under the circumstances in the conduct of such person's own affairs. The Indentures also provide that the Trustee and any paying or other agent of the Notes, in their individual or any other capacity, may become the owner or pledgee of the Notes with the same rights it would have if it were not the trustee or such agent and may otherwise deal with the Guarantor and the Issuer and receive, collect, hold and retain collections from the Guarantor and the Issuer with the same rights it would have if it were not the trustee or such agent. All moneys received by the Trustee shall, until used or applied as provided in the Indentures, be held in trust thereunder for the purposes for which they were received and need not be segregated from other funds except to the extent required by law.

The Trustee will be under no obligation to exercise any rights or powers conferred under the Indentures for the benefit of the holders unless such holders have offered to the Trustee indemnity and/or security satisfactory to the Trustee against any loss, liability or expense. In the exercise of its duties, the Trustee shall not be responsible for the calculation or computation of any amount payable under the Notes and the Guarantees or the verification of any such calculations or computations or any verification of the accuracy or completeness of any certification, opinion or other documents submitted to it by the Issuer or the Guarantor.

Indemnification for Judgment Currency Fluctuations

To the fullest extent permitted by law, the obligations of the Guarantor or the Issuer to any holder of the Notes under the Indentures, the Guarantees or the Notes, as the case may be, shall, notwithstanding any judgment in a currency (the "Judgment Currency") other than U.S. dollars (the "Agreement Currency"), be discharged only to the extent that on the day following receipt by such holder or the Trustee, as the case may be, of any amount in the Judgment Currency, such holder or the Trustee, as the case may be, may in accordance with normal banking procedures purchase the Agreement Currency with the Judgment Currency. If the amount of the Agreement Currency so purchased is less than the amount originally to be paid to such holder or the Trustee, as the case may be, in the Agreement Currency, the Guarantor and the Issuer agree, as a separate obligation and notwithstanding such judgment, to pay the difference and if the amount of the Agreement Currency so purchased exceeds the amount originally to be paid to such holder, such holder or the Trustee, as the case may be, agrees to pay to or for the account of the Guarantor or the Issuer, as the case may be, such excess; provided that such holder or the Trustee, as the case may be, shall not have any obligation to pay any such excess as long as a default by the Guarantor or the Issuer in its obligations under the Indentures or the Notes has occurred and is continuing, in which case such excess may be applied by such holder or the Trustee, as the case may be, to such obligations.

Governing Law and Consent to Jurisdiction

The Notes, the Guarantees and the Indentures are governed by and will be construed in accordance with the laws of the State of New York.

The Guarantor and the Issuer will each irrevocably submit to the non-exclusive jurisdiction of any New York state or United States federal court located in the Borough of Manhattan, The City of New York, New York (each a "New York Court") in any suit, action or proceeding arising out of or relating to the Indentures, the Notes, the Guarantees or any transaction contemplated thereby, and will irrevocably waive, to the fullest extent permitted by applicable law, any objection to the venue of any such suit, action or proceeding in any such New York Court and any claim of an inconvenient forum.

The Guarantor and the Issuer have appointed Cogency Global Inc., 122 East 42nd Street, 18th Floor, New York, NY 10168, USA, as agent for service of process with respect of any such suit, action or proceeding.

Waiver of Immunity

To the extent that the Guarantor or the Issuer has or hereafter may acquire any immunity (sovereign or otherwise) from any legal action, suit or proceeding, from jurisdiction of any court or from set-off or any legal process (including any immunity from non-exclusive jurisdiction or from service of process or from any execution to satisfy a final judgment or from attachment or in aid of such execution or otherwise) with respect to itself or any of its assets or properties, the Guarantor and the Issuer each irrevocably waives, to the fullest extent permitted under applicable law, any such right of immunity or claim thereto which may now or hereafter exist, and agrees not to assert any such right or claim in any action or proceeding against it arising out of or based on the Notes, the Guarantees or the Indentures.

Notices

Notices to holders of the Notes will be mailed to them (or the first named of joint holders) by first class mail (or, if first class mail is unavailable, by airmail) at their respective addresses in the register and will be deemed to have been given on the fourth Business Day after the date of mailing. So long as and to the extent that the Notes are represented by global notes and such global notes are held by DTC, notices to owners of beneficial interests in the global notes may be given by delivery of the relevant notice to DTC for communication by it to entitled account holders.

Notes; Delivery and Form

The statements set forth herein include summaries of certain rules and operating procedures of DTC, Euroclear and Clearstream, Luxembourg which will affect transfers of interests in the global notes.

The Notes sold in offshore transactions in reliance on Regulation S under the Securities Act will be initially in the form of one or more Regulation S global notes, fully registered without interest coupons, which will be deposited with Citibank N.A., London Branch, as custodian for DTC (in such capacity, the "Custodian") and registered in the name of Cede & Co., as nominee of DTC, for the accounts of Euroclear and Clearstream, Luxembourg, as participants in DTC.

The Notes sold to qualified institutional buyers ("QIBs") in reliance on Rule 144A under the Securities Act will be issued initially in the form of one or more Rule 144A global notes, fully registered without interest coupons, which will be deposited with the Custodian for DTC and registered in the name of Cede & Co., as nominee of DTC.

The Notes will be issued in minimum denominations of US$200,000 and in integral multiples of US$1,000 in excess of that amount.

The Notes (including beneficial interests in the global notes) will be subject to certain restrictions on transfer set forth therein and in the Indenture and will bear a legend regarding such restrictions as set forth under "Transfer Restrictions." Under certain circumstances, transfers may be made only upon receipt by the Trustee of a written certification (in the form(s) provided in the Indentures).

Beneficial interests in a Rule 144A global note may be transferred to a person who takes delivery in the form of an interest in a Rule 144A global note without any written certification from the transferor or the transferee. Beneficial interests in a Rule 144A global note may be transferred to a person who takes delivery in the form of an interest in a Regulation S global note only upon receipt by the Trustee of written certifications (in the form(s) provided in the Indentures) from the transferor to the effect that such transfer is being made to a non-U.S. person as defined in Rule 904 of Regulation S or pursuant to Rule 144 under the Securities Act (if available).

Any beneficial interest in one of the global notes that is transferred to an entity who takes delivery in the form of an interest in the other global note will, upon transfer, cease to be an interest in such global note and become an interest in the other global note and, accordingly, will thereafter be subject to all transfer restrictions, if any, and other procedures applicable to beneficial interests in such other global note for as long as it remains such an interest.

Investors may hold their interests in the global notes directly through DTC, Clearstream, Luxembourg or Euroclear, as the case may be, if they are participants in such systems, or indirectly through organizations which are participants in such systems. Clearstream, Luxembourg and Euroclear will hold interests in the Regulation S global notes on behalf of their participants through customers' securities accounts in their respective names on the books of their respective depositaries, which are participants in DTC.

Transfers between participants in DTC (the "Participants") will be effected in the ordinary way in accordance with DTC rules. Transfers between participants in Clearstream, Luxembourg and Euroclear ("Clearstream Participants" and "Euroclear Participants," respectively) will be effected in the ordinary way in accordance with their respective rules and operating procedures.

Persons who are not Participants may beneficially own interests in the global notes held by DTC only through Participants or Indirect Participants (as defined below) (including Euroclear and Clearstream, Luxembourg). So long as Cede & Co., as the nominee of DTC, is the registered owner of the global notes, Cede & Co., for all purposes will be considered the sole holder of such Notes. Payment of interest on and principal of the global notes will be made to Cede & Co., the nominee for DTC, as the registered owner of the global notes by wire transfer of immediately available funds. None of the Guarantor, the Issuer nor the Trustee will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the global notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interest.

The Issuer has been informed by DTC that, upon receipt of any payment of interest on or the redemption price of the global notes, DTC will credit Participants' accounts with payments in amounts proportionate to their respective beneficial interests in the global notes as shown on the records of DTC. Payments of interest on and principal of the Notes held through Clearstream, Luxembourg or Euroclear will be credited to the cash accounts of Clearstream Participants or Euroclear Participants, as the case may be, in accordance with the relevant system's rules and procedures. Payments by Participants to owners of beneficial interests in the global notes held through such Participants will be the responsibility of such Participants, as is the case with securities held by broker-dealers, either directly or through nominees, for the accounts of customers and registered in "street name."

Because DTC can only act on behalf of Participants, who in turn act on behalf of Indirect Participants and certain banks, the ability of a person having a beneficial interest in the global notes to pledge such interest to persons or entities that do not participate in the DTC system, or to otherwise take actions in respect of such interest, may be affected by the lack of a physical certificate.

So long as the Notes are represented by global notes and such global notes are held on behalf of DTC or any other clearing system, such clearing system or its nominee will be considered the sole holder of the Notes represented by the applicable global notes for all purposes under the Indentures, including, without limitation, obtaining consents and waivers thereunder, and none of the Guarantor, the Issuer or the Trustee shall be affected by any notice to the contrary. None of the Guarantor, the Trustee or the Issuer shall have any responsibility or obligation with respect to the accuracy of any records maintained by any clearing system or any Participant of such clearing system. The clearing systems will take actions on behalf of their Participants (and any such Participants will take actions on behalf of any Indirect Participants) in accordance with their standard procedures. To the extent that any clearing system acts upon the direction of the holders of the beneficial interests in the applicable global note and such beneficial holders give conflicting instructions, the applicable clearing system may take conflicting actions in accordance with such instructions.

DTC has advised the Issuer that it will take any action permitted to be taken by a holder of the Notes (including, without limitation, the presentation of the Notes for exchange) only at the direction of one or more Participants and only in respect of the principal amount of the Notes represented by the global note as to which such Participant or Participants has or have given such direction.

Clearstream, Luxembourg or Euroclear, as the case may be, will take any action permitted to be taken by a holder of the Notes (including, without limitation, the presentation of the Notes for exchange) on behalf of a Clearstream Participant or a Euroclear Participant only in accordance with its relevant rules and procedures and subject to its ability to effect such actions through DTC.

DTC has advised the Issuer as follows:

DTC is a limited purpose trust company organized under the laws of the State of New York, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the Uniform Commercial Code and a "Clearing Agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities for its Participants and facilitate the clearance and settlement of securities transactions between Participants through electronic book-entry changes in accounts of its Participants, thereby eliminating the need for the physical movement of certificates. Participants include securities brokers and dealers, banks, trust companies and clearing corporations and may include certain other organizations. Indirect access to the DTC system is available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Participant, either directly or indirectly ("Indirect Participants").

Although DTC, Clearstream, Luxembourg and Euroclear have agreed to the foregoing procedures in order to facilitate transfers of interests in the global notes among participants of DTC, Clearstream, Luxembourg and Euroclear, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. None of the Guarantor, the Issuer or the Trustee will have any responsibility for the performance by DTC, Clearstream, Luxembourg and Euroclear, or their respective Participants or Indirect Participants, of their respective obligations under the rules and procedures governing their operations.

Individual Notes

If DTC is at any time unwilling or unable to continue as depositary and a successor depositary is not appointed by the Issuer within 90 calendar days or if there shall have occurred and be continuing an Event of Default (as described above) with respect to the Notes, the Issuer will issue individual notes in certificated, fully registered form in exchange for the global notes.

Subject to the transfer restrictions set forth on the individual notes in certificated form, the holder of such individual notes in certificated form may transfer or exchange such Notes by surrendering them at the corporate trust office of the Trustee. Prior to any proposed transfer of individual notes in certificated form (other than pursuant to an effective registration statement), the holder may be required to provide certifications and other documentation relating to the manner of such transfer and submit such certifications and other documentation to the Trustee as described under "– Notes; Delivery and Form" above. Upon the transfer, exchange or replacement of individual notes in certificated form not bearing the legend referred to under "Transfer Restrictions," the Trustee will deliver individual notes in certificated form that do not bear the legend. Upon the transfer, exchange or replacement of individual notes in certificated form bearing the legend, or upon specific request for removal of the legend on an individual note in certificated form, the Trustee will deliver only individual notes in certificated form that bear such legend or shall refuse to remove such legend, as the case may be, unless there is delivered to the Guarantor or the Issuer such satisfactory evidence, which may include an opinion of counsel, as may reasonably be required by the Guarantor or the Issuer that neither the legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the Securities Act.

Certain Definitions

Set forth below are definitions of certain of the terms used herein. Additional terms are defined elsewhere above or in the Indenture.

"*Adjusted Consolidated Net Worth*" means the sum of the Guarantor's (a) shareholders' equity as determined under PRC GAAP and (b) Subordinated Indebtedness.

"*Beijing Business Day*" means a day other than a Saturday, Sunday or a day on which the Beijing Branch is authorized or obligated by law or executive order to remain closed.

"*Capital Stock*" means any and all shares, interests (including joint venture interests), participations or other equivalents (however designated) of capital stock of a corporation or any and all equivalent ownership interests in a Person (other than a corporation).

"*Indebtedness*" of any Person means, at any date, without duplication, (i) any outstanding indebtedness for or in respect of money borrowed (including bonds, debentures, notes or other similar instruments, whether or not listed) that is evidenced by any agreement or instrument, excluding trade payables, (ii) all noncontingent obligations of such Person to reimburse any bank or other Person in respect of amounts paid under a letter of credit or similar instrument, and (iii) all Indebtedness of others guaranteed by such Person.

"*Issuer*" means Sinopec Group Overseas Development (2018) Limited.

"*Lien*" means any mortgage, charge, pledge, lien, encumbrance, hypothecation, title retention, security interest or security arrangement of any kind.

"*Person*" means any individual, corporation, partnership, joint venture, association, joint stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any other entity.

"*PRC GAAP*" means generally accepted accounting principles in the PRC consistently applied as in effect from time to time.

"*Principal Subsidiary*" at any time shall mean one of the Guarantor's Subsidiaries.

(i) as to which one or more of the following conditions is/are satisfied:

  (a) its net profit or (in the case of one of the Guarantor's Subsidiaries which has one or more Subsidiaries) consolidated net profit attributable to the Guarantor (in each case before taxation and exceptional items) is at least 10% of the Guarantor's consolidated net profit (before taxation and exceptional items); or

  (b) its net assets or (in the case of one of the Guarantor's Subsidiaries which has one or more Subsidiaries) consolidated net assets attributable to the Guarantor (in each case after deducting minority interests in Subsidiaries) are at least 10% of the Guarantor's consolidated net assets (after deducting minority interests in Subsidiaries);

  (c) all as calculated by reference to the then latest audited financial statements (consolidated or, as the case may be, unconsolidated) of the Guarantor's Subsidiary and the Guarantor's then latest consolidated financial statements, provided that: (1) in the case of a Subsidiary of the Guarantor acquired after the end of the financial period to which the then latest relevant audited financial statements relate, the reference to the then latest audited financial statements for the purposes of the calculation above shall, until audited financial statements for the financial period in which the acquisition is made are published, be deemed to be a reference to the financial statements adjusted to consolidate the latest audited financial statements of the Subsidiary in the financial statements; (2) if, in the case of a Subsidiary of the Guarantor which itself has one or more Subsidiaries, no consolidated financial statements are prepared and audited, its consolidated net assets and consolidated net profits shall be determined on the basis of pro forma consolidated financial statements of the relevant Subsidiary and its Subsidiaries prepared for this purpose and opined on by its auditors; or (3) if the financial statements of a Subsidiary of the Guarantor (not being a Subsidiary referred to in (1) above) are not consolidated with those of the Guarantor then the determination of whether or not the Subsidiary is a Principal Subsidiary shall, if the Guarantor requires, be based on a pro forma consolidation of its financial statements (consolidated, if appropriate) with the consolidated financial statements of the Guarantor and its Subsidiaries; or

(ii) to which is transferred all or substantially all of the assets of the Guarantor's Subsidiary which immediately prior to the transfer was a Principal Subsidiary, provided that, with effect from such transfer, the Subsidiary which so transfers its assets and undertakings shall cease to be a Principal Subsidiary (but without prejudice to paragraph (i) above) and the Guarantor's Subsidiary to which the assets are so transferred shall become a Principal Subsidiary.

A certificate of the Guarantor's auditors as to whether or not the Guarantor's Subsidiary is a Principal Subsidiary shall be conclusive and binding on all parties in the absence of manifest error.

"*Relevant Indebtedness*" of any Person means, at any date, Indebtedness that (x) has a final maturity date of one year or more from the date of incurrence or issuance of such Indebtedness and (y) is in the form of, is represented or embodied by, bonds, notes, debentures or other securities which are, or are intended to be, commonly quoted, listed or dealt in or traded on any stock exchange or over-the-counter securities market.

"*Subordinated Indebtedness*" means the Guarantor's indebtedness (including perpetual debt, which the Guarantor is not required to repay) which (i) has a final maturity and a weighted average life to maturity longer than the remaining life to maturity of the Notes and (ii) is issued or assumed pursuant to, or evidenced by, an indenture or other instrument containing provisions for the subordination of such Indebtedness to the Notes including (a) a provision that in the event of the Guarantor's bankruptcy, insolvency or other similar proceeding, the holders of the Notes shall be entitled to receive payment in full in cash of all principal, Additional Amounts and interest on the Notes (including all interest arising after the commencement of such proceeding whether or not an allowed claim in such proceeding) before the holder or holders of any such Subordinated Indebtedness shall be entitled to receive any payment of principal, interest or premium thereon, (b) a provision that, if an Event of Default has occurred and is continuing under the Indentures, the holder or holders of any such Subordinated Indebtedness shall not be entitled to payment of any principal, interest or premium in respect thereof unless or until such Event of Default shall have been cured or waived or shall have ceased to exist, and (c) a provision that the holder or holders of such Subordinated Indebtedness may not accelerate the maturity thereof as a result of any default relating thereto so long as any Note is outstanding.

"*Subsidiary*" means, as applied to any Person, any corporation or other entity of which a majority of the outstanding Voting Shares is, at the time, directly or indirectly, owned by such Person.

"*Voting Shares*" means, with respect to any Person, the Capital Stock having the general voting power under ordinary circumstances to vote on the election of the members of the board of directors or other governing body of such Person (irrespective of whether or not at the time stock of any other class or classes shall have or might have voting power by reason of the happening of any contingency).

TRANSFER RESTRICTIONS

Because of the following restrictions, purchasers are advised to consult legal counsel prior to making any offer, sale, resale, pledge or other transfer of the Notes and the Guarantees (together, the "Securities").

Each purchaser of the Securities will be deemed to have represented and agreed as follows (terms used in this paragraph that are defined in Rule 144A or in Regulation S under the Securities Act are used herein as defined therein):

(1) it is not an "affiliate" (as defined in Rule 144 under the Securities Act) of the Company or the Issuer or acting on behalf of the Company or the Issuer and (A)(i) is a Qualified Institutional Buyer, (ii) is aware, and each beneficial owner of the Securities has been advised, that the sale of the Securities to it is being made in reliance on Rule 144A and (iii) is acquiring such Securities for its own account or the account of a Qualified Institutional Buyer, or (B)(i) is outside the United States and (ii) is not a U.S. person;

(2) it acknowledges that the Securities have not been and will not be registered under the Securities Act or with any securities regulatory authority of any jurisdiction and may not be offered or sold within the United States except as set forth below;

(3) (A) it understands and agrees that if it decides to resell, pledge or otherwise transfer any Securities or any beneficial interests in any Securities other than a Regulation S global note within the time period referred to in Rule 144(d) under the Securities Act with respect to such resale, pledge or transfer, such Securities may be resold, pledged, or transferred only, (a) if such purchaser is an initial investor, (i) to the Company or the Issuer or any subsidiary thereof, (ii) to a person whom the seller reasonably believes is a Qualified Institutional Buyer that purchases for its own account or for the account of a Qualified Institutional Buyer in a transaction meeting the requirements of Rule 144A, (iii) in an offshore transaction meeting the requirements of Rule 904 of Regulation S under the Securities Act or (iv) pursuant to an exemption from registration under the Securities Act provided by Rule 144 under the Securities Act (if available); (b) if such purchaser is a subsequent investor, as set forth in (a) above and, in addition, pursuant to any available exemption from the registration requirements under the Securities Act (provided that as a condition to the registration of transfer of any Securities otherwise than as described in a(i), (a)(ii) or (a)(iii) above or (c) below, the Company, the Issuer, the Trustee, the Paying Agent, the Transfer Agent or the Registrar may, in circumstances that any of them deems appropriate, require evidence as to compliance with any such exemption); or (c) pursuant to an effective registration statement under the Securities Act, and in each of such cases, in accordance with any applicable securities laws of any state of the United States and any other jurisdiction; (B) if it is a purchaser in a sale that occurs outside the United States within the meaning of Regulation S, it acknowledges that until the expiration of the 40-day distribution compliance period, it shall not make any offer or sale of the Securities to a U.S. person or for the account or benefit of a U.S. person within the meaning of Rule 902 under the Securities Act, except pursuant to Rule 144A to a qualified institutional buyer taking delivery thereof in the form of a beneficial interest in a Rule 144A global note;

(4) it agrees to, and each subsequent holder is required to, notify any purchaser of the Securities from it of the resale restrictions referred to in clause 3 above, if then applicable;

(5) it understands and agrees that (A) the Securities initially offered in the United States to Qualified Institutional Buyers will be represented by Rule 144A global notes and before any interest in the Rule 144A global notes may be offered, sold, pledged or otherwise transferred to a person who takes delivery in the form of an interest in the Rule 144A global notes, it will be required to provide the Transfer Agent with a written certification as to compliance with applicable securities laws and (B) the Notes offered outside the United States in reliance on Regulation S will be represented by Regulation S global notes and prior to the expiration of the distribution compliance period, before any interest in the Regulation S global notes may be offered, sold, pledged or otherwise transferred to a person who takes delivery in the form of an interest in the Regulation S global notes, it will be required to provide the Transfer Agent with a written certification as to compliance with applicable securities laws;

(6) it understands that the Notes will bear a legend to the following effect, unless otherwise agreed to by the Company and the Issuer in accordance with applicable law:

(A) In the case of Rule 144A global notes:

THIS NOTE AND THE GUARANTEE RELATING TO THIS NOTE HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS EXCEPT AS SET FORTH IN THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF, THE HOLDER (1) REPRESENTS THAT IT IS A "QUALIFIED INSTITUTIONAL BUYER" (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) OR IT IS NOT A U.S. PERSON AND IS ACQUIRING THIS NOTE IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH REGULATION S UNDER THE SECURITIES ACT, (2) AGREES THAT IT WILL NOT, WITHIN THE TIME PERIOD REFERRED TO IN RULE 144(d) UNDER THE SECURITIES ACT AS IN EFFECT WITH RESPECT TO SUCH TRANSFER, RESELL OR OTHERWISE TRANSFER THIS NOTE EXCEPT (A) TO THE ISSUER, THE GUARANTOR OR ANY SUBSIDIARY THEREOF, (B) INSIDE THE UNITED STATES TO A QUALIFIED INSTITUTIONAL BUYER IN COMPLIANCE WITH RULE 144A UNDER THE SECURITIES ACT, (C) OUTSIDE THE UNITED STATES IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH RULE 904 UNDER THE SECURITIES ACT, (D) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) OR (E) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, AND (3) AGREES THAT IT WILL DELIVER TO EACH PERSON TO WHOM THIS NOTE IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND. AS USED HEREIN, THE TERMS "OFFSHORE TRANSACTION," "UNITED STATES" AND "U.S. PERSON" HAVE THE MEANINGS GIVEN TO THEM BY REGULATION S UNDER THE SECURITIES ACT. THE INDENTURE CONTAINS A PROVISION REQUIRING THE TRUSTEE TO REFUSE TO REGISTER ANY TRANSFER OF THIS NOTE IN VIOLATION OF THE FOREGOING RESTRICTIONS.

(B) In the case of Regulation S global notes:

THIS NOTE AND THE GUARANTEE RELATING TO THIS NOTE HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED, OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY JURISDICTION, AND MAY NOT BE TRANSFERRED IN THE UNITED STATES EXCEPT PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND ALL APPLICABLE STATE SECURITIES LAWS. PRIOR TO EXPIRATION OF THE 40-DAY DISTRIBUTION COMPLIANCE PERIOD (AS DEFINED IN REGULATION S ("REGULATION S") UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT")), THIS NOTE MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED WITHIN THE UNITED STATES (AS DEFINED IN REGULATION S) OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, A U.S. PERSON (AS DEFINED IN REGULATION S), EXCEPT TO A PERSON REASONABLY BELIEVED TO BE A "QUALIFIED INSTITUTIONAL BUYER" (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT ("RULE 144A")) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A AND THE INDENTURE REFERRED TO HEREIN.

(7) it acknowledges that the Company, the Issuer and the Initial Purchasers, the Trustee, the Paying Agent, the Transfer Agent, the Registrar and others will rely upon the truth and accuracy of the foregoing acknowledgments, representations and agreements and agrees that, if any of such acknowledgments, representations or agreements deemed to have been made by virtue of its purchase of the Notes are no longer accurate, it shall promptly notify the Company and the Issuer, and if it is acquiring any Notes as a fiduciary or agent for one or more accounts, it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgments, representations and agreements on behalf of each such account.

For further discussion of the requirements (including the presentation of transfer certificates) under the Indentures to effect exchanges of transfer of interests in the global notes and of the Notes in certificated form, see "Description of the Notes and Guarantees – Notes; Delivery and Form."

EXCHANGE RATES

This offering memorandum contains translations of certain Renminbi amounts into U.S. dollar amounts at specified rates. Unless otherwise stated, the translations of Renminbi into U.S. dollars have been made at the Noon Buying Rate, as of September 30, 2020, which was RMB6.7896 to US$1.00, the exchange rate set forth in the H.10 weekly statistical release of the Federal Reserve Board on September 30, 2020. We make no representation that the Renminbi or U.S. dollar amounts referred to in this offering memorandum could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, the rates stated below, or at all. See "Risk Factors – Risks Related to Doing Business in the PRC – Government control of currency conversion and exchange rate fluctuation may adversely affect our operations and financial results." For discussions of the effects of fluctuating exchange rates and currency control on the value of your investment in the Notes.

The following table sets forth the Noon Buying Rate as set forth in the H. 10 statistical release of the Federal Reserve Board for and as of the period ends indicated from and after January 1, 2015:

Period	Period end	Average(1)	High	Low
		(RMB per US$1.00)		
2015	6.4778	6.2827	6.1870	6.4896
2016	6.9430	6.6549	6.4480	6.9580
2017	6.5063	6.7350	6.4773	6.9575
2018	6.8755	6.6090	6.2649	6.9737
2019	6.9618	6.9081	6.6822	7.1786
January 2020	6.9161	6.9184	6.8589	6.9749
February 2020	6.9906	6.9967	6.9650	7.0286
March 2020	7.0808	7.0205	6.9244	7.1099
June 2020	7.0651	7.0816	7.1263	7.0575
July 2020	6.9744	7.0041	7.0703	6.9744
August 2020	6.8474	6.9270	6.9799	6.8474
September 2020	6.7896	6.8106	6.8474	6.7529
October 2020	6.6919	6.7254	6.7898	6.6503
November 2020	6.5706	6.6029	6.6899	6.5556

(1) Annual averages are calculated by averaging the rates on the last business day of each month during the relevant year. Monthly averages are calculated by averaging the daily rates during the relevant monthly period.

TAXATION

The following summary of certain tax consequences of the purchase, ownership and disposition of the Notes is based upon applicable laws, rules and regulations in effect as of the date of this offering memorandum, all of which are subject to change (possibly with retroactive effect). This discussion does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, own or dispose of the Notes and does not purport to deal with consequences applicable to all categories of investors, some of which may be subject to special rules. Persons considering the purchase of the Notes should consult their own tax advisors concerning the tax consequences of the purchase, ownership and disposition of the Notes, including any possible consequences under the laws of their country of citizenship, residence or domicile.

British Virgin Islands

A British Virgin Islands business company is exempt from all provisions of the Income Tax Act (as amended) of the British Virgin Islands including with respect to all dividends, interests, rents, royalties, compensations and other amounts payable by the company to persons who are not resident in the British Virgin Islands.

Income and capital gains realized with respect to notes issued by such company, such as the Notes, by persons who are not persons resident in the British Virgin Islands are also exempt from all provisions of the Income Tax Act of the British Virgin Islands. Accordingly, there is no income or other tax of the British Virgin Islands imposed by withholding or otherwise on any payments to be made by such company pursuant to the Notes to persons who are not resident in the British Virgin Islands.

No estate, inheritance, succession or gift tax, rate, duty, levy or other charge is payable with respect to the Notes by persons who are not persons resident in the British Virgin Islands, save for interest payable to or for the benefit of an individual resident in the European Union.

PRC

Taxation on Interest

Pursuant to the EIT Law and its implementation regulations, enterprises that are established under the laws of foreign countries and regions whose "de facto management bodies" are within the territory of the PRC are treated as PRC tax resident enterprises for the purpose of the EIT Law and must pay enterprise income tax at the rate of 25% in respect of their income sourced from both within and outside China. If the relevant PRC tax authorities decide, in accordance with applicable tax rules and regulations, that the "de facto management body" of the Issuer is within the territory of the PRC, the Issuer may be treated as a PRC tax resident enterprise for the purpose of the EIT Law and be subject to enterprise income tax at the rate of 25% on its income from sources both within and outside the PRC.

The EIT Law and its implementation regulations impose withholding tax at the rate of 10%, or a lower rate if tax treaty benefits are available, on PRC-source income paid to a "non-resident enterprise" that does not have an establishment or place of business in China or that has an establishment or place of business in China but the relevant income is not effectively connected therewith. Pursuant to these provisions of the EIT Law, in the event the Issuer is considered to be a PRC resident enterprise by the PRC tax authorities in the future, interest paid to non-resident enterprise holders of the Notes may be treated as income derived from sources within China and be subject to such PRC withholding tax. Further, in accordance with the Individual Income Tax Law of the PRC which was latest amended on August 31, 2018 and took effect on January 1, 2019 and its implementation regulations which was latest amended on December 18, 2018 and took effect on January 1, 2019, if the Issuer is considered to be a PRC tax resident enterprise, interest payable to nonresident individual holders of the Notes may be treated as income derived from sources within China and be subject to a 20% individual income tax which the Issuer would be obliged to withhold from payments of interests to non-resident individual holders of the Notes.

To the extent that China has entered into arrangements relating to the avoidance of double-taxation with any jurisdiction, such as Hong Kong, that allow a lower rate of withholding tax, such lower rate may apply to qualified holders of the Notes.

As confirmed by the Issuer, as of the date of this offering memorandum, the Issuer has not been given notice or informed by the PRC tax authorities that it is considered to be a PRC tax resident enterprise for the purpose of the EIT Law. On that basis, non-resident holders of the Notes will not be subject to income tax imposed by any governmental authority in the PRC in respect of the holding of the Notes or any repayment of principal and payment of interest made thereon. However, there is no assurance that the Issuer will not be treated as a PRC tax resident enterprise under the EIT Law and related implementation regulations in the future.

In addition, as the Guarantor is a PRC resident enterprise, in the event that the Guarantor is required to fulfill its obligations under the Guarantee by making interest payments on behalf of the Issuer, the Guarantor will be obliged to withhold PRC enterprise income tax at a rate of 10% on such payments to non-resident enterprise holders of the Notes and 20% for non-resident individual holders of the Notes if such interest payments are deemed to be derived from sources within the PRC. To the extent that the PRC has entered into arrangements relating to the avoidance of double-taxation with any jurisdiction, such as Hong Kong, which allow a lower rate of withholding tax, such lower rate may apply to qualified holders of the Notes. Repayment of the principal will not be subject to PRC withholding tax.

Taxation on Capital Gains

The EIT Law and its implementation regulations impose a tax at the rate of 10%, or a lower rate if tax treaty benefits are available, on income derived from sources within the PRC realized by a "non-resident enterprise" that does not have an establishment or place of business in China or that has an establishment or place of business in China but the relevant gain is not effectively connected therewith. The Individual Income Tax Law and its implementation regulations impose a tax at the rate of 20% on income derived from sources within the PRC realized by non-resident individuals. If the Issuer is considered to be a PRC resident enterprise by the PRC tax authorities in the future, and if the capital gains realized by holders of the Notes are treated as income derived from sources within China, such gains will be subject to the PRC tax described above. To the extent that China has entered into arrangements relating to the avoidance of double-taxation with any jurisdiction, such as Hong Kong, that allow a lower rate of tax, such lower rate may apply to qualified non-resident holders of the Notes, if both the Issuer and the investors qualify for benefits under the applicable tax treaty.

Value-added Tax and Related Surtaxes

PRC value-added tax and surtaxes may be withheld from the interest paid by the Guarantor at a rate of approximately 6.72% if the PRC tax authority views such interest as interest income derived from the territory of the PRC.

Stamp Duty

No PRC stamp tax will be chargeable upon the issue or transfer of a Note to the extent that the register of holders of the Notes is maintained outside mainland China. The Issuer intends to maintain the register of holders of the Notes outside mainland China.

Hong Kong

No Hong Kong taxes are required to be withheld from or chargeable on payments of principal, premium (if any) or interest in respect of the Notes. No Hong Kong stamp duty is payable on the sale and purchase or other disposal of bonds or notes denominated in a currency other than the Hong Kong dollar provided that the bonds or notes are not redeemable, and may not at the option of any person be redeemed, in Hong Kong dollars. Therefore, a sale or purchase or other disposal of the Notes will not be subject to Hong Kong stamp duty. Hong Kong profits tax is chargeable on every person carrying on a trade, profession or business in Hong Kong in respect of profits arising in or derived from Hong Kong from such trade, profession or business (excluding profits arising from the sale of capital assets). Interest on the Notes may be deemed to be profits arising in or derived from Hong Kong from a trade, profession or business carried on in Hong Kong in the following circumstances:

(i) interest on the Notes is derived from Hong Kong and is received by or accrues to a company carrying on a trade, profession or business in Hong Kong;

(ii) interest on the Notes is derived from Hong Kong and is received by or accrues to a person, other than a company, carrying on a trade, profession or business in Hong Kong and is in respect of the funds of that trade, profession or business; or

(iii) interest on the Notes is received by or accrues to a financial institution (as defined in the Inland Revenue Ordinance of Hong Kong (Chapter 112, the Laws of Hong Kong)) and arises through or from the carrying on by the financial institution of its business in Hong Kong.

Any capital gains from the sale of the Notes will not be subject to taxes in Hong Kong, except that Hong Kong profits tax may be chargeable in the case of owners of the Notes who carry on a trade, profession or business in Hong Kong and such gains form part of the revenue or profits of such trade, profession or business.

United States Federal Income Tax Considerations

The following is a summary of United States federal income tax considerations generally applicable to the ownership and disposition of the Notes by a "U.S. holder" (as defined below) who acquires our Notes upon original issuance at their initial offering price and who holds the Notes as "capital assets" (generally, property held for investment) for United States federal income tax purposes, but it does not purport to be a complete analysis of all potential tax consequences and considerations. This summary is based upon existing United States federal income tax law, which is subject to differing interpretations or change, possibly with retroactive effect. This summary does not discuss all aspects of United States federal income taxation which may be important to particular investors in light of their individual investment circumstances, such as investors subject to special tax rules (e.g., banks or other financial institutions, insurance companies, broker-dealers, partnerships and their partners, tax-exempt organizations (including private foundations)), investors who are not U.S. holders, traders in securities that have elected the mark-to-market method of accounting, investors subject to the alternative minimum tax, real estate investment trusts, regulated investment companies, pension plans, cooperatives, investors who hold Notes as part of a straddle or other integrated security transaction, investors required to accelerate the recognition of any item of gross income with respect to the Notes as a result of such income being recognized on an applicable financial statement, or investors whose functional currency is not the United States dollar, all of whom may be subject to tax rules that differ significantly from those summarized below. In addition, this summary does not address any state, local, non-United States, or non-income tax (such as United States federal gift and estate tax) considerations or the Medicare surtax on net investment. You are urged to consult your tax advisors regarding the United States federal, state, local, and non-United States income and other tax considerations of an investment in our Notes.

For purposes of this summary, a "U.S. holder" is a beneficial owner of our Notes that is, for United States federal income tax purposes:

- an individual who is a citizen or resident of the United States;

- a corporation created in, or organized under the laws of, the United States, any state thereof or the District of Columbia;

- an estate the income of which is subject to United States federal income taxation regardless of its source; or

- a trust if it (1) is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (2) has an election in effect under applicable United States Treasury regulations to be treated as a United States person.

If a partnership or other entity treated as a partnership is a beneficial owner of our Notes, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partnership or a partner of a partnership holding our Notes, you are urged to consult your tax advisors regarding the United States federal income tax considerations of an investment in our Notes.

Payments of Interest

Interest on the Notes will generally be taxable to you as ordinary income at the time it is paid or accrued in accordance with your method of accounting for United States federal income tax purposes. In addition to interest on the Notes, you will be required to include in income any PRC or other foreign taxes withheld from the interest payments you receive and, without duplication, any Additional Amounts paid in respect of such foreign taxes withheld.

Sale, Exchange or Other Disposition of the Notes

Upon the sale, exchange or other taxable disposition of a Note, you will recognize gain or loss equal to the difference between the amount realized upon the sale, exchange or other disposition (less an amount equal to any accrued but unpaid interest, which will be taxable as ordinary interest income, as described in "– Payments of Interest" above, to the extent not previously included in income) and your tax basis in the Note. Your tax basis in a Note will generally be the cost of such Note. Gain or loss on the sale, exchange or other taxable disposition will be capital gain or loss and will be long-term capital gain or loss if the Note were held for more than one year. Certain non-corporate U.S. holders (including individuals) may qualify for preferential rates of United States federal income taxation in respect of long-term capital gains. The deductibility of capital losses is subject to certain limitations.

Foreign Tax Credit

If any PRC taxes are withheld in respect of any payments on the Notes (as discussed in "TAXATION – PRC"), you may be entitled to claim either a deduction or a foreign tax credit for United States federal income tax purposes, subject to certain limitations (including that the election to deduct non-U.S. taxes in lieu of claiming foreign tax credits must apply to all of your non-U.S. taxes for a particular tax year). Interest income (including any Additional Amounts) on a Note generally will be considered foreign source income and, for purposes of the foreign tax credit, generally will be considered "passive income" or, in certain cases, "general category income."

Because gain or loss on a sale or disposition of a Note generally will be U.S. source gain or loss, you may not be able to claim a credit for any foreign taxes imposed upon a disposition of a Note unless such credit can be applied (subject to certain limitations) against tax due on other income treated as derived from foreign source. If, however, any PRC tax is imposed upon a disposition of a Note (as discussed in "TAXATION – PRC") and you are eligible for the benefits of the U.S.-China income tax treaty, any gain or loss (or a portion thereof) from such disposition might be treated as non-U.S. source gain or loss for foreign tax credit purposes. You are urged to consult your tax advisors regarding the tax consequences if PRC tax is imposed on the disposition of a Note, including the application of the foreign tax credit rules to your particular circumstances.

You will generally be denied a foreign tax credit for foreign taxes imposed with respect to the Notes if you do not meet a minimum holding period requirement during which you are not protected from risk of loss. The rules governing the foreign tax credit are complex. You are urged to consult your tax advisers regarding the availability of the foreign tax credit under your particular circumstances.

Foreign Asset Reporting

Certain U.S. holders are required to report information relating to an interest in a Note, subject to certain exceptions (including an exception for Notes held in accounts maintained by certain financial institutions). You should consult your tax advisor regarding the effect, if any, of these rules on your ownership and disposition of the Notes.

The preceding discussion of certain U.S. federal income tax considerations is general information only and is not tax advice. Accordingly, each U.S. holder should consult its own tax advisor as to the particular tax and reporting considerations pertinent to it of holding or disposing of the Notes, including the applicability and effect of any U.S. federal, state, local or non-U.S. tax laws, and of any changes or proposed changes in applicable law.

PLAN OF DISTRIBUTION

Subject to the terms and conditions set forth in a purchase agreement relating to the Notes among the Issuer, the Company, Citigroup Global Markets Inc., Goldman Sachs (Asia) L.L.C., J.P. Morgan Securities plc, Bank of China Limited, BOCI Asia Limited, CCB International Capital Limited, China Construction Bank (Asia) Corporation Limited, ICBC International Securities Limited, Merrill Lynch (Asia Pacific) Limited, Société Générale, Agricultural Bank of China Limited Hong Kong Branch, Bank of Communications Co., Ltd. Hong Kong Branch, China Merchants Securities (HK) Co., Limited, CMBC Securities Company Limited, DBS Bank Ltd., Morgan Stanley & Co. International plc and UBS AG Hong Kong Branch, as representatives for the Initial Purchasers named below, the Issuer has agreed to sell to the Initial Purchasers, and each of the Initial Purchasers has agreed, severally and not jointly, to purchase from the Issuer, the principal amount of the Notes set forth opposite its name below.

Initial Purchaser	Principal Amount of the 2026 Notes	Principal Amount of the 2031 Notes	Principal Amount of the 2051 Notes
Citigroup Global Markets Inc.	U.S.$169,625,000	U.S.$177,000,000	U.S.$95,875,000
Goldman Sachs (Asia) L.L.C.	U.S.$166,750,000	U.S.$174,000,000	U.S.$94,250,000
J.P. Morgan Securities plc	U.S.$161,000,000	U.S.$168,000,000	U.S.$91,000,000
Bank of China Limited together with BOCI Asia Limited	U.S.$135,125,000	U.S.$141,000,000	U.S.$76,375,000
CCB International Capital Limited together with China Construction Bank (Asia) Corporation Limited	U.S.$132,250,000	U.S.$138,000,000	U.S.$74,750,000
ICBC International Securities Limited	U.S.$132,250,000	U.S.$138,000,000	U.S.$74,750,000
Merrill Lynch (Asia Pacific) Limited	U.S.$69,000,000	U.S.$72,000,000	U.S.$39,000,000
Société Générale	U.S.$69,000,000	U.S.$72,000,000	U.S.$39,000,000
Agricultural Bank of China Limited Hong Kong Branch	U.S.$27,600,000	U.S.$28,800,000	U.S.$15,600,000
Bank of Communications Co., Ltd. Hong Kong Branch	U.S.$18,400,000	U.S.$19,200,000	U.S.$10,400,000
China Merchants Securities (HK) Co., Limited	U.S.$13,800,000	U.S.$14,400,000	U.S.$7,800,000
CMBC Securities Company Limited	U.S.$13,800,000	U.S.$14,400,000	U.S.$7,800,000
DBS Bank Ltd.	U.S.$13,800,000	U.S.$14,400,000	U.S.$7,800,000
Morgan Stanley & Co. International plc	U.S.$13,800,000	U.S.$14,400,000	U.S.$7,800,000
UBS AG Hong Kong Branch	U.S.$13,800,000	U.S.$14,400,000	U.S.$7,800,000
Total	U.S.$1,150,000,000	U.S.$1,200,000,000	U.S.$650,000,000

Subject to the terms and conditions set forth in the purchase agreement, the Initial Purchasers have agreed, severally and not jointly, to purchase all of the Notes sold under the purchase agreement. The purchase agreement also provides that the obligations of the Initial Purchasers to purchase the Notes are subject to, among other things, the receipt by the Initial Purchasers of documentation related to the issuance and sale of the Notes, officers' certificates and legal opinions and to other conditions.

The Issuer has agreed to indemnify the Initial Purchasers against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the Initial Purchasers may be required to make in respect of those liabilities.

The Initial Purchasers propose initially to offer the Notes at the offering price set forth on the cover page of this offering memorandum. After the initial offering, the offering price or any other term of the offering may be changed.

Bank of China Limited has agreed to offer and sell the Notes only outside of the United States to non-U.S. persons.

Notes Are Not Being Registered

The Notes have not been registered under the Securities Act or any state securities laws. The Initial Purchasers propose to offer the Notes for resale in transactions not requiring registration under the Securities Act or applicable state securities laws, including sales in reliance on the exemption provided by Rule 144A and Regulation S under the Securities Act. The Initial Purchasers will not offer or sell the Notes within the United States except to persons they reasonably believe to be Qualified Institutional Buyers (as defined in Rule 144A under the Securities Act). Each of the Initial Purchasers has acknowledged and agreed that, except as permitted by the preceding sentence, it will not offer or sell Notes as part of its distribution at any time within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S under the Securities Act). In addition, until 40 days after the commencement of this offering, an offer or sale of the Notes within the United States by a dealer that is not participating in this offering may violate the registration requirements of the Securities Act if that offer or sale is made otherwise than in accordance with Rule 144A. Each purchaser of the Notes will be deemed to have made acknowledgments, representations and agreements as described under "Transfer Restrictions."

New Issue of the Notes

The Notes are a new issue of securities with no established trading market. An application has been made to the SEHK for the listing of, and permission to deal in, the Notes by way of debt issues to Professional Investors only. We cannot assure you that the Notes will be or remain listed. The Issuer has been advised by the Initial Purchasers that they presently intend to make a market in the Notes after completion of the offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice. The Issuer cannot assure you that a liquid trading market will develop for the Notes, that you will be able to sell your Notes at a particular time or that the price that you receive when you sell your Notes will be favorable. If an active trading market for the Notes does not develop, the market price and liquidity of the Notes may be adversely affected. If the Notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, the Company's operating performance and financial condition, general economic conditions and other factors.

Settlement

The Issuer expects that delivery of the Notes will be made to investors on or about the closing date specified on the cover page of this offering memorandum, which will be the third business day following the date of this offering memorandum (such settlement being referred to as "T+3"). Under Rule 15c6-1 under the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Notes on the date of pricing or the next succeeding business day will be required, by virtue of the fact that the Notes initially will settle on or about T+3, to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement. Purchasers of the Notes who wish to trade the Notes prior to their date of delivery hereunder should consult their advisors.

No Sales of Similar Securities

Each of the Issuer and the Company has agreed that it will not, for a period of 30 days after the date of this offering memorandum, without first obtaining the prior written consent of the Initial Purchasers, offer, sell, contract to sell, pledge or otherwise dispose of, or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the Issuer, the Company or any affiliate of the Issuer or the Company or any person in privity with the Issuer, the Company or any affiliate of the Issuer or the Company, directly or indirectly, or announce the offering, of any debt securities issued or guaranteed by the Issuer or the Company having a tenor of more than one year (other than (i) the offerings of the Notes contemplated hereby, (ii) any loans, including bilateral or syndicated loans or club deals and (iii) after the closing date, any securities denominated in Renminbi that are sold exclusively within the PRC). The Initial Purchasers in their sole discretion may release any of the securities subject to these lock-up agreements at any time without notice.

Short Positions and Stabilizing Transactions

In connection with the offering, Citigroup Global Markets Inc., Goldman Sachs (Asia) L.L.C., J.P. Morgan Securities plc, Bank of China Limited, BOCI Asia Limited, CCB International Capital Limited, China Construction Bank (Asia) Corporation Limited, ICBC International Securities Limited, Merrill Lynch (Asia Pacific) Limited and Société Générale as the Stabilizing Managers, may purchase and sell the Notes in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing purchases. Short sales involve the sale by the Stabilizing Managers of a greater principal amount of the Notes than they are required to purchase in the offering. The Stabilizing Managers must close out any short position by purchasing the Notes in the open market. A short position is more likely to be created if the Initial Purchasers are concerned that there may be downward pressure on the price of the Notes in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions involve bids to purchase the Notes so long as the stabilizing bids do not exceed a specified maximum.

Similar to other purchase transactions, the Stabilizing Managers' purchases to cover the syndicate short sales and stabilizing purchasers may have the effect of raising or maintaining the market price of the Notes or preventing or retarding a decline in the market price of the Notes. As a result, the price of the Notes may be higher than the price that might otherwise exist in the open market.

None of the Issuer, the Company or any of the Initial Purchasers makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the Notes. In addition, none of the Issuer, the Company or any of the Initial Purchasers makes any representation that the Initial Purchasers will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice at any time. No assurance can be given as to the liquidity of, or the trading market for, the Notes.

PRIIPs Regulation/Prohibition of Sales to EEA

The Notes which are the subject of the offering contemplated by this offering memorandum in relation thereto have not been offered, sold or otherwise made available and will not be offered, sold or otherwise made available to any retail investor in the European Economic Area. For the purposes of this provision: the expression "retail investor" means a person who is one (or more) of the following: a retail client, as defined in point (11) of MiFID II; or a customer within the meaning of the IDD, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

PRIIPs Regulation/Prohibition of Sales to UK Retail Investors

The Notes which are the subject of the offering contemplated by this offering memorandum in relation thereto have not been offered, sold or otherwise made available and will not be offered, sold or otherwise made available to any retail investor in the UK. For the purposes of this provision: the expression "retail investor" means a person who is one (or more) of the following: a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; or a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA.

Notice to Prospective Investors in the United States

The Notes and the Guarantees have not been and will not be registered under the Securities Act, and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in certain transactions exempt from the registration requirements of the Securities Act. Terms used in this paragraph have the meanings given to them by Regulation S under the Securities Act.

Each Initial Purchaser has agreed that, except as permitted by the Purchase Agreement, it will not offer or sell the Notes and the Guarantees (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of this offering and the closing of this offering, within the United States or to, or for the account or benefit of, U.S. persons, and it will have sent to each dealer to which it sells the Notes and the Guarantees (other than a sale pursuant to Rule 144A) during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Notes and the Guarantees within the United States or to, or for the account or benefit of, U.S. persons. Terms used in this paragraph have the meanings given to them by Regulation S.

The Notes and the Guarantees are being offered and sold outside of the United States to non-U.S. persons in reliance on Regulation S. The Purchase Agreement provides that the Initial Purchasers may arrange for the offer and resale of the Notes and the Guarantees within the United States only to Qualified Institutional Buyers in reliance on Rule 144A.

In addition, until 40 days after the commencement of the offering of the Notes and the Guarantees, an offer or sale of the Notes and the Guarantees within the United States by a dealer that is not participating in the offering may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

To the extent the Initial Purchasers intend to make any offers or sales of the Notes in the United States, or to nationals or residents of the United States, they will do so only through one or more registered broker dealers in compliance with applicable securities laws and regulations, as well as with applicable laws of various states.

Notice to Prospective Investors in Italy

The offering of the Notes has not been registered with the Commissione Nazionale per le Società e la Borsa ("CONSOB") pursuant to Italian securities legislation and, accordingly, no Notes may be offered, sold or delivered, nor may copies of this offering memorandum or of any other document relating to any Notes be distributed in Italy, except, in accordance with any Italian securities, tax and other applicable laws and regulations.

Each Initial Purchaser has represented and agreed that it has not offered, sold or delivered, and will not offer, sell or deliver any Notes or distribute any copy of this offering memorandum or any other document relating to the Notes in Italy except:

(a) to qualified investors (investitori qualificati), as defined pursuant to Article 100 of Legislative Decree no. 58 of 24 February 1998 (the "Financial Services Act") and Article 34-ter, paragraph 1, letter (b) of CONSOB regulation No. 11971 of 14 May 1999 (the "Issuers Regulation"), all as amended from time to time; or

(b) in other circumstances which are exempted from the rules on public offerings pursuant to Article 100 of the Financial Services Act and Issuers Regulation.

In any event, any offer, sale or delivery of the Notes or distribution of copies of this offering memorandum or any other document relating to the Notes in Italy under paragraphs (a) or (b) above must be:

(a) made by an investment firm, bank or financial intermediary permitted to conduct such activities in Italy in accordance with the Financial Services Act, Legislative Decree No. 385 of 1 September 1993 (the "Banking Act") and CONSOB Regulation No. 20307 of 15 February 2018, all as amended from time to time;

(c) in compliance with Article 129 of the Banking Act, as amended from time to time, and the implementing guidelines of the Bank of Italy, as amended from time to time; and

(d) in compliance with any other applicable laws and regulations, including any limitation or requirement which may be imposed from time to time by CONSOB or the Bank of Italy or other competent authority.

Notice to Prospective Investors in the United Kingdom

Each of the Initial Purchasers has represented and agreed that:

(a) it has only communicated or caused to be communicated, and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (the "FSMA")) received by it in connection with the issue or sale of any Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

Notice to Prospective Investors in the European Economic Area

Each Initial Purchaser has represented and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this offering memorandum in relation thereto to any retail investor in the European Economic Area.

For the purposes of this provision, the expression "retail investor" means a person who is one (or more) of the following:

(a) a retail client as defined in point (11) of Article 4(1) of MiFID II; or

(b) a customer within the meaning of the Insurance Distribution Directive where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

Notice to Prospective Investors in Hong Kong

Each of the Initial Purchasers has represented and agreed that:

(a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the "SFO") and any rules made under the SFO; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "C(WUMP)O") or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and

(b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

Notice to Prospective Investors in Japan

The Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "Financial Instruments and Exchange Act"). Accordingly, each of the Initial Purchasers has represented and agreed that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Notes in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and other relevant laws and regulations of Japan.

Notice to Prospective Investors in the PRC

Each of the Initial Purchasers has represented and agreed that the Notes are not being offered or sold and may not be offered or sold, directly or indirectly, in the PRC (for such purposes, not including the Hong Kong and Macau Special Administrative Regions or Taiwan), except as permitted by applicable laws of the PRC.

Notice to Prospective Investors in Singapore

Each of the Initial Purchasers has acknowledged that this offering memorandum has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each of the Initial Purchasers has represented and agreed that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase, and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute this offering memorandum or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than: (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the "**SFA**")) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interests (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

(a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law;

(d) as specified in Section 276(7) of the SFA; or

(e) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018).

Singapore SFA Product Classification: In connection with Section 309B of the SFA and the CMP Regulations 2018, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are 'prescribed capital markets products' (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Notice to Prospective Investors in Australia

This offering memorandum is not, and is not intended to be, a disclosure document within the meaning of Section 9 of the Corporations Act 2001 (Cth) (the "Australian Corporations Act")) or a product disclosure statement for the purposes of Chapter 7 of the Australian Corporations Act. No action has been taken by us that would permit a public offering of the Notes in Australia. In particular, no prospectus or other disclosure document in relation to the Notes has been, or will be, lodged with the Australian Securities and Investments Commission ("ASIC") or the Australian Securities Exchange operated by ASX Limited (ABN 98 008 624 691) ("ASX").

Each Initial Purchaser has represented and agreed, or will be required to represent and agree, that it:

(a) has not offered or invited applications, and will not offer or invite applications, for the issue, sale or purchase of any Notes in Australia (including an offer or invitation which is received by a person in Australia); and

(b) has not distributed or published, and will not distribute or publish, this offering memorandum or any other offering material or advertisement relating to any Notes in Australia,

unless in either case (a) or (b),

(i) the aggregate consideration payable on acceptance of the offer or invitation by each offeree or invitee is at least A$500,000 (or the equivalent in another currency, in either case disregarding moneys lent by the person offering the Notes or making the invitation or its associates) or the offer or invitation otherwise does not require disclosure to investors in accordance with Part 6D.2 or 7.9 of the Australian Corporations Act and is not made to a person who is a "retail client" within the meaning of section 761G of the Australian Corporations Act;

(ii) the offer, invitation or distribution complied with the conditions of the Australian financial services license of the person making the offer, invitation or distribution or an applicable exemption from the requirement to hold such license;

(iii) the offer, invitation or distribution complies with all applicable laws, regulations and directives relating to the offer, sale and resale of the Notes in the jurisdiction in which such offer, sale and resale occurs; and

(iv) such action does not require any document to be lodged with ASIC or the ASX;

(c) will not offer any of the Notes purchased in this offering for resale in Australia within 12 months of those Notes being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 or 708A of the Australian Corporations Act.

Each Initial Purchaser, severally and not jointly, represents and warrants to and agrees with the Issuer and the Guarantor that, in connection with the primary distributions of the Notes, it will not offer or sell any of the Notes to any person if, at the time of such offer or sale, the employees or officers of the Initial Purchaser directly involved in the offer or sale know or have reasonable grounds to suspect that those Notes (or an interest in or right in respect of them) are being (or would be) acquired (directly or indirectly) by an associate of the Issuer within the meaning of section 128F(9) of the Tax Act, except as permitted in section 128F(5) of the Tax Act.

Notice to Prospective Investors in Switzerland

Neither the offering memorandum nor any other document relating to the sale of the Notes and the Guarantee constitutes a public offering prospectus within the meaning of article 652a or 1156 of the Swiss Federal Code of Obligations or a listing prospectus within the meaning of the listing rules of the SIX Swiss Exchange. The Notes and the Guarantee may not be publicly offered, sold or advertised, directly or indirectly, in or from Switzerland. Neither the offering memorandum nor any other document relating to the

Notes and the Guarantee may be publicly distributed or otherwise made publicly available in or from Switzerland. The offering memorandum is not intended as an offer or solicitation with respect to the purchase or sale of the Notes and the Guarantee by the public and may be distributed only on a private placement basis, without any public distribution, offering or marketing in, or from, Switzerland, provided that any such distribution does not occur as a result of, or in connection with, public solicitation or marketing with respect to the purchase or sale of the Notes and the Guarantee.

Notice to Prospective Investors in Taiwan

The Notes and the Guarantee have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitute an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the Notes in Taiwan.

Notice to Prospective Investors in Canada

The Notes may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this offering memorandum (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the Initial Purchasers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Other Relationships

The Initial Purchasers and their affiliates have in the past engaged, and may in the future engage, in transactions with and perform services, including commercial banking and financial advisory and investment banking services, for the Issuer, the Company and their respective affiliates in the ordinary course of business, for which they received or will receive customary fees and expenses. The Issuer, the Company and their respective affiliates may enter into hedging or other derivative transactions as part of their risk management strategy with one or more of the Initial Purchasers, which may include transactions relating to its obligations under the Notes. The Issuer's and the Company's obligations under these transactions may be secured by cash or other collateral.

In connection with the offering of the Notes, each Initial Purchaser and/or its affiliate(s) may act as an investor for its own account and may take up Notes in the offering and in that capacity may retain, purchase or sell for its own account such securities and any securities of the Guarantor or Issuer or related investments and may offer or sell such securities or other investments otherwise than in connection with the offering. Accordingly, references herein to the Notes being offered should be read as including any offering of the Notes to the Initial Purchasers and/or their affiliates acting in such capacity. Such persons do not intend to disclose the extent of any such investment or transactions otherwise than in accordance with any legal or regulatory obligation to do so.

In addition, in the ordinary course of their business activities, the Initial Purchasers and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Company or its affiliates. The Initial Purchasers and their affiliates may also make investment recommendations and/or publish or express independent research views with respect to such securities or financial instruments and may hold, or recommend to clients that they acquire long and/or short positions in such securities and instruments.

The Initial Purchasers or certain of their affiliates may purchase Notes and be allocated Notes for asset management and/or proprietary purposes but not with a view to distribution.

If a jurisdiction requires that the offering be made by a licensed broker or dealer and the Initial Purchaser or any affiliate of the Initial Purchaser is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by that Initial Purchaser or its affiliate on behalf of the Issuer in such jurisdiction.

RATINGS

The Notes are expected to be assigned a rating of "A1" by Moody's and "A+" by S&P. The ratings reflect the rating agencies' assessment of the likelihood of timely payment of the principal of and interest on the Notes. Ratings are limited in scope, and do not address all material risks relating to an investment in the Notes, but rather reflect only the view of each rating agency at the time the rating is issued. An explanation of the significance of a rating may be obtained from the relevant rating agency. Ratings are not recommendations to buy, sell or hold securities, and there can be no assurance that ratings will remain in effect for any given period of time or that ratings will not be lowered, suspended or withdrawn entirely by the rating agency, if, in each rating agency's judgment, circumstances so warrant. Each rating should be evaluated independently of any other rating on the Notes, on any other of our securities, or on us. See "Risk Factors – Risks Relating to the Notes and the Guarantees – The rating of the Notes may be lowered, suspended or withdrawn; changes in such credit rating may adversely affect the value of the Notes."

LEGAL MATTERS

Certain legal matters in connection with this offering as to Hong Kong law and United States federal and New York law will be passed upon for the Issuer and the Company by Skadden, Arps, Slate, Meagher & Flom LLP and for the Initial Purchasers as to United States federal and New York law by Linklaters. Certain legal matters in connection with this offering as to PRC law will be passed upon by JunHe LLP. Certain legal matters in connection with this offering as to British Virgin Islands law will be passed upon for the Issuer by Conyers Dill & Pearman.

INDEPENDENT AUDITORS

Our consolidated financial statements as of and for the years ended December 31, 2017 and 2018 included in this offering memorandum have been audited, by Grant Thornton China, Certified Public Accountants, our independent auditors, as indicated in their report with respect thereto, included herein.

Our consolidated financial statements as of and for the year ended December 31, 2019 included in this offering memorandum have been audited, by BDO China Shu Lun Pan Certified Public Accountants LLP, our independent auditors, as indicated in their report with respect thereto, included herein.

Our consolidated financial statements as of and for each of the nine months ended September 30, 2019 and 2020 have been reviewed, by BDO China Shu Lun Pan Certified Public Accountants LLP, our independent auditors, as indicated in their report with respect thereto, included herein.

DESCRIPTION OF CERTAIN DIFFERENCES BETWEEN PRC GAAP AND U.S. GAAP

Introduction

Our consolidated financial statements included in this offering memorandum have been prepared and presented in accordance with PRC GAAP. Certain differences exist between PRC GAAP and U.S. GAAP which might be relevant to our financial information included herein.

The following is a general summary of certain differences between PRC GAAP and U.S. GAAP as applicable to us. The differences identified below are limited to those significant differences that are appropriate to our financial statements. We are responsible for preparing the summary below.

