CNOOC Limited
Environmental, Social and Governance Report
2019
Report Information

Name of Organization

CNOOC Limited (“the Company”, or “we”)

Reporting Period

From January 1, 2019 to December 31, 2019. The report may include information beyond the reporting period in order to keep the information consistent.

Scope of the Report

CNOOC Limited and its subsidiaries.

Contents of the Report

Vision and commitment of the Company’s Corporate Social Responsibility (“CSR”), common practices, and other key achievements in the course of performing CSR.

Data

The data in the report is derived from CNOOC Limited's internal statistical reports, company documents and reports, third-party surveys and interviews.

Reporting Languages

Chinese and English (should there be any discrepancies, please refer to the Chinese version.)

Reference

This report refers to the Environmental, Social and Governance Reporting Guide issued by the Stock Exchange of Hong Kong Limited (HKEx), the 10 Principles of UN Global Compact and the GRI Sustainability Reporting Standards issued by the Global Reporting Initiative (GRI).

Report Verification Method

An independent limited assurance engagement was conducted against this report by Deloitte Touche Tohmatsu Certified Public Accountants LLP.

An electronic version of this report is available on the Company’s website at www.cnoocltd.com and hard copies are available upon request.

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# Table of Contents

## About Us
- Chairman’s Statement 03

## Vision and Commitments
- Materiality Analysis 06

## Corporate Governance
- Governance Standards 11
- ESG Management 15
- Code of Ethics 16
- Risk Management and Internal Control 16
- Audit and Supervision 17
- Anti-corruption Practices 18

## Energy Supply
- Products and Services 21
- Technological Innovation 24
- Supply Chain Management 27

## Safety and Health
- Production Safety 31
- Employee Health 40

## Care for Employees
- Employment Policies 65
- Employee Development 68
- Staff Care 74

## Social Contributions
- Economic Contributions 79
- Maritime Rescue 79
- Public Welfare 81
- Employee Volunteers 89

## Environmental Protection
- Environmental Management 45
- Response to Climate Change 47
- Emissions Management 57
- Ecological Protection 60

## Future Prospects
- Key Performance Data 92
- Independent Assurance Report 93
- ESG Reporting Guide Index 97
- Feedback
About Us

CNOOC Limited, incorporated in the Hong Kong Special Administrative Region in August 1999, was listed on the New York Stock Exchange (code: CEO) and the Stock Exchange of Hong Kong limited (code: 00883) on February 27 and 28, 2001, respectively. The Company was included as a constituent stock of the Hang Seng Index in July 2001. The Company’s American Depositary Receipts (ADRs) was listed on the Toronto Stock Exchange (code: CNU) on September 18, 2013.

The Company is the largest producer of offshore crude oil and natural gas in China and one of the largest independent oil and gas exploration and production companies in the world. The Company mainly engages in exploration, development, production and sale of crude oil and natural gas.

The Company’s core operation areas are Bohai, Western South China Sea, Eastern South China Sea and East China Sea in offshore China. The Company has oil and gas assets in Asia, Africa, North America, South America, Oceania and Europe.

Unless otherwise stated, all amounts of reserve and production in this report include our interests in equity method investees.
As at December 31, 2019
Average daily net production
1,387,564 BOE

Net proved reserves of approximately
5.18 billion BOE

Total assets of approximately
757.7 billion RMB
The world economy growth was weak in 2019. The energy sector underwent a cycle of profoundly adjustment. International crude oil prices lingered at low level. Risks for petroleum and petrochemical industry remained rising. CNOOC Limited reacted to these challenges by adhering to high-quality development, exerting outstanding capability in production, operation, and management. This enabled us to celebrate the Company's 20th anniversary by delivering the best operating results since its listing. CNOOC Limited has steadily grown production and expanded operation while continuing to optimize its management system, protect the environment, fulfill social responsibilities and improve the environmental, social and governance (ESG) management measures. We strive to excel in economic growth, environmental protection and social progress.

In 2019, we successfully achieved our production target, with total net oil and gas production reaching the highest ever of 506.5 million barrels of oil equivalent (BOE). We also continued our ongoing efforts to further strengthen exploration and development, bringing multiple projects on production safely ahead of schedule and forging ahead with new project construction to achieve a new workload record. The annual reserve replacement ratio reached 144%, with its reserve life above 10 years, further consolidating the resource base for future development.

The Company always puts safety and environmental protection first. We strengthen our safety foundation, underlining the need for a safety-first culture, and maintained a stable HSE (Health, Safety and Environment) record throughout the year. In 2019, we have upheld our HSE core values of “safety first, environment paramount, people oriented and equipment integrated”, fully implemented the HSE Management System Framework and improved our production safety management policies. Our focus on people-oriented safety culture emphasized employee responsibility for work safety. Our ongoing goal is to raise employee awareness of the need to manage safety risks.

As a responsible energy company, we remain dedicated to our green and low-carbon strategy and are committed to building a clean, low-carbon, safe and efficient energy system. We implement the Green Development Action Plan of China National Offshore Oil Corporation (“the Group”) and promote the Three-year Action Plan for Environmental Protection Upgrade of the Bohai Oilfield. We also pay equal attention to environmental protection and resource
development. To this end, we incorporated the concept of environmental protection across the entire oil and gas field life cycle. We maintained a fast pace of development in clean energy and natural gas projects, exploring renewable energy transition possibilities in offshore wind power. We are committed to biodiversity protection and environmental improvement around our field sites, enabling us to deliver an even more environmentally friendly oil and gas operation.

The Company’s high-quality development relies heavily on our employees’ tremendous effort along with local community and social support. We strive to benefit every employee and every community as we grow. Our commitment to be a responsible energy company is based on practical action in areas such as maritime rescue, targeted poverty alleviation, and community building. Our focus on talent-driven strategy involves further motivating employees and tapping their potential. This will guarantee reliable human resources for a sustainable future.

We have consistently followed a high standard of business ethics and the market has recognized this exemplary corporate governance and social responsibility record. We are honored to have won the Gold Award, Best Environmental Stewardship Initiative, and Best Social Responsibility Highly Commended Initiative in the 2019 ESG Corporate Awards by The Asset in 2019, along with the China Securities Golden Bauhinia Award – Best Investment Value Award for Listed Companies, etc.

Sustainable development concept has been widely acknowledged by the international community in recent years, leading to increasingly rigorous ESG regulations and policy requirements around the world. In December 2019, The Stock Exchange of Hong Kong Limited (HKEx) updated its ESG Reporting Guide to promote more transparent and in-depth disclosure of ESG management and practices among listed companies. Investors are also incorporating ESG into their own investment decisions. They scrutinize ESG management and urge enterprises to improve their practices in this area. In line with this developing trend, the Company gives full attention to investors’ requirements, continuously improves the ESG management, and keeps strong communication with stakeholders. This supports our goal of steady long-term ESG development.

At this moment, China is fighting a battle of coronavirus outbreak. Under the effective responses taken by Chinese government, we implemented prevention measures to guarantee normal operation of our business. In response to the call from the Group, the Company and our employees donated to support medical supplies for affected areas, making great efforts to fulfill our social responsibility.

An ancient saying tells us, “the world moves on in a never-ending process of the new replacing the old.” With the goal of becoming a world-class energy company, we will always pursue the coordinated development of economy, environment and society, and strive for mutually beneficial relationships with stakeholders. We will always stay true to our mission, seize the day and live it to the full, strive for achieving that goal no matter what challenges we encounter.

Chairman

March 25, 2020
Vision and Commitments

Sustainable Development Strategy

It is our commitment to sustainable development that we will develop existing natural resources in a safe, efficient, and environmentally friendly manner and provide society with clean, reliable and stable energy that meets reasonable energy demand. The economy, environment, and society form the three cornerstones for us to unfold our businesses in energy resource development and value creation. As our business and economic contributions grow steadily, we will press ahead on the road of environmental protection and social progress. Continued efforts will be made in integrating economic, environmental and social factors to drive the sustainable development of the Company.

The Company believes that sustainable development should not only depend on the knowledge, beliefs and ideas of management or employees. We must integrate sustainability into our corporate management systems to become a part of our corporate culture.

The Board of Directors (the “Board”) of CNOOC Limited actively supports the Company’s commitment to CSR and keenly monitors its progress. Topics of interest cover company strategy and risk, performance, internal operations, occupational health and safety, the environment, and human rights, as well as the procedures and results of compliance in operations and sales. Our management is responsible for formulating and executing CSR related strategies and environmental protection, energy-saving projects, emissions reduction, ecological protection, greenhouse gas (GHG) reduction and clean energy supplies have been effectively incorporated into the scope.

The Company has incorporated sustainable development into our organizational structure, institutional system and management process. We constantly assess our performance in terms of sustainability and make improvements to ensure our operations are environmentally friendly, efficient and safe, and achieve balanced development for the economy, environment and society.

CSR Vision

As an energy company, it is our responsibility to deliver sustainable energy to society. In the future, the Company will promote clean, healthy, and green energy models with our partners on the industry chain. We will work with stakeholders and turn social responsibility a drive for the Company to grow together with the society.

CNOOC Limited strives to be

CNOOC Limited is committed to

- Ensuring the stable supply of energy in the world and enhancing supply capacity
- Pursuing sustainable development, improving the world’s energy structure, and delivering clean energy
- Operating in compliance with laws and regulations and adhering to a high standard of business ethics and corporate governance
- Exploiting resources in a safe and environmentally-friendly way and responding actively to climate change
- Proactively participating in community-building activities and making contributions to general welfare
- Respecting the rights and interests of stakeholders and pursuing win-win situation
In order to further define the key areas for our ESG practices and information disclosure and make this report more pertinent to stakeholders’ concerns, CNOOC Limited has identified issues that stakeholders are potentially concerned with and determined their importance in accordance with the requirements of the Environmental, Social and Governance Reporting Guide issued by HKEx. Through this exercise, we finalized the extent and scope of issues for a more accurate and comprehensive disclosure of ESG information.

In December 2018, we conducted questionnaires to learn more about stakeholders’ views on the importance of each ESG issue to the Company and to the stakeholders. In 2019, we reviewed the results from last materiality matrix and made revisions to this year’s matrix with the inputs and opinions on risks and opportunities of various ESG issues that we collected through business review and discussion, ESG performance benchmarking and internal workshops.

2019 ESG Materiality Matrix of CNOOC Limited
Deep understanding of our stakeholders’ expectations serves as the bedrock for the Company to fulfill CSR and achieve sustainable development. We maintain open, transparent and multichannel communications with stakeholders on a variety of social responsibility issues. The Company’s stakeholders primarily include: shareholders and creditors, employees and employee organizations, governments and regulatory authorities, business partners and service providers, the public and communities, charities and non-government organizations (NGOs) and clients.

### Communications with Stakeholders

<table>
<thead>
<tr>
<th>Shareholders and Creditors</th>
<th>Employees and Employee Organizations</th>
<th>Governments and Regulatory Authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled information disclosure</td>
<td>Employee representatives meetings</td>
<td>Enforcement and follow-up to ensure compliance with laws and regulations</td>
</tr>
<tr>
<td>Regular communications</td>
<td>Regular communications</td>
<td>Report on specific matters</td>
</tr>
<tr>
<td>Annual general meeting and extraordinary general meetings</td>
<td>Internal information exchange</td>
<td>Routine inspections</td>
</tr>
<tr>
<td></td>
<td>Complaints and responses</td>
<td>Response to inquiries</td>
</tr>
</tbody>
</table>

**Key Communication Channels**

- Protection of shareholders’ and creditors’ interests
- Corporate governance and risk management

- Ensure rights and interests
- Career development
- Occupational health and safety

- Operate in compliance with laws and regulations
- Proper utilization and exploitation of natural resources
- Economic contribution
- Corporate governance

**Key Focuses**

- Ensure the quality and effectiveness of information disclosure
- Maintain close communication
- Equal treatment of shareholders
- Non-deal roadshows

- Support employees to join labor unions or other employee organizations
- Provide professional training and skill training
- Provide occupational health examination

- Comply with all applicable laws and regulations
- Fulfill taxpayer obligations
- Share industry expertise for further development
- Ensure quality of disclosed information
- Enhance corporate governance

**Key Actions**

**Case**

>>>10,000+ Ugandan People Made a Choice

The Kingfisher Oilfield, developed by CNOOC Limited Uganda subsidiary, is near Lake Albert - the “eye” of Uganda. In accordance with local regulations, the subsidiary held a hearing in 2019, attended by more than 10,000 stakeholder representatives to assess whether the Kingfisher project’s Environmental and Social Impact Assessment (ESIA) report could be passed so that the project could enter the subsequent field development stage.

In order to ensure that the news of the ESIA hearing could reach every resident in the village near the oilfield, the subsidiary used a loudspeaker to broadcast information about the time and place of the hearing in each village. On the day of the hearing, more than 10,000 representatives of stakeholders including local...
petroleum bureaus, local environmental protection bureaus, provincial governments, NGOs, and local residents attended the hearing. “This is the most attendees I’ve ever seen at a hearing in all my years at State Environmental Protection Administration,” said Isaac Ntujju, Chief Environmental Inspector of State Environmental Protection Administration of Uganda. The entire hearing was well-ordered, and stakeholder representatives did not raise any objections to the ESIA report of the project, whether during the demonstration of the project or the public inquiry, thus the project proposal was successfully passed.
Corporate Governance

CNOOC Limited strictly abides by the national laws and regulations and regulatory provisions and its own corporate governance policies and Code of Ethics for Directors and Senior Officers (“Code of Ethics”). We operate honestly and legally and pay attention to risk management and internal control. We emphasize ESG management and the Board of Directors’ participation during the whole-process of ESG information disclosure. For audit and supervision, we have a whistleblower protection system and have implemented an anti-corruption policy among suppliers, third-party agents, and intermediaries to ensure compliant and effective corporate governance.
The Company has always upheld and attained high standard of business ethics, for which its transparency and standard of governance have been recognized by the public and its shareholders. We believe that maintaining a high-standard corporate governance is essential to stable and effective operation, and serves the long-term interests of the Company and its shareholders.

In 2019, the Company executed its corporate governance policies strictly and sought to comply with the relevant codes on corporate governance of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (“Listing Rules”), ensuring that all decisions were made on the principles of trust and fairness and in an open and transparent manner so as to protect the interests of all shareholders.

As at December 31, 2019, the Board of the Company consisted of 6 members, including one Executive Director, one Non-executive Director and four Independent Non-executive Directors. The resumes of all the directors are included in our Annual Report available on the Company's website at www.cnoccltd.com. The duties of the Board are to provide guidance, orientation and supervision for lawful and effective execution of the operations of the Company and to protect shareholders’ interests, while safeguarding the healthy and stable development of the Company.

The primary functions performed by the Board include reviewing and approving long-term strategic plans and annual operating plans, and monitoring the implementation and execution of these plans; reviewing and approving significant financial and business transactions and other major corporate actions; reviewing and approving financial statements and reports, and overseeing the establishment and maintenance of controls, processes and procedures to ensure accuracy, integrity and clarity in financial and other disclosures; and overall responsibility for the Company's ESG strategy and reporting, evaluating and determining the Company's ESG-related risks, and ensuring appropriate and effective ESG risk management and internal control systems are in place. The Company holds Board meetings at least four times a year at approximately quarterly intervals. The ESG related issue is set as one of the agenda on the Board meeting. Three committees have been set up under the Board, namely the Audit Committee, Nomination Committee and Remuneration Committee. Members of all committees are Non-executive Directors and Independent Non-executive Directors with a high degree of independence. When the potential conflict of interests of the Board related matters arises, the Independent Non-executive Directors will take the lead in reflecting the opinion of the minority shareholders.
There were changes to the directors and the senior management of CNOOC Limited in 2019. Mr. Qiu Zhi Zhong has been appointed as an Independent Non-executive Director and a member of the Nomination Committee of the Company with effect from May 7, 2019. On the same day, Mr. Kevin G. Lynch has resigned as an Independent Non-executive Director and a member of the Nomination Committee of the Company. With effect from September 2, 2019, Mr. Yang Hua has resigned as Chairman, a Non-executive Director and Chairman of the Nomination Committee of the Company. On the same day, Mr. Yuan Guangyu has resigned as an Executive Director and CEO. And on November 18, 2019, Mr. Wang Dongjin, a Non-executive Director, has been appointed as the Chairman of the Company and the Chairman of the Nomination Committee of the Company, and has resigned as Vice Chairman of the Company. Mr. Xu Keqiang, an Executive Director and the President, has been appointed as the CEO of the Company with effect from 19 November 2019.

