

CNOOC LTD  
Form 6-K  
April 11, 2019

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**FORM 6-K**

**Report of Foreign Private Issuer**

**Pursuant to Rule 13a-16 or 15d-16  
of the Securities Exchange Act of 1934**

For the month of April 2019

Commission File Number 1-14966

**CNOOC Limited**

(Translation of registrant's name into English)

65th Floor

Bank of China Tower

One Garden Road

Central, Hong Kong

(Address of principal executive offices)

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Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes ☐ No ☒

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): Not applicable

**Signature**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**CNOOC Limited**

By: /s/ Xiaonan Wu  
Name: Xiaonan Wu  
Title: Joint Company Secretary

Dated: April 11, 2019

**EXHIBIT INDEX**

Exhibit No. Description

99.1           Announcement entitled “CNOOC Limited 2018 Environmental, Social and Governance Report”

**Exhibit 99.1**

CNOOC Limited

**2018 Environmental, Social and Governance Report**

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## Report Information

### **Name of Organization:**

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

### **Reporting Period:**

From January 1, 2018 to December 31, 2018. 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](http://www.cnoocltd.com) and hard copies are available upon request.

Investor Relations Department of CNOOC Limited

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## 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.

As at December 31, 2018, the Company owned net proved reserves of approximately 4.96 billion BOE<sup>1</sup> (barrels of oil equivalent, similarly hereinafter), and its average daily net production was 1,301,438 BOE. The Company had total assets of approximately RMB 678.8 billion.

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<sup>1</sup> Unless otherwise stated, all amounts of reserve and production in this report include our interests in equity method investees.

## Chairman's Statement

In 2018, the world economy stumbled, and global crude oil prices plummeted after unsteady gains. Against a macro backdrop full of uncertainty, the Company managed to steadily grow its oil and gas reserves and production. With rigorous cost control, sustainable development mechanisms, and social responsibility firmly in mind, the Company continued to build itself into a world-leading energy group. We adhered to the 10 Principles of the UN Global Compact, with emphasis on human rights, labor, the environment and anti-corruption. We also actively responded to the 17 UN 2030 Sustainable Development Goals, and strove to enhance the integrated value of economic growth, environmental protection, and social progress, the three perspectives that are of most concern to our stakeholders.

In 2018, the Company achieved its annual target of 475 million BOE for net production of oil and gas. Our daily production soared from less than 300 thousand BOE at the time of our IPO in 2001 to about 1.3 million BOE in 2018. In offshore China, multiple quality mid-to-large size oil and gas fields, including Bozhong 19-6 and Bozhong 29-6, were successfully appraised. Going forward, Bozhong 19-6 gas field is expected to play an important role in ensuring a low-carbon energy supply in the Bohai Rim Region. Overseas, 12 discoveries in total were made in the Stabroek block in Guyana. We managed to increase natural gas production, and maintained stable supply of this low-carbon energy during the winter peak seasons. CNOOC Limited's reserve replacement ratio reached 126% and its reserve life improved to 10.5 years at the end of 2018. These factors further strengthened the Company's resource foundation for sustainable development in the future.

In 2018, the Company maintained a stable HSE (Health, Safety and Environment) record. We have upheld our HSE core values of "Safety First, Environment Paramount, People Oriented and Equipment Integrated". We made solid progress in every aspect in 2018, a year with safety being the highest priority. We further improved our safety management system, formulated an HSE management system, an equipment and facility integrity management framework and a working permission management policy to profoundly improve our safety management. We also promoted our own offshore safety culture of "People Orientation, Execution and Intervention" and integrated the culture into our systems and individuals, while constantly pushing our employees towards higher awareness of risk management, to build a foundation for high-quality growth and world-leading management for the Company.

As an environmentally responsible energy company, we have implemented a low-carbon strategy with a concrete action plan to integrate environmental protection throughout the life cycle of oil and gas fields. Believing in the philosophy that lucid waters and lush mountains are invaluable assets, the Company has actively responded to the Paris Agreement and employed multiple measures to tackle climate change and cut greenhouse gas emissions. In the peripheral areas of our operations, we pay close attention to biodiversity conservation and environmental remediation and improvement, and strive to create a better ecological system.

Our employees are our most valuable assets and the pillars of our development. In 2018, we adhered to the philosophy of "human-oriented management", and established an energetic and effective mechanism, through which every employee can gain a stronger sense of belonging, accomplishment and happiness. For our fast-growing overseas

business, we are developing our own international talent pool, and encouraging multicultural cooperation and communication based on mutual respect. We ranked 6th in Forbes' Global 2000 list of the World's Best Employers, demonstrating high recognition from our employees and the international community.