Since the summary is not meant to be exhaustive, there is no assurance regarding the completeness of the summary. We have not prepared a complete reconciliation of the consolidated financial information and related footnote disclosure between PRC GAAP and U.S. GAAP and have not quantified such differences. Had any such quantification or reconciliation been undertaken by us, other potentially significant accounting and disclosure differences may be required that are not identified below. Additionally, no attempt has been made to identify possible future differences between PRC GAAP and U.S. GAAP as a result of prescribed changes in accounting standard.

Regulatory bodies that promulgate PRC GAAP and U.S. GAAP have significant projects ongoing that could affect future comparisons such as this one. Finally, no attempt has been made to identify future differences between PRC GAAP and U.S. GAAP that may affect the financial information as a result of transactions or events that may occur in the future. Accordingly, no assurance is provided that the following summary of differences between PRC GAAP and U.S. GAAP is complete.

In making an investment decision, you must rely upon your own examination of our financial information, the terms of the offering and other disclosure contained herein.

Inventories

PRC GAAP only permits reversal when the circumstances where previously caused inventories to be written down below cost no longer exist. PRC GAAP requires the reversal to be recognized under asset impairment loss.

Under U.S. GAAP, a provision to write down inventories to market value cannot be reversed. If inventory value is written down to lower amount, the reduced amount becomes new cost for subsequent periods. Inventories may be stated above cost only in exceptional cases (e.g., precious metals).

Intangible Assets

Under PRC GAAP, when an intangible asset arises from the development phase and the entity can demonstrate that all of the five criteria are met, the intangible shall be recognized:

(a) it is feasible technically to finish intangible assets for use or sale;

(b) it is intended to finish and use or sale the intangible assets;

(c) the usefulness of methods for intangible assets to generate economic benefits shall be proved;

(d) it is able to finish the development of the intangible assets; and

(e) the development of expenditures of the intangible assets can be reliably measured.

Under U.S. GAAP, all research and development ("R&D") expenditures (except those acquired in business combination) shall be charged to expenses and disclosed in notes when incurred, because FASB considers future benefits from R&D to have too much uncertainty, and costs and benefits to be lack of necessary causal relationship. However, U.S. GAAP requires costs of producing software masters (for products to be sold, leased or otherwise marketed) subsequent to establishing technological feasibility to be capitalized. The capitalization ceases when the product is available for general release to customers.

PRC GAAP requires an intangible asset to be measured initially at cost. The initial measurement includes its purchase price and any directly attributable cost of preparing the asset for its intended use (e.g., import duties, professional fees).

U.S. GAAP requires initial measurement at fair value, however it goes on to refer the general concept of asset acquisition to D2-D7 of FAS 141(R), which states that assets are initially recognized based on their cost to the acquiring entity (generally including the transaction costs of the asset acquisition).

Contingency

Under PRC GAAP, a provision shall be recognized when:

(a) an entity has a present obligation (legal or constructive) as a result of a past event;

(b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and

(c) a reliable estimate can be made of the amount of the obligation.

Under U.S. GAAP, an estimated loss from a loss contingency shall be accrued by a charge to income if both of the following conditions are met:

(a) information available before the financial statements are issued or are available to be issued indicates that it is probable an asset had been impaired or a liability had been incurred at the date of the financial statements; and

(b) the amount of loss can be reasonably estimated.

When a loss from contingency is charged to income, U.S. GAAP records either an increase in liability or a decrease in asset, while PRC GAAP records a provision (a liability) although sometimes it takes the form of allowance against an asset (e.g., in the case of uncollectible receivables). However the basic principles as to whether and when a loss from contingency should be recognized are the same under these two systems.

Although these two systems use probable, what they mean by probable is different. PRC GAAP uses probable as "more likely than not to occur," which is defined as greater than 50%. U.S. GAAP uses probable as "likely to occur." Although a numeric standard does not exist, practice generally considers an event that has 75% or greater likelihood of occurrence to be probable.

Because of the uncertainties surrounding contingencies, these two systems require "best estimate" as the amount to be recognized. However, they differ in practices as to what is a best estimate. PRC GAAP adopts a more statistical view on this matter. Although they consider the most likely outcome the anchor, they also weight-in the influence of other outcomes to reach the best estimate. U.S. GAAP accept the most likely outcome as the best estimate. When no amount within the range of outcome is a best estimate:

(a) under PRC GAAP, when there is a continuous range of possible outcomes and each point in that range is as likely as any other, the mid-point of the range (the statistically correct point) is used.

(b) when no amount within the range of outcome is a best estimate, U.S. GAAP chooses the minimum amount in the range to be the recognized amount.

PRC GAAP requires time value of money to be included when its effect is material. Under U.S. GAAP, only when the amount and timing of payments are fixed or reliably determinable, or when the obligation is a fair value obligation, time value of money may be included.

Borrowing Costs

Under PRC GAAP, borrowing costs may include exchange differences that arise from foreign currency borrowings if they are regarded as an adjustment to interest costs.

Under U.S. GAAP, the exchange differences resulting from foreign currency borrowings are not capitalized and interest earned on the temporary investment of the funds borrowed to finance the production of the asset would not be netted against the borrowing costs.

Statement of Cash Flows

Under PRC GAAP, the direct method together with a supporting note reconciling operating result to cash flows arising from operations is the only permitted method.

U.S. GAAP requires an enterprise should report cash flows from operating activities using either: the direct method or the indirect method. If the direct method is used, then a reconciliation of net profit and operating cash flow must be presented.

Government Grants

Under PRC GAAP, government grants and subsidies are recognized at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions have been complied with. When the grant or subsidy relates to a specifically identifiable expense item, it is recognized as income over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate, while it should be included in current profits and losses to compensate for the relevant costs or losses that have been incurred. Government grants relating to purchase of property, plant and equipment are included in current liabilities as deferred income and are credited to the statement of income on a straight line basis over the expected useful lives of the relevant asset. Before 2017, government grants and subsidies were recognized as non-operating income and expenses. Since January 1, 2017, the government grants and subsidies related to daily operation shall be included in other income, while the government grants and subsidies unrelated to daily operation shall be included in non-operating income and expenses.

Under U.S. GAAP, there is no pronouncement that specifically covers government grants and subsidies.

GENERAL INFORMATION

1. **Authorizations**: The Issuer has obtained all necessary consents, approvals and authorizations in connection with the issue and performance of the Notes and the Indentures. The issue of the Notes was authorized by resolutions of the Board of Directors of the Issuer passed on January 5, 2021.

   The Company has obtained all necessary consents, approvals and authorizations in connection with the issue and performance of the Guarantees and the Indentures. The issue of the Guarantees was duly authorized by the Chairman's Executive Committee of the Board of the Company on January 5, 2021.

2. **Litigation**: Except as disclosed in this offering memorandum, none of the Issuer, the Company or any of the Company's subsidiaries is involved in any litigation, arbitration, or governmental proceedings which may have, or have had during the 12 months preceding the date of this offering memorandum, a material adverse effect on the financial position of the Issuer or the Company, nor is the Issuer or the Company aware that any such proceedings are pending or threatened.

3. **Reporting Accountants**: The consolidated financial statements of the Company as of and for each of the years ended December 31, 2017 and 2018 set out in this offering memorandum have been audited by Grant Thornton China, as stated in their reports appearing herein. Grant Thornton China is a member firm of Grant Thornton International Ltd. and is a group member of the Chinese Institute of Certified Public Accountants. The consolidated financial statements as of and for the year ended December 31, 2019 included in this offering memorandum have been audited, by BDO China Shu Lun Pan Certified Public Accountants LLP, as stated in their reports appearing herein. The consolidated financial statements of the Company as of and for each of the nine months ended September 30, 2019 and 2020, and the balance sheet of the Company as of September 30, 2020 have been reviewed by BDO China Shu Lun Pan Certified Public Accountants LLP, as stated in their report appearing herein.

4. **No Material Adverse Change**: Except as disclosed in this offering memorandum, there has been no material adverse change in the prospects of the Issuer or the Company since September 30, 2020 and there has been no significant change in the financial or trading position of the Issuer or the Company since September 30, 2020.

5. **Clearing Systems and Settlement**: The Legal Entity Identifier (LEI) Code of the Issuer is 549300C6OZZ8LTVR8209. The Notes have been accepted for clearance through the facilities of Euroclear, Clearstream, Luxembourg and DTC. Certain trading information with respect to the Notes is set forth below:

	ISIN	CUSIP	Common Code
2026 Notes Rule 144A global note	US82939GAR92	82939GAR9	228132535
2026 Notes Regulation S global note	USG82016AR01	G82016AR0	228132543
2031 Notes Rule 144A global note	US82939GAS75	82939GAS7	228132560
2031 Notes Regulation S global note	USG82016AS83	G82016AS8	228132586
2051 Notes Rule 144A global note	US82939GAT58	82939GAT5	228132608
2051 Notes Regulation S global note	USG82016AT66	G82016AT6	228132616

   Only Note evidenced by a global note has been accepted for clearance through Euroclear, Clearstream, Luxembourg or DTC, as the case may be.

6. **Documents Available for Inspection**: For so long as any of the Notes are outstanding, copies of the Company's articles of association (or equivalent) will be available for inspection by qualified lawyers of the PRC during normal business hours on any weekday (except public holidays) at the State Administration for Market Regulation of the PRC. For so long as any of the Notes are outstanding, copies of the Issuer's articles of association (or equivalent) and Guarantor's audited consolidated financial statements for the years ended 31 December 2018 and 31 December 2019 will be available for inspection during normal business hours on any weekday (except public holidays) at the specified offices of the Trustee and paying agents.

7. **Where You Can Find More Information**: A copy of the Notes, the Guarantees, the financial statements of the Company and the Indentures will be available for inspection at the registered office of the Trustee, for the life of the Notes.

8. **Listing of Notes**: A confirmation of the eligibility of the listing of the Notes has been received from the SEHK. Application will be made to the SEHK for the listing of the Notes by way of debt issues to Professional Investors only. Notes to be listed on the SEHK are required to be traded with a board lot size of at least HK$500,000 (or equivalent in other currencies).

INDEX TO FINANCIAL STATEMENTS

Auditor's Report

CHINA PETROCHEMICAL CORPORATION

For the year ended 31 December 2018

Grant Thornton

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(English Translation for Reference Only)

Auditor's Report

GTCSZ (2019) No. 110ZA5256-T

To the Board of Directors of China Petrochemical Corporation,

I. Opinion

We have audited the consolidated financial statements of China Petrochemical Corporation ("Sinopec"), which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and the notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of Sinopec as at 31 December 2018, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Accounting Standards for Business Enterprises.

II. Basis for Opinion

We conducted our audit in accordance with China Standards on Auditing. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the consolidated Financial Statement Section of our report. We are independent of Sinopec in accordance with the Code of Ethics for Chinese Certified Public Accountant (Ethics Code) together with the ethical requirements that are relevant to our audit of the financial statements, and we fulfilled our other ethical responsibilities in accordance with these requirements and the Ethics Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

III. Responsibilities of Management and Those Charged with Governance for the Financial Statement

Management of Sinopec is responsible for the preparation and fair presentation of the financial statement in accordance with Accounting Standards for Business Enterprises, and for such internal control as management determines in necessary to enable the preparation of financial statements that are free form material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing Sinopec's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate Sinopec or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Sinopec's financial reporting process.

IV. Auditor's Responsibilities for the Audit of the Financial Statement

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with China Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise form fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with China Standards on Auditing, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

(1) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

(2) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Sinopec's internal control.

(3) Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

(4) Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Sinopec's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, further events or conditions may cause Sinopec to cease to continue as a going concern.

(5) Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

(6) Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Grant Thornton

Beijing, China	Certified Public Accountant: Ma Jian
23 April 2019	Certified Public Accountant: Liu Zhizeng

Consolidated Balance Sheet
For the year ended 31 December 2018

Items	Note	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Current assets				
Cash	Ⅷ.1	200,150	195,941	164,675
Financial assets held for trading	Ⅷ.2	41,560		
Financial assets at fair value through profit and loss	Ⅷ.3		51,196	
Financial derivative assets		7,886	526	762
Bills receivable	Ⅷ.4	12,017	20,186	16,542
Accounts receivable	Ⅷ.5	74,564	74,201	63,483
Prepayments	Ⅷ.6	19,375	12,997	10,785
Other receivables	Ⅷ.7	30,289	28,553	30,209
Inventories	Ⅷ.8	241,515	263,250	251,050
Contract assets		14,300		
Non-current assets due within one-year	Ⅷ.9	92,567	79,633	68,961
Other current assets	Ⅷ.10	67,415	68,935	53,498
Total current assets		**801,638**	**795,418**	**659,965**
Non-current assets				
Available-for-sale financial assets	Ⅷ.11		18,667	23,780
Other debt instrument investment	Ⅷ.12	4,192		
Long-term receivables	Ⅷ.13	39,411	37,032	36,750
Long-term equity investments	Ⅷ.14	137,959	128,166	120,216
Other equity instrument investments	Ⅷ.15	12,319		
Fixed assets	Ⅷ.16	570,594	590,389	591,036
Oil and gas assets	Ⅷ.17	145,508	171,898	215,240
Construction in progress	Ⅷ.18	154,489	134,646	151,304
Intangible assets	Ⅷ.19	130,431	124,386	110,495
Goodwill	Ⅷ.20	10,861	10,819	8,537
Long-term deferred expenses	Ⅷ.21	20,039	18,514	17,409
Deferred tax assets	Ⅷ.22	23,587	16,740	8,332
Other non-current assets	Ⅷ.23	209,066	210,023	216,328
Total non-current assets		**1,458,456**	**1,461,280**	**1,499,426**
Total assets		**2,260,094**	**2,256,698**	**2,159,391**

Consolidated Balance Sheet (Continued)
For the year ended 31 December 2018

Items	Note	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Current liabilities				
Short-term loans	Ⅷ.25	93,372	145,497	116,269
Financial derivative liabilities		13,571	2,665	4,472
Bills payable	Ⅷ.26	13,726	11,906	10,088
Accounts payable	Ⅷ.27	255,535	247,030	225,600
Advances from customers	Ⅷ.28		149,295	126,054
Contract liabilities	Ⅷ.29	143,068		
Employee benefits payable	Ⅷ.30	14,853	10,200	5,387
Taxes and fees payable	Ⅷ.31	93,369	77,418	60,020
Other payables	Ⅷ.32	80,587	85,388	59,171
Non-current liabilities due within one year	Ⅷ.33	38,425	76,838	71,977
Other current liabilities	Ⅷ.34	37,295	36,191	49,051
Total current liabilities		**783,801**	**842,428**	**728,088**
Non-current liabilities				
Long-term loans	Ⅷ.35	62,850	37,677	66,306
Bonds payable	Ⅷ.36	227,834	218,537	216,688
Long-term employee benefits payable	Ⅷ.30	2,428	2,349	2,419
Long-term payables	Ⅷ.37	31,208	17,654	17,617
Accruedliabilities	Ⅷ.38	43,765	40,281	39,620
Deferred tax liabilities	Ⅷ.22	6,696	6,705	8,079
Other non-current liabilities		12,908	12,501	7,674
Total non-current liabilities		**387,689**	**335,704**	**358,403**
Total liabilities		**1,171,490**	**1,178,132**	**1,086,491**
Owner's equity				
Paid-in capital	Ⅷ.39	326,547	326,374	325,908
Capital reserve	Ⅷ.40	54,723	96,983	97,561
Other comprehensive income	Ⅷ.56	(27,999)	(24,995)	(23,851)
Specific reserve	Ⅷ.41	2,069	1,260	1,091
Surplus reserves	Ⅷ.42	217,356	209,415	205,373
General risk reserve	Ⅷ.43	1,765	1,460	1,328
Retained earnings	Ⅷ.44	147,684	129,985	132,869
Total equity attributable to parent company		**722,145**	**740,482**	**740,279**
Minority interests		366,459	338,084	332,621
Total equity		**1,088,604**	**1,078,566**	**1,072,900**
Total liabilities and equity		**2,260,094**	**2,256,698**	**2,159,391**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Consolidated Income Statement
For the year ended 31 December 2018

Items	Note	2018 RMB million	2017 RMB million	2016 RMB million
1.Operating revenue	Ⅷ.45	2,936,841	2,400,281	1,969,220
2. Total operating costs		2,858,077	2,358,007	1,934,382
Incl.: Operating costs	Ⅷ.45	2,425,746	1,920,377	1,528,840
Taxes and surcharges		251,393	239,627	237,978
Selling and distribution expenses		61,166	57,833	51,198
General and administrative expenses		81,145	73,530	70,198
Research and development costs		11,340	8,248	7,707
Exploration costs		10,753	11,120	11,047
Financial expenses	Ⅷ.46	33	4,183	8,402
Assets impairment losses	Ⅷ.47	16,172	43,089	19,012
Credit impairment losses	Ⅷ.48	329		
Add: Other income	Ⅷ.49	8,179	5,372	
Investment income (loss)	Ⅷ.50	13,282	13,094	16,819
Gains/(losses) from changes in fair value	Ⅷ.51	2,028	(9)	(209)
Gains from assets disposal ("-" for losses)	Ⅷ.52	(847)	(2,222)	(1,183)
3.Operating profit (loss)		**101,406**	**58,509**	**50,265**
Add: Non-operating income	Ⅷ.53	8,050	3,546	6,650
Less: Non-operating expenses	Ⅷ.54	12,718	3,850	4,011
4. Profit before taxation		**96,738**	**58,205**	**52,904**
Less: Income tax expense	Ⅷ.55	24,253	19,245	24,705
5.Net profit		**72,485**	**38,960**	**28,199**
Less: Profit/loss attributable to minority interests		33,822	28,567	19,842
6.Net profit attributable to parent company		**38,663**	**10,393**	**8,357**
7.Other comprehensive income		**(2,534)**	**(3,094)**	**15,884**
Less: Other comprehensive income, net of tax, attributable to minority interests		152	(1,949)	1,151
8. Other comprehensive income, net of tax, attributable to parent company	Ⅷ.56	**(2,686)**	**(1,145)**	**14,733**
9.Total comprehensive income		**69,951**	**35,866**	**44,083**
Less: Total comprehensive income attributable to minority interests		33,974	26,617	20,993
10.Total comprehensive income attributable to parent company		**35,977**	**9,249**	**23,090**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Consolidated Cash Flow Statement
For the year ended 31 December 2018

Items	Note	2018 RMB million	2017 RMB million	2016 RMB million
1.Cash flows from operating activities				
Cash received from sales and services		3,225,339	2,665,161	2,186,666
Refund of tax and surcharges		4,167	2,529	2,875
Other cash received relating to operating activities		106,846	68,343	45,700
Subtotal of cash inflows from operating activities		**3,336,352**	**2,736,033**	**2,235,242**
Cash paid for goods and services		2,540,913	2,010,836	1,526,189
Cash paid to and for employees		113,901	102,416	95,540
Payments of taxes and surcharges		346,315	343,524	334,704
Other cash paid relating to operating activities		128,472	74,170	64,383
Subtotal of cash outflows from operating activities		**3,129,601**	**2,530,946**	**2,020,816**
Net cash flows from operating activities	Ⅷ. 57	**206,751**	**205,087**	**214,426**
2.Cash flows from investing activities				
Cash received from disposal of investments		142,799	16,904	43,737
Cash received from investment income		11,862	10,292	5,455
Net cash received from disposal fixed assets, intangible assets and other long-term assets		10,098	6,577	1,212
Net cash received from disposal of subsidiaries and other operating units		11	78	
Other cash received relating to investing activities		21,315	3,484	14,111
Subtotal of cash inflows from investing activities		**186,085**	**37,335**	**64,515**
Cash paid for purchasing fixed assets, intangible assets and other long-term assets		110,401	78,584	82,185
Cash paid for acquisition of investments		100,655	94,540	44,447
Net cash paid to acquire subsidiaries and other operating units		3,195	1,288	
Other cash paid relating to investing activities		30,166	11,226	38,850
Subtotal of cash outflows from investing activities		**244,417**	**185,638**	**165,482**
Net cash flows from investing activities		**(58,332)**	**(148,303)**	**(100,967)**

Consolidated Cash Flow Statement (Continued)
For the year ended 31 December 2018

Items	Note	2018 RMB million	2017 RMB million	2016 RMB million
3.Cash flows from financing activities				
Cash received from capital contributions		2,891	1,425	6,265
Cash received from borrowings		1,037,101	898,205	943,099
Other cash received relating to financing activities		2,981	864	754
Subtotal of cash inflows from financing activities		**1,042,973**	**900,494**	**950,118**
Cash repayments of borrowings		1,111,706	890,258	954,718
Cash paid for dividends, profits distribution or interest		50,139	32,944	38,058
Other cash paid relating to financing activities		875	412	1,126
Subtotal of cash outflows from financing activities		**1,162,720**	**923,614**	**993,902**
Net cash flows from financing activities		**(119,747)**	**(23,120)**	**(43,784)**
4.Effect of foreign exchange rate changes on cash		2,278	(2,394)	722
5.Net increase in cash and cash equivalents		**30,950**	**31,270**	**70,397**
Add: Cash and cash equivalents at the beginning of the period		169,228	164,825	94,428
6.Cash and cash equivalents at the end of the period		**200,178**	**196,095**	**164,825**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Consolidated Statement of Changes in Equity
For the year ended 31 December 2018

Items	Shareholder's equity attributed to parent enterprise							Minority interest	Total equity
	Paid in Capital	Capital reserve	Other comprehensive income	Specialized reserve	Surplus reserve	General risk reserve	Retained earnings		
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 31 Decmber 2017	326,374	96,983	(24,995)	1,260	209,415	1,460	129,985	338,084	1,078,566
Changes of accounting polices			(325)		3		(67)		(388)
Balance at 1 January 2018	326,374	96,983	(25,320)	1,260	209,418	1,460	129,918	338,084	1,078,178
Amount of increase （decrease） of this year	173	(42,260)	(2,679)	809	7,938	305	17,766	28,375	10,426
（1）Total comprehensive income			(2,686)				38,663	33,974	69,951
(2)Owner's devotion and decreased capital	173	(42,260)			(95)		(2,679)	21,541	(23,320)
1.Owner's devotion capital	173							2,789	2,962
2.Others		(42,260)			(95)		(2,679)	18,753	(26,283)
(3)Special reserve				809				321	1,130
1.Appropriation of special reserve				3,923				1,688	5,611
2.Use of special reserve				(3,114)				(1,367)	(4,481)
(4)Profit Distribution(decrease)					8,033	305	(18,211)	(27,461)	(37,334)
1.Appropritation to surplus reserve					8,033		(8,033)		
Including : Withdrawal Statutory surplus reserve					8,028		(8,028)		
Withdrawal other surplus					5		(5)		
2.Appropritation to general risk provisions						305	(305)		
3.Distribution to owner's							(9,871)	(27,460)	(37,331)
4.Others							(2)	(1)	(3)
(5）Internal transferring of owner's equity			7				(7)		
Balance at 31 December 2018	326,547	54,723	(27,999)	2,069	217,356	1,765	147,684	366,459	1,088,604

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Consolidated Statement of Changes in Equity
For the year ended 31 December 2017

Items	Shareholder's equity attributed to parent enterprise							Minority interest	Total equity
	Paid in Capital	Capital reserve	Other comprehensive income	Specific reserve	Surplus reserve	General risk reserve	Retained earnings		
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 1 January 2017	**325,908**	**97,561**	**(23,851)**	**1,091**	**205,373**	**1,328**	**132,869**	**332,621**	**1,072,901**
Amount of increase (decrease) of this year	466	(578)	(1,145)	169	4,042	132	(2,884)	5,463	5,665
(1)Total comprehensive income			(1,145)				10,393	26,617	35,866
(2)Owner's devotion and decreased capital	466	(578)			(496)		(102)	952	242
1.Owner's devotion capital	466	27						765	1,258
2.Others		(605)			(496)		(102)	187	(1,016)
(3)Special reserve				169				51	220
1.Appropriation of special reserve				3,022				1,598	4,620
2.Use of special reserve				(2,853)				(1,547)	(4,400)
(4)Profit Distribution(decrease)					4,538	132	(13,175)	(22,158)	(30,663)
1.Appropritation to surplus reserve					4,538		(4,538)		
Including : Withdrawal Statutory surplus reserve					4,508		(4,508)		
Withdrawal other surplus					29		(29)		
2.Appropritation to general risk provisions						132	(132)		
3.Distribution to owner's							(8,504)	(22,197)	(30,701)
4.Others							(1)	39	38
(5)Internal transferring of owner's equity									
Balance at 31 December 2017	**326,374**	**96,983**	**(24,995)**	**1,260**	**209,415**	**1,460**	**129,985**	**338,084**	**1,078,566**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Consolidated Statement of Changes in Equity
For the year ended 31 December 2016

Items	Shareholder's equity attributed to parent enterprise							Minority interest	Total equity
	Paid in Capital	Capital reserve	Other comprehensive income	Specific reserve	Surplus reserve	General risk reserve	Retained earnings		
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 1 January 2016	**319,898**	**97,538**	**(38,584)**	**1,042**	**204,977**	**877**	**144,491**	**322,741**	**1,052,980**
Amount of increase (decrease) of this year	6,010	23	14,733	49	396	451	(11,622)	9,880	19,920
(1)Total comprehensive income			14,733				8,357	20,993	44,083
(2)Owner's devotion and decreased capital	6,010	23						306	6,339
1.Owner's devotion capital	6,010							466	6,476
2.Others		23						(160)	(137)
(3)Special reserve				49				16	65
1.Appropriation of special reserve				2,984				1,562	4,546
2.Use of special reserve				(2,935)				(1,546)	(4,481)
(4)Profit Distribution(decrease)					396	451	(19,979)	(11,435)	(30,567)
1.Appropritation to surplus reserve					396		(396)		
Including : Withdrawal Statutory surplus reserve					396		(396)		
Withdrawal other surplus									
2.Appropritation to general risk provisions						451	(451)		
3.Distribution to owner's							(19,130)	(11,433)	(30,563)
4.Others							(2)	(2)	(4)
(5)Internal transferring of owner's equity									
Balance at 31 December 2016	**325,908**	**97,561**	**(23,851)**	**1,091**	**205,373**	**1,328**	**132,869**	**332,621**	**1,072,900**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Company Balance Sheet
For the year ended 31 December 2018

Items	Note	2018 RMB million	2017 RMB million	2016 RMB million
Current assets				
Cash		43,405	10,607	19,108
Financial assets held for trading		3,560		
Bills receivable and accounts receivable				
Prepayments				
Other receivables		38,415	37,356	41,227
Inventories		1	1	1
Non-current assets due within one-year		14,462	4,474	1,800
Other current assets		59	62	27
Total current assets		**99,902**	**52,500**	**62,163**
Non-current assets				
Debt investments		40,409		
Available-for-sale financial assets			4,095	2,188
Long-term equity investments	XIV.1	323,604	337,007	340,936
Other equity investments		8,305		
Fixed assets		614	669	768
Construction in progress		43	27	1
Intangible assets		15,943	16,460	16,982
Other non-current assets			43,832	44,779
Total non-current assets		**388,918**	**402,090**	**405,654**
Total assets		**488,820**	**454,590**	**467,817**

Company Balance Sheet (Continued)
For the year ended 31 December 2018

Items	Note	2018 RMBmillion	2017 RMB million	2016 RMB million
Current liabilities				
Short-term loans		34,300	18,558	26,960
Accounts payable		15	9	4
Advances from customers				
Contract liabilities				
Employee benefits payable		5,591	1,509	2,289
Taxes and fees payable		1,079	565	1,743
Other payables		627	1,009	5,975
Non-current liabilities due within one year				400
Other current liabilities				10,000
Total current liabilities		**41,612**	**21,650**	**47,371**
Non-current liabilities				
Long-term loans		54	54	60
Bond payable		23,100	18,100	18,100
Long-term payables		4,470	4,468	4,469
Deferred tax liabilities		423		
Total non-current liabilities		**28,047**	**22,622**	**22,628**
Total liabilities		**69,659**	**44,272**	**70,000**
Owner's equity				
Paid- in capital		326,547	326,374	325,908
Capital reserves		19,536	48,984	49,834
Other comprehensive income		(19,978)	(21,348)	(22,876)
Surplus reserves		55,326	50,472	48,928
Retained earnings		37,730	5,836	(3,977)
Total owner's equity		**419,161**	**410,318**	**397,817**
Total liabilities and owner's equity		**488,820**	**454,590**	**467,817**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Company Income Statement
For the year ended 31 December 2018

Items	Note	2018 RMB million	2017 RMB million	2016 RMB million
1.Operating revenue	XIV.2	**4,901**	**6,798**	**9,392**
2. Total operating costs	XIV.2	**6,231**	**1,640**	**4,851**
Incl.: Operating costs	XIV.2			
Taxes and surcharges		69	77	297
General and administrative expenses		5,475	457	3,431
Research and development costs		344	378	341
Financial expenses		343	728	783
Assets impairment losses				
Credit impairment losses				
Add: Other income		5		
Investment income (loss)	XIV.3	52,720	16,414	(1,846)
Gains/(losses) from changes in fair value		(316)		
Gains from assets disposal ("-" for losses)				
3.Operating profit		**51,079**	**21,572**	**2,695**
Add: Non-operating income				
Less: Non-operating expenses		71	65	64
4. Profit before taxation		**51,008**	**21,507**	**2,631**
Less: Income tax expense		1,521	1,114	1,729
5.Net profit		**49,487**	**20,393**	**901**
6.Other comprehensive income		**1,370**	**1,528**	**490**
Items that will not be reclassified to profit or loss		1,286	21	(192)
Inc: Other comprehensive income recognized under equity method			21	(192)
Changes in fair value on other equity instrument investments		1,286		
Items that may be reclassified subsequently to profit or loss		84	1,507	682
Inc: Other comprehensive income recognized under equity method		84	1,507	682
7.Total comprehensive income		**50,857**	**21,921**	**1,391**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Company Cash Flow Statement
For the year ended 31 December 2018

Items	Note	2018 RMBmillion	2017 RMBmillion	2016 RMB million
1.Cash flows from operating activities				
Cash received from sales and services		4,876	6,768	9,092
Refund of tax and surcharges				
Other cash received relating to operating activities		6,217	5,467	2,544
Subtotal of cash inflows from operating activities		**11,093**	**12,235**	**11,636**
Cash paid for goods and services				
Cash paid to and for employees		303	272	229
Payments of taxes and surcharges		2,062	2,342	2,373
Other cash paid relating to operating activities		6,250	6,499	2,320
Subtotal of cash outflows from operating activities		**8,615**	**9,113**	**4,922**
Net cash flows from operating activities	XV.4	**2,478**	**3,122**	**6,714**
2.Cash flows from investing activities				
Cash received from disposal of investments		13,324	13,187	6,019
Cash received from investment income		50,001	24,364	12,922
Net cash received from disposal fixed assets, intangible assets and other long-term assets		1		
Net cash received from disposal of subsidiaries and other operating units				
Other cash received relating to investing activities				
Subtotal of cash inflows from investing activities		**63,326**	**37,551**	**18,941**
Cash paid for purchasing fixed assets, intangible assets and other long-term assets		43	38	5
Cash paid for acquisition of investment		42,758	20,826	47,802
Net cash paid to acquire subsidiaries and other operating units				
Other cash paid relating to investing activities		1		
Subtotal of cash outflows from investing activities		**42,802**	**20,864**	**47,807**
Net cash flows from investing activities		**20,524**	**16,687**	**(28,866)**

Company Cash Flow Statement (Continued)
For the year ended 31 December 2018

Items	Note	2018 RMB million	2017 RMB million	2016 RMB million
3.Cash flows from financing activities				
Cash received from capital contribution		225	467	6,004
Cash received from borrowings		41,180	24,208	62,760
Other cash received relating to financing activities				
Subtotal of cash inflows from financing activities		**41,405**	**24,675**	**68,764**
Cash repayments of borrowings		20,440	43,013	32,613
Cash paid for dividends, profits distribution or interest		11,169	9,971	19,909
Other cash paid relating to financing activities				51
Subtotal of cash outflows from financing activities		**31,609**	**52,984**	**52,572**
Net cash flows from financing activities		**9,796**	**(28,309)**	**16,192**
4.Effect of foreign exchange rate changes on cash			**(1)**	
5.Net increase in cash and cash equivalents		**32,798**	**(8,501)**	**(5,960)**
Add: Cash and cash equivalents at the beginning of the period		10,607	19,108	25,068
6.Cash and cash equivalents at the end of the period		**43,405**	**10,607**	**19,108**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Company Statement of Changes in Equity
For the year ended 31 December 2018

Items	Shareholder's equity attributed to parent company					Total equity
	Paid in Capital	Capital reserve	Other comprehensive income	Surplus reserve	Retained profit	
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 1 January 2018	**326,374**	**48,984**	**(21,348)**	**50,472**	**5,836**	**410,318**
Amount of increase (decrease) of this year	173	(29,447)	1,370	4,854	31,893	8,843
(1)Total comprehensive income			1,370		49,487	50,857
(2)Owner's devotion and decreased capital	173	(29,447)		(95)	(2,774)	(32,143)
1.Owner's devotion capital	173					225
2.Others		(29,447)		(95)	(2,774)	(32,368)
(3)Special reserve						
1.Appropriation of special reserve						
2.Use of special reserve						
(4)Profit Distribution				4,949	(14,819)	(9,871)
1.Appropritation to surplus reserve				4,949	(4,949)	
Inc: Withdrawal Statutory surplus reserve				4,949	(4,949)	
Withdrawal other surplus						
2.Appropritation to general risk provisions						
3.Distribution to owner's					(9,871)	(9,871)
4.Others						
(5)Internal transferring of owner's equity						
6. Adjustment to asset and capital verification						
Balance at 31 December 2018	**326,547**	**19,536**	**(19,978)**	**55,326**	**37,730**	**419,161**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

Company Statement of Changes in Equity (Continued)
For the year ended 31 December 2017

Items	Shareholder's equity attributed to parent company					Total equity
	Paid in Capital	Capital reserve	Other comprehensive income	Surplus reserve	Retained profit	
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 1 January 2017	**325,908**	**49,834**	**(22,876)**	**48,928**	**(3,977)**	**397,817**
Amount of increase (decrease) of this year	**466**	**(850)**	**1,528**	**1,543**	**9,813**	**12,500**
(1)Total comprehensive income			1,528		20,393	21,921
(2)Owner's devotion and decreased capital	466	(850)		(496)	(37)	(917)
1.Owner's devotion capital						
2.Others	466	(850)		(496)	(37)	(917)
(3)Special reserve						
1.Appropriation of special reserve						
2.Use of special reserve						
(4)Profit Distribution				2,039	(10,543)	(8,504)
1.Appropritation to surplus reserve				2,039	(2,039)	
Inc: Withdrawal Statutory surplus reserve				2,039	(2,039)	
Withdrawal other surplus						
2.Appropriation to general risk provisions						
3.Distribution to owner's					(8,504)	(8,504)
4.Others						
(5)Internal transferring of owner's equity						
6. Adjustment to asset and capital verification						
Balance at 31 December 2017	**326,374**	**48,984**	**(21,348)**	**50,472**	**5,836**	**410,318**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements

Company Statement of Changes in Equity (Continued)
For the year ended 31 December 2016

Items	Shareholder's equity attributed to parent company					Total equity
	Paid in Capital	Capital reserve	Other comprehensive income	Surplus reserve	Retained profit	
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 1 January 2016	**319,898**	**50,138**	**(23,366)**	**48,838**	**14,342**	**409,850**
Amount of increase (decrease) of this year	**6,010**	**(304)**	**490**	**90**	**(18,319)**	**(12,033)**
(1)Total comprehensive income			490		901	1,391
(2)Owner's devotion and decreased capital	6,010	(304)				5,706
1.Owner's devotion capital	6,010					6,010
2.Others		(304)				(304)
(3)Special reserve						
1.Appropriation of special reserve						
2.Use of special reserve						
(4)Profit Distribution(decrease)				90	(19,220)	(19,130)
1.Appropritation to surplus reserve				90	(90)	
Including : Withdrawal Statutory surplus reserve				90	(90)	
Withdrawal other surplus						
2.Appropritation to general risk provisions						
3.Distribution to owner's					(19,129)	(19,129)
4.Others						
(5)Internal transferring of owner's equity						
Balance at 31 December 2016	**325,908**	**49,834**	**(22,876)**	**48,928**	**(3,977)**	**397,817**

Dai Houliang	Zhao Dong	Shou Donghua
General Managert	Chief Financial Officer	Head of the finance department

The accompanying notes form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2018

Ⅰ. Company's profile

China Petrochemical Corporation (the “Company") is a stated-owned company, established on 27 July 1998. The Company with a registered capital of RMB 274.9 billion is registered and headquartered in Beijing. The legal representative of the Company is Dai Houliang.

The Company is one of the largest vertically integrated energy and chemical companies in China, established on the basis of former China Petrochemical Corporation according to the Circular on Establishment Program of Sinopec Group by the State Economic and Trade Commission and Announcement on the articles of association of Sinopec Group (Guo Jing Mao Wei [1998] No.458). The Company's predecessor is China Petrochemical Corporation established in 1983 as the economic entity with the qualification of a legal person under direct control by the State Council, and is responsible for designing and planning the national petrochemical production construction, import and export business. In July, 1998, China carried out significant reform and restructured the petroleum and petrochemical industry, Sinopec Group completely acquired China Eastern United Petrochemical (Group) Company Limited, finished transition with China National Petroleum Corporation and hand-over with provincial/ municipal as well as specifically designated municipal petroleum companies, hence, it became a state-owned company, functioning as a state-authorized investment organization in which the state holds the controlling share.

According to the file titled “About the approval to reforming China Petrochemical Corporation” (Guo Zi Gai Ge [2017] No.1076) and issued by State-owned Assets Supervision and Administration Commission of the State Council, the company completed the reform in August 2018, the enterprise type has transformed to limited company (solely owned by state) from the entity owned by whole people. This transformation has been approved and registered by Beijing Administration for Industry and Commerce on August 20th 2018.

The Company and its subsidiaries' (the “Group", "Sinopec Group") key business activities include: exploration and development of petroleum and natural gas, petroleum refining, petrochemical, wholesale and retail of finished goods, petroleum chemical, goods production and sales, exploration and designing, construction, installation of petroleum and petrochemical projects and R&D on alternative energy.

Sinopec Group was ranked third on the Fortune 2018 Global 500.

Sinopec Group has 39 wholly or partially owned subsidiaries (displayed in Note. VII), including China Petroleum & Chemical Company (Sinopec Corp.) listed in Hong Kong, New York, London and Shanghai, Sinopec Oilfield Service Corporation (SSC) listed in Hong Kong and Shanghai, Sinopec Engineering (Group) Co., Ltd. (SEG) listed in Hong Kong, Sinopec Oilfield Equipment Corporation (SOFE) listed in Shenzhen, as well as 35 unlisted companies.

The release of the Group's financial statements and its accompanying notes for the year ended 31 December 2018 have been approved by the Board of Directors.

Ⅱ. Basis of preparation

The financial statements are prepared in accordance with the Accounting Standards for Business Enterprises and corresponding application guidance, interpretations and other related provisions issued by the Ministry of Finance (collectively referred as "Accounting Standards for Business Enterprises ").

The financial statements of Sinopec Group have been prepared on the going concern basis.

Ⅲ. Statement of compliance with the Accounting Standards for Business Enterprises

The financial statements have been prepared in compliance with the Accounting Standards for Business Enterprises to truly and completely present the consolidated and company's financial position as at 31 December 2018, and the consolidated and company's operating results and cash flows for the year ended 31 December 2018.

Ⅳ. Significant accounting policies and accounting estimates

1. Accounting period

The accounting period of the Group is from 1 January to 31 December.

2. Functional currency

The Group's functional currency is RMB.

3. Accounting basis and valuation principle

The Group adopts the accrual basis of accounting. Except for certain financial instruments, the financial statements are conventionally prepared under the historical cost. In the cases of impairment of assets, a provision for impairment is made in accordance with the relevant regulations.

4. Business combination

(1) Business combinations under the common control

For the business combination involving entities under common control, the assets and liabilities obtained in the business combination shall be measured at their original carrying amounts at the combination date, except for the adjustments of different accounting policies. The difference between the carrying amount of the net assets obtained and the carrying amount of assets paid shall be adjusted to capital reserve, if the capital reserve is not sufficient to against the difference, any excess difference shall be adjusted to the retained earnings.

The fees directly attributable to business combination are accounted in current profit and loss.

(2) Business combination not under the common control

For business combinations involving entities not under common control, the consideration for each combination is measured at the aggregate fair value at acquisition date, of assets given, liabilities incurred or assumed, and equity securities issued by the acquirer in exchange for control of the acquiree. At acquisition date, the acquired assets, liabilities or contingent liabilities of acquiree are measured at their fair value.

The intermediate fees incurred in business combination, such as auditing, legal services and estimating consultant, and other relevant administration fees would be taken into account current profit and loss at their occurrence dates. If the consideration includes equity and debt instruments, related commission fees should be netted by the instruments' initial record.

Where the cost of combination exceeds the fair value of the acquiree's identifiable net assets, the difference is recognized as goodwill, and measured on the basis of its cost minus accumulative impairment provision; Where the cost of combination is less than the fair value of the acquiree's identifiable net assets, the difference is recognized in current profit or loss after verification.

Business combinations involving enterprises not under common control and achieved in stages.

In the consolidated financial statements, the combination cost is the sum of consideration paid at acquisition date and fair value of the acquiree's equity investment held prior to acquisition date; the cost of equity of the acquiree held prior to acquisition date shall be re-measured at the fair value at acquisition date, the difference between the fair value and the carrying amount shall be recognized as investment income or loss for the current period. Other comprehensive income and changes of investment equity related with acquiree's equity held prior to acquisition date shall be transferred to investment profit or loss for current period at acquisition date, excluding those incurred by the changes of net assets or net liabilities due to the re-measurement of defined benefit plan.

5. Basis of preparation for consolidated financial statements

The consolidated scope of the financial statements is determined by the basis of control, including the Company and subsidiaries.

The consolidated financial statements are based on the financial statements of the Company and its subsidiaries, and prepared by the Company according to other relevant information. Both accounting period and accounting policy is consistent among the Company and subsidiaries, and significant transactions, payables and receivables within the group are eliminated.

For the subsidiraires acquired under the common control in this reporting perioed, their financial information about operational results and cash flows are regarded to have been included in the consolidated scope since both acquirers and acquirees are commonly controlled.

The non-controlling interests in the Group's subsidiaries are presented separately in consolidated balance sheet as minority interest. The subsidiaries' current profits and losses attributable to minority interests are presented in consolidated income statement. Even if the losses suffered by minorities have exceeded the part of minority interests initially recognized, the differences should still writes down the non-controlling interests.

Transactions that acquire the minority interests of subsidiaries or dispose part of equity investment but not lose control of this subsidiary are accounted for equity transactions that adjust shareholders' equity attributable to the parent and minority interests to reflect the changes of equity in subsidiaries. The difference between the adjustment of minority interests and the fair value of consideration paid/received shall be adjusted to capital reserve, if the capital reserve is not sufficient to against difference, any excess shall be adjusted to against retained earnings.

If a business combination is achieved in stages, acquiree's equity interest previously held by acquirer would be re-measured in fair value at the acquisition date. Current investment income should recognize the differences between its carrying amount and fair value. Other comprehensive income and changes of investment equity related with acquiree's equity held prior to acquisition date shall be transferred to current investment income or loss at acquisition date

When an enterprise loses control over investee because of disposing part of equity investment or other reasons, the remaining part of the equity investment should be re-measured at fair value at the date when losing control over the investee; the sum of the proceeds received and the fair value of remaining part of the equity investments, deducting previous proportion of net assets calculated continuously since the acquisition date, should be recorded in current profit or loss, while goodwill are written down. Other comprehensive income related to the investment on previous subsidiaries are transferred into current profit and loss at the date of control loss, excepting the part caused by re-measurement of investee's defined benefit plan or changes in investee's net asset.

Proportionally disposing acquiree's equity in stages resulted in losing control belongs to package deal, consolidated financial statements should recognize all differences between disposal proceeds and their corresponding proportion of subsidiaries' net asset before control losing as other comprehensive income, the accumulated amount is regarded as current profit and loss when control is lost.

6. Joint arrangement

A joint arrangement is an arrangement of which two or more parties have joint control. The Group's joint arrangement is divided into joint operation and joint venture.

(1)Joint operation

A joint operation is a joint arrangement whereby the Group that has joint control of the arrangement has rights to the assets, and obligations for the liabilities, relating to the arrangement

A joint operator shall recognize its interest in a joint operation and choose specified accounting treatment based on ASBE as follows:

a. its assets, including its share of any assets held jointly;

b. its liabilities, including its share of any liabilities incurred jointly;

c. its revenue from the sale of its share of the output arising from the joint operation;

d. its share of the revenue from the sale of the output by the joint operation;

e. its expenses, including its share of any expenses incurred jointly.

(2)Joint ventures

A joint venture is a joint arrangement whereby the Group that has joint control of the arrangement has rights to the net assets of the arrangement.

The group recognizes its interest in a joint venture as an investment and account for that investment using the equity method.

7. Recognition basis of cash and cash equivalents

Cash and cash equivalents include cash, bank deposit, other monetary assets and short-term non-equity investment. Non-equity investment that can be recognized as cash equivalents shall conform to the following conditions: short-term (commonly refers to those expiring within 3 months from purchase date), with high liquidity, easily convertible to known amounts of cash, and with insignificant risk volatility of fair value.

8. Foreign currency translation

(1) Transactions in foreign currency

Transactions denominated in foreign currencies are translated into functional currency using the spot exchange rates at the dates of the transactions or at the date of the last month-end day. Foreign exchange transactions or others shall be translated into functional currency at the exchange rate undertaken by the deal, which is bid price or ask price of the bank.

Exchange differences arising on the settlement of monetary items or on the translation of monetary items at rates different from those at which they were translated on initial recognition during the period in previous financial statements should be recognized in profit or loss for the period in which they arise. Non-monetary items that are measured in terms of historical cost in a foreign currency should be translated into the reporting currency using the spot exchange rate at the date of the transaction. Accordingly, at each balance sheet date, the reporting currency amount of non-monetary items remains the same in the transaction. At each balance sheet date, non-monetary items that are measured at fair value in a foreign currency should be translated into the reporting currency using the spot exchange rates at the date when the fair value was determined. Differences between the translated amount and the original amount of functional currency are included in profit or loss for the current period. Foreign currency translation difference of specific borrowings accounts which is directly attributable to the construction or production of assets eligible for capitalization is capitalized according to regulations and included in the cost of related assets.

(2)Translation of financial statements in foreign currency

For subsidiaries that use foreign currency as their reporting currency, when financial statements are translated from the foreign currency into RMB, all asset and liability accounts should be translated into RMB using the market exchange rates on the consolidation date. All equity accounts, except for the "undistributed profit" account, should be translated into RMB using the market exchange rates when the transactions take place. All accounts in the income statement and those items relating to profit distribution should be translated into RMB using the market exchange rates prevailing on the consolidation date of the financial statements. All accounts in the cash flow statement should be translated into RMB using the market exchange rates prevailing on the consolidation date of the financial statements. Exchange differences arising from the translation of financial statements are accounted for separately as "Foreign currency translation differences" of undistributed profit accounts in the balance sheet.

9. Financial instruments

Financial instruments refer to the contracts that form one party's financial assets and form the financial liabilities or equity instruments of the other party. The Group recognizes a financial asset or a financial liability when the Group enters into and becomes a party to the underlining contract of the financial instrument.

(1)Classification and measurement of financial assets

The Group classifies financial assets into different categories depending on the business model for managing the financial assets and the contractual terms of cash flows of the financial assets: (1) financial assets measured at amortized cost, (2) financial assets measured at fair value through other comprehensive income, (3) financial assets measured at fair value through profit or loss.

Financial assets are initially recognized at fair value. For financial assets measured at fair value through profit or loss, the relevant transaction costs are recognized in profit or loss. The transaction costs for other financial assets are included in the initially recognized amount. Accounts receivable or bills receivable arising from sales of goods or rendering services, without significant financing component, are initially recognized based on the transaction price expected to be entitled by the Group.

a. Debt instruments

①Those measured at amortized costs: the assets held for receiving contractual cash flows, generated exclusively from the interests paid for principals, are classified as “financial assets measured at amortized costs.

The Group applies effective interest method to account these assets as their subsequent treatment under the basis of amortized costs. The gains and losses from derecognition, impairment losses and amortization should be accounted for current profits and losses.

②Those measured at fair value through other comprehensive income: the assets held for receiving contractual cash flows and sales, besides the cash flows are the payments for interest and principals only, are classified as financial assets measured at fair value through other comprehensive income.

After the initial recognition, these kinds of instruments are measured at fair value sequentially. The changes to financial assets rather than those caused by recognized impairment losses, interest income and exchange translation differences would be regarded as other comprehensive income directly. If the financial assets are derecognized, their correspondingly accumulated gains or losses accounted for other comprehensive income should be transferred into current profits and losses.

③Those measured at fair value through profit or loss: if financial assets cannot be classified as the two kind of financial assets mentioned above, they should be recognized as financial assets measured at fair value through profit or loss. Gains and losses from this kind of assets, not belonging to debt investment treated by hedge accounting, should be accounted for current profits and losses.

b. Equity instruments

Equity instruments that the Group has no power to control, jointly control or exert significant influence over, are measured at fair value through profit or loss and presented in financial assets held for trading.

In addition, the Group designates some equity instruments that are not held for trading as financial assets at fair value through other comprehensive income, and presented in other equity instrument investments. The relevant dividends of these financial assets are recognized in profit or loss. When derecognized, the cumulative gain or loss previously recognized in other comprehensive income transfer to retained earnings.

(2) Classification and measurement of financial liabilities

The Group, at initial recognition, classifies financial liabilities as either financial liabilities subsequently measured at amortized cost or financial liabilities at fair value through profit or loss. For those excluded from financial liabilities at fair value through profit or loss, relating commission fees generated should be considered at initial recognition.

The Group recognizes the gains and losses from the financial liabilities measured at amortized costs in corresponding period, which are resulted from these liabilities' derecognition or amortization. For financial liabilities at fair value through profit or loss, dividend, interest paid and gains or losses generated from fair value changes would be accounted for current profits and losses.

(3) Derivative instruments

The derivative instruments are initially recognized at fair value, and are re-estimated their fair values at each balance sheet date. The gains and losses generated from re-estimation, except for those applied to meet requirements of hedging accounting, are recognized current profit and loss.

(4) Impairment

The Group recognizes loss allowances for expected credit losses on financial assets measured at amortized cost, bond investments measured at fair value through other comprehensive income, lease receivables, contract assets, loan commitments and financial guarantee contract .

The Group is concerned with past events, current conditions, forecast to future economics and other factors to recognize expected credit losses.

At balance sheet date, the Group shall separately measure expected credit losses for financial instruments at different stages. For financial instruments, of which risks have not significantly risen, at first stage, the Group measures the loss allowance at an amount equal to 12-month expected credit losses. Financial instruments, having not been prepared with loss allowance since their initial recognition, with rising credit risks are arranged in the second stage, the Group shall prepare their provisions equal to lifetime expected credit losses. The group shall use lifetime expected credit losses to against financial instruments, having been provided with loss allowance since their initiall recognition, at the third stage.

The Group assumes that credit risks of the financial instruments, lower than others, would not significantly increase and measures loss allowance at the amount equal to 12-month expected credit losses at balance sheet date.

For financial instruments at the first and second stage, the group shall apply their book values without any deductions of loss allowances and effective interest rate to calculate interest income. For financial instruments at the third stage, their amortized costs after being deducted by loss allowances and effective interest rates are used to get their interest income.

Bills receivables and accounts receivable and contract assets should be provided with loss allowance equal to lifetime expected credit losses, no matter there is a significant financing component.

Provisions for impairment losses which are recognized or have been reversed in current period would affect the Group's current profit and losses.

(5)Fair value of financial instruments

The methods for determining fair value of financial asset and financial liability are displayed in IV.29

(6) Derecognition of financial instruments

The Group derecognizes a financial asset when a) the contractual right to receive cash flows from the financial asset expires; b) the Group has transferred substantially all the risks and rewards of ownership of the financial asset; c) the financial assets have been transferred, and the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, but the Group has not retained control.

For the derecognition of other equity instrument investments, the difference between the carrying amounts and the sum of the consideration received and any cumulative gain or loss previously recognized in other comprehensive income, is recognized in retained earnings. While on de-recognition of other financial assets, this difference is recognized in profit or loss.

Where the present obligations of financial liabilities are completely or partially discharged, the Group derecognizes these financial liabilities or discharged parts of obligations. The differences between the carrying amounts and the consideration received are recognized in profit or loss.

(7) Transfer of financial asset

The transfer refers to a transaction that transfers a financial asset to the buyer other than an issuer.

If the Group transfers substantially all the risks and rewards of ownership of the financial asset, the group shall derecognise the financial asset. If the group retains substantially all the risks and rewards of ownership of the financial asset, the group shall continue to recognise the financial asset.

If the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, the group shall determine whether it has retained control of the financial asset. In this case:

a. If the Group has not retained control, it shall derecognise the financial asset and recognise separately as assets or liabilities any rights and obligations created or retained in the transfer.

b. if the Group has retained control, it shall continue to recognise the financial asset to the extent of its continuing involvement in the financial asset.

10. Hedging Instruments

Hedge accounting refers to group's methods bringing the gains or losses generated by hedged items and hedging instruments in current profits and losses or other comprehensive income to reflect the activities of risk management.

Hedged items refers to those making the group be exposed to volatilities of cash flows and being designated as hedged objectives with reliable measurement. The hedged items designated by the group generates expectations of cash flows' volatilities faced to the group, such as procurements or sales based on uncertainty market price in the future.

Hedging instruments are the financial instruments designated by the group for hedging or those of which expected fluctuation of cash flows would offset against that of hedged items.

The hedging relationship meets all of the following hedge effectiveness requirements:

a. There is an economic relationship between the hedged item and the hedging instrument.

b. the effect of credit risk does not dominate the value changes that result from that economic relationship

c. the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the group actually hedges and the quantity of the hedging instrument that the group actually uses to hedge that quantity of hedged item. However, that designation shall not reflect an imbalance between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness

Cash flow hedge:

Cash flow hedge refers to a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognized asset or liability or a highly probable forecast transaction, and could affect profit or loss.

Gains or losses generated by hedging instruments, belonging to effective part, are regarded as cash flow hedge reserve and recognized in other comprehensive income. For those belonging to ineffective part are taken into account current profits and losses.

If a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability, or a hedged forecast transaction for a non-financial asset or a non-financial liability becomes a firm commitment for which fair value hedge accounting is applied, the group shall remove that amount from the cash flow hedge reserve and include it directly in the initial cost or other carrying amount of the asset or the liability.

For cash flow hedges other than those covered by the circumstance above, that amount shall be reclassified from the cash flow hedge reserve to profit or loss as a reclassification adjustment in the same period or periods during which the hedged expected future cash flows affect profit or loss

However, if cash flow hedge reserve recognized in other comprehensive income is a loss and the group expects that all or a portion of that loss will not be recovered in one or more future periods, it shall immediately reclassify the amount that is not expected to be recovered into profit or loss as a reclassification adjustment.

The group shall discontinue hedge accounting when the hedging relationship ceases to meet risk management objectives because of changes in objectives. This includes instances when the hedging instrument expires or is sold, terminated or exercised, economic relationships between hedged items and hedging instruments no longer exist, or effects of credit risk begin to denominate the changes in values generated by hedged items and hedging instruments, or hedge cannot meet the conditions of hedging accounting. If the hedged future cash flows are still expected to happen, cash flow reserve accumulated in other comprehensive income could be kept and treated according to hedging accounting polices displayed above. If the hedged future cash flows are no longer expected to happen, cash flow reserve should be transferred from other comprehensive income to current profit and loss. If there exsit possibility, even not big enough, that hedged future cash flows are expected to happen, cash flow reserve accumulated in other comprehensive income should be held and abide relevant accounting polices.

11. Inventories

(1)Classification of inventories

The Group classified the inventory as raw material, turnover material, goods in process, materials in transit, work in progress, finished goods, goods in transi, and contract performance costs.

(2)Measurement method of cost of inventories

Inventories were recorded at actual cost when acquired. Raw materials, work in progress, and finished goods (other than reserve crude oil) are issued using a weighted average method or plan cost. The difference between the planned cost and the actual cost is accounted for separately through the cost variance account. The month ends and the carry-over is completed. The cost difference between the use and delivery of inventories shall be adjusted to the actual cost; and for the reserve crude oil, the sales shall be converted to the replacement purchase cost to carry forward the cost of sales. If the sales of crude oil through serial replacement do not complete the purchase on the balance sheet date, the sale proceeds will be carried forward based on the amount of sales revenue. After the replenishment is completed, the difference will be adjusted based on the actual purchase cost. For the inventory that cannot be replaced, the inventory purchased and manufactured specifically for a specific project, and the cost of providing labor services, the cost of issuing inventory is determined by the individual valuation method. Low-value consumables shall be amortized with a one-off amortization method when they are used. Other turnover materials are generally subject to a one-off amortization method. Turnover materials with a relatively large value and a long lifespan are amortized over the benefit period.

(3)Method for provision for obsolete inventories

Any excess of the cost over the net realisable value of inventories is recognized as a provision for obsolete inventories, and is recognized in profit or loss. The Group usually recognizes provision for decline in value of inventories by a single inventory item, but for reserve crude oil. If the factors caused the value of inventory previously written-down have disappeared, the provision for decline in value of inventories previously made is reversed.

(4)Measurement of net realisable value

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale and relevant taxes. Apart from reserve crude oil, the net realisable value is measured based on the verified evidences and considerations for the purpose of holding inventories and the effect of post balance sheet events. The commercial reserve crude oil is based on forecast crude oil prices within next five years and takes into account the transportation charges and oil surcharges.

(5)Inventory system

The inventories are counted in perpetual inventory system.

12. Long-term equity investments

The group's long-term equity investments include those that the Group is able to exercise controls and significant influence over the investees and also the investments to joint ventures. Joint ventures are the investees over which the Company is able to exercise joint control together with other ventures.

(1) Recognition of investment cost

The group's long-term equity investments are measured at the cost of investments on acquisition. The cost of investments includes the assets paid for the investments, liabilities incurred or assumed and the fair value of issuing equity securities, as well as directly associated costs. While the cost of the long-term investment acquired from the business combination under common control is recognized as the carrying amount of combined party's equity recorded in the ultimate controlling party's consolidated financial statements at the combination date.

(2) Subsequent measurement and recognition of profit

Where the Group is able to exercise control over the investee, the long-term equity investment is accounted for using the cost method; where the Group has joint control or significant influence over the investee, the long-term equity investment is accounted for using the equity method.

a. Long-term equity investment accounted for using the cost method

For long-term equity investment which is accounted for using the cost method, investment income is recognized in profit or loss for the current period as the cash dividend or profit announced and distributed, except for those cash dividend or profit which have already included in the actual payment or consideration of offer when the investment was made.

b. Long-term equity investment accounted for using the equity method

Under the equity method, where the initial investment cost of a long-term equity investment exceeds the Group's interest in the fair values of the investee's identifiable net assets, no adjustment is made to the initial investment cost; where the initial investment cost is less than the Group's interest in the fair values of the investee's identifiable net assets, the difference is charged to profit or loss for the current period, and the carrying amount of the long-term equity investment is adjusted accordingly.

For long-term equity investments accounted for using the equity method, the Company recognizes the investment income and other comprehensive income according to its share of investee's net profit or loss and other comprehensive income respectively, and the carrying amount of the long-term equity investments shall be adjusted accordingly; The carrying amount of the investment is reduced by the Company's share of the profit distribution or cash dividends declared by an investee; for changes in owners' equity of the investee other than those arising from its net profit or loss, other comprehensive income and profit distribution, the carrying amount of the long-term equity investment shall be adjusted and recognized to shareholder's equity. The recognition of the share of investee's net profit and loss is adjusted in the light of fair value of investee's identifiable assets at aquasition date and the group's accounting polices and reporting period.

c. The transform between the cost method and the equity method in the measurement

If the group has significant influences or can implement joint control over investees due to additional investment, the initial investment cost is recognized as the sum of the fair value of the original portion of equity investment and the additional investment cost under equity method. For the original portion of equity investment classified as available for sale, the difference between the fair value and carrying amount and cumulative changes in fair value recognized as other comprehensive income shall be recognized as current profit of loss under equity method.

(3) Basis for recognition of control, joint control or significant influence over an investee

Control refers to the Group has the ability to influence the return amounts which are enjoyed by the Group through participation in the invested entity related activities by using the power to the invested entity. Subsidiaries' financial positions, operation results and cash flows are included in consolidated financial statements , started from acquisition date to control-losing date.

Joint control refers to any joint venture party alone cannot control the production and operation activities of the joint venture, decisions related to the basic operating activities of joint venture should require the unanimous consent of the parties sharing control.

Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies. When determining whether an investing enterprise is able to exercise control or significant influence over an investee, the effect of potential voting rights of the investee (for example, warrants and convertible debts) held by the investing enterprises or other parties that are currently exercisable or convertible shall be considered.

(4) Disposition of the long-term equity investments

When disposing of a long-term equity investment, the difference between its book value and the actual purchase price shall be included in the current profits and losses. If any change other than the net profits and losses of the invested entity occurs and is included in the owner's equity, the portion previously included in the owner's equity shall, when disposing of a long-term equity investment measured by employing the equity method, be transferred to the current profits and losses according to a certain proportion.