CNOOC Limited Organizational Structure of Board of Directors

To demonstrate the Company’s continued commitment to high standards of corporate governance, the Board adopted a board diversity policy in August 2013. Since the adoption of the policy, the Board has observed the policy and took into account the objectives set out in the policy in reviewing its Board composition. In particular, in selecting the candidates for Non-executive Director, not only the Board considered the knowledge, experience and industry-specific exposures of the candidates, the Board also took into account other factor such as cultural background and diversified vision of the candidates. In selecting candidates for Executive Director, the Board will consider knowledge and exposures in the oil and gas industry, leadership and management skills and experience and length of service in the industry. As a result, the Nomination Committee considered that the appointments of Independent Non-executive Director, the Chairman of the Board and the Chairman of the Nomination Committee of the Company (as the case maybe) during the reporting period were appropriate and that there is sufficient diversity at the Board level. The diverse backgrounds of the Board members ensure that they can fully represent the interests of all shareholders of the Company and enhance the effectiveness of the Board and corporate governance.
The Company believes that the active involvement of the Non-executive Director and Independent Non-executive Directors in the management and decision making of the Board and its Committees strengthens the objectivity and independence of the Board. The Company has received annual confirmations from all of our Independent Non-executive Directors acknowledging full compliance with the relevant requirements in respect of their independence pursuant to Rule 3.13 of the Listing Rules. The Company is therefore of the view that all of the Independent Non-executive Directors are independent.

All directors newly appointed to the Board receive a comprehensive, formal and tailored induction on appointment for the purpose of giving an overview of the business and operations of the Company and appropriate briefings and trainings from the Company covering the statutory and regulatory obligations of directors, organizational structure, policies, procedures and codes of the Company and terms of reference of Committees. The senior management and the joint company secretaries will also conduct subsequent briefings as and when necessary to ensure that the directors are kept appraised of the latest developments relevant to the operations and business of the Company, and their responsibilities under statutes and common law, the Listing Rules, legal and other regulatory requirements as well as the Company's business and governance policies, so that they are able to discharge their responsibilities properly.

The Company recognizes the importance of continuous professional development of the directors. The directors are encouraged to participate in continuous professional development to develop and refresh their knowledge and skills. During the year, the Company arranged trainings conducted by its external professional advisers on updates and new amendments to the Listing Rules. The trainings covered a broad range of topics including latest developments in corporate governance and recent regulatory case studies. In addition, in accordance with the company's business characteristics and in order for the directors to have a better understanding of the status quo and prospects of new energy business, the Company also arranged on-site visit and research activities for the Independent Non-executive Directors on offshore wind power project and offshore platform operations.

Certain directors also attended trainings organized by the Company or external professional bodies on other regulatory updates as well as obligations of directors. In addition, directors also read materials/publications which they thought appropriate and necessary for the fulfillment of their roles. The directors provided their regular training records to the Company. In addition, the Company also provided regular updates to directors in respect of continuing obligations of listed issuers and their directors as well as monthly updates on the business and operations of the Company.

The Company attaches great importance to the communication with the minority shareholders. Their support and trust guaranteed our long-term and successful sustainable development. We have established open and transparent communication channels for our minority shareholders. The Company pays great attention to the shareholder's concerns, and seeks to constantly strengthen the communication and cooperation with them.

A dedicated section on the Investor Relations page on our website allows us to inform our shareholders in an open and transparent manner about important Company events and invite them to participate in such activities as Annual General Meeting. We also invite the minority shareholders to take part in annual panel discussions and conference calls to have a better understanding of the Company's operations.

The effective management of the Board and the Committees further enhanced the governance standards of the Company. The Company's excellent corporate governance is highly recognized, winning several corporate governance awards by The Asset and Corporate Governance Asia, etc.
Awarded “Most Valuable Energy & Resources Companies” in 2018 Golden Hong Kong Stocks Awards and “Best Investor Relations Listed Company” in Phoenix Financial Jin Wu Awards

Awarded “Best Investor Relations Company (China)” “Asia’s Best CEO (Investor Relations)” and “Asia’s Best CFO (Investor Relations)” in the “Asian Excellence Recognition Award” hosted by Corporate Governance Asia

Awarded “Most Honored Company (Oil & Gas)” “Best Corporate Governance” and “Best IR Programs” in Institutional Investor’s 2019 All-Asia Executive Team Awards

Awarded “Gold Award” “Best Environmental Stewardship Initiative” and “Best Social Responsibility Highly Commended Initiative” in the 2019 ESG Corporate Awards by The Asset

Awarded “2019 China Securities Golden Bauhinia Awards - Best Investment Value Award for Listed Companies”
The Company attaches much importance to ESG management and has incorporated ESG management into corporate governance. The Board is the highest decision-making body for ESG matters, the primary functions performed by the Board include taking overall responsibility for the Company’s strategy and reporting on ESG, evaluating and determining ESG-related risks, and ensuring appropriate and effective ESG risk management and internal control systems are in place.

In October 2016, CNOOC Limited established the ESG Audit Committee, which is responsible for evaluating and reviewing the Company’s ESG report, then submitting the report to the Board. The CEO sits as the director of this Committee, and the executives serve as its members.

CNOOC Limited has also founded a working group for the Committee, members of the working group include General Manager of the Investor Relations Department, and heads of QHSE Department, Human Resources Department, Oil and Gas Sales Department, Procurement Department, Audit Department, President’s Office, Risk Management Office and Legal Department. Under the lead of the ESG Committee, the working group is responsible for preparing ESG reports, regularly reporting progress to the Committee, and handling other affairs assigned by the Committee. The Chief Safety Officer of the Company annually reports QHSE related matters to the Board on the Board Meeting held in May. The Risk Control Officer reports risk control matters twice a year. The Board annually reviews and approves the Corporate Governance Report, Working Report on Risk Management and Internal Control, ESG report, and the results of stakeholder communication and material issue analysis, ensuring participation in the whole process of ESG management and disclosure.
**Code of Ethics**

The Board adopted a *Code of Ethics* in 2003. The *Code of Ethics* covers areas such as supervisory rules, insider trading, market malpractices, conflict of interests, company opportunities, protection and proper use of the Company’s assets as well as reporting requirements. It provides guidelines to the senior management and Directors in legal and ethical matters as well as the sensitivity involved in reporting illegal and unethical matters. As part of its continued efforts to improve its corporate governance standards, the Board conducted an annual review to the *Code of Ethics* since 2009, and have continued to revise it in accordance with the latest governance requirements. The current version of *Code of Ethics* is published on the Company’s website. All the senior management members and Directors are required to familiarise themselves with and follow the *Code of Ethics* to ensure that the Company’s operations are honest and legal. Violations of the rules will be penalised and serious breaches will result in dismissal.

**Risk Management and Internal Control**

Since its establishment, CNOOC Limited has treated risk management and internal control as a top priority. The Company recognizes that it is the duty and obligation of its management to establish and maintain a risk management and internal control system, which serves the Company’s strategic objectives and meets the Company’s business practice.

The Board acknowledges that it is its responsibilities to ensure that the Company establishes and maintains appropriate and effective risk management and internal control systems and review their effectiveness. The Board receives reports from the management of the Company regarding the establishment, review and evaluation of the Company’s strategic, financial, operational and compliance control, risk management and internal control systems twice per year. All major risks are reported to the Board. The Board will also evaluate the corresponding risks and the response plan.

The Company’s Risk Management Committee is directly managed by the CEO of the Company. The committee is responsible for the organization and implementation of the overall risk management and internal control, on-going monitoring of the risk management and internal control system, and making regular reports to the Board regarding the status of risk management and internal control system.

With respect to risk management, the Company has adopted the risk management framework issued by COSO (namely, the “Committee of Sponsoring Organizations of the Tread way Commission”) of the U.S., established a risk management system covering design, implementation, monitoring, assessment and continuous improvement based on the ISO 31000 Risk Management Guidelines. The Risk Management Committee of the Company shall establish the overall targets and strategies of the risk management system which are in line with the strategic objectives of the Company, and identify, analyze and assess the overall risks of the Company, including the Company’s key risks in making major decisions, important events and key business processes. The Risk Management Committee is also responsible for reviewing and approving the response plans to major risks, as well as following up and periodically reviewing the implementation of such response plans, in order to make sure that sufficient attention, monitoring and responses will be afforded to all key risks of the Company.

With respect to internal control, the Company has adopted the internal control framework issued by COSO of the U.S., established an internal control system and mechanism over financial, operational and compliance controls and has conducted continuing review and evaluation of the internal control of the Company in order to ensure the timeliness, accuracy and completeness of all information reported.

The Company follows up any update and modification of international theoretical frameworks and standards of risk management and internal control. In 2019, we hired a third-party to help benchmark our risk control system with the latest ISO 31000: 2018 Risk Management Guidelines and COSO Enterprise Risk Management Framework- strategy and performance (2017). The results show that the Company's risk control system are generally in line with those standards. We'll continue to refer to those standards to further improve our risk management and internal control.
Audit and Supervision

In order to ensure appropriate and effective operations, internal control, and risk management, the Company has set up a supervision management system focusing on risk control, supported by internal control and internal auditing. A vertically integrated management and reporting system consists of: Audit Committee - Compliance Officer - Audit Department – Internal Auditing Center. The Company has published the *Internal Audit Management System of CNOOC Limited* and the *Implementing Rules of Internal Control and Audit of CNOOC Limited*, which applies to the headquarters and subsidiaries domestic and abroad, and covers audits that regulate the management of suppliers, and promulgated *Detailed Rules for the Implementation and Operation of Foreign Assets Auditing of CNOOC Limited* for asset auditing of overseas subsidiaries, so as to ensure the auditing system is comprehensive and complete. In 2019, through audit project rectification, the Company caused its affiliated units to establish or revise 48 policies and organize training for 2,009 people.

The Company’s auditing management uphold the guideline of “problem oriented risk control, efficiency driven development”. Audit management system and audit resource distribution are optimized. We implement the full coverage of audit supervision in key areas, important processes and major projects. Strengthened supervision promoted risk control, efficiency building, compliance operation, and sustainable development. The Company has also established and implemented audit rectification mechanisms.

With the development of our overseas businesses, the Company’s internal controls and risk management of overseas assets have become increasingly extensive. The Company will combine the annual and mid-to-long term plans of overseas audits to cover overseas subsidiaries and projects. By various forms of auditing, the Company has improved audit efficiency and effectiveness.

Case

>>>Financial Control Complaints: Reporting Channel and Handling

CNOOC Limited and its subsidiaries have set up permanent and temporary departments and positions to handle complaints. Both employees and external individuals can report any kind of violation of disciplines or laws to executives, discipline inspectors, legal advisers, the internal audit department, or to other related departments. Reporting in form of letters, visits, phone calls and e-mail are all acceptable. The channels for complaints on financial control are disclosed on the Company’s website. The telephone number for financial control complaints is 86-10-84523416, and the email address for financial control complaints is complaint@cnooc.com.cn.

The Company handles and archives appeals and complaints according to the *Complaint and Grievance Administrative Measures of CNOOC Limited*, and reports to the Audit Committee of the Company periodically in order to ensure that all reports are given proper attention, and ensuring that all major weaknesses in supervision and reports reach the Audit Committee directly. Company policy clearly stipulates that the whistleblower’s information shall be kept strictly confidential, and corresponding procedures shall be adopted to protect the whistleblower’s information from being leaked and the complainant not being retaliated against.
CNOOC Limited attaches great importance to anti-corruption. The Company sets strict internal punitive mechanisms and management policies abiding with national laws and local regulations related to anti-corruption and business ethics, such as the Anti-Money Laundering Law of the People’s Republic of China, Prevention of Bribery Ordinance, and Anti-Unfair Competition Law of the People’s Republic of China. We seek to identify and punish any practice of employee corruption or malpractice with no exception.

The Company carries out anti-corruption in a continuous and in-depth manner, laying out bottom line for employee behavior. The anti-corruption procedures include strengthening day-to-day anti-corruption education, keeping an eye on key areas and crucial aspects, carrying out special campaigns, and establishing and practicing anti-corruption systems, etc. During the year, the headquarter of the Company conducted 10 anti-corruption training programs.

The Company uphold high ethical standards for our employees. It requires integrity and honesty incorporated in daily work and life. The Company established an effective system to punish and prevent fraud, which consists of the Code of Commercial Behavior and Conduct of Employees of CNOOC Limited, Procedures for Handling Rule Violations, Regulations on Conflicts of Interest, Petition and Visiting Reporting and Appeal Management Measures, and Financial Control Complaint Management Measures. Each of the newly recruited will receive ethical and anti-corruption training, before asked to sign the Code of Commercial Behavior and Conduct of Employees of CNOOC Limited. Senior executives of the Company and general managers of each department are responsible for anti-corruption management.

The Code of Commercial Behavior and Conduct of Employees describes the code or standard of conduct that employees should follow in the workplace. It’s clearly stated that the Company forbids employees from accepting or giving bribes or kickbacks, and from engaging in circumvention behaviors of any form including accepting bribes or kickbacks through relatives or third parties. The code aims to avoid misconduct by employees at work. Meanwhile, employees are encouraged to abide by laws, provisions and business rules to avoid conflict of interest.

The Procedures for Handling Rule Violations specifies detail provisions for behaviors that violate the relevant laws of the state and the regulations of the Company. These behaviors include violations of operational discipline, violations of economic discipline, corruption and bribery. The procedures clearly outlines punishments for corruption (embezzlement) and bribery, stipulates penalties for economic transactions with contractors or suppliers, and states that employees facing criminal liability from breaking the law will be dismissed.

The Regulations on Conflicts of Interest regulates directors’ and employees’ commercial behaviors, preventing them from bringing risks to the Company due to conflicts of interest. The Regulations on Conflicts of Interest defines activities that may lead to conflicts of interest, such as asking suppliers or clients for rewards of any kind, or receiving rewards of any kind from them. It prohibits seeking any benefit from business partners, customers, suppliers, contractors, competitors or other parties with whom the company has a business relationship. It also defines measures to protect whistleblowers’ lawful rights and interests.
Energy Supply

One of CNOOC Limited’s main responsibilities is to ensure the stable supply of crude oil and natural gas through exploration and production of oil and gas resources. Our innovations in technology and management have led to consistent breakthroughs in energy exploration, development, production, and technology research. We constantly explore ways to improve our product quality and services to meet reasonable energy demand of the society.
CNOOC Limited is committed to promoting sustainable energy supply. Through innovations in technology, management and equipments, we consistently make breakthroughs in energy exploration, improve product quality and services, and promote the sustainable development of the Company and the society.

Products and Services

The Company has long been promoting the integration of exploration and development, a way of improving quality and efficiency. We continue to expand oil and gas reserves and production at a steady pace while refining our oil and gas development and production processes. The Company achieved its annual business operation targets this year.

In 2019, the Company enhanced efforts in exploration focusing on mid-to-large sized oil and gas fields in China, strengthened the value-driven exploration philosophy while actively developing overseas exploration. 23 new discoveries were made and 30 successful appraisals of oil and gas bearing structures were achieved throughout the year.

Among the new projects planned to come on stream in 2019, Huizhou 32-5 oilfield comprehensive adjustment / Huizhou 33-1 oilfield joint development project, Caofeidian 11-1/11-6 comprehensive adjustment project and Bozhong 34-9 oilfield in offshore China as well as Egina oilfield in Nigeria and Appomattox project in the U.S. Gulf of Mexico came on steam gradually.

More than 20 projects were under construction throughout the year. The development and construction of key projects progressed smoothly. Among which, Lingshui 17-2 gas fields have entered the development and construction stage, the construction progress for Liuhua 16-2 / Liuhua 20-2 oilfield joint development project accelerated significantly and construction of Bozhong 19-6 condensate gas field pilot development project achieved positive progress as well.

In 2019, the Company continued to focus on the increase of oil and gas production, promoted construction of acceleration and efficiency, strictly controlled operating cost, and drove sustainable development with technology innovations. Further progress was made in the “Year of Water Injection” programme to significantly reduce the decline rate and enhance the recovery rate; the application of new oilfield technologies and new chemical flooding was promoted, and the workload of production enhancement measures reached a record high. In offshore China, we promoted unmanned and depopulated wellhead platforms and onshore power supply mode to explore the green, low carbon and high quality development for offshore oil and gas fields.

<table>
<thead>
<tr>
<th>As at December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net proved reserves of approximately 5.18 billion BOE</td>
</tr>
</tbody>
</table>

| Year |
| Net oil and gas production 506.5 million BOE |

| USD/BOE |
| All-in cost 29.78 |

Product Supply

Net oil and gas production 506.5 million BOE

All-in cost 29.78 USD/BOE
We are committed to implementing the policies on the utilization of natural gas. Optimizing the energy structure and developing a low-carbon economy are both important goals for us, as are promoting energy conservation and emission reduction and increasing the share of natural gas in the primary energy consumption structure. To support these goals, we continuously optimize our development and production plans and realize reasonable prices in the natural gas market. Helping users to promote and utilize clean energy will satisfy the residential demand for natural gas.

We arranged for overhauls by coordinating with downstream users to make sure our producing gas fields are operating safely, and at the same time produce at full capacity. As a result, the Company supplied 13.4 billion cubic meters of natural gas, which exceeds the annual target by 400 million cubic meters.

We leveraged offshore gas with other resources. Using onshore terminals located in Guangdong Province processing offshore gas and other resources, together with PetroChina’s Second West-East Gas Pipeline, the Company secured the capability for south-to-north gas supply program, which eased gas supply constraint in northern China in winter.

We made backup plan to secure gas supply for Hong Kong by actively promoting offshore pipeline network construction linking gas fields. Under extreme circumstances, offshore gas will be bridged from the Gaolan terminal to the Black Point Power Station, CLP Group in Hong Kong, a backup plan to ensure Hong Kong’s gas supply.

Emergency plans for winter gas supply was made in advance. Based on market forecast and analysis, the Company made clear supply priorities, making full efforts to meet residents’ gas demand.

Case

>>>One Million Cubic Meters Scale Daily Production of High-Quality Natural Gas was Successfully Tested From Qiongdongnan Basin

Yongle 8-3-1 exploration well in the eastern deep-water area of Qiongdongnan Basin was successfully tested. The average daily high-quality natural gas production was tested to be around one million cubic meters. This sets a new record for the tested capacity of buried-hill gas fields in China and marks a major breakthrough in the exploration of the eastern deep-water of Qiongdongnan Basin.
Product Quality

CNOOC Limited upholds the quality principle of “people, safety, integrity, foundation, innovation, quality”. Following these principles, we identify quality risks, refine quality management systems, cultivate the culture of quality, and continuously improve the product quality.

We comply with national laws and regulations and strictly follow domestic and international quality management standards to produce and supply crude oil, natural gas and by-products. We hire professional third parties and conduct independent sampling, alongside joint quality testing with customers, issuing objective and truthful test reports based on the inspection results. Our focus on quality and safety extends beyond our products to delivery process. We ensure that by-product delivery vehicles meet safety and quality standards, thereby ensuring the safety and quality of sold by-products.

By the end of 2019, we had not received any client complaints regarding our crude oil and natural gas products and services. Should any complaint arise, we will communicate with the clients in accordance with national standard GB 36170-2018 and signed contracts, and handle the complaint properly to protect their interests from any loss.

The Company follows market-oriented policy to guarantee of winter and residential natural gas supply. Gas sales contract prescribes product quality issues including higher heating value, methane content, water dew point, and other quality indicators. It also defines measures for dealing with unqualified natural gas.
Cyber Security

As cyber security risks escalate in the energy industry, the number of cyber attacks cases targeting the industry is increasing. The Company continuously improves its cyber security management system. We formulated the CNOOC Limited Information Security Management Measures (Trial), Link Security Configuration Management Regulations (Trial), CNOOC Limited Information Security Training Management Regulations, CNOOC Limited Information System Security Management Regulations (Trial), CNOOC Limited Employee Information Security Manual and other management regulations. Cyber security risk assessment mechanism, risk prevention and control system were established and effectively enhanced.

In 2019, in compliance with the CNOOC Limited Information Security Management Measures (Trial) and key annual work arrangements, we completed inspections through on-site assessment and remote scanning. No major cyber security incidents occurred throughout the year.

Technological Innovation

The Company proactively implemented its “innovation-driven” strategy. In 2019, the Company continued to carry out critical core technology such as development of deepwater oil and gas fields, offshore viscous oil fields, high temperature and high pressure and fields with low porosity and permeability.

- **01**
  Developed new knowledge in the Ternary-element Controlling Reservoir, coupling structure, lithology, and fluids, in the deep-water area of the Qiongdongnan Basin. We made achievements including the "Comprehensive Adjustment of Water Flooding and Efficient Development of Drilling and Production Technologies for Large-size, Thin-interlayer, Complex, and Fluvial Viscous Oil Reservoirs in the Sea".

- **02**
  Established major projects such as the "Research on Key Production Technologies of 20 Million Cubic Meters of Production in Western South China Sea" and the "Research on Key Production Technologies of 20 Million Tons of Production in Eastern South China Sea".

- **03**
  Established scientific research platforms and began experimental research for the Company's chemical flooding for viscous oil, gas hydrate extraction simulator, and others in the Changping Future Science City.

The Company implemented management methods including CNOOC Limited Intellectual Property Management Measures and CNOOC Limited Patent Management Implementation Rules to ensure and protect intellectual property. We strengthened the management of intellectual property rights and proprietary technologies resulting from key core technology research.
In 2019, CNOOC Limited obtained 156 authorized patents, filed 287 patents, and registered 42 software copyrights. During the year, CNOOC Limited formulated and issued 69 standards, including 6 national standards, 12 industrial standards, and 51 enterprise standards. SY/T 7057-2016: Dynamic Riser won the Second Prize of Excellent Standard of Technical Committee on Petroleum & Natural Gas of Standardization Administration of China. National standard GB/T 21412.10-2019 Petroleum and Natural Gas Industries - Design and Operation of Subsea Production Systems - Part 10: Specification for Bonded Flexible Pipe, which was drafted by the Beijing Research Center, filled the technical gaps in design standards, manufacturing and testing of bonded flexible pipe. It also provided guidance for the engineering technology of bonded flexible pipe, furthering the development of deep-water oil and gas fields in China.

During the year, CNOOC Limited implemented the joint fund program with the National Natural Science Foundation of China, attracting 62 outstanding scientific research teams to apply, and within which, 12 research projects have been supported. CNOOC Limited successfully applied for nine projects (leading three projects and participating in six). The three projects are "Seismic Response Mechanism and Accurate Imaging Techniques of Fractured Oil and Gas Reservoirs in Buried Hills in the Bohai", "New Methodology for Improving Oil Recovery in Offshore Oilfields" and "Characteristics of Argillaceous Siltstone Gas Hydrate Reservoirs in South China Sea and Gas-liquid-solid Heat and Mass Transfer Mechanism in Multiphase".

After 8 years of collaborative technology research, the “Theory and Technology for Exploration of Deep Large-size Condensate Gas Field in Bohai Basin with Important Discoveries” revealed the mechanism of explosive gas generation with rapid subsidence, ternary co-controlled reservoir formation, and hydrocarbon accumulation by overpressure dynamic seal, short-range distance for high-density land seismic acquisition and efficient drilling technology was developed, and the exploration theory and technology of deep large-size condensate gas fields were formed, which supported the discovery of Bozhong 19-6 condensate gas field. As of July 2019, a proved in-place volume of natural gas of 217.5 billion cubic meters and condensate of 203.55 million cubic meters has been explored in the project, and the tertiary reserves were 800 million cubic meters of oil equivalent, leading the Bohai Super Basin to move from the era of large-size exploration for oil to a new era of large-size search for oil and gas.
We made several achievements in our research on gas hydrate technology based on the National Key R&D Programs (NKPs), the Beijing Municipal Science & Technology Commission, and our platform development project:

- We developed the world’s largest three-dimensional gas hydrate extraction simulator and dynamic monitoring system.

- Our gas hydrate detection equipment technology won the top prize at the International Exhibition of Inventions of Geneva. We applied it successfully in the implementation of the Qiongdongnan Sampling Project.

- We achieved whole-well representative sampling in gas-hydrate-rich areas, which was a world first. We used multiple samples from the mud surface to the top of the shallow gas. We used localized logging and sampling equipment to obtain bulk gas hydrate crystals in an ultra-deep-water area for the first time, and recorded the hydrate decomposition process on video. We also set another Chinese record in the ultra deep-water area, probing 39 meters into the mud at a water depth of 1,624.6 meters with our deep-water seabed CPT system.

In 2019, “Key Technologies for Oil and Gas Exploration Geophysics in the Deep-water Area of the South China Sea”, the National Science and Technology Major Project, formed the world’s leading technology wide azimuth and broadband marine seismic acquisition, and established an industrial "two-width, two-height" acquisition system with multi-source and random excitation. This technology completed the design of wide azimuth and broadband acquisition in the Songtao 36-2 deep water block, realized the three-ship, six-source, and “plow” acquisition for the first time in China, obtained massive seismic data with broadband, wide azimuth, high coverage frequency and high gun-density, solved the complex structural analysis, oil and gas identification and other problems in the deep-water area of the South China Sea, marking a new era for deep-water streamer seismic acquisition technology at CNOOC Limited.

Supply Chain Management

CNOOC Limited made several advances in supply chain management by applying management systems including *Procurement Management Measures*, *Supplier Management Methods*, and *Bidding Management Methods*. We used these to handle two-tier supplier database management, along with bidding and procurement. They helped us implement whole-process dynamic management from the supplier’s entry to exit by sharing supplier resource information and optimizing the supplier’s performance assessment.

We take supply chain risk management seriously, evaluating and controlling environmental, social, and governance risks through on-site inspections, performance assessments, open letters, and third-party agency reviews.
We have established a risk control system to handle violations of laws, regulations and contracts, enhancing our ability to control and manage the overall supplier risk.

In 2019, we hired a third-party agency to investigate supplier operating conditions. The agency also explored credit risk situations involving abnormal registration of business and industry, major tax violations, and breach of trust. This enables us to remove suppliers with abnormal operating conditions and high credit risks.

We continued to shortlist suppliers through public qualification examinations in written form and on-site investigations. We used internal and external experts in on-site investigations of over 17 suppliers, evaluating their qualifications, CSR performance, risk control, process control, quality control, personnel quality, technological capability, and HSE management.

We evaluate the performance of all suppliers in our database annually, including but not limited to their product quality, price, delivery time, after-sales service, and HSE execution. We then adjust their ratings and update the database accordingly.

According to the open letter to all CNOOC suppliers by the Group, we emphasize the need for integrity and self-discipline in the bidding and procurement process. The letter strengthens penalties for violations of laws and regulations, and makes it clear that we will punish unfair competition and illegal acts such as collusion, bid rigging, bid stringing, commercial fraud, and bribery.

Energy efficiency indicators should be clearly put forward in data sheets for pumps, air compressors, transformers and other products.

Energy savings report should be prepared by a qualified inspection and testing agency for fixed asset investment projects, analyzing energy saving measures, energy utilization, energy efficiency levels, and the impact of energy consumption. It should encourage suppliers to improve energy conservation capabilities.

By the end of 2019

We had nearly 3,400 suppliers

Including about 270 overseas suppliers
Safety and Health

CNOOC Limited adheres to the core HSE values, which put “Safety First, Environment Foremost, People Oriented and Asset Integrated” approach to continuous HSE management system improvement. We prioritize work safety for all personnel and reinforce this with safe production processes and monitor the results of these safety measures through safety inspections to promote safe and stable production and operation.
Safety and Health
Production Safety

HSE Philosophy

- Sound HSE performance is one of the foundations for the company’s growth and development.
- Ensuring economic returns, HSE management is also our commitment to social responsibility.
- Put people first and regard employees as our most valuable resource and asset.
- With set objectives, implementation is important.
- Conduct systematic management and continuous improvement with motto "We can always do it better".
- Promote the "5 DON'Ts until DOs" Safety Rules, focus on details, and manage risks at acceptable levels.
- Manage contractors and share information and experience to achieve Win-Win cooperation.
- Endeavor to use clean & harmless materials and energy, and protect the environment & natural resources.
- Comply with laws, regulations and industrial standards, and strive for HSE excellence.
- HSE performance mirrors the comprehensive quality of the company.

CNOOC Limited has consistently upheld its goal of achieving world-leading safety and environmental protection. Our CNOOC Limited HSE Management System (CHSEMS) embodies our advanced management ideas. It consists of 10 core elements including leadership and responsibilities, along with 70 specific management requirements. We use this system to clarify our safety management requirements, guide self-inspection by subordinate units, and follow a pattern of risk and continuous improvement.
The Group’s Safe Production Committee is our highest authority for quality, health, safety and environmental management. The Chairman of the Company serves as the director of the committee. The committee sets up a position of safety director and decides matters including annual safety management goals, major accident investigations and treatments, and major hidden danger rectification measures. It also monitors implementation status and sets safe production rewards.

The Company’s HSE accountability rules follow the general principle that safety must permeate business, production and operation. Our safe production management policy covers all subordinate units, operating locations, and third-party partners. Our HSE management system clarifies contractors’ responsibilities and guides their selection, personnel qualification requirements, admission education, site supervision, completion evaluation and other stages. It uses a cumulative scoring system for contractors that acknowledges accidents and dictates corresponding measures.

In 2019, the Company continued to improve HSE management through a series of measures:

- We further clarified the responsibilities and requirements for safety risk classification management and control, established a long-term risk prevention mechanism, and implemented the Group’s safety risk classification management regulations, along with the Notice on Further Strengthening HAZOP Risk Analysis Work and Safety Management Rules for Ship of Offshore Oil.

- We established a quarterly joint meeting for the safety directors of each affiliated unit and some safety managers, determined the theme of the quarterly joint meeting based on the current safe production situation, and discussed key safety management tasks for the quarter.

- We built our safe production responsibility system into our supervision assessment, and guided affiliated units to establish a responsibility system based on job risks.

- We established a shared emergency center, strengthening the management of accident information reporting and improving overall response capabilities.

- In 2019, we clarified our annual work focus on system improvement, foundation consolidation, and a stronger responsibility system for the work safety for all personnel. We also set an annual management goal of resolutely preventing major accidents, comprehensively preventing all accidents, and always pursuing zero death.
The Occupational Safety and Health Administration (OSHA) occupational safety record for the year is as follows.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Total Work Hours</th>
<th>Number of Recordable Incidents</th>
<th>Rate of Recordable Incidents</th>
<th>Cases of Lost Work Days</th>
<th>Rate of Lost Work Days</th>
<th>Casualties</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 Employees</td>
<td>204</td>
<td>16</td>
<td>0.08</td>
<td>5</td>
<td>0.02</td>
<td>0</td>
</tr>
<tr>
<td>Employees and Direct Contractors</td>
<td>709</td>
<td>47</td>
<td>0.07</td>
<td>20</td>
<td>0.03</td>
<td>1</td>
</tr>
<tr>
<td>2018 Employees</td>
<td>202</td>
<td>16</td>
<td>0.08</td>
<td>10</td>
<td>0.05</td>
<td>1</td>
</tr>
<tr>
<td>Employees and Direct Contractors</td>
<td>557</td>
<td>44</td>
<td>0.08</td>
<td>22</td>
<td>0.04</td>
<td>2</td>
</tr>
<tr>
<td>2017 Employees</td>
<td>205</td>
<td>12</td>
<td>0.06</td>
<td>6</td>
<td>0.03</td>
<td>0</td>
</tr>
<tr>
<td>Employees and Direct Contractors</td>
<td>545</td>
<td>48</td>
<td>0.09</td>
<td>17</td>
<td>0.03</td>
<td>1</td>
</tr>
<tr>
<td>2016 Employees</td>
<td>200</td>
<td>12</td>
<td>0.06</td>
<td>6</td>
<td>0.03</td>
<td>3</td>
</tr>
<tr>
<td>Employees and Direct Contractors</td>
<td>560</td>
<td>68</td>
<td>0.12</td>
<td>25</td>
<td>0.04</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: All indicators are calculated on the basis of 200,000 man-hours.

Case >>> UK Subsidiary Won Two Safety Awards

In August 2019, UK subsidiary won two UK safety awards. The Hydrocarbon Release Prevention program won the "Operational Integrity" award and the Hazard Awareness "Virtual Reality Simulator" developed in cooperation with Det Norske Veritas (DNV GL) won the "Innovation in Safety" prize.

The Awards are jointly organized by the UK's industry trade association, Oil & Gas UK, and Step Change in Safety. They celebrate individuals and businesses striving to make the UK Continental Shelf as safe as possible.
Safety Culture

The Company further enhanced the awareness and safety skills of all personnel in 2019, promoting safety culture and a positive atmosphere for production safety through our “People Orientation, Execution and Intervention” initiative.

- **Selecting Outstanding Employees for Production Safety Awareness**
  - The Company offered training, learning, and sharing opportunities for award-winning employees.
  - Recognition and training of outstanding employees in production safety

- **Safety Lecture**
  - Affiliated units conducted lectures to improve safety awareness.

- **Essay Contest for Safety**
  - Grassroots units participated in essay and video contests.

- **Micro-video Contest for Safety and Environmental Protection**
  - Short video of CNOOC Iraq Limited - Preparation of training passport in oil field
  - Short video of CNOOC Iraq Limited - Interview with local drivers about traffic safety

- **Public Open Day for Safe Production**
  - We invited nearly a thousand people including family members and students on tours of warehouses and parks. They learned about producing processes and equipment to increase public knowledge about production safety.
Zhanjiang Branch Created "3 Meter" Safety Brand

Zhanjiang branch's "3 Meter" safety brand is helping to build a strong safety culture for offshore oil production platforms.