If the group loses joint control or has no significant influence over investees due to the disposal of parts of the equity investment, the surplus equity after disposal shall be recognized in accordance with the difference between fair value and carrying amount at the date of loss of joint control or significant influence. Other comprehensive income of original equity investment recognized under equity method shall be recognized in accordance with the same foundation used by the investees when dispose the relevant assets or liabilities directly in the termination of equity method. Other changes of owners' equity related to the original equity investment shall be transferred into profit or loss for current period.

If the group loses control over investees due to the elimination of parts of the equity investment , the surplus owners' equity that are able to implement joint control or have significant influence over investees shall be measured at equity method and are deemed to be recognized under equity method since the acquisition date. The surplus owners' equity that are unable to implement joint control or have no significant influence over investees shall be processed in accordance with "ASBE 22-Recognition and Measurement of financial instruments", and the difference between fair value and carrying amount at the day of loss of control shall be recognized as profit or loss for current period.

(5) Impairment provision of the long-term equity investments

The impairment assessment and provision accrual on investments in subsidiaries, associates and joint ventures entities are stated in Note IV.20.

13. Fixed assets

(1)Recognition of fixed assets

Fixed assets refer to tangible assets that are held for use in the production or supply of goods and services, for rental to others, or for administrative purposes, and have a useful life of more than one year. An item of fixed asset should be recognized if, and only if it is probable that future economic benefits associated with the asset will flow into the Group and the cost of the asset can be measured reliably.

(2)Fixed assets measurement

Fixed assets are initially measured at actual costs of acquisition.

(3)Classification of fixed assets and depreciation policy

The Group classifies the fixed assets and recognizes the expected useful lives, estimated net residual values rates and the depreciation method of the fixed assets according to China Petrochemical Enterprise Standard Q/SH0417-2011 "Classification of fixed assets, code and confirmation rules of single fixed assets".

All the fixed assets are depreciated, except the fixed assets that are depreciated fully but are used continually or the land that is valued individually as fixed asset according to the rules of audit of assets.

The Company uses the straight line method for depreciation. For the fixed assets without impairment provision, their expected useful lives, estimated residue values and the Group's annual depreciation rates are shown as follows according to the category

Categories	**Estimated useful lives**	**Residual percentage%**	**Annual depreciation rates%**
Plant and buildings	12-40	3	2.43-8.08
General equipment	4-20	3	4.85-24.25
Special equipment for oil and gas	8-18	3	5.39-12.13
Special equipment for petroleum and chemical industry	10-20	3	4.85-9.70
others	4-30	0-3	3.23-25.00

For the fixed assets with impairment provision or those with changing estimated useful lives and residual values, the related depreciation charge is recalculated based upon the adjusted carrying amounts over their remaining useful lives. But the accumulated depreciation having been charged previously will not be adjusted.

A finance lease is a lease that transfers in substance all the risks and rewards incidental to ownership of an asset. An operating lease is a lease other than a finance lease.

Fixed assets under finance lease should be depreciated over the remaining useful life if there is reasonable certainty that the Group is to obtain ownership of the leased asset by the end of the lease term. If there is no reasonable certainty that the Group is to obtain ownership of the leased asset by the end of the lease term the asset should be depreciated over the shorter one of the lease term and its remaining useful life.

(4)Subsequent expenditure of the fixed assets

Subsequent expenditure of the fixed assets includes the renovation spending and the cost of repairs in the using progress.

The renovation spending should be recognized in the carrying amount of the item if the recognition criteria are satisfied and the carrying amount of the replaced part is derecognized. The repair costs for fixed assets, not satisfying the recognition criteria of fixed assets, are recognized in profit or loss as incurred.

(5)Provision for impairment of fixed assets

The methods applied on fixed assets' impairment assessments and provisions preparation are presented in Note. IV 20.

14. Oil and gas properties

(1) Classification, recognition and measurement of oil and gas properties

The oil and gas properties of the Group include drilling activities and other relevant activities, the rights and interests of proved and unproved mining areas. An item of oil and gas properties should be recognized and be measured initially according to the actual cost occurred, if future economic benefits associated with the asset will flow into the Group, and the cost of the asset can be measured reliably.

After the obtainment of the rights and interests of proved and unproved mining areas, the initial costs of the oil and gas properties shall be measured according to the costs of obtainment.

Where an enterprise eventually abandons an unproved mining area due to its failure to discover and prove any economically exploitable reserve therein, its book value at the time of abandonment shall be recorded in the profits and losses of the current period.

With a view to the drilling exploration disbursements, after a well is completed if:

a. It is sure that an economically exploitable reserve is discovered and proved in the well, the disbursements for drilling this well shall be carried forward as cost of the well and relevant facilities;

b. It is sure that no economically exploitable reserve is discovered and proved in the well, the result of the disbursements for drilling this well less the net salvage value shall be recorded in the profits and losses of the current period.

c. It is not sure whether or not an economically exploitable reserve is discovered and proved in the well, the disbursements for drilling the well shall be temporarily capitalized within 1 year after it is completed. After the completion of the well, If it is still impossible to make sure whether or not an economically exploitable reserve is discovered and proved within next 1 year, the capitalized disbursements for drilling the well shall continue to be temporarily capitalized only if the following conditions are met simultaneously, otherwise they shall be recorded in the profits and losses of the current period:

①. Reserve has been discovered in the well, but in order to make sure whether or not it is an economically exploitable reserve, it is necessary to carry out further exploration activities

②. Further exploration activities are being implemented or are about to be implemented under a specific plan.

d. Where a new economically exploitable reserve is discovered and proved in a well for which the drilling exploration disbursements have been expensed, no adjustment may be made to the expensed drilling exploration disbursements and the disbursements for re-drilling exploration and for the completion of the well shall be capitalized.

The disbursements for drilling exploration and the related auxiliary equipment shall be capitalized.

The non-drilling exploration disbursements shall be recorded in the profits and losses of the current period at the time of incurrence.

The disbursements for the development of oil and gas shall be transferred into the costs of the oil and gas properties, when they reach the condition for its intended use (or a well is completed).

(2) Depletion policy of the oil and gas properties

The subsidiaries of oil and gas exploration compute the depletion of oil and gas properties by adopting the output method.

(3) The discard expense of the oil and gas properties

For the Group' s obligation to discard any mining areas, if this obligation satisfies the conditions for recognizing estimated liabilities, it shall increase the corresponding book value of oil and gas properties by present value of the estimated liabilities. The disposal costs of oil and gas properties are depleted according to relevant policies. The differences between the present value and future value of dismantlement are amortized in financial expenses over its remaining lives.

For the oil and gas properties without capitalized discard expenses prepared, discard expenses occurred are recorded in current profits and losses.

(4) The provision for impairment of the oil and gas properties

Methods applied on impairment assessment and provision preparation are presented in Note IV.20.

15. Construction in progress

(1) Valuation of construction in progress

The cost of construction in progress is determined according to the actual expenditure incurred for the construction, including interest costs generated from the specific and general borrowings eligible for capitalization and used for the acquisition and construction of assets.

(2) The standards and time-point of fixed assets transferred from construction in progress

All the expenditure incurred before the construction reaching the condition for intended use should be included in the recorded value of fixed assets. Construction in progress is transferred to fixed assets using the estimated value according to the actual cost of the project budget, cost, or engineering when the asset is ready for its intended use, having not been handled the completion of final accounts. After handling the final account, the provisional estimate of value should be adjusted according to the actual cost under the provision for depreciation of fixed assets of the Group, but the original provision for depreciation is not necessary to adjust.

(3) Provision for impairment of the construction in progress

Methods applied on preparation of impairment provision are presented in Note IV.20.

16. Borrowing costs

(1)Recognition principles for borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualified asset should be capitalized as part of the cost of the asset. Other borrowing costs should be recognized as an expense in its corresponding period.

Assets eligible for capitalization refers to the fixed assets, investment property, inventories and other assets which need a long period to be acquised, constructed or produced to achieve its intended use or sale situations.

(2)Conditions of capitalizing and expensing borrowing costs

Borrowing costs should be capitalized only if the following conditions are satisfied simultaneously:

A. Expenditures for the asset have been incurred,

B. Borrowing costshave been incurred;

C. Acquisition, construction and production activities necessary to prepare the asset for its intended use or sale have commenced.

Capitalization of borrowing costs should be suspended when the acquisition, construction or production of a qualified asset is abnormally interrupted for a consecutive period of more than three months.

The capitalization of borrowing costs should cease when the acquisition, construction or production of a qualified asset is prepared for its intended use or sale.

The capitalization of borrowing costs should cease when the individual component parts of the acquisition, construction or production of qualified asset have be finished and can be used alone.

(3)Capitalization period of borrowing costs

The capitalization period shall refer to the period from the commencement to the cessation of capitalization of the borrowing costs, excluding the period of suspension of capitalization of the borrowing costs.

(4)Calculation of the amount of capitalization of borrowing costs

As for specifically borrowed loans, the to-be-capitalized amount of interest costs and auxiliary costs shall be determined in light of the actual cost incurred of the specially borrowed loan at the present period minus the income of interests earned on the unused borrowing loans as a deposit in the bank or as a temporary investment, before the acquisition, construction or production of qualified asset preparing for its intended use or sale.

Where a general borrowing is used for the acquisition and construction or production of assets eligible for capitalization, the enterprise shall calculate and determine the to-be-capitalized amount of interests on the general borrowing by multiplying the weighted average asset disbursement of the part of the accumulative asset disbursements minus the general borrowing by the capitalization rate of the general borrowing used. The capitalization rate shall be calculated and determined in light of the weighted average interest rate of the general borrowing.

Where there is any discount or premium, the amount of discounts or premiums that shall be amortized during each accounting period shall be determined by the real interest rate method, and an adjustment shall be made to the amount of interests in each period.

17. Intangible assets

(1) Valuation and amortization method of intangible assets

The Company initially measures the intangible asset at cost, and analyses and judges its service life when obtained. An intangible asset with a finite useful life is amortized on a straight-line basis over the expected useful lives when the asset is available for use.

(2) Useful life and amortization period

A. Being derived from any contractual right or other statutory rights, the useful life of intangible assets is no more than the period of the contractual rights or other legal rights; if the contractual rights or other statutory rights can continue due to renewal and it can be proved that the Group do not need to pay a huge cost for the renewal, the renewal period should be credited in the useful life.

B. When there are no rules about the useful life in the contract or the law, the Group recognizes the period of intangible assets that bring economic benefit to the enterprise, by hiring experts to conduct feasibility studies, comparing the condition with the same industry and referring to the historical experience under various aspects.

C. After these efforts above, if it is still unable to forecast the period when the intangible asset can bring economic benefits to the enterprise, it shall be regarded as an intangible asset with uncertain service life.

(3) Provision for impairment of the intangible assets

Intangible assets, where the estimated useful life is finite, are stated in the balance sheet at cost less accumulated amortisation and provision for impairment losses (see Note IV.20).

18. Research and development expenditures

The expenditures on internal research and development project shall be classified into expenditure in research phase and expenditure in development phase.

Expenditure in research phase shall be recognized in current profit or loss when occurred.

Expenditure in development phase satisfied with following conditions shall be recognized as intangible assets, otherwise, reckoned in current profit and loss.

(a) It is technically feasible in completing the intangible assets and making it available for sale or use;

(b) The Group has intention to complete and use or sell the intangible asset;

(c) Ways of intangible assets generating economic benefits, including demonstrating the existence of a market for the output of the intangible asset or the intangible asset itself or intangible asset used internal, can be proved its usefulness;

(d) The Group can provide adequate technology, finance and other resources to complete the development of intangible assets while being able to use or sell them;

(e) Expenditure attributable to the intangible asset during its development phase can be measured reliably.

(f) If it is unable to distinguish expenditure into research phase or development phase, all expenditure will be recorded into current profit or loss.

19. Long-term deferred expenses

Long-term deferred expenses of the Group is recorded at actual cost and amortized evenly over their expected beneficial periods. For long-term deferred expenses that cannot bring benefit to the Group in the subsequent accounting periods, the amortized value of the expenses should be charged completely to current profits and losses.

20. Impairment of assets

Internal and external sources of information are reviewed at each balance sheet date for indications that fixed assets, oil and gas properties, construction in progress, goodwill, intangible assets and investments in subsidiaries, associates and joint ventures may be impaired.

Assets are tested for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. The recoverable amounts of goodwill and intangible assets with uncertain useful lives are estimated annually no matter there are any indications of impairment. Goodwill is tested for impairment together with related asset units or groups of asset units.

An asset unit is the smallest identifiable group of assets that generates cash inflows largely independent of the cash inflows from other assets or groups of assets. An asset unit comprises related assets that generate associated cash inflows. In identifying an asset unit, the Group primarily considers whether the asset unit is able to generate cash inflows independently as well as the management style of production and operational activities, and the decision for the use or disposal of asset.

The recoverable amount is the greater of the fair value less costs to sell and the present value of expected future cash flows generated by the asset (or asset unit, set of asset units).

Fair value less costs to sell of an asset is based on its selling price in an arm's length transaction less any direct costs attributable to the disposal. Present value of expected future cash flows is the estimation of future cash flows to be generated from the use of and upon disposal of the asset, discounted at an appropriate pre-tax discount rate over the asset's remaining useful life.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount is reduced to the recoverable amount. The amount by which the carrying amount is reduced is recognized as an impairment loss in profit or loss. A provision for impairment loss of the asset is recognized accordingly. Impairment losses related to an asset unit or a set of asset units first reduce the carrying amount of any goodwill allocated to the asset unit or set of asset units, and then reduce the carrying amount of the other assets in the asset unit or set of asset units on a pro rata basis. However, the carrying amount of an impaired asset will not be reduced below the highest of its individual fair value less costs to sell (if determinable), the present value of expected future cash flows (if determinable) and zero.

Impairment losses for assets are not reversed.

21. Employee benefits

(1) The scope of employee benefits

Employee benefits are all forms of consideration and compensation given by the Group in exchange for service rendered by employees or the termination of employment. Employee benefits include short term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits. Employee benefits include benefits provided to employees' spouses, children, other dependants, survivors of the deceased employees or to other beneficiaries.

During the accounting period in which the employee render the related services, wages, bonuses ,social security contributions(including medical insurance, injury insurance, maternity insurance, etc.) and house funding are recognized as liability and current profit or loss or related assets expenditure. If the short-term employee benefits are expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service and have significant financial impact, the liability shall be measured as the discounted amounts.

(2) Post-employment benefits

Post-employment benefit plans are classified as either defined contribution plans or defined benefit plans. Under defined contribution plans, the group pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods. Defined benefit plans are other post-employment benefit plans except for defined contribution plans.

Defined contribution plans include the basic pension insurance, unemployment insurance and annuity.

The Group sets up annuity scheme according to the "the approval to enterprise annuity scheme of China Petrochemical Group" (Guozifenpei [2009] No.1387) issued by State-owned Assets Supervision and Administration Commission and relevant policies of the Group. In addition to this, the Group has no other significant commitments of social security of employees.

When an employee has rendered service to the Group during an accounting period, the Group shall recognize the accrued amount according to the defined contribution plans as a liability and charged to the cost of an asset or to profit or loss in the same period.

Under defined benefit plans, the welfare costs are determined by expected cumulative unit credit method, which was evaluated by independent actuaries in the annual balance sheet date. The employee benefits of the Group's defined benefit plans include the following components:

①Service cost, which includes current service cost, past service cost and settlement gains or losses. Current service cost refers to the added present value of defined benefit plans caused by the employee's services. Past service cost refers to the increase or decrease present value of defined benefit plans related to the past employee's services caused by the change of defined benefit plans.

②Net interest of defined benefit plans' net liabilities or net assets includes the interest income of plan assets, interest expense of defined benefit plans obligations and the interest influenced by the assets limit.

③Re-measured the change of defined benefit plan's net liabilities or net assets.

Unless required or permitted by other accounting standards for employee benefit costs included in the cost of assets, those costs which described in item① and item② are recognized in profit or loss; the costs which described in item③ are recognized in other comprehensive income and will not be reversed to profit or loss in subsequent accounting periods while can be transferred within the scope of equity.

(3) Termination benefits

The Group recognizes termination benefits liabilities and profit or loss in the period in the earlier date of the followings: (i) The outgoing business cannot unilaterally withdraws the termination plan or reduce the termination benefits under the proposal, or encourage the employees to accept voluntary redundancy compensation when the outgoing business cannot withdraw from the termination of employment or the layoff proposal ; or (ii) The Group recognizes the payment of the termination benefits costs and expenses.

22. Bonds payable

(1) Convertible bonds

a. Convertible bonds combined with equity component

The holders of convertible bonds could convert bonds to shares, however, the number of shares and consideration converted would not be fluctuated. These convertible bonds could be treated as mixed financial instruments comprising debt and equity components.

The debt parts of convertible bonds are initially measured at the present values of future interest payments and principals, the discount factor is referred by the market rates of the bonds similar to these convertible bonds held prior to extert options. The premium between proceeds received and amount initially recognized is regarded as equity component. The commission fees related to bond offering are allocated proportionally and respectively to equity and debt part.

For debt part of convertible bond which is not designated as those measured at fair value through profit and loss, it should be amortized by effective interest rate method after its initial recognition. However, the equity part should not be re-measured.

The debt and equity part of convertible bond should be recognized as paid-in capital and capital reserve when option of these bonds is exercised. Redeem payments and commission fees are allocated in equity and debt part if convertible bonds are redeemed, of which differences with book value of equity and debt parts are counted in equity and profit and loss repectively.

b. Other convertible bonds

For convertible bonds with cash call option and other embedded derivatives, they should be presented as liabilities and derivatives separately.

The derivatives embedded in convertible bonds are initially measured at fair value. The premium of proceeds received over the derivatives part initially recognized should be treated as debt part. Commission fees about bond offering are allocated according to the proportion of derivative and debt part. The fees allocated to debt part are recognized in liabilities, while those allocated to derivatives are recognized in current profit and loss.

The derivative part is subsequentially measured at fair value at each balance-sheet date, the differences arising from remeasurements are recognized in current profit and loss. The debt part undertakes effective interest rate method as its post-measurement. The debt and derivative part are presented in financial statements together.

The book value of debt and derivative part are regarded as consideration to shares offering when the convertible option is exercised.

(2) Other bonds

Other outstanding bonds of the group are measured at the differences between their fair value of trading commission fees, and undertake effective interest rate method as their post-treatment.

Interest expenses are recognized in current profit and loss except those for borrowings eligible for capitalizing.

23. Accrued liabilities

The accrued liabilities are the present obligation likely incurred due to external guarantee, trade acceptance discounts, pending litigations, product quality gurantee, loss of contracts and restructuring obligations, etc. The Group shall record the obligations satisfying the following conditions into the liabilities of the balance sheet: the obligation is the Company's current obligations; the fulfilment of the obligation may possibly result in an outflow of economic benefits; and the amounts of the obligations can be measured reliably.

24. Revenue

The group shall recognise revenue when the group satisfies a performance obligation by transferring a promised good or service to a customer. Control of an asset refers to the ability to direct the use of, and obtain substantially all of the economic benefits from the asset.

For each performance obligation satisfied over time, the group shall recognise revenue over time by measuring the progress towards complete satisfaction of that performance obligation. For performance obligations satisfied at a point in time, the group recognizes revenue at which a customer obtains control of promised goods or services.

Sales of goods

The contracts signed by the group and customers generally include performance obligations of transferring promised goods. The expected considerations are recognized as revenue when customers obtain control of promised goods. The group shall consider following indicators of the transfer of control:

a. The group has a present right to payment for the asset

b. The significant risks and rewards of ownership of the asset have been transferred

c. The group has transferred legal right of, and physical possession of the asset

d. The customer has accepted the asset

Construction

The contracts signed by the group and clients generally include performance obligation of establishing infrastructure. As clients could control the goods during the construction process, the group shall recognise revenue over time by measuring the progress towards complete satisfaction of that performance obligation, except those progresses which cannot be reasonably estimated. The group applied output method to measure its progress. For the progresses cannot be estimated reasonably, the group recognized revenues by using costs actually incurred until the estimation become reasonable.

Rendering service

The services provided by the group to clients mainly include the performance obligations like technology services for petroleum construction, designing construction, etc.

If one of the following criteria is met:

a. The customer simultaneously receives and consumes the benefits provided by the group's performance as the group performs.

b. The group's performance creates or enhances an asset that the customer can control

c. The group's performance does not create an asset with an alternative use to the group and the group has an enforceable right to payment for performance completed to date

The group shall recognize revenue for a performance obligation satisfied over time only if the group can reasonably measure its progress towards complete satisfaction of the performance obligation. If the group may not be able to reasonably measure the outcome of a performance obligation, the group shall recognize revenue only to the extent of the costs incurred until such time that it can reasonably measure the outcome of the performance obligation.

If the group does not satisfy a performance obligation over time, the performance obligation is satisfied at which clients obtain the control of promised goods or services.

25. Government grants

A government grant is recognized when there is reasonable assurance that the grant will be received and that the Group will comply with the conditions attaching to the grant.

If a government grant is in the form of a transfer of a monetary asset, it is measured at the amount received or receivable. If a government grant is in the form of a transfer of a non-monetary asset, it is measured at fair value. If fair value cannot be reliably determined, it is measured at a nominal amount of RMB 1.

A government grant related to an asset is recognized as deferred income and amortised to profit or loss equally over the useful life of the related asset. A grant that compensates the Group for expenses or losses already incurred is recognized in profit or loss or offset against related expenses directly. A grant that compensates the Group for expenses or losses to be incurred in the future is recognized as deferred income, and included in profit or loss or offset related expenses in the periods in which the expenses or losses are recognized.

A grant related to ordinary activities is recognized as other income. A grant not related to ordinary activities is recognized as non-operating income.

If the government directly transfers the interest subsidy to the lending bank, the Group recognized the loan as the amount received, and interest expense, resulting from the loan principal and policy-related preferential interest rate, is calculated. If the government directly transfers the interest subsidy to the Group, the interest subsidy is offset against interest expense.

When a recognized government grant is needed to be refunded, if there is balance of relevant deferred income, it is offset against the carrying amount of relevant deferred income. Any excess of the reversal to the carrying amount of deferred income is recognized in profit or loss for the current period. For other circumstances, reversal is directly recognized in profit or loss for the current period.

26. Deferred tax assets and deferred tax liabilities

Income tax comprises of current tax and deferred tax. Current income tax and deferred tax are recognized in profit or loss except to the extent that they relate to transactions or items recognized directly in equity and goodwill arising from a business combination.

Deferred tax assets and deferred tax liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases.

At the balance sheet date, if the Group has legal rights settled on net amounts and intends to use net settlement or obtain assets and settle liabilities at the same time, the current income tax assets and current income tax liabilities are shown net amount after offsetting.

All the taxable temporary differences are recognized as deferred tax liabilities except for those incurred in the following transactions:

(1)Initial recognition of goodwill, or assets or liabilities in a transaction that is not a business combination and that affects neither accounting profit nor taxable profit (or deductible loss);

(2)Taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, and the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The Group recognizes a deferred tax asset for deductible temporary differences, deductible losses and tax credits carried forward to subsequent periods, to the extent that it is probable that future taxable profits will be available against which deductible temporary differences, deductible losses and tax credits can be utilized, except for those incurred in the following transactions:

(1)A transaction that is not a business combination and affects neither accounting profit nor taxable profit (or deductible loss);

(2)Deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, the corresponding deferred tax asset is recognized when both of the following conditions are satisfied: it is probable that the temporary difference will reverse in the foreseeable future; and it is probable that taxable profits will be available in the future against which the temporary difference can be utilized.

At the balance sheet date, deferred tax assets and liabilities is measured, following the expected manner of assets' recollection or settlement of the liabilities, with appropriate tax rates. These deferred items both reflect recovered assets or settled liabilities effects on tax at balance sheet dates.

The carrying amount of a deferred tax asset is reviewed at each balance sheet date and reduced the part that it is no longer probable to utilize tax benefits. Such reduction is reversed if taxable profits become sufficient.

27. Safety fund reserve

According to the circular of "Administrative measurement on the withdraw and allocation of enterprise's manufacturing-safety fee" issued by the finance ministry accompanying with Sate Administration of Work safety (CaiQi [2012] No. 16), exploration activities of crude oil and natural gas shall be charged in the light of raw mineral output, which requires 17 Yuan per ton for crude oil and 5 Yuan per 1,000 cubic metres for natural gas. 2.5% of oil engineering revenue, excluding geophysical exploration and ground construction, would be extracted monthly for safety cost, while 1.5% of construction and installation costs for petrochemical engineering business are charged to safety cost. Among refinery and petrochemical business, the extraction is based on real revenue from items listed on "Name List of Hazardous Chemicals "(GB12268). Regressive rate ranged from 0.05%-2% of actual operating income of the previous year is applied to machine-manufacturing business.

Specific reserve for safety production accounted in "Specific reserve" account, and meanwhile calculated in the costs of related products or the profit or loss.

When Specific reserve for safety production is used according to the specified scope, payment of expenses is directly offset against the special reserve; payment in formation of fixed assets is first imputed through "construction in progress" account, then recognized as fixed assets when the project is completed to its intended use state; meanwhile, offset the special reserve according to the cost in formation of the fixed assets and recognize the same amount of accumulated depreciation. The fixed assets will no longer depreciate in the subsequent accounting periods.

28. Leases

The Group has classified the lease as a financing lease or an operating lease.

(1) Operating leases:

The rents from operating leases shall be recorded by the lessee in the relevant asset costs or current profits and losses by using the straight-line method over each period of the lease term. The initial direct costs incurred by a lessee shall be recognized in current profits and losses.

(2) Financing leases:

On the lease beginning date, a lessee shall record the lower one of the fair value of the leased asset and the present value of the minimum lease payments on the lease beginning date as the entering value in an account, recognize the amount of the minimum lease payments as the entering value in an account of long-term account payable, and treat the balance between the recorded amount of the leased asset and the long-term account payable as unrecognized financing charges. The initial direct costs such as commissions, attorneys' fees and travelling expenses, stamp duties directly attributable to the leased item incurred during the process of lease negotiating and signing the leasing agreement shall be recorded in the asset value of the current period. The unrecognized financing charge shall be amortized to each period during the lease term according to the effective interest rate method and the Group recognizes the financing charge in the current period. Contingent rents shall be recognized as an expense in the period in which they are actually incurred.

29. Fair value measurement

The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

If there is an active market for the financial assets or financial liabilities, the Group uses the quotation on the active market as its fair value. For those in the absence of active market, the Group uses valuation technique to recognize its fair value.

For non-financial assets measured at fair value, the Group should consider the capacity of the market participants to put the assets into optimal use thus generating the economic benefit, or the capacity to sell assets to other market participants who can put the assets into optimal use and generate economic benefit.

The Group’s valuation technique suitable for the current condition, supported by enough available data and other information , prefers to use observable inputs. Unobservable inputs are solely applied in the case of observable inputs that cannot be obtained or impracticable.

For the assets and liabilities measured at fair value or disclosure at financial statements, Fair value hierarchies are categorized into three levels as the lowest level input that is significant to the entire fair value measurement: Level 1: inputs are quoted prices (unadjusted) in active markets for identical assets and liabilities. Level 2: inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3: inputs are unobservable inputs for the asset or liability.

At each balance sheet date, the Group reviews the assets and liabilities recognized to be re-measured at fair value on the financial statements to make sure whether conversion occurs between fair value hierarchies.

30. Principal Accounting Estimates and Judgments

The Group evaluates its estimates and significant judgments on an on-going basis in accordance with the historical experience and other assumptions including the reasonable expectations of future events.

The most significant judgments and estimates which are likely to lead to a significant adjustment risk in book value of assets and liabilities during the next fiscal year are listed in the following.

(1) Oil and gas properties and reserves

The accounting for the exploration and production segment's oil and gas activities is subject to accounting rules that are unique to the oil and gas industry. The Group has used the successful efforts method to account for oil and gas business activities. The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense. These costs primarily include dry hole costs, seismic costs and other exploratory costs.

Engineering estimates of the Group's oil and gas reserves are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information. There are authoritative guidelines regarding the engineering criteria that have to be met before estimated oil and gas reserves can be designated as "proved". Proved and proved developed reserves estimates are updated at least annually and take into account recent production and technical information about each field. In addition, as prices and cost levels change from year to year, the estimate of proved and proved developed reserves also changes. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depreciation rates.

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

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation expense, impairment expense and future dismantlement costs. Depreciation rates are determined based on estimated proved developed reserve quantities (the denominator) and capitalised costs of producing properties (the numerator). Producing properties' capitalised costs are amortised based on the unit-of-production method.

(2) Impairment for non-financial and long-term assets

If circumstances indicate that the net book value of a long-lived asset may not be recoverable, the asset may be considered "impaired", and an impairment loss may be recognized in accordance with "ASBE 8 – Impairment of Assets". The carrying amounts of long-lived assets are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to recoverable amount. For goodwill, the recoverable amount is estimated annually. The recoverable amount is the greater of the net selling price and the value in use. It is difficult to precisely estimate selling price because quoted market prices for the Group's assets or cash-generating units are not readily available. In determining the value in use, expected cash flows generated by the asset or the cash-generating unit are discounted to their present value, which requires significant judgement relating to sales volume, selling price and amount of operating costs. The Group uses all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of sales volume, selling price and amount of operating costs.

(3) Allowances for doubtful accounts

The Group is concerned with past events, current conditions, forecast to future economics and other reasonable and justified factors to recognize expected credit losses. The Group regularly monitors and reviews assumptions related to the calculation of expected credit losses.

(4) Allowance for diminution in value of inventories

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

The net realizable value of crude oil reserve is based on forcast crude oil prices within next five years and takes into account transportation charges and oil surcharges. If the actual selling price in the future is lower than forcast price, actual privision prepared for impairment would be higher than what managements estimated.

(5)Deferred tax assets

If the Group is much likely to obtain sufficient taxable income in subsequent years to offset unused tax loss, it should recognize deferred tax asset correspondingly. This requires the management to apply a lot of judgements on the timing and amount of future taxable profits, combining with strategies of tax planning, to ensure the amount of deferred tax asset needed to be recognized. If the taxable income in the future is lower than expectation or the actual income tax rate is higher than expected, the recognized deferred income tax assets will be reversed and included in the income statement of the reversal period.

(6)Overseas taxation

There is uncertainty in the understanding of complicated tax rules (including related preferential tax treatments) and the amount and time of taxable income. Management recognizes provisions for possible results of the audit from tax authorities of each country where the Group do business. The amount of provision is based on various factors such as previous years' audit experience and the explanations from relevant taxable entities and tax authorities. The recognized tax revenues and expenses may need to be adjusted in the future in accordance with the wide range of the international business relations, long-term and complexity of existing contract agreement, the difference between the actual operating results and assumptions or the changes of those assumptions in the future.

Ⅴ. CHANGES IN ACCOUNTING POLICIES AND ESTIMATES AND PRE-ERROR CORRECTION AND OTHER MATTERS NECESSARY TO ADJUST

1. Changes in accounting policies

1) Ministry of Finance issued Cai Kuai [2018] No. 15 “Announcement of the revision of general enterprise financial statements format for 2018”. The Group has adopted the above guidelines to prepare financial statements statements for 2018. The impact to the Group’s financial statements is presented as below：

Balance Sheet

Contents of the changes	Subject	Amount (RMB million) 31 December 2017	Amount (RMB million) 31 December 2016
The Group combined interests receivable, dividends receivable and other receivable into other receivables	Other receivable	3,852	3,330
	Other current assets	(3,852)	(3,330)
The Group combined fixed assets and fixed assets pending for disposal into fixed assets	Fixed assets	332	239
	Other non-current assets	(332)	(239)
The Group combined construction material and construction in progress into construction in progress	Construction in progress	107	43
	Construction material	(107)	(43)
The Group combined interests payable, dividends payable and other payables into other payables	Other payables	9,680	5,182
	Interests payable	(2,847)	(3,118)
	Other current liabilities	(6,833)	(2,063)
The Group combined long-term payables and special accounts payable into long-term payables	Long-term payables	1,763	1,511
	Other curent liabilities	(1,763)	(1,511)

Income Statement

Contents of the changes	Subject	Amount (RMB million) 2017	Amount (RMB million) 2016
The research and development expenses originally included in the general and administrative expenses was separately presented in the research and development expense	Research and development expenses	8,248	7,707
	General and administrative expenses	(8,248)	(7,707)
Surcharges returned from withholding personal income, originally included in other business revenue, was reclassified into other income	Other income	37	
	Other Business Revenue	(37)	

2) Ministry of Finance issued revised "No.14 Accounting Standard for Business Enterprises - Revenue" ("New Revenue Standard") and the New Revenue Standard was effective on 1 January 2018. The Group has adopted the above standard to prepare financial statements in 2018, comparative figures not been restated.

The Group's initial implementation of the standard affects the consolidated balance sheet as follows:

Subject	Pre-adjustement At 31 December 2017	Reclassification	Remeasurement	Post-adjustment At 1 January 2018
Assets:				
Inventory	263,250	(14,467)		248,783
Contract Asset		14,467		14,467
Liabilities:				
Advances from customers	149,295	(149,295)		
Contract Liabilities		149,743		149,743
Deferred Income	12,052	(448)		11,604

3) Ministry of Finance issued revised "No.22 Accounting Standards for Business Enterprises - Financial instruments: recongnition and measurement", revised "No.23 Accounting Standards for Business Enterprises - Transfer of financial assets", revised "No.24 Accounting Standards for Business Enterprises - Hedging" and revised "No.37 Accounting Standards for Business Enterprises - Presentation of financial instruments" ("New Financial Instruments Standards"), New Financial Instruments Standards is effective after 1 January 2018. The group has adopted the above guideline to prepare financial statements in 2018, comparative figures not been restated.

The Group's initial implementation of the standard affects the consolidated balance sheet as follows:

Subject	Pre-adjustment 31 December 2017	Reclassification	Remeasurement	Post-adjustment 1 Janauray 2018
Assets:				
Cash at bank and on hand	195,941	(26,714)	(18)	169,209
Financial assets held for trading		67,507	143	67,650
Financial assets at fair value through profit or loss	51,196	(51,196)		
Other receivables	28,553		(118)	28,435
Buying back the sale of financial assets		24		24
Other non-current assets maturing within 1 year	79,633	63	(244)	79,452
Other current assets	68,935	16,482	(328)	85,089
Other non-current assets-loans and payments on behalf	5,995		(17)	5,978
Other non-current assets-debt investment		1,059		1,059

Subject	Pre-adjustment 31 December 2017	Reclassification	Remeasurement	Post-adjustment 1 Janauray 2018
Available-for-sale financial assets	18,667	(18,667)		
Other debt instruments investment		5,011	5	5,016
Other non-current assets-Held-to-maturity investments	230	(230)		
Other non-current assets-entrusted loans	929	(929)		
Other equity instrument investment		7,807		7,807
Liabilities:				
Accrued liabilities	40,281		29	40,310
Equity:				
Other comprehensive income	(24,995)	74	(399)	(25,320)
Surplus reserve	209,415		3	209,418
Retained profit	129,985	143	(210)	129,918

2. Changes in accounting estimates

1) Contents and reasons of accounting estimates changes

According to current status of geothermal wells developed previously, the company found that depreciation policies mismatched their actual operational cycle and decided to extend geothermal well's depreciable life to 25 years from 14 years under the requirements of accounting standards for business enterprise and the file about the reply to China Star Petroleum Co., Ltd's adjustments for geothermal well's extension on depreciable life （Zhong Guo Shi Hua Cai Chan [2018] No 64）.

2) Effects of changes of accounting estimates on the company's key performance index

According to the requirements of "No. 28 Accounting Standard - Accounting Policies, Changes in Accounting Estimates and Errors", this change in accounting estimate adopts prospective application which does not need retrospective adjustment. Given this case, this change would do have any affects in the company's previous financial position and operational results.

This change described above decreased depreciation expense by RMB 45 million in 2018, which resulted in the increase of RMB 45 million in earnings before tax in 2018.

Ⅵ. TAXATION

1. Taxes and tax rates

Taxes	Tax Basis	Tax Rates
Value added tax	Income subject to VAT	16%,10%,6%
Consumption tax	Amount issued from production enterprises	Note(1)
City maintenances& construction tax	Subject to turnover tax	7%,5%,1%
Enterprise income tax	Taxable income	25%,15%
Education surcharges	Subject to turnover tax	3%-5%
Resource tax	Income subject to resource tax	5%
Real estate tax	70%-90% of original value of real estate, Rent income	1.20%、12%
Compensatory fee for mineral resources	Crude oil, natural gas sales	1%
Exploration license fee	Exploration area	100-500 Yuan/km^2 year
Mining license fee	Mining area	1000 Yuan/km^2
Special oil income levy	Domestic oil sales	Excess progressive tax rate Note(2)

Note 1: The consumption tax on taxable goods was levied based on sales quantities, the tax rates (effective since 13th January 2015) are as follows:

Petroleum products	Tax rates (RMB / ton)
Gasoline	2,109.76
Diesel oil	1,404.48
Naphtha	2,105.20
Solvent oil	1,948.64
Lubrication oil	1,719.71
Fuel oil	1,218.00
Aviation kerosene	1,495.20

Note2: progressive tax rate for special oil gain

Crude oil price (US $/bbl.)	Rate	Quick deduction (US $/barrel)
65-70(contain)	20%	0.00
70-75(contain)	25%	0.25
75-80(contain)	30%	0.75
80-85(contain)	35%	1.50
over 85	40%	2.50

2. Tax incentives and approval

(1) Value-added Tax

According to "Notice of the Ministry of Finance and the State Administration of Taxation on the Preferential Policies concerning the Value-added Tax, Property Tax and Urban Land Use Tax for Heat Supply Enterprises" (No. 94 [2016] of the Ministry of Finance), from January 1, 2016 to the end of the heating period of 2018, heat supply enterprises in “Three Northern” Regions shall be exempt from the value-added tax on their heating fee income obtained through supplying heat to resident individuals (hereinafter referred to as residents).

According to "Notice of the Ministry of Finance, the General Administration of Customs, and the State Administration of Taxation on the Tax Policies for Imported Materials for the Exploitation of Petroleum (Natural Gas) in China's Specific

Onshore Regions during the “13th Five-Year Plan” Period" (No. 68 [2016] of the Ministry of Finance) and "Notice of the Ministry of Finance, the General Administration of Customs, and the State Administration of Taxation on Exempting Imported Materials for the Exploitation of Petroleum (Natural Gas) in China's Sea Areas from Import Taxes during the “13th Five-Year Plan” Period" (No. 69 [2016] of the Ministry of Finance), from January 1, 2016 to December 31, 2020, imported equipment, instruments, spare parts and accessories, and special tools that are unable to be produced in China, or whose performance is unable to meet the requirements, and that are directly used in the exploitation operations for the proprietary projects of petroleum (natural gas) exploitation operations in the deserts, Gobi deserts and sea areas within the territory of China shall be exempted from import tariff within the prescribed duty-free import quotas.

According to "Notice of the Ministry of Finance and the State Administration of Taxation on Issues Concerning the Value-added Tax, Business Tax and Enterprise Income Tax Policies for Promoting the Development of the Energy Services Sector" (No.110 [2010] of the Ministry of Finance) and "Notice of the Ministry of Finance and the State Administration of Taxation on Implementing the Pilot Program of Replacing Business Tax with Value-Added Tax in an All-round Manner" (No. 36 [2016] of the Ministry of Finance), income subject to VAT gained by energy services companies from contract-based energy management projects shall be exempted from VAT during the benefit sharing period.

According to the tax incentives that the childcare and education services provided by nurseries and kindergartens are exempt from VAT in "Notice of the Ministry of Finance and the State Administration of Taxation on Implementing the Pilot Program of Replacing Business Tax with Value-Added Tax in an All-round Manner" (No. 36 [2016] of the Ministry of Finance), The kindergarten education services of the relevant companies of the Group are exempt from VAT.

China Petrochemical Press Co., Ltd. and China Economic Publishing House implement preferential policies for the implementation of VAT repayment on science and technology books in accordance with the "Provisional Regulations of the People's Republic of China on VAT" and relevant regulations.

According to "Opinions on Deepening the System Reform of Publishing Houses in All Ministries of the Central Government" (Zhongban Fat [2009] No. 16) and "Notice of the Ministry of Finance, the General Administration of Customs, and the State Administration of Taxation on Further Implementing the Several Tax Policies on Supporting the Development of Cultural Enterprises" (No. 85 [2014] of the Ministry of Finance) with their related supporting tax incentives, Sinopec Press will enjoy preferential policies for VAT exemption from January 1, 2014 to December 31, 2018 after restructuring into a enterprise.

In accordance with "Shanghai Huxi Puhu Zeng" ([2012] No. 145 Shanghai Pudong New Area State Taxation Bureau), Sinopec Energy Saving Technology Service Co., Ltd. enjoys the preferential policy of exempting value-added tax for contract energy management projects.

According to "Announcement of the State Administration of Taxation on the Issues of Value-added Tax concerning Nitro-Compound Fertilizer" (Announcement No. 52 [2012] of the State Administration of Taxation), Sinopec Nanjing Chemical Industry Co., Ltd. enjoys the preferential policy of direct VAT exemption in production and sales of agricultural fertilizer and other agricultural production materials.

According to "Notice of the Ministry of Finance and the State Administration of Taxation on Including the Railway Transportation and Postal Services Industries in the Pilot Program of Replacing Business Tax with Value-Added Tax" (No. 106 [2013], Ministry of Finance), revenues from technology transfer, technology development, and related technical consulting and technical service business of related companies of the Group are exempt from VAT.

(2) Consumption tax

According to the Circular on Exempting Consumption Tax on Oil Products by Product Oil Manufacturing Enterprises for Their Own Use (CaiShui [2010] No. 98) issued the Ministry of finance, and the State Administration of Taxation, since 1 January 2009, the self-produced refined oil consumed and used as fuel, power and raw materials exempted from consumption tax.

According to the Circular on Levy-Rebate of Consumption Tax on Self-use Product Oil of Oil (Gas) Field Enterprises (CaiShui [2011] No.7) issued the Ministry of finance, and the State Administration of Taxation, since 1 January 2009, the domestically purchased refined oil consumed during the crude oil exploitation process of oil (gas) field enterprises, was temporarily rebated all the consumption tax based on the amount actually paid.

(3) Resource tax

The production of heating crude oil, heavy oil, tertiary oil recovery, "three lows" oil and gas fields, deep-water oil and gas fields is tax exempted or tax relief of 20% -40%.

According to the Notice of the Ministry of Finance and the State Administration of Taxation on Reducing Resource Tax on Shale Gas (CaiShui[2018] No. 26) effective since 1st Apirl 2018 to 31st March 2021, the energy resource tax on shale gas are reduced by 30%.

(4) Corporate income tax

According to the Notice of the Ministry of Finance and the State Administration of Taxation on the Policy of Pre-tax Deduction of Employee Education Funds of Enterprises (CaiShui[2018] No. 51) effective since 1st January 2018, employee education funds incurred within the extent of 8% of total employee benefits is deductible in corporate taxable income in current year, the excess parts are deductible in subsequent years.

According to the Notice of the Ministry of Finance and the State Administration of Taxation on the Relevant Enterprise Income Tax Policies for the Deduction of Equipment and Instruments (CaiShui[2018] No. 54), If the unit price of the equipment or instruments newly purchased during the period from January 1, 2018 to December 31, 2020 by an enterprise is not more than 5 million yuan, such equipment or instruments are allowed to be included in the current costs and expenses at one time and deducted in the calculation of taxable income, instead of being depreciated annually.

According to the Notice by the Ministry of Finance, the State Administration of Taxation and the Ministry of Science and Technology of Raising the Proportion of Weighted Pre-tax Deduction of Research and Development Expenses (CaiShui[2018] No. 99), where the R&D expenses actually incurred by an enterprise in the course of its R&D activities have been included in the current loss and profit instead of being recognized as intangible assets, during the period from January 1, 2018, to December 31, 2020, another 75% of the amount of R&D expenses actually incurred shall be deducted before tax payment from the amount of taxable income in addition to the deduction as prescribed to the extent of the amount actually incurred. Where any intangible assets are formed, 175% of the costs of the intangible assets shall, during the said period, be amortized before tax payment

Part of the Group's affiliated enterprises which identified as high-tech enterprises by government adopts 15% income tax rate.

According to twenty-third article of No.19 in the first class of "National Development and Reform Commission Order No.9 [2011] which is about the guide catalogue of the adjustment of industrial structure (2011 version)", Sinopec southwest petroleum engineering company, Shanxi Green, Sichuan Star gas limited liability Company, Jinling petrochemical (Chengdu) Co., Ltd shall enjoy the incentives for western development of enterprise income tax relief 15% pay.

According to the Circular of Ministry of Finance and the State Administration of Taxation on Enterprise income tax collection for institutions and social groups and related issues (CaiShuiZi [1997] No. 075), the administrative fees of the institutions of the Group shall be exempted from enterprise income tax.

(5) Property tax and urban land use tax

According to "Notice of the Ministry of Finance and the State Administration of Taxation on the Preferential Policies concerning the Value-added Tax, Property Tax and Urban Land Use Tax for Heat Supply Enterprises" (No. 94 [2016] of the Ministry of Finance), Plants and land used for heating of residents are exempted from property tax and urban land use tax. from January 1, 2016 to the end of the heating period of 2018, for heating companies that supply heat to residents, but also provide heat to the unit or concurrently engage in other production and business activities, the heating fee income obtained from the heating of residents is the proportion of the total income of the company and exempted from property tax and urban land use tax.

According to "Notice of the Ministry of Finance and the State Administration of Taxation on Relevant Preferential Tax Policies for City and State-Owned Mining Shanty Area Renovation Projects" (No. 42 [2010] of Ministry of Finance), relevant enterprises affiliated to the Group are exempted from urban land use tax and stamp duty on the basis of the proportion of the total area of the building area.

(6) Land Appreciation Tax

According to the Notice of the Ministry of Finance and the State Administration of Taxation on Continuing the Implementation of Relevant Land Appreciation Tax Policies for Enterprise Restructuring and Reorganization (CaiShui[2018] No. 57) and provisions of the Company Law of the People's Republic of China, for unincorporated enterprises entirely restructured into limited liability companies or joint-stock limited companies,the transfer and change of the state-owned land use right and buildings and the attached installations thereon (hereinafter referred to as “real estate”) by an enterprise before restructuring to the restructured enterprise shall be exempt from land appreciation tax for the time being.

(7) Deed Tax

According to the Notice of the Ministry of Finance and the State Administration of Taxation on the Deed Tax Policy on Continuing to Support the Transformation and Restructuring of Enterprises and Public Institutions (CaiShui[2018] No. 17) and provisions of the Company Law of the People's Republic of China, for unincorporated enterprises entirely restructured into limited liability companies or joint-stock limited companies, the company resulting from the transformation (or modification) shall be exempt from deed tax on its succession to the original enterprise's rights to land and buildings.

(8) Stamp Tax

According to the Notice of the Ministry of Finance and the State Administration of Taxation on Reducing and Exempting the Stamp Tax on Business Account Books (CaiShui[2018] No. 50) effective since 1st May 2018, business account books stamped by 0.5‰ are havled, and other business account books stamped by the piece are exempted.

3.Overseas corporate taxes, rates and preferential policy

Overseas enterprise enjoys the preferential policies according to the relevant legal provisions in country or regions.

Ⅶ. BUSINESS COMBINATION AND CONSOLIDATED FINANCIAL STATEMENTS

1. Basic profiles of subsidiaries within the scope of consolidated financial statements

Subsidiaries	Grade	Types	Registration place	Main business
Sinopec Corp	2	Domestic and non-financial	Beijing	Production and sale of petroleum and petrochemical products
Sinopec Engineering(Group) Co., Ltd	2	Domestic and non-financial	Beijing	Engineering design, general contracting, construction and installation business
Sinopec Oilfield Service Corporation	2	Domestic and non-financial	Beijing	Exploration drilling, logging and other petroleum engineering services
Sinopec Oilfield Equipment Corporation	2	Domestic and non-financial	Wuhan	Petroleum machinery equipment and production and sales of oil and gas pipelines
Sinopec Assets Management Co., Ltd.	2	Domestic and non-financial	Beijing	State-owned Assets Management, cultural and educational health, community services
Shengli Petroleum Co.,Ltd	2	Domestic and non-financial	Dongying	Culture, education, health, municipal affairs for public interest, real estate management, equipment manufacturing, utilities and telecom
Zhongyuan Petroleum Co.,Ltd	2	Domestic and non-financial	Puyang	Culture, education, health, municipal affairs for public interest, comprehensive services for mining, and electronics import and installment
Henan Petroleum Co.,Ltd	2	Domestic and non-financial	Nanyang	Culture, education, health, municipal affairs for public interest
Jianghan Petroleum Co.,Ltd	2	Domestic and non-financial	Qianjiang	Culture, education, health, municipal affairs for public interest
Jiangsu Petroleum Co.,Ltd	2	Domestic and non-financial	Yangzhou	Culture, education, health, municipal affairs for public interest, restaurant and public projects
Northwest China Co.,Ltd	2	Domestic and non-financial	Urumchi	Culture, education, health, municipal affairs for public interest,transportation and real estate management
North China Petroleum Co.,Ltd	2	Domestic and non-financial	Zhengzhou	Culture, education, health, and municipal affairs for public
East China Petroleum Bureau	2	Domestic and non-financial	Nanjing	Culture, education, health, municipal affairs for public interest,, and comprehensive services for mining

Subsidiaries	Grade	Types	Registration place	Main business
Southwest China Co.,Ltd	2	Domestic and non-financial	Chengdu	Culture, education, health, municipal affairs for public interest, and property management
Northeast China Petroleum Co.,Ltd	2	Domestic and non-financial	Changchun	Real estate management, comprehensive services for mining and transportation
Shanghai Offshore Petroleum Co.,Ltd	2	Domestic and non-financial	Shanghai	Lease of harbor, official facilities and other fixed assets, Oil gas field engineering services and management on mineral zones
China Star Petroleum Co., Ltd.	2	Domestic and non-financial	Beijing	Engineering construction and technical services
Pipeline Storage and Transportation Company	2	Domestic and non-financial	Xuzhou	Maintenance of oil and natural gas pipeline
Sinopec Capital Co., Ltd	2	Domestic and non-financial	Baoding	Project investment, equity investment, investment management and consulting
Sinopec Finance Co., Ltd.	2	Domestic and financial	Beijing	Deposits and loans within the Group, discounted bills and other financial services
Sinopec Century Bright Capital Investment Ltd	2	Overseas	Hong Kong	Investment and financing business
Sinopec Shanghai Zheshi Futures Co., Ltd	2	Domestic and financial	Shanghai	Domestic commodity futures and financial futures brokerage
Sinopec Insurance Co., Ltd	2	Overseas	Hong Kong	Assets insurance
Sinopec Insurance Broker Co., Ltd	2	Domestic and financial	Beijing	Insurance broker
Sinopec Group Overseas Development Co., Ltd.	2	Overseas	British Virgin Island	Investing and financing
Petroleum & Chemical Engineering Quality Supervision Station	2	Domestic and non-financial	Beijing	Supervision and management
Sinopec Engineering Quality Inspection Centre	2	Domestic and non-financial	Beijing	Monitoring and testing of petrochemical engineering quality
Tendering Co., Ltd.	2	Domestic and non-financial	Beijing	Consulting and tendering agency services
Petroleum Commercial Reserves Co., Ltd.	2	Domestic and non-financial	Beijing	Reserves of crude oil and wholesale
Sinopec Baichuan Economic and Trade Company	2	Domestic and non-financial	Beijing	Management of real estate and operating of hotels
Sinopec sharing services Co., Ltd	2	Domestic and non-financial	Beijing	Financial and IT services

Subsidiaries	Grade	Types	Registration place	Main business
Authority Service Centre	2	Domestic and non-financial	Beijing	Logistics services
China Petrochemical Consulting Corporation	2	Domestic and non-financial	Beijing	Evaluation and consulting of investment
Economic & Technology Research Institute	2	Domestic and non-financial	Beijing	Management and technical supports
Petroleum and Chemical Management Institute	2	Domestic and non-financial	Beijing	Training and academic exchanges
China Petrochemical News	2	Domestic and non-financial	Beijing	Publication
China Petrochemical Press Co., LTD	2	Domestic and non-financial	Beijing	Publication and distribution
Economic Press China	2	Domestic and non-financial	Beijing	Publication and distribution
Research Institute of Petroleum Engineering Technology	2	Domestic and non-financial	Beijing	Petroleum machinery fabrication

(Continued):

Subsidiaries	Paid-in Capital	Proportion of shares held	Voting Right	Investments (RMB millions)
Sinopec Corp	121,071	68.55	68.77	100,791
Sinopec Engineering(Group) Co., Ltd	4,428	67.01	67.01	5,575
Sinopec Oilfield Service Corporation	18,984	70.18	70.18	28,015
Sinopec Oilfield Equipment Corporation	598	58.74	58.74	828
Sinopec Assets Management Co., Ltd.	30,080	100.00	100.00	53,260
Shengli Petroleum Co.,Ltd	8,431	100.00	100.00	23,893
Zhongyuan Petroleum Co.,Ltd	5,000	100.00	100.00	5,158
Henan Petroleum Co.Ltd	1,625	100.00	100.00	3,085
Jianghan Petroleum Co.Ltd	2,364	100.00	100.00	5,237
Jiangsu Petroleum Co.Ltd	1,536	100.00	100.00	2,776
Northwest China Co.Ltd	286	100.00	100.00	881
North China Petroleum Co.Ltd	343	100.00	100.00	(154)
East China Petroleum Bureau	183	100.00	100.00	888
Southwest China Co.Ltd	2,018	100.00	100.00	2,541
Northeast China Petroleum Co.Ltd	50	100.00	100.00	211
Shanghai Offshore Petroleum Co.Ltd	151	100.00	100.00	193
China Star Petroleum Co. Ltd.	1,361	100.00	100.00	2,768

Subsidiaries	Paid-in Capital	Proportion of shares held	Voting Right	Investments (RMB millions)
Pipeline Storage and Transportation Company	191	100.00	100.00	506
Sinopec Capital Co., Ltd	10,000	100.00	100.00	10,000
Sinopec Finance Co., Ltd.	18,000	100.00	100.00	8,169
Sinopec Century Bright Capital Investment Ltd	11,082	100.00	100.00	11,082
Sinopec Shanghai Zheshi Futures Co., Ltd	200	95.00	95.00	190
Sinopec Insurance Co. Ltd	399	100.00	100.00	235
Sinopec Insurance Broker Co. Ltd	50	100.00	100.00	50
Sinopec Group Overseas Development Co., Ltd.	1	100.00	100.00	1
Petroleum & Chemical Engineering Quality Supervision Station	2	100.00	100.00	26
Sinopec Engineering Quality Inspection Centre	10	100.00	100.00	10
Tendering Co., Ltd.	11	100.00	100.00	11
Petroleum Commercial Reserves Co. Ltd.	51,429	100.00	100.00	52,342
Sinopec Baichuan Economic and Trade Company	3,758	100.00	100.00	4,650
Sinopec sharing services Co., Ltd	5	100.00	100.00	231
Authority Service Centre	300	100.00	100.00	300
China Petrochemical Consulting Corporation	75	100.00	100.00	78
Economic & Technology Research Institute	22	100.00	100.00	168
Petroleum and Chemical Management Institute	50	100.00	100.00	725
China Petrochemical News	7	100.00	100.00	288
China Petrochemical Press Co. LTD	40	100.00	100.00	44
Economic Press China	25	100.00	100.00	107
Research Institute of Petroleum Engineering Technology	100	100.00	100.00	160

a. A change in the number of subsidiaries at second-grade within scope of consolidation

There were 38 secondary subsidiaries within the consolidated scope in 2017. As the establishment of Sinopec Capital Co., Ltd in 2018, the number increased to 39.

b. Profiles about the current companies controlled by the Group

1) The proportion of Sinopec Corporation's equity held by the Company

At December 31st 2018, the Company directly and indirectly held 82,989,134,207 shares of Sinopec Corporation (including 82,435,984,207 A-shares held directly and 553,150,000 H-shares indirectly held via Sinopec Century Bright Capital Investment Ltd), the proportion of equity held decreased by 2.5468% to 68.5457% in 2018.

a. The company gratuitously transferred the A shares of China Petroleum & Chemical Corporation with amounts of 1,241,721,854 A shares and 1,241,721,854 A shares to each of Beijing Chengtong Financial Control Investment Co., Ltd. and Guoxin Investment Co., Ltd. respectively in September 2018, which resulted in 2.0512% decrease in the proportion. See note XIV (1b).

b. In October 2018, the company exchanged 600,000,000 A shares of Sinopec Corporation for Bosera CSI Central-SOEs' Structural Reform Index ETF and ChinaAMC CSI State-owned reformation ETF, which resulted in 0.4956% decrease of proportion.

2) Explanation to the difference between nominal ownership and actual ownership to Sinopec Corporation

The annual report of Sinopec Corporation disclosed that proportion of its shares held by the Group was 68.7714% in 2018, which was slightly different from the actual ownership of 68.5457%. The reasons of this different are displayed below:

According to the Company's agreement with Henan province on 10% equity shares of Luoyang refinery (Sinopec [2000] Qi Zi No. 298), 10% equity of Luoyang refinery owned by Henan Zhong Yuan Natural Gas Corporation (previously named Henan Natural Gas Development Corporation) worth RMB 110 million had been converted to 77,068,591 shares of Sinopec Corp according to the same conversion price of the Group, accounting for 0.0828% of Sinopec Corp's shares in 2018.

According to the Company's agreement with Anqing Petrochemical Acrylic limited on assets disposal (Sinopec [2000] Qi Zi No.402), RMB 190 million equity of Anqing Petrochemical Acrylic Ltd held by Anhui Investment Group was converted to 133.12 million shares of Sinopec Corp according to the same conversion price of the Company. After Sinopec Corporation shares conversion and payment in 2013, the proportion of its shares held by Anhui Investment Group was 0.1429%.

3) Explanations to the interests exclusively for state-owned equity of listed affiliates and transfer of fiscal appropriations

According to the regulations imposed by Finance of Ministry to companies held by diversified investment entities, the interests created by appropriations from state, funds transferred, estimated price of land, tax refund and deduction, liquidated capital from state, and other policies are considered as interests exlusively for state-owned equity. Prior to the end of 2012, fiscal appropriation to Sinopec Corp increased the Company's long-term equity investment to the corporation and had been reflected in the consolidated financial statements. At December 31st 2012, the Company had RMB 2,703.33 million interests accumulated by fiscal appropriation to Sinopec Corporation.

Under the guidance of a file titled "A notice to strengthening enterprise's management on financial information" (Cai Qi No. [2012] 23) published by ministry of finance, the Company started to record fiscal appropriations as entrusted loan in 2012.

2. Reasons for holding half or less voting rights of subsidiarie but still taking control of them

There are no subsidiaries within consolidated scope of which major voting rights are not held by the Group.

3. The secondary subsidiaries not within consolidated scope of which most voting rights are held by the Group

There are no subsidiaries not within consolidated scope of which most voting rights are held by the Group.

4. Important subsidiaries not solely invested by the Group

a. Minority interests:

Subsidiaries Name	Proportion of shares held by minority shareholders (%)	Profits & losses attributable to minority shareholders (in RMB million)	Dividends to minority shareholders (in RMB million)	Accumulated minority interest at end of 2018 (in RMB million)
Sinopec Corp	28.91	14,777	9,450	209,447
Sinopec Engineering(Group) Co., Ltd	32.99	371	196	8,441
Sinopec Oilfield Service Corp	34.78	(3,680)		(731)
Sinopec Oilfield Equipment Corp	41.26	4		726

b. Significant financial information (in RMB million)

The year of 2018/ the end of 2018

Items	Sinopec Corp	Sinopec Engineering(Group) Co., Ltd	Sinopec Oilfield Service Corporation	Sinopec Oilfield Equipment Corporation
Current assets	504,120	63,818	32,014	6,255
Non-current assets	1,088,188	7,055	28,891	1,580
Total assets	**1,592,308**	**70,873**	**60,905**	**7,837**
Current liabilities	565,098	42,163	52,963	5,806
Non-current liabilities	169,551	2,727	2,163	111
Total Liabilities	**734,649**	**44,890**	**55,126**	**5,917**
Operating revenue	2,891,179	47,208	58,409	4,919
Net income	80,289	2,483	142	32
Comprehensive income	73,664	2,276	154	32
Cash flows generated by operation	175,868	6,104	(2,940)	(294)

(Continued):

The year of 2017/ the end of 2017

Items	Sinopec Corp	Sinopec Engineering(Group) Co., Ltd	Sinopec Oilfield Service Corporation	Sinopec Oilfield Equipment Corporation
Current assets	529,050	51,856	31,822	5,425
Non-current assets	1,066,455	7,549	30,120	1,572
Total assets	**1,595,504**	**59,406**	**61,943**	**6,997**
Current liabilities	579,445	31,086	63,356	5,034
Non-current liabilities	161,988	2,729	684	65
Total Liabilities	**741,434**	**33,815**	**64,039**	**5,098**
Operating revenue	2,360,193	36,350	48,486	3,994
Net income	70,294	1,126	(10,583)	35
Comprehensive income	65,917	994	(10,583)	35
Cash flows generated by operation	190,936	4,458	419	48

5. The new consolidated subsidiary (in RMB million)

Subsidiary name	Net asset at end of 2018	Net income in 2018
Sinopec Capital Co., Ltd	10,037.46	37.46

6.There were no limitations to intra-group cash and assets movements, or intra-group dividends and profit distribution, or intra-group lending distribution and collection.