The number "3" used in the logo has three meanings:

- The number represents all employees. Three people can form a group, and group participation makes things better.
- The unit of length is three meters. When you are within three meters of our employees, our employees will not only ensure their safety, but also yours.
- There are three items of safety culture construction: one meter without violations, two meters without hidden danger, and three meters without accidents.

This branding exercise helped Zhanjiang branch prevent any major safety production accidents in 2019.

Safety Audit

CNOOC Limited has strengthened key investigations, inspections, and controls. We have formulated and adopted corresponding control measures for key tasks and important links such as key projects under construction, downhole operational safety, high-risk well control, production facilities, and typhoon preparations.

In 2019, we organized a wide range of safety inspections and helped rectify hidden dangers, including:

- Special safety deployments for increasing storage capacity, to determine 11 monthly key inspection contents such as work permits, hot work and tagout.
- Joint inspections of 13 onshore terminals and two unconventional booster stations.
- Audits of 8 units and supervision of 424 issues to rectify.
- Access reviews for 9 diving contractors.
- Continued to implement special audits of helicopter, organized technical audits in the northern region and management audits in the southern region, focusing on the possible impact of helicopter inspection and maintenance management.
Iraq subsidiary reviewed its contractors’ safety management in 2019. It compiled the Review Form of Security Management Status in Iraq (System) and Review Outline of Contractors’ Safety Management Status in Iraq (Implementation), using them in site inquiries, data reviews, and site inspections. By the end of 2019, 8 contractor audits had covered 3 drilling and workover teams and 5 engineering construction projects.

CNOOC Limited constantly strives to improve its emergency response management mechanisms, emergency rescue systems, and accident prevention and emergency response capabilities.

- **Strengthen Emergency Capacity Mechanism Building**

  1. Improve our emergency response system, revise and promulgate the Crisis Management Plan, Measures for Emergency Management, and Measures for Public Security and Terrorism Management, and improve the emergency response filing of the affiliated units.

  2. Strengthen emergency response, establish an emergency center, implement the 24-hour emergency watch in accordance with the State Council’s Regulations on Production Safety Accidents, and add the office startup mechanism of emergency coordination to our emergency plan.

  3. Conduct a follow-up watch, guide subordinate units to deal with emergencies during events such as the emergency withdrawal at the Shanghai branch, and report information to the state authorities and the Company.

  4. Complete the reconstruction of the standby emergency command center to lay a strong foundation for emergency management.
Explore Advanced Emergency Management Methods

Scenario construction of major accident

In 2019, the Company cooperated with the Ministry of Emergency Management of the People’s Republic of China to model five major accident scenarios for offshore platforms. We used statistics and analysis of major past accidents in the offshore oil industry to model these scenarios.

- **Scenario 1**: Fire and explosion accident due to leakage of production platform facility
- **Scenario 2**: Disconnection and drift of FPSO due to typhoon attack
- **Scenario 3**: Fire and explosion accident due to leakage of storage tank at terminal plant
- **Scenario 4**: Disconnection and drift of working ship due to typhoon attack during construction process
- **Scenario 5**: Sinking platform due to fire and explosion accident caused by blowout from deepwater drilling

CNOOC Incident Management System (CIMS) project research and promotion

The Company expanded the application of the CNOOC Incident Management System (CIMS). We completed the benchmarking analysis, training course development, manual compilation, and other tasks required by CIMS and existing domestic laws and regulations. We also guided the branches to include the emergency plan of CIMS.
Case >>>Safety Drills

In 2019
Business units at all levels of the Company

Completed 8,721 drills With a total of 379,665 participants

Zhanjiang branch conducted an oil spill emergency drill
Zhanjiang branch launched an emergency response drill
Zhanjiang branch launched a ship-shore union emergency drill on chemical leak and fire at Hainan Wharf

Ningbo terminal of Shanghai branch conducted fire drill with local agencies

Case >>>Scientific Prevention of Natural Disasters

The Company continuously optimized its typhoon preparation strategy, improving its defense efficiency to help ensure safe production.

In 2019, there were no production accidents relating to natural disasters, and no casualties occurred. A total of 10 evacuations were organized, 301 flights and 72 voyages mobilized, and 10,634 people were evacuated.
Equipment and Facility Integrity Management

CNOOC Limited normalized potential risk identification along with equipment and facilities management as part of a continued push for safe production. In 2019, we focused on the inspection and management of subsea pipelines, drilling and workover rig, electrical and instrument equipment, and aging facilities. This included a comprehensive survey of subsea pipeline safety along with an initiative to protect and treat subsea pipelines. Key measures included: adjustment and optimization of the Automatic Identification System (AIS) of vessels and radar coverage, site monitoring, leasing of law enforcement vessels, and communication with competent authorities for joint law enforcement. We also invited DNV GL, the independent third party, to audit integrity management in the Tianjin, Zhanjiang and Shanghai branches in response to the release of the revised integrity management system document.

Our equipment and facilities accident rate has been decreasing annually and remained at a low level. The production impact rate caused by equipment and facilities failures also remained low to ensure the production efficiency.

![Impact Rate of Equipment and Facilities breakdowns on Production](image)

**Case **

>>>Huizhou 32-3/32-2 Jacket Crack Group Maintenance Project

The Company found 62 cracks during our preliminary inspection of the Huizhou 32-3/32-2 jacket. After the safety assessment, we reviewed our maintenance plan and began offshore maintenance in April 2019. We completed the maintenance 20 days ahead of schedule on June 10, 2019. The inspection and maintenance achieved the following results:

- **Innovation in detection technology:** We increased accuracy from the conventional 6 mm to 3.5 mm.
- **Innovation in evaluation method:** We added critical state assessment with cracks and crack growth analysis.
- **Innovation in maintenance planning:** We applied root and wedge welding support. The jacket crack maintenance project eliminated the hidden dangers of large platform structures, ensuring the safety of offshore personnel and production.
CNOOC Limited strictly abided by the Law of the People’s Republic of China on Prevention and Control of Occupational Diseases and the relevant laws and regulations of countries and regions where the Company operates. We improved the occupational health management system, promoted the governance of noise hazards on offshore platforms, deepened the use of occupational health management information systems, and implemented the grading control of occupational disease hazards. This helped us achieve full occupational health surveillance and periodically test occupational-disease-inductive factors.

The Company prevents and controls occupational health risks at the source, conducting pre-assessments for occupational health risks, and designing and inspecting on-site occupational health facilities. In 2019 we pre-evaluated 25 occupational disease hazards for construction projects, designed 6 occupational disease protection facilities and completed and accepted 9 occupational disease protection facilities. We introduced a grading system for the control of occupational disease hazards in the workplace. We also used an occupational health management information system to prioritize prevention and control of key locations, personnel, positions and hazards.

Employee Health

In 2019

We pre-evaluated 25 occupational disease hazards for construction projects

Designed 6 occupational disease protection facilities

Inspected 9 occupational disease protection facilities
In 2019, we implemented the National Healthy China Strategy and Healthy China Action, actively participated in the Group’s opinions on the implementation of the Healthy China Action, focusing on the health protection of occupational populations and the comprehensive intervention of health influencing factors, and promoted the implementation of a full range of occupational health protection actions.

We continued promoting stress management and mental health services for offshore employees and tracked their psychological stress, identifying those with psychological hazards and helping with their psychological recovery.

The Company regularly tests occupational health in line with relevant national requirements, and the employees exposed to occupational hazards are all inspected. In 2019, we found 2 new cases of occupational noise-induced hearing loss.

<table>
<thead>
<tr>
<th>Employees exposed to occupational hazards:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees to be inspected:</td>
</tr>
<tr>
<td>Number of inspected employees:</td>
</tr>
<tr>
<td>Occupational health examination rate:</td>
</tr>
</tbody>
</table>

CNOOC Limited Occupational Health Examination Rate 2011-2019
Case  >>>Caring for the Mental Health of Employees at Sea

Offshore workers operate in a relatively closed working environment. Our Shanghai branch consulted mental health teaching and research to find suitable training models and understand psychological needs. It also set up a 24-hour mental health hotline for employees.

We continued to strengthen our source prevention and workplace control in 2019.
Environmental Protection

CNOOC Limited is committed to protecting the environment by conserving resources and striving for green development. We abide by relevant laws and regulations at home and abroad, and follow a robust corporate environmental responsibility strategy by refining our environmental protection processes, following carbon emission reduction policies, implementing the Green Development Action Plan, continuously strengthening the whole process management of environmental protection and continuing to develop clean energy.

Note: All data in this chapter do not include CNOOC International; all data in this chapter, except for emissions management data, include China United Coalbed Methane Corporation Limited (CUCBM).
Environmental Protection
Environmental Management

CNOOC Limited pays equal attention to environmental protection and resource development. To support this goal, our environmental protection management strategy covers all stages from project design through construction, production and operation, and disposal. We protect the marine environment by optimizing site selection and process routes in the early research stage of the project to circumvent environmentally sensitive targets. We set internal control process of the project management, such as environmental impact pre-assessment, environmental assessment implementation plan, completion acceptance and calibration monitoring, etc. We protect the ocean and fisheries during the construction and operation process by avoiding environmentally sensitive periods, reducing pollutant emissions, strengthening our prevention and control of oil spills, and setting up ecological compensation funds.

CNOOC Limited attaches great importance to the legality of environmental impact assessment procedures and compliant project operation. We maintain close contact with the government’s Department of Environmental Impact Management and Review and Approval Agencies and have established a mutual trust exchange mechanism. We also keep up with the latest national and local ecological red line adjustments in line with the Guiding Opinions on the Overall Planning and Implementation of Three Control

The Company’s Whole-process Environmental Protection Flowchart

Environmental Management Information System

* Triple Waste: waste gas, waste water and solid waste
* Three Simultaneous: safety facilities must be designed, constructed and put into use simultaneously with the main project. – *Safe Production Law of the People’s Republic of China*
**Lines in Land and Space Planning and the Technical Regulations for the Red Line Standards of Ecological Protection.** We carry out research on marine and land for oil and gas exploration and development in the ecological protection red line area, and provide the technical basis for adjusting ecological red line areas.

In 2019, we continued promoting environmental management system certification, and incorporated the certification into the QHSE system's "three-in-one" verifying management. We acted as superior auditor when promoting the environmental management system verifying, and promoted the steady implementation of various tasks by combining document and site audits. By the end of 2019, we had completed the site audit of QHSE systems in two branches.
Response to Climate Change

As a responsible company, CNOOC Limited views lucid waters and lush mountains as invaluable assets. We respond to climate change challenges with low-carbon policies, clean energy developments, energy saving and emission reduction projects, and efficient energy utilization, committed to be a resource-saving green company.

Special: Green Development Action Initiative

In order to comply with the global trend of energy transformation and development and implement the requirements of ecological civilization construction, in 2019, the Group expanded the connotation of green and low-carbon strategy and formulated an implementation plan. On June 10, 2019, the Group issued the Green Development Action Plan in Beijing for the first time, which clearly clarified its green development targets in the short-term (2020), mid-term (2035), and long-term (2050). This contains three specific action plans addressing green oil fields, clean energy, and green and low carbon emissions. These plans will help us to reform supply-side energy production, increase clean energy supplies, and promote our green development, helping us to become a world-leading clean energy producer and supplier with Chinese characteristics.

Overall Planned Goals of the Group

By 2020
The Group’s main green and low-carbon indicators will lead domestically. We will complete the pilot construction of the green manufacturing system, laying a solid foundation for building a world-leading clean energy producer and supplier with Chinese characteristics.

By 2035
The Group’s overall green and low-carbon indicators will reach an advanced international level. We will finish the basics of our green manufacturing system to become a world-leading clean energy producer and supplier with Chinese characteristics.

By 2050
The Group’s overall green and low-carbon indicators will lead internationally. We will complete the green manufacturing system and become a world-leading clean energy producer and supplier with Chinese characteristics in all respects.
Specific Action Objectives

**Green Oil Field**

- **By 2020**: The main indicators of environmental friendliness will reach the domestic leading level.
- **By 2035**: The overall indicators of environmental friendliness will reach the international advanced level.
- **By 2050**: The overall indicators of environmental friendliness will reach the international leading level.

**Clean Energy**

- **By 2020**: We will become a leading domestic clean energy producer and supplier.
- **By 2035**: We will become an international advanced clean energy producer and supplier.
- **By 2050**: We will become an international leading clean energy producer and supplier.

**Green and Low-carbon**

- **By 2020**: We will reduce carbon emissions by 3.2 million tons compared to 2015 level. The main indicators of green and low-carbon development will reach the domestic leading level, and we will complete pilot construction of the green manufacturing system.
- **By 2035**: Overall green and low-carbon development indicators will reach the international advanced level, and we will complete the basics of the green manufacturing system.
- **By 2050**: Overall green and low-carbon development indicators will reach the international leading level, and we will fully complete the green manufacturing system.
To establish a long-term mechanism for marine ecological protection and adopt environmentally friendly development methods to reduce damage to the marine ecological environment.

To strengthen the comprehensive use of resources and energy, strengthen economic operation, and optimize control of major energy-consuming equipment.

To improve the environmental friendliness of oil and gas production and reduce pollutant emissions and waste produced.

To improve our hierarchical prevention and control of environmental risks and continuously improve the construction of the "four in one" emergency management system.

To increase efforts on exploration and development of offshore natural gas and unconventional natural gas, promote exploration and development technology, and substantially increase natural gas reserves and production.

To increase the supply of liquefied natural gas (LNG), deploy the global LNG resource network, improve infrastructure, increase research investment, and promote the sustainable development of LNG supply capacity.

To ensure the production of clean refining and chemical products, optimize the industrial distribution, increase the production capacity of clean oil products, strengthen scientific research and development, and ensure the quality of clean oil.

To develop new energy and new business, promote the development of offshore wind power and natural gas hydrate, develop clean energy technologies, and create new energy service models.

To promote energy conservation and efficiency and digital development, continue to promote energy efficiency improvement, implement key projects in energy conservation transformation, continue to enhance the supervision and monitoring of energy conservation and low carbon emission, and carry out the construction of energy management center systems.

To create a low-carbon control system, comprehensively promote international advanced benchmarking, continue to strengthen source and process carbon control, increase the use of clean energy, respond to carbon trading and asset management, explore comprehensive use of carbon dioxide, and focus on new carbon control technologies like carbon sink.

To establish an integrated green industry chain, develop green products, jointly build green industrial parks, and carry out standardized green construction.

To promote pollution control and emission reduction, promote the upgrading and reform of waste gas treatment, accelerate the upgrading and reform of sewage treatment facilities, strengthen the compliance disposal of solid waste, and improve environmental monitoring capabilities.
Risk Assessment

The United Nations Climate Change Conference in Paris helped the world reach a consensus on active response to climate change. CNOOC Limited is determined to become an international clean energy company. We support the climate goals set in the Paris Agreement and fully understand the impact of climate change on the Company. We are working to meet this challenge by identifying and analyzing the risks and opportunities created by climate change and responding with appropriate measures.

- In 2019, the Ministry of Ecology and Environment of the People’s Republic of China established the Department of Climate Change to advance policies and laws to address climate change.
- The legal documents and supporting systems for building a carbon emissions trading system are under development.
- There is uncertainty about the cost of policy implementation and compliance.

- High-efficiency heating and heat exchange, advanced oil and gas processing, and other new energy-efficient technologies are developing at a faster pace.
- Assessing the technical characteristics and adaptability of new technologies and processes while eliminating backward processes and equipment bring costs and risks to the Company.

- Consumer preference for low-carbon products is increasing.
- Structural optimization in the energy industry is promoting the strong development of natural gas and renewable electricity.
- The development of CNG and LNG for vehicles and electric vehicles has affected the market capacity of fuel products for traditional fuel transportation, which then influences market demand for crude oil.

- The Company predicted that increased production capacity among energy companies increases greenhouse gas emissions.
- Energy companies’ responsiveness to climate change and control greenhouse gas emissions is a key regulatory issue in various countries, and is also a focal point for domestic and foreign investors.

- The increase of extreme weather phenomena caused by climate change, such as typhoon and hurricane, may cause damage to the Company’s offshore operations.

Policies and Regulations

- Participating in the preparation and review of the national standard Requirements of the Greenhouse Gas Emission Accounting and Reporting for Oil and Gas Enterprises.

Technologies

- Reorganizing regional grids and managing reactive power compensation in offshore oil and gas fields.
- Recovering oilfield associated gas.
- Renovating key energy-consuming equipment such as compressors and large-displacement transfer pumps for energy efficiency.
- Inspecting and eliminating inefficient equipment according to China’s equipment obsolescence catalog.

Market

- Assessing offshore natural gas resources and the development of deep-water natural gas.
- Optimizing the layout of the offshore natural gas pipeline network.
- Accelerating the exploration of unconventional gas to accelerate production.
- Establishing a wind power promotion team to develop our offshore wind power business.

Reputation

- Implementing the Group’s Green Development Action Initiative and low-carbon control throughout the whole industry chain.
- Disclosing the Company’s low-carbon development information.

Physical

- Establishing a sound emergency system.
Energy Conservation

CNOOC Limited continues to improve energy-saving system and mechanism, outlining the requirements for energy-saving management system in areas including the organization system, division of responsibilities, management principles, planning and plan management, energy-saving assessment and review management of fixed asset investment projects, special fund management, supervision and management, publicity, and training, etc. These have also been integrated into our risk management and control system. In 2019, we revised 6 energy saving-related standards, including the Code for Preparation of Energy Saving Reports for Fixed Asset Investment Projects, General Principles for Post-Energy Saving Evaluation of Fixed Asset Investment Projects, Code for Economic Operation of Heating Furnaces in Offshore Oil and Gas Fields, etc., standardizing energy-saving management procedures. We follow this up with extensive publicity and education around our energy-saving efforts to promote employees’ energy conservation consciousness.

We are committed to the principle of "clean production, the use of harmless raw materials, resource recycling, and low-carbon energy". We support these principles by continuously promoting the construction of green manufacturing systems and energy-saving technologies to increase efficiency. In 2019, we promoted 62 energy-saving transformation projects, investing RMB 180 million. This created an average annual income of RMB 75.07 million, reduced comprehensive energy consumption by 12.5 tce, and reduced GHG emissions by over 300,000 tCO₂e. In 2019, CNOOC Limited continued promoting the construction of green factories and created green oil and gas fields and green terminals. CNOOC Deepwater Development Limited and CNOOC Dongfang Operation Company won the National Green Factory award. CNOOC China Limited Zhanjiang Branch and CNOOC China Limited Dongying Terminal were appraised as the Green Factory in Petroleum and Chemical Industry.

Main Company Energy Consumption

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil</td>
<td>Thousand tons</td>
<td>323.2</td>
<td>324.1</td>
<td>371.0</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>Million cubic meters</td>
<td>1,766</td>
<td>1,881</td>
<td>2,051</td>
</tr>
<tr>
<td>Diesel</td>
<td>Thousand tons</td>
<td>28.3</td>
<td>29.4</td>
<td>55.4</td>
</tr>
<tr>
<td>Electricity</td>
<td>Million kWh</td>
<td>150</td>
<td>203</td>
<td>254</td>
</tr>
<tr>
<td>Comprehensive Energy Consumption per Ton of Oil and Gas Production</td>
<td>Tons of standard coal equivalent/ton</td>
<td>0.0494</td>
<td>0.0515</td>
<td>0.0553</td>
</tr>
</tbody>
</table>

Energy Conservation Results

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Conservation Targets</td>
<td>Tons of standard coal equivalent</td>
<td>130,767</td>
<td>93,723</td>
<td>116,150</td>
</tr>
<tr>
<td>Actual Energy Saving</td>
<td>Tons of standard coal equivalent</td>
<td>155,299</td>
<td>165,148</td>
<td>125,340</td>
</tr>
</tbody>
</table>
Dongying terminal located in the Dongying Port Economic Development Zone, Dongying City, Shandong Province, fully complies with the evaluation requirements of green factories in the petroleum and chemical industry from construction to operation. The unit land area’s output value is more than eight times that required by Shandong Province. The comprehensive energy consumption per unit product is 0.1174 kgce per ton, which is lower than the optimal level in the Bohai region. In November 2019, the China Petroleum and Chemical Industry Federation awarded it the title of “Green Factory in Petroleum and Chemical Industry in 2019”.

Dongying terminal follows national laws and regulations during the establishment, construction, and production process and raises awareness of environmental protection through publicity and education in pursuit of an environmentally friendly corporate brand. So far, there has been no accident in safety, environmental protection and quality.

The Company promotes the comprehensive use of oilfield associated gas by recovering it as a valuable and high-quality resource for offshore turbine power generation, boiler fuel, or transportation to shore for use as fuel. We have applied this technology to development projects such as Kenli 10-1 oilfield, Weizhou oilfield group, and phase II of JinZhou 25-1 South oil and gas field. Among them, the Weizhou oilfield group’s low-pressure natural gas recovery project has saved 22.32 million cubic meters of natural gas annually.

CNOOC Limited strives to be a world-class competitor in low-carbon energy development through its exploration of clean energy alternatives such as offshore wind power.

In July 2019, we established CNOOC Renewable Energy Co., Ltd. to implement our offshore wind power business.

In order to give full play to the advantages of the Company’s industry chain and achieve integrated development, CNOOC Limited is trying to study power schemes for offshore distributed wind power in oil and gas fields. Such a project would reduce offshore oil and gas field development costs and nitrogen oxide emissions. We have started our first jointly developed offshore wind power project and expect it to achieve full grid-connected power generation by the end of 2020.
Adhering to the principle of "paying equal attention to developing reserves and reducing usage, giving priority to conservation" and focusing on improving the utilization efficiency of water resources, the Company strengthens technological transformation and promotes comprehensive treatment and reuse of wastewater to conduct all-around water resources management.

In 2019, the Company prioritized water conservation at all levels by setting specific tasks and indicators for all subsidiaries, and implemented multiple management and technical measures on water conservation. For example, freshwater conservation was achieved through measures such as seawater desalination; the Company optimized freshwater consumption per unit of production by streamlining the production process; employees’ awareness of water resources crisis and water conservation was enhanced by active water conservation promotion.

### Water Resources Consumption of the Company

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Freshwater Consumption</td>
<td>Million tons</td>
<td>1.813</td>
<td>1.859</td>
<td>2.137</td>
</tr>
<tr>
<td>Freshwater Consumption per Ton of Oil and Gas Production</td>
<td>Cubic meters/ton</td>
<td>0.0332</td>
<td>0.0335</td>
<td>0.0367</td>
</tr>
<tr>
<td>Annual Water Saving</td>
<td>Thousand tons</td>
<td>88</td>
<td>108</td>
<td>182</td>
</tr>
</tbody>
</table>

### Case

**FPSO Waste Heat of Boilers for Seawater Desalination in Penglai 19-3 Oilfield**

The Penglai 19-3 oilfield's FPSO (Floating Production Storage and Offloading) contains three boilers. We recover and utilize waste heat for seawater desalination by feeding the flue gas of boilers into hot water heat exchanger to produce hot water for the desalination machine.

After the commissioning of the project of waste heat boiler of FPSO for seawater desalination in Penglai 19-3 oilfield in July 2019, it produced an average of 100 cubic meters of fresh water per day, enabling FPSO facilities to become self-sufficient in fresh water production.
CNOOC Limited responds to national policy requirements for climate change and incorporates low-carbon management into the Company's overall oil and gas development process. Under the instructions of the Plan to Control Greenhouse Gas Emissions under the 13th Five-Year Plan, the Notice on Earmlessly Launching a National Carbon Emissions Trading Market, and other relevant documents and policies in China, we have established a low-carbon management system with reference to the national policies and practices of leading energy companies in China and abroad as well as requirements to implement climate and carbon management. The system includes Low Carbon Management Measures, Rules for Carbon Emission Statistics and Reporting, Rules for Carbon Emission Impact Assessment and Review of Fixed Asset Investment Projects, Rules for CCER* Project Development Management, Rules for Carbon Asset Management, and Rules for Carbon Assessment. Through this system, the Company has calculated the division of work for the carbon management and corresponding data collection methods, and laid out managing rules for carbon reduction work including CCER projects, carbon evaluation, and carbon assets assessment. In order to improve the low-carbon management system, we released three standards related to low-carbon management in 2019, including the GHG Emission Accounting Methods in Offshore Oil and Gas Fields, Specifications for Monitoring Carbon Dioxide Emissions from Fixed Combustion Sources, and Guidelines for the Preparation of Impact Assessment Reports of Carbon Emission for Fixed Asset Investment Projects. In 2019, we laid out our short-term, mid-term, and long-term carbon reduction action plans in the Group's Green and Low-Carbon Plan (which is part of the Green Development Action Plan). We also quantified our 2020 carbon reduction targets. We will reduce carbon emissions by 1.3 million tons over 2015 level, reach the domestic leading level for the main indicators of green and low-carbon development, and complete pilot construction of our green manufacturing system.

We have also improved our energy-saving and low-carbon supervision and monitoring system, established an information platform for carbon emission data management, assessed our affiliated enterprises' carbon emission status, created testing guidelines that exceed country and industry requirements, and conducted target responsibility assessments. We strengthened the internal control mechanism for energy-saving and low-carbon supervision and monitoring, and regularly supervised energy-saving and low-carbon activities.

### Key Greenhouse Gas Emissions Data

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Greenhouse Gas Emissions</td>
<td>Thousand tons of carbon dioxide equivalent</td>
<td>7,829</td>
<td>7,480</td>
<td>8,783</td>
</tr>
<tr>
<td>Direct Greenhouse Gas Emissions</td>
<td>Thousand tons of carbon dioxide equivalent</td>
<td>7,736</td>
<td>7,345</td>
<td>8,597</td>
</tr>
<tr>
<td>Indirect Greenhouse Gas Emissions</td>
<td>Thousand tons of carbon dioxide equivalent</td>
<td>93</td>
<td>135</td>
<td>186</td>
</tr>
<tr>
<td>Greenhouse Gas Emissions per Ton of Oil and Gas Production</td>
<td>Tons of carbon dioxide equivalent/ton</td>
<td>0.1409</td>
<td>0.1328</td>
<td>0.1493</td>
</tr>
</tbody>
</table>

*CCER: According to the Interim Measures for the Administration of Voluntary Emission Reduction and Trading of Greenhouse Gases, the quantity involved in voluntary emission reductions shall be registered and recorded by the national competent authorities in the National Voluntary Emissions Reduction Transaction Register. The quantity in emission reduction is called Chinese Certified Emission Reduction (CCER). After the registration of voluntary emission reduction, the carbon emission can be traded in registered Chinese trading institutions.
Case >>>Natural Gas Recovery Project in South Bohai (Phase II)

The Company laid a 7.5km natural gas submarine pipeline starting in the Bozhong 35-2 oilfield to make full use of associated gas resources in the oilfield of south Bohai and reduce flaring emissions. The pipeline lets us export natural gas newly produced in Bozhong 28/34 and the Kenli oilfield group to the southwest Bohai joint pipeline network.

The pipeline came on stream at the end of August 2019. We expected it to recover 50 million cubic meters of associated gas annually and cut approximately 110,000 tons of carbon dioxide-equivalent greenhouse gas.

Case >>>Carbon Management in North America Subsidiary

North America subsidiary uses an interdisciplinary team to track the subsidiary’s greenhouse gas emission performance and develop input to government regulations.

The subsidiary has formed a greenhouse gas emission management system for equipment that has been put into operation and planned operation with the participation of multiple departments. The subsidiary also continued to carry out technical renovations and equipment upgrades on projects with high greenhouse gas emissions or potentially high greenhouse gas compliance costs. The Long Lake oil sands project has experienced a 69% decline in GHG intensity from 2010 to 2019.
Our UK subsidiary implemented the *Green Development Action Plan*, took the initiative to make response to climate change, and carried out all-round actions in terms of green management systems, environmental audit, and low-carbon emissions reduction technologies.

### Net Zero Emission Action Plan

In June 2019, the UK became the first major economy in the world to pass laws to end its contribution to global warming by 2050. The target requires the UK to bring all greenhouse gas emissions to net zero by 2050. CNOOC International’s Europe & Africa business has developed a *Net Zero action plan to deliver on the Green Development Plan* and help meet this challenge.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green management system</td>
<td>Creating an internationally recognized system.</td>
</tr>
<tr>
<td>Green industry chain</td>
<td>Integrating Net Zero principles into the supply chain.</td>
</tr>
<tr>
<td>Green workplace</td>
<td>Creating an environmentally sustainable workplace.</td>
</tr>
<tr>
<td>Green culture</td>
<td>Embedding a “Green Growth” mindset in an inclusive and diverse team.</td>
</tr>
<tr>
<td>Green asset life cycle</td>
<td>Doing what we do now in a greener way on our existing assets.</td>
</tr>
<tr>
<td>Green next generation</td>
<td>Developing with the future in mind.</td>
</tr>
<tr>
<td>developments</td>
<td></td>
</tr>
<tr>
<td>Green portfolio</td>
<td>Diversifying our portfolio with gas, renewables, and carbon sinks.</td>
</tr>
</tbody>
</table>

### Top Marks in UK Environmental Audit

From March 24 to April 30, 2019, UK Environmental Management System (EMS) commissioners audited and inspected UK subsidiary. The subsidiary achieved top marks and every item in the audit was running perfectly with no area for improvement.

UK subsidiary’s EMS is based on the ISO 14001 standard and aims to minimize the subsidiary’s impact on the environment. An accredited body must conduct an EMS audit every two years and submit a report to the UK government’s Department for Business, Energy & Industrial Strategy, which acts as the environmental regulator.

### Golden Eagle Reaches Environmental Milestone

In recent years, UK subsidiary’s Golden Eagle Platform has worked closely with regulators to invest in energy-saving emission reduction equipment. An improved drainage system prevents sewage from flowing into the ocean, while an advanced state-of-the-art bunkering station reduces the risk of spillage when bunkering diesel from supply vessels. The redesigned emergency disposal system for methanol storage prevents accidental release during shutdown operations.

By the end of 2019, the Golden Eagle Platform has witnessed good results of zero petroleum and chemical emission for more than 500 days.

### Buzzard Set a New Record for Hydrocarbon Emissions

By the end of 2019, Buzzard has set a new and excellent performance record in relation to Tier 1 or 2 Process Safety Hydrocarbon release events for over 700 days.
Emissions Management

CNOOC Limited supports green production by strictly controlling pollutant emissions, conducting pollutant and waste management and monitoring throughout the operation processes, thereby reducing waste.

We implement the Environmental Protection Law of the People’s Republic of China and its supporting national laws, regulations and policies, along with the relevant laws and regulations of the countries where we operate. We follow relevant environmental standards to strengthen marine environmental protection control in our offshore operations, including Effluent Limitations for Pollutant from Offshore Petroleum Exploration and Production, Biological Toxicity for Pollutants from Marine Petroleum Exploration, and Exploitation and Discharge Standard for Water Pollutants from Ships. We created the Detailed Implementation Regulations on Environmental Protection Supervision to comply with national offshore environmental protection requirements, and wrote the CNOOC Limited Detailed Regulations on Reporting Environmental Incidents in China to strengthen the control of pollutant emissions through the implementation of environmental protection management and clarify the procedures and requirements in environmental incident reporting.

In 2019, we began preparing our Rules for Solid Waste Management to further standardize solid waste and hazardous waste management procedures throughout the Company. By making surveys of offshore platform wastes, the Company further clarified the control process, proposed to reduce solid waste from the very beginning and ensured the recycling and harmlessness in solid waste disposal according to the nature of solid waste.
CNOOC Limited strengthened the production and operation management of construction projects and monitored environmental compliance and pollutant emissions by means of environmental monitoring, special supervision and investigation. In 2019, a supervisory monitoring was conducted on the domestic sewage in some platforms of Shenzhen branch and the results of all sampling inspections met the standard. In addition, on-site surveys were conducted at 8 outsourcing suppliers of hazardous waste disposal across 4 branches to assess their management and compliance status.

We continued to increase our investment in offshore platform environmental protection facilities in line with national emission standards. In 2019, we invested approximately RMB 730 million in the "Three Simultaneous** construction of building environmental protection facilities for our new offshore platforms and about RMB 70 million in related upgrades and renovations. For the Bohai region, we proposed the **Three-year Action Plan for the Upgrade of Environmental Protection of the Bohai Oilfield.** This plan will eliminate wastewater from the Bohai's offshore oil and gas fields by the end of 2020, reduce the total amount of pollutants entering the sea, continue to improve environmental protection facilities and equipment management, and reduce the concentration of wastewater discharge.

**Emission of the Company’s Main Pollutants**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil Content in Discharged Water</td>
<td>Tons</td>
<td>2,535</td>
<td>2,437</td>
<td>3,919</td>
</tr>
<tr>
<td>(Platform + Terminal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>Tons</td>
<td>99.8</td>
<td>128.7</td>
<td>110.4</td>
</tr>
<tr>
<td>(Platform + Terminal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfur Dioxide (SO₂) (Terminal)</td>
<td>Tons</td>
<td>8.4</td>
<td>17.9</td>
<td>12.0</td>
</tr>
<tr>
<td>Nitrogen Oxides (NO₃) (Terminal)</td>
<td>Tons</td>
<td>272.2</td>
<td>341.3</td>
<td>330.7</td>
</tr>
<tr>
<td>Non-hazardous Waste</td>
<td>Tons</td>
<td>16,490</td>
<td>13,970</td>
<td>16,104</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>Tons</td>
<td>22,326</td>
<td>29,426</td>
<td>45,772</td>
</tr>
</tbody>
</table>

*Three Simultaneous: safety facilities must be designed, constructed and put into use simultaneously with the main project. – Safe Production Law of the People’s Republic of China*
Paying equal attention to environmental protection and resource development, Bohai Oilfield has optimized its production and disposal technologies, transitioning from increasing production without increasing pollution to increasing production while reducing pollution.