Ⅷ. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Cash

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Cash in hand	66	64	67
Cash in bank	198,083	193,663	162,762
Other monetary fund	2,028	2,368	1,996
Subtotal	**200,177**	**196,095**	**164,825**
less: Impairment provision	27	154	150
Total	**200,150**	**195,941**	**164,675**

2. Financial assets held for trading

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Financial assets classified as those at fair value through profit and loss	40,929	—	—
Inc: Equity investments	718	—	—
Structured deposit	27,282	—	—
Mutual funds and other financial products	12,929	—	—
Financial assets designated as those at fair value through profit and loss	631	—	—
Inc: debt investment	631	—	—
Total	**41,560**	**—**	**—**

3. Financial assets at fair value through profit and loss

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Structured deposits	—	51,195	
Equity instrument investments	—	1	
Total	**—**	**51,196**	

Financial assets at fair value through profit and loss of the Group mainly refer to structured deposits which are saved in financial institutions and could not be timely converted into cash. They are classified as current assets because of their maturities within 12 months.

4. Bills receivable

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Bank acceptance bills	11,548	19,529	15,446
Commercial acceptance bills	469	657	1,096
Total	**12,017**	**20,186**	**16,542**

5. Accounts receivables

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Accounts receivable	80,110	79,469	67,437
Less: provisions	5,546	5,268	3,954
Total	**74,564**	**74,201**	**63,483**

1) Aging analysis on accounts receivable is as follows

Aging	At 31 December 2018			At 31 December 2017			At 31 December 2016		
	Amount RMB million	%	Provision RMB million	Amount RMB million	%	Provision RMB million	Amount RMB million	%	Provision RMB million
Within 1 year	71,916	89.77	207	69,932	88	137	58,565	86.84	0
1-2 years	2,899	3.62	827	4,434	5.57	1,352	5,129	7.61	1,440
2-3 years	1,938	2.42	1,215	2,699	3.4	1,711	2,166	3.21	967
Over 3 years	3,357	4.19	3,297	2,404	3.03	2,068	1,577	2.34	1,547
Total	**80,110**	**100**	**5,546**	**79,469**	**100**	**5,268**	**67,437**	**100**	**3,954**

2) Receivables were written off 33 million Yuan by factual events in 2018, comparing with 74 million 79 million in 2017 and 2016 respectively. There was no individual significant write-off.

6. Prepayments

(1) Aging	At 31 December 2018		At 31 December 2017		At 31 December 2016	
	Amount RMB million	%	Amount RMB million	%	Amount RMB million	%
Within 1 year	18,862	96.79	12,553	94.85	9,963	88.89
1-2 years	369	1.9	355	2.68	948	8.46
2-3 years	91	0.47	179	1.35	196	1.75
Over 3 years	165	0.84	148	1.12	100	0.9
subtotal	**19,487**	**100**	**13,235**	**100**	**11,207**	**100**
Less: Provision for bad debts	112		238		422	
Total	**19,375**		**12,997**		**10,785**	

The book value of the group's prepayments was 19,375 million Yuan, 12,997 million Yuan and 10,785 million Yuan at the end of 2018, 2017 and 2016.

(2) The main prepayments aging over one year

There was no significant prepayment aging over one year in the Group.

7. Other receivables

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Interests receivable	4,644	3,431	2,426
Dividends receivable	168	421	903
Other receivable	25,477	24,701	26,880
Total	**30,289**	**28,553**	**30,209**

Profile of other receivable

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Other receivable	28,539	27,860	29,758
Less: provisons	3,062	3,159	2,878
Total	**25,477**	**24,701**	**26,880**

Aging analysis on other receivable is as follows

Aging	At 31 December 2018			At 31 December 2017			At 31 December 2016		
	Amount RMB million	%	Provision RMB million	Amount RMB million	%	Provision RMB million	Amount RMB million	%	Provision RMB million
Within 1 year	23,519	82.41	7	22,428	80.5	120	25,393	37.65	215
1-2 years	1,416	4.96	253	1,368	4.91	214	634	0.94	148
2-3 years	363	1.27	183	624	2.24	221	842	1.25	146
Over 3 years	3,241	11.36	2,619	3,440	12.35	2,604	2,889	4.28	2,369
Total	**28,539**	**100**	**3,062**	**27,860**	**100**	**3,159**	**29,758**	**100**	**2,878**

Other receivables were written off 30 million Yuan in 2018, 24 million Yuan in 2017 and 40 million Yuan in 2016.

8. Inventories

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Raw material	55,191	38,439	51,479
Goods in process	16,674	17,549	16,501
Finished goods	152,651	169,409	133,811
Turnover materials	381	384	288
Materials in transit	34,174	39,810	34,429
Inventories caused by construction contract		14,726	15,418
Labour costs		151	170
Contract performance costs	7,047		
Others	384	385	383
Total	**266,502**	**280,853**	**252,479**
Less: Provisions for diminution in value of inventories	24,987	17,603	1,429
Carrying amount	**241,515**	**263,250**	**251,050**

9. Non-current assets due within one year

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Discounted assets of Finance Company	19,583	9,462	5,871
Loans	67,060	68,588	60,912
Long - term deferred expenses due in one year		949	1,819
Other non-current assets due in one year	6,277	733	429
Subtotal	**92,920**	**79,732**	**69,031**
Less: provisions for assets impairment	353	99	70
Total	**92,567**	**79,633**	**68,961**

The loans are provided by Sinopec Century Bright Capital Investment to joint ventures and associates due in one year, including the amounts of RMB 66,973 million to SIPC.

10. Other current assets

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Investments characterized with debt instruments	34,103	34,698	18,469
Held-to-maturity investment maturing within one year		6,730	6,335
Buying back the sale of financial assets	2,195		578
Recoverable value-added tax	31,117	27,507	28,116
Total	**67,415**	**68,935**	**53,498**

11. Available-for-sale financial assets

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Available-for-sale equity instruments	——	11,090	18,077
Available-for-sale bond	——	5,530	5,314
Others	——	3,289	1,669
Total	**——**	**19,909**	**25,060**
Less: Provisions of impairment on Available-for-sale financial assets	——	1,242	1,280
Book value	**——**	**18,667**	**23,780**

12. Other debt instrument investments

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Financial bonds	4,089	——	——
Enterprise bonds	103	——	——
Total	**4,192**	**——**	**——**

13. Long-term receivables

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Shareholder loans	27,584	25,047	24,977
Loans	11,700	11,700	11,700
Others	127	285	73
subtotal	**39,411**	**37,032**	**36,750**
Less: Provision for bad debts			
Total	**39,411**	**37,032**	**36,750**

14. Long term equity investments

a. Classification of long-term equity investments

Items	Balance at 1 January 2017 RMB million	Increase RMB million	Decrease RMB million	Balance at 31 December 2017 RMB million
Investment in joint ventures	55,365	14,393	12,716	57,042
Investment in associates	133,816	13,059	5,905	140,970
Investment in subsidiaries	13			13
Subtotal	**189,194**	**27,452**	**18,621**	**198,025**
Less: Long-term investments impairment provision	68,978	936	55	69,859
Total	**120,216**	**26,516**	**18,566**	**128,166**

Continued:

Items	Balance at 1 January 2018 RMB million	Increase RMB million	Decrease RMB million	Balance at 31 December 2018 RMB million
Investment in joint ventures	57,042	11,123	6,302	61,863
Investment in associates	140,970	9,148	4,104	146,014
Investment in subsidiaries	13		13	
Subtotal	**198,025**	**20,271**	**10,419**	**207,877**
Less: Long-term investments impairment provision	69,859	107	48	69,918
Total	**128,166**	**20,164**	**10,371**	**137,959**

b. Principal financial information of significant joint ventures

At 31 December 2018 (RMB million)

Items	FREP	BASF-YPC company limited	Taihu	YASREF	SINOPEC SABIC Tianjin Petrochemical
Current assets	16,636	7,377	7,095	11,197	9,118
Non-current assets	19,271	11,086	9,216	51,873	13,990
Total assets	35,906	18,463	16,311	63,070	23,108
Current liabilities	6,139	2,548	2,183	17,023	3,007
Non-current liabilities	12,733	236	2,343	33,300	3,982
Total Liabilities	18,872	2,783	4,526	50,324	6,989
Net assets	17,034	15,680	11,785	12,746	16,119
Net assets based on proportion of shareholding	8,517	7,840	5,573	4,780	8,059
Adjustments					

At 31 December 2018 (RMB million)

Items	FREP	BASF-YPC company limited	Taihu	YASREF	SINOPEC SABIC Tianjin Petrochemical
Book value of investments to joint ventures	8,517	7,840	5,573	4,780	8,059
Operating revenue	52,469	21,574	14,944	77,561	23,501
Financial expenses	(501)	(1)	151	(1,281)	(2)
Income tax	935	897	729	249	993
Net profit	2,986	2,728	2,764	(1,818)	2,924
Other comprehensive income			921	1,059	
Total comprehensive income	2,986	2,728	3,685	(758)	2,924
Dividends received form Joint ventures	1,200	1,226			

Continued:

At 31 December 2017 (RMB million)

Items	FREP	BASF-YPC company limited	Taihu	YASREF	SINOPEC SABIC Tianjin Petrochemical
Current assets	16,785	7,135	4,814	15,732	9,233
Non-current assets	19,740	12,075	7,978	51,553	13,248
Total assets	36,525	19,210	12,792	67,285	22,481
Current liabilities	6,184	2,215	1,934	17,271	5,782
Non-current liabilities	13,890	974	2,758	36,509	4,142
Total Liabilities	20,074	3,189	4,692	53,780	9,924
Net assets	16,451	16,021	8,100	13,505	12,557
Net assets based on proportion of shareholding	8,226	8,010	3,831	5,064	6,279
Adjustments					
Book value of investments to joint ventures	8,226	8,010	3,831	5,064	6,279
Operating revenue	49,356	21,020	12,520	61,587	22,286
Financial expenses	649	35		1,337	119
Income tax	1,699	1,151	553	(57)	1,279
Net profit	5,278	3,414	1,144	605	3,834
Other comprehensive income			25	(554)	
Total comprehensive income	5,278	3,414	1,169	51	3,834
Dividends received form Joint ventures	1,250	1,109			1,375

c. rincipal financial information about significant associates

At 31 December 2018 (RMB million)

Items	SIPC	Pipeline Company	SIBUR	Zhongtian Hechuang	CIR
Current assets	26,991	12,498	22,502	7,477	6,712
Non-current assets	299,803	39,320	170,794	49,961	1,828
Total assets	326,794	51,817	193,296	57,438	8,540
Current liabilities	103,258	1,020	23,293	7,252	961
Non-current liabilities	340,822	3,026	58,628	31,436	673
Total Liabilities	444,080	4,047	81,922	38,688	1,634

At 31 December 2018 (RMB million)

Items	SIPC	Pipeline Company	SIBUR	Zhongtian Hechuang	CIR
Net assets	(92,099)	47,771	111,374	18,750	6,906
Net assets based on proportion of shareholding	(22,213)	23,885	11,086	7,266	3,453
Adjustments	22,213				
Book value of investments to associates		23,885	11,086	7,266	3,453
Operating revenue	49,158	4,746	59,927	12,235	2,856
Net income expense	837	2,022	10,403	1,142	583
Other comprehensive income	(7,188)		6,393		116
Comprehensive income	(6,351)	2,022	16,796	1,142	699
Dividends received form associates		1,207	271		

Continued

At 31 December 2017 (RMB million)

Items	SIPC	Pipeline Company	SIBUR	Zhongtian Hechuang	CIR
Current assets	20,552	11,317	20,719	8,232	5,612
Non-current assets	304,327	40,972	158,938	51,553	1,673
Total assets	324,879	52,289	179,657	59,785	7,285
Current liabilities	82,977	933	20,554	10,668	908
Non-current liabilities	352,726	3,176	61,771	31,494	170
Total Liabilities	435,703	4,109	82,325	42,162	1,078
Net assets	(87,375)	48,180	97,332	17,623	6,207
Net assets based on proportion of shareholding	(20,796)	24,090	9,676	6,829	3,104
Adjustments	20,796				
Book value of investments to associates		24,090	9,676	6,829	3,104
Operating revenue	41,165	5,644	52,496	3,569	2,563
Net income expense	(58,754)	2,543	9,601	123	(610)
Other comprehensive income	6,701		260		(334)
Comprehensive income	(52,053)	2,543	9,341	123	(944)
Dividends received form associates			221		

15. Other equity instrument investments

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Stock investments	532	——	——
Other equity investments	11,787	——	——
Total	**12,319**	**——**	**——**

16. Fixed assets

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Fixed assets	570,523	590,057	**590,797**
Clearance of fixed assets	71	332	239
Total	**570,594**	**590,389**	**591,036**

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
1.Cost	**1,313,216**	**1,299,914**	**1,247,042**
Incl.:Land assets	8,135	8,478	8,493
Plant & buildings	175,754	181,983	176,011
Temporary facilities	1,078	1,059	917
General equipment	112,626	114,628	110,428
Special equipment for oil and gas	178,256	178,350	176,926
Special equipment for petroleum and chemical industry	810,996	788,965	749,308
Others	26,371	26,451	24,959
2.Accumulated depreciation	**693,618**	**662,270**	**622,227**
Incl.:Plant & buildings	74,922	74,461	70,106
Temporary facilities	900	708	565
General equipment	73,939	73,328	69,428
Special equipment for oil and gas	102,692	98,341	92,195
Special equipment for petroleum and chemical industry	428,452	402,475	378,141
Others	12,713	12,957	11,792
3. Impairment provision	**49,075**	**47,587**	**34,018**
Incl.:Land assets	30	29	29
Plant & buildings	7,153	7,429	6,313
General equipment	3,238	2,781	1,505
Special equipment for oil and gas	5,363	5,388	982
Special equipment for petroleum and chemical industry	31,983	31,208	24,904
Others	1,308	752	285
4.Book value	**570,523**	**590,057**	**590,797**
Incl.:Land assets	8,105	8,449	8,464
Plant & buildings	93,679	100,093	99,592
Temporary facilities	178	351	352
General equipment	35,449	38,519	39,495
Special equipment for oil and gas	70,201	74,621	83,749
Special equipment for petroleum and chemical industry	350,561	355,282	346,263
Others	12,350	12,742	12,882

During the year ended 31 December 2018, 2017 and 2016, the depreciation expense totalled RMB 60,843 million, RMB 61,076 million and RMB 60,843 million respectively.

During the year ended 31 December 2018, 2017 and 2016, fixed assets transferred from construction in progress totalled RMB 54,465 million, RMB 71,063 million and RMB 54,465 million respectively.

17. Oil and gas assets

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
1.Cost	**696,512**	**668,526**	**651,541**
Wells and related facilities	696,512	668,526	651,541
2. Cumulative depletion	**507,440**	**457,223**	**405,656**
Wells and related facilities	507,440	457,223	405,656
3.Impairment provision	**43,564**	**39,405**	**30,645**
Wells and related facilities	43,564	39,405	30,645
4. Book value	**145,508**	**171,898**	**215,240**
Wells and related facilities	145,508	171,898	215,240

During the year ended 31 December 2018, 2017 and 2016, the depletion expense totalled RMB 48,634 million, RMB 55,085 million and RMB 48,634 million respectively.

18. Construction in progress

(1) Profiles of construction in progress

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Infrastructure projects spending	85,865	65,714	75,650
Technological transformation project	39,757	36,855	37,386
Geological exploration expenditures	7,331	9,748	12,246
Disbursements for oil and gas development	20,177	20,404	22,196
Others	3,253	3,761	5,721
Construction materials	124	107	43
Total	**156,507**	**136,589**	**153,242**
Less: Provision for impairment of construction in progress	2,018	1,943	1,938
Book value	**154,489**	**134,646**	**151,304**

(2) Significant Construction projects in process (in RMB million)

Projects	Budget	2018/1/1	Increase	Parts transferred to fixed asset	Other decreases	2018/12/31
1. Zhongke integrated refining and petrochemical	34,667	6,990	10,792	3		17,779

Projects	Budget	2018/1/1	Increase	Parts transferred to fixed asset	Other decreases	2018/12/31
project						
2. Wen #23 Gas reserve	13,865	1,329	2,135	1	35	3,428
3. Tianjin LNG project	13,639	3,154	1,084	2,191	8	2,039
4. Construction projects about Xinjiang coal gas pipeline	11,589	1,692	4,061		71	5,682
5. project of Ordos-Anping-Cangzhou gas pipeline	7,864	12	4,753	2,827		1,938
6. project of Rizhao-Puyang-Luoyang curde oil pipeline	4,939	77	1,500			1,577
7. Project of Hainan second set of P-xylene plant	3,680	794	1,855		55	2,594
8. Oil pipline in Pearl River Delta at second stage	1,509	1,198			9	1,189
9. Yangpu bonded oil warehouse project of Harbor constcution	1,235	640	303			943
10. 5 tone/yr accelerator production project in Yunxi base	721	523	168			691
Total	**93,708**	**16,409**	**26,651**	**5,022**	**178**	**37,860**

Continued:

Projects	Percentage of accumulated investments to budget	Completion	Accumulated capitalized interests	Capitalized interests in 2018	Funds sources
1. Zhongke integrated refining and petrochemical project	51%	51%	184	159	Loan and self-finance
2. Wen #23 Gas reserve	25%	25%	51	50	Loan and self-finance
3. Tianjin LNG project	86%	86%	180	31	Loan and self-finance
4. Construction projects about Xinjiang coal gas pipeline	49%	49%	50	50	Loan and self-finance
5. project of Ordos-Anping-Cangzhou gas pipeline	25%	25%	54	54	Loan and self-finance
6. project of Rizhao-Puyang-Luoyang curde oil pipeline	32%	32%	13	13	Loan and self-finance
7. Project of Hainan second set of P-xylene plant	71%	71%	6	3	Loan and self-finance
8. Oil pipline in Pearl River Delta at second stage	79%	79%	49	24	Loan and self-finance
9. Yangpu bonded oil warehouse project of Harbor	76%	76%			Self-finance

Projects	Percentage of accumulated investments to budget	Completion	Accumulated capitalized interests	Capitalized interests in 2018	Funds sources
constcution					
10. 5 tone/yr accelerator production project in Yunxi base	96%	96%	17	13	Loan and self-finance
Total			**604**	**397**	

19. Intangible assets

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
1.Cost	**191,643**	**177,948**	**155,661**
Incl: Patent right	5,768	5,698	4,913
Land use right	122,778	113,518	104,440
Computer software	910	865	829
Others	62,187	57,867	45,479
2.Accumulated amortization	**60,126**	**52,488**	**44,124**
Incl: Patent right	3,805	3,520	3,555
Land use right	31,764	28,026	24,881
Computer software	785	738	686
Others	23,772	20,204	15,002
3.Impairment provision	**1,086**	**1,074**	**1,042**
Incl: Patent right	498	498	498
Land use right	375	369	355
Computer software	1	1	1
Others	212	206	188
4.Book value	**130,431**	**124,386**	**110,495**
Incl: Patent right	1,465	1,680	860
Land use right	90,639	85,123	79,204
Computer software	124	126	142
Others	38,203	37,457	30,289

20. Goodwill

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Book balance	19,645	19,603	17,124
Less:Goodwill impairment provision	8,784	8,784	8,587
Book value	**10,861**	**10,819**	**8,537**

(1)The main original value of goodwill

Name of investee or goodwill items	At 31 December 2018 RMB million
Sinopec Zhenhai Refining & Chemical Compan	4,043
Sinopec Yangzi Petrochemical Company Limited SECCO	2,744
Shanghai SECCO Petrochemical Company Limited	2,541
Sinopec Qilu Branch	2,161
Circulation Right for Equity Separation (Sinopec Corp.)	2,123
Sinopec Zhongyuan Petroleum Company Limited	1,391
Sinopec Shengli Oil Field Dynamic Company Limited	1,361
Sinopec Beijing Yanshan Company	1,202
Oil and gas business acquised from China Resources Enterprise Limited.	922

The main goodwill of the Group arose from the difference between fair value of identifiable assets and liabilities of the companies acquired and consideration paid.

(2)The main provision for impairment of goodwill

Name of investee or goodwill items	At 31 December 2018 RMB million
Sinopec Yangzi Petrochemical Company Limited	2,744
Sinopec Qilu Branch	2,161
Sinopec Zhongyuan Petroleum Company Limited	1,391
Sinopec Shengli Oil Field Dynamic Company Limited	1,361

Provision of impairment results from Group's assessments on goodwill's recoverable amount, the recoverable amount is based on future cash flows. These calculations use cash flow projections based on financial budgets approved by management covering a one–year period and pre–tax discount rates primarily ranging from11.7% to 12.3% under the assumption that the cash flows beyond the one–year period are maintained stable. The forecast to recoverable amount did not lead to significant impairment losses. Key assumptions applied for cash flow forecasts for these entities are the gross margin and sales volume. Management determined the budgeted gross margin based on previous gross margin achieved and management's expectation on the future trend of the prices of crude oil and petrochemical products. The projection of sales volume was based on the production capacity and/or the sales volume that has been achieved.

21. Long-term deferred expenses

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Expenses on improvement of operating leased fixed assets	2,197	2,124	1,888
Site rent	14	29	33
Amortization of mobile house	741	852	883
Catalyst	4,246	3,524	3,391
Drilling tools	2,720	2,420	2,421
Stations and depots rent	8,425	8,347	7,660
Lease	46	31	39
Others	1,649	1,187	1,094
Total	**20,039**	**18,514**	**17,409**

Other long-term deferred expenses were mostly from the preliminary expense of SSC's projects and others.

22. Deferred tax assets and liabilities

(1) Deferred income tax assets and liabilities recognized

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Deferred income tax assets			
Receivables and inventory	2,439	1,532	1,135
Fixed assets and oil& gas assets	13,641	13,087	9,653
Accrued items	5,692	3,783	2,238
Deductible loss	3,721	2,362	2,477
Other items	1,803	315	254
Subtotal	**27,296**	**21,079**	**15,757**
Deferred income tax liabilities			
Fixed assets and oil& gas assets	8,687	9,952	14,639
Available for sale financial assets	727	215	389
Other items	991	877	476
Subtotal	**10,405**	**11,044**	**15,504**
Elimination Between deferred tax assets and liabilities	3,709	4,339	7,425

Deferred tax assets and liabilities after the consolidated elimination adjustments are as follows:

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Deferred tax assets	23,587	16,740	8,332
Deferred tax liabilities	6,696	6,705	8,079

The income tax rate applicable to temporary differences of most affliates of the group is 25%. Some affliates located in special economic zones or economic and technological development zones, those registered in western zones, high-tech enterprise accredited by government and foreign-funded entities could benefit from tax incentives of 15% income tax rate. Those located in foreign countries should undertake the regional tax rates.

(2) Deferred income tax assets unrecognized

As at 31 December 2018, some subsidiaries estimate that they cannot generate enough taxable income to against deductible temporary difference in the future because of consecutive losses, the deductible temporary difference of the deficit enterprise's unrecognized deferred income tax assets totalled RMB 168,641 million, of which the deductible losses in the operation was RMB 34,784 million. Amounts of these deductible losses due in 2019, 2020, 2021, 2022 and 2023 are RMB 5,869 million , RMB 6,473 million, RMB 5,569 million, RMB 11,717 million and RMB5,156 million respectively.

23. Other non-current assets

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Lendings	198,555	201,080	207,631
Loans issued	7,854	5,995	5,734
Investment real estate	1,670	929	1,026
Others	987	2,019	1,937
Total	**209,066**	**210,023**	**216,328**

The lendings are all provided by Sinopec Century Bright Capital Investment Ltd to SIPC.

24. Provision for Assets impairment

Items	Balance at 31 December 2017	Changes of accounting policies	Balance at 1 January 2018	Increase		Decrease			Balance at 31 December 2018
				Provision	Other increase	Reversed	Written-off	Other decrease	
	RMB Million	RMB Million	RMB Million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB Million
Bad debt provision	8,675	(10)	8,665	79	44		64	4	8,720
Inventory impairment provisions	17,603	(259)	17,344	7,979	17		339	14	24,987
Provision for contract assets impairment		259	259	45				259	45
Provision for debt instrument investments		62	62	41	3				106
Provision for impairment of long-term equity investment	69,859		69,859	8	99		27	21	69,918
Provision for impairment of fixed assets	47,587		47,587	4,131	25		2,477	191	49,075
Provision for impairment of oil and gas assets	39,405		39,405	4,027	133		1		43,564
Provision for impairment of construction in progress	1,943		1,943	27	49		1		2,018
Provision for impairment of intangible assets	1,074		1,074		18		2	4	1,086
Provision for impairment of goodwill	8,784		8,784						8,784
Others	1,642	(1,140)	502	164	18			1	683
Total	**196,572**	**(1,088)**	**195,484**	**16,501**	**406**		**2,911**	**494**	**208,986**

Continued:

Items	Balance at1 January2017 RMB million	Increase		Decrease			Balance at 31 December2017 RMB million
		Provision RMB million	Other increase RMB million	Reversed RMB million	Written-off RMB million	Other decrease RMB million	
Bad debt provision	7,255	1,551	228		99	260	8,675
Inventory impairment provisions	1,429	16,654	37		457	60	17,603
Provision for impairment of long term equity investment	68,978	936			2	53	69,859
Provision for impairment of fixed assets	34,018	14,565	217		1,023	190	47,587
Provision for impairment of oil and gas assets	30,645	8,875				115	39,405
Provision for impairment of construction in progress	1,938	252			139	108	1,943
Provision for impairment of intangible assets	1,043	19	29		1	16	1,074
Provision for impairment of goodwill	8,587	198				1	8,784
Others	1,663	39				60	1,642
Total	**155,556**	**43,089**	**511**		**1,721**	**863**	**196,572**

Continued:

Items	Balance at1 January2016 RMB million	Increase		Decrease			Balance at 31 December2016 RMB million
		Provision RMB million	Other increase RMB million	Reversed RMB million	Written-off RMB million	Other decrease RMB million	
Bad debt provision	5,870	1,651	21		125	162	7,255
Inventory impairment provisions	4,832	589	318		4,095	215	1,429
Provision for impairment of long term equity investment	68,950	1	45		11	7	68,978
Provision for impairment of fixed assets	30,285	4,499	33		779	20	34,018
Provision for impairment of oil and gas assets	20,013	10,588	49			5	30,645
Provision for impairment of construction in progress	482	1,487	3		21	13	1,938
Provision for impairment of intangible assets	1,024	10	13		3	1	1,043
Provision for impairment of goodwill	8,580	7					8,587
Others	1,417	180	67		1		1,663
Total	**141,453**	**19,012**	**549**		**5,035**	**423**	**155,556**

25. Short-term loans

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Credit loans	93,316	145,436	116,121
Mortgage loans	55	60	147
Guarantee loans	1	1	1
Total	**93,372**	**145,497**	**116,269**

26. Bills payable

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Bank acceptance bills	8,391	8,755	8,709
Commercial acceptance bills	5,336	3,151	1,379
Total	**13,726**	**11,906**	**10,088**

27. Accounts payable

	At 31 December 2018		At 31 December 2017		At 31 December 2016	
Aging	**Amount RMB million**	**%**	**Amount RMB million**	**%**	**Amount RMB million**	**%**
Within 1 year	239,070	93.56	226,148	91.55	205,023	90.88
1-2 years	9,050	3.54	11,202	4.53	11,845	5.25
2-3 years	3,325	1.3	4,710	1.91	4,716	2.09
Over 3 years	4,090	1.6	4,970	2.01	4,016	1.78
Total	**255,535**	**100**	**247,030**	**100**	**225,600**	**100**

No significant accounts payables of the Group aged over 3 years need to be disclosed.

28. Advances from customers

	At 31 December 2018		At 31 December 2017		At 31 December 2016	
Aging	**Amount RMB million**	**%**	**Amount RMB million**	**%**	**Amount RMB million**	**%**
Within 1 year	—	—	144,851	97.02	119,498	94.8
Above 1 year	—	—	4,444	2.98	6,556	5.2
Total	**—**	**—**	**149,295**	**100**	**126,054**	**100**

No significant advances from customers of the Group over one year need to be disclosed.

29. Contract liabilities

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Advance payments for future goods	124,290	—	—
Contract liabilities caused by reclassification of construction project	15,783	—	—
Others	2,995	—	—
Total	**143,068**	**—**	**—**

30. Employee benefits payable

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Employees benefits payables	**14,853**	**10,200**	**5,387**
1. Wages, bonuses, allowances and subsidies	11,628	6,955	2,592
2. Welfare expense	1,886	1,683	878
3. Social insurances	374	448	466
4. Housing reserve fund	69	149	379
5.Trade union expenditure	510	479	419
6.Employee education expenses	33	43	56
7.Labor cost	56	56	91
8.Termination benefits	264	349	309
9.Housing subsidies	12	13	16
10.Other	19	25	181
Long-term employees benefits payables	**2,428**	**2,349**	**2,419**
1. Post-employment benefit of defined benefit plan	2,254	2,175	2,233
2. Termination benefits over 1 year	175	174	186
Total	**17,281**	**12,549**	**7,806**

31. Taxes and fees payable

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Value added tax	11,268	9,819	10,790
Consumption tax	60,087	39,768	30,033
Resource tax	539	506	458
Enterprise income tax	8,683	14,696	7,507
Land value added tax	874	852	897
City maintenance and construction tax	3,752	3,175	2,915
Land use tax	1,637	1,805	1,520
Individual income tax	1,101	1,365	950

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Special petroleum proceeds	466	12	7
Education surcharges	2,766	2,884	2,647
Others	2,197	2,536	2,296
Total	**93,369**	**77,418**	**60,020**

32. Other payables

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Interests payable	3,102	2,847	3,118
Dividends payable	273	6,833	2,063
Other payables	77,212	75,708	53,990
Total	**80,587**	**85,388**	**59,171**

a. Profile of other payable

Aging	At 31 December 2018		At 31 December 2017		At 31 December 2016	
	Amount RMB million	%	Amount RMB million	%	Amount RMB million	%
Within 1 year	32,171	41.67	53,227	70.31	37,794	70.01
1-2 years	30,773	39.85	8,001	10.57	3,690	6.83
2-3 years	4,172	5.4	4,939	6.52	5,412	10.02
Over 3 years	10,096	13.08	9,541	12.6	7,094	13.14
Total	**77,212**	**100**	**75,708**	**100**	**53,990**	**100**

No significant other payable of the Group aged over 3 years needs to be disclosed.

33. Non-current liabilities due within one year

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Long-term loan due within 1 year	14,522	41,746	13,209
(1)Credit loans	14,522	41,746	12,909
(2)mortgage loans			
(3)Guarantee loans			300
Bonds payable due in 1 year	22,971	34,053	58,043
Other long-term liability due in one year	932	1,039	725
Total	**38,425**	**76,838**	**71,977**

Other long-term liability due in one year is mainly from long-term payables due in one year.

34. Other current liabilities

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Short-term financing bonds	6,375	5,736	24,347
Borrowed capital of the financial company	7,700	8,200	4,000
Financial company deposits	12,268	15,626	17,386
Funds from sales of financial assets with repurchase agreement	10,296	6,418	3,114
Other current liabilities	656	211	204
Total	**37,295**	**36,191**	**49,051**

35. Long-term loans

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Credit loans	62,835	37,662	59,077
Mortgage loans	1	1	521
Guarantee loans	14	14	6,708
Total	**62,850**	**37,677**	**66,306**

36. Bonds payable

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Corporate bond	227,834	218,537	216,688

37. Long-term payables

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Long-term payables	19,050	15,891	14,206
Special Accounts Payable	12,158	1,763	3,410
Total	**31,208**	**17,654**	**17,616**

a. Long-term payables

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Financing instalments payable	55	57	60
Finance lease payment payable	1724	699	1,138
Other long-term payable	17,485	15,187	13,077
Less: Unrealized financing costs	214	52	69
Total	**19,050**	**15,891**	**14,206**

1) Production safety management fund

Pursuant to the notice Cai Gong Zi [1997] No. 268 "The Issue Regarding production safety management Fund of China Petroleum & Chemical Corporation" issued by the Ministry of Finance, the Group established a security guarantee fund. The accumulated balance accounts of security funds are RMB 4,617 million, RMB 4,627million and RMB 4,627million in the end of 2018, 2017 and 2016.

2) The other long-term payables are payables to shareholders.

38. Accrued liabilities

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
External guarantee	25	25	25
Asset retirement obligations	42,048	39,444	36,959
Others	1,692	812	2,636
Total	**43,765**	**40,281**	**39,620**

The asset retirement obligation represents provision for future dismantlement costs of oil and gas properties. The Group has established a set of standardized measurements for dismantling oil and gas properties according to the industry practices, and actively accept the obligations of the dismantlement.

39. Paid-in Capital

Items	2018 RMB million	2017 RMB million	2016 RMB million
Beginning balance	**326,374**	**325,908**	319,898
Increase of appropriation from Ministry of Finance	173	466	6,010
Closing balance	**326,547**	**326,374**	**325,908**

40. Capital reserves

Items	2018 RMB million	2017 RMB million	2016 RMB million
Beginning balance	**96,983**	**97,561**	**97,538**
Capital premium	(1,613)		
Other equity change in investees	186	(58)	151
Other	(40,833)	(520)	(128)
Closing balance	**54,723**	**96,983**	**97,561**

41. Specific reserves

Item	2018 RMB million	2017 RMB million	2016 RMB million
Beginning balance	**1,260**	**1,091**	**1,042**
Additions during the year	3,923	3,022	2,984
Reductions during the year	(3,114)	(2,853)	(2,935)
Closing balance	**2,069**	**1,260**	**1,091**

42. Surplus reserves

Items	2018 RMB million	2017 RMB million	2016 RMB million
Balance at the end of 2017	**209,415**	**205,373**	**204,977**
Changes of accounting policies	3		
Beginning balance	**209,418**	**205,373**	**204,977**
Statutory reserve fund	7,933	4,013	396
Voluntary reserve fund	5	29	
Closing balance	**217,356**	**209,415**	**205,373**

43. General risk reserve

Items	2018 RMB million	2017 RMB million	2016 RMB million
Beginning balance	**1,460**	**1,328**	**877**
Increase: General risk reserve	305	132	451
Closing balance	**1,765**	**1,460**	**1,328**

General risk reserve refers to accrual of affiliated financial enterprises (Sinopec Finance Co., Ltd. and Sinopec Shanghai Zheshi Futures Co., Ltd.).

44. Retained earnings

Items	2018 RMB million	2017 RMB million	2016 RMB million
Balance at the end of last year	129,985	132,869	144,491
Changes of accounting policies	(67)		
Beginning balance	129,918	132,869	144,491
Add: current net profit	38,663	10,393	8,357
Other increases	22		
Less: Withdraw surplus reserve	8,033	4,539	396
Contribution to national capital income and profits	9,871	8,504	19,132
Provision for general risk reserve	305	132	451
Transfer of three supplies and real estate management	2,707	102	
Other decreases	3		
Closing balance of undistributed profit	**147,684**	**129,985**	**132,869**

45. Operating revenue and operations costs

Items	2018		2017		2016	
	Revenues RMB million	Operating costs RMB million	Revenues RMB million	Operating costs RMB million	Revenues RMB million	Operating costs RMB million
1.Main operations	**5,002,957**	**4,487,062**	**3,963,773**	**3,478,387**	**3,243,075**	**2,798,300**
Exploration of oil and gas	189,453	152,318	146,971	142,058	106,397	118,169
Oil refining	1,258,018	947,566	1,006,749	698,286	850,299	548,294
Chemical production	570,960	512,022	458,427	401,520	353,225	303,498
Sales of refined oil	1,414,213	1,329,149	1,195,864	1,103,885	1,030,854	941,612
Petroleum and petrochemical engineering	109,183	98,206	88,008	86,071	86,377	92,692
Others	1,461,130	1,447,801	1,067,754	1,046,567	815,923	794,035
2.Other operations	**55,582**	**47,369**	**51,629**	**45,952**	**47,293**	**44,038**
Subtotal	**5,058,539**	**4,534,431**	**4,015,402**	**3,524,339**	**3,290,368**	**2,842,338**
Elimination of inter-segment	2,121,698	2,108,685	1,615,121	1,603,962	1,321,148	1,313,498
Total	**2,936,841**	**2,425,746**	**2,400,281**	**1,920,377**	**1,969,220**	**1,528,840**

Other operating revenue was mainly from the sales of auxiliary material, providing services, lease and others activities.

46. Financial expenses

Items	2018 RMB million	2017 RMB million	2016 RMB million
The net interest expenses	(303)	2,969	5,250
Incl:Interest expenses	8,216	8,621	9,021
Interest income	8,519	5,652	3,771
Exchange net loss	(813)	268	1,432
Other expenses	1,149	946	1,720
Incl: Commission fees	1,099	860	108
Total	**33**	**4,183**	**8,402**

47. Assets impairment losses

Items	2018 RMB million	2017 RMB million	2016 RMB million
Impairment loss for bad and doubtful accounts	——	1,552	1,651
Allowance for diminution in value of inventories	7,979	16,655	589
Long term equity investment impairment loss	8	936	1
Fixed assets impairment loss	4,131	14,565	4,499
Oil and gas assets impairment loss	4,027	8,875	10,588
Intangible assets impairment loss		19	10
Construction in progress impairment loss	27	252	1,487
Goodwill impairment loss		198	7
Other		37	180
Total	**16,172**	**43,089**	**19,012**

48. Credit impairment losses

Items	2018 RMB million	2017 RMB million	2016 RMB million
Impairment losses of bad and doubtful accounts	79	——	——
Impairment losses of loans	121	——	——
Impairment losses of debt investments	41	——	——
Impairment losses of other debt instrument investments		——	——
Impairment losses of contract assets	45	——	——
Impairment losses of loans guarantees	26	——	——
Others	17	——	——
Total	**329**	**——**	**——**

49. Other income

Items	2018 RMB million	2017 RMB million	2016 RMB million
(1) Governments grants related to assets	**375**	**497**	——
Special grants for energy saving and emission deduction	79	13	——
Funds for acquiring special equipment for environmental protection	28	21	——

Items	2018 RMB million	2017 RMB million	2016 RMB million
Other grants related to environmental protection	122	35	——
Funds for acquiring special equipment	32	13	——
Tax refund and deduction	30	110	——
Funds related to R&D projects	19	23	——
Subsidy for interest payable	27	246	——
Grants related to upgrade of oil quality	1	2	——
Others	37	34	——
(2) Government rants related to income	**7,771**	**4,838**	——
Subsidy for upgrading technology related to energy saving	14	10	——
Subsidy for other management of environment protection	25	13	——
Grants for technology development	281	249	——
State funds for ownership transformation of technological institute	178	164	——
Funds for retired and terminated employees	321	149	——
Funds for scientific study at sate level	752	402	——
Tax refund and deduction	2,217	1,715	——
Subsidy for interest payable	13	2	——
Subsidy for staffs' housing	514	111	——
Funds/subsidy for industry-specific projects	644	494	——
Subsidy for shale gas	2,282	1,301	——
Others	532	228	——
(3) Commission income rewarded from collecting individual income tax	33	37	——
Total	**8,179**	**5,372**	——

50. Investment income

Items	2018 RMB million	2017 RMB million	2016 RMB million
Income from long-term equity investments	14,013	9,217	(5,792)
Income from disposal of long-term equity investments	423	3,918	13
Income from financial assets held for trading within holding horizon	110	——	
Income from disposal of financial assets held for trading	1,195	——	
Income from held-to-maturity investments within holding horizon	——	5	7
Income from disposal of held-to-maturity investments	——	346	226
Income from available-for-sale financial assets	——	960	942
Income from disposal of available-for-sale financial assets	——	226	127
Interests income from debt investments	(20)	——	——
Interests income from other debt instruments investment	244	——	——
Income from disposal of other debt instruments investment	686	——	——
Dividends income from other equity instruments investments	966	——	
Income from financial liabilities held for trading	(6)	——	
Re-measured value at the date that control is lost			20,562
Income from derivative instruments	(2,813)	(250)	368

Items	2018 RMB million	2017 RMB million	2016 RMB million
Gains or losses from hedging	(1,604)	(1,418)	280
Income from entrusted loans	63	31	77
Other investment income	25	59	9
Total	**13,282**	**13,094**	**16,819**

51. Gain from changes of fair value (loss)

Items	2018 RMB million	2017 RMB million	2016 RMB million
Financial assets held for trading	(688)	194	
Financial liabilities held for trading	2	(2)	
Derivative financial instruments	3,075	105	152
The hedging losses	(383)	(353)	(301)
Other	22	47	(60)
Total	**2,028**	**(9)**	**(209)**

52. Gains or losses on assets disposal

Items	2018 RMB million	2017 RMB million	2016 RMB million
Fixed assets	(1,223)	(2,013)	(1,183)
Construction in progress	(11)	(39)	(23)
Intangible assets	94	(272)	187
Oil and gas assets	2	(28)	(4)
Non-monetary assets exchange	243		1
Other assets	48	130	(161)
Total	**(847)**	**(2,222)**	**(1,183)**

53. Non-operating income

Items	2018 RMB million	2017 RMB million	2016 RMB million
Gains from debt restructure	396	50	
Penalty income	109	42	48
Government grants	5,447	1,982	5,332
Accounts payable that cannot be paid	1,103	712	427
Gains on understated inventory	205	71	32
Revenue from liquidated damages	169	330	67
Others	621	359	744
Total	**8,050**	**3,546**	**6,650**

54. Non-operating expenses

Items	2018 RMB million	2017 RMB million	2016 RMB million
Losses on damaged or expired assets	813	22	54
Losses on debt restructure	6	58	2
Fines	134	150	151
Donation	314	221	199
Abnormal losses	16	14	51

Items	2018 RMB million	2017 RMB million	2016 RMB million
Expected losses on pending litigation	10	19	2
Losses on liquidated damages /compensations	206	220	375
Costs for transferring three supplies and real estate management	4,254		
Others	6,966	3,146	3,177
Total	**12,718**	**3,850**	**4,011**

Note: Other expenses mainly refers to the compensation for employees terminated by negotiation, employees who were terminated because of restructure of state-owned enterprise, and employees who left their post and families of the employees above-mentioned, transfer of medical insurance and payments to housing maintenance fund.

55. Income tax expenses

Items	2018 RMB million	2017 RMB million	2016 RMB million
Current income tax	30,657	30,061	25,491
Deferred income tax	(6,404)	(10,816)	(786)
Total	**24,253**	**19,245**	**24,705**

56. Other comprehensive income attributed to shareholders of parent company

(1) Items indicating circumstances about other comprehensive income, the influence of the income tax and the process of change to profit or loss.

Items	2018 RMB million			2017 RMB million			2016 RMB million		
	Pre-tax amount	Income tax	After-tax amount	Pre-tax amount	Income tax	After-tax amount	Pre-tax amount	Income tax	After-tax amount
1. Items that cannot be reclassified to profit or loss	**1,716**	**519**	**1,197**	**14**	**1**	**13**	**(225)**	**(6)**	**(219)**
(1) changes of net liabilities or net assets due to recalculate defined benefit plans	(128)	(22)	(106)	(7)	1	(8)	(33)	(6)	(27)
(2)Shares of other comprehensive income of investee that cannot be reclassified to profit or loss under equity method				21		21	(192)		(192)
(3) Fair value changes of other equity instrument investments	1,844	541	1,303						
2. Items that may be reclassified to profit or loss	**(4,476)**	**(593)**	**(3,883)**	**(1,544)**	**(387)**	**(1,157)**	**15,262**	**310**	**14,952**
(1)Shares of other comprehensive income of investee that may be reclassified to profit or loss under equity method	(37)		(37)	2,024		2,024	2,337		2,337
Less: Amount recognized in other comprehensive income in prior period transferred to profit or loss in current period									
Subtotal	**(37)**		**(37)**	**2,024**		**2,024**	**2,337**		**2,337**
(2)Fair value changes of other debt instrument investments	192	94	98	(441)	(133)	(308)	(175)	1	(176)
Less: Amount recognized in other comprehensive income in prior period transferred to profit or loss in current period				97	24	73	64	16	48
Subtotal	**192**	**94**	**98**	**(538)**	**(157)**	**(381)**	**(239)**	**(15)**	**(224)**
Provisions for credit impairment losses of other debt instrument investements	55	(19)	74						
Less: those recognized in other comprehensive income previously and transferred in current profit and loss									
Subtotal	**55**	**(19)**	**74**						
(3) Effective portion of cash flow hedge	(12,128)	(1,491)	(10,637)	(175)	(230)	55	5,761	(467)	6,228
Adjustment amount transferred to initial recognition amount of hedged items	(4,319)	(707)	(3,612)				(9)	(1)	(8)
Less: Amount recognized in other comprehensive income in prior period transferred to profit or loss in current period	(620)	(116)	(504)				(4,464)	(793)	(3,671)
Subtotal	**(7,189)**	**(668)**	**(6,521)**	**(175)**	**(230)**	**55**	**10,216**	**325**	**9,891**

Items	2018 RMB million			2017 RMB million			2016 RMB million		
	Pre-tax amount	Income tax	After-tax amount	Pre-tax amount	Income tax	After-tax amount	Pre-tax amount	Income tax	After-tax amount
(4) Translation difference in foreign currency statements	2,503		2,503	(2,855)		(2,855)	2,948		2,948
Subtotal	**2,503**		**2,503**	**(2,855)**		**(2,855)**	**2,948**		**2,948**
3. Total other comprehensive income	**(2,760)**	**(74)**	**(2,686)**	**(1,530)**	**(386)**	**(1,144)**	**15,037**	**304**	**14,733**

(2)Reconciliation of other comprehensive income

Items	1-Jan-16	Changes in 2016	1-Jan-17	Changes in 2017	31-Dec-17	Changes in accounting policies	1-Jan-18	Changes in 2018	31-Dec-18
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
1. Changes of net liabilities or net assets due to recalculating defined benefit plans	(276)	(27)	(304)	(9)	(312)		(312)	(106)	(418)
2. Shares of other comprehensive income of investee that cannot be reclassified to profit or loss under equity method	85	(192)	(107)	21	(86)		(86)		(86)
3. Changes in fair value of other equity instruments investment						(394)	(394)	1,310	916
4. Shares of other comprehensive income of investee that may be reclassified to profit or loss under equity method	(29,149)	2,337	(26,812)	2,024	(24,788)		(24,788)	(37)	(24,825)
5. Changes in fair value of other debt instruments investment						(391)	(391)	98	(293)
6. Gains or losses from changes in fair value of available-for-sale financial assets	242	(224)	17	(381)	(364)	364			
7. Provision for credit impairment of other debt instruments investment						96	96	74	170
8. Effective portion of cash flow hedges	(8,484)	9,892	1,407	55	1,462		1,462	(6,521)	(5,059)
9. Translation difference in foreign currency statements	(1,001)	2,948	1,947	(2,855)	(907)		(907)	2,503	1,596
Other comprehensive income attributable to share-holders of the company	**(38,584)**	**14,733**	**(23,851)**	**(1,145)**	**(24,995)**	**(325)**	**(25,320)**	**(2,679)**	**(27,999)**

57. Notes to cash flow statement

(1) Supplementary Information of cash flow statement

Supplementary Information	2018 RMB million	2017 RMB million	2016 RMB million
1.Reconciliation of net profit to cash flows from operating activities			
Net profit	**72,485**	**38,960**	**28,199**
Add: Provision for asset impairment	16,501	43,089	19,012
Depreciation of fixed assets, oil and gas assets depletion, investment property depreciation and amortization	109,526	116,201	110,022
Amortization of intangible assets	6,490	5,422	5,254
Amortization of long-term prepaid expenses	6,873	7,010	6,908

Supplementary Information	2018 RMB million	2017 RMB million	2016 RMB million
Net losses/(gain) on disposal of fixed assets, oil and gas assets, intangible assets and other long-term assets	847	2,222	1,184
Expired costs of fixed assets, oil and gas assets and investment property	813	22	54
Gains or losses on fair value change	(2,028)	9	209
Financial expenses	7,495	8,843	10,450
Exploration costs	10,753	11,120	7,479
Investment income(loss)	(13,282)	(13,093)	(16,819)
Decrease/(increase) in deferred income tax assets	(5,234)	(5,201)	1,803
Increase in deferred income tax liabilities	(1,169)	(5,615)	(2,589)
Decrease/(increase) in inventories	(711)	(28,854)	(19,381)
Decrease/(increase) in operating receivables	(7,654)	(15,154)	(6,705)
Increase/(decrease) in operating payables	4,237	39,937	69,281
Increase/(decrease) in safety fund reserve	809	169	65
Net cash flows from operating activities	**206,751**	**205,087**	**214,426**
2.Net increase in cash and cash equivalents			
Cash at end of year	**200,178**	**196,095**	**164,825**
Less: Cash at beginning of year	169,228	164,825	94,428
Net increase in cash and cash equivalents	**30,950**	**31,270**	**70,397**

(2) Cash and cash equivalents

Items	2018 RMB million	2017 RMB million	2016 RMB million
1.Cash	200,178	196,095	164,825
Incl: Cash in hand	66	64	68
Bank deposit available for payment	198,084	193,663	163,183
Other monetary fund available for payment	2,028	2,368	1,574
Cash and cash equivalents at the end of this year	**200,178**	**196,095**	**164,825**

58. Major monetary items denominated in foreign currency

Items	Amount of foreign currency million	Exchange Rate	RMB million
Cash			
Incl: USD	8,727	6.8632	59,894
EUR	66	7.8473	516
HKD	6,206	0.8762	5,438
GBP	1	8.6762	5
Others			3,113
Short-term loans			
Incl: USD	12,575	6.8632	86,308
EUR	27	7.8473	209
HKD	1,645	0.8762	1,441

Items	Amount of foreign currency million	Exchange Rate	RMB million
Non-current liabilities due within one year			
Incl: Bonds maturing within one year-USD	3,347	6.8632	22,971
Long-term loans due with one year-USD	2,453	6.8632	16,837
Other current liabilities			
Incl: Short-term bonds payable-USD	929	6.8632	6,375
Long-term loans			
Incl: USD	3,536	6.8632	24,265
EUR	65	7.8473	510
Bonds payable			
Incl: USD	25,315	6.8632	173,743
EUR	1,196	7.8473	9,386
HKD	1,218	0.8762	1,067

59. Segment information

For the year ended 31 December 2018

Items	Exploration and Production RMB million	Refining RMB million	Chemicals RMB million	Marketing and Distribution RMB million
1. Operating revenue	200,191	1,263,408	587,868	1,446,637
Incl: External revenue	104,237	154,320	514,033	1,441,413
Intra-segment revenue	95,954	1,109,088	73,835	5,224
2. Total operating costs	215,737	1,208,420	563,297	1,421,371
3.Operating profit/(loss)	(8,954)	56,320	32,472	28,202
4.Total assets	321,685	271,357	194,300	317,643
5.Total liabilities	93,874	103,707	69,509	159,031

For the year ended 31 December 2018 (continued)

Items	Oil & Petrochemical Engineering Technical Services RMB million	Others RMB million	Elimination of inter-segment RMB million	Total RMB million
1. Operating revenue	110,674	1,474,449	(2,146,386)	2,936,841
Incl: External revenue	110,674	816,121	(203,957)	2,936,841
Intra-segment revenue		658,328	(1,942,429)	
2. Total operating costs	108,397	1,484,656	(2,143,801)	2,858,077
3.Operating profit/(loss)	3,607	600	(10,841)	101,406
4.Total assets	139,805	1,366,907	(351,603)	2,260,094
5.Total liabilities	106,025	1,088,890	(449,546)	1,171,490

For the year ended 31 December 2017

Items	Exploration and Production RMB million	Refining RMB million	Chemicals RMB million	Marketing and Distribution RMB million
1. Operating revenue	157,490	1,011,848	474,466	1,224,197
Incl: External revenue	79,686	137,577	424,851	1,220,235
Intra-segment revenue	77,804	874,271	49,615	3,962
2. Total operating costs	209,240	948,179	453,474	1,191,026
3.Operating profit/(loss)	(48,629)	65,462	34,543	36,071
4.Total assets	343,404	273,125	197,224	309,726
5.Total liabilities	99,367	101,429	68,309	163,680

For the year ended 31 December 2017 (continued)

Items	Oil & Petrochemical Engineering Technical Services RMB million	Others RMB million	Elimination of inter-segment RMB million	Total RMB million
1. Operating revenue	89,320	1,079,561	(1,636,601)	2,400,281
Incl: External revenue	89,320	632,671	(184,059)	2,400,281
Intra-segment revenue		446,890	(1,452,542)	
2. Total operating costs	98,925	1,091,873	(1,634,710)	2,358,007
3.Operating profit/(loss)	(8,871)	(15,622)	(4,447)	58,509
4.Total assets	129,560	1,318,140	(314,481)	2,256,698
5.Total liabilities	104,083	1,019,042	(377,778)	1,178,132

For the year ended 31 December 2016

Item	Exploration and Production RMB million	Refining RMB million	Chemicals RMB million	Marketing and Distribution RMB million
1. Operating revenue	115,939	855,786	367,197	1,052,857
Incl: External revenue	56,985	108,469	328,583	1,049,377
Intra-segment revenue	58,954	747,317	38,614	3,480
2. Total operating costs	179,838	800,459	350,087	1,020,294
3.Operating profit/(loss)	(44,618)	54,410	23,789	35,554
4.Total assets	402,477	260,902	179,234	292,329
5.Total liabilities	95,882	82,171	60,098	132,920

For the year ended 31 December 2016 (continued)

Item	Oil & Petrochemical Engineering Technical Services RMB million	Others RMB million	Elimination of inter-segment RMB million	Total RMB million
1. Operating revenue	87,539	830,463	(1,340,561)	1,969,220
Incl: External revenue	87,539	504,270	(166,003)	1,969,220
Intra-segment revenue		326,193	(1,174,558)	
2. Total operating costs	102,367	822,083	(1,340,746)	1,934,382
3.Operating profit/(loss)	(14,502)	(3,296)	(1,072)	50,265

Item	Oil & Petrochemical Engineering Technical Services RMB million	Others RMB million	Elimination of inter-segment RMB million	Total RMB million
4.Total assets	141,442	1,181,549	(298,542)	2,159,391
5.Total liabilities	105,573	864,900	(255,053)	1,086,491

Ⅸ. CONTINGENCE

1. Contingent liabilities from guarantees

As at 31 December 2018, Sinopec Group had provided several extra-group guarantees as below:

1) Guarantee provided for outsiders

a. The Company has provided guarantees amounted to RMB 113,211 million to SIPC which include RMB 96,215 million secured loan, RMB 14,227 performance guarantee and RMB 2,768 million other guarantee.

b. Assets Management Co., Ltd. has provided 74 guarantees to those outside the group, which amounted to RMB 276 million.

1 undue guarantee amounted to RMB 192 million is provided for its associate named Anhui AnqingShuguang Chemical Co., Ltd.

Assets Management Co., Ltd. has provided 73 overdue guarantees amounted to RMB 84 million. Those guarantees are mainly involved for its subsidiaries before they were incorporated in Sinopec Group. As for judgment and potential liable guarantees, Sinopec Group has provision for RMB 24 million estimated liabilities. The rest are not involved in litigation or cannot be estimated the extent of responsibility.

c. Sinopec Corp. has provided 3 undue loan guarantees of RMB 24,398 million to the parties out of the group's consolidated scope. Two of them are provided by Sinopec Corp. to its joint venture named ZhongAnLianHe Coal Chemical Co., Ltd. and its associate named ZhongtianHechuang Energy Co., Ltd with RMB 5,032 million and RMB 12,167 million respectively. The last one is provided by Sinopec Corp.'s subsidiary named Hong Kong Sinopec International Limited to New Bright International Development Limited with RMB 7,197 million.

2) Guarantees for internal divisions

The Group has guaranteed 2 overdue payments worth RMB 2 million, they were specifically conducted by Assets Management Co. Ltd for its Anhui division prior to its combinations with the Group.

2. Legal contingencies

The Group is a defendant in certain lawsuits as well as the pointed party in other proceedings arising in the ordinary course of business. Management has assessed the likelihood of an unfavourable outcome of such contingencies, lawsuits or other proceedings and believes that any resulting liabilities will not have a material adverse effect on the financial position, operating results or cash flows of the Group.

X. SUBSEQUENT EVENTS

1. Dividend distribution

According to the discretion of board of directors of Sinopec corporation on 22 March 2019, the board proposed to distribute cash dividends of RMB 0.26 per share. This proposal is yet to be approved by the annual general meeting of shareholders.

According to the discretion of board of directors of SEG on 8 March 2018, the board of directors proposed to distribute cash dividends of RMB 0.124 per share. This proposal is yet to be approved by the annual general meeting of shareholders.

2. Other events subsequent to the balance sheet date

As at 23 April 2019, there are no other events subsequent to the balance sheet date to be disclosed.

Ⅺ. RELATED PARTY RELATIONSHIP AND TRANSACTIONS

1. Related parties

(1)Controller of the Company

The ultimate controller of the Company is SASAC.

(2) Subsidiaries of the Company

Information of subsidiaries of the Company is stated as Note VII.1.

(3) Joint ventures and associates of the Company

a. Information of significant joint ventures of associates

Name of joint venture or associate	Principal place of business	Registration place	Principal activities	Shareholding%		Voting rights%
				Direct	Indirect	
Joint venture						
BASF-YPC Company Limited	China	Nanjing, China	Production and sales of petrochemical products		50.00	50.00
Fujian Refining & Petrochemical Company Limited	China	Fujian, China	production of refined oil products		50.00	50.00
Sinopec SABIC Tianjin petrochemical	China	Tinajin China	Production and sales petrochemical products		50.00	50.00
Taihu	Russia	Cyprus	Crude oil and natural gas exploration		49.00	50.00
YASREF	Saudi Arabia	Saudi Arabia	Oil refining and processing		37.50	37.50
Associate						
SIPC	Overseas	Beijing, China	Crude oil and natural gas exploration	30.00		30.00
Sinopec Sichuan to East China Gas Pipeline Co., Ltd.	China	Wuhan, China	Operation of natural gas pipelines and auxiliary facilities		50.00	50.00
Zhongtian Hechuang Energy Co., Ltd	China	Inner Mongolia	Production of coal chemical		38.75	38.75
SIBUR	Russia	Russia	processing natural gas		10	10
Caspian Investments Resources Ltd.	The Republic of Kazakhstan	British Virgin Islands	Crude oil and natural gas extraction		50	50

b. Financial information of significant joint ventures and associates is stated as Note VIII. 12.

2. Related transactions information of joint ventures and associates

Items	2018 RMB million	2017 RMB million
Sales	219,917	189,504
Purchase	123,665	98,580
Loan funds (USD million)	65,521	69,744
Loan funds (EUR million)		2
Recovered funds (USD million)	849	
Recovered funds (EUR million)	66,665	67,780
Interest income	8,387	8,130

Items	2018 RMB million	2017 RMB million
Rendering services	7,602	10,887
Including: Engineering Construction	7,299	4,901
Accepting services	522	468
Agent income	95	102
Leasing income	29	33

3. Unsettled amount of related transaction of joint ventures and associates

(1)Receivables

Unsettled Items	At 31 December 2018			At 31 December 2017		
	Book balance RMB million	%	Provision for bad debts RMB million	Book balance RMB million	%	Provision for bad debts RMB million
Bills and accounts receivables	6,706	7.80	15	3,568	3.29	22
Prepayments	9,933	0.51		41	0.31	
Other accounts receivables	1,919	6.33	67	1,074	3.78	67
Shareholder loans	26,582	96.34		25,043	99.98	
Loan funds	265,597	95.83		267,105	95.80	
Entrusted loans	5,695	83.98		495	29.78	

(2)Payables

Unsettled Items	At 31 December 2018		At 31 December 2017	
	Book balance RMB million	%	Book balance RMB million	%
Bills and accounts payables	6,668	2.49	4,725	1.91
Advances from customers			3,738	2.50
Contract liabilities	2,652	1.85		
Other accounts payables	440	0.55	325	0.42
Shareholder loans	12,470	100.00	10,165	100.00

XII. Gratiuous Transfer

a. Transfer of three supplies and real estate management

According to the file named "About the guidance to separate three supplies and real estate management provided for employees' homes from stated-owned enterprises" (Guo Ban Fa No [2016] 45) published by general office of state council, "Methods for managing the funds compensating central state-owned enterprises for the placement of three supplies and real estate management of their employees' homes to central government " (Cai Zi No. [2016] 38) published by ministry of finance and state-owned assets supervision and administration commission, and other files, the Group started to arrange the transfer of "three supplies and real estate management" in 2016 and conducted relevant accounting procedures under the company’s replies.

In 2018, the group gratuitously transferred 10.31 billion Yuan asset relating to three supplies and real estate management and afforded a cost of 20.02 billion Yuan compensating for reconstruction. The corresponding write-off of parent’s equity interests was 29.32 billion Yuan, including 2.71 billion Yuan in undistributed profit, 0.1 billion Yuan in surplus reserve and 26.52 billion Yuan in capital reserve. Minority interests was written off 1.01 billion Yuan correspondingly.

Since 2016 to 2018, accumulitave amount of this gratuitous transfer of assets and funds compensating for reconstruction had increased to 10.83 billion Yuan and 21.24 billion Yuan respectively. Corresponding writte-off of parent’s interests had accumulated to 31.02 billion Yuan, including 2.81 billion Yuan in undistributed profit, 0.59 billion Yuan in surplus reserve and 27.62 billion Yuan in capital reserve. Minority interests was written off 1.06 billion Yuan correspondingly.

b. Gratuitous Transfer of China Petroleum & Chemical Corporation's Equity

For pursuing the notice about "gratuitous transfer of China Petroleum & Chemical Corporation's Equity" (Guo Zi Chan Quan No [2018] 405) issued by State-owned Assets Supervision and Administration Commission of the State Council, the company gratuitously transferred the A shares of China Petroleum & Chemical Corporation held by the company with amounts of 1,241,721,854 A shares and 1,241,721,854 A shares to each of Beijing Chengtong Financial Control Investment Co., Ltd. and Guoxin Investment Co., Ltd. respectively ("Gratuitous Transfer") in September 2018. The amount of this gratuitous transfer, accounting for 2.0512% of China Petroleum & Chemical Corporation's Equity and reducing total equity attributable to parent company by 14.761 billion Yuan, would not change the fact that China Petroleum & Chemical Corporation is still controlled by the company.

XIII Other important event

Sinopec Oilfield Service Corporation's Non-public issuance of A and H shares

After having received State-owned Supervision and Administration Commission of the State Council's Reply to Issues about Non-Public Issuance of A and H Shares by Sinopec Oilfield Service Corporation (Guo Zi Chan Quan [2017] No. 1169), Chinese Security Exchange Comission's Approval on Non-public Issuance of Shares by Sinopec Oilfield Service Corporation (Zheng Jian Xu Ke [2018] No. 142) and Approval on Issuance of Overseas Listed Foreign Shares by Sinopec Oilfield Service Corporation (Zheng Jian Xu Ke [2018] No. 130) , and approval of 2018 first extraordinary general, Sinopec Oilfield Corporation raised 7.64 billion Yuan from issuance of 1,526,717,556 A shares and 3,314,961,482 H shares in January 2018 and used them to supplememt issuer's cash reserve. After the completion of this issuance, Sinopec Oilfield Corporation has issued 18,984,340,033 shares, 70.18% of which is directly and indirectly held by the company.

XIV. NOTES TO THE MAIN ITEMS OF PARENT COMPANY'S FINANCIAL STATEMENTS

1. Long-term equity investment

Items	At 31 December 2018 RMB million	At 31 December 2017 RMB million	At 31 December 2016 RMB million
Investment in subsidiaries	323,627	337,437	335,602
Investment in joint ventures	2,957	2,817	2,773
Investment in associates	71,506	71,238	77,047
Subtotal	**398,090**	**411,492**	**415,422**
Less:Long-term equity investment impairment	74,486	74,485	74,486
Total	**323,604**	**337,007**	**340,936**

2. Operating revenue and operating costs

Items	2018 RMB million		2017 RMB million		2016 RMB million	
	Revenue	Costs	Revenue	Costs	Revenue	Costs
Revenue from intangible assets lease	4,901		6,798		9,392	

3. Investment income

Items	2018 RMB million	2017 RMB million	2016 RMB million
Income from long term equity investment	52,426	16,258	(2,007)
Inc.: Investment income recognized by the cost method	49,135	23,498	12,690
Investment income recognized by equity method	196	(7,199)	(14,697)

Items	2018 RMB million	2017 RMB million	2016 RMB million
Income from disposal of equity	3,095	(41)	
Other investment income	294	156	161
Total	**52,720**	**16,414**	**(1,846)**

4. Supplementary Information of cash flow statements

(1) Supplementary Information of cash flow statement

Supplementary Information	2018 RMB million	2017 RMB million	2016 RMB million
1.Reconciliation of net profit to cash flows from operating activities			
Net profit	**49,487**	**20,393**	**901**
Add: Depreciation of fixed assets, oil and gas assets depletion, investment property, depreciation and amortization	83	102	102
Amortization of intangible assets	518	523	522
Gains or losses from fair value changes	315		
Financial expenses	1,251	1,321	1,027
Investment losses	(52,720)	(16,414)	1,846
Decrease in inventory			
Decrease in operating receivables		8	(217)
Increase in operating payables	3,544	(2,811)	2,533
Net cash flows from operating activities	**2,478**	**3,122**	**6,714**
2.Net increase in cash and cash equivalents			
Cash at end of year	**43,405**	**10,607**	**19,108**
Less: Cash at beginning of year	10,607	19,108	25,068
Net increase in cash and cash equivalents	**32,798**	**(8,501)**	**(5,960)**

(2) Cash and cash equivalents

Items	2018 RMB million	2017 RMB million	2016 RMB million
1. Cash	43,405	10,607	19,108
Incl.: Cash on hand		1	1
Bank deposit available for payment	43,346	10,554	19,055
Other monetary fund available for payment	59	52	52
2. Closing balance of cash and cash equivalents	43,405	10,607	19,108

XV. FINANCIAL STATEMENTS APPROVAL

The financial statements for the year of 2018 had been approved by the Board of Directors of Sinopec Group.

China Petrochemical Corporation

CHINA PETROCHEMICAL CORPORATION

AUDITORS' REPORT AND FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2019

China Petrochemical Corporation
Auditors' Report and Financial Statements
(From January 1, 2019 to December 31, 2019)

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Auditors' Report

PCPAR [2020] No. ZK20861

To China Petrochemical Corporation,

I Opinion

We have audited the accompanying consolidated and the parent company's financial statements of China Petrochemical Corporation (hereinafter referred to as "the Company"), which comprise the balance sheet as at December 31, 2019, and the income statement, statement of cash flows, statement of changes in owners' equity and statement of provision for assets impairment for the year then ended, and notes to the financial statements.

In our opinion, the financial statements attached are prepared, in all material respects, in accordance with the Accounting Standards for Business Enterprises, and present fairly the consolidated financial positions and the parent company's financial positions of the Company as at December 31, 2019 and the consolidated operating results and cash flows and the parent company's operating results and cash flows for the year then ended.

II Basis for Opinion

We conducted our audit in accordance with the Auditing Standards for Certified Public Accountants of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of this auditors' report. According to the Code of Ethics for Certified Public Accountants of China, we are independent of the Company and we have fulfilled other responsibilities in the aspect of code of ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

III Responsibilities of the Management and Those Charged with Governance for the Financial Statements

The management of the Company (hereinafter referred to as the "Management") is responsible for preparing the financial statements in accordance with the requirements of Accounting Standards for Business Enterprises to achieve a fair presentation, and for designing, implementing and maintaining internal control that is necessary to ensure that the financial statements are free from material misstatements, whether due to frauds or errors.

In preparing the financial statements, the Management is responsible for assessing the Company's ability to continue as a going concern, disclosing matters related to going concern (if applicable) and using the going concern basis of accounting unless the Management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the financial reporting process of the Company.

IV Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the audit standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

During the process of an audit conducted in accordance with audit standards, we exercise professional judgment and maintain professional scepticism throughout the audit. Meanwhile, we also implement the following work:

(1) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

(2) Understand the internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.

(3) Evaluate the appropriateness of accounting policies used by and the reasonableness of accounting estimates and related disclosures made by the Management.

(4) The Management comes to the conclusion by using the appropriateness of the going-concern assumption. Meanwhile, based on the audit evidence obtained, we come to a conclusion on whether a material uncertainty exists in events or conditions that may cause significant doubt on the Company's going-concern ability. If we conclude that a material uncertainty exists, we are required to, in our auditors' report, draw attention of the users of statements to the related disclosures in the financial statements; if such disclosures are inadequate, we should modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

(5) Evaluate the overall presentation, structure and content (including the disclosures) of the financial statements, and evaluate whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

(6) Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the Company's audit, and bear full responsibility for our audit opinion.

We communicate with those charged with governance regarding the planned scope and timing of the audit, significant audit findings and other matters, including any significant deficiencies in internal control that we identify during our audit.

BDO CHINA Shu Lun Pan Certified Public Accountants LLP	**Certified Public Accountant of China: Lin Zhen**
	Certified Public Accountant of China: Zhu Xiaodong
Shanghai, China	**April 24, 2020**

This auditors' report and the accompanying financial statements are English translations of the Chinese auditors' report and statutory financial statements prepared under accounting principles and practices generally accepted in the People's Republic of China. In case the English version does not conform to the Chinese version, the Chinese version shall prevail.

Consolidated Balance Sheet

Items	Note 8	As at 31 December 2019 RMB '000,000 (Audited)	As at 1 January 2019 RMB '000,000 (Audited)
Current assets			
Cash and cash equivalents	1	151,409	200,150
Financial assets held for trading	2	21,673	41,560
Derivative financial assets		863	7,886
Notes receivable	3	2,193	12,017
Accounts receivable	4	66,893	74,564
Receivables financing	5	10,069	
Advances to suppliers	6	21,087	18,607
Other receivables	7	33,754	30,289
Inventories	8	250,574	241,515
Contract assets		17,879	14,300
Non-current assets maturing within one year	9	2,704	7,350
Other current assets	10	114,345	152,632
Total current assets		**693,443**	**800,870**
Non-current assets			
Other creditor's right investments	11	3,193	4,192
Long-term receivables	12	16,099	39,411
Long-term equity investments	13	145,422	137,959
Other equity instruments investments	14	9,727	12,319
Fixed assets	15	576,330	570,522
Construction in progress	16	191,973	154,489
Oil and gas assets	17	140,426	145,508
Right-of-use assets	18	33,883	31,942
Intangible assets	19	134,633	130,427
Goodwill	20	10,882	10,861
Long-term deferred expenses	21	14,966	11,913
Deferred income tax assets	22	19,486	23,587
Other non-current assets	23	221,256	209,066
Total non-current assets		**1,518,276**	**1,482,196**
Total assets		**2,211,719**	**2,283,066**

Consolidated Balance Sheet (Continued)

Items	Note 8	As at 31 December 2019 RMB '000,000 (Audited)	As at 1 January 2019 RMB '000,000 (Audited)
Current liabilities			
Short-term borrowings	25	71,449	93,372
Derivative financial liabilities		3,708	13,571
Notes payable	26	20,392	13,726
Accounts payable	27	240,176	255,535
Contract liabilities	28	148,226	143,068
Employee compensation payable	29	16,767	14,853
Taxes and surcharges payable	30	74,774	93,369
Other payables	31	79,076	80,590
Non-current liabilities maturing within one year	32	56,255	50,642
Other current liabilities	33	18,915	36,827
Total current liabilities		**729,738**	**795,553**
Non-current liabilities			
Long-term borrowings	34	60,921	62,850
Bonds payable	35	193,506	227,834
Lease liabilities	36	20,383	10,767
Long-term payables	37	19,918	31,196
Long-term employee compensation payable	38	2,287	2,428
Estimated liabilities	39	43,993	43,765
Deferred income tax liabilities	22	7,030	6,696
Other non-current liabilities		15,177	13,373
Total non-current liabilities		**363,215**	**398,909**
Total liabilities		**1,092,953**	**1,194,462**
Owner's equity			
Paid-in capital	40	325,547	326,547
Capital reserves	41	51,947	54,723
Other comprehensive income	57	(23,800)	(27,999)
Special reserves	42	2,193	2,069
Surplus reserves	43	223,499	217,356
General risk reserves	44	1,765	1,765
Undistributed profits	45	169,350	147,684
Total equity attributable to parent company		**750,501**	**722,145**
Minority interests		368,265	366,459
Total equity		**1,118,766**	**1,088,604**
Total Liabilities and equity		**2,211,719**	**2,283,066**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Director of Finance Department**

Consolidated Income Statement

Items	Note 8	Year 2019 RMB '000,000 (Audited)	2018 RMB '000,000 (Audited)
1. Operating revenue	46	**3,003,417**	**2,936,841**
2. Total operating costs		**2,915,047**	**2,841,576**
Incl.: Operating costs	46	2,497,875	2,425,746
Taxes and surcharges		247,174	251,393
Selling expenses		63,553	61,166
General and administrative expenses		79,576	81,145
Research and development expenses		13,690	11,340
Exploration costs		10,520	10,753
Financial expenses	47	2,659	33
Plus: Other income (loss)	48	7,111	8,179
Investment income (loss)	49	13,635	13,282
Gains from changes in fair value (losses)	50	(2,737)	2,028
Losses from credit impairment (losses)	51	(1,991)	(329)
Losses from asset impairment (losses)	52	(2,338)	(16,172)
Income from disposal of assets (losses)	53	(871)	(847)
3. Operating profit (loss)		**101,179**	**101,406**
Plus: Non-operating revenue	54	5,498	8,050
Less: Non-operating expenses	55	5,803	12,718
4. Total profit (loss)		**100,874**	**96,738**
Less: Income tax expenses	56	21,773	24,253
5. Net profit (loss)		**79,101**	**72,485**
Less: Profit/loss attributable to minority interests		32,171	33,822
6. Net profit attributable to parent company		**46,930**	**38,663**
7. Other comprehensive income		**6,445**	**(2,534)**
Less: Other comprehensive income, net of tax, attributable to minority interests		2,234	152
8. Other comprehensive income, net of tax, attributable to parent company	57	**4,211**	**(2,686)**
9. Total comprehensive income		**85,546**	**69,951**
Less: Total comprehensive income attributable to minority interests		34,405	33,974
10. Total comprehensive income attributable to parent company		**51,141**	**35,977**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Director of Finance Department**

Consolidated Statement of Cash Flows

Items	Note 8	Year 2019 RMB '000,000 (Audited)	 2018 RMB '000,000 (Audited)
I. Cash flows from operating activities			
Cash received from sale of goods and rendering of services		3,228,895	3,225,339
Refunds of tax and surcharges		2,560	4,167
Other cash received relating to operating activities		110,812	106,846
Subtotal of cash inflows from operating activities		**3,342,267**	**3,336,352**
Cash paid for goods purchased and services received		2,612,779	2,540,913
Cash paid to and on behalf of employees		125,314	113,901
Cash paid for taxes and surcharges		329,607	346,315
Other cash paid relating to operating activities		138,335	128,472
Subtotal of cash outflows from operating activities		**3,206,035**	**3,129,601**
Net cash flows from operating activities	59	**136,232**	**206,751**
II. Cash flows from investing activities			
Cash received from disposal of investments		150,849	142,799
Cash received from returns on investments		11,768	11,862
Net cash received from disposal fixed assets, intangible assets and other long-term assets		3,016	10,098
Net cash received from disposal of subsidiaries and other business units			11
Other cash received relating to investing activities		19,423	21,315
Subtotal of cash inflows from investing activities		**185,056**	**186,085**
Cash paid for purchasing fixed assets, intangible assets and other long-term assets		151,309	110,401
Cash paid for investments		101,357	100,655
Net cash paid to acquire subsidiaries and other business units		1,066	3,195
Other cash paid relating to investing activities		3,663	30,166
Subtotal of cash outflows from investing activities		**257,395**	**244,417**
Net cash flows from investing activities		**(72,339)**	**(58,332)**

Consolidated Statement of Cash Flows (Continued)

Items	Note 8	Year 2019 RMB '000,000 (Audited)	2018 RMB '000,000 (Audited)
III. Cash flows from financing activities			
Cash received from capital contributions		3,927	2,891
Cash received from borrowings		1,027,778	1,037,101
Other cash received relating to financing activities		370	2,981
Subtotal of cash inflows from financing activities		**1,032,075**	**1,042,973**
Cash repayments of borrowings		1,088,630	1,111,706
Cash paid for dividends, profits distribution or interest		53,879	50,139
Other cash paid relating to financing activities		2,249	875
Subtotal of cash outflows from financing activities		**1,144,758**	**1,162,720**
Net cash flows from financing activities		**(112,683)**	**(119,747)**
IV. Effect of foreign exchange rate changes on cash		**28**	**2,278**
V. Net increase in cash and cash equivalents	59	**(48,762)**	**30,950**
Add: Cash and cash equivalents at the beginning of the period	59	200,178	169,228
VI. Cash and cash equivalents at the end of the period	59	**151,416**	**200,178**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Director of Finance Department**

Consolidated Statement of Changes in Equity
For the year ended 31 December 2019

Items	Shareholder's equity attributed to parent enterprise							Minority interest	Total equity
	Paid in Capital	Capital reserve	Other comprehensive income	Specia reserve	Surplus reserve	General risk reserve	Undistributed Profits		
	RMB ’000,000	RMB ’000,000	RMB ’000,000	RMB ’000,000	RMB ’000,000	RMB ’000,000	RMB ’000,000	RMB ’000,000	RMB ’000,000
Balance at 31 December 2018	**326,547**	**54,723**	**(27,999)**	**2,069**	**217,356**	**1,765**	**147,684**	**366,459**	**1,088,604**
Changes of accounting polices									
Balance at 1 January 2019	**326,547**	**54,723**	**(27,999)**	**2,069**	**217,356**	**1,765**	**147,684**	**366,459**	**1,088,604**
Amount of increase （decrease） of this year	**(1,000)**	**(2,776)**	**4,199**	**124**	**6,143**		**21,666**	**1,806**	**30,162**
(1)Total comprehensive income			4,211				46,930	34,405	85,546
(2)Owner's devotion and decreased capital	(1,000)	(2,776)						1,001	(2,775)
1.Owner's devotion capital	(1,000)							172	(828)
2. Amounts of share-based payments recognized in owner’s equity		3						1	4
3.Others		(2,779)						828	(1,951)
(3)Withdrawal and use of special reserves				124				69	193
1.Withdrawal of special reserves				4,424				2,350	6,774
2. Use of special reserves				(4,300)				(2,281)	(6,581)
(4)Profit distribution					6,143		(25,276)	(33,669)	(52,802)
1.Withdrawal of surplus reserves					6,143		(6,143)		
Including: Statutory reserve funds					6,129		(6,129)		
Discretionary reserve funds					14		(14)		
2. Withdrawal of general risk reserves									
3. Profit distributed to owners (or shareholders)							(18,946)	(33,701)	(52,647)
4. Others							(187)	32	(155)
(5)Internal carry-forward of owners' equity			(12)				12		
Balance at 31 December 2019	**325,547**	**51,947**	**(23,800)**	**2,193**	**223,499**	**1,765**	**169,350**	**368,265**	**1,118,766**

Zhang Yuzhuo	Zhao Dong	Wu Bo
General Manager	**Chief Financial Officer**	**Head of the finance department**

Consolidated Statement of Changes in Equity
For the year ended 31 December 2018

Items	Shareholder's equity attributed to parent enterprise							Minority interest	Total equity
	Paid in Capital	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	General risk reserve	Undistributed Profits		
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Balance at 31 December 2017	**326,374**	**96,983**	**(24,995)**	**1,260**	**209,415**	**1,460**	**129,985**	**338,084**	**1,078,566**
Changes of accounting polices			**(325)**		**3**		**(67)**		**(388)**
Balance at 1 January 2018	**326,374**	**96,983**	**(25,320)**	**1,260**	**209,418**	**1,460**	**129,918**	**338,084**	**1,078,178**
Amount of increase（decrease） of this year	**173**	**(42,260)**	**(2,679)**	**809**	**7,938**	**305**	**17,766**	**28,375**	**10,426**
(1)Total comprehensive income			(2,686)				38,663	33,974	69,951
(2)Owner's devotion and decreased capital	173	(42,260)			(95)		(2,679)	21,541	(23,320)
1.Owner's devotion capital	173							2,789	2,962
2. Amounts of share-based payments recognized in owner's equity		(10)						34	24
3.Others		(42,250)			(95)		(2,679)	18,719	(26,307)
(3)Withdrawal and use of special reserves				809				321	1,130
1.Withdrawal of special reserves				3,923				1,688	5,611
2. Use of special reserves				(3,114)				(1,367)	(4,481)
(4)Profit distribution					8,033	305	(18,211)	(27,461)	(37,334)
1.Withdrawal of surplus reserves					8,033		(8,033)		
Including: Statutory reserve funds					8,028		(8,028)		
Discretionary reserve funds					5		(5)		
2. Withdrawal of general risk reserves						305	(305)		
3. Profit distributed to owners (or shareholders)							(9,871)	(27,460)	(37,331)
4. Others							(2)	(1)	(3)
(5)Internal carry-forward of owners' equity			7				(7)		
Balance at 31 December 2019	**326,547**	**54,723**	**(27,999)**	**2,069**	**217,356**	**1,765**	**147,684**	**366,459**	**1,088,604**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Head of the finance department**

Company Balance Sheet

Items	Note 13	As at 31 December 2019 RMB '000,000 (Audited)	As at 1 January 2019 RMB '000,000 (Audited)
Current assets			
Cash and cash equivalents		30,991	43,405
Derivative financial assets		3,888	3,560
Advances to suppliers			
Other receivables		20,262	38,415
Inventories			1
Non-current assets maturing within one year		25,676	14,462
Other current assets		26	59
Total current assets		**80,843**	**99,902**
Non-current assets			
Creditor's right investment		42,542	40,409
Long-term equity investments	1	336,973	323,604
Other equity instruments investments		6,204	8,305
Fixed assets		647	614
Construction in progress		18	43
Intangible assets		15,428	15,943
Total non-current assets		**401,812**	**388,918**
Total assets		**482,655**	**488,820**

Company Balance Sheet (Continued)

Items	Note 13	As at 31 December 2019 RMB '000,000 (Audited)	As at 1 January 2019 RMB '000,000 (Audited)
Current liabilities			
Short-term borrowings		28,653	34,300
Accounts payable		15	15
Contract liabilities		2	
Employee compensation payable		10,148	5,591
Taxes and surcharges payable		739	1,079
Other payables		3,198	627
Total current liabilities		**42,755**	**41,612**
Non-current liabilities			
Long-term borrowings		52	54
Bonds payable		5,731	23,100
Long-term payables		4,470	4,470
Deferred income tax liabilities		30	423
Total non-current liabilities		**10,283**	**28,047**
Total liabilities		**53,038**	**69,659**
Owner's equity			
Paid-in capital		325,547	326,547
Capital reserves		19,545	19,536
Other comprehensive income		(21,091)	(19,978)
Surplus reserves		58,476	55,326
Undistributed profits		47,140	37,730
Total equity		**429,617**	**419,161**
Total Liabilities and equity		**482,655**	**488,820**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Director of Finance Department**

Company Income Statement

Items	Note 13	Year 2019 RMB ’000,000 (Audited)	 2018 RMB ’000,000 (Audited)
1. Operating revenue	2	**6,339**	**4,901**
2. Total operating costs		**6,906**	**6,231**
Incl.: Operating costs	2		
Taxes and surcharges		83	69
General and administrative expenses		6,261	5,475
Research and development expenses		257	344
Financial expenses		305	343
Plus: Other income (loss)		16	4
Investment income (loss)	3	32,986	52,720
Gains from changes in fair value (losses)		328	(316)
Losses from credit impairment (losses)			
Income from disposal of assets (losses)			
3. Operating profit (loss)		**32,763**	**51,079**
Plus: Non-operating revenue		35	
Less: Non-operating expenses		92	71
4. Total profit (loss)		**32,706**	**51,008**
Less: Income tax expenses		1,206	1,521
5. Net profit (loss)		**31,500**	**49,487**
6. Other comprehensive income		**(1,107)**	**1,370**
Other comprehensive income that cannot be reclassified into profit or loss		(1,204)	1,286
Including: Changes in fair value of other equity instruments investment		(1,204)	1,286
Other comprehensive income that will be reclassified into profit or loss		97	84
Including: Other comprehensive income that can be transferred to profit or loss under the equity method		97	84
7. Total comprehensive income		**30,393**	**50,857**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Director of Finance Department**

Company Cash Flow Statement

Items	Note 13	Year 2019 RMB '000,000 (Audited)	 2018 RMB '000,000 (Audited)
I. Cash flows from operating activities			
Cash received from sale of goods and rendering of services		6,533	4,876
Refunds of tax and surcharges			
Other cash received relating to operating activities		11,390	6,217
Subtotal of cash inflows from operating activities		**17,923**	**11,093**
Cash paid for goods purchased and services received			
Cash paid to and on behalf of employees		631	303
Cash paid for taxes and surcharges		1,763	2,062
Other cash paid relating to operating activities		8,644	6,250
Subtotal of cash outflows from operating activities		**11,038**	**8,615**
Net cash flows from operating activities		**6,885**	**2,478**
II. Cash flows from investing activities			
Cash received from disposal of investments		38,383	13,324
Cash received from returns on investments		33,392	50,001
Net cash received from disposal fixed assets, intangible assets and other long-term assets			1
Net cash received from disposal of subsidiaries and other business units			
Other cash received relating to investing activities		900	
Subtotal of cash inflows from investing activities		**72,675**	**63,326**
Cash paid for purchasing fixed assets, intangible assets and other long-term assets		142	43
Cash paid for investments		46,140	42,758
Net cash paid to acquire subsidiaries and other business units			
Other cash paid relating to investing activities		800	1
Subtotal of cash outflows from investing activities		**47,082**	**42,802**
Net cash flows from investing activities		**25,593**	**20,524**

Company Cash Flow Statement (Continued)

Items	Note 13	Year 2019 RMB ’000,000 (Audited)	2018 RMB ’000,000 (Audited)
III. Cash flows from financing activities			
Cash received from capital contributions			225
Cash received from borrowings		39,922	41,180
Other cash received relating to financing activities			
Subtotal of cash inflows from financing activities		**39,922**	**41,405**
Cash repayments of borrowings		62,940	20,440
Cash paid for dividends, profits distribution or interest		20,874	11,169
Other cash paid relating to financing activities		1,000	
Subtotal of cash outflows from financing activities		**84,814**	**31,609**
Net cash flows from financing activities		**(44,892)**	**9,796**
IV. Effect of foreign exchange rate changes on cash			
V. Net increase in cash and cash equivalents	4	**(12,414)**	**32,798**
Add: Cash and cash equivalents at the beginning of the period	4	43,405	10,607
VI. Cash and cash equivalents at the end of the period	4	**30,991**	**43,405**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Director of Finance Department**

Company Statement of Changes in Equity
For the year ended 31 December 2019

Items	Paid in Capital RMB '000,000	Capital reserve RMB '000,000	Other comprehensive income RMB '000,000	Surplus reserve RMB '000,000	Undistributed Profits RMB '000,000	Total equity RMB '000,000
Balance at 31 December 2018	**326,547**	**19,536**	**(19,978)**	**55,326**	**37,730**	**419,161**
Changes of accounting polices						
Balance at 1 January 2019	**326,547**	**19,536**	**(19,978)**	**55,326**	**37,730**	**419,161**
Amount of increase (decrease) of this year	**(1,000)**	**9**	**(1,113)**	**3,150**	**9,410**	**10,456**
(1) Total comprehensive income			(1,107)		31,500	30,393
(2) Owner's devotion and decreased capital	(1,000)	9				(991)
1. Owner's devotion capital	(1,000)					(1,000)
2. Others		9				9
(3) Profit distribution				3,150	(22,096)	(18,946)
1.Withdrawal of surplus reserves				3,150	(3,150)	
Including: Statutory reserve funds				3,150	(3,150)	
Discretionary reserve funds						
2. Profit distributed to owners (or shareholders)					(18,946)	(18,946)
(4) Internal carry-forward of owners' equity			(6)		6	
Balance at 31 December 2019	**325,547**	**19,545**	**(21,091)**	**58,476**	**47,140**	**429,617**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Head of the finance department**

Company Statement of Changes in Equity (Continued)

For the year ended 31 December 2018

Items	Paid in Capital RMB ’000,000	Capital reserve RMB ’000,000	Other comprehensive income RMB ’000,000	Surplus reserve RMB ’000,000	Undistributed Profits RMB ’000,000	Total equity RMB ’000,000
Balance at 31 December 2017	**326,374**	**48,983**	**(21,348)**	**50,472**	**5,836**	**410,318**
Changes of accounting polices						
Balance at 1 January 2018	**326,374**	**48,983**	**(21,348)**	**50,472**	**5,836**	**410,318**
Amount of increase (decrease) of this year	**173**	**(29,447)**	**1,370**	**4,854**	**31,893**	**8,843**
(1) Total comprehensive income			1,370		49,487	50,857
(2) Owner's devotion and decreased capital	173	(29,447)		(95)	(2,774)	(32,143)
1. Owner's devotion capital	225					225
2. Others	(52)	(29,447)		(95)	(2,774)	(32,368)
(3) Profit distribution				4,949	(14,819)	(9,871)
1.Withdrawal of surplus reserves				4,949	(4,949)	
Including: Statutory reserve funds				4,949	(4,949)	
Discretionary reserve funds						
2. Profit distributed to owners (or shareholders)					(9,871)	(9,871)
(4) Internal carry-forward of owners' equity						
Balance at 31 December 2018	**326,547**	**19,536**	**(19,978)**	**55,326**	**37,730**	**419,161**

Zhang Yuzhuo	**Zhao Dong**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Head of the finance department**

China Petrochemical Corporation
Notes to the Financial Statements
For the Year Ended December 31, 2019

1 Company profile

China Petrochemical Corporation (hereinafter referred to as "the Company") is a wholly state-owned company established on July 27, 1998, with its registered place and headquarters in Beijing, a registered capital of RMB 326.5 billion and Zhang Yuzhuo as its legal representative.

The Company was established in accordance with the *Circular of the State Economic and Trade Commission on Printing and Issuing the Establishment Plan of China Petrochemical Corporation and the Articles of Association of China Petrochemical Corporation* (GJMW [1998] No.458). It is a petroleum and petrochemical enterprise established by the State on the basis of the former China Petrochemical Corporation, integrating upstream and downstream, domestic and foreign trade, and production and marketing. The company, formerly known as China Petrochemical Corporation, was established in 1983. It is an economic entity with legal person status under the direct leadership of the State Council and is responsible for the overall planning of the production, construction and import and export of petrochemical industry. In July 1998, the state carried out a major reform and reorganization in the petroleum and petrochemical industries. After completion of the overall merger of China Eastern Union Petrochemical Corporation, the transfer with China National Petroleum Corporation and the transfer of oil companies in provinces (autonomous regions and municipalities) and city specifically designated in the state plan, the Company has separated government functions from those of enterprises and has become a state-owned company funded by the state. It is a state-authorized investment institution and a wholly-owned company established by the State Council.

According to the *Reply on Matters related to the Restructuring of China Petrochemical Corporation* (GZGG [2017] No.1076) issued by the State-owned Assets Supervision and Administration Commission, the Company completed its corporate restructuring in August 2018, with its enterprise type changing from "ownership by the whole people" to "limited liability company (wholly state-owned)" and its name changing to "China Petrochemical Corporation". With the approval of Beijing Administration for Industry and Commerce, the Company completed the industrial and commercial registration of changes on August 20, 2018.

The main business scope of the Company and its subsidiaries (hereinafter referred to as "the Group" or "Sinopec Group") includes: exploration and development of petroleum and natural gas; petroleum refining; wholesale and retail of refined oil; production and sales of petrochemical products; exploration and design, construction, construction and installation of petroleum and petrochemical projects; and research and development of alternative energy products.

The Group ranked the 2nd on Fortune's Global 500 List in 2019.

For the reporting period, the Group has included 38 directly owned and controlled subsidiaries, including 4 listed companies and 34 unlisted enterprises, for consolidation purpose. The 4 listed companies are subsidies of China Petroleum & Chemical Corporation listed on the stock exchanges in Hong Kong, New York, London and Shanghai, Sinopec Oilfield Service Corporation ("SSC") listed on stock exchanges in Hong Kong and Shanghai, Sinopec Engineering (Group) Co., Ltd. ("SEG") listed on the Hong Kong Stock Exchange, and Sinopec Oilfield Equipment Corporation ("SOFE") listed on the Shenzhen Stock Exchange.

The Group’s financial statements were approved for disclosure by the management.

2 Basis of preparation for financial statements

The financial statements are prepared in accordance with the Accounting Standards for Business Enterprises promulgated by the Ministry of Finance and its Application Guidance, the Interpretations and other relevant provisions (hereinafter referred to as the Accounting Standards for Business Enterprises collectively).

The financial statements are prepared on the going-concern basis.

3 Statement on compliance with Accounting Standards for Business Enterprises:

The financial statements prepared by the Group meet the requirements of the *Accounting Standards for Business Enterprises* and its application guidelines, and truly and completely reflect the consolidated financial position and the Company's financial position as at December 31, 2019, and the consolidated operating results and the Company's operating results, the consolidated cash flows and the Company's cash flows and other related information for the year then ended.

4 Notes to significant accounting policies and accounting estimates

4.1 Accounting period

The calendar year is adopted for the accounting year of the Group, namely, from January 1 to December 31 of each year.

4.2 Functional currency

The recording currency of the Group is RMB.

4.3 Accounting basis and measurement principle

The Group's accounting is recorded on an accrual basis. Except for certain financial instruments, the financial statements are measured on basis of historical cost. If the assets are impaired, the depreciation reserves shall be provided according to the relevant provisions.

4.4 Business combination

4.4.1 Business combination under common control

For the business combination under the common control, assets and liabilities acquired in business combination from the combinee are measured at the book value of such assets and liabilities in the consolidated financial statements of the ultimate controller on the combination date, except for the adjustment due to the different accounting policies. Capital reserves shall be adjusted according to the difference between the book value of consideration (total face value of the shares issued) paid for the combination) or and the book value of net asset acquired from the combination; in case the capital reserves are not enough for write-down, the retained earnings need to be adjusted.

Expenses occurred directly related to the business combination are included into the current profit or loss when they occurs.

4.4.2 Business combination not under the same control

For the business combination not under the common control, the combination costs are the fair value, on the acquisition date, of any assets paid, any liabilities incurred or assumed, and any equity securities issued by the Group, in exchanges for control over the acquiree. The Group will recognize the assets, liabilities or contingent liabilities acquired from the acquiree at the fair value on the acquisition date.

Intermediary service charges such as audit fee, legal service fee, appraisal and consultancy fee paid for business combination and other relevant general and administrative expenses are included in the current profit and loss when incurred. Transaction expenses incurred by the acquirer for issuance of equity or debt securities as consideration for business combination shall be included in the initial recognition amount of those equity securities or debt securities.

The Group shall recognize the difference of the combination costs in excess of the fair value of the identifiable net assets of the acquiree acquired from the combination as goodwill, which shall be subsequently measured at costs less accumulative impairment provision. The Group shall recognize the difference of the combination costs in short of the fair value of the identifiable net assets of the acquiree acquired from the combination in the current profit or loss after review.

For business combinations accomplished through multiple transactions and by stage, the combination costs shall be the sum of the consideration paid on the acquisition date and the fair value of the acquiree's equity on the acquisition date which already held before. The equity held by the acquiree prior to the acquisition date is remeasured at the fair value on the acquisition date of the equity, and the difference between the fair value and the book value shall be included in the current investment income. In the event that the equity held by the acquiree prior to the acquisition date involves other comprehensive income, other changes to owners' equity are transferred to income of the period, except for other comprehensive income arising from changes in net liabilities or net assets due to the re-measurement of defined benefits plan by the investee.

4.5 Measures for preparation of the consolidated financial statements

The consolidation scope of consolidated financial statements is determined on the basis of control, including the Company and all the subsidiaries controlled by the Company.

The consolidated financial statements of the Company are prepared by the Company on the basis of financial statements of the Company and its subsidiaries as well as other relevant information. In preparing the consolidated financial statements, the accounting policies and the accounting period adopted by the Company and those adopted by its subsidiaries shall be consistent with each other, and significant inter-company transactions and balances are eliminated on consolidation.

In the reporting period, if the subsidiary or business increases due to a business combination under common control, it is deemed that the subsidiary and the business are included in the scope of consolidation from the date when it is controlled by the ultimate controller; the operating results and cash flow from the date when it is controlled by the ultimate controller are included in the consolidated income statement and consolidated statement of cash flow.

The part in shareholders' equity of subsidiaries not attributable to the Company shall be presented separately under the shareholders' equity in the consolidated balance sheet as “minority shareholders' equity”. The share attributable to minority shareholders in subsidiary's current net profit and loss will be separately listed under profit and loss of minority shareholders item in the consolidated income statement. Where the loss shared by minority shareholders of a subsidiary exceeds the shares enjoyed by minority shareholders in the owners' equity of the subsidiary at the beginning of the period, the balance may still offset against the minority equity.

The transaction on purchase of minority equity in the subsidiary or partial disposal of equity investments without losing control over the subsidiary will be accounted for as equity transaction, book value attributable to the owner's equity and minority equity of the parent company will be adjusted to reflect its change in equity related to the subsidiary. Capital reserves should be adjusted according to the difference between the fair value of amount adjusted and that of consideration paid and received; in case the capital reserves are not enough for offset, the retained earnings will be adjusted.

Where the Group can implement control over an investee not under common control due to additional investment or other reasons, the equity held by the combinee before the purchase date is remeasured at the fair value on the purchase date of the equity, and the difference between the fair value and the book value shall be included in the current investment income. In the event that the equity of the acquiree held prior to the acquisition date involves other comprehensive income, other comprehensive income associated therewith is transferred to investment income of the period to which the acquisition date belongs.

When the Group loses the control over the original subsidiary due to disposal of partial equity investment or other reasons, the remaining equity will be remeasured by the Group at its fair value on the date of loss of the control. The difference of total amount of the consideration from disposal of equities plus the fair value of the remaining equities less the shares calculated at the original shareholding ratio in net assets and goodwill of the original subsidiary which are continuously calculated as of the acquisition date is included in the investment income of the period at the loss of control, meanwhile the goodwill shall be offset. Other comprehensive incomes associated with the equity investments of the original subsidiary are transferred into investment income of the period when control is lost, except for other comprehensive income from the change in net liability or net asset due to the investor's re-measurement of defined benefit plans.

When these transactions of disposing equity investment in subsidiary cause loss of control and be deemed as a package deal, the difference between the accumulated disposal considerations before loss of control and the Company's share of the net assets of the subsidiary is recognized as other comprehensive income in the consolidated financial statements, and is transferred into current profit and loss upon loss of control.

4.6 Joint venture arrangements

Joint venture arrangement refers to an arrangement jointly controlled by two or more participants. The Group’s joint venture arrangements are classified into joint operation and joint venture.

4.6.1 Joint operation

Joint operation refers to those joint venture arrangements under which the Group is entitled to relevant assets and be responsible for relevant liabilities.

The Group should recognize the following items related to its share of benefits in the joint operation and conduct accounting treatment in accordance with the relevant accounting standards for business enterprises:

A. Assets it solely holds and its share of jointly-held assets based on its percentage;

B. Liabilities it solely assumes and its share of jointly-assumed liabilities based on its percentage;

C. Incomes from sale of output enjoyed by it from the joint operation;

D. Incomes from sale of output from the joint operation based on its percentage;

E. Separate costs and costs for the joint operation based on its percentage.

4.6.2 Joint ventures

Joint venture refers to those venture arrangements under which the Group is just entitled to the net assets.

The Group conducts the accounting treatment on the investment of joint ventures in accordance with relevant regulations on the accounting via the equity method of the long-term equity investment.

4.7 Recognition criteria of cash and cash equivalents

Cash and cash equivalents include cash on hand, bank deposits, other monetary funds and short-term non-equity investments held by the Company. The recognition of short-term non-equity investments as cash equivalents must meet the following four conditions at the same time: short term (generally refers to maturity within three months from the acquisition date), strong liquidity, easy conversion into known amount of cash, and little risk of value change.

4.8 Foreign currency transactions and translation of foreign currency financial statements

4.8.1 Foreign currency transactions

For the Group's foreign-currency transactions, the foreign-currency amount is translated into the functional currency amount according to the spot exchange rate on the transaction date or the exchange rate at the end of last month. Foreign-currency exchange business or transactions involving foreign currency exchange shall be translated at the exchange rate actually used in the transactions, i.e. the bank purchase price or selling price.

The balance of foreign currency monetary items is adjusted by translating into amount in RMB at the spot exchange rate on the balance sheet date, and the foreign currency non-monetary items measured at fair value are adjusted by translating into amount in RMB at the spot exchange rate on the date determining the fair value. Where the translation differences at the end of the period of the account for special borrowings in foreign currency may be directly attributable to the acquisition, construction or production of assets eligible for capitalization, such translation differences shall be subject to the capitalization as required and included in relevant asset cost; the remaining translation differences of foreign currency account are included in the financial expenses. Translation differences arising from the exchange of different currencies are included in the financial expenses.

4.8.2 Translation of foreign currency financial statements

Assets and liabilities in the balance sheet are translated at the spot exchange rates on balance sheet date; owners' equity items, except for the item of “undistributed profits”, are translated at the spot exchange rates on the dates when the transactions occur. Income and expense items in the income statement and items reflecting the amount of profit distribution in the statement of changes in owner's equity shall be converted using the exchange rate consistent with the initial recognition on the date of occurrence of the foreign-currency transactions. Differences arising from the said translation of foreign-currency financial statements are presented separately as "translation differences of foreign currency statements" under the owners' equity in the balance sheet.

4.9 Financial instruments

A financial instrument refers to a contract from which financial assets of a party and financial liabilities or equity instruments of other parties arise. Where the Group becomes a party to the contract of financial instruments, relevant financial assets or liabilities will be recognized.

(1) Classification and measurement of financial assets

The Group classifies financial assets according to the business model of managing financial assets and the contractual cash flow characteristics of financial assets:

A. Financial assets measured at amortized cost; and

B. Financial assets measured at fair value through other comprehensive income.

C. Financial assets measured at fair value through current profit or loss

Except for accounts receivable or notes receivable that do not consist of or consider significant financing components, financial assets are measured at fair value at initial recognition. For the financial assets which are measured at their fair values and of which the variation is included in the current profits and losses, the transaction expense shall be directly recorded into the profits and losses of the current period. For other categories of financial assets, the transaction expense shall be recorded into the initially recognized amount. Accounts receivable or notes receivable arising from the sale of products or the provision of labor services that do not include or take into account significant financing components are initially recognized by the Group in accordance with the amount of consideration that the Group is expected to be entitled to receive.

1) Debt instruments

① Measured at amortized cost: Assets, which are held for the purpose of receiving contract cash flows and whose cash flows are only for the payment of principal and interest, are classified as financial assets measured at amortized cost.

After initial recognition, such financial assets are measured at amortized cost by using the effective interest method. Gains or losses arising from the financial assets that are measured at amortized cost and that are not part of any hedging relationship shall be included into the current profit or loss when such financial assets are de-recognized, amortized under the effective interest method or impaired.

② Measured at fair value through other comprehensive income: Assets, which are held for the purpose of receiving contractual cash flows and selling the financial assets and whose cash flows are only for the payment of principal and interest, are classified as financial assets measured at fair value through other comprehensive income.

After initial recognition, such financial assets will be subsequently measured at fair value. The interest calculated with the effective interest method, impairment losses or gains and exchange losses or gains shall be recorded into current period profit and loss, and other gains or losses shall be recorded into other comprehensive income. When de-recognized, the accumulated gains or losses previously included in other comprehensive income shall be transferred from other comprehensive income and included in current profit or loss.

③ Measured at fair value through current profit or loss: Except for the financial assets measured at amortized cost and the financial assets measured at fair value through other comprehensive income mentioned above, all the rest debt instruments are classified as financial assets measured at fair value through current profit or loss by the Group.

After the initial recognition, such financial assets will be subsequently measured at fair value, and the gains or losses (including interest and dividends income) arising therefrom will be included in the current profit or loss, unless the financial assets are part of the hedging relationship.

2) Equity instruments
Investments in equity instruments over which the Group has no control, joint control and significant influence are designated as financial assets measured at fair value through the current profit or loss, and are listed as financial assets held for trading.

In addition, the Group designated some non-trading equity instrument investments as financial assets measured at fair value through other comprehensive income and listed them as other equity instrument investments. Dividend income related to such financial assets is included in the current profit or loss. At derecognition, the accumulated gains or losses previously included in other comprehensive income will be transferred from the other comprehensive income to the retained earnings.

(2) Classification and measurement of financial liabilities
Financial liabilities, upon initial recognition, are classified into the financial liabilities measured at amortized cost and the financial liabilities measured at fair value through the current profit or loss. Transaction expenses related to financial liabilities which have not been divided as the financial liabilities measured at fair value through current profit or loss are included in the initial recognition amount.

For financial liabilities measured at amortized cost, the gains or losses arising from their derecognition or amortization are included in the current profit or loss. For financial liabilities that are subsequently measured at fair value, the gains or losses arising from changes in their fair value and the dividends and interest expenses related to the financial liabilities are included in current profit or loss.

(3) Derivative financial instrument
Derivative financial instruments are measured at fair value upon initial recognition and their fair value is re-assessed on each balance sheet date. Gains and losses arising from the reassessment of the fair value of derivative financial instruments shall be included in the current profit or loss except for those meeting the requirements for hedge accounting.

(4) Impairment of financial instruments
The Group recognizes the provision for loss based on the expected credit losses of the financial assets measured at amortized cost, other debt investments measured at fair value through other comprehensive income, the lease receivables, the contract assets, the loan commitments other than financial liabilities classified at fair value through the current profit or loss, and the financial guarantee contracts not measured at fair value through the current profit or loss.

The Group calculates and recognizes the expected credit losses after taking into account reasonable and reliable information such as past events, current situation and forecast of future economic situation.

On the balance sheet date, the Group separately measures the expected credit losses of financial instruments at different stages. If the credit risk of a financial instrument has not increased significantly since the initial confirmation, it is in the first stage, and the Group measures the provision for loss according to the expected credit loss in the next 12 months. If the credit risk of a financial instrument has increased significantly since its initial recognition but no credit impairment has occurred, it is in the second stage and the Group measures the provision for loss according to the expected credit loss of the instrument throughout its life. If a financial instrument has suffered credit impairment since its initial recognition, it is in the third stage, and the Group measures the provision for loss according to the expected credit loss of the instrument throughout its life.

For a financial instrument with lower credit risk on the balance sheet date, the Group assumes that its credit risk has not increased significantly since the initial recognition, and measures the provision for loss according to the expected credit losses in the next 12 months.

For the financial instruments in the first stage and the second stage, as well as those with lower credit risk, the Group calculates the interest income according to its book balance without deducting the impairment provision at actual interest rate. For the financial instruments in the third stage, the interest income is calculated according to the book balance minus the amortized cost after the provision for impairment at the actual interest rate.

For notes receivable, accounts receivable and contract assets, regardless of whether there is any significant financing component, the Group measures the provision for loss according to the expected credit loss for the entire duration.

The Group includes the accrued or reversed provision for loss into the current profit or loss.

(5) Fair value of financial instruments

For the recognition method of fair value of financial assets and financial liabilities, see note 4.29.

(6) Derecognition of financial instruments

In case any financial asset meets one of the following conditions, it will be derecognized:

A. The contract rights of obtaining cash flows of the financial assets are terminated;

B. The financial asset has been transferred, and nearly all the risks and rewards associated with ownership of the financial assets have been transferred by the Group to the transferee;

C. The financial asset has been transferred, even though the Group neither transfers nor retains nearly all the risks and rewards associated with the ownership of the financial asset but gives up its control over the financial asset.

When other equity instrument investment is derecognized, the difference between its book value and the sum of the received consideration and the accumulated amount of changes in fair value originally directly included in other comprehensive income shall be included in retained earnings. When a remaining financial asset is derecognized, the difference between the book value of the financial asset and the sum of the consideration received and the accumulated amount of changes in the fair value originally included in other comprehensive income will be included in the current profit or loss.

A financial liability shall be wholly or partly derecognized if its present obligations are wholly or partly dissolved. As for financial liabilities, the difference between the book value of the derecognized part and the consideration paid is included in the current profit or loss.

(7) Transfer of financial assets
The transfer of a financial asset refers to a transfer or delivery of the financial asset from the issuer of such assets to any party other than the issuer ("the transferee").

Where the Group has transferred nearly all risks and rewards associated with the ownership of a financial asset to the transferee, the financial asset shall be de-recognized; where the Center retains nearly all risks and rewards associated with the ownership of a financial asset, the financial asset shall be continuously recognized.

Where the Group neither transfers nor retains almost all the risks and rewards of ownership of financial assets, the following situations shall be dealt with respectively: if the control over financial assets is waived, the financial asset should be derecognized and the assets and liabilities generated are recognized; where the control over the financial asset is not waived, the relevant financial asset should be recognized according to the extent of continuous involvement in transferred financial assets; the corresponding financial liabilities should be accordingly recognized.

4.10 Hedging instruments

Hedge accounting is a method which recognises the offsetting effects on profit or loss (or other comprehensive income) of changes in the fair values of the hedging instrument and the hedged item in the same accounting period, to represent the effect of risk management activities.

Hedged items are the items that expose the Group to risks of changes in future cash flows and that are designated as being hedged and that must be reliably measurable. The Group’s hedged items include a forecast transaction that is settled with an undetermined future market price and exposes the Group to risk of variability in cash flows, etc.

The term "hedging instrument" refers to a financial instrument designated by an enterprise, by which it is expected that changes in its fair value or cash flow can offset the changes in fair value or cash flow of the hedged item.

The hedging relationship meets all of the following hedge effectiveness requirements:

A. There is an economic relationship between the hedged item and the hedging instrument, which shares a risk and that gives rise to opposite changes in fair value that tend to offset each other;

B. The effect of credit risk does not dominate the value changes that result from that economic relationship;

C. The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item. However, that designation does not reflect an imbalance between the weightings of the hedged item and the hedging instrument.

Cash flow hedges

Cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognized asset or liability or a highly probable forecast transaction, and could affect the profit or loss of the Group.

The gain or loss on the hedging instrument that is determined to be an effective hedge is recognized in other comprehensive income as the reserves of cash flow hedges. The portion of the gain or loss on the hedging instrument that is determined to be an ineffective hedge is recognized in the current profit or loss.

If a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability, or a hedged forecast transaction for a non-financial asset or a nonfinancial liability becomes a firm commitment for which fair value hedge accounting is applied, the entity removes that amount from the cash flow hedge reserve and include it directly in the initial cost or other carrying amount of the asset or the liability.

For the cash flow hedges, other than those covered by the preceding policy statements, that amount is reclassified from the cash flow hedge reserve originally recognized in the other comprehensive income to the current profit or loss as a reclassification adjustment in the same period or periods during which the hedged expected future cash flows affect profit or loss.

If the amount that has been accumulated in the cash flow hedge reserve is a loss and the Group expects that all or a portion of that loss will not be recovered in one or more future periods, the Group immediately reclassifies the amount that is not expected to be recovered into profit or loss.

When the hedging relationship no longer meets the risk management objective on the basis of which it qualified for hedge accounting, or when a hedging instrument expires or is sold, terminated, exercised, or there is no longer an economic relationship between the hedged item and the hedging instrument or the effect of credit risk starts to dominate the value changes that result from that economic relationship or no longer meets the criteria for hedge accounting, the Group discontinues prospectively the hedge accounting treatments. If the hedged future cash flows are still expected to occur, that accumulative cash flow hedge reserve recognized in the other comprehensive income remains in the cash flow hedge reserve and is accounted for as cash flow hedges. If the hedged future cash flows are no longer expected to occur, the accumulative cash flow hedge reserve is immediately reclassified from other comprehensive income to the current profit or loss as a reclassification adjustment. A hedged future cash flow that is no longer highly probable to occur may still be expected to occur, if the hedged future cash flows are still expected to occur, that amount remains in the cash flow hedge reserve and is accounted for as cash flow hedges.

4.11 Inventories

(1) Classification of inventories

The Group's inventories are classified into raw materials, revolving materials, goods in transit, goods in process, self-manufactured semi-finished products, goods in stock, goods dispatched, and contract performance costs.

(2) Measurement method of inventories when acquired and dispatched

Inventories of the Group are measured at actual costs when acquired. When raw materials, goods in progress, goods in stock (except reserved crude oil) and the like are dispatched, the weighted average method or the planned cost method shall be adopted for pricing, the difference between the planned cost and the actual cost shall be separately accounted for through the cost difference account, and at the end of each month, the cost difference borne by the received and dispatched inventories shall be carried forward, and the planned cost shall be adjusted to the actual cost). For the swap sale of reserve crude oil, the swap purchase cost shall be carried forward to the sales cost. If the crude oil sold for swap is not fully replaced on the balance sheet date, the sales revenue will be carried forward temporarily as the sales cost, and the difference will be adjusted according to the actual repurchase cost after the replacement is completed. For inventories that cannot be used instead, inventories purchased or manufactured specially for specific projects, and the cost of providing labor services, the cost of dispatched inventories shall be determined by using the specific identification method. Low-cost consumables shall be amortized by the one-time write-off method when they are collected. Other revolving materials generally adopt the one-time write-off method, and revolving materials with larger value and longer service life are amortized by times over the benefit period.

(3) Method of making provision for inventory depreciation

On the balance sheet date, where the inventory costs are higher than the net realizable values, the provision for inventory depreciation reserves shall be made. The Group makes provision for inventory depreciation of commercial crude oil reserves on combined category basis, and makes such provision for other inventories on an individual item basis. If the factors that previously affected the write-down of inventory value have disappeared, the provision for inventory depreciation is reversed within the original provision made.

(4) Determination method for net realizable values of inventories

The net realizable values of inventories refer to the amounts of the estimated selling prices of inventories minus the estimated costs to completion, estimated selling expenses and relevant taxes and surcharges. In determining the net realizable value of inventories, the purpose of holding the inventories (except for the crude oil reserves) and the influence of post balance sheet events are both taken into account. The net realizable value of commercial crude oil reserves is determined based on the estimated future (five-year) crude oil price with consideration to the incidental transportation expenses and the oil premiums and discounts that have occurred.

(5) Inventory system

The perpetual inventory system is adopted by the Group.

4.12 Long-term equity investments

The Group's long-term equity investments include equity investment by which the Company exercises control and significant influence over the investee and equity investment in joint ventures. Where the Group is able to have significant influences on an investee, the investee is an associate of the Group.

4.12.1 Determination of investment costs

Long-term equity investments are measured at the investment costs upon acquisition. The investment costs are the fair value of any assets acquired, any liabilities incurred or assumed, and any equity securities issued for acquisition of such investment, including the relevant direct costs. For long-term equity investments formed from business combinations under common control, the investment costs thereof shall be recognized at the share of book value of the combinee's owners' equity on the acquisition date.

4.12.2 Subsequent measurement and recognition methods of profit or loss

The Group measures the long-term equity investments that can exercise control over the investee under the cost method, and measures the investments in associates and joint ventures under the equity method.

① Long-term equity investments under cost method

For the long-term equity investments under the cost method, except for the actual price paid for acquisition of investment or the cash dividends or profits contained in the consideration which have been declared but not yet distributed, the cash dividends or profits declared to be distributed by the investee are recognized as investment income to be included in current profit or loss.

② Long-term equity investments under equity method

For the Group's long-term equity investments measured under the equity method, if the investment costs are higher than the investor's attributable share of the fair value of the investee's identifiable net assets, no adjustment will be made to the investment costs of the long-term equity investments; if the investment costs are lower than the investor's attributable share of the fair value of the investee's identifiable net assets, the book value of long-term equity investments should be adjusted, and the difference should be included into the current profit or loss.

When the equity method is adopted, the Company shall, according to the shares of net profits and losses and other comprehensive income realized by the investee which the Company shall enjoy or bear, recognize the profit and loss on the investments and other comprehensive income and adjust the book value of the long-term equity investments; the Company shall calculate the part distributed from cash dividends or profits declared by the investee and correspondingly reduce the book value of the long-term equity investments; for other changes in owner's equity of the investee other than net profit or loss and profit distribution, the Company adjusts the book value of long-term equity investments and includes such changes in owner's equity. When recognizing the attributable share of net profit or loss of the investee, the Company should, based on the fair value of identifiable net asset of the investee when it obtains the investment, recognize its attributable share of the net profit or loss of the investee after the adjustment according to the Group's accounting policy and accounting period.

③ Conversion between the equity method and the cost method for long-term equity investments

Where the Company can have significant influence on or implement jointly control over an investee but not constitute a control due to additional investment or other reasons, the initial investment cost should be changed to be accounted for under the cost method and recognized at the sum of the fair value of equity investments originally held and newly increased investment costs. Where previously held equity investment is classified into other equity instruments investments, the difference between its fair value and book value and the cumulative change in fair value originally recognized in other comprehensive income should be transferred to the retained earnings calculated under the equity method.

4.12.3 Basis of control, common control over or significant impact on the investee

Control means that the Company has the power over the investee and enjoys the variable return through participating in activities related to the investee, and has the ability to affect the return of the investee by using the power over the investee. The financial positions, operating results and cash flows of subsidiaries are included in the consolidated financial statements from the control start date to the control end date.

Joint control refers to the control shared over an arrangement in accordance with the relevant stipulations, and the decision-making of related activities of the arrangement should not be made before the party sharing the control right agrees the same.

Significant influence refers to the power of the investor to participate in making decisions on the financial and operating policies of the investee, but not the power to control, or jointly control, the formulation of such policies with other parties. In determining whether to exercise significant influence over the investee, the Company will consider the voting shares of the investee directly or indirectly held by the investor, and effects of the transfer into the equities of the investee from the potential voting rights to be exercisable in current period held by the investor and other parties under an assumption such as the effects of the current convertible warrants, security options, convertible corporate bonds, etc. issued by the investee.

4.12.4 Disposal of long-term equity investments

For the disposal of long-term equity investments, the difference between the book value and the actual price thereof shall be included in the investment income. For long-term equity investment accounted for using the equity method, if it is included in other comprehensive income due to changes in other comprehensive income of the investee, the part originally included in other comprehensive income shall be transferred to investment income according to the corresponding proportion when the investment is disposed.

In case the joint control or significant influence over the investee is lost for disposing part of equity investments and other reasons, the remaining equity should be calculated as the difference between the fair value and the book value on the date of the loss of joint control or significant influence and be included in the current profit and loss. For other comprehensive income recognized from accounting of the original equity investments under the equity method, accounting treatment should be made by using the same basis for the investee to directly dispose the relevant assets or liabilities when the equity method is no longer adopted. Other changes in equity interests related to original equity investment should be included in current profit or loss.

Where the Company losses control over the investee due to its disposal of part of equity investment or other reasons, if it can exercise joint control over or significant influence on the investee through the remaining equities after disposal, the remaining equities shall be measured by changing to employ the equity method and adjusted as if the remaining equities had been measured by employing the equity method ever since acquired in preparation of separate financial statements; if the Company cannot exercise joint control over or a significant influence on the investee through the remaining equities after disposal, the accounting treatment shall be changed to be made in accordance with relevant provisions of the Accounting Standard for Business Enterprises No.22- Recognition and Measurement of Financial Instruments, and the difference between the fair value and book value thereof on the date of loss of the control shall be included in current profit or loss.

4.12.5 Impairment of long-term equity investments

For investments in subsidiaries, associates and joint ventures, as well as the Group's provision method for asset impairment, see the Note 4.20.

4.13 Fixed assets

AMOUNTS ARE EXPRESSED IN RMB '000,000 UNLESS OTHERWISE STATED

4.13.1 Recognition criteria of fixed assets

The Group's fixed assets refer to the tangible assets held for the purpose of producing commodities, providing services, renting or business management with useful lives exceeding one accounting year. Fixed assets are recognized when they meet the following conditions at the same time: economic benefits related to the fixed assets are likely to flow into the enterprise and the cost of the fixed assets can be measured reliably.

4.13.2 Measurement of fixed assets

The Group's fixed assets are initially measured at actual costs on acquisition.

4.13.3 Classification and depreciation policy of fixed assets

The Group accounts for its fixed assets by categories and determine their estimated useful life, estimated net residual value and depreciation method in accordance with the Depreciation Life of Fixed Assets of China Petrochemical Corporation.

Other than assets that are fully depreciated and remain in use as well as land and other assets that are separately measured and accounted for according to provisions on assets checkup and capital verification, the Group provides depreciation for all fixed assets.

The Group adopts the straight-line method for the provision for depreciation. For fixed assets for which no provision for impairment has been made, their depreciation shall be accrued by category, estimated useful lives and expected residual value. The Group determines the annual depreciation rate of various fixed assets as follows:

Category of fixed assets	Estimated useful life (year)	Estimated residual rate (%)	Annual depreciation rate (%)
Buildings and constructions	12-40	3	2.43-8.08
General equipment	4-20	3	4.85-24.25
Special equipment for oil and gas exploration	8-18	3	5.39-12.13
Special equipment for petroleum and chemical industry	10-20	3	4.85-9.70
Others	4-30	0-3	3.23-25.00

For a fixed asset whose estimated depreciation life and estimated residual rate are re-estimated within its useful life and which has been provided with impairment reserve, the depreciation rate and amount are re-determined according to the fixed asset's book value and its remaining useful life. When the depreciation amount of fixed assets is adjusted due to the impairment reserve of fixed assets, the accumulated depreciation previously accrued shall not be adjusted.

Leases with almost all the risks and rewards relevant to the ownership of the fixed assets being materially transferred are recognized as finance leases, and other leases are recognized as operating leases.

For fixed assets acquired under finance leases, if it is reasonably certain that the ownership of the leased assets will be transferred to the lessee by the end of the lease term, they shall be depreciated over their remaining useful lives; otherwise, the leased assets shall be depreciated over the shorter of the lease terms or their remaining useful lives.

4.13.4 Subsequent expenses of fixed assets

Subsequent expenses of fixed assets of the Group refer to expenses from updating and improvement, repair costs of fixed assets during use.