We updated production and disposal technologies in the oilfield to lower the concentration of oil-containing wastewater. With innovative domestic wastewater disposal technologies, the domestic wastewater can be treated by means of wastewater recycling, effectively reducing about 60% domestic wastewater.

Regarding the control of other types of pollutant emissions, Bohai Oilfield has controlled the production and emissions in aspects of space, time and total amount. In terms of space, for the exploratory operation within the sensitive marine ecological area, we transformed the drilling platform to completely collect and store cuttings and mud for transportation and disposal by qualified organizations on shore, ensuring zero discharge of cuttings and mud from the oil layer in the operation area. In terms of time, we took steps to avoid the fishing season while targeting cuttings and mud recycling to accommodate the fish spawning period, reducing our impact on the marine ecological environment. In terms of total amount, the oilfield has strictly controlled the discharge of production water and domestic wastewater based on the total amount specified in the environment impact assessment report.

Tianjin branch has developed an environmentally friendly reusable drilling fluid system and made innovations in well cementing waste disposal, eliminating discharge throughout the drilling operation cycle.

These measures have made the drilling and completion operation at Qinhuangdao 33-1 south oilfield the first zero discharge project in Bohai. The seven-well recycling operation has reduced waste drilling fluids by 80% and cutting by 60-70%, while achieving a 30% reuse rate for drilling fluids. We tested the environmentally friendly repeatable drilling fluids system at Qinhuangdao 32-6 oilfield, Caofeidian oilfields, and Qinhuangdao 33-1 south oilfield for 37 wells. For a singer well, we reduced the average fluid preparation by 35%, saving more than RMB 1 million and reducing emissions.
CNOOC Limited puts protection first by strictly controlling the red line of ecological protection with environmentally friendly development. We also conduct marine ecological protection work to create harmony between humans and oceans.

CNOOC Limited attaches great importance to marine ecological environmental protection and implements laws such as Marine Environmental Protection Law of the People’s Republic of China, Measures for Environmental Protection Management during Production, and Measures to Manage Accountability for Environmental Damages. The Company has created Green Oil Field Plan and established a long-term mechanism for marine ecological protection. We support the infrastructure and ecological civilization construction at marine conservation areas by participating in research on marine biodiversity protection, marine ecological restoration projects, and comprehensive restoration projects in coastal areas.

The Company incorporates compensation for loss of marine biological resources and ecological service functions into environmental protection investment in construction projects. In new projects, we will continue to carry out marine biological resource artificial propagation and release, conservation and management of marine biological resources, artificial fish reefs, and related research work.
Artificial propagation and release is a restoration project to alleviate the impact of marine engineering construction on the ecological environment. In 2019, Tianjin branch cooperated with Department of Agriculture and Rural Areas of Liaoning Province in artificial propagation and release at Liaodong Bay. CNOOC Limited invested over RMB 10 million to restore Bohai’s resources, releasing over 16 million blue crabs and 946 million Chinese white shrimps.

The artificial propagation and release project was an important measure for CNOOC Limited as part of our comprehensive control for pollution and control campaign of the Bohai as well as the Three-year Action Plan for the Upgrade of Environmental Protection of the Bohai, which was of great significance to improve the ecological environment of the Bohai.

On May 2, 2019, Jiang Kaili, who was inspecting the Panyu 30-1 Platform, recorded this scene with an inspection machine: dolphins, large and small, chased and played around the Platform.

Living harmoniously with marine life while developing and using marine oil and gas resources is a common goal across the Company. Dolphins generally have high requirements for water quality, so the presence of wild dolphins is a strong indicator of a cleaner ocean. CNOOC Limited protects the ecological marine environment by strictly controlling pollution emissions, prohibiting destructive development and reducing marine pollution. Nowadays, fish are joining the dolphins around the platform, marking the success of our ecological platform construction.
Case >>> A "Cute Assistant" for Oilfield

On June 12, 2019, the WHPF platform in the Bohai’s Caofeidian oilfield welcomed a "cute assistant" - an adorable harbor seal. The harbor seal is a national second-level protected animal, which has high requirements for marine water quality and ambient noise. The continuous appearance of harbor seals around oilfield facilities reflects the success of our green oil field development and measures to protect marine life.

Case >>> Uganda Subsidiary Evaluated and Guarded Chimpanzee Homes Scientifically

The Uganda subsidiary helped protect the forest reserve near the Kingfisher Oilfield for chimpanzees by inviting experts in chimpanzees’ research and protection to participate in its Environmental and Social Impact Assessment (ESIA). They helped analyze the possible impact of oilfield development on the reserve and propose countermeasures to optimize all aspects of the project. In addition, in order to ensure the original life of chimpanzees in a more natural state, Uganda subsidiary also took strict administrative measures to preserve traditional life for the chimpanzees. It developed detailed monitoring plans during project construction and operation, set targeted monitoring indicators, and monitored operations regularly to ensure that oilfield construction would not damage the reserve environment.
Care for Employees

CNOOC Limited regards employees as the most precious resource and asset. Adhering to our people-oriented development concept, the Company complies with employment related labor law and regulations, and constantly perfects the labor system so as to create an environment for staff growth and career development. At the same time, the Company cares for employees’ physical and mental health, protects employees’ rights and interests, and endeavors to build a safe production environment for employees, benefitting everyone with a shared growth.
Care for Employees
Employment Policies

CNOOC Limited insists on employment in accordance with laws and regulations, treats all staff equally within an inclusive corporate culture, and safeguards all rights and benefits that staff should enjoy in every aspect of their work and life.

Legal Employment

CNOOC Limited respects the basic human rights which all employees are entitled to, strictly abides by applicable domestic and international laws and regulations, and has constantly improved its internal employment management system. In China, we act in strict compliance with international conventions ratified by the Chinese Government, such as the Convention on the Elimination of Discrimination in Employment and Occupation, and local laws and regulations such as the Labor Law of the People’s Republic of China, the Labor Contract Law of the People’s Republic of China, etc. We have established our own employment and labor contract management system to guarantee all employees’ rights and interests in compliance. For overseas operation, the Company acts in compliance with relevant laws and regulations and international conventions which the Chinese government supports. We have established an overseas employee management system, and respect the legitimate rights of all employees.

All employees enter into employment contracts with the Company on an equal and voluntary basis. We strictly conform to labor laws, abide by stipulations on salary, overtime, and statutory benefits, oppose to any form of inhumane treatment, and prohibit the use of forced labor. We strictly comply with National Provisions on the Prohibition of Using Child Labor and the legal requirements prohibiting child labor in overseas operations. It is strictly prohibited to employ and use any child labor.

We comply with diversification and non-discrimination principles, and prohibit any discriminating recruitment clauses on gender, nationality, marital status, religion or hepatitis B status. We insist on fair and equal treatment in our recruitment, training, promotion and compensation regardless of race, nationality, religion, gender, age, marital status and other legally protected characteristics. We offer equal opportunities in recruitment, promotion, training and career development, build our corporate culture with respect, openness and inclusiveness, and cherish our staff's diverse talents.
The Company adheres to gender equality, encourages hiring female employees, implements *Special Rules on the Labor Protection of Female Employees*, guarantees the legitimate rights of female employees, and develops training program for female managements. By the end of 2019, the Company had 2,960 female employees, accounting for 15.83% of the staff, and the female mid-level and senior managers accounted for 14.35% of the management.

As an international energy company, CNOOC Limited earnestly fulfills the responsibilities of overseas employees and actively promotes the development of local communities. After years of development, we are currently operating in more than 20 countries and regions in 6 continents, including Indonesia, Nigeria, the United States, Brazil, Australia, and the United Kingdom. Adhering to the principle of "inclusive reciprocity, mutual benefit and win-win", CNOOC Limited fully respects the cultural diversity of various countries and the customs of local residents, and is always committed to promoting cultural integration, conveys Chinese cultural confidence, advocates mutual understanding between staff of different nationalities, from different regions and with different cultural background and strives to promote the integration of and exchange between domestic and foreign staff, in a bid to establish a dynamic working environment. The International cooperative projects have created a large number of local employment opportunities in countries where such projects were implemented. By the end of 2019, CNOOC Limited had 2,856 foreign staff and enjoyed a local employment rate of 92%.

By the end of 2019, CNOOC Limited had a total of 18,703 staff, with staff turnover rate of 1.15% approximately.

### Number of Staff by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff in Mainland China</td>
<td>15,847</td>
</tr>
<tr>
<td>Staff outside China and in Asia</td>
<td>870</td>
</tr>
<tr>
<td>Staff in Europe</td>
<td>921</td>
</tr>
<tr>
<td>Staff in North and South America</td>
<td>1,001</td>
</tr>
<tr>
<td>Staff in Africa</td>
<td>58</td>
</tr>
<tr>
<td>Staff in Oceania</td>
<td>6</td>
</tr>
</tbody>
</table>

### Proportion of Staff by Age

- Below 30 years old: 7.58%
- 30-50 years old: 67.13%
- Above 50 years old: 25.29%

### Proportion of Staff by Education

- Master degree or above: 16.64%
- Bachelor degree: 59.56%
- College degree or below: 23.80%
CNOOC Limited strives to provide employees with competitive remuneration packages in the industry and have established a salary growth mechanism. We are also gradually establishing a distribution mechanism that matches the market mechanism. Our salary distribution implements multi-level incentives, rewarding technical experts and front-line workers, and correlates with the quality of employees’ work and the value of their contribution, so as to match employee income with the growth of the Company, and enables employees to share in our business achievements.

We provide comprehensive and effective employee benefits, which consists of social insurances and a variety of supplementary insurance schemes. Aside from the five basic social insurances namely pension, healthcare, employment injury, unemployment and maternity, we also provide employees with personal accident insurance, critical illness insurance, commercial supplementary medical insurance, and supplementary medical insurance for employees’ children under the age of 18. Besides, we provide employees with enterprise annuity and housing subsidies.

CNOOC Limited respects and supports the association freedom of our employees complying with the law. Guided by the Trade Union Law of the People’s Republic of China, we have established labor unions across different subsidiaries and branches, which have the responsibility and obligation to protect employees’ legitimate rights and interests as well as to monitor the Company’s practices. Labor unions also oversee all operational activities related to employee benefits, and communicate with the Company on behalf of its members. We follow the Labor Contract Management Rules and other management requirements and conduct awareness-raising activities within the Company. We also maintain close communication with legal department and labor unions to jointly guarantee employees’ rights and interests.

CNOOC Limited protects the legitimate rights and interests of local employees in overseas, strictly abides by local employment regulation in each jurisdiction, and provides employees with vacation, social insurance and other benefits in compliance with local labor laws and regulations. We establish salary adjustment and incentive mechanisms in accordance with local conditions to encourage local employees to grow together with the Company. We provide local employees with necessary vocational skills and capacity-building training, as well as development opportunities such as internal transfer, on-the-job training, and overseas job opportunities. CNOOC Limited always adheres to the promotion of cultural integration, actively participates in local community construction and activities, and encourages local employees to actively participate in competitions and cultural activities organized by the Beijing headquarters.
Employee Development

CNOOC Limited has improved its training system to grow together with employees. We motivate employees to realize their self-worth through our employee development system and the creation of development opportunities.

Talent Strategy

We believe strongly in enterprise development by fostering employee talent, which we consider to be the most valuable resource of CNOOC Limited. We focus on cultivating high-level talent that aligns with our industrial planning. We are deepening reforms in our talent development system and mechanism, and implementing a talent policy that can inspire vitality and highlight value.

The Company attaches great importance to creating an excellent employer brand. We emphasize talent attraction and recruitment using channels including campus recruitment, school-enterprise cooperation, and social recruitment to attract the most promising people. In 2019, CNOOC Limited attracted a total of 32,300 graduates through campus recruitment.

Case

>>>CNOOC Limited Launched the “Rising Sun-CNOOC Plan” Open Day Through School-Enterprise Cooperation

On June 27, 2019, CNOOC Limited launched the “Rising Sun-CNOOC Plan” Open Day for the first time. More than 40 teachers and students from Tsinghua University came to CNOOC Limited to learn about the Company, and promoted the mutual understanding. An appointment letter issuance ceremony for career coaches opened a new chapter in school-enterprise cooperation.

Students learned about the development of offshore oil industry in the China National Offshore Oil Exhibition Center. The leader of human resources department introduced our development prospects and talent concepts, and then answered questions on issues including recruitment, employment, and talent training.
Zhanjiang branch has explored a talent team construction system featuring “concentration, manpower, ability, vitality, and motivation” through the innovation of “talent pool” cultivation model, which provided a solid talent guarantee for high-quality development. In 2019, Zhanjiang branch was selected as a model enterprise for deepening the reform of the talent development system and mechanism reform by the State-owned Assets Supervision and Administration Commission of the State Council.

In terms of “concentration”, the branch strengthens the study of political theories for employees to enhance the political concentration of talents. In terms of “manpower”, the branch has compiled a talent development plan scientifically. Relying on the two “talent pools” featuring technology and skills, the branch has trained a large number of high-level talents through systematic training and scientific selection. In terms of “ability”, the branch has independently explored and innovated a set of talent cultivation and development system clusters. In terms of “vitality”, the branch follows the rules for the growth and development of different types of talents, adheres to the principle of both ability and moral integrity, and takes the actual work performance as the guide to continuously innovate the talent classification and evaluation mechanism. In terms of “motivation”, a full-power positive incentive system based on real-time efficiency incentives, precise performance incentives, outstanding contribution incentives, and technological innovation incentives has been established to create a good environment for pioneering and superior employees within the branch, with the purpose to stimulate the internal driving force of various types of talents in promoting entrepreneurship in the process of promoting high-quality development.

Meanwhile, the Company actively assessed professional skill levels for skilled personnel. In 2019, we carried out the assessment on 2,600 people for 5 professional skill levels including primary workers, junior workers, senior workers, technicians, and senior technicians, ranging across 58 roles. By the end of 2019, we had 4,374 senior workers and above, accounting for 74% of total skilled workers in main jobs, and had 846 technicians and senior technicians, accounting for 14% of total skilled workers in main jobs. We also conducted occupational qualification reviews, and certified over 85 staff for their roles in exploration, downhole operation, drilling and completion.
CNOOC Limited continues to focus on career development by making career path for skilled workers and technicians more accessible. We selected the Group’s first batch of 3 senior technical experts, focusing on three specialties: exploration, drilling and completion, and offshore engineering. With morality, ability, performance and potential as the focus, the Company also carried out the selection of the fourth batch of senior technical expert for the Group. We also added the job of chief technician to back up technical experts in affiliated units, further strengthening the construction of high-level technical and skilled talents.
CNOOC Limited has established a multi-level training system for employees, and continuously empowers employees as needed.

A talent diversified development strategy was implemented within the Company. In 2019, guided by the Key Training Plan, we continued to decompose and implement the 13th Five-Year Talent Development Plan, and put the focus of training on key specialities and critical roles. During the year, the Company organized leaders and outstanding experts in various ranks, functions and businesses to participate in key training programs, including the “young talent cultivation camp” “drilling and completion expert training course” “equipment and facilities digital training course” and “advanced information technology training course”, which helped the Company’s business development while cultivating talents.

### 2019 Training Performance

<table>
<thead>
<tr>
<th>Year</th>
<th>Total training sessions</th>
<th>Total number of trainees</th>
<th>Total training hours</th>
<th>Total training hours per person</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>12,670</td>
<td>188,197</td>
<td>1,492,566</td>
<td>96</td>
</tr>
<tr>
<td>2018</td>
<td>23,875</td>
<td>266,266</td>
<td>1,235,644</td>
<td>83</td>
</tr>
<tr>
<td>2017</td>
<td>22,468</td>
<td>213,167</td>
<td>1,084,229</td>
<td>72</td>
</tr>
</tbody>
</table>
In 2019, CNOOC Limited continued to strengthen the construction of contents and the promotion of application of the Haixue online learning platform for the provision of China Europe International Business School (CEIBS) MBA, English, and accounting courses. The platform includes special content focusing on digitalization, health, safety and environment (HSE), and well control. The platform offers training in areas including subject-based learning, talent selection, and contests. As at December 31, 2019, the platform featured 1,834 online courses. We have organized 54 subject-based trainings and 226 online tests. More and more staff participated in the on-line learning featuring independence, fragmentation and mobility. With more learning methods, the ecological environment of learning organizations will be healthier.