Subsequent expenses such as renovation and reconstruction costs of fixed assets, which meet the conditions for recognition of fixed assets, shall be included in the cost of fixed assets, and the book value of the replaced parts (if any) shall be deducted; expenses such as repair costs that do not meet the conditions for recognition of fixed assets shall be included in the current profit or loss when incurred.

4.13.5 Provision for impairment of fixed assets

See 4.20 for testing and provision methods of impairment of fixed assets.

4.14 Oil and gas assets

4.14.1 Classification, recognition and measurement of oil and gas assets

The Group's oil and gas assets include wells and related facilities, rights and interests in proven mining areas, and rights and interests in unproved mining areas. When the economic benefits related to the oil and gas assets are likely to flow into the enterprise and the cost of the oil and gas assets can be measured reliably, the oil and gas assets are recognized, and the Group carries out initial measurement based on the actual cost incurred.

When the rights and interests in proven mining areas and unproved mining areas are obtained, the initial cost of oil and gas assets shall be recognized based on the actual expenses incurred. The rights and interests in unproved mining areas shall be transferred to the current profit and loss when the proven economically recoverable reserves are not finally obtained.

After completion of the well, the drilling exploration expenditure shall be handled respectively as follows:

A. If there is economically proved recoverable reserves found in the well, the well drilling expenditures shall be carried forward to the cost of the well and related facilities;

B. If there is no economically proved recoverable reserves found in the well, the well drilling expenditures shall be carried forward to the cost of the well and related facilities;

C. If it is impossible to determine whether there is economically proved recoverable reserves upon the well completion practice, the expenditures shall be capitalized temporarily for a time not exceeding one year.; If it is still impossible to determine whether there is economically proved recoverable reserves after one year from the well completion practice, and the following conditions are met at the same time, the capitalized expenditures for drilling the well will continue to be capitalized temporarily, otherwise, they will be included in the current profit or loss:

   1) It is discovered that the well has enough reserves, but further exploration activities are needed to determine whether it is economically proved recoverable reserves.

   2) Further exploration activities are already in progress or in plan and will soon be implemented.

D. If an exploratory well that has been expensed for drilling exploration is found to having economically proved recoverable reserves, the expensed drilling exploration expenditure shall not be adjusted, and the expenditures incurred for re-drilling and completion shall be capitalized.

The cost of development wells and related auxiliary equipment shall be capitalized.

Non-drilling exploration expenditures are included in the current profit or loss when incurred and will not be capitalized.

Oil and gas development expenditure, when reaching the expected serviceable condition (dry wells are completed), is transferred to the cost of oil and gas assets.

4.14.2 Depletion policy for oil and gas assets

Oil and gas mining enterprises under the Group accrue depreciation for oil and gas assets using the production method based on the production and the oil and gas reserves.

4.14.3 Disposal fee of oil and gas assets

The Group will accrue deposit disposal fee for its obligation to dispose of oil and gas assets that meet the conditions for recognition of estimated liabilities from these assets' present value, while recognizing the estimated liabilities. The disposal fees of oil and gas assets are depreciated in accordance with the depreciation policy for related assets. The difference between the final value and present value of the mining area disposal fees is amortized over the life of the related assets, included in the current financial expenses, with estimated liabilities recognized at the same time.

The disposal expenses incurred to the Group for oil and gas assets that have not been accrued with mining area disposal fees are included in the current profit or loss when incurred.

4.14.4 Provision for impairment of oil and gas assets

See 4.20 for testing and provision methods of impairment of oil and gas assets.

4.15 Construction in progress

4.15.1 Measurement of construction in progress

The Group determines the project costs at the expenses actually incurred in construction in progress. The borrowing costs of special borrowings eligible for capitalization incurred for the purchase and construction of fixed assets and the borrowing costs of general borrowings eligible for capitalization conditions are included in the cost of construction in progress.

4.15.2 Time point of conversion of construction in process into fixed assets:

The book-entry values of the fixed asset are stated at all the expenditures incurred before the Group’s constructions in progress reaching the working condition for their intended use. For fixed assets constructed that has reached working condition for intended use but for which the completion settlement has not been handled, it shall be transferred into fixed assets at the estimated value according to the project budget, construction price or actual cost, etc. as of the date when it reaches the serviceable condition for intended use, and the fixed assets shall be depreciated in accordance with the Group’s depreciation policy for fixed assets; adjustment shall be made to the estimated value based on the actual cost after the completion of settlement is handled, but depreciation already provided for will not be adjusted.

4.15.3 Provision for impairment of construction in process

See Note 4.20 for provision method of impairment of construction in progress.

4.16 Borrowing costs

4.16.1 Recognition criteria of capitalization and disbursement of borrowing costs

The borrowing costs incurred to the Group and directly attributable to the acquisition and construction or production of assets eligible for capitalization should be capitalized and included in relevant asset costs; other borrowing costs should be recognized as costs based on the amount incurred and be included in the current profit or loss.

Assets eligible for capitalization refer to fixed assets, investment property, inventories and other assets which may reach their intended use or sale status only after long-time acquisition and construction or production activities.

4.16.2 Conditions for capitalization and disbursement of borrowing costs

Borrowing costs incurred to the Group may be capitalized only when all the following conditions are met at the same time:

A. Asset disbursements have already been incurred;

B. Borrowing costs have already been incurred; and

C. The acquisition and construction or production activities which are necessary to prepare the assets for their intended use or sale have been in progress.

If the acquisition, construction or production activities of assets eligible for capitalization are abnormally interrupted and such condition lasts for more than three months, the capitalization of borrowing costs should be suspended.

The capitalization of borrowing costs should be ceased when the acquired and constructed or produced assets eligible for capitalization have reached their intended use or sale condition.

When some projects among the acquired and constructed or produced assets eligible for capitalization are completed and can be used separately, the capitalization of borrowing costs of such assets should be ceased.

4.16.3 Capitalization period for borrowing costs

The capitalization period refers to the period from the commencement of capitalization of borrowing costs to its cessation, excluding the period of capitalization suspension of borrowing costs.

4.16.4 Method of calculating the capitalization rate and capitalized amounts of borrowing costs

The amount of interest expenses and ancillary expenses for special borrowings, after deducting the interest income from the unused borrowing funds deposited in banks or the investment income from the temporary investment, is capitalized before the assets eligible for capitalization purchased or constructed or produced reach their intended use or sale status.

Where general borrowings are used for acquiring and constructing or producing assets eligible for capitalization, the expenses of general borrowings to be capitalized are calculated by multiplying the weighted average of asset disbursements of the part of accumulated asset disbursements exceeding special borrowings by the capitalization rate of the used general borrowings. The capitalization rate is calculated by weighted average interest rate of general borrowings.

Where there are discounts or premiums on borrowings, amounts of discounts or premiums should be amortized in each accounting period by the effective interest method, and the amount of interest for each accounting period should be adjusted.

4.17 Intangible assets

4.17.1 Measurement and amortization methods of intangible assets

The Group's intangible assets are initially measured at actual cost, and their useful lives are analyzed and determined upon acquisition. Intangible assets with finite useful life are amortized by stages at the straight-line method over their estimated useful lives when they are available for use.

4.17.2 Useful lives and amortization periods of intangible assets

A. The useful life of intangible assets derived from contractual rights or other legal rights shall not be longer than the term of contractual rights or other legal rights; if the contractual rights or other legal rights can be extended upon expiration due to contract renewal, and if there is evidence that the Company does not need to pay a large cost for the renewal, the renewal period is included in the useful life;

B. If the useful life is not stipulated in the contract or the law, the Group will employ relevant experts to conduct argumentation, or compare with its peers, and refer to historical experience to determine the period during which the intangible assets can bring future economic benefits to the Group;

C. If it is still impossible to reasonably determine the period of economic benefits brought by intangible assets after the above efforts, such assets will be regarded as intangible assets with indefinite useful lives.

4.17.3 Provision for impairment of intangible assets

See Note 4.20 for provision method of impairment of intangible assets.

4.18 Research and development expenditures

The Group's internal research and development expenditures include those incurred in the research phase and those in the development phase.

Expenditures incurred in the research phase are included in the current profit or loss when it occurs.

Expenditures incurred in the research phase are capitalized only when all of the following conditions are satisfied simultaneously: in respect of the technology, it is feasible to finish the intangible asset for use or sale; it is intended to finish and use or sell the intangible assets; the usefulness of methods for intangible assets to generate economic benefits should be proved, including being able to prove that there is a potential market for the products manufactured by applying the intangible assets or there is a potential market for the intangible assets themselves or the intangible assets will be used internally; it has obtained sufficient support in technology, financial resources and other resources to complete the development of the intangible asset, and is able to use or sell the intangible asset; the expenditures attributable to the intangible assets during their development phase can be reliably measured. Development expenditures that do not meet the above conditions are included in the current profit or loss.

The Company's relevant projects enter the development phase after meeting the above conditions, going through technical feasibility and economic feasibility studies and being approved for implementation.

Capitalized expenditures in the development phase are presented as development expenditures on the balance sheet, and are transferred to intangible assets from the date when the project reaches the working condition for intended use.

4.19 Long-term deferred expenses

The Group's long-term deferred expenses refer to various expenses that cannot be all included in the current profit or loss and should be amortized in subsequent years. The expenses are calculated based on the actual amount incurred and evenly amortized over the expected useful life or workload.

4.20 Impairment of assets

The Group's impairment of assets, such as the long-term equity investments in subsidiaries, joint ventures and joint ventures and the investment property, fixed assets, oil and gas assets, construction in progress, intangible assets, goodwill and other non-current assets that are subsequently measured by the cost model, are determined according to the following methods:

The Group shall, on the balance sheet date, make a judgment on whether there is any indication that the assets may impair. If such indication does exist, the Group shall estimate the recoverable amount and carry out an impairment test. Impairment tests for goodwill arising from the business combination, intangible assets with indefinite useful lives and intangible assets that have not reached the serviceable conditions shall be conducted every year whether the indication of impairment exists or not.

The recoverable amounts of assets are the higher between the net amount of their fair values less the disposal expenses and the present values of estimated future cash flows. The Group shall, on the basis of single item assets, estimate the recoverable amount. Where it is difficult to do so, it shall determine the recoverable amount of the group assets on the basis of the asset group to which the asset belongs. The recognition of an asset group shall base on whether the main cash inflow generated from the asset group is independent of those generated from other assets or other asset groups.

Where the recoverable amount of an asset or an asset group is lower than its book value, the book value of the asset or asset group shall be written down to their recoverable amounts. The write-downs are included in the current profit or loss, and the provision for asset impairment shall be made accordingly at the same time.

Goodwill is tested in combination with goodwill-related asset group or portfolio of asset groups. In the course of impairment test, if the indication of impairment of goodwill-related asset group or portfolio of asset groups exists, the Company shall firstly test the impairment of asset group or portfolio of asset groups excluding the goodwill, calculate the recoverable amount and recognize relevant impairment losses. Then, the Company shall test the impairment of the asset group or portfolio of asset groups with goodwill, and compare the book value thereof with said recoverable amount; if the said recoverable amount is lower than the book value thereof, it shall recognize the losses from impairment of goodwill.

Losses from asset impairment will not be reversed in subsequent accounting periods once recognized.

4.21 Employee compensation

4.21.1 Scope of employee compensation

Employee compensation refers to all kinds of remuneration or compensation paid by the Group in exchange of the services offered by the employees or for the cancellation of the labor relationship. Employee compensation mainly includes short-term compensation, post-employment benefits, dismissal benefits and other long-term employee benefits. The welfare provided by an enterprise to employees' spouses, children, dependents, family dependants of the deceased employee and other beneficial owners also belong to employee compensation.

During the accounting period when employees provide services, the Group recognizes the actual wages, bonuses, medical insurance premiums, work-related injury insurance premiums, maternity insurance premiums and other social insurance premiums and housing accumulation funds paid for employees according to the prescribed standards and proportions as liabilities, and includes them in the current profit or loss or related asset costs. If the liabilities are not expected to be fully paid within 12 months from the end of the reporting year in which the employees provide relevant services and the financial impact arising therefrom is significant, such liabilities will be measured at a discounted amount.

4.21.2 Post-employment benefits

The post-employment benefit plans include defined contribution plans and defined benefit plans. Among them, the defined contribution plans refer to the after-service welfare plans under which the enterprise will no longer undertake further payment obligations after paying fixed fees to independent funds, and the defined benefit plans refer to the after-service benefit plan other than the defined contribution plan.

The defined contribution plans include basic endowment insurance, unemployment insurance and enterprise annuity plans.

The Group has established a supplementary pension insurance system in accordance with SASAC's *Reply on the Trial Implementation of Enterprise Annuity System by China Petrochemical Corporation* (GZFP [2009] No.1387) and relevant regulations of the Group. In addition, the Group has no other major social security commitments for employees.

During the accounting period in which employees serve the Group, the payable amount calculated according to the defined contribution plans should be recognized as a liability and included in the current profit or loss or the asset-related cost.

For defined benefit plans, the actuarial valuation is carried out by an independent actuary on the annual balance sheet date, and the cost of providing benefits is determined by the expected cumulative benefit unit. The employee compensation costs incurred to the Group in defined benefit plans include the following components:

① Service costs, including current service costs, past service costs and settlement gains or losses. Among them, the current service cost refers to the increase in the present value of obligations under the defined benefit plans due to employees' services in the current period; the past service cost refers to the increase or decrease in the present value of obligations under the defined benefit plans related to employee services in the previous period due to the revision of the defined benefit plans;

② The net interest on the net liabilities or net assets of defined benefit plans includes the interest income on the planned assets, the interest expense on obligations under the defined benefit plans, and the interest affected by the asset cap.

③ The changes arising from the re-measurement of net liabilities or net assets of defined benefit plans

Unless other accounting standards require or allow employee welfare costs to be included in asset costs, the Group will include the items ① and ② above in the current profit or loss; and will include the item ③ in other comprehensive income without reversal to the profit or loss of subsequent accounting period, but may transfer the amount recognized in other comprehensive income within the scope of equity, or transfer the part originally included in other comprehensive income all to undistributed profit within the scope of equity upon termination of the original defined benefit plans.

4.21.3 Dismissal benefits

Where the Group provides dismissal benefits for employees, the employee compensation liabilities incurred from such dismissal benefits are included in the current profit or loss at the date when the Company is unable to unilaterally withdraw the dismissal benefits provided in the plan on the cancellation of labor relationship or the layoff proposal, or when the Company recognizes the cost related to restructuring concerning payment of dismissal benefits, whichever is earlier.

4.22 Bonds payable

4.22.1 Convertible bonds

A. Convertible bonds with equity component

When the holder of convertible bonds can choose to convert the bonds into equity, and the number of shares converted and the conversion consideration will not change subsequently, the convertible bonds will be accounted for as a hybrid financial instrument including liability part and equity part.

The liability part of convertible bonds is measured on initial recognition at the present value of the interest and principal to be paid, and the discounted interest rate can refer to the market interest rate of similar debts that had no conversion option on initial recognition. Any excess of the proceeds over the part initially recognized as liabilities will be recognized as the equity part. Transaction costs related to the issuance of convertible bonds are distributed according to the proportion of liabilities and equity to the proceeds.

After initial recognition, the liability part not designated as liabilities measured at fair value through the current profit or loss will be measured by amortized cost using the effective interest rate method. The equity part of convertible bonds will not be remeasured after initial measurement.

When convertible bonds are converted, their equity part and liability part are transferred to equity and capital reserves (share premium). If convertible bonds are redeemed, the price paid for redemption and the transaction costs incurred will be allocated to the equity and liability parts, and the difference between them and the book value of the equity and liability parts will be included in equity if it is related with the equity part and will be included in the profit or loss if it is related with the liability part.

B. Other convertible bonds

Convertible bonds have the option of cash redemption and the features of other embedded derivatives, and thus need to be separate into liabilities and derivatives for presentation purpose.

Derivatives of convertible bonds are measured at fair value upon initial recognition. Any excess of the proceeds over the part initially recognized as derivatives will be recognized as the liability part. Transaction costs related to the issuance of convertible bonds are distributed according to the proportion of liabilities and derivatives to the proceeds. Transaction costs allocated to the liability part are recognized as part of the liability first, while transaction costs allocated to the derivative part are included in the current profit or loss.

On each balance sheet date, the subsequent measurement of derivatives is made at fair value, and the changes in fair value are included in the current profit or loss. The liability part is subsequently measured at amortized cost using the effective interest rate method until it is converted or redeemed. The liability part and derivative part are shown in parallel in the financial statements.

The book values of derivatives and liabilities are transferred into shares as consideration for issuing shares when convertible bonds are converted into equity.

4.22.2 Other bonds

Other bonds publicly issued by the Group are initially measured at the amount of the fair value less the transaction costs and are measured subsequently based on the amortized costs under the effective interest rate method during the remaining period.

The interest costs will be capitalized when they are eligible for capitalization, otherwise they will be included in the current profit or loss directly.

4.23 Estimated liabilities

The Group's estimated liabilities include liabilities likely to arise from matters including external guarantees, discount of commercial acceptance bills, pending litigations, product quality assurance, loss contract and restructuring obligations.

The Group recognizes the estimated liabilities when obligations related to contingencies satisfy all the following conditions: such obligation is a present obligation of the Company; the performance of such obligation is likely to result in outflow of economic benefits; and the amount of the obligation can be measured reliably.

4.24 Revenue

The Group fulfills its performance obligations in the contract, that is, it recognizes the revenue when the customer obtains control over the relevant goods or services. Obtaining control over the relevant goods or services means being able to dominate the use of the goods or the provision of the services and to receive almost all economic benefits from them.

For the performance obligations performed within a certain period, the Group recognizes revenue according to the performance progress during that period. For performance obligations performed at a certain time-point, the Group recognizes revenue when the customer obtains control over the relevant goods or services.

4.24.1 Sales of goods

The sales contracts between the Group and its customers usually only include the performance obligation for transferring goods. When any customer obtains the control over relevant goods, the Group will recognize the revenue based on the amount of consideration that it is expected to receive. The Group will consider the following signs when judging whether the customer has acquired control over relevant goods:

A. Acquisition of the current right to collect the payment for goods;

B. Transfer of main risks and rewards in goods ownership;

C. Transfer of legal ownership of the goods, and transfer of the goods asset in kind; and

D. Customer's acceptance of the goods.

4.24.2 Construction

Construction contracts between the Group and its customers usually include performance obligations for infrastructure construction. As customers are able to control the goods under construction by the Group in the course of performing obligations, the Group regards it as a performance obligation to be performed within a certain period, and recognizes the revenue according to the performance progress, except for the case that the performance progress cannot be reasonably determined. The Group determines the performance progress of services rendered according to the output method. When the performance progress cannot be reasonably determined, if the cost incurred to the Group is expected to be compensated, the revenue will be recognized according to the amount of the cost incurred until the performance progress can be reasonably determined.

4.24.3 Rendering of services

Service contracts between the Group and its customers mainly include such performance obligations as petroleum engineering and technical services, and engineering design.

For service contracts that meet one of the following conditions:

A. The customer obtains and consumes the economic benefits brought by the performance of the Company while the Company is performing the obligation;

B. Customers are able to control the goods under construction by the Company in the course of performing obligations; or

C. The services rendered in the course of performing obligations have irreplaceable uses, and the Group has the right to receive payments for the portion of the performance that has been completed to date.

The Group regards it as a performance obligation to be performed within a certain period, and recognizes the revenue according to the performance progress, except for the case that the performance progress cannot be reasonably determined. When the performance progress cannot be reasonably determined, if the cost incurred to the Group is expected to be compensated, the revenue will be recognized according to the amount of the cost incurred until the performance progress can be reasonably determined.

For service contracts that do not meet one of the above conditions, the Group will regard them as performance obligations to be performed at a certain time-point and recognize the revenue at the time-point when the customer obtains control over the relevant services.

4.25 Government grants

Government grants are recognized when the Company can meet the conditions for the government grants and can obtain the grants.

Government grants in the form of monetary assets are measured at the amount received or receivable. The government grants offered in the form of non-monetary assets are measured at fair value, or at the nominal value of RMB 1 if the fair value cannot be reliably obtained.

The asset-related government grants are recognized as deferred income, allocated evenly over the useful lives of the assets, and included in the current profit or loss; the income-related government grants, if used to compensate relevant expenses or losses already incurred, are included into the current profit or loss, or if used to compensate relevant expenses or losses in the future, are included in the deferred income and later included in the current profit or loss during the period when relevant expenses are recognized. Government grants measured at nominal amount are directly included in the current profit or loss.

Government grants relevant to the routine activities of the Company are included in the other income. Government grants irrelevant to the routine activities of the Company are included in the non-operating revenue and expenses.

For the interest subsidies for policy-based preferential loan, if the finance department appropriates the interest subsidies to the lending bank, the Company will take the book-entry value at the loan amount actually received, and calculate relevant loan expenses based on the principal of the loan and the policy-based preferential interest rate. Where the finance department directly appropriates the interest subsidies to the Group, the interest subsidies will be used to offset related loan expenses.

Where recognized government grants becomes repayable, it shall be handled accordingly as follows: if there is relevant deferred income balance, the government grants repayable will be offset against the book balance of the deferred income, and the remainder will be included in the current profit or loss; if there is no relevant deferred income, the government grants repayable will be directly included in the current profit or loss.

4.26 Deferred income tax assets and deferred income tax liabilities

Income tax includes the current income tax and deferred income tax. All income tax expenses are included in the current profit or loss, other than the adjusted goodwill generated from business combination or the deferred income tax relating to the transactions or matters directly included in the owners' equity, which are included in the owners' equity.

The Group recognizes the deferred income tax by the debt method based on balance sheet at the temporary difference between the book value of the asset or liability on the balance sheet date and the tax base.

On the balance sheet date, if the Group has the legal right to settle in net amounts and intends to settle in net amount or to obtain assets and discharge liabilities simultaneously, the current income tax assets and current tax liabilities will be presented based on the net amount after offset.

Taxable temporary differences are recognized as deferred income tax liabilities, except that such taxable temporary differences are generated from following transactions:

(1) The initial recognition of goodwill, or the initial recognition of assets or liabilities arising from transactions with the following characteristics: The transaction is not a business combination, and the transaction, when occurring, affects neither accounting profit nor taxable income;

(2) As to taxable temporary differences related to the investments in subsidiaries, joint ventures and associates, the time of their reversal can be controlled and they are not likely to be reversed in the foreseeable future.

For deductible temporary differences, and deductible losses and tax deduction that can be carried forward to the next year, corresponding deferred income tax assets are recognized by the Group to the extent of the amount of future taxable income that may be probably obtained to be offset against deductible temporary differences, deductible losses and tax deduction; unless such deductible temporary differences are generated from following transactions:

(1) The transaction is not a business combination, and the transaction, when occurring, affects neither accounting profit nor taxable income;

(2) For the deductible temporary differences arising from investments in subsidiaries, associates and joint ventures, the deferred income tax assets will be accordingly recognized when meeting the following conditions at the same time: the temporary differences may be reversed in the foreseeable future and they can be used to offset the taxable income of deductible temporary differences in the future.

On the balance sheet date, the Group measures the deferred income tax assets and deferred income tax liabilities at the tax rate applicable to the period where such assets will be recovered or the liabilities will be discharged, and express that effect of income tax on asset recovery or liability discharge on the balance sheet date.

On the balance sheet date, the Group reviews the book value of deferred income tax assets. If it is unlikely to obtain sufficient taxable income in the future to offset against the benefit of deferred income tax assets, the book value of deferred income tax assets will be written down. If it is likely to obtain sufficient taxable income, the book value of deferred tax assets written down will be recovered.

4.27 Work safety costs

According to the relevant provisions of the *Circular of the Ministry of Finance and the State Administration of Work Safety on Issuing the Administrative Measures for the Withdrawal and Use of Work Safety Costs of Enterprises* (CQ [2012] No.16), the work safety costs for crude oil and natural gas extraction business are withdrawn on a monthly basis according to the crude ore output, specifically as RMB 17 per ton for crude oil and RMB 5/103 m^3 for natural gas. The work safety cost for petroleum engineering business (excluding geophysical exploration and surface construction) is withdrawn on a monthly basis at 2.5% of the operating income. The same for petrochemical engineering business (SEG) is withdrawn at 1.5% of the construction and installation cost. The same for refinery and chemical business is withdrawn every month at 0.2%-4% of the actual operating income of various dangerous goods listed in the *List of Dangerous Goods* (GB12268) for the prior year, in an excess regressive manner. The same for machinery manufacturing business is withdrawn every month at 0.05%-2% of the actual operating income for the prior year, in an excess regressive manner.

The work safety costs, upon withdrawal, are included in the cost of related products or the current profit or loss, and recognized in the item of "special reserves" at the same time.

When withdrawn work safety costs are used within the prescribed range and belong to expenses, such costs will be used to directly offset the special reserves; if fixed assets generate therefrom, the incurred expenses will be accumulated under the item "construction in progress" and recognized as fixed assets when the safe project is completed and reaches the working conditions for its intended; meanwhile, special reserves will be offset according to the costs of fixed assets, and the accumulated depreciation of the same amount will be recognized. Provision for depreciation of such fixed assets will be no longer made in subsequent periods.

4.28.1 Leases (Old Standards)

The Group divides leases into the operating lease and finance lease.

(1) Operating lease

The rental from operating lease is included in the related asset cost or the current profit or loss at straight-line method during each stage of the lease term. The initial direct cost incurred of the leasee is included in the general and administrative expenses, while the contingent rental is included in the current profit or loss when it actually occurs.

(2) Finance lease

On the lease commencement date, the Company (leasee) takes the fair value of the leased asset or the present value of the minimum lease payment (whichever is lower) as the entry value of the leased asset, and takes minimum lease payment as the book value of long-term payables, and the difference between them is deemed as unrecognized finance fees. In the course of lease, handling charges, legal expenses, travel expenses, stamp duties and other initial and direct expenses attributable to the lease program are included in the value of leased assets. The Company amortizes the unrecognized finance fees within all stages of the lease term by the effective interest method, and includes the amortized amount in the current profit or loss, and include the contingent rental in the current profit or loss when it actually occurs.

4.28.2 Leases (New Standards)

Lease refers to a contract where the leaser transfers the asset use right to the leasee for a certain period to get relevant consideration.

(1) The Group acts as the leasee

The Group recognizes the assets where the use right belongs as of the starting date of the lease term, and recognizes the lease liability at the present value of unpaid lease payment. Lease payment includes fixed payment, and the payments which need to be paid for exercising the option for purchase or lease termination upon the reasonable determination. The variable rental determined at a certain rate of the amount of sales does not be included in the lease payment, but should be included in the current profit or loss when it actually occurs. The Group presents the lease liabilities paid within one year (including one year) of the balance sheet date as the non-current liabilities maturing within one year.

The Group’s right-of-use assets mainly include lands. The initial measurement of right-of-use assets is conducted at cost, which includes the initially measured amount of lease liabilities, the lease payment paid on or before the starting date of lease term, and the initial direct costs, and where the lease incentives received have been deducted. The Group makes the provision for depreciation by the straight-line method during the lease term or the remaining useful life of leased assets, whichever is shorter. When the recoverable amount is less than the book value of the right-of-use assets, the Group will write down the book value to the recoverable amount.

For the short-term lease with the lease term less than 12 months and the lease of individual assets with low value in the new age, the Group chooses not to recognize the right-of-use assets and lease liabilities, and includes relevant rental expenses in the current profit or loss or related asset cost by the straight-line method within all stages of the lease term.

(2) The Group acts as the leaser
The finance lease refers to the lease where all risks and rewards related to the ownership of leased assets have been transferred. The lease other than the finance lease refers to the operating lease.

When the Group rents out its own plants and buildings, and machinery equipment, the revenue from operating lease will be recognized by the straight-line method during the lease term. The variable rental determined at a certain rate of the amount of sales is included by the Group in the lease revenue when it actually occurs.

4.29 Measurement at fair value

Fair value refers to the price received from sales of an asset or paid for the transfer of a liability by a market participant in an orderly transaction on the measurement date.

Where there is an active market for any financial asset or financial liability, the fair value thereof is determined by the Group at the price quoted in the active market. The fair value of a financial instrument, for which there is no active market, is determined by using valuation techniques.

For the measurement of non-financial assets at fair value, the capability of the market participant in bringing about economic interest via the best use of such assets, or the capability in selling such assets to the other market participant for bringing about economic interest with the best use of such assets should be taken into account.

The Group adopts the valuation technique that is applicable to the current circumstance and that is supported by enough available data and other information, and gives the priority in use of relevant observable input values. And the unobservable input values can be used only when the observable input values are unable or unpractical to be obtained.

For the assets and liabilities measured or disclosed at fair value in the financial statements, the level of fair value where they stand is determined based on the lowest-level input which is significant to the overall measurement at fair value: Level 1 input values are unadjusted quotations of the same assets or liabilities that can be obtained on the measurement date in the active market; Level 2 input values are the directly or indirectly observable input values of relevant assets or liabilities other than level 1 input value; Level 3 input values are unobservable input values for the relevant assets or liabilities.

On each balance sheet date, the Group will review the assets and liabilities recognized in the financial statements and continuously measured at fair value, to confirm whether there is any conversion of measurement at fair value among the aforesaid levels.

4.30 Major accounting judgment and estimates

According to the historical experience and other factors, including the rational expectations on future events, the Group carries out the continuous assessment on the significant accounting estimates and key assumptions adopted.

Significant accounting estimates and key assumptions that may cause the significant adjustment to book values of assets and liabilities in the next accounting year are presented as follows:

(1) Oil and gas assets and reserves

The accounting treatment for partial oil and gas production in exploration and development of oil and gas is subject to the special accounting regulations set up for the oil and gas industry. The oil and gas production of the Group is reflected via the successful-efforts accounting. The successful-efforts accounting reflects the inherent volatility in prospecting mineral resources, in which the costs on unsuccessful well exploration are included in expenses. These costs mainly include the dry hole cost, seismic cost and other exploration costs.

As preparing these materials involves the subjective judgment, the engineering estimates of oil and gas reserves of the Group may be inaccuracy, and only be approximate amounts. Before the oil and gas reserves are confirmable, becoming the "proved reserves", several authoritative guidances for relevant engineering standards shall prevail. Estimates on proved reserves and proved developed reserves must be updated once a year, and then included in the latest production and technical materials of all relevant oilfields. In addition, as the price and cost change per year, the estimates on proved reserves and proved developed reserves may change accordingly. For accounting purposes only, these changes are treated as estimate changes, and reflected through relevant depreciation rates based on the expected benchmark.

The future estimate of the Group on the demolition cost of oil and gas assets is conducted according to the present industry practice in the similar area, by considering the expected demolition method and such factors as expected economic lives, and technological and price levels of oil and gas assets, and by referring to the engineering estimate. The present values of expected future demolition costs are capitalized into oil and gas assets, and included in the corresponding estimated liabilities of demolition costs at the same amounts.

Though the engineering estimates may have the inherent inaccuracy, they are used as the benchmarks of depreciation expense, impairment loss and future demolition cost. The depreciation rate is calculated by dividing the proved reserve with the capitalized cost of production equipment. The capitalized cost of production equipment is amortized by the output method.

(2) Provision for impairment of long-term non-financial assets

If the situation shows that the net book values of long-term assets may be unrecoverable, relevant assets will be deemed to be "impaired", and the impairment loss may be recognized according to the *Accounting Standards for Enterprises No. 8 – Impairment of Assets*. The book values of long-term assets are assessed on a regular basis to determine whether the recoverable amounts have dropped and are lower than the book values. If any change in event or environment reveals that the book value of any asset may be unrecoverable, the impairment test will be carried out for such asset. In case of the sign of decline in the asset, the book value will be reduced to the recoverable value. The recoverable value of goodwill is assessed every year. The recoverable value is calculated at the higher between the net selling price and the use value. As the Group is difficult to acquire the open market prices, it is difficult to estimate the selling price accurately. In determining the use value, the expected cash flow from the asset is discounted to the present value of the asset; thus, the major judgment should be made in terms of amount of sales, selling price and operating cost. In determining the reasonable amount similar to the recoverable amount, the Group makes prediction by using all available materials, including the estimates, amounts of sales, selling price and operating cost determined based on the reasonable and supportable assumptions.

(3) Provision for bad debts of accounts receivable

Considering the reasonable and well-founded information such as the predictions relevant to the past events, current situation and future economic status, the Group calculates and recognizes the expected credit loss. The Group carries out the regular monitoring and reviews on assumptions relevant to the calculation of expected credit loss.

(4) Provision for inventory depreciation

If the inventory cost is higher than the net realizable value, the provision for inventory depreciation will be made.

Except for crude oil reserves, the net realizable value of inventory is the estimated selling price in the routine business less the cost needed for completing the production and sales as estimated. The management takes the available materials as the estimate foundation, including the market price of finished product and raw materials, and past operating cost. If the actual selling price is lower than or the cost of completing the production is higher than the estimate, the provision for inventory depreciation actually made will be higher than the estimated amount.

The net realizable value of crude oil reserve is based on the estimated crude oil price (in future five years), where the incurred freight and miscellaneous expenses, and crude oil premiums and discounts are taken into account. If the future actual selling price is lower than the estimated crude oil price, the provision for inventory depreciation actually made will be higher than the estimate amount.

(5) Deferred income tax assets

To the extent that there is sufficient taxable profit for loss offset, the Group should recognize the deferred income tax assets regarding all unutilized tax losses. This requires the management to estimate the time for generating the taxable profit and the amount of the same by using applying a lot of judgments, and to determine the amount of deferred income tax assets that should be recognized with the combination of tax planning and strategy. If in the future accounting period, the taxable income acquired is lower than the expected or the actual income tax rate is higher than the expected, the recognized deferred income tax assets will be reversed and included in the current income statement.

(6) Overseas taxation

The uncertainty exists in the interpretation of complex tax regulations (including the regulations relevant to tax preference), and the amount and time of future taxable income. Based on the reasonable estimates, the Group withdraws possible audit results given by the tax authorities in the countries where it operates business, for allocation. The amount of allocation is based on various factors, such as the prior tax audit experience, and different interpretations of tax regulations given by taxable entities and relevant tax authorities. In view of the wide international business relationship and the longevity and complexity of existing contracts and agreements, the difference between the actual operating result and the assumption made or assumed future change may require the future adjustment to the recognized tax revenue and expenses.

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5 Notes to changes in accounting policies and accounting estimates as well as corrections of accounting errors

5.1 Changes in accounting policies

(1) The Ministry of Finance issued the revised *Accounting Standards for Business Enterprises No.21 - Leases* (hereinafter referred to as the "New Lease Standards") in December 2018, and the Group's subsidiaries including Sinopec Corp., SSC and SEG have implemented the New Lease Standards as of January 1, 2019, while the Group's other subsidiaries do not be implemented the same for the time being. The adoption of the New Lease Standards by Sinopec Corp., SSC and SEG did not have significant impact on the Group's accounting policies. Meanwhile, the Group did not re-present the compared financial statements in 2018, but summarized the impact on the consolidated balance sheet as at January 1, 2019 as follows:

Content of changes in accounting policies	Affected items in the financial statements	Affected amount As at January 1, 2019
Initial implementation of the New Lease Standards	Advances to suppliers	(768)
	Fixed assets	(72)
	Intangible assets	(5)
	Right-of-use assets	31,942
	Long-term deferred expenses	(8,125)
	Non-current liabilities maturing within one year	12,217
	Lease liabilities	10,767
	Long-term payables	(12)

(2) In September 2019, the Ministry of Finance issued the *Circular on Revising and Issuing the Format of Consolidated Financial Statements (Version 2019)* (CK [2019] No.16). The Group has rearranged relevant business and prepared the financial statements for the year ended December 31, 2019 according to the circular, made relevant adjustments to the compared financial statements, and summarized the impact on the consolidated balance sheet as follows:

Content of changes in accounting policies/ Content of relevant rearranged business	Affected items in the financial statements	Affected amount As at December 31, 2018
Return the items of "notes receivable" and "accounts receivable" to the item of "notes receivable and accounts receivable"	Notes receivable	12,017
	Accounts receivable	73,997
	Notes receivable and accounts receivable	(86,014)
Return the items of "notes payable" and "accounts payable" to the item of "notes payable and accounts payable"	Notes payable	13,726
	Accounts payable	255,535
	Notes payable and accounts payable	(269,261)
Rearrangement of other current assets	Non-current assets maturing within one year	(85,217)
	Other current assets	85,217
Rearrangement of financial liabilities held for trading	Financial liabilities held for trading	(4)
	Other payables	4

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(3) In May 2019, the Ministry of Finance issued the revised *Accounting Standard for Business Enterprises No.7 - Exchange of Non-monetary Assets*, which shall be come into effect as of June 10, 2019. The Group has adopted the standards to prepare its financial statements for the year ended December 31, 2019. For the exchange of non-monetary assets occurred before January 1, 2019, no retroactive adjustments has been made to the comparative financial statements in 2018.

(4) In May 2019, the Ministry of Finance issued the revised *Accounting Standards for Business Enterprises No. 12 - Debt Restructuring*, which shall be come into effect as of June 17, 2019. The Group has adopted the standards to prepare its financial statements for the year ended December 31, 2019. For the debt restructuring occurred before January 1, 2019, no retroactive adjustments has been made to the comparative financial statements in 2018.

5.2 There was no substantial change in accounting estimates during the reporting period of the Group.

5.3 There was no substantial correction of accounting errors in prior periods during the reporting period of the Group.

6 Main taxes

6.1 Main tax types and tax rates

Taxes (fees) Type	Basis of tax (fee) assessment	Tax (fee) rate
Value added tax (VAT):		
General product sales and imported goods;	Taxable sale income	16%, 13%
Processing, repairing and replacement activities	Taxable sale income	16%, 13%
Lease of tangible movables	Taxable sale income	16%, 13%
Fertilizers, pesticides, agricultural film, liquefied gas, natural gas, tap water, heating, etc.	Taxable sale income	10%, 9%
Building services	Taxable sale income	10%, 9%
Transportation service	Taxable sale income	10%, 9%
Lease of immovables	Taxable sale income	10%, 9%
Sales of immovables	Taxable sale income	10%, 9%
Research and development and technical services	Taxable sale income	6%
Attestation consulting services	Taxable sale income	6%
Financial services	Taxable sale income	6%
Catering, accommodation, tourism, culture, education and other modern services, etc.	Taxable sale income	6%
Consumption tax	Quantity issued by production enterprises	Remark 1
Enterprise income tax	Taxable income	25%, 15%
Urban maintenance and construction tax	Turnover tax payables	7%, 5%, 1%
Educational surcharge	Turnover tax payables	2%-3%
Resource tax:		
Crude oil	Taxable sale income	6%
Natural gas	Taxable sale income	6%
Property taxes	Original value of the property *70%-90% or rent income	1.2%, 12%
Compensation fees of mineral resources	Sales amount from crude oil or natural gas	0%

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Taxes (fees) Type	Basis of tax (fee) assessment	Tax (fee) rate
Exploration license fees	Exploration area	RMB100-500/km^2 per year
Mining license fees	Area of mining zone	RMB 1,000/km^2
Special oil income	Income from sales of crude oil	Excess progressive tax rate (Remark 2)

Remark 1: the consumption tax should be calculated and paid on the basis of the quantity of the taxable product sold, and the tax rate of the oil product from January 13, 2015 are as follows:

Name of oil product	Tax (fee) rate (RMB /ton)
Gasoline	2,109.76
Diesel oil	1,404.48
Naphtha	2,105.20
Solvent oil	1,948.64
Lubricating oil	1,719.71
Fuel oil	1,218.00
Aviation kerosene	1,495.20

Remark 2: excess progressive tax rate of special oil gains:

Price of crude oil (USD/barrel)	Rate of levy (%)	Quick calculation deduction (USD/barrel)
65-70(inclusive)	20	0
70-75(inclusive)	25	0.25
75-80(inclusive)	30	0.75
80-85(inclusive)	35	1.5
Over 85	40	2.5

6.2 Main Preferential taxes and approvals

(1) Value-added tax

According to the *Circular on Tax Policies for Imported Goods and Materials for Exploiting Petroleum (Natural Gas) in the Designated Onshore Areas within the Territory of China during the 13th Five-Year Plan Period* (CGS[2016] No.68) and the *Circular on Exempting the Taxes on Imported Goods and Materials for Exploiting Offshore Petroleum (Natural Gas) in China during the 13th Five-Year Plan Period* (CGS[2016] No.69) issued by the State Taxation Administration, the Ministry of Finance and the General Administration of Customs, from January 1, 2016 to December 31, 2020, self-operated projects, such as carrying out oil (gas) extraction operations in the deserts, gobi-desert and oceans within the territory in China, importing equipment, instruments, spare parts or special tools that cannot be produced or whose performance does not meet the requirements in China and are directly used for extraction operations, shall be exempted from import duties within the prescribed duty-free import quota.

According to the *Circular of the Ministry of Finance and the State Taxation Administration on Issues Concerning VAT, Business Tax and Enterprise Income Tax Policies for the Promotion of the Development of the Energy-Conservation Service Industry* (CS[2010] No.110) and the *Circular of the Ministry of Finance and the State Taxation Administration concerning the Comprehensive Promotion of the Pilot Collection of Value-added Tax in lieu of Business Tax*(CS [2016] No.36), the contracted energy management project shall be exempted from VAT within the term of a benefit-sharing contract.

According to the *Announcement on Issues Concerning Value-added Tax for Nitro-compound Fertilizer* (Announcement of the State Taxation Administration [2012] No.52), Sinopec Nanjing Chemical Industries Co., Ltd. shall directly enjoy the VAT exemption policy for production and sale of agricultural production materials such as compound fertilizers.

According to the *Circular of the Ministry of Finance and the State Taxation Administration on Renewing Preferential Policies on Value-added Tax, Real Estate Tax and Urban Land Use Tax for Heat Supply Enterprises*(CS[2019] No.38), from January 1, 2019 to the end of the heat supply period in 2020, the income from heating charges obtained by heat supply enterprises in "Three-North" areas for supplying heat to individual residents (hereinafter referred to as the “residents”) (include those costs directly charged by heat supply enterprises from residents, those charged from residents through other entities and those paid by the entities on behalf of residents) shall be exempt from VAT.

According to the *Announcement on Clarifying the Policies on Value-added Tax Super-deduction for the Life Service Sector* (CS [2019] No.87) issued by the Ministry of Finance and the State Taxation Administration, from October 1, 2019 to December 31, 2021, taxpayers of the life service sector are allowed to add an extra 15% based on the deductible input VAT for the current period for deduction of the tax payable.

(2) Consumption tax

According to the *Circular on Exempting Consumption Tax on Oil Products by Product Oil Manufacturing Enterprises for Their Own Use* (CS [2010] No.98) issued by the Ministry of Finance and the State Taxation Administration, from January 1, 2009, consumption tax shall be exempted for the self-made product oil consumed by a product oil enterprise as fuel, power and raw materials in the process of manufacturing product oil.

According to the *Circular on Levy-Rebate of Consumption Tax on Self-use Product Oil of Oil (Gas) Field Enterprises* (CS [2011] No.7) issued by the Ministry of Finance and the State Taxation Administration, from January 1, 2009, the consumption tax on internally purchased product oil consumed by oil (gas) fields during the exploitation of crude oil shall be refunded in full at the amount of consumption tax on product oil actually paid for the time being.

According to the *Circular on Continuing to Raise Consumption Tax on Refined Oil* (CS [2015] No.11) issued by the Ministry of Finance and the State Taxation Administration, as of January 13, 2015, the consumption tax on gasoline, naphtha, solvent oil and lubricating oil shall be raised from RMB 1.4 per litre to RMB 1.52 per litre; the consumption tax on diesel fuel and fuel oil shall be raised from RMB 1.1 per litre to RMB 1.2 per litre. The collection of taxes on jet fuel shall continue to be deferred;

(3) Resource tax

According to the *Circular on Policies concerning the Adjustment to Resource Tax on Crude Oil and Natural Gas* (CS[2014] No.73) issued by the Ministry of Finance and the State Taxation Administration, the Group’s subordinated enterprises that engage in the production of crude oil for heating, heavy crude oil, tertiary oil recovery, oil and gas field with “three low”(low pressure, low sulfur and low yield) and deep-water oil and gas field shall be subject to tax exemption or tax reduction of 20%-40%.

According to the *Circular on Reducing Resource Tax on Shale Gas* (CS[2018] No.26) issued by the Ministry of Finance and the State Taxation Administration, the resource tax on shale gas (based on the prescribed tax rate of 6%) shall be reduced by 30% from April 1, 2018 to March 31, 2021.

(4) Enterprise income tax

According to the *Circular on the Pre-tax Deduction Policy for Employee Educational Funds of Enterprises*(CS[2018] No.51) issued by the Ministry of Finance and the State Taxation Administration, as of January 1, 2018, the expenditures of employees' educational funds incurred by an enterprise, are deductible in full when the enterprise's taxable income for the enterprise income tax purpose is calculated, if such expenditures are not higher than 8% of the total wages and salaries; otherwise, the portion in excess of 8% may be carried forward to the succeeding tax years.

According to the *Circular on the Enterprise Income Tax Policy Concerning Deductions for Equipment and Appliances* (CS[2018] No.54) issued by the Ministry of Finance and the State Taxation Administration, enterprises are allowed to count on a lump-sum basis the costs of equipment and appliances that are newly bought between January 1, 2018 and December 31, 2020, into the costs and expenditures of the current period, and deduct such costs in full when the taxable income is calculated, provided that the unit value of such equipment and applicants is no more than RMB 5 million;

According to the *Circular on Raising the Proportion of Pre-tax Super Deduction of Research and Development Expenses* (CS[2018] No.99) issued by the Ministry of Finance, the State Taxation Administration and the Ministry of Science and Technology, with respect to research and development (R&D) expenses actually incurred by an enterprise from its R&D activities, an extra 75% of the actual amount of expenses is deductible before tax, in addition to other actual deductions, during the period from January 1, 2018 till December 31, 2020, provided that the said expenses are not converted into the intangible asset and balanced into this enterprise's current gains and losses; however, if the said expenses have been converted into the intangible asset, such expenses may be amortized at a rate of 175% of the intangible asset's costs before tax during the above-said period.

Some of the Group’s subordinate enterprises are identified by the government department as high-tech enterprises and are subject to an income tax rate of 15%.

According to Article 23, Item 19 (Light Industry) (Encouragement) in the *Catalogue for the Guidance on Adjustment of Industrial Structure of the Order of National Development and Reform Commission (2011) No. 9 - Guiding Catalogue for Industrial Structure Adjustments (Version 2011)*, Sinopec Southwest Petroleum Engineering Co., Ltd. and Sinopec Jinling Petrochemical (Chengdu) Co., Ltd. enjoyed preferential policies for enterprise income tax rate of 15% on the west development.

(5) Real estate tax and urban land use tax

According to the *Circular of the Ministry of Finance and the State Taxation Administration on Renewing Preferential Policies on Value-added Tax, Real Estate Tax and Urban Land Use Tax for Heat Supply Enterprises*, from January 1, 2019 to December 31, 2020 (CS [2019] No.38), for the heat supply enterprises that collect heating charges from residents in "Three-North" areas, the real estate tax and urban land use tax for the plants and land used for supplying heat for residents shall be exempted. For the heat supply enterprises supplying heat to residents and entities or concurrently engaged in other production and operation activities, the real estate tax and urban land use tax shall be exempted according to the proportion of the income from heating charges collected from residents to the total income of the enterprises.

According to the *Circular of the Ministry of Finance on the Tax Policies Concerning the Work relating to the Renovation of Urban Shanty Towns* (CZ [2015] No.57), for the renovation projects of urban shanty towns of the Group's subordinate enterprises, the educational surcharges or local educational surcharges shall be exempted or reduced.

(6) Land value-added tax

According to the *Circular of the Ministry of Finance or the State Taxation Administration on Continuing the Land Value-added Tax Policies relating to Restructuring and Reorganization of Enterprises*(CS[2018] No.57) , where an enterprise carries out a whole restructuring to a limited liability company or joint-stock limited company in accordance with the provisions of the Company Law of the People's Republic of China, the transfer or change of registration of rights to use state-owned land and the buildings and fixtures thereon (hereinafter referred to as "real estate") from the original enterprise to the enterprise after the restructuring shall be temporarily exempted from land value-added tax.

(7) Deed tax

According to the *Circular of the Ministry of Finance or the State Taxation Administration on Relevant Deed Tax Policies for Continued Support to Enterprises and Public Institutions for Their System Reform and Reorganization*(CS[2018] No.17) , where an enterprise carries out a whole restructuring to a limited liability company or joint-stock limited company in accordance with the provisions of the Company Law of the People's Republic of China, such enterprise' inheritance of the original enterprise's ownership of land and houses is exempt from deed tax.

(8) Stamp tax

According to the *Circular of the Ministry of Finance or the State Taxation Administration on Stamp Tax Reliefs for Business Account Books*(CS[2018]No.50), to ease the burden of enterprises and encourage efforts to make investment and start business, the matters relating to reducing stamp tax on business account books are announced as follows: from May 1, 2018, capital account books, subject to 0.05% stamp tax rate, will be taxed for stamp tax purpose at the half-reduced rate, and other account books that shall be attached with a RMB 5 stamp apiece in the past will be exempt from stamp tax.

6.3 Tax type, tax rate and preferential tax burdens of outbound enterprises

Outbound enterprises enjoy preferential policies according to the relevant laws and regulations of the country or region in which they are located.

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7 Business combination and consolidated financial statements

7.1 Information of the Group’s subsidiaries newly included in the consolidation of scope

S.N.	Company name	Tier	Enterprise Types	Registered address	Main business	Paid-in capital	Shareholding ratio (%)	Voting Share Ratio (%)	Investment Amount	Method of acquisition Method of acquisition
1	Sinopec Corp.	2	1	Beijing	Production and sale of petroleum and petrochemical products	121,071	68.5457	68.7714	103,545	1
2	SEG	2	1	Beijing	Engineering, general contracting and building installation business	4,428	67.01	67.01	5,724	1
3	SSC	2	1	Beijing	Petroleum engineering services such as drilling, exploration or logging	18,984	70.18	70.18	30,944	1
4	SOFE	2	1	Wuhan	Production and sale of petroleum machinery and equipment, oil and gas pipelines, oil drill bits and drilling tools	778	58.74	58.74	828	1
5	Sinopec Assets Management Corporation (hereinafter referred to as the “SINOPEC Assets Company”)	2	1	Beijing	State-owned assets management or community service for culture, education and health	30,080	100.00	100.00	59,552	1
6	Sinopec Shengli	2	1	Dongying	Culture, education	8,431	100.00	100.00	30,473	1

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S.N.	Company name	Tier	Enterprise Types	Registered address	Main business	Paid-in capital	Shareholding ratio (%)	Voting Share Ratio (%)	Investment Amount	Method of acquisition Method of acquisition
	Petroleum Administration Bureau (hereinafter referred to as the "Shengli Bureau")				and health, public municipal services, property management, mechanical processing, water and electricity communications					
7	Sinopec Zhongyuan Petroleum Prospecting Bureau Co., Ltd.	2	1	Puyang	Culture, education and health, public municipal services, integrated business of oil and gas mineral resources, electromechanical import and installation	5,000	100.00	100.00	7,238	1
8	Sinopec Henan Oil Prospecting Bureau Co., Ltd. (hereinafter referred to as the "Henan Bureau")	2	1	Nanyang	Culture, education and health, public municipal services	1,625	100.00	100.00	3,855	1
9	Sinopec Jianghan Oil Prospecting Bureau Co., Ltd. (hereinafter referred to as the "Jianghan Bureau")	2	1	Qianjiang	Culture, education and health, public municipal services	2,364	100.00	100.00	6,247	1
10	Sinopec Jiangsu	2	1	Yangzhou	Culture, education	1,536	100.00	100.00	2,896	1

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S.N.	Company name	Tier	Enterprise Types	Registered address	Main business	Paid-in capital	Shareholding ratio (%)	Voting Share Ratio (%)	Investment Amount	Method of acquisition Method of acquisition
	Petroleum Prospecting Bureau Co., Ltd.				and health, public municipal services, catering tourism and public works					
11	Sinopec Star Co., Ltd.	2	1	Beijing	Engineering construction or technical services	1,361	100.00	100.00	2,769	1
12	Sinopec Northwest Petroleum Bureau Co., Ltd.	2	1	Urumchi	Culture, education and health, public municipal services, transportation planning, property services	286	100.00	100.00	881	1
13	Sinopec North China Petroleum Bureau Co., Ltd.	2	1	Zhengzhou	Culture, education and health, public municipal services	343	100.00	100.00	(154)	1
14	Sinopec East China Petroleum Bureau (hereinafter referred to as the “East China Petroleum Bureau”)	2	1	Nanjing	Culture, education and health, public municipal services, integrated oil and gas business	183	100.00	100.00	888	1
15	Sinopec Southwest Petroleum Bureau Co., Ltd.	2	1	Chengdu	Culture, education and health, public municipal services or housing land resource management	2,018	100.00	100.00	2,541	1
16	Sinopec Northeast Petroleum	2	1	Changchun	Base property management, integrated oil and	50	100.00	100.00	211	1

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S.N.	Company name	Tier	Enterprise Types	Registered address	Main business	Paid-in capital	Shareholding ratio (%)	Voting Share Ratio (%)	Investment Amount	Method of acquisition Method of acquisition
	Bureau Co., Ltd.				gas business, transportation services					
17	Sinopec Offshore Petroleum Bureau Co., Ltd.	2	1	Shanghai	Leasing of base dock, site, office facilities and other fixed assets, mining management	151	100.00	100.00	193	1
18	Sinopec Pipeline Storage and Transportation Asset Management Co., Ltd.	2	1	Xuzhou	Maintenance and maintenance of oil and gas pipelines	191	100.00	100.00	506	1
19	Sinopec Capital Co., Ltd.	2	1	Baoding	Project investment, equity investment, investment management and consulting	10,000	100.00	100.00	10,000	1
20	Sinopec Finance Co., Ltd. (hereinafter referred to as "SFC")	2	2	Beijing	Deposits and loans, note discounting and other financial business and investment business of member companies	18,000	100.00	100.00	8,169	1
21	General Station of Petrochemical Engineering Quality Supervision	2	4	Beijing	Testing, inspection and management	2	100.00	100.00	26	1
22	Sinopec	2	1	Beijing	Quality monitoring	10	100.00	100.00	10	1

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S.N.	Company name	Tier	Enterprise Types	Registered address	Main business	Paid-in capital	Shareholding ratio (%)	Voting Share Ratio (%)	Investment Amount	Method of acquisition Method of acquisition
	Engineering Quality Supervision Co., Ltd.				and inspection of petroleum and petrochemical projects					
23	Sinopec Tendering Co., Ltd.	2	1	Beijing	Bid and tender agency and consulting services	11	100.00	100.00	11	1
24	Sinopec Petroleum Commercial Reserves Co., Ltd.	2	1	Beijing	Reserves and wholesale of petroleum or crude oil	51,429	100.00	100.00	52,342	1
25	Sinopec Consulting Co., Ltd.	2	1	Beijing	Assessment and consulting on investment projects	75	100.00	100.00	78	1
26	Sinopec Baichuan Economic & Trading Corporation (hereinafter referred to as the "Baichuan Corporation")	2	1	Beijing	Self-owned house property management and hotel management	3,758	100.00	100.00	4,953	1
27	Sinopec Century Bright Capital Investment, Ltd. (hereinafter referred to as the "Century Bright")	2	3	Hong Kong	Investment and financing business	11,082	100.00	100.00	11,082	1
28	Sinopec Sharing Service Co.,	2	1	Beijing	Transactional business services	300	100.00	100.00	300	1

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S.N.	Company name	Tier	Enterprise Types	Registered address	Main business	Paid-in capital	Shareholding ratio (%)	Voting Share Ratio (%)	Investment Amount	Method of acquisition Method of acquisition
	Ltd.				covering finance and IT, etc.					
29	Sinopec Economics & Development Research Institute	2	4	Beijing	Business management technical support of petrochemical enterprises	22	100.00	100.00	168	1
30	Sinopec Management Institute	2	4	Beijing	Training and academic exchanges	50	100.00	100.00	728	1
31	Sinopec News	2	4	Beijing	Publication of newspapers and magazines	7	100.00	100.00	288	1
32	China Petrochemical Press Co., Ltd.	2	1	Beijing	Publication and distribution of petrochemical books, periodicals, etc.	40	100.00	100.00	44	1
33	Economic Press China Co., Ltd.	2	1	Beijing	Publication and distribution	25	100.00	100.00	107	3
34	Sinopec Research Institute of Petroleum Engineering Co., Ltd.	2	1	Beijing	Petroleum machinery processing	100	100.00	100.00	160	1
35	SHANGHAI ZHESHI FUTURES Co. Ltd. (hereinafter referred to as the “ZHESHI	2	2	Shanghai	Domestic commodity futures brokerage, financial futures brokerage	700	100.00	100.00	702	1

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S.N.	Company name	Tier	Enterprise Types	Registered address	Main business	Paid-in capital	Shareholding ratio (%)	Voting Share Ratio (%)	Investment Amount	Method of acquisition Method of acquisition
	FUTURES")									
36	Sinopec Overseas Development Co., Ltd. (hereinafter referred to as the "Sinopec Overseas Development")	2	3	British Virgin Islands	Investment and financing business	1	100.00	100.00	1	1
37	Sinopec Insurance Co., Ltd.	2	3	Hong Kong	Property insurance	399	100.00	100.00	235	1
38	Sinopec Insurance Broker Co., Ltd.	2	2	Beijing	Insurance broker	50	100.00	100.00	50	1

Remarks (1): Enterprise type: 1. domestic non-financial subsidiary; 2. domestic financial subsidiary; 3. overseas subsidiary; 4. public institution; 5. infrastructure entities;

(2) Acquisition mode: 1. established by investment; 2. business combination; 3. gratuitous transfer-in;

(3) Level: the Group is at level-1, the Group's subsidiaries are at level-2, and so forth.

7.1.1 Information about the change in number of level-2 subsidiaries included in the consolidation of scope

There were 39 level-2 subsidiaries of the Group included in the scope of consolidation in 2018, and 38 level-2 subsidiaries included in the scope of consolidation in 2019, with one subsidiary decreased compared with the previous year. Due to the restructuring of Sinopec Institution Service Center due to equity restructuring, the subsidiary was included as the subordinated company of Baichuan Corporation.

7.1.2 Information about equity held in subsidiaries

(1) Shareholding ratio of the Company in Sinopec Corp.

As of December 31, 2019, the Company held 82,989,134,207 shares (of which A-share of 82,435,984,207 shares were held directly and H-share of 553,150,000 shares were held through Century Bright, an overseas wholly-owned subsidiary) of Sinopec Corp., with a shareholding ratio of 68.5457%, which remained unchanged compared with the end of last year.

(2) Explanation of the difference between nominal and actual shareholdings in Sinopec Corp.

The 2019 annual report of Sinopec Corp. announced that the controlling shareholders' shareholding ratio at the end of the year was 68.7714%, with a difference of 0.2257% from the Company's actual shareholding ratio of 68.5457%, which was held by the Company on behalf of Henan Zhongyuan Petroleum and Gas Group Co., Ltd. (formerly "Henan Natural Gas Development Corporation") (hereinafter referred to as "Henan Zhongyuan Petroleum Group") and ANHUI PROVINCIAL INVESTMENT GROUP HOLDING CO., LTD. (hereinafter referred to as "Anhui Investment Group") as follows.

Pursuant to the *Agreement on Issues such as Henan Province's 10% Equity in the Luoyang Refinery* signed by and between the Company and the People's Government of Henan Province (ZGSH [2000] QZ No.298), Henan Zhongyuan Petroleum Group used to own the equity of RMB 110 million in the former Luoyang Refinery, which was converted into 77,068,591 A-shares of Sinopec Corp. at the same conversion price for the Company, and finally became 100,189,168 shares after the distribution of shares sent and transferred of Sinopec Corp. in 2013, representing 0.0828% equity of Sinopec Corp. at the end of 2019.

According to the *Agreement on Arrangement for Disposal of Assets and Equity of Anqing Petrochemical Acrylic Co., Ltd.* (ZGSH[2000] QZ No.402) signed by and between the Company and Anhui Investment Group, Anhui Investment Group used to own the interests of RMB 190 million in Anqing Petrochemical Acrylic Co., Ltd., which was converted into 133,118,475 A-shares of Sinopec Corp. at the same conversion price for the Company, and finally became 173,054,018 shares after the distribution of shares sent and transferred of Sinopec Corp. in 2013, representing 0.1429% equity of Sinopec Corp. at the end of 2019.

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7.1.3 Information about state-owned exclusive interests and transfer of capital financial funds of listed companies

In accordance with the relevant regulations of the Ministry of Finance, enterprises that are the subjects of diversified investments such as joint ventures, cooperation and shareholding, the amounts formed by such policy factors as special allocations from the State, the transfer-in of funds, the accounting of land valuation, the tax refunds or special exemptions, and the allocation of working capital by the State are the exclusive interests of the State. The financial allocations transferred by the Company to Sinopec Corp. prior to 31 December 2012 for increase in its long-term equity investment in Sinopec Corp. are shown as exclusive interests of the Group. As of December 31, 2012, the cumulative amount of the Company's state-owned exclusive interests resulting from the Company's transfer of financial allocations to Sinopec Corp. was RMB 2,703million.

According to the Circular of the Ministry of Finance concerning Issuing the Regulations on Strengthening the Management of Financial Information of Enterprises (CQ [2012] No. 23), from 2013, the Company will transfer capital financial funds to its listed companies as entrusted loans, as detailed in Note 14.2.

7.2 Reasons for that the parent company which has less than half of the voting rights in the investee, but has control over the investee

There is no situation for the control of the Company over the investee even if the Company has less than half of the voting rights of the investee

7.3 Reasons for that the parent company which has more than half of the voting rights in the investee, but has no control over the investee

The situation that the Company which has more than half of the voting rights in the investee, but has no control over the investee

7.4 Situation of important non-wholly-owned subsidiaries

7.4.1 Minority shareholder

No.	Enterprise name	Shareholding ratio of minority shareholders (%) Remark	Profit or loss attributable to minority shareholders in 2019	Dividends paid to minority shareholders in 2019	Cumulative minority equity as at December 31, 2019
1	Sinopec Corp.	31.45	18,115	14,471	231,650
2	SEG	32.99	730	339	8,995
3	SSC	29.82	273		2,017
4	SOFE	41.26	10		742

Remark: The shareholding ratio of minority shareholders (%) is rounded to two decimal places for disclosure, and each amount is calculated based on the precise shareholding ratio.

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7.4.2 Main financial information

Item	Amount as at December 31, 2019 / Year 2019			
	Sinopec Corp.	SEG	SSC	SOFE
Current assets	445,856	60,603	30,529	7,243
Non-current assets	1,309,215	7,271	31,540	1,611
Total assets	1,755,071	67,874	62,069	8,854
Current liabilities	576,374	37,909	52,353	6,802
Non-current liabilities	301,792	2,694	2,953	102
Total liabilities	878,166	40,603	55,306	6,904
Operating revenue	2,966,193	52,535	69,870	6,588
Net profits	72,122	2,213	914	45
Total comprehensive income	77,702	2,344	909	45
Cash flows from operating activities	153,418	300	1,377	(639)

(Continued :)

Item	Amount as at January 1, 2019/Year 2018			
	Sinopec Corp.	SEG	SSC	SOFE
Current assets	503,353	63,816	32,014	6,257
Non-current assets	1,287,517	7,242	29,835	1,580
Total assets	1,790,870	71,058	61,849	7,837
Current liabilities	578,993	42,214	53,274	5,806
Non-current liabilities	354,219	2,861	2,797	111
Total liabilities	933,212	45,075	56,071	5,917
Operating revenue	2,891,179	47,208	58,409	4,919
Net profits	80,289	2,483	142	32
Total comprehensive income	73,664	2,276	154	32
Cash flows from operating activities	175,868	6,104	(2,940)	(294)

7.5 Treatment methods adopted by the parent company for the preparation of financial statements when its subsidiaries adopt the accounting policies inconsistent with those of the parent company

The Group's subsidiaries Sinopec Corp., SSC and SEG implemented the new lease standards from January 1, 2019, and the remaining companies did not implement such standards. According to the 2019 Application Guidance to the Accounting Standards for Business Enterprises No. 21 – Leases, if the parent company did not implement the new standards and the subsidiaries has implemented the new standards, the parent company can directly use the statements of subsidiaries for consolidation at the time of preparing the financial statements. The adoption of the new lease standards by the subsidiaries Sinopec Corp., SSC and SEG did not have a significant impact on the Group's accounting policies.

7.6 Restrictions on the use of assets of the Group and the liquidation of debts of the Group by subsidiaries

The Group has neither any restrictions on the transfer of cash or other assets between the parent company or its subsidiaries and other entities within the Group, nor any restrictions on the distribution of dividends or profit distribution, or the issuance or recovery of loans or advances among the entities within the Group.

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7.7 Changes in shares of owner's equity of the parent company in subsidiaries

Enterprise name	Beginning share (%)	Ending share (%)	Changes in shares held (%, "-" if decreased)	Reason for changes in shares held
ZHESHI FUTURES	95.00	100.00	5.00	Purchase of equity from minority shareholders

8 Notes to the main items of the consolidated financial statements

8.1 Cash and cash equivalents

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Cash on hand	59	66
Bank deposits	147,569	198,056
Other cash and cash equivalents	3,781	2,028
Total	151,409	200,150

8.2 Financial assets held for trading

Item	Fair value as at December 31, 2019	Fair value as at January 1, 2019
Financial assets classified as measured at fair value through the current profit or loss	21,673	41,560
Including: investment in debt instruments	8,013	7,051
Equity instrument investments	5,088	28,000
Others	8,572	6,509
Total	21,673	41,560

8.3 Notes receivable

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Bank acceptance bill	1,712	11,548
Commercial acceptance bill	481	469
Total	2,193	12,017

8.4 Accounts receivable

8.4.1 Accounts receivable

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Accounts receivable	73,551	80,110
Less: provision for bad debts	6,658	5,546
Total	66,893	74,564

8.4.2 The aging of accounts receivable and the corresponding provision for bad debts are analyzed as follows:

Aging	Amount as at December 31, 2019			Amount as at January 1, 2019		
	Book balance		Provision for bad debts	Book balance		Provision for bad debts
	Amount	Proportion (%)		Amount	Proportion (%)	
Within 1 year	64,850	88.17	1,258	71,916	89.77	207
1-2 years	3,894	5.29	1,120	2,899	3.62	827
2-3 years	1,004	1.37	585	1,938	2.42	1,215

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Aging	Amount as at December 31, 2019			Amount as at January 1, 2019		
	Book balance		Provision for bad debts	Book balance		Provision for bad debts
	Amount	Proportion (%)		Amount	Proportion (%)	
Over 3 years	3,803	5.17	3,695	3,357	4.19	3,297
Total	73,551	100.00	6,658	80,110	100.00	5,546

8.4.3 Accounts receivable actually wrote-off during this reporting period

In the current year, the accounts receivable written off due to the factual losses amounted to RMB 74 million, and there was no individually significant amount written off.

8.5 Receivables financing

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Notes receivable	10,069	
Total	10,069	

8.6 Advances to suppliers

8.6.1 Presentation of advances to suppliers by aging

Aging	Amount as at December 31, 2019			Amount as at January 1, 2019		
	Book balance		Provision for bad debts	Book balance		Provision for bad debts
	Amount	Proportion (%)		Amount	Proportion (%)	
Within 1 year	19,838	93.55		18,094	96.66	
1-2 years	1,093	5.15	32	369	1.97	11
2-3 years	89	0.42	6	91	0.49	44
Over 3 years	187	0.88	82	165	0.88	57
Total	21,207	100.00	120	18,719	100.00	112

8.6.2 The Group has no significant advances to suppliers with aging over one year.

8.7 Other receivables

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Interest receivable	4,783	4,644
Dividends receivable	601	168
Other receivables	28,370	25,477
Total	33,754	30,289

8.7.1 Other receivables

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Other receivables	31,543	28,539
Less: provision for bad debts	3,173	3,062
Total	28,370	25,477

(1) The aging of other receivables and corresponding provision for bad debts are analyzed as below:

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Aging	Amount as at December 31, 2019			Amount as at January 1, 2019		
	Book balance		Provision for bad debts	Book balance		Provision for bad debts
	Amount	Proportion (%)		Amount	Proportion (%)	
Within 1 year	26,797	84.95	128	23,519	82.41	7
1-2 years	1,059	3.36	142	1,416	4.96	253
2-3 years	412	1.31	189	363	1.27	183
Over 3 years	3,275	10.38	2,714	3,241	11.36	2,619
Total	31,543	100.00	3,173	28,539	100.00	3,062

(2) Other receivables actually written off in the reporting period

In the current year, the other receivables written off due to the factual losses amounted to RMB 75 million, and there was no individually significant amount written off.

8.8 Inventories

Item	Balance as at December 31, 2019			Balance as at January 1, 2019		
	Book balance	Provision for depreciation	Book value	Book balance	Provision for depreciation	Book value
Raw materials	54,582	756	53,826	55,191	3,857	51,334
Revolving materials	430		430	381		381
Goods in transit	42,150		42,150	34,174		34,174
Goods in process and self-manufactured semi-finished products	16,204	97	16,107	16,674	101	16,573
Stock commodities	157,235	20,273	136,962	152,651	21,004	131,647
Goods dispatched	63	36	27	120	25	95
Contract performance cost	781		781	7,047		7,047
Others	291		291	264		264
Total	271,736	21,162	250,574	266,502	24,987	241,515

8.9 Non-current assets maturing within one year

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Other creditor's right investment maturing within one year	1,502	1,107
Entrusted loans maturing within one year	1,158	6,277
Long-term receivables maturing within one year	44	62
Creditor's right investment maturing within one year	7	7
Sub-total	2,711	7,453
Less: Provision for impairment of assets	7	103
Total	2,704	7,350

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8.10 Other current assets

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Loans	56,885	69,088
Reclassified taxes and surcharges payable	37,649	31,104
Discounted assets of Sinopec Finance	14,357	15,708
Negotiable certificate of deposit	5,281	32,675
Factoring of corporate debts	377	677
Structural deposits	167	1,430
Others	21	2,208
Sub-total	114,737	152,890
Less: Provision for impairment of assets	392	258
Total	114,345	152,632

The loans were mainly lent to joint ventures or associates, of which RMB 54,670 million was lent to SIPC.

8.11 Other creditor's right investments

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Financial bonds	3,091	4,089
Corporate bonds	102	103
Total	3,193	4,192

8.12 Long-term receivables

Item	Balance as at December 31, 2019			Balance as at January 1, 2019		
	Book balance	Provision for bad debts	Book value	Book balance	Provision for bad debts	Book value
Shareholder loans	3,355		3,355	26,582		26,582
Loans	11,700		11,700	11,700		11,700
Other long-term receivables	1,044		1,044	1,129		1,129
Total	16,099		16,099	39,411		39,411

8.13 Long-term equity investments

8.13.1 Classification of long-term equity investments

Item	Balance as at January 1, 2019	Increase in 2019	Decrease in 2019	Balance as at December 31, 2019
Investment in joint ventures	61,863	9,960	7,402	64,421
Investment in associates	146,014	9,589	4,660	150,943
Sub-total	207,877	19,549	12,062	215,364
Less: Provision for impairment	69,918	27	3	69,942
Total	137,959	19,522	12,059	145,422

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8.13.2 Main financial information of significant joint ventures

Item	Amount as at December 31, 2019 / Year 2019				
	FREP	BASF-YPC	Taihu	YASREF	Sinopec SABIC Tianjin
Current assets	17,580	6,092	6,821	12,044	7,743
Non-current assets	17,267	10,497	10,453	50,548	14,878
Total assets	34,847	16,589	17,274	62,592	22,621
Current liabilities	8,370	2,044	1,872	19,949	3,396
Non-current liabilities	11,475	35	2,109	31,408	4,960
Total liabilities	19,845	2,079	3,981	51,357	8,356
Net assets attributable to owners of the parent company	15,002	14,510	12,829	11,235	14,265
Net assets calculated based on shareholding ratio	7,501	7,255	6,286	4,213	7,132
Adjustments					
Book value of equity investment in joint ventures	7,501	7,255	6,286	4,213	7,132
Fair value of equity investment with public offer					
Operating revenue	57,047	19,590	15,222	75,940	20,541
Financial expenses	473	(8)	171	1,412	(38)
Income tax expenses	197	579	708	8	533
Net profits	767	1,734	2,612	(1,300)	1,645
Other comprehensive income			(1,105)	(261)	
Total comprehensive income	767	1,734	1,507	(1,561)	1,645
Dividends received from joint ventures in current year	1,400	1,530			1,750

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8.13.2 Main financial information of significant joint ventures (continued)

Item	Amount as at January 1, 2019/Year 2018				
	FREP	BASF-YPC	Taihu	YASREF	Sinopec SABIC Tianjin
Current assets	16,636	7,377	7,095	11,197	9,118
Non-current assets	19,270	11,086	9,216	51,873	13,990
Total assets	35,906	18,463	16,311	63,070	23,108
Current liabilities	6,139	2,548	2,183	17,023	3,007
Non-current liabilities	12,733	235	2,343	33,301	3,982
Total liabilities	18,872	2,783	4,526	50,324	6,989
Net assets attributable to owners of the parent company	17,034	15,680	11,373	12,746	16,119
Net assets calculated based on shareholding ratio	8,517	7,840	5,573	4,780	8,059
Adjustments					
Book value of equity investment in joint ventures	8,517	7,840	5,573	4,780	8,059
Fair value of equity investment with public offer					
Operating revenue	52,469	21,574	14,944	77,561	23,501
Financial expenses	(501)	(1)	151	(1,281)	(2)
Income tax expenses	935	897	729	249	993
Net profits	2,986	2,728	2,764	(1,818)	2,924
Other comprehensive income			921	1,060	
Total comprehensive income	2,986	2,728	3,685	(758)	2,924
Dividends received from joint ventures in current year	1,200	1,226			

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8.13.3 Main financial information of major associates

Item	Amount as at December 31, 2019 / Year 2019				
	SIPC	Pipeline Ltd	SIBUR	Zhongtian Synergetic Energy	CIR
Current assets	31,305	13,245	31,634	4,219	7,612
Non-current assets	283,940	37,842	182,646	56,424	971
Total assets	315,245	51,087	214,280	60,643	8,583
Current liabilities	154,446	721	31,295	13,887	936
Non-current liabilities	268,399	2,910	71,289	26,227	166
Total liabilities	422,845	3,631	102,584	40,114	1,102
Net assets attributable to owners of the parent company	(110,134)	47,456	111,250	20,529	7,481
Net assets calculated based on shareholding ratio	(28,140)	23,728	11,125	7,955	3,741
Adjustments	28,140				
Book value of equity investment in associates		23,728	11,125	7,955	3,741
Fair value of equity investment with public offer					
Operating revenue	44,574	5,008	56,706	13,329	2,334
Net profits	148	2,191	6,513	1,994	424
Other comprehensive income	(3,273)		(1,435)		151
Total comprehensive income	(3,125)	2,191	5,078	1,994	575
Dividends received from associates in the current year		1,259	468	219	

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8.13.3 Main financial information of major associates (Continued)

Item	Amount as at January 1, 2019/Year 2018				
	SIPC	Pipeline Ltd	SIBUR	Zhongtian Synergetic Energy	CIR
Current assets	26,991	12,498	22,502	7,477	6,712
Non-current assets	299,803	39,319	170,794	49,961	1,828
Total assets	326,794	51,817	193,296	57,438	8,540
Current liabilities	103,258	1,020	23,293	7,252	961
Non-current liabilities	340,822	3,026	58,629	31,436	673
Total liabilities	444,080	4,046	81,922	38,688	1,634
Net assets attributable to owners of the parent company	(92,099)	47,771	110,857	18,750	6,906
Net assets calculated based on shareholding ratio	(22,213)	23,885	11,086	7,266	3,453
Adjustments	22,213				
Book value of equity investment in associates		23,885	11,086	7,266	3,453
Fair value of equity investment with public offer					
Operating revenue	49,158	4,746	59,927	12,235	2,856
Net profits	837	2,022	10,400	1,142	583
Other comprehensive income	(7,188)		6,410		116
Total comprehensive income	(6,351)	2,022	16,810	1,142	699
Dividends received from associates in the current year		1,207	271		

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8.14 Other equity instruments investments

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Stock investments	214	532
Other equity investments	9,513	11,787
Total	9,727	12,319

8.15 Fixed assets

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Fixed assets	576,286	570,451
Disposal of fixed assets	44	71
Total	576,330	570,522

8.15.1 Fixed assets

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
(1) Original book value	1,361,657	1,313,111
Including: land assets	7,979	8,135
Houses and buildings	180,224	175,754
Temporary facilities	1,140	1,078
General equipment	116,961	112,626
Special equipment for oil and gas exploration	179,984	178,151
Special equipment for petroleum and chemical industry	849,428	810,996
Others	25,941	26,371
(2) Accumulated depreciation	737,873	693,585
Including: land assets	——	——
Houses and buildings	78,988	74,922
Temporary facilities	1,009	900
General equipment	77,733	73,939
Special equipment for oil and gas exploration	108,264	102,659
Special equipment for petroleum and chemical industry	459,014	428,452
Others	12,865	12,713
(3) Net book value	623,784	619,526
Including: land assets	7,979	8,135
Houses and buildings	101,236	100,832
Temporary facilities	131	178
General equipment	39,228	38,687
Special equipment for oil and gas exploration	71,720	75,492
Special equipment for petroleum and chemical industry	390,414	382,544
Others	13,076	13,658
(4) Provision for impairment	47,498	49,075
Including: land assets	30	30
Houses and buildings	7,498	7,153
Temporary facilities		
General equipment	3,183	3,238
Special equipment for oil and gas exploration	5,203	5,363

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Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Special equipment for petroleum and chemical industry	30,299	31,983
Others	1,285	1,308
(5) Book value	576,286	570,451
Including: land assets	7,949	8,105
Houses and buildings	93,738	93,679
Temporary facilities	131	178
General equipment	36,045	35,449
Special equipment for oil and gas exploration	66,517	70,129
Special equipment for petroleum and chemical industry	360,115	350,561
Others	11,791	12,350

Among the increases in fixed assets in 2019, the amount transferred from construction in progress amounted to RMB 65.418 billion; among the cumulative depreciation increased in 2019, the amount of depreciation expenses accrued this year amounted to RMB 60.410 billion. The increases or decreases in the accumulated depreciation other than the depreciation accrued are mainly the adjustment of asset reclassification.

8.16 Construction in progress

8.16.1 Construction in progress

Item	Balance as at December 31, 2019			Balance as at January 1, 2019		
	Book balance	Provision for impairment	Book value	Book balance	Provision for impairment	Book value
Expenses for capital construction	111,435	228	111,207	85,865	252	85,613
Technological improvement project	48,538	660	47,878	39,757	685	39,072
Geological exploration	9,092		9,092	7,331		7,331
Oil and gas exploitation	22,002	1,012	20,990	20,177	995	19,182
Other projects	2,659	86	2,573	3,253	86	3,167
Project materials	233		233	124		124
Total	193,959	1,986	191,973	156,507	2,018	154,489

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8.16.2 Changes of significant construction in progress in 2019

Project name	Budget	Balance as at January 1, 2019	Increase in 2019	Amount transferred into fixed assets in 2019	Other decreases in 2019	Balance as at December 31, 2019	Proportion of accumulated project investment in budget (%)	Project progress (%)	Accumulated capitalization amount of interest	Including: capitalization amount of the interest in 2019	Sources of funds
1. Zhongke integrated refining and petrochemical project	34,667	17,779	12,487	252	1,432	28,582	87.33	87.33	720	536	Loans and self-raised funds
2. Wen #23 Gas reserve	13,865	3,428	8,692			12,120	87.44	87.44	267	216	Loans and self-raised funds
3. Construction projects about Xinjiang coal gas pipeline	11,589	5,682	2,250	2		7,930	68.46	68.46	204	154	Loans and self-raised funds
4. Project of Rizhao-Puyang-Luoyang curde oil pipeline	4,939	1,577	2,040			3,617	73.25	73.25	58	45	Loans and self-raised funds
5. Scientific research center project	3,766	1,561	806			2,367	62.85	62.85	47	30	Loans and self-raised funds
6. Ethylene project of Zhenhai Refining & Chemical	26,787	309	1,499			1,808	11.71	11.71			Self-raised funds

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Project name	Budget	Balance as at January 1, 2019	Increase in 2019	Amount transferred into fixed assets in 2019	Other decreases in 2019	Balance as at December 31, 2019	Proportion of accumulated project investment in budget (%)	Project progress (%)	Accumulated capitalization amount of interest	Including: capitalization amount of the interest in 2019	Sources of funds
expansion											
7. Development and construction project of Leikoupo gas reservoir in West Sichuan Gas Field	9,961	51	976	1	2	1,024	73.69	73.69	6	6	Loans and self-raised funds
8. Green Steam Supply Center Project	1,637	82	715			797	48.66	48.66			Self-raised funds
9. R&D Building of East China Petroleum Bureau	1,013	647	85			732	72.31	72.31			Loans and self-raised funds
10. Construction project of technology research and development center	410	49	140			189	46.09	46.09			Self-raised funds
Total	108,634	31,165	29,690	255	1,434	59,166	——	——	1,302	987	——

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8.17 Oil and gas assets

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
1. Original price	728,363	696,512
Including: wells and related facilities	728,363	696,512
2. Accumulated depletion	544,316	507,440
Including: wells and related facilities	544,316	507,440
3. Provision for impairment	43,621	43,564
Including: wells and related facilities	43,621	43,564
4. Book value	140,426	145,508
Including: wells and related facilities	140,426	145,508

During the year ended 31 December 2019, the depletion expense totaled RMB 36,307 million.

8.18 Right-of-use assets

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
1. Original book value	40,366	31,979
Including: land assets	4,242	3,480
Houses and buildings	3,395	2,116
Oil tank	2,994	2,926
Oil station	26,940	21,831
Oil depot	220	106
Ships	247	204
Pipeline	161	151
Equipment	1,729	888
Others	438	277
2. Accumulated depreciation	6,481	37
Including: land assets	390	4
Houses and buildings	1,144	
Oil tank	515	
Oil station	3,561	
Oil depot	46	
Ships	105	
Pipeline	15	
Equipment	544	33
Others	161	
3. Net book value	33,885	31,942
Including: land assets	3,852	3,476
Houses and buildings	2,251	2,116
Oil tank	2,479	2,926
Oil station	23,379	21,831
Oil depot	174	106
Ships	142	204
Pipeline	146	151
Equipment	1,185	855
Others	277	277
4. Provision for impairment	2	
Including: land assets		
Houses and buildings		

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Oil tank		
Oil station		
Oil depot		
Ships		
Pipeline		
Equipment	2	
Others		
5. Book value	33,883	31,942
Including: land assets	3,852	3,476
Houses and buildings	2,251	2,116
Oil tank	2,479	2,926
Oil station	23,379	21,831
Oil depot	174	106
Ships	142	204
Pipeline	146	151
Equipment	1,183	855
Others	277	277

8.19 Intangible assets

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
1. Original price	202,358	191,635
Including: patent rights	5,930	5,768
Trademark right	15	14
Land use right	130,192	122,770
Copyright	306	214
Management right	53,579	52,226
Non-patent technology	5,208	4,205
Software	983	910
Other intangible assets	6,145	5,528
2. Accumulated amortization	66,640	60,122
Including: patent rights	4,069	3,805
Trademark right	14	2
Land use right	35,022	31,760
Copyright	114	72
Management right	19,394	17,138
Non-patent technology	3,393	3,101
Software	824	785
Other intangible assets	3,810	3,459
3. Provision for impairment	1,085	1,086
Including: patent rights	498	498
Trademark right		
Land use right	372	375
Copyright		
Management right	146	146
Non-patent technology	44	41
Software		1
Other intangible assets	25	25
4. Book value	134,633	130,427
Including: patent rights	1,363	1,465
Trademark right	1	12

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Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Land use right	94,798	90,635
Copyright	192	142
Management right	34,039	34,942
Non-patent technology	1,771	1,063
Software	159	124
Other intangible assets	2,310	2,044

8.20 Goodwill

8.20.1 Book Balance of goodwill

Name of the investee or matters forming goodwill	Balance as at December 31, 2019	Balance as at January 1, 2019
Sinopec Zhenhai Refining and Chemical Branch	4,043	4,043
Sinopec Yangzi Petrochemical Company Limited	2,744	2,744
Sinopec Qilu Petrochemical Company	2,161	2,161
Circulation right for equity separation (Sinopec Corp.)	2,123	2,123
SINOPEC ZHONGYUAN PETROLEUM CO., LTD.	1,391	1,391
Shengli Oilfield Dynamic (Group) Co., Ltd.	1,361	1,361
Sinopec Beijing Yanshan Petrochemical Branch	1,202	1,202
Hong Kong China Resources Oil & Gas Business	943	922
Shanghai SECCO Petrochemical Company Limited	2,541	2,541
Multiple entities without significant goodwill	1,157	1,157
Total	19,666	19,645

8.20.2 Provision for impairment of goodwill

Name of the investee or matters forming goodwill	Balance as at December 31, 2019	Balance as at January 1, 2019
Sinopec Yangzi Petrochemical Company Limited	2,744	2,744
Sinopec Qilu Petrochemical Company	2,161	2,161
SINOPEC ZHONGYUAN PETROLEUM CO., LTD.	1,391	1,391
Shengli Oilfield Dynamic (Group) Co., Ltd.	1,361	1,361
Sinopec Beijing Yanshan Petrochemical Branch	198	198
Multiple entities without significant goodwill	929	929
Total	8,784	8,784

The Group's expected result of the recoverable amount of goodwill results in impairment losses. The recoverable amount is calculated and determined based on the relevant expected future cash flows. The cash flow is predicted based on the one-year financial budget approved by the Management and the pre-tax discount rate mainly from 11.0% to 11.9% (in 2018: 11.7% to 12.3%), and it is assumed that the cash flow after one year will remain stable .The expected results of the recoverable amount did not result in the occurrence of the significant impairment loss. The prediction of cash flow uses gross profit rate and sales volume as key assumptions. The gross profit rate is determined based on the gross profit rate achieved before the budget period in combination with the Management's expectations of price trends for future international crude oil and petrochemical products. The sales volume is determined based on production capacity and (or) sales quantity before the budget period.

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8.21 Long-term deferred expenses

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
1. Expenses for improvement of leased fixed assets	2,974	2,194
2. Site rent	15	14
3. Camping house	873	741
4. Catalyst	4,685	4,246
5. Special tools for petroleum engineering	4,165	2,720
6. Leasing fees for gas stations and oil depots		564
7. Rental fees	34	46
8. Others	2,220	1,388
Total	14,966	11,913

Others are mainly the long-term deferred expenses such as the early fees of SSC project.

8.22 Deferred income tax assets and deferred income tax liabilities

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
(1) Deferred income tax assets		
Financial assets held for trading		35
Financial assets included in other comprehensive income	131	192
Fixed assets	6,591	5,270
Investment properties	1	1
Oil and gas assets	7,614	8,371
Intangible assets	467	434
Long-term deferred expenses	135	45
Provision for asset impairment	2,376	2,809
Employee compensation payable	479	1,293
Estimated liabilities	2,569	2,192
Derivative financial instruments	116	1,131
Other	2,702	1,802
Deductible losses allowed to offset future profits	3,594	3,721
Sub-total	26,775	27,296
Mutual offset amount of deferred income tax assets and liabilities	7,289	3,709
Net amount of deferred income tax assets	19,486	23,587
(2) Deferred income tax liabilities		
Financial assets held for trading	63	13
Financial assets included in other	163	727

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Item	Balance as at December 31, 2019	Balance as at January 1, 2019
comprehensive income		
Fixed assets	7,229	3,351
Oil and gas assets	5,105	5,336
Intangible assets	508	535
Derivative financial instruments	384	27
Others	867	416
Sub-total	14,319	10,405
Mutual offset amount of deferred income tax assets and liabilities	7,289	3,709
Net amount of deferred income tax liabilities	7,030	6,696

As of December 31, 2019, as some subsidiaries included in the consolidation are expected to be unable to generate sufficient taxable income to offset the deductible temporary differences due to continuous losses and other reasons in the future period where the deductible temporary differences is reversed, the deductible temporary differences of unrecognized deferred income tax assets were RMB 136.844 billion, and the deductible operating loss of RMB 23,415 million. The deductible losses due in 2020, 2021, 2022, 2023 and 2024 amounted to RMB 5.518 billion, RMB 5.764 billion, RMB 2.563 billion, RMB 2.313 billion and RMB 7.257 billion respectively.

8.23 Other non-current assets

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Lendings	206,232	198,555
Loans issued	9,011	7,854
Structural deposits	3,511	
Investment real estate	1,643	1,670
Others	859	987
Total	221,256	209,066

The loans refer to the medium and long-term borrowings from Century Bright to SIPC.

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8.24 Provision for assets impairment

Items	Book balance as at January 1, 2019	Increase in 2019		Decrease in 2019			Book balance as at December 31, 2019
		Provision	Other increase	Reversed	Write-off	Other decrease	
Total provision for impairment	208,986	4,544	753	215	7,864	771	205,433
Provision for bad debts	8,720	1,381	12		152	10	9,951
Provision for impairment of inventories	24,987	1,681	22	199	5,314	15	21,162
Provision for impairment of contract assets	45	113					158
Provision for impairment of creditors' investment	9					2	7
Provision for impairment of entrusted loans	97			16	81		
Provision for impairment of long-term equity investments	69,918		27		1	2	69,942
Provision for impairment of investment properties	5						5
Provision for impairment of fixed assets	49,075	694	601		2,206	666	47,498
Provision for impairment of construction in progress	2,018	120	17		110	59	1,986
Provision for impairment of oil and gas assets	43,564	11	46				43,621
Provision for impairment of right-to-use assets						(2)	2
Provision for impairment of intangible assets	1,086		16			17	1,085
Provision for impairment of goodwill	8,784						8,784
Other provision for impairment	678	544	12			2	1,232

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8.25 Short-term borrowings

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Credit borrowings	71,351	93,316
Mortgaged borrowings	97	55
Guarantee borrowings	1	1
Total	71,449	93,372

8.26 Notes payable

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Bank acceptance bills	13,378	8,391
Commercial acceptance bills	7,014	5,335
Total	20,392	13,726

8.27 Accounts payable

Aging	Balance as at December 31, 2019	Balance as at January 1, 2019
Within 1 year	232,586	239,070
1-2 years	4,128	9,050
2-3 years	1,337	3,325
Over 3 years	2,125	4,090
Total	240,176	255,535

The Group has no individually significant accounts payable with aging over one year.

8.28 Contract liabilities

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Advance sales of products	127,980	124,290
Contract liabilities formed by engineering project reclassification	19,116	15,783
Other contract liabilities	1,130	2,995
Total	148,226	143,068

8.29 Employee compensation payable

8.29.1 Employee compensation payable

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Short-term compensation	16,353	14,447
Post-employment benefits - defined contribution plans	163	142
Dismissal benefits (payable within 12 months)	251	264
Total	16,767	14,853

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8.29.2 Short-term compensation

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Wages, bonuses, allowances and subsidies	13,610	11,628
Employee welfare	1,823	1,886
Social insurance premiums	258	232
Housing provident funds	54	69
Labor union expenditure	527	510
Employee education expenses	27	33
Labor service fees	26	56
Housing subsidies	12	12
Other short-term compensation	16	21
Total	16,353	14,447

8.29.3 Defined contribution plans

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Basic endowment insurance premium	126	110
Unemployment insurance premium	9	12
Enterprise annuity payment	28	20
Total	163	142

8.30 Taxes and surcharges payable

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Value-added tax	5,837	11,268
Consumption tax	53,009	60,087
Resource tax	610	539
Enterprise income tax	5,110	8,683
Value-added tax on land	848	874
Urban maintenance and construction tax	2,770	3,752
House property tax	237	235
Land use tax	1,397	1,637
Individual income tax	980	1,101
Stamp duty	143	148
Farmland use tax	21	31
Special oil gain levy	15	466
Educational surtax	2,071	2,766
Other taxes and surcharges	1,726	1,782
Total	74,774	93,369

8.31 Other payables

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Interest payable	2,817	3,102
Dividends payable	509	273
Other payables	75,750	77,215
Total	79,076	80,590

8.31.1 Profile of other payable

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Aging	Balance as at December 31, 2019	Balance as at January 1, 2019
Within 1 year	28,363	32,174
1-2 years	11,907	30,773
2-3 years	27,529	4,172
Over 3 years	7,951	10,096
Total	75,750	77,215

The Group has no other payables individually significant and having aging over one year.

8.32 Non-current liabilities maturing within one year

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Long-term borrowings maturing within one year	4,165	14,522
Including: Credit borrowings	4,165	14,522
Bonds payable maturing within one year	47,666	22,971
Lease liabilities maturing within one year	2,420	12,235
Long-term payables maturing within one year	2,004	914
Total	56,255	50,642

8.33 Other current liabilities

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Short-term bonds payable	2,615	6,375
Output VAT to be recognized	18	21
Security deposits of Sinopec Finance	77	95
Funds from sales of financial assets with repurchase agreement	469	10,296
Other	15,736	20,040
Total	18,915	36,827

8.34 Long-term borrowings

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Credit borrowings	60,396	62,835
Guaranteed borrowings	524	14
Mortgaged borrowings	1	1
Total	60,921	62,850

8.35 Bonds payable

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Corporate bonds	193,506	227,834

8.36 Lease liabilities

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Lease payments	22,844	23,153
Less: financing charges unrecognized	41	151
Lease liabilities maturing within one year	2,420	12,235
Total	20,383	10,767

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8.37 Long-term payables

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Safety guarantee fund Remark	4,466	4,466
Finance lease payments	1,079	1,498
Amount due to shareholders	64	12,470
Financing installment payables	53	55
Other long-term payables	611	549
Special payables	13,645	12,158
Total	19,918	31,196

1) Production safety management fund
According to the *Circular on Issuing the Administrative Measures of China Petrochemical Corporation for Work Safety Guarantee Fund* (CGZ [1997] No. 268) issued by the Ministry of Finance, Sinopec Group has set a work safety guarantee fund. As at December 31, 2019, the balance of the work safety guarantee fund was RMB 4,615 million, including RMB 4,466 million of deposits in the special fund account and RMB 149 million of working capital for the safety supervision bureau.

8.38 Long-term employee compensation payable

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Post-employment benefits - net liabilities of defined benefit plans	2,313	2,462
Dismissal benefits	176	175
Sub-total	2,489	2,637
Less: defined benefit plans maturing within one year	202	209
Total	2,287	2,428

8.39 Estimated liabilities

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
External guarantee	23	25
Asset retirement obligations	42,480	42,048
Others	1,490	1,692
Total	43,993	43,765

The asset retirement obligation represents provision for future dismantlement costs of oil and gas properties. The Group has established a set of standardized measurements for dismantling oil and gas properties according to the industry practices, and actively accept the obligations of the dismantlement.

8.40 Paid-in capital

Item	Balance as at January 1, 2019	Increase in 2019	Decrease in 2019	Balance as at December 31, 2019
State-owned capital	326,547		1,000	325,547

8.41 Capital reserves

Item	Balance as at January 1, 2019	Increase in 2019	Decrease in 2019	Balance as at December 31, 2019

Item	Balance as at January 1, 2019	Increase in 2019	Decrease in 2019	Balance as at December 31, 2019
Capital premium	52,813		52,813	
Other equity changes in investees	(128)	97	4	(35)
Unexercised share-based payment	9	3		12
Other capital reserves	2,029	54,654	4,713	51,970
Total	54,723	54,754	57,530	51,947

8.42 Special reserves

Item	Balance as at January 1, 2019	Increase in 2019	Decrease in 2019	Balance as at December 31, 2019
Work safety cost	2,069	4,424	4,300	2,193

8.43 Surplus reserves

Item	Balance as at January 1, 2019	Increase in 2019	Decrease in 2019	Balance as at December 31, 2019
Statutory surplus reserves	95,251	6,129		101,380
Discretionary surplus reserves	122,105	14		122,119
Total	217,356	6,143		223,499

8.44 General risk reserves

Item	Balance as at January 1, 2019	Increase in 2019	Decrease in 2019	Balance as at December 31, 2019
General risk reserves	1,765			1,765

The general risk reserves in 2019 are accrued by Zheshi Futures.

8.45 Undistributed profits

Item	Year 2019	Year 2018
Ending balance of the prior period	147,684	129,985
Plus: amount adjusted according to accounting policies		(67)
Beginning balance of the current year	147,684	129,918
Increase in the current year	46,952	38,685
Including: net profit transferred in the current period	46,930	38,663
Other adjustment factors	22	22
Decrease in the current year	25,286	20,919
Including: surplus reserves withdrawn in the current period	6,143	8,033
General risk reserves withdrawn in the current period		305
Withdrawal of employee warfare and bonus fund in the current period	2	2
Handing-over of state-owned capital gains and profits	18,946	9,871
Transfer of water/power/heat supply and property management	190	2,707

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Other decreases	5	1
Ending balance of the current period	169,350	147,684

8.46 Operating revenue and operating costs

Item	Year 2019		Year 2018	
	Revenue	Cost	Revenue	Cost
1. Sub-total of primary business	5,033,615	4,536,864	5,002,957	4,487,062
Oil and gas exploitation	200,429	155,738	189,453	152,318
Refinery production	1,218,693	938,637	1,258,018	947,566
Chemical production	520,434	474,619	570,960	512,022
Sales of refined oil	1,397,699	1,307,441	1,414,213	1,329,149
Petroleum and petrochemical engineering	127,418	115,056	109,183	98,206
Others	1,568,942	1,545,373	1,461,130	1,447,801
2. Sub-total of other business	51,677	41,307	55,582	47,369
Sub-total	5,085,292	4,578,171	5,058,539	4,534,431
Segment offset	2,081,875	2,080,296	2,121,698	2,108,685
Total	3,003,417	2,497,875	2,936,841	2,425,746

8.47 Financial expenses

Item	Year 2019	Year 2018
1. Net interest expenses	1,391	(303)
Including: Interest expenses	8,910	8,216
Interest income	7,519	8,519
2. Gains from foreign exchange	146	(813)
3. Others	1,122	1,149
Including: handling charges	1,285	1,099
Total	2,659	33

8.48 Other income

Item	Year 2019	Year 2018
1. Asset-related government grants	270	375
Special grant for environmental protection, energy conservation and emission reduction	66	79
Appropriation of special equipment assets for environmental protection projects	6	28
Other grants related to environmental protection	6	122
Appropriation of special equipment assets	11	32
Tax refund and reduction		30
Special appropriation for research and development projects	12	19
Financial interest discount fund	1	27
Grant for petrol quality upgrade	1	1
Others	167	37
2. Income-related government grants	6,755	7,771
Environmental protection and energy-saving technical innovation rewards and transformation funds	5	14
Other environmental protection grants	39	25
Technology development grant	41	281
National appropriation for transformed scientific	225	178

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Item	Year 2019	Year 2018
research institutions		
Funds allocated by the Ministry of Finance for retirees	252	321
National scientific research project	512	752
Tax refund and reduction	2,360	2,217
Financial interest discount fund	33	13
Employee placement subsidies	132	514
Special grant/fund for the industry	18	644
Grant for shale gas	1,363	2,282
Others	1,775	532
3. Withholding of handling charges of individual income tax	49	33
4. Additional deduction of VAT	37	
Total	7,111	8,179

8.49 Investment income

Source of investment income	Year 2019	Year 2018
Income from long-term equity investments accounted for under the equity method	12,543	14,013
Investment income from disposal of long-term equity investments	188	423
Investment income from holding held-for-trading financial assets	265	110
Investment income from disposal of financial assets held for trading	504	1,195
Interest income from holding of creditor's right investments	29	43
Interest income from holding of other creditor's right investments	196	244
Income from disposal of other creditor's right investments	19	686
Dividend income from holding of other equity instruments	821	966
Income from financial liabilities held for trading		(6)
Income from derivative instruments	(1,654)	(2,813)
Hedging gains and losses	587	(1,604)
Others	137	25
Total	13,635	13,282

8.50 Gains from changes in fair value

Sources of gains from changes in fair value	Year 2019	Year 2018
Financial assets held for trading	881	(688)
Financial liabilities held for trading		2
Derivative financial instruments	(2,730)	3,075
Hedging gains and losses	(809)	(374)
Others	(79)	13
Total	(2,737)	2,028

8.51 Losses from credit impairment

Item	Year 2019	Year 2018
Losses from bad debts	1,354	79
Losses from impairment of loans	214	121
Losses from impairment of creditor's right investments		41

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Losses from impairment of other creditor's right investments	263	6
Losses from impairment of contract assets	113	45
Losses from off-balance credit impairment	93	(29)
Others	(46)	66
Total	1,991	329

8.52 Losses from asset impairment

Item	Year 2019	Year 2018
Losses from inventory depreciation	1,482	7,979
Losses from impairment of long-term equity investments		8
Losses from impairment of fixed assets	693	4,131
Losses from impairment of oil and gas assets	120	27
Losses from impairment of intangible assets	12	4,027
Losses from impairment of construction in progress		
Others	31	
Total	2,338	16,172

8.53 Income from disposal of assets

Item	Year 2019	Year 2018
Gains on disposal of fixed assets	(1,075)	(1,223)
Gains from disposal of construction in progress	(13)	(11)
Gains from disposal of intangible assets	83	94
Gains from disposal of oil and gas assets		2
Gains from exchange of non-monetary assets	54	243
Gains from disposal of other assets	80	48
Total	(871)	(847)

8.54 Non-operating revenue

Item	Year 2019	Year 2018
Penalty and confiscatory income	104	109
Government grants irrelevant to daily activities	2,025	5,447
Payables not required to pay	1,531	1,103
Gains from asset inventory profit	60	205
Revenue from liquidated damages	414	169
Fund for shantytown renovation	812	12
Other revenues	552	1,005
Total	5,498	8,050

8.55 Non-operating expenses

Item	Year 2019	Year 2018
Loss from asset retirement or damage	661	813
Amercement outlay	163	134
Donations made	306	314
Abnormal losses	100	16
Estimated loss of pending litigation	4	10
Expenses on compensation and liquidated damages	74	206
Expenses on transitional separation and transfer of water/power/heat supply and property management	110	4,254
Other expenses	4,385	6,971
Total	5,803	12,718

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Other expenses mainly refer to the expenses on "Class 3 personnel", retiree expenses, relocation expenses and other compensatory expenditures.

8.56 Income tax expenses

Item	Year 2019	Year 2018
Current income tax expenses	18,395	30,657
Adjustment to deferred income tax	3,378	(6,404)
Total	21,773	24,253

8.57 Other comprehensive income attributable to owners of the parent company

8.57.1 All items of other comprehensive income and their influence on income tax and transfer to the profit or loss:

Item	Year 2019			Year 2018		
	Pre-tax	Income tax	After-tax, net	Pre-tax	Income tax	After-tax, net
I. Other comprehensive income that cannot be reclassified into profit or loss later	(1,468)	(578)	(890)	1,716	519	1,197
1. Changes arising from the re-measurement of net liabilities or net assets of defined benefit plan	36	12	24	(128)	(22)	(106)
2. Changes in fair value of other equity instrument investments	(1,504)	(590)	(914)	1,844	541	1,303
II. Other comprehensive income that will be reclassified into profit or loss	6,675	1,574	5,101	(4,476)	(593)	(3,883)
1. Share enjoyed in other comprehensive income of the investee to be reclassified into profits or losses under the equity method	(379)		(379)	(37)		(37)
Less: amount previously included in the other comprehensive income and currently transferred to the profit or loss						
Sub-total	(379)		(379)	(37)		(37)
2. Changes in fair value of other bond investments	321	81	240	192	94	98
Less: amount previously included in the other comprehensive income and currently transferred to the profit or loss						
Sub-total	321	81	240	192	94	98
3. Provision for credit impairment of other creditor's rights investment	262	94	168	55	(19)	74
Less: amount previously included in the other comprehensive income and currently transferred to the profit or loss						
Sub-total	262	94	168	55	(19)	74

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8.57.1 All items of other comprehensive income and their influence on income tax and transfer to the profit or loss - (continued):

Item	Year 2019			Year 2018		
	Pre-tax	Income tax	After-tax, net	Pre-tax	Income tax	After-tax, net
4. Reserves of cash flow hedges (effective portion of cash flow hedging profit or loss)	3,343	982	2,361	(9,754)	(1,491)	(8,263)
Less: adjustment to initially-recognized amount upon transfer to hedged items	(1,270)	(232)	(1,038)	(1,945)	(707)	(1,238)
Amount previously included in the other comprehensive income and currently transferred to the profit or loss	(774)	(185)	(589)	(620)	(116)	(504)
Sub-total	5,387	1,399	3,988	(7,189)	(668)	(6,521)
5. Differences arising from translation of foreign-currency financial statements	1,084		1,084	2,503		2,503
Less: amount previously included in the other comprehensive income and currently transferred to the profit or loss						
Sub-total	1,084		1,084	2,503		2,503
III. Total of other comprehensive income	5,207	996	4,211	(2,760)	(74)	(2,686)

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8.57.2 Adjustment to items of other comprehensive income

Item	Changes in re-measurement of the defined benefit plan	Other comprehensive income that cannot be transferred to profit or loss under the equity method	Changes in fair value of other equity instrument investments	Other comprehensive income that can be transferred to profit or loss under the equity method	Changes in fair value of other creditor's right investment	Provision for credit impairment of other creditor's right investment	Reserves of cash flow hedges (effective portion of cash flow hedging profit or loss)	Translation differences of foreign currency financial statements	Sub-total
I. Balance as at January 1, 2018	(312)	(86)	(394)	(24,788)	(391)	96	1,462	(907)	(25,320)
II. Increases/decreases in 2018 ("-" for decreases)	(106)		1,310	(37)	98	74	(6,521)	2,503	(2,679)
III. Balance as at January 1, 2019	(418)	(86)	916	(24,825)	(293)	170	(5,059)	1,596	(27,999)
IV. Increases/decreases in 2019 ("-" for decreases)	24		(926)	(379)	240	168	3,987	1,085	4,199
V. Balance as at December 31, 2019	(394)	(86)	(10)	(25,204)	(53)	338	(1,072)	2,681	(23,800)

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8.58 Segment information

Item	Oil and gas exploitation		Oil refining production		Chemical production		Sales of refined oil product	
	Year 2019/ As at December 31, 2019	Year 2018/ As at January 1, 2019	Year 2019/ As at December 31, 2019	Year 2018/ As at January 1, 2019	Year 2019/ As at December 31, 2019	Year 2018/ As at January 1, 2019	Year 2019/ As at December 31, 2019	Year 2018/ As at January 1, 2019
I. Total operating revenue	210,712	200,191	1,224,156	1,263,408	536,686	587,868	1,430,963	1,446,637
Including: revenue from external transactions	121,398	104,237	147,138	154,320	481,813	514,033	1,426,804	1,441,413
Revenue from inter-segment transactions	89,314	95,954	1,077,018	1,109,088	54,873	73,835	4,159	5,224
II. Operating costs	201,059	215,737	1,188,790	1,208,420	506,811	562,743	1,370,185	1,421,371
III. Operating profits (losses)	5,581	(8,954)	30,015	56,320	21,281	32,472	30,259	28,202
IV. Total assets	410,948	321,685	321,081	271,357	219,373	194,300	399,243	317,643
V. Total liabilities	162,262	93,874	120,617	103,707	92,093	69,509	219,380	159,031

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(Continued)

Item	Petroleum and petrochemical engineering		Other business		Elimination of inter-segment		Total	
	Year 2019/ As at December 31, 2019	Year 2018/ As at January 1, 2019	Year 2019/ As at December 31, 2019	Year 2018/ As at January 1, 2019	Year 2019/ As at December 31, 2019	Year 2018/ As at January 1, 2019	Year 2019/ As at December 31, 2019	Year 2018/ As at January 1, 2019
I. Total operating revenue	128,993	110,674	1,597,918	1,474,449	2,126,011	2,146,386	3,003,417	2,936,841
Including: revenue from external transactions	128,993	110,674	930,803	816,121	233,532	203,957	3,003,417	2,936,841
Revenue from inter-segment transactions			667,115	658,328	1,892,479	1,942,429		
II. Operating costs	126,055	108,188	1,592,076	1,480,451	2,070,014	2,155,426	2,914,962	2,841,484
III. Operating profits (losses)	4,049	3,607	41,250	600	31,256	10,841	101,179	101,406
IV. Total assets	138,797	139,805	1,133,030	1,389,880	410,753	351,604	2,211,719	2,283,066
V. Total liabilities	102,813	106,025	914,833	1,111,863	519,045	449,547	1,092,953	1,194,462

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8.59 Notes to matters concerning the consolidated statement of cash flows

8.59.1 Net profits adjusted to cash flows from operating activities

Item	Year 2019	Year 2018
(1) Net profits adjusted to cash flows from operating activities:		
Net profit	79,101	72,485
Plus: provision for impairment of assets	2,338	16,172
Losses from impairment of credit assets	1,991	329
Depreciation of fixed assets, depletion of oil and gas assets, and depreciation and amortization of investment properties	102,846	109,526
Amortization of intangible assets	6,720	6,490
Amortization of long-term deferred expenses	5,315	6,873
Losses from disposal of fixed assets, intangible assets and other long-term assets ("-" for gains)	871	847
Losses from scrapping of fixed assets, oil and gas assets and investment properties ("-" for gains)	661	813
Losses from changes in fair value ("-" for gains)	2,737	(2,028)
Financial expenses ("-" for gains)	9,142	7,495
Exploration expenses	10,520	10,753
Investment losses ("-" for gains)	(13,635)	(13,282)
Decreases in deferred income tax assets ("-" for increases)	3,117	(5,234)
Increases in deferred income tax liabilities ("-" for decreases)	261	(1,169)
Decreases in inventories ("-" for increases)	(10,541)	(711)
Decreases in operating receivables ("-" for increases)	(28,840)	(7,654)
Increases in operating payables ("-" for decreases)	(36,496)	4,237
Increases in work safety costs ("-" for decreases)	124	809
Net cash flows from operating activities	136,232	206,751
(2) Net changes in cash:		
Ending balance of cash	151,416	200,178
Less: beginning balance of cash	200,178	169,228
Net increase in cash	(48,762)	30,950

8.59.2 Breakdowns of cash

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Cash on hand	59	66
Unrestricted bank deposit	147,576	198,084
Other unrestricted cash and cash equivalents	3,781	2,028
Total ending balance of cash	151,416	200,178

8.60 Main foreign currency monetary items

Item	Balance in foreign currency as at December 31, 2019	Exchange rate for conversion	Balance in RMB converted as at December 31, 2019
Cash and cash equivalents			
Including: USD	3,319	6.9762	23,154
EUR	411	7.8155	3,210
HKD	16,971	0.8958	15,202

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Item	Balance in foreign currency as at December 31, 2019	Exchange rate for conversion	Balance in RMB converted as at December 31, 2019
GBP	1	9.1501	7
Other foreign currencies			2,787
Short-term borrowings			
Including: USD	6,931	6.9762	48,351
EUR	12	7.8155	93
HKD	890	0.8958	797
Non-current liabilities maturing within one year			
Including: bonds payable maturing within one year - USD	4,814	6.9762	33,585
Long-term borrowings maturing within one year - USD	4	6.9762	25
Other current liabilities			
Including: Short-term bonds payable - USD	375	6.9762	2,615
Long-term borrowings			
Including: USD	276	6.9762	1,922
EUR	1,205	7.8155	9,419
Bonds payable			
Including: USD	24,443	6.9762	170,521
EUR	1,197	7.8155	9,357
HKD	1,124	0.8958	1,007

9 Contingencies

9.1 Contingent liabilities arising from guarantees provided

As at December 31, 2019, the external guarantee provided by the Group amounted to RMB 135,649 million, with the details as follows:

1. The Company provided the guarantee to its associate SIPC of RMB 118,229 million, including the loan guarantee of RMB 89,323 million, performance guarantee of RMB 12,986 million and other guarantee of RMB 15,920 million.

2. SINOPEC Assets Company, a subordinate company of the Group, provided 4 guarantees to external entities of the Group, amounting to RMB 130 million. In which:

   One undue guarantee, amounted to RMB 108 million is the general loan guarantee provided by Anqing Branch of Sinopec Corp. to its associate Anhui Anqing Shuguang Chemical Co., Ltd...

   And the remaining three overdue guarantees of RMB 22 million mainly are the loan guarantee for the parties out of the group’s consolidated scope, which used to provide by the original sales enterprise at the provincial or municipal levels subordinated to SINOPEC Assets Company. For guarantees which have been adjudicated or are more likely to undertake joint liability, the estimated liabilities of RMB 22 milion had been withdrawn in prior years..

3. Sinopec Corp., a subordinate company of the Group, provided 2 guarantees to external enterprises of the Group, amounting to RMB 17,240 million, which have not been overdue. In which: one guarantee of RMB 10,140 million was provided to the associate Zhongtian Synergetic Energy, and the other guarantee of RMB 7,100 million was provided to the joint venture Zhongan United Coal Chemical Co. ,Ltd..

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4. SFC, a subordinate company of the Group, provided 1 performance guarantee to the associate Huaheng Energy Co., Ltd., which is an external enterprise of the Group, amounting to RMB 50 million.

9.2 Contingent liabilities arising from pending litigation or arbitration

The Group is the accused in some legal actions, and also the designated party in other lawsuits lodged in the routine business operation. The management has made the assessment on the possibility of bad outcomes brought about by these contingencies, legal actions or other lawsuits, and believes that no liability therefrom will have significant adverse impact on the Group's financial condition or operating performance.

10 Subsequent events

10.1 Dividend distribution

On March 27, 2020, Sinopec Corp. convened a board meeting, in which the board of directors proposed to distribute A-share dividends as at December 31, 2019 at RMB 0.19 per share, and such proposal remains to be approved by shareholder at the annual general meeting.

On March 20, 2020, SEG convened a board meeting, in which the board of directors proposed to distribute dividends as at December 31, 2019 at RMB 0.212 per share, and such proposal remains to be approved by shareholder at the annual general meeting.

10.2 Others statement on post balance sheet events

At the beginning of 2020, the Group's sales of refined oil and chemical products have been hit by the outbreak of the novel coronavirus pneumonia (“COVID-19”). The Group has taken a series of effective measures to well prepare for the outbreak prevention and control and work resumption, and try the best to minimize the impact of the outbreak.

As affected by the COVID-19 outbreak, the breakdown of negotiation on OPEC production cuts and other matters, the global crude oil price plunge in March 2020, by which the Group’s production and operation were badly affected.

The Company will continue to pay close attention to the development of the COVID-19 outbreak and the future change in oil price, and take relevant measures to assess the impact of the outbreak on its financial situation and operation results. As at the approval date of releasing the financial statements, the assessment is in process.

11 Related-party relationships and related transactions

11.1 Related-party relationships

1. Controller of the Company
The ultimate controller of the Company is the State-owned Assets Supervision and Administration Commission of the State Council.

2. Major subsidiaries of the Group
For the information the Company's subsidiaries, see Note 7.1.

3. Joint ventures and associates of the Group

(1) Basic information on major joint ventures or associates

Name of joint venture/associate	Main business place	Registration place	Business nature	Shareholding ratio (%)		Voting right ratio (%)
				Direct	Indirect	
I. Joint ventures						
FREP	China	Fujian, China	Refined oil		50.00	50.00

Name of joint venture/associate	Main business place	Registration place	Business nature	Shareholding ratio (%) Direct	Shareholding ratio (%) Indirect	Voting right ratio (%)
			production			
BASF-YPC	China	Nanjing, China	Manufacturing and distribution of petrochemicals		50.00	50.00
Taihu	Russia	Cyprus	Oil and gas exploration		49.00	50.00
YASREF	Saudi Arabia	Saudi Arabia	Petroleum refining and processing		37.50	37.50
Sinopec SABIC Tianjin	China	Tianjin, China	Manufacturing and distribution of petrochemicals		50.00	50.00
II. Associates						
SIPC	Overseas	Beijing, China	Oil and gas exploration	30.00		30.00
Pipeline Ltd.	China	Wuhan, China	Construction and operation of natural gas pipelines and ancillary facilities		50.00	50.00
SIBUR	Russia	Russia	Natural gas processing and chemical engineering		10.00	10.00
Zhongtian Synergetic Energy	China	Inner Mongolia	Manufacturing of coal chemical products		38.75	38.75
CIR	Kazakhstan	BVI (British Virgin Islands)	Oil and gas exploration		50.00	50.00

(2) For the financial information on major joint ventures or associates, see Note 8.14

11.2 Related transactions of joint ventures or associates

Related transactions	Year 2019	Year 2018
Sales of goods	226,357	219,917
Purchase of goods	158,392	142,579
Loans (USD ’000,000)	50,403	65,521
Loans (EUR ’000,000)	1	
Funds withdrawal (EUR ’000,000)		849
Funds withdrawal (USD ’000,000)	51,878	66,665
Interest income	8,464	8,387
Rendering of services	5,660	7,650
Including: engineering construction	5,482	7,347
Receiving of services	8,515	6,301
Agency revenue	93	95
Lease revenue	106	117

11.3 Unsettled amount of related transactions

(1) Receivables from related parties

Outstanding	Balance as at December 31, 2019	Balance as at January 1, 2019

AMOUNTS ARE EXPRESSED IN RMB '000,000 UNLESS OTHERWISE STATED

item	Book balance	Proportion (%)	Provision for bad debts	Book balance	Proportion (%)	Provision for bad debts
Notes receivable	570.00	4.65		443	3.69	
Accounts receivable	8,008	10.93	25	6,263	8.46	15
Advances to suppliers	176	0.83		99	0.51	
Other receivables	1,586	5.03	23	1,919	6.33	67
Shareholder loans	3,355	100.00		26,582	96.34	
Lendings	260,972	90.97		265,597	95.83	
Entrusted loans	734	38.77		5,695	83.98	

(2) Payables to related parties

Outstanding item	Balance as at December 31, 2019		Balance as at January 1, 2019	
	Book balance	Proportion (%)	Book balance	Proportion (%)
Notes payable	716	3.51	73	0.53
Accounts payable	10,319	4.30	6,595	2.58
Contract liabilities	5,848	3.95	2,652	1.85
Other payables	538	0.71	440	0.55
Shareholder loans			12,470	100.00

12 Information conducive to the assessment by the user of the financial statements on the target, policies and procedures of enterprise management capital

12.1 The main target of the Group's capital management is to guarantee the Group's going concern ability and maintain the sound capital ratio, so as to support the business development and realize the increment goal of the state-owned capital.

In order to maintain and adjust the capital structure, the Group actively carries out the regular review and management of its capital structure, to achieve the most ideal capital structure and capital gains. Factors taken into account by the Group include the Group's future capital demand, efficiency of capital, present and anticipated profitability, anticipated operating cash flow, anticipated capital expenditure and anticipated strategic investment opportunities.

12.2 The Group monitors the capital structure mainly based on the debt to capital ratio and the debt to asset ratio.

12.3 In 2019, the Group deeply carried out the deleveraging work by taking measures such as efficiency improvement, debt reduction, and intensification of investment control and capital operation. The debt to capital ratio and debt to asset ratio declined compared with those at the end of the prior year, by which the capital structure was further optimized.

Monitoring indicators	As at December 31, 2019	As at January 1, 2019
Debt to capital ratio (Interest-bearing liabilities/Sum of equity and interest-bearing liabilities)	25.59%	28.84%
Debt to asset ratio (Total liabilities/Total assets)	49.42%	52.32%

AMOUNTS ARE EXPRESSED IN RMB '000,000 UNLESS OTHERWISE STATED

12.4 The Group is not subject to external mandatory capital requirements.

13 Notes to main items of the parent company's financial statements

13.1 Long-term equity investments

Item	Balance as at December 31, 2019	Balance as at January 1,2019
Investments in subsidiaries	334,841	323,627
Investments in joint ventures	3,220	2,957
Investments in associates	73,398	71,506
Sub-total	411,459	398,090
Less: provision for impairment	74,486	74,486
Total	336,973	323,604

13.2 Operating revenue and operating costs

Item	Year 2019		Year 2018	
	Revenue	Cost	Revenue	Cost
Lease revenue	6,339		4,901	

13.3 Investment income

Sources of income from investments	Year 2019	Year 2018
Long-term equity investment income calculated under the cost method	32,042	49,135
Long-term equity investment income calculated by the equity method	503	196
Investment income from disposal of long-term equity investments	(97)	3,095
Interest income from creditor's right investment during the holding period	444	231
Dividend income from investments in other equity instruments	94	63
Total	32,986	52,720

13.4 Notes to matters concerning the parent company's statement of cash flows

13.4.1 Net profit adjusted to cash flows from operating activities

Item	Year 2019	Year 2018
(1) Net profit adjusted to cash flows from operating activities:		
Net profit	31,500	49,487
Plus: losses from impairment of credit assets		
Depreciation of fixed assets, depletion of oil and gas assets, and depreciation and amortization of investment properties	36	83
Amortization of intangible assets	515	518
Losses from disposal of fixed assets, intangible assets and other long-term assets ("-" for gains)		
Losses from scrapping of fixed assets, oil and gas assets and investment properties ("-" for gains)		
Losses from changes in fair value ("-" for gains)	(328)	316
Financial expenses ("-" for gains)	1,197	1,251
Investment losses ("-" for gains)	(32,986)	(52,720)
Increases in deferred income tax liabilities	3	

AMOUNTS ARE EXPRESSED IN RMB '000,000 UNLESS OTHERWISE STATED

Item	Year 2019	Year 2018
("-" for decreases)		
Decreases in inventories ("-" for increases)	1	
Decreases in operating receivables ("-" for increases)	7	
Increases in operating payables ("-" for decreases)	6,940	3,543
Net cash flows from operating activities	6,885	2,478
(2) Net changes in cash:		
Ending balance of cash	30,991	43,405
Less: beginning balance of cash	43,405	10,607
Net increase in cash	(12,414)	32,798

13.4.2 Breakdowns of cash

Item	Balance as at December 31, 2019	Balance as at January 1, 2019
Cash on hand		
Unrestricted bank deposit	30,932	43,346
Other unrestricted cash and cash equivalents	59	59
Total ending balance of cash	30,991	43,405

14 Other contents to be disclosed as required by relevant financial and accounting systems

14.1 Separation and transfer of water/power/heat supply and property management

According to the *Guiding Opinions on the Separation and Transfer of Water/Power/Heat Supply and Property Management for Family Area of Employees in SOEs* (GBF [2016] No.45) issued by the General Office of the State Council, the Administrative Measures for the Central Government Subsidy for t*he Separation and Transfer of Water/Power/Heat Supply and Property Management for Family Area of Employees in Central SOEs* (CZ [2016] No.38) issued by the Ministry of Finance and the State-owned Assets Supervision and Administration Commission and other documents, all enterprises subordinated to the Group have carried out the separation and transfer of water/power/heat supply and property management as planned since 2016, and conducted the financial accounting according to the official reply given by the Company.