Cultivating International Experts

In 2019, based on the international talent demands, the Company formulated training and exchange programs in various forms to improve the business and management capabilities of expatriate employees and overseas support teams. The Company applied training methods such as overseas rotation, short-term technical exchanges, overseas training, and on-the-job training at international energy companies to comprehensively improve the working skills of overseas and domestic staff. Meanwhile, we continued to track and evaluate overseas human resources management to promptly meet the human resources demands of overseas business, and effectively manage overseas local employees.

We continued to promote our plan to cultivate "international leaders and professional talents". In 2019, we selected the third batch of 11 leading international experts, 8 of whom studied abroad, and the remaining 3 participated in leading talent training for the "Belt and Road Initiative". We continued to select and train the second batch of 61 leading international experts. The Company organize online and offline mixed training, actively select core talents and high potential talents for international business.
Through personal career development plans, staff at CNOOC International can constantly share knowledge and experience, develop, learn new skills, and tap their potential as contributors to the Company and local communities.

Hanbing Zhang is a senior manager of exploration and international accounting based in Calgary, Canada. Our international development platform offered her the opportunity to visit and study at our Beijing headquarters and share experiences with colleagues there.

"The knowledge and experience shared within our organization are priceless. The diversified corporate culture is the driving force that sets CNOOC Limited apart from other oil and gas companies." said Hanbing Zhang.
Staff Care

CNOOC Limited is a people-oriented company that believes in mutual development with staff through practical action. We provide paid annual leave and family visit leave for staff and encourage them to take vacations for better work-life balance. For migrant staff, we offer lump-sum settlement subsidies and comprehensive subsidies along with temporary shelter to help them in their everyday lives. For front-line staff, we provide cooling devices in hot seasons and organize video chats with families during holidays and festivals. We also provide female employees nursing new children with baby care rooms so that they can nurse safely and comfortably.

In early 2020, facing the COVID-19 outbreak, the Company adheres to the people-oriented principle and puts the safety and health of employees as top priority. The epidemic prevention and control team of the Group will arrange the overall prevention work and care for employees with sincerest concerns. Firstly, more work on the publicity and training of knowledge on epidemic prevention shall be done, aiming to raise employees’ awareness for self-protection. Secondly, the epidemic control at offices and operating sites shall be enhanced and relevant control measures shall be specified to comprehensively improve epidemic prevention. Thirdly, due to traffic control and other problems, employees who are temporarily stranded shall be properly arranged to work at home. Meanwhile, for those who are returning to work, assistance shall be provided in time. Fourthly, humanistic care and support shall be promptly provided for employees together with their relatives who have practical difficulties in making a life due to the quarantine or epidemic.

For employees working overseas, both response plans and prevention and control teams shall be developed according to the actual conditions, in order to ensure the proper implementation of all measures, including contactless business handling, use of masks, avoidance of etiquette contacts like handshaking and hugging, as well as group activities, such as meetings and trainings.

Meanwhile, the Company will provide mental health services by means of free psychological counseling hotline and online live broadcast to support employees and their relatives. Moreover, mental health experts will also be invited to give mental empowerment lectures and mental health counselling, to minimize the psychological confusion and relieve the psychological stress caused by the epidemic.

Case

>>>Zhanjiang Branch Organized a Recitation Performance Called "Good Family Tradition, Outstanding Female Talents"

On March 6, 2019, Zhanjiang branch organized a recitation performance on the theme of "Good Family Tradition, Outstanding Female Talents" to celebrate the 109th International Women’s Day. A total of 248 people participated in this event. The staff used music, monologue, dancing, and scene play to celebrate the talents of our female employees, expressing their feelings about society, CNOOC Limited, their lives, their motherland, and their families.
CNOOC Limited understands the importance of keeping front-line employees working at sea in touch with their loved ones. At the Chinese New Year Party, Zhanjiang branch sent blessings of offshore platform workers to their families by a mixture of visits, WeChat group chat, and video chat. The Company also made blessing videos featuring family members as a surprise for those that could not get home. These gifts, which we named “Best Wishes from Your Family”, warmed the hearts of those working for our joint success at sea.

In 2019, Shenzhen branch organized four singles-focused activities among young staffs at the region of Eastern South China Sea with other local enterprise employees in Shenzhen in order to promote mutual understanding and communication among young staff. Over 160 single employees participated in these events, which paired nearly 20 couples.
"Care about everyone with heart and impress every staff with love." Labor Union of Tianjin branch initiated a Cool Summer Visit event to deliver cooling goods and food for over 4,000 front-line employees working in hot, humid environment.
Social Contributions

The Company and its subsidiaries strive for good corporate citizenship. We aim to serve society, create harmony, and benefit the people while creating economic benefits. Over the years, we have continued to use our expertise to help with maritime rescue, targeted poverty alleviation, community development, and voluntary services to the benefit of our stakeholders and society.
Social Contributions
Economic Contributions

In 2019, our production and operations progressed steadily. Oil and gas production was in line with target. We seized opportunities and increased investment, vigorously speeding up key projects to achieve outstanding results. We are committed to creating economic benefits and to playing a positive role in the national economy.

In 2019, the Company recorded oil and gas sales revenue of RMB 197.2 billion with a net profit of RMB 61 billion. Confronting international oil price uncertainties, we have always regarded improving quality and efficiency as the key to our response to the industry cycle. In 2019, our all-in cost was USD 29.78 per BOE, which decreased by 1.98% year-over-year.

Maritime Rescue

CNOOC Limited continuously promotes and guarantees maritime search and rescue work, strengthens maritime emergency drills, and improves its maritime emergency response capabilities. We use our own resources and large-scale equipment and facilities for emergency rescue, and coordinate emergency response with various maritime departments and government agencies to escort ships and ensure maritime safety.

In 2019, we made 56 voyages and seven flights across 47 maritime rescue events, rescuing 829 people and 19 ships. We received five commendations, two of which were from the government, and three of which were by thank-you letters.
At 14:00 pm on March 23, 2019, Ennova Tourism’s Beiyou 25 passenger ship (owned by ENN Group) became stranded on the Beihai-Weizhou route due to wind and waves. After receiving its call for help, we quickly launched an emergency response, arranging for four ships to participate in the rescue. With our efforts, 770 passengers and dozens of staff members returned safely to shore from the stranded vessel. After the rescue, Zhanjiang branch received a letter of thanks from Guangxi Maritime Search and Rescue Center and Beihai Maritime Search and Rescue Center.

>>Zhanjiang Branch Successfully Rescued a Stranded Passenger Ship

On January 8, 2019, Shanghai branch and Zhoushan Putuo Hospital conducted a joint helicopter medical emergency drill to test the hospital apron’s safety and operability for medical helicopter rescue at sea. This helped prepare for the further use of helicopters to deal with unexpected accidents on offshore platforms and surrounding islands.

>>>Shanghai Branch Conducted Helicopter Medical Emergency Drill
In 2019, the Company donated RMB 64.08 million for public welfare.

Public Welfare

The Company created the Management Methods of Charity and Public Welfare Causes to help standardize public welfare work. The document regulates the division of responsibilities, approval authority, and implementation acceptance concerning public welfare project management. In 2019, the Company donated RMB 64.08 million for public welfare.
Targeted Poverty Alleviation

2019 is a crucial year for poverty alleviation in China as it continues to focus on building a moderately prosperous society. We supported the national strategy and promoted targeted poverty alleviation in areas including infrastructure, industry, and education. Our efforts in motivating poor households to help them escape poverty produced good results.

Case >>>CNOOC Limited Assisted Nima County, Tibet Autonomous Region in Winning the Fight Against Poverty

The Group has been supporting Nima County in Tibet since 2002, and has invested RMB 376 million to assist Tibet. CNOOC Limited actively participated in the group-wide poverty alleviation work and invested RMB 40 million in poverty reduction funds in 2019 alone.

Poverty alleviation cadres complement funding as a key asset in the fight against poverty. The Group has provided 14 Tibet-aid cadres, 16 engineering and technical personnel, and 27 poverty alleviation cadres. In 2016, CNOOC Limited sent a Tibet-aid cadre to Nima County to serve as Executive Vice County Mayor. Working at an elevation of 4,800 meters, the cadre overcame altitude sickness to visit and study poverty-stricken households in numerous villages. Working with local government, the cadre chose created 38 high-quality projects to help people lift themselves out of poverty. These included talent training, eco-environmental protection, and tourism initiatives. Together, they are helping build this remote and small county into a shining Pearl of North Tibet. In 2019, Nima County completely shook off poverty.

A Tibet-aid cadre said, "Shaking off poverty is not the end of poverty alleviation, but the start of rural revitalization. We will firmly maintain our efforts of aid on poverty alleviation and battle against poverty, and contribute to building a moderately prosperous society in all respects."
In 2019, Zhanjiang branch’s funds for poverty alleviation projects amounted to RMB 647,000. We used this for poverty alleviation projects in Luxi Village, Potou District, Zhanjiang City, Guangdong Province and Xijiao Village, Weizhou Island, Beihai City, Guangxi Province.

Zhanjiang branch also promoted poverty alleviation through consumption and targeted education assistance. In 2019, the branch encouraged all employees to participate in poverty alleviation through consumption, and the participation reached 8,311 employees. Zhanjiang branch also helped 211 impoverished high school students through partner assistance.
In 2019, CUCBM provided RMB 5,844,500 for poverty alleviation projects, including the pig farm construction and assistance project in Zhaojiaping Town, Xing County, Shanxi Province, the beef cattle breeding project and various village improvement projects in Caijiahui Town, Xing County, Shanxi Province, in which it gave full play to the exemplary role of industry-based poverty alleviation, benefiting the poor in a continuous manner.
Community Building

We emphasize the integration and communication with local culture in our global operations. We safeguard and improve local peoples’ livelihoods by improving community infrastructure, enhancing environment and health, and promoting employment.

Poverty alleviation:
Since 2017, UK subsidiary has participated in the food bank project, which provides food and assistance to the poor. We donated 21 crates of food for Community Food Initiatives North East and Hillingdon Food Bank in 2019.

Education aid:
UK subsidiary supported an outreach trust fund established by a British charity. The fund trains young people in education, work, and life skills by offering challenging outdoor learning courses. In addition, the subsidiary also appointed new employees and young talents as fund ambassadors to share their growth experience and insights with young people.

Congo subsidiary donates USD 200,000 per year to local community projects.

Education aid:
In 2019, Congo subsidiary learned that MOKEKO Primary School in the suburb of Pointe-Noire, Congo, was in dire need of repairs. The subsidiary spent its budget for the year on school renovations, helping supervise project quality and progress.

Medical and health services:
North America subsidiary has participated in local cycling activities for public welfare every year since 2014 to raise funds for the Calgary Heart and Stroke Foundation. By the end of 2019, the subsidiary had raised more than USD 143,000 for medical research.

Education aid:
North America subsidiary are committed to encouraging female participation in science, technology, engineering, and mathematics (STEM) learning and increasing female representation in STEM-related career fields. To support this goal, North America subsidiary invited female students from the Operation Minerva program to visit it and learn more about STEM-related jobs and experience a typical day of women scientists or engineers. The subsidiary has organized this annual event for many years.

CUCBM  Uganda subsidiary  Congo subsidiary  UK subsidiary
Medical and health services:

Uganda subsidiary organized free clinics, cooperated with local non-governmental organizations, and carried out a number of special AIDS prevention campaigns. It enjoyed the support of the China Enterprises Chamber of Commerce Uganda and the Chinese medical aid team to Uganda.

Education aid:

Since 2012, Uganda subsidiary has launched CNOOC Best Performance Awards in Hoima District to fund outstanding local primary, ordinary and advanced level students. According to statistics from the local education office, this project contributed to an improvement of over 300% in Uganda’s academic performance at all levels by the end of 2019.

Since 2012, Uganda subsidiary has sponsored 8 local university students to attend China University of Petroleum for further study. All eight returned to work in building Uganda’s petroleum industry.

Employment promotion:

Ugandan engineers are sent constantly to China to learn advanced technology and management concepts at CNOOC Limited’s domestic platforms, research institutions, and agencies.

Well-being of people:

In 2019, CUCBM guaranteed the supply of residential natural gas and natural gas for a coal-to-gas project featuring clean energy heating. During the year, it built the Shizhuang South Block-Gaoping Gas Pipeline to open up a gas supply channel for the people of Gaoping City, Shanxi Province. This supplied 76.1 million cubic meters of natural gas to households in Shanxi Province.

Infrastructure:

Iraq subsidiary has been allocating USD 5 million per year in contributing to local infrastructure improvement projects and development projects since 2015. It invested to complete 7 projects from 2018 to 2019, including the expansion of riverside roads, the sewage pipe network project, the 11kV power grid project, and the water treatment equipment construction in Musharrah.

Employment promotion:

Iraq subsidiary worked closely with the local government and created nearly 1,000 jobs through local contractors in the construction of community infrastructure projects.

Environmental improvement:

Husky CNOOC Madura Limited (HCML), a subsidiary of our Southeast Asian subsidiary, has held nature conservation events since 2014 to celebrate World Environment Day. It also began planting mangroves in cooperation with local community every year since 2017.

Infrastructure:

In 2019, Southeast Asia subsidiary helped the Semare Village near our natural gas metering station improve access roads and build a child learning center in the village.
Charitable Donations

CNOOC Limited actively uses its own resources to provide funds and resources to those in need, and to disseminate CNOOC Limited's positive energy.

Case  >>>Caring for the Next Generation and Bringing Knowledge to the Kindergarten

Zhanjiang branch went to Xiaotianshi Kindergarten in Nanyou Unit 1 Block, Haibao Kindergarten in Nanyou Unit 2 Block, Beibei Bilingual Kindergarten in Nanyou Unit 3 Block, and Huayuan Baobao Kindergarten in Nanyou Unit 5 on International Children’s Day 2019 to give children books combining learning and fun as gifts.

Case  >>>Blue Force Visited the Taihang Mountains Resettlement Site for Poverty Relief Relocation

CNOOC Limited’s Blue Force volunteer team went to the resettlement site for poverty relief relocation in Guxian Township, Qinshui County, Shanxi Province. Together with the government of Guxian Township, it organized an activity called “Enterprise and Local Government Deliver Love and Care Together to Help Those in Need Grow with the Motherland”. It donated living materials to 526 poor households.
Our Beijing Research Center has assisted the Beijing Tongxin Huhui Charity Society, founded in 2006 by Beijing Workers Home, since 2017. Each quarter, the Research Center collects employees’ spare clothes, transports them to the charity society, and benefits workers through distribution and charity sales. The proceeds go to a public welfare fund for migrants and left-behind children. By the end of 2019, the Research Center had donated over 12,000 pieces of spare clothing and over 800 books to the society.
Employee Volunteers

CNOOC Limited encourages and supports employees’ participation in voluntary activities. In 2019, all CNOOC Limited subsidiaries and branches continued to call on employees and the public to participate in environmental protection through the voluntary project of “Blue Force”. We organized employee-driven voluntary services for communities and residents to help nurture a sense of social responsibility and honor.

Case >>>Little Drops of Water Gather to Form a Blue Force

In 2019, our Blue Force volunteer team led voluntary projects in areas including environmental protection and community services on commemorative festivals such as the June 8 World Ocean Day. It organized public welfare brand activities such as visits to schools and visits to CNOOC Limited, along with education aid to further expand the Company’s social influence and shape the Company’s positive public image.

- On March 3, Zhanjiang branch organized a Little CNOOC People practice lesson for 18 participants. They visited the Nanyou Education and Training Center, learned about the labor protection and emergency rescue equipment for marine operation, watched the oil and gas production fire drills closely, and took turns to practice cardiopulmonary resuscitation and operate a portable dry powder fire extinguisher with the help of the instructor.

- On July 14, Tianjin branch marked World Ocean Day with the Blue Ocean Guarding Action event that encouraged participants to mix lifestyle activities with environmental protection. The branch encouraged people to clean the beach by collecting garbage while jogging. It worked with partners including the Beihai Bureau of the Ministry of Natural Resources, CNOOC Marine Environment and Ecological Protection Public Welfare Foundation, Beijing Student Marine Environmental Awareness Education Organizing Committee, and the Blue Ribbon Ocean Conservation Association.
On August 31, the Shanghai branch’s Blue Force volunteer service team organized a parent-child activity called Where Does Trash Go in partnership with Putuo District Women's Federation. A total of 30 families visited the Shanghai communities and waste terminal disposal plant to understand the waste sorting process and help children develop a good waste sorting habit.

On September 11, the Beijing Research Center organized Blue Force volunteers to teach at Beijing Aquarium for the ninth consecutive year. Volunteers conducted themed activities to help students think deeply about protecting, exploring, and developing the ocean in a responsible way, and to realize the importance of developing clean energy.

On September 27, young volunteers from Zhanjiang branch went to Baoting County, Hainan Province to launch a Blue Force welfare activity to help young people in poverty. Activities included a book donation, a lesson about CNOOC culture, and also visits to difficult families.

On October 24, volunteers from Shenzhen branch visited Shenzhen Liwan Primary School and held a "Blue Force into School" mini-public welfare event, teaching primary students about the petroleum industry. The event featured fun activities including physical models and popular science videos. It helped students to understand the urgency and necessity of marine environmental protection.
Looking into 2020, the world economy will face profound changes, and the global energy industry will witness accelerated transformation. Against this backdrop, global oil and gas supplies will remain sufficient. CNOOC Limited will meet challenges and seize opportunities as we develop the low carbon strategy, follow the trend of the global energy industry, and continue our evolution into a world-class energy company with new development concepts.

The Company will continue to focus on high-quality development, in pursuit of profitable reserves and production in the new year. We will also practice our low-carbon strategy, including developing natural gas, advancing offshore wind power projects, and exploring more opportunities of renewable energy. Meanwhile, we will also guarantee a stable supply of high-quality energy to meet energy demand and strive for the sustainable development of the economy, environment, and society.

In the meantime, we will maintain a high standard of HSE and strengthen our systematic risk management through risk ranking and hidden risk investigation and management. With prevention at source and standardized management, we will consolidate our safety foundation and implement an operation safety responsibility system for all employees, thus raising safety culture awareness and ensuring the smooth implementation of our production safety system.

Achieving mutual benefits with various stakeholders has always been a primary goal for the Company. In the future, we will continue our environmentally friendly development to build a harmonious ecological environment. Technological innovation and management upgrades will help us to build a comprehensive low-carbon management system that ensures energy conservation and emissions reduction. We will continue our strong adherence to business ethics, further improving the efficiency and transparency of our corporate governance. As for social responsibility, we will actively participate in community building, be enthusiastic in public welfare, and develop voluntary services. Meanwhile, we will also continue to invigorate the Company through human resource development. By respecting and valuing talent, we can foster a sense of gain, happiness, and security among employees, enabling them to unite and make enormous strides.

A new beginning comes with new roles and actions. CNOOC Limited is embarking on a new green energy development journey and is committed to becoming a world-class energy company.
## Key Performance Data

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2017</th>
<th>2018¹</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets (million RMB)</td>
<td>617,219</td>
<td>686,381</td>
<td>757,731</td>
</tr>
<tr>
<td>Net assets (million RMB)</td>
<td>379,975</td>
<td>419,910</td>
<td>448,226</td>
</tr>
<tr>
<td>Total revenue (million RMB)</td>
<td>186,390</td>
<td>227,711</td>
<td>233,199</td>
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<tr>
<td>Net profit (million RMB)</td>
<td>24,677</td>
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<tr>
<td>Tax payment² (billion RMB)</td>
<td>37.2</td>
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<td>50.5</td>
</tr>
<tr>
<td>Earnings per share (RMB)</td>
<td>0.55</td>
<td>1.18</td>
<td>1.37</td>
</tr>
<tr>
<td>Net production of the year² (million BOE)</td>
<td>470.2</td>
<td>475.0</td>
<td>506.5</td>
</tr>
<tr>
<td>Net proven reserves (billion BOE)</td>
<td>4.84</td>
<td>4.96</td>
<td>5.18</td>
</tr>
<tr>
<td>Dividend per share (HKD)</td>
<td>0.50</td>
<td>0.70</td>
<td>0.78</td>
</tr>
<tr>
<td>Crude oil consumption (thousand tons)</td>
<td>323.2</td>
<td>324.1</td>
<td>371.0</td>
</tr>
<tr>
<td>Natural gas consumption (billion cubic meters)</td>
<td>1.766</td>
<td>1.881</td>
<td>2.051</td>
</tr>
<tr>
<td>Diesel consumption (thousand tons)</td>
<td>28.3</td>
<td>29.4</td>
<td>55.4</td>
</tr>
<tr>
<td>Electricity consumption (million kWh)</td>
<td>150</td>
<td>203</td>
<td>254</td>
</tr>
<tr>
<td>Energy saving (tons of standard coal equivalent)</td>
<td>155,299</td>
<td>165,148</td>
<td>125,340</td>
</tr>
<tr>
<td>Comprehensive energy consumption per ton of production (tons of standard coal equivalent/ton)</td>
<td>0.0494</td>
<td>0.0515</td>
<td>0.0553</td>
</tr>
<tr>
<td>Direct total GHGs (million tons of CO₂ equivalent)</td>
<td>7.736</td>
<td>7.345</td>
<td>8.597</td>
</tr>
<tr>
<td>Indirect Total GHGs (million tons of CO₂ equivalent)</td>
<td>0.093</td>
<td>0.135</td>
<td>0.186</td>
</tr>
<tr>
<td>Total GHGs (million tons of CO₂ equivalent)</td>
<td>7.829</td>
<td>7.480</td>
<td>8.783</td>
</tr>
<tr>
<td>GHGs per ton of production (tons of CO₂ equivalent/ton)</td>
<td>0.1409</td>
<td>0.1328</td>
<td>0.1493</td>
</tr>
<tr>
<td>Non-hazardous waste (tons)</td>
<td>16,490</td>
<td>13,970</td>
<td>16,104</td>
</tr>
<tr>
<td>Hazardous waste (tons)</td>
<td>22,326</td>
<td>29,426</td>
<td>45,772</td>
</tr>
<tr>
<td>Freshwater consumption (million tons)</td>
<td>1.813</td>
<td>1.859</td>
<td>2.137</td>
</tr>
<tr>
<td>Freshwater consumption per ton of production (cubic meters/ton)</td>
<td>0.0332</td>
<td>0.0335</td>
<td>0.0367</td>
</tr>
<tr>
<td>Water saving (thousand tons)</td>
<td>88</td>
<td>108</td>
<td>182</td>
</tr>
<tr>
<td>Number of employees</td>
<td>19,030</td>
<td>18,312</td>
<td>18,703</td>
</tr>
<tr>
<td>Number of female employees</td>
<td>2,605</td>
<td>2,846</td>
<td>2,960</td>
</tr>
<tr>
<td>Total training hours (hours)</td>
<td>1,084,229</td>
<td>1,235,644</td>
<td>1,492,566</td>
</tr>
<tr>
<td>Occupational health examination rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

¹ Tax payment refers to paid-in tax in the year, including income tax, value-added tax, royalties, resource tax, etc.
² Unless otherwise stated, all amounts of reserve and production in this report include our interests in equity investments.
³ Four indicators including total assets, net assets, total revenue and net profit for the year ended 31 December 2018 have been restated as a result of the acquisition of CUCBM, please refer to annual report for details.
Independent Assurance Report

To the Board of Directors of China National Offshore Oil Corporation Limited (the "Board of Directors"):

We have been engaged by the Board of Directors of China National Offshore Oil Corporation Limited ("CNOOC Limited") to perform a limited assurance engagement on its 2019 Environmental, Social and Governance ("ESG") Report for the period from 1 January 2019 to 31 December 2019.

Responsibilities of the Board of Directors

The Board of Directors is responsible for preparing the 2019 ESG Report in accordance with Environmental, Social and Governance Reporting Guide ("ESG Reporting Guide") issued by Hong Kong Stock Exchange, and its presentation (including reporting guidelines, limitations, reporting data and relevant identification procedures).

The Board of Directors is also responsible for determining CNOOC Limited’s objectives in respect of ESG performance and reporting, including identifying stakeholders and relevant material issues, establishing and maintaining appropriate performance management system and internal control system for obtaining performance information in the report, and maintaining sufficient records.

Our Responsibilities

In accordance with the agreed terms with CNOOC Limited, we are responsible for performing a limited level of assurance engagement on selected data and performance claims ("the Subject Matter Information") in the 2019 ESG Report. Our work is only for the Board of Directors, and for no other purposes. We do not assume responsibility or accept liability to any other person or third party for our work or the contents of this report.

Our Independence and Quality Control

We conducted our engagement in accordance with the independence and other ethical requirements in the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants. We maintain a comprehensive system of quality control applying International Standard on Quality Control 1.

Basis of Our Work

We conducted our work in accordance with International Standard on Assurance Engagements 3000: Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Federation of Accountants. We planned and performed our engagement to obtain all the information and evidences which we considered necessary to form conclusions.

Procedures, Scopes and Limitations of Our Work

Our work performed includes interviewing personnel responsible for the ESG Report, analyzing information, and other steps to collect evidences. Specifically, our procedures include:

- Interviewing management and staff responsible for the Subject Matter Information, to understand the process for determining the key stakeholders and material issues, and applicable controls.
- Assessing the inclusion of the Subject Matter Information in the ESG Report against requirements of the ESG Reporting Guide, and comparing the sampled original documents from Headquarter with the statements in the ESG Report.
- Establishing acknowledgement of Subject Matters regarding the 2019 ESG Report with CNOOC Limited to perform this limited assurance engagement.
- Analyzing sampled data and performance claims, reviewing its consistency with our work results, and Assessing the effectiveness of the control on the ESG Report preparation procedure.

The extent of evidence gathering procedures performed is less than that of a reasonable assurance engagement and therefore a lower level of assurance is provided. Our work performed is not for the purpose of expressing an opinion on the effectiveness of CNOOC Limited’s internal control.

We performed our limited assurance engagement at headquarter of CNOOC Limited. We did not carry out such engagement at any other branches and subsidiaries of CNOOC Limited, nor interview with external stakeholders. Moreover, historical data and financial information are not within the scope of our work.

Our Conclusions

Based on our work performed, nothing has come to our attention that would lead us to believe that there is any material misstatement related to the Subject Matter Information in CNOOC Limited’s 2019 ESG Report.

This is translation of the Chinese language version of the Independent Assurance Report. If there is any conflict between the Chinese and English version, the Chinese version will prevail.

Deloitte Touche Tohmatsu Certified Public Accountants LLP

25 March 2020
## ESG Reporting Guide Index

### Subject Areas, Aspects, General Disclosures and KPIs

<table>
<thead>
<tr>
<th>Locations in the Report</th>
<th>External Verification</th>
</tr>
</thead>
</table>

### A: Environment

#### Aspect A1: Emissions

<table>
<thead>
<tr>
<th>General disclosure</th>
<th>P54-58</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1.1 The types of emissions and respective emissions data.</td>
<td>P58</td>
<td>Yes</td>
</tr>
<tr>
<td>A1.2 Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).</td>
<td>P54</td>
<td>Yes</td>
</tr>
<tr>
<td>A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).</td>
<td>P58</td>
<td>Yes</td>
</tr>
<tr>
<td>A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).</td>
<td>P58</td>
<td>Yes</td>
</tr>
<tr>
<td>A1.5 Description of measures to mitigate emissions and results achieved.</td>
<td>P57-59</td>
<td>Yes</td>
</tr>
<tr>
<td>A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.</td>
<td>P57-59</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Aspect A2: Use of resources

<table>
<thead>
<tr>
<th>General disclosure</th>
<th>P51-53</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).</td>
<td>P51</td>
<td>Yes</td>
</tr>
<tr>
<td>A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).</td>
<td>P53</td>
<td>Yes</td>
</tr>
<tr>
<td>A2.3 Description of energy use efficiency initiatives and results achieved.</td>
<td>P51-52</td>
<td>Yes</td>
</tr>
<tr>
<td>A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.</td>
<td>P53</td>
<td>Yes</td>
</tr>
<tr>
<td>A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Aspect A3: Environment and natural resources

<table>
<thead>
<tr>
<th>General disclosure</th>
<th>P60</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.</td>
<td>P60-62</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Subject Areas, Aspects, General Disclosures and KPIs

#### B: Society

**Employment and Labor Standards**

**Aspect B1: Employment**

<table>
<thead>
<tr>
<th>General disclosure</th>
<th>Locations in the Report</th>
<th>External Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1.1</td>
<td>Total workforce by gender, employment type, age group and geographical region.</td>
<td>P66</td>
</tr>
<tr>
<td>B1.2</td>
<td>Employee turnover rate by gender, age group and geographical region.</td>
<td>P66</td>
</tr>
</tbody>
</table>

**Aspect B2: Health and safety**

<table>
<thead>
<tr>
<th>General disclosure</th>
<th>Locations in the Report</th>
<th>External Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2.1</td>
<td>Number and rate of work-related fatalities.</td>
<td>P33</td>
</tr>
<tr>
<td>B2.2</td>
<td>Lost days due to work injury.</td>
<td>P33</td>
</tr>
<tr>
<td>B2.3</td>
<td>Description of occupational health and safety measures adopted, how they are implemented and monitored.</td>
<td>P35-P36, P40-42</td>
</tr>
</tbody>
</table>

**Aspect B3: Development and training**

<table>
<thead>
<tr>
<th>General disclosure</th>
<th>Locations in the Report</th>
<th>External Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>B3.1</td>
<td>The percentage of employees trained by gender and employee category (e.g. senior management, middle management).</td>
<td>P71</td>
</tr>
<tr>
<td>B3.2</td>
<td>The average training hours completed per employee by gender and employee category.</td>
<td>P71</td>
</tr>
</tbody>
</table>

**Aspect B4: Labor guidelines**

<table>
<thead>
<tr>
<th>General disclosure</th>
<th>Locations in the Report</th>
<th>External Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>B4.1</td>
<td>Description of measures to review employment practices to avoid child and forced labor.</td>
<td>P65</td>
</tr>
<tr>
<td>B4.2</td>
<td>Description of steps taken to eliminate such practices when discovered.</td>
<td>——</td>
</tr>
</tbody>
</table>

**Operational Practices**

**Aspect B5: Supply chain management**
<table>
<thead>
<tr>
<th>Subject Areas, Aspects, General Disclosures and KPIs</th>
<th>Locations in the Report</th>
<th>External Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>General disclosure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B5.1 Number of suppliers by geographical region.</td>
<td>P28</td>
<td>Yes</td>
</tr>
<tr>
<td>B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.</td>
<td>P27-28</td>
<td>Yes</td>
</tr>
<tr>
<td>Aspect B6: Product responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General disclosure</td>
<td>P21-23</td>
<td>Yes</td>
</tr>
<tr>
<td>B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>B6.2 Number of products and service related complaints received and how they are dealt with.</td>
<td>P23</td>
<td>Yes</td>
</tr>
<tr>
<td>B6.3 Description of practices relating to observing and protecting intellectual property rights.</td>
<td>P24-25</td>
<td>Yes</td>
</tr>
<tr>
<td>B6.4 Description of quality assurance process and recall procedures.</td>
<td>P23</td>
<td>Yes</td>
</tr>
<tr>
<td>B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Aspect B7: Anti-corruption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General disclosure</td>
<td>P18</td>
<td>Yes</td>
</tr>
<tr>
<td>B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.</td>
<td>P18</td>
<td>Yes</td>
</tr>
<tr>
<td>Community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect B8: Community investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General disclosure</td>
<td>P79-90</td>
<td>Yes</td>
</tr>
<tr>
<td>B8.1 Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).</td>
<td>P79-90</td>
<td>Yes</td>
</tr>
<tr>
<td>B8.2 Resources contributed (e.g. money or time) to the focus area.</td>
<td>P79-90</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Dear readers,
Thank you very much for reading the 2019 Environmental, Social and Governance Report of CNOOC Limited. We attach great importance and look forward to your feedback on CNOOC Limited’s management, practice and report related to environmental, social and governance. To further improve our work and make the next report better meet your expectations, we hope that you will give feedback and suggestions in the following aspects.

1. Are you satisfied with the overall report?
   - Satisfied □  Acceptable □  Not Satisfied □

2. Is the information you care about presented in this report?
   - Satisfied □  Acceptable □  Not Satisfied □

3. Do you think CNOOC Limited’s environmental protection, social compliance and corporate governance and the impact on stakeholders are accurately presented in this report?
   - Satisfied □  Acceptable □  Not Satisfied □

4. Can you easily find the information of interest in this report?
   - Satisfied □  Acceptable □  Not Satisfied □

Open question
Please write down your comments and suggestions on CNOOC Limited’s environmental protection, social compliance and corporate governance, as well as on this report.

Your contact information
Name: __________________________  Company: __________________________  Address: __________________________
Tel.: __________________________  Email: __________________________  Fax: __________________________

Please mail the above information to the following address:
Investor Relations Department of CNOOC Limited
Address: 25 Chaoyangmenbei Dajie, Dongcheng District, Beijing, People’s Republic of China
Postcode: 100010
Email: mr@cnooc.com.cn

We will give due consideration to your comments and suggestions, and promise to protect your information from being accessed by third parties.