In 2019, the separation and transfer of water/power/heat supply and property management in enterprises subordinated to the Company were used to offset the state-owned equity, decreasing the undistributed profits of RMB 190 million and the capital reserves of RMB 4,437 million.

During the period from 2016 to 2019, the separation and transfer of water/power/heat supply and property management in enterprises subordinated to the Company were used to offset the state-owned equity, accumulatively decreasing the undistributed profits of RMB 2,999 million, the surplus reserves of RMB 591 million and the capital reserves of RMB 32,053 million.

14.2 Long-term entrusted loans for listed companies

1. On May 10, 2001, the Company signed the agreement on directional long-term entrusted loans with Sinopec Corp. and SFC, to replace the *Agreement on Liability Transfer and Adjustment* the Company signed in August 2000 with Sinopec Corp.. The principal of entrusted loan amounted to RMB 35,560 million with the interest rate of 0% and the term from the date of sign such agreement (May 10, 2001) to the end of the 20th year of Sinopec Corp. for overseas listing (December 31, 2020). Sinopec Corp. has the right to choose to repay all of the loan, or firstly repay 50% of the same, and

then repay the remaining 50% at the end of the 21st year of Sinopec Corp. for overseas listing (December 31, 2021).

2. According to the *Circular on Issuing the Provisions on Strengthening the Enterprise Financial Information Management* (CQ [2012] No.23) issued by the Ministry of Finance, the financial funds allocated by the parent company of the Group to all subordinated wholly owned or holding corporate enterprises for use shall be taken as equity investment. If the holding corporate enterprises subordinated to the parent company does not intend to increase capital and capital and share for the time being, such financial funds shall be presented as entrusted loan, and the enterprise shall sign an agreement with the parent company, agreeing that in case of the increase in capital and share, listing via restructuring or other matters, the entrusted loan shall be converted into the parent company's equity investment. According to the agreement on entrusted loans, the period of loan shall be 5 years, and the loan interest rate for the first year shall be 1.08%, and that for the subsequent years shall be determined by the parties to the agreement through negotiation. As at December 31, 2019, the financial funds allocated by the Company to its subordinated listed companies via the entrusted loans amounted to RMB 8,857 million, including RMB 8,851 million for Sinopec Corp. and RMB 6 million for SOFE.

15 Approval of the financial statements

The financial statements for the year ended December 31, 2019 were approved by the Management of the Company for disclosure.

China Petrochemical Corporation

April 24, 2020

Review Report

PCPAR [2020] No. ZK21049

To China Petrochemical Corporation:

We have reviewed the attached condensed financial statements of China Petrochemical Corporation (hereinafter referred to as "the Group"), including the consolidated balance sheet as at September 30, 2020, the consolidated income statement and consolidated statement of cash flows for the nine months then ended, and the notes to the financial statements. The Group's management is responsible for the preparation of financial statements, and our responsibility is to express a conclusion on these financial statements based on our review.

We conducted our review in accordance with the Review Standards for Certified Public Accountants of China No.2101 - Engagements to Review Financial Statements. The standards require that we shall plan and perform the review of financial statements to obtain limited assurance about whether the financial statements are free of material misstatement. A review is limited primarily to inquiries of relevant personnel of the Group and analytical review procedures applied to the financial information and thus provides less assurance than an audit. We have not performed an audit, and therefore we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the financial statements are not presented fairly, in all material respects, the financial position of the Group as at September 30, 2020, and its financial performance and cash flows for the nine-month period then ended in accordance with the requirements of Accounting Standards for Business Enterprises.

BDO CHINA Shu Lun Pan
Certified Public Accountants LLP

Certified Public Accountant of China:
Lin Zhen

Certified Public Accountant of China:
Zhu Xiaodong

Shanghai, China

October 29, 2020

This review report and the accompanying financial statements are English translations of the Chinese review report and statutory financial statements prepared under accounting principles and practices generally accepted in the People's Republic of China. In case the English version does not conform to the Chinese version, the Chinese version shall prevail.

Consolidated Balance Sheet

Items	Note V	As at 30 September 2020 RMB '000,000 (Unaudited)	As at 31 December 2019 RMB '000,000 (Audited)
Current assets			
Cash and bank	1	257,155	151,409
Financial assets held for trading		22,173	21,673
Notes receivable		1,805	2,192
Accounts receivable	2	55,320	66,579
Prepayments		25,571	21,087
Other receivables		113,968	33,754
Inventories	3	246,018	250,574
Contract assets		26,349	17,879
Non-current assets due within one-year		718	2,704
Other current assets		139,605	125,592
Total current assets		**888,682**	**693,443**
Non-current assets			
Other Debt Investments		9,775	3,192
Long-term receivables		12,717	16,099
Long-term equity investments		182,731	145,422
Other equity instrument investments		12,749	9,727
Fixed assets		506,395	576,330
Construction in progress		164,714	191,973
Oil and gas assets		137,858	140,426
Right-of-use assets		35,302	33,883
Intangible assets		134,937	134,633
Goodwill		10,864	10,882
Long-term deferred expenses		14,886	14,966
Deferred tax assets		25,910	19,486
Other non-current assets		241,411	221,257
Total non-current assets		**1,490,249**	**1,518,276**
Total assets		**2,378,931**	**2,211,719**

Consolidated Balance Sheet (Continued)

Items	Note V	As at 30 September 2020 RMB '000,000 (Unaudited)	As at 31 December 2019 RMB '000,000 (Audited)
Current liabilities			
Short-term loans	4	125,246	71,449
Notes payable		26,347	20,392
Accounts payable		208,984	240,176
Contract liabilities		154,166	148,226
Employee benefits payable		23,673	16,767
Taxes and surcharges payable		45,982	74,774
Other payables		91,911	79,076
Non-current liabilities due within one year	5	49,275	56,255
Other current liabilities		134,345	22,623
Total current liabilities		**859,929**	**729,738**
Non-current liabilities			
Long-term loans	6	48,204	60,921
Bonds payable	7	214,227	193,506
Long-term payables		20,796	19,918
Lease liabilities		23,010	20,383
Long-term Employee Benefits		2,340	2,287
Estimated liabilities		44,926	43,993
Deferred tax liabilities		8,120	7,030
Other non-current liabilities		18,329	15,177
Total non-current liabilities		**379,952**	**363,215**
Total liabilities		**1,239,881**	**1,092,953**
Owner's equity			
Paid-in capital		325,547	325,547
Capital reserves		52,207	51,947
Other comprehensive income		(30,541)	(23,800)
Specific reserves		3,172	2,192
Surplus reserves		223,474	223,499
General risk reserves		1,766	1,766
Retained earnings		195,203	169,350
Total equity attributable to parent company		**770,828**	**750,501**
Minority interests		368,222	368,265
Total equity		**1,139,050**	**1,118,766**
Total Liabilities and equity		**2,378,931**	**2,211,719**

Zhang Yuzhuo	**Zhang Shaofeng**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Director of Finance Department**

Consolidated Income Statement

Items	Note V	Nine months ended 30 September 2020 RMB '000,000 (Unaudited)	2019 RMB '000,000 (Unaudited)
I. Operating revenue		**1,581,131**	**2,265,309**
II. Total operating costs		**1,567,897**	**2,189,200**
Incl.: Operating costs		1,277,742	1,893,422
Taxes and surcharges		174,833	185,177
Selling and distribution expenses		45,117	45,547
General and administrative expenses		50,768	46,606
Research and development expenses		10,030	8,574
Exploration costs		6,109	6,623
Financial expenses	8	3,298	3,251
Add: Other income (loss)		5,138	3,302
Investment income (loss)		42,350	6,455
Gain from changes of fair value (loss)		2,019	(696)
Expected credit loss		(917)	(262)
Assets impairment loss		(11,427)	(48)
Gain from assets disposal (loss)		1,253	(56)
III. Operating profit (loss)		**51,650**	**84,804**
Add: Non-operating income		2,253	2,579
Less: Non-operating expenses		3,164	5,171
IV. Total profit (loss)		**50,739**	**82,212**
Less: Income tax expenses		7,678	16,147
V. Net profit (loss)		**43,061**	**66,065**
Less: Profit/loss attributable to minority interests		15,519	24,263
VI. Net profit attributable to parent company		**27,542**	**41,802**

Zhang Yuzhuo	Zhang Shaofeng	Wu Bo
General Manager	**Chief Financial Officer**	**Director of Finance Department**

Consolidated Statement of Cash Flows

Items	Notes	Nine months ended 30 September 2020 RMB ’000,000 (Unaudited)	2019 RMB ’000,000 (Unaudited)
I. Cash flows from operating activities			
Cash received from sales and services		1,738,938	2,379,191
Refund of tax and surcharges		3,010	1,692
Other cash received relating to operating activities		149,352	110,194
Subtotal of cash inflows from operating activities		**1,891,300**	**2,491,077**
Cash paid for goods and services		1,327,409	1,892,906
Cash paid to and for employees		77,273	79,301
Payments of taxes and surcharges		243,196	289,905
Other cash paid relating to operating activities		176,612	105,539
Subtotal of cash outflows from operating activities		**1,824,490**	**2,367,651**
Net cash flows from operating activities		**66,810**	**123,426**
II. Cash flows from investing activities			
Cash received from disposal of investments		35,845	85,910
Cash received from investment income		7,924	9,161
Net cash received from disposal fixed assets, intangible assets and other long-term assets		2,275	714
Net cash received from disposal of subsidiaries and other operating units		41	
Other cash received relating to investing activities		2,693	6,582
Subtotal of cash inflows from investing activities		**48,778**	**102,367**
Cash paid for purchasing fixed assets, intangible assets and other long-term assets		85,675	77,912
Cash paid for acquisition of investments		56,077	101,571
Net cash paid to acquire subsidiaries and other operating units			
Other cash paid relating to investing activities		9,898	1,492
Subtotal of cash outflows from investing activities		**151,650**	**180,975**
Net cash flows from investing activities		**(102,872)**	**(78,608)**

Consolidated Statement of Cash Flows (Continued)

Items	Notes	Nine months ended 30 September 2020 RMB ’000,000 (Unaudited)	2019 RMB ’000,000 (Unaudited)
III. Cash flows from financing activities			
Cash received from capital contributions		3,493	2,222
Cash received from borrowings		666,780	661,708
Other cash received relating to financing activities		757	326
Subtotal of cash inflows from financing activities		**671,030**	**664,256**
Cash repayments of borrowings		499,283	660,420
Cash paid for dividends, profits distribution or interest		21,207	45,484
Other cash paid relating to financing activities		3,426	1,919
Subtotal of cash outflows from financing activities		**523,916**	**707,823**
Net cash flows from financing activities		**147,114**	**(43,567)**
IV. Effect of foreign exchange rate changes on cash		**(5,280)**	**2,576**
V. Net increase in cash and cash equivalents		**105,772**	**3,827**
Add: Cash and cash equivalents at the beginning of the period		151,416	200,178
VI. Cash and cash equivalents at the end of the period		**257,188**	**204,005**

Zhang Yuzhuo	**Zhang Shaofeng**	**Wu Bo**
General Manager	**Chief Financial Officer**	**Director of Finance Department**

China Petrochemical Corporation
Notes to the Financial Statements
For the Nine Months Ended September 30, 2020

I COMPANY PROFILE

China Petrochemical Corporation (hereinafter referred to as "the Company") is a wholly state-owned company established on July 27, 1998, with its registered place and headquarters in Beijing, a registered capital of RMB 326.5 billion and its legal representative is Zhang Yuzhuo.

The Company is integrated energy and chemical companies with upstream, midstream and downstream operation in China, established on the basis of former China Petrochemical Corporation according to the Circular on Establishment Program of Sinopec Group and Announcement on the articles of association of Sinopec Group (the State Economic and Trade Commission [1998] No.458). The former China Petrochemical Corporation was established in 1983 as the economic entity with the qualification of a legal person under direct control by the State Council, and responsible for designing and planning the national petrochemical production construction and import and export business. In July, 1998, China carried out significant reform and restructured the petroleum and petrochemical industry, Sinopec Group completely merged China Eastern United Petrochemical (Group) Company Limited and finished transfer with China National Petroleum Corporation and hand-over with provincial/ municipal as well as specifically designated municipal petroleum companies, hence, it became a state-owned company, functioning as a state-authorized investment organization in which the state holds the full control.

According to the Reply on Matters Related to the Restructuring of China Petrochemical Corporation (GZGG [2017] No.1076) issued by the State-owned Assets Supervision and Administration Commission, the Company completed its corporate restructuring in August 2018, with its enterprise type changing from "ownership by the whole people" to "limited liability company (wholly state-owned)" and its name changing to "China Petrochemical Corporation". With the approval of Beijing Administration for Industry and Commerce, the Company completed the industrial and commercial registration of changes on August 20, 2018.

The Company and its subsidiaries' ("the Group") key business activities include: exploration and development of petroleum and natural gas, petroleum refining, petrochemical, petroleum products wholesale and retail, exploration and designing, construction and installation of petroleum and petrochemical projects.

The Group ranked the 2nd on Fortune's Global 500 List in 2020.

The Group has 39 wholly-owned or holding subsidiaries, including China Petroleum & Chemical Company (“Sinopec Corp.”) listed in Hong Kong, New York, London and Shanghai, Sinopec Oilfield Service Corporation listed in Hong Kong and Shanghai, Sinopec Engineering (Group) Co., Ltd. listed in Hong Kong, Sinopec Oilfield Equipment Corporation listed in Shenzhen, as well as 35 unlisted companies.

II BASIS OF PREPARATION FOR THE FINANCIAL STATEMENTS

The financial statements are prepared in accordance with the Accounting Standards for Business Enterprises and corresponding application guidance, interpretations and other related provisions issued by the Ministry of Finance (collectively referred as "Accounting Standards for Business Enterprises").

The financial statements of the Group have been prepared on the going concern basis.

III STATEMENT ON COMPLIANCE WITH THE ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES

The financial statements have been prepared in compliance with the Accounting Standards for Business Enterprises to truly and completely present the consolidated financial position as at September 30, 2020, and the consolidated operating results and cash flows for the nine months ended September 30, 2020.

IV SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

1 Accounting period

The calendar year is adopted for the accounting year of the Group, namely, from January 1 to December 31 of each year.

2 Functional currency

The Group adopts RMB as its functional currency.

3 Accounting basis and valuation principle

The Group's accounts are recorded on an accrual basis. Except for any financial instruments, the financial statements are measured on basis of historical cost. In case of the assets impairment, provision for impairment will be made according to relevant regulations.

4 Recognition criteria of cash and cash equivalents

Cash and cash equivalents include cash on hand, cash at bank, other monetary funds and short-term non-equity investments held by the Company. The recognition of short-term non-equity investments as cash equivalents must meet the following four conditions at the same time: short term (generally refers to maturity within three months from the acquisition date), strong liquidity, easy conversion into known amount of cash, and little risk of value change.

5 Foreign currency transactions and translation of foreign currency financial statements

5.1 Foreign currency transactions

For the Group's foreign-currency transactions, the foreign-currency amount is translated into the functional currency amount according to the spot exchange rate on the transaction date or the exchange rate at the end of last month. Foreign-currency exchange business or transactions involving foreign currency exchange shall be translated at the exchange rate actually used in the transactions, i.e. the bank purchase price or selling price.

Balance of foreign currency monetary items is translated into the amount in RMB for adjustment at the spot exchange rate prevailing on the balance sheet date; foreign currency non-monetary items measured at fair value are translated into the amount in RMB for adjustment at the spot exchange rate prevailing on the day when the fair value is determined. Differences arising from exchange of special borrowing accounts in foreign currency at the end of the period and directly attributable to the acquisition and construction or production of assets eligible for capitalization should be capitalized and recorded into relevant asset costs according to the provisions; differences arising from exchange of other foreign currency accounts shall be included in the financial expenses. Differences arising from exchange of different currencies are included in the financial expenses.

5.2 Translation of foreign currency financial statements

Assets and liabilities in the balance sheet are translated at the spot exchange rates on balance sheet date; owners' equity items, except for the item of “Retained earnings”, are translated at the spot exchange rates on the dates when the transactions occur. Income and expense items in the income statement and items reflecting the amount of profit distribution in the statement of changes in owner's equity shall be converted using the exchange rate consistent with the initial recognition on the date of occurrence of the foreign-currency transactions. Differences arising from the said translation of foreign-currency financial statements are presented separately as "Other comprehensive income" under the owners' equity in the balance sheet.

6 Financial instruments

Financial instruments, refer to the contracts that form one party's financial assets and form the financial liabilities or equity instruments of the other party. The Group recognizes a financial asset or a financial liability when the Group enters into and becomes a party to the underlining contract of the financial instrument.

6.1 Classification and measurement of financial assets

The Group classifies financial assets according to the business model of managing financial assets and the contractual cash flows characteristics of financial assets:

- Financial assets measured at amortized cost;

- Financial assets measured at fair value through other comprehensive income;

- Financial assets measured at fair value through current profit or loss.

Except for accounts receivable or notes receivable that do not consist of or consider significant financing components, financial assets are measured at fair value at initial recognition. For the financial assets which are measured at their fair values and of which the variation is included in the current profits and losses, the transaction expense shall be directly recorded into the profits and losses of the current period. For other categories of financial assets, the transaction expense shall be recorded into the initially recognized amount. Accounts receivable or notes receivable arising from the sale of products or the provision of labor services that do not include or take into account significant financing components are initially recognized by the Group in accordance with the amount of consideration that the Group is expected to be entitled to receive.

A. Debt instruments

(1) Measured in amortized cost: Assets, which are held for the purpose of receiving contract cash flows and whose cash flows are only for the payment of principal and interest, are classified as financial assets measured at amortized cost.

After initial recognition, such financial assets are measured at amortized cost by using the effective interest method. Gains or losses arising from the financial assets that are measured at amortized cost and that are not part of any hedging relationship shall be included into the current profit or loss when such financial assets are de-recognized, amortized under the effective interest method or impaired.

(2) Measured at fair value through other comprehensive income: Assets, which are held for the purpose of receiving contractual cash flows and selling the financial assets and whose cash flows are only for the payment of principal and interest, are classified as financial assets measured at fair value through other comprehensive income.

After initial recognition, such financial assets will be subsequently measured at fair value. The interest calculated under the effective interest method, impairment losses or gains and exchange losses or gains will be included in current profit or loss, and other gains or losses will be included in other comprehensive income. When de-recognized, the accumulated gains or losses previously included in other comprehensive income shall be transferred from other comprehensive income and included in current profit or loss.

(3) Measured at fair value through current profit or loss: Except for the financial assets measured at amortized cost and the financial assets measured at fair value through other comprehensive income mentioned above, all the rest debt instruments are classified as financial assets measured at fair value through current profit or loss by the Group.

After the initial recognition, such financial assets will be subsequently measured at fair value, and the gains or losses (including interest and dividends income) arising therefrom will be included in the current profit or loss, unless the financial assets are part of the hedging relationship.

B. Equity instruments

Investments in equity instruments over which the Group has no control, joint control and significant influence are designated as financial assets measured at fair value through the current profit or loss, and are listed as financial assets held for trading.

In addition, the Group designated some non-trading equity instrument investments as financial assets measured at fair value through other comprehensive income and listed them as other equity instrument investments. Dividend income related to such financial assets is included in the current profit or loss. At derecognition, the accumulated gains or losses previously included in other comprehensive income will be transferred from the other comprehensive income to the retained earnings.

6.2 Classification and measurement of financial liabilities

Financial liabilities, upon initial recognition, are classified into the financial liabilities measured at amortized cost and the financial liabilities measured at fair value through the current profit or loss. Transaction expenses related to financial liabilities which have not been divided as the financial liabilities measured at fair value through current profit or loss are included in the initial recognition amount.

For financial liabilities measured at amortized cost, the gains or losses arising from their derecognition or amortization are included in the current profit or loss. For financial liabilities that are subsequently measured at fair value, the gains or losses arising from changes in their fair value and the dividends and interest expenses related to the financial liabilities are included in current profit or loss.

6.3 Derivative financial instruments

Derivative financial instruments are measured at fair value upon initial recognition and their fair value is re-assessed on each balance sheet date. Gains and losses arising from the reassessment of the fair value of derivative financial instruments shall be included in the current profit or loss except for those meeting the requirements for hedge accounting.

6.4 Impairment of financial instruments

The Group recognizes the provision for loss based on the expected credit losses of the financial assets measured at amortized cost, other debt investments measured at fair value through other comprehensive income, the lease receivables, the contract assets, the loan commitments other than financial liabilities classified at fair value through the current profit or loss, and the financial guarantee contracts not measured at fair value through the current profit or loss.

The Group calculates and recognizes the expected credit losses after taking into account reasonable and reliable information such as past events, current situation and forecast of future economic situation.

On the balance sheet date, the Group separately measures the expected credit losses of financial instruments at different stages. If the credit risk of a financial instrument has not increased significantly since the initial confirmation, it is in the first stage, and the Group measures the provision for loss according to the expected credit loss in the next 12 months. If the credit risk of a financial instrument has increased significantly since its initial recognition but no credit impairment has occurred, it is in the second stage and the Group measures the provision for loss according to the expected credit loss of the instrument throughout its life. If a financial instrument has suffered credit impairment since its initial recognition, it is in the third stage, and the Group measures the provision for loss according to the expected credit loss of the instrument throughout its life.

For a financial instrument with lower credit risk on the balance sheet date, the Group assumes that its credit risk has not increased significantly since the initial recognition, and measures the provision for loss according to the expected credit losses in the next 12 months.

For the financial instruments in the first stage and the second stage, as well as those with lower credit risk, the Group calculates the interest income according to its book balance without deducting the impairment provision at actual interest rate. For the financial instruments in the third stage, the interest income is calculated according to the book balance minus the amortized cost after the provision for impairment at the actual interest rate.

For notes receivable, accounts receivable and contract assets, regardless of whether there is any significant financing component, the Group measures the provision for loss according to the expected credit loss for the entire duration.

The Group includes the accrued or reversed provision for loss into the current profit or loss.

6.5 Fair value of financial instruments

For the recognition method of fair value of financial assets and financial liabilities, see note IV 7.

6.6 Derecognition of financial instruments

In case any financial asset meets one of the following conditions, it will be derecognized:

(1) The contract rights of obtaining cash flows of the financial assets are terminated;

(2) The financial asset has been transferred, and nearly all the risks and rewards associated with ownership of the financial assets have been transferred by the Group to the transferee;

(3) The financial asset has been transferred, even though the Group neither transfers nor retains nearly all the risks and rewards associated with the ownership of the financial asset but gives up its control over the financial asset.

When other equity instrument investment is derecognized, the difference between its book value and the sum of the received consideration and the accumulated amount of changes in fair value originally directly included in other comprehensive income shall be included in retained earnings. When a remaining financial asset is derecognized, the difference between the book value of the financial asset and the sum of the consideration received and the accumulated amount of changes in the fair value originally included in other comprehensive income will be included in the current profit or loss.

A financial liability shall be wholly or partly derecognized if its present obligations are wholly or partly dissolved. As for financial liabilities, the difference between the book value of the derecognized part and the consideration paid is included in the current profit or loss.

6.7 Transfer of financial assets

The transfer of a financial asset refers to a transfer or delivery of the financial asset (or its cash flows) from an enterprise (the "transferor") to a party other than the issuer of such financial asset ("the transferee").

Where the Group has transferred nearly all risks and rewards associated with the ownership of a financial asset to the transferee, the financial asset shall be de-recognized; where the Group retains nearly all risks and rewards associated with the ownership of a financial asset, the financial asset shall be continuously recognized.

Where the Group neither transfers nor retains nearly all the risks and rewards associated with the ownership of the financial asset, it shall be treated based on different circumstances as below: where the Company has not retain its control over the financial asset, the financial asset should be derecognized, and assets and liabilities arising therefrom should be recognized; or where the Company retains its control over the financial asset, relevant financial asset is recognized according to the extent of its continuing involvement in the transferred financial assets and relevant liabilities are recognized accordingly.

7 Fair value measurement

Fair value is the price received from an asset or paid for transfer of a liability by a market participant in an orderly transaction on the measurement date.

Where there is an active market for the financial assets or financial liabilities, the Group will determine their fair values at the quoted price in the active market. Where there is no active market, the Group will adopt the valuation techniques to determine their fair values.

When the Company measures non-financial assets at fair value, it should consider a market participant’s ability to generate economic benefit by using the asset or by selling it to another market participant who will use the asset in its highest and best use.

When the Group uses the valuation techniques, it has considered the valuation techniques that are applicable in the current situation and are supported by enough available data and other information. The Company gives priority to the observable inputs when using valuation techniques, and those unobservable inputs are used only under the circumstance when it is impossible or unobservable inputs to obtain relevant observable inputs.

For assets and liabilities measured at or disclosed by their fair value in the financial statements, the level of the measurement result of fair value shall subject to the lowest level which the input having great significance to the entire measurement of fair value belongs to: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access on the measurement date; Level 2 inputs are directly or indirectly observable inputs of relevant assets or liabilities other than first-level inputs; Level 3 inputs refer to unobservable inputs of relevant assets or liabilities.

On each balance sheet date, the Group reevaluates the assets and liabilities continuously measured at fair value and recognized in the financial statements in order to determine whether there is a conversion among the levels of fair value measurement.

8 Inventories

8.1 Classification of inventories

The Group's inventories are classified into raw materials, revolving materials, goods in transit, goods in process, goods in stock, goods dispatched, and contract performance costs etc.

8.2 Measurement of inventories when acquired and dispatched

Inventories of the Group are measured at actual costs when acquired. When raw materials, goods in progress, goods in stock (except reserved crude oil) and the like are dispatched, the weighted average method or the planned cost method shall be adopted for pricing, the difference between the planned cost and the actual cost shall be separately accounted for through the cost difference account, and at the end of each month, the cost difference borne by the received and dispatched inventories shall be carried forward, and the planned cost shall be adjusted to the actual cost). For the swap sale of reserve crude oil, the swap purchase cost shall be carried forward to the sales cost. If the crude oil sold for swap is not fully replaced on the balance sheet date, the sales revenue will be carried forward temporarily as the sales cost, and the difference will be adjusted according to the actual repurchase cost after the replacement is completed. For inventories that cannot be used instead, inventories purchased or manufactured specially for specific projects, and the cost of providing labor services, the cost of dispatched inventories shall be determined by using the specific identification method. Low-cost consumables shall be amortized by the one-time write-off method when they are collected. Other revolving materials generally adopt the one-time write-off method, and revolving materials with larger value and longer service life are amortized by times over the benefit period.

8.3 Method of making provision for inventory impairment

On the balance sheet date, where the inventory costs are higher than the net realizable values, the provision for inventory impairment reserves shall be made. The Group makes provision for inventory impairment of commercial crude oil reserves on combined category basis, and makes such provision for other inventories on an individual item basis. If the factors that previously affected the write-down of inventory value have disappeared, the provision for inventory impairment are reversed within the original provision made.

8.4 Determination method for net realizable values of inventories

The net realizable values of inventories refer to the amounts of the estimated selling prices of inventories minus the estimated costs to completion, estimated selling expenses and relevant taxes and surcharges. In determining the net realizable value of inventories, the purpose of holding the inventories (except for the crude oil reserves) and the influence of post balance sheet events are both taken into account. The net realizable value of commercial crude oil reserves is determined based on the estimated future (five-year) crude oil price with consideration to the incidental transportation expenses and the oil premiums and discounts that have occurred.

8.5 Inventory physical counting system

The perpetual inventory system is adopted by the Group.

9 Long-term equity investments

The Group's long-term equity investments include equity investment by which the Company exercises control and significant influence over the investee and equity investment in joint ventures. Where the Group is able to have significant influence on an investee, the investee is an associate of the Group.

9.1 Determination of investment costs

Long-term equity investments are measured at the investment costs upon acquisition. The investment costs are the fair value of any assets acquired, any liabilities incurred or assumed, and any equity securities issued for acquisition of such investment, including the relevant direct costs. For long-term equity investments formed from business combinations under common control, the investment costs thereof shall be recognized at the share of book value of the combinee's owners' equity on the acquisition date.

9.2 Subsequent measurement and recognition methods of profit or loss

The Group measures the long-term equity investments that can exercise control over the investee under the cost method, and measures the investments in associates and joint ventures under the equity method.

A. Long-term equity investments under cost method

For the long-term equity investments under the cost method, except for the actual price paid for acquisition of investment or the cash dividends or profits contained in the consideration which have been declared but not yet distributed, the cash dividends or profits declared to be distributed by the investee are recognized as investment income to be included in current profit and loss.

B. Long-term equity investments under equity method

For the Group's long-term equity investments measured under the equity method, if the investment costs are higher than the investor's attributable share of the fair value of the investee's identifiable net assets, no adjustment will be made to the investment costs of the long-term equity investments; if the investment costs are lower than the investor's attributable share of the fair value of the investee's identifiable net assets, the book value of long-term equity investments should be adjusted, and the difference should be included into the current profit and loss.

When the equity method is adopted, the Company shall, according to the shares of net profits and losses and other comprehensive income realized by the investee which the Company shall enjoy or bear, recognize the profit and loss on the investments and other comprehensive income and adjust the book value of the long-term equity investments; the Company shall calculate the part distributed from cash dividends or profits declared by the investee and correspondingly reduce the book value of the long-term equity investments; for other changes in owner's equity of the investee other than net profit or loss and profit distribution, the Company adjusts the book value of long-term equity investments and includes such changes in owner's equity. When recognizing the attributable share of net profit or loss of the investee, the Company should, based on the fair value of identifiable net asset of the investee when it obtains the investment, recognize its attributable share of the net profit or loss of the investee after the adjustment according to the Group's accounting policy and accounting period.

9.3 Basis of control, common control over or significant impact on the investee

Control means that the Company has the power over the investee and enjoys the variable return through participating in activities related to the investee, and has the ability to affect the return of the investee by using the power over the investee. The financial positions, operating results and cash flows of subsidiaries are included in the consolidated financial statements from the control start date to the control end date.

Joint control refers to the control shared over an arrangement in accordance with the relevant stipulations, and the decision-making of related activities of the arrangement should not be made before the party sharing the control right agrees the same.

Significant influence refers to the power of the investor to participate in making decisions on the financial and operating policies of the investee, but not the power to control, or jointly control, the formulation of such policies with other parties. In determining whether to exercise significant influence over the investee, the Company will consider the voting shares of the investee directly or indirectly held by the investor, and effects of the transfer into the equities of the investee from the potential voting rights to be exercisable in current period held by the investor and other parties under an assumption such as the effects of the current convertible warrants, security options, convertible corporate bonds, etc. issued by the investee.

9.4 Disposal of long-term equity investments

For the disposal of long-term equity investments, the difference between the book value and the actual price thereof shall be included in the investment income. For long-term equity investment accounted for using the equity method, if it is included in other comprehensive income due to changes in other comprehensive income of the investee, the part originally included in other comprehensive income shall be transferred to investment income according to the corresponding proportion when the investment is disposed.

In case the joint control or significant influence over the investee is lost for disposing part of equity investments and other reasons, the remaining equity should be calculated as the difference between the fair value and the book value on the date of the loss of joint control or significant influence and be included in the current profit and loss. For other comprehensive income recognized from accounting of the original equity investments under the equity method, accounting treatment should be made by using the same basis for the investee to directly dispose the relevant assets or liabilities when the equity method is no longer adopted. Other changes in equity interests related to original equity investment should be included in current profits and losses.

Where the Company losses control over the investee due to its disposal of part of equity investment or other reasons, if it can exercise joint control over or significant influence on the investee through the remaining equities after disposal, the remaining equities shall be measured by changing to employ the equity method and adjusted as if the remaining equities had been measured by employing the equity method ever since acquired in preparation of separate financial statements; if the Company cannot exercise joint control over or a significant influence on the investee through the remaining equities after disposal, the accounting treatment shall be changed to be made in accordance with relevant regulations of the Accounting Standard for Business Enterprises No.22-Recognition and Measurement of Financial Instruments, and the difference between the fair value and book value thereof on the date of loss of the control shall be included in current profit or loss.

(Amounts are expressed in RMB ’000,000 unless otherwise stated)

9.5 Impairment of long-term equity investment

For investments in subsidiaries, associates and joint ventures, as well as the Group's provision method for asset impairment, see the Note IV 12.

10 Fixed assets

10.1 Recognition criteria of fixed assets

The Group's fixed assets refer to the tangible assets held for the purpose of producing commodities, providing services, renting or business management with useful lives exceeding one accounting year. Fixed assets are recognized when they meet the following conditions at the same time: economic benefits related to the fixed assets are likely to flow into the enterprise and the cost of the fixed assets can be measured reliably.

10.2 Measurement of fixed assets

The Group's fixed assets are initially measured at actual costs on acquisition.

10.3 Classification and depreciation policy of fixed assets

The Group accounts for its fixed assets by categories and determine their estimated useful life, estimated net residual value and depreciation method in accordance with the Depreciation Life of Fixed Assets of China Petrochemical Corporation.

Other than assets that are fully depreciated and remain in use as well as land and other assets that are separately measured and accounted for according to provisions on assets checkup and capital verification, the Group provides depreciation for all fixed assets.

The Group adopts the straight-line method for the provision for depreciation. For fixed assets for which no provision for impairment has been made, their depreciation shall be accrued by category, estimated useful lives and expected residual value. The Group determines the annual depreciation rate of various fixed assets as follows:

Category of fixed assets	Service life (year)	Residual rate (%)	Annual depreciation rate (%)
Buildings and constructions	12-40	3	2.43-8.08
General equipment	4-20	3	4.85-24.25
Special equipment for oil and gas exploration	8-18	3	5.39-12.13
Special equipment for petroleum and chemical industry	10-20	3	4.85-9.70
Others	4-30	0-3	3.23-25.00

For a fixed asset whose estimated depreciation life and estimated residual rate are re-estimated within its useful life and which has been provided with impairment reserve, the depreciation rate and amount are re-determined according to the fixed asset's book value and its remaining useful life. When the depreciation amount of fixed assets is adjusted due to the impairment reserve of fixed assets, the accumulated depreciation previously accrued shall not be adjusted.

10.4 Subsequent expenses of fixed assets

Subsequent expenses of fixed assets of the Group refer to expenses from updating and improvement, repair costs of fixed assets during use.

Subsequent expenditures such as renovation and reconstruction costs of fixed assets, which meet the conditions for recognition of fixed assets, shall be included in the cost of fixed assets, and the book value of the replaced parts (if any) shall be deducted; expenses such as repair costs that do not meet the conditions for recognition of fixed assets shall be included in the current profit or loss when incurred.

10.5 Provision for impairment of fixed assets

See IV 12 for testing and provision methods of impairment of fixed assets.

11 Oil and gas assets

11.1 Classification, recognition and measurement of oil and gas assets

The Group's oil and gas assets include wells and related facilities, rights and interests in proven mining areas, and rights and interests in unproved mining areas. When the economic benefits related to the oil and gas assets are likely to flow into the enterprise and the cost of the oil and gas assets can be measured reliably, the oil and gas assets are recognized, and the Group carries out initial measurement based on the actual cost incurred.

When the rights and interests in proven mining areas and unproved mining areas are obtained, the initial cost of oil and gas assets shall be recognized based on the actual expenses incurred. The rights and interests in unproved mining areas shall be transferred to the current profit and loss when the proven economically recoverable reserves are not finally obtained.

After completion of the well, the drilling exploration expenditure shall be handled respectively as follows:

A. If there is economically proved recoverable reserves found in the well, the well drilling expenditures shall be carried forward to the cost of the well and related facilities;

B. If there is no economically proved recoverable reserves found in the well, the well drilling expenditures shall be included in current profit or loss after deducting net residual value;

C. If it is impossible to determine whether there is economically proved recoverable reserves upon the well completion practice, the expenditures shall be capitalized temporarily for a time not exceeding one year. If it is still impossible to determine whether there is economically proved recoverable reserves after one year from the well completion practice, and the following conditions are met at the same time, the capitalized expenditures for drilling the well will continue to be capitalized temporarily, otherwise, they will be included in the current profit or loss:

   1) It is discovered that the well has enough reserves, but further exploration activities are needed to determine whether it is economically proved recoverable reserves.

   2) Further exploration activities are already in progress or in plan and will soon be implemented.

D. If an exploratory well that has been expensed for drilling exploration is found to having economically proved recoverable reserves, the expensed drilling exploration expenditure shall not be adjusted, and the expenditures incurred for re-drilling and completion shall be capitalized.

The cost of development wells and related auxiliary equipment shall be capitalized.

Non-drilling exploration expenditures are included in the current profit or loss when incurred and will not be capitalized.

Oil and gas development expenditure, when reaching the expected serviceable condition (dry wells are completed), is transferred to the cost of oil and gas assets.

11.2 Depletion policy for oil and gas assets

Oil and gas mining enterprises under the Group accrue depreciation for oil and gas assets using the production method based on the production and the oil and gas reserves.

11.3 Disposal fee of oil and gas assets

The Group will accrue deposit disposal fee for its obligation to dispose of oil and gas assets that meet the conditions for recognition of estimated liabilities from these assets' present value, while recognizing the estimated liabilities. The disposal fees of oil and gas assets are depreciated in accordance with the depreciation policy for related assets. The difference between the final value and present value of the mining area disposal fees is amortized over the life of the related assets, included in the current financial expenses, with estimated liabilities recognized at the same time.

The disposal expenses incurred to the Group for oil and gas assets that have not been accrued with mining area disposal fees are included in the current profit or loss when incurred.

11.4 Provision for impairment of oil and gas assets

See IV 12 for testing and provision methods of impairment of oil and gas assets.

12 Impairment of assets

The Group's impairment of assets, such as the long-term equity investments in subsidiaries, associates and joint ventures and the investment property, fixed assets, oil and gas assets, construction in progress, intangible assets, goodwill and other non-current assets that are subsequently measured by the cost model, are determined according to the following methods:

The Group shall, on the balance sheet date, make a judgment on whether there is any indication that the assets may impair. If such indication does exist, the Group shall estimate the recoverable amount and carry out an impairment test. Impairment tests for goodwill arising from the business combination, intangible assets with indefinite useful lives and intangible assets that have not reached the serviceable conditions shall be conducted every year whether the indication of impairment exists or not.

The recoverable amounts of assets are the higher between the net amount of their fair values less the disposal expenses and the present values of estimated future cash flows. The Group shall, on the basis of single item assets, estimate the recoverable amount. Where it is difficult to do so, it shall determine the recoverable amount of the group assets on the basis of the asset group to which the asset belongs. The recognition of an asset group shall base on whether the main cash inflow generated from the asset group is independent of those generated from other assets or other asset groups.

Where the recoverable amount of an asset or an asset group is lower than its book value, the book value of the asset or asset group shall be written down to their recoverable amounts. The write-downs are included in the current profit or loss, and the provision for asset impairment shall be made accordingly at the same time.

Goodwill is tested in combination with goodwill-related asset group or portfolio of asset groups. In the course of impairment test, if the indication of impairment of goodwill-related asset group or portfolio of asset groups exists, the Company shall firstly test the impairment of asset group or portfolio of asset groups excluding the goodwill, calculate the recoverable amount and recognize relevant impairment losses. Then, the Company shall test the impairment of the asset group or portfolio of asset groups with goodwill, and compare the book value thereof with said recoverable amount; if the said recoverable amount is lower than the book value thereof, it shall recognize the losses from impairment of goodwill.

Losses from asset impairment shall not be reversed in subsequent accounting periods once recognized.

13 Revenue

The Group fulfills its performance obligations in the contract, that is, it recognizes the revenue when the customer obtains control over the relevant goods or services. Obtaining control over the relevant goods or services means being able to dominate the use of the goods or the provision of the services and to receive almost all economic benefits from them.

For the performance obligations performed within a certain period, the Group recognizes revenue according to the performance progress during that period. For performance obligations performed at a certain time-point, the Group recognizes revenue when the customer obtains control over the relevant goods or services.

13.1 Sale of goods

The sales contracts between the Group and its customers usually only include the performance obligation of transferring the goods. When the customer obtains the control over the relevant goods, the Group recognizes the revenue based on the amount of consideration that it is expected to receive. The Group will consider the following signs when judging whether the customer has acquired control over the goods, including:

- Acquisition of the current right to collect the goods payment;
- Transfer of main risks and rewards in goods ownership;
- Transfer of legal ownership of the goods, and transfer of the goods asset in kind; and
- Customer's acceptance of the goods.

13.2 Construction

Construction contracts between the Group and its customers usually include performance obligations for infrastructure construction. Since customers can control the goods under construction during the performance of the Group, the Group regards them as performance obligations to be performed within a certain period, and revenue is recognized according to the performance progress, except for those whose performance progress cannot be reasonably determined. The Group determines the performance progress of the services according to the input method. When the performance progress cannot be reasonably determined, if the cost incurred to the Group is expected to be compensated, revenue shall be recognized according to the amount of the cost incurred until the performance progress can be reasonably determined.

13.3 Rendering of services

Service contracts between the Group and its customers mainly include performance obligations such as petroleum engineering and technical services and engineering design.

For service contracts that meet one of the following conditions:

- The customer obtains and consumes the economic benefits brought by the performance of the Company while the Company is performing the obligation;
- Customers are able to control the goods under construction in the Company's performance process; or

- The services provided during the contract performance process have irreplaceable uses, and the Group has the right to receive payments for the portion of the performance that has been completed to date.

The Group regards it as a performance obligation to be performed within a certain period, and recognizes the revenue according to the performance progress, except for the case that the performance progress cannot be reasonably determined. When the performance progress cannot be reasonably determined, if the cost incurred to the Group is expected to be compensated, revenue shall be recognized according to the amount of the cost incurred until the performance progress can be reasonably determined.

For service contracts that do not meet one of the above conditions, the Group will regard them as performance obligations to be performed at a certain time-point and recognize the revenue at the time-point when the customer obtains control over the relevant services.

14 Government grants

Government grants are recognized when the Company can meet the conditions for the government grants and can obtain the grants.

Government grants in the form of monetary assets are measured at the amount received or receivable. The government grants offered in the form of non-monetary assets are measured at fair value or at the nominal value of RMB 1 if the fair value cannot be reliably obtained.

The assets-related government grants shall be recognized as deferred income, allocated evenly over the useful lives of the assets, and included in the current profit or loss. The income-related government grants, if used to compensate relevant expenses or losses already incurred, shall be included into the current profit or loss deferred income; the income-related government grants, if used to compensate relevant expenses or losses in the future, shall be included into the deferred income and later included into the current profit or loss during the period of recognition of the relevant expenses. Government grants measured at nominal amount are included in current profit or loss.

Government grants relevant to routine activities of the Company should be included into other income. Government grants irrelevant to these routine activities of the Company should be included in the non-operating revenue and expenditure.

For the interest subsidies for policy-based preferential loan, if the finance department appropriates the interest subsidies to the lending bank, the Company will take the book-entry value at the loan amount actually received, and relevant loan expenses are calculated based on the principal of the loan and the policy-based preferential interest rate. Where the finance department directly appropriates the interest subsidies to the Group, the interest subsidies will be used to offset related borrowing costs.

Where recognized government subsidies becomes repayable, it shall be handled accordingly as follows: if there is relevant deferred income balance, the government subsidies repayable shall be offset against the book balance of the deferred income, and the remainder shall be recorded in current profit or loss; if there is no relevant deferred income, the government subsidies repayable shall be recorded directly in current profit or loss.

15 Safety fund reserve

According to the relevant regulations of the Circular of the Ministry of Finance and the the State Administration of Work Safety on Issuing the Administrative Measures for the Withdrawal and Use of Work Safety Costs of Enterprises (CQ [2012] No.16), the work safety costs for crude oil and natural gas extraction business are withdrawn on a monthly basis according to the crude ore output, specifically as RMB 17 yuan/ton for crude oil and 5 yuan/thousand cubic meters for natural gas; the work safety costs for petroleum engineering business (excluding geophysical exploration and surface construction) are withdrawn on a monthly basis at a rate of 2.5% of operating income; and the work safety costs for petrochemical engineering business (refining engineering) are withdrawn at 1.5% of the construction and installation cost; the work safety costs for refinery and chemical business are withdrawn every month based on the actual operating income of various dangerous goods listed in the List of Dangerous Goods (GB12268) for the last year, in an excess regressive manner and at a rate of 0.2%-4%; the work safety costs for machinery manufacturing business are withdrawn every month based on the actual operating income of the last year, in an excess regressive manner and at a rate of 0.05%-2%.

(Amounts are expressed in RMB ’000,000 unless otherwise stated)

Expenses of safety production, upon withdrawal, are included in the cost of related products or the current profit and loss, and recognized in the item of "special reserves" at the same time.

When withdrawn safe production costs are used within the prescribed range and belong to expenses, such costs shall be directly deducted from special reserves; where fixed assets form, incurred expenses are accumulated under the item "construction in progress" and are recognized as fixed assets when the safe project is completed and reaches the working conditions for its intended; meanwhile, special reserves shall be offset according to the costs of fixed assets and the accumulated depreciation of the same amount shall be recognized. Provision for depreciation of fixed assets will be no longer made in subsequent periods.

16 There was no adjustments for changes in significant accounting policies and accounting estimates and corrections of errors in prior periods required to be disclosed during the reporting period.

V NOTES TO THE MAIN ITEMS OF CONSOLIDATED FINANCIAL STATEMENTS

1 Cash and bank

Item	As at September 30, 2020	As at December 31, 2019
Cash on hand	61	59
Cash at bank	253,246	147,569
Other monetary fund	3,848	3,781
Total	**257,155**	**151,409**

2 Accounts receivable

Item	As at September 30, 2020	As at December 31, 2019
Accounts receivable	62,280	73,237
Less: provision for bad debts	6,960	6,658
Total	**55,320**	**66,579**

3 Inventories

Item	As at September 30, 2020			As at December 31, 2019		
	Book balance	Impairment provision	Book value	Book balance	Impairment provision	Book value
Finished goods	162,025	20,086	141,939	157,235	20,273	136,962
Raw materials	50,724	1,532	49,192	54,582	756	53,826
Materials in transit	36,217		36,217	42,150		42,150
Goods in process	16,352	100	16,252	16,204	97	16,107
Contract performance costs	1,642		1,642	781		781
Turnover materials	384		384	430		430
Goods in transit	77	36	41	63	36	27

Item	As at September 30, 2020			As at December 31, 2019		
	Book balance	Impairment provision	Book value	Book balance	Impairment provision	Book value
Other inventories	351		351	291		291
Total	**267,772**	**21,754**	**246,018**	**271,736**	**21,162**	**250,574**

4 Short-term loans

Item	As at September 30, 2020	As at December 31, 2019
Credit loans	125,187	71,351
Mortgage loans	58	97
Guarantee loans	1	1
Total	**125,246**	**71,449**

5 Non-current liabilities due within one year

Item	As at September 30, 2020	As at December 31, 2019
Long-term loans due within one year	17,094	4,165
Incl.: Credit loans	17,094	4,165
Bonds payable due within one year	25,057	47,666
Other long-term liabilities due within one year	7,124	4,424
Total	**49,275**	**56,255**

As at September 30, 2020 and December 31, 2019, the Group had no significant long-term loans outstanding on schedule.

As at June 30, 2020, the Group's bonds payable due within one year are as follows:

Bonds Name	Issuer	Issuing Date	Maturity (year)	Par value (million)
RMB 4,000,000,000 3.70% Due 2020	Sinopec Corp.	2015/11/18	5	RMB 4,000
HKD 1,200,000,000 3.15% Due 2020	*Century Bright	2018/10/31	2	HKD 1,200
16 Sinopec 01	The Company	2016/09/23	5	RMB 13,000
EUR 550,000,000 2.625% Senior Notes Due 2020	*Overseas Development	2013/10/17	7	EUR 550
USD 900,000,000 2.75% Senior Notes Due 2021	Overseas Development	2016/04/25	5	USD 900
USD 1,300,000,000 2.00% Senior Notes Due 2021	Overseas Development	2016/09/28	5	USD 1,300
Total	—	—	—	—

(Continued:)

Bonds name	Issuing value (million)	Coupon rate (%)	As at September 30, 2020
RMB 4,000,000,000 3.70% Due 2020	4,000	3.70	4,000
HKD 1,200,000,000 3.15% Due 2020	1,064	3.15	1,068
16 Sinopec 01	13,000	2.83	631

Bonds name	Issuing value (million)	Coupon rate (%)	As at September 30, 2020
EUR 550,000,000 2.625% Senior Notes Due 2020	4,532	2.625	4,395
USD 900,000,000 2.75% Senior Notes Due 2021	5,774	2.75	6,124
USD 1,300,000,000 2.00% Senior Notes Due 2021	8,626	2.00	8,839
Total	**36,996**	—	**25,057**

*Sinopec Century Bright Capital Investment Limited ("Century Bright")
Sinopec Group Overseas Development Limited ("Overseas Development")

6 Long-term loans

Item	As at September 30, 2020	As at December 31, 2019
Credit loans	47,586	60,396
Guarantee loans	617	524
Mortgage loans	1	1
Total	**48,204**	**60,921**

7 Bonds payable

Bonds name	Issuer	Issuing Date	Maturity (year)	Par value (million)
RMB 5,000,000,000 2.70% Due 2023	Sinopec Corp.	2020/04/01	3	RMB 5,000
RMB 5,000,000,000 2.70% Due 2023	Sinopec Corp.	2020/04/01	3	RMB 5,000
RMB 10,000,000,000 2.20% Due 2023	Sinopec Corp.	2020/05/28	3	RMB 10,000
USD 1,250,000,000 3.13% Due 2023	Sinopec Corp.	2013/04/24	10	USD 1,250
USD 500,000,000 4.25% Due 2043	Sinopec Corp.	2013/04/24	30	USD 500
RMB 7,000,000,000 4.90% Due 2022	Sinopec Corp.	2012/06/05	10	RMB 7,000
RMB 1,000,000,000 4.5% Due 2021	Century Bright	2018/10/31	3	RMB 1,000
16 Sinopec 01	The Company	2016/09/23	5	RMB 13,000
16 Sinopec 02	The Company	2016/09/23	7	RMB 4,300
16 Sinopec 03	The Company	2016/09/23	10	RMB 800
USD 1,000,000,000 3.90% Senior Notes Due 2022	Overseas Development	2012/05/18	10	USD 1,000
USD 1,000,000,000 4.875% Senior Notes Due 2042	Overseas Development	2012/05/18	30	USD 1,000
USD 500,000,000 3.90% Senior Notes Due 2022	Overseas Development	2012/08/09	10	USD 500
USD 1,500,000,000 4.375% Senior Notes Due 2023	Overseas Development	2013/10/17	10	USD 1,500
USD 500,000,000 5.375% Senior Notes Due 2043	Overseas Development	2013/10/17	30	USD 500

Bonds name	Issuer	Issuing Date	Maturity (year)	Par value (million)
USD 1,000,000,000 4.375% Senior Notes Due 2024	Overseas Development	2014/04/10	10	USD 1,000
USD 400,000,000 4.375% Senior Notes Due 2024	Overseas Development	2014/06/09	10	USD 400
EUR 650,000,000 1.00% Senior Notes Due 2022	Overseas Development	2015/04/22	7	EUR 650
USD 1,500,000,000 3.25% Senior Notes Due 2025	Overseas Development	2015/04/22	10	USD 1,500
USD 800,000,000 4.10% Senior Notes Due 2045	Overseas Development	2015/04/22	30	USD 800
USD 900,000,000 2.75% Senior Notes Due 2021	Overseas Development	2016/04/25	5	USD 900
USD 700,000,000 3.5% Senior Notes Due 2026	Overseas Development	2016/04/25	10	USD 700
USD 400,000,000 4.25% Senior Notes Due 2046	Overseas Development	2016/04/25	30	USD 400
USD 1,300,000,000 2.00% Senior Notes Due 2021	Overseas Development	2016/09/28	5	USD 1,300
USD 600,000,000 2.75% Senior Notes Due 2026	Overseas Development	2016/09/28	10	USD 600
USD 1,000,000,000 2.375% Senior Notes Due 2027	Overseas Development	2017/04/05	10	USD 1,000
USD 300,000,000 4.25% Senior Notes Due 2047	Overseas Development	2017/04/05	30	USD 300
USD 1,100,000,000 3.00% Senior Notes Due 2022	Overseas Development	2017/04/05	5	USD 1,100
USD 1,400,000,000 2.50% Senior Notes Due 2022	Overseas Development	2017/09/06	5	USD 1,400
USD 750,000,000 3.25% Senior Notes Due 2027	Overseas Development	2017/09/06	10	USD 750
USD 400,000,000 4.00% Senior Notes Due 2047	Overseas Development	2017/09/06	30	USD 400
USD 750,000,000 3.75% Senior Notes Due 2023	Overseas Development	2018/09/12	5	USD 750
USD 500,000,000 4.125% Senior Notes Due 2025	Overseas Development	2018/09/12	7	USD 500
USD 750,000,000 4.25% Senior Notes Due 2028	Overseas Development	2018/09/12	10	USD 750
USD 400,000,000 4.60% Senior Notes Due 2048	Overseas Development	2018/09/12	30	USD 400
USD 800,000,000 2.500% Senior Notes Due 2024	Overseas Development	2019/08/01	5	USD 800
USD 700,000,000 2.950% Senior Notes Due 2029	Overseas Development	2019/08/01	10	USD 700
USD 500,000,000 3.680% Senior Notes Due 2049	Overseas Development	2019/08/01	30	USD 500
USD 700,000,000 2.500% Senior Notes Due 2024	Overseas Development	2019/11/04	5	USD 700
USD 1,000,000,000 2.950% Senior Notes Due 2029	Overseas Development	2019/11/04	10	USD 1,000
USD 300,000,000 3.440% Senior Notes Due 2049	Overseas Development	2019/11/04	30	USD 300

Bonds name	Issuer	Issuing Date	Maturity (year)	Par value (million)
USD 1,000,000,000 2.15% Senior Notes Due 2025	Overseas Development	2020/05/06	5	USD 1,000
USD 500,000,000 3.35% Senior Notes Due 2050	Overseas Development	2020/05/06	30	USD 500
USD 1,500,000,000 2.70% Senior Notes Due 2030	Overseas Development	2020/05/06	10	USD 1,500
Total	—	—	—	—

(Continued:)

Bonds name	Issuing value (million)	Coupon rate (%)	As at September 30, 2020	As at December 31, 2019
RMB 5,000,000,000 2.70% Due 2023	5,000	2.70	4,993	
RMB 5,000,000,000 2.70% Due 2023	5,000	2.70	4,991	
RMB 10,000,000,000 2.20% Due 2023	10,000	2.20	9,992	
USD 1,250,000,000 3.13% Due 2023	7,776	3.13	8,493	8,694
USD 500,000,000 4.25% Due 2043	3,110	4.25	3,380	3,462
RMB 7,000,000,000 4.90% Due 2022	7,000	4.90	6,530	6,530
RMB 1,000,000,000 4.5% Due 2021	1,000	4.50	1,019	1,007
16 Sinopec 01	13,000	2.83		631
16 Sinopec 02	4,300	3.02	4,300	4,300
16 Sinopec 03	800	3.30	800	800
USD 1,000,000,000 3.90% Senior Notes Due 2022	6,224	3.90	6,799	6,960
USD 1,000,000,000 4.875% Senior Notes Due 2042	6,222	4.875	6,758	6,922
USD 500,000,000 3.90% Senior Notes Due 2022	3,386	3.90	3,450	3,553
USD 1,500,000,000 4.375% Senior Notes Due 2023	9,123	4.375	10,176	10,415
USD 500,000,000 5.375% Senior Notes Due 2043	3,043	5.375	3,374	3,456
USD 1,000,000,000 4.375% Senior Notes Due 2024	6,115	4.375	6,795	6,958
USD 400,000,000 4.375% Senior Notes Due 2024	2,581	4.375	2,774	2,851
EUR 650,000,000 1.00% Senior Notes Due 2022	4,307	1.00	5,181	5,069
USD 1,500,000,000 3.25% Senior Notes Due 2025	9,088	3.25	10,147	10,384
USD 800,000,000 4.10% Senior Notes Due 2045	4,895	4.10	5,431	5,563
USD 900,000,000 2.75% Senior Notes Due 2021	5,774	2.75		6,267

Bonds name	Issuing value (million)	Coupon rate (%)	As at September 30, 2020	As at December 31, 2019
USD 700,000,000 3.5% Senior Notes Due 2026	4,491	3.50	4,749	4,863
USD 400,000,000 4.25% Senior Notes Due 2046	2,566	4.25	2,708	2,774
USD 1,300,000,000 2.00% Senior Notes Due 2021	8,626	2.00		9,043
USD 600,000,000 2.75% Senior Notes Due 2026	3,962	2.75	4,054	4,149
USD 1,000,000,000 2.375% Senior Notes Due 2027	6,862	2.375	6,786	6,949
USD 300,000,000 4.25% Senior Notes Due 2047	2,059	4.25	2,033	2,083
USD 1,100,000,000 3.00% Senior Notes Due 2022	7,548	3.00	7,478	7,655
USD 1,400,000,000 2.50% Senior Notes Due 2022	9,241	2.50	9,534	9,767
USD 750,000,000 3.25% Senior Notes Due 2027	4,951	3.25	5,108	5,232
USD 400,000,000 4.00% Senior Notes Due 2047	2,640	4.00	2,724	2,790
USD 750,000,000 3.75% Senior Notes Due 2023	5,079	3.75	5,083	5,201
USD 500,000,000 4.125% Senior Notes Due 2025	3,389	4.125	3,388	3,468
USD 750,000,000 4.25% Senior Notes Due 2028	5,064	4.25	5,062	5,182
USD 400,000,000 4.60% Senior Notes Due 2048	2,723	4.60	2,718	2,784
USD 800,000,000 2.500% Senior Notes Due 2024	5,474	2.50	5,422	5,549
USD 700,000,000 2.950% Senior Notes Due 2029	4,781	2.95	4,733	4,847
USD 500,000,000 3.680% Senior Notes Due 2049	3,429	3.68	3,393	3,475
USD 700,000,000 2.500% Senior Notes Due 2024	4,900	2.50	4,750	4,863
USD 1,000,000,000 2.950% Senior Notes Due 2029	6,976	2.95	6,762	6,923
USD 300,000,000 3.440% Senior Notes Due 2049	2,103	3.44	2,037	2,087
USD 1,000,000,000 2.15% Senior Notes Due 2025	7,043	2.15	6,786	
USD 500,000,000 3.35% Senior Notes Due 2050	3,526	3.35	3,396	
USD 1,500,000,000 2.70% Senior Notes Due 2030	10,523	2.70	10,140	
Total	**235,700**	—	**214,227**	**193,506**

As at September 30, 2020, bonds payable due within one year have been reclassified to "non-current liabilities due within one year", see note V5.

(Amounts are expressed in RMB '000,000 unless otherwise stated)

8 Financial expenses

Category	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019
Net interest expenses	3,441	2,113
Incl.: interest expenses	6,976	8,779
interest income	3,535	6,666
Net losses from foreign exchange	(871)	133
Other expenses	728	1,005
Incl.: poundage spending	633	928
Total	**3,298**	**3,251**

9 Segment information

Item	Oil & Gas Exploitation		Refining Production		Chemical Production	
	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019
Operating revenue	120,354	152,408	687,285	911,125	291,841	410,033
Operating costs and expenses	130,080	145,113	703,169	889,680	286,546	394,608
Operating profit (loss)	(9,726)	7,295	(15,884)	21,445	5,605	15,576

(Continued 1:)

Item	Sales of refined oil		Oil & Petrochemical Engineering		Others	
	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019
Operating revenue	818,400	1,058,333	87,529	89,512	749,739	1,188,774
Operating costs and expenses	803,766	1,035,194	85,799	87,353	741,436	1,185,402
Operating profit (loss)	14,634	23,139	2,619	3,167	64,955	46,589

(Continued 2:)

Item	Elimination of inter-segment		Total	
	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019	For the nine months ended September 30, 2020	For the nine months ended September 30, 2019
Operating revenue	(1,174,017)	(1,544,876)	1,581,131	2,265,309
Operating costs and expenses	(1,182,899)	(1,548,150)	1,567,897	2,189,200
Operating profit (loss)	(10,553)	(32,407)	51,650	84,804

VI THERE WAS NO SUBSEQUENT EVENTS REQUIRED TO BE DISCLOSED DURING THE REPORTING PERIOD.

VII OTHER SIGNIFICANT EVENT

Sinopec Corp. and its subsidiaries transferred their equity interests in relevant companies, oil and gas pipeline assets and other facilities to China Oil & Gas Pipeline Network Corporation ("PipeChina") in exchange for newly issued shares of and cash paid by PipeChina as consideration. The ownership, obligations, responsibilities and risks of the relevant target assets was transferred to PipeChina from 24:00 on 30 September 2020.

VIII FINANCIAL STATEMENTS APPROVAL

The financial statements for the nine-month period ended 30 September 2020 had been approved by the management of the Company.

China Petrochemical Corporation

October 29, 2020

ISSUER

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