We are committed to our social responsibilities to benefit the society with our achievements and create jobs for local communities. We play an important role in infrastructure upgrades and cultural development to build better communities. We also actively take part in maritime search and rescue and marine protection to give back to society. We are also involved in many public welfare activities to help alleviate poverty.

In 2018, we maintained strong corporate governance for our shareholders and stakeholders. The Company won many public awards, including the “Corporate Awards – Platinum” from The Asset, the “Asian Excellence Award” from Corporate Governance Asia, and the “Best Listed Company Award” from the China Securities Golden Bauhinia Awards. These awards demonstrated that we are an outstanding industry role model with strong public faith in our governance and performance, particularly in protecting shareholders’ rights, information disclosure, investor relations and business ethics.

Study the past to define the future. Opportunities and challenges always come together, while hopes and dreams exist side by side. The Company holds fast to its original aspiration of “achieving all-win results for all stakeholders”, with the mission of sustainable development firmly in mind at all times. As a qualified corporate citizen, the Company adheres to the philosophy of balanced development among the economy, environment and society. We aim to create a new business model, which features low-carbon environmental friendliness, respect of all stakeholders’ rights and interests, and all-win results. As one of the top energy companies in the world, we will keep innovating and striving to win more respect from the international community.

## 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 societal 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 merely 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 at all levels.

The Board of Directors (the “Board”) of CNOOC Limited actively supports the Company’s commitment to CSR and keenly follows 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 methods 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 and adjustments to ensure our operations are environmentally friendly, efficient and safe, and achieve balance and coordinated development for the economy, environment and society.

### CSR Vision

As an energy company, it is the Company’s 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:

A driving force for the supply of sustainable energy

A motivating force for joint progress of stakeholders and society

A dominating force for clean, healthy, and green energy development models

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

## Stakeholders

## Communications with Stakeholders

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 key stakeholders

Stakeholder	Key Communication Methods	Main Focuses	Main Actions
Shareholders and Creditors	· Scheduled information disclosure	· Protection of shareholders' and creditors' interests	· Ensure the quality and effectiveness of information disclosure
	· Regular communications	· Corporate governance and risk management	· Maintain close communication
	· Annual general meeting and extraordinary general meetings		· Equal treatment of shareholders
Employees and Employee Organizations	· Employee representatives meetings	· Ensure rights and interests	· Non-deal roadshows
	· Regular communications	· Career development	· Support employees to join labor unions or other employee organizations
			· Provide professional training and skill training



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Governments and Regulatory Authorities	· Internal information exchange	· Occupational health and safety	· Provide occupational health examination
	· Complaints and responses		
	· Enforcement and follow-up to ensure compliance with laws and regulations	· Operate in compliance with laws and regulations	· Comply with all applicable laws and regulations
	· Report on specific matters	· Proper utilization and exploitation of natural resources	· Fulfill taxpayer obligations
	· Routine inspections		· Share industry expertise for further development
	· Response to enquiries	· Economic contribution	· Ensure quality of disclosed information
	· Discussion on industry issues	· Corporate governance	· Enhance corporate governance
		· Stable cooperative relationships	· Integrate internal and external resources
	· Business negotiations		
		· Knowledge, information and resource sharing	· Encourage experience, resources and technology sharing
Business Partners and Service Providers	· Project cooperation	· Mutual benefits	
	· Business communications		· Discuss industry development prospects
		· Sustainable energy development model	
Public and Communities	· Information disclosure	· Stable energy supply	· Improve oil and gas supply capability

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- Public relations
- Environmental protection
- Participate in public welfare activities
- Respond to public enquiries
- Good corporate image
- Publish ESG reports
- Support for community building activities
- Building harmonious communities
- Ensure high standards on public welfare
- Participation in public welfare projects
- Support community building

	<ul style="list-style-type: none"> <li>· Participation in designated projects</li> </ul>		<ul style="list-style-type: none"> <li>· Contribute business experience</li> </ul>
Charities and NGOs	<ul style="list-style-type: none"> <li>· Response to enquiries</li> </ul>	<ul style="list-style-type: none"> <li>· Social responsibility undertakings</li> </ul>	<ul style="list-style-type: none"> <li>· Participate in relevant activities</li> </ul>
	<ul style="list-style-type: none"> <li>· Regular communications</li> </ul>		
	<ul style="list-style-type: none"> <li>· Business negotiations</li> </ul>		<ul style="list-style-type: none"> <li>· Promote a win-win concept</li> </ul>
	<ul style="list-style-type: none"> <li>· Client services</li> </ul>	<ul style="list-style-type: none"> <li>· Service, price and quality</li> </ul>	<ul style="list-style-type: none"> <li>· Enhance product quality</li> </ul>
Clients	<ul style="list-style-type: none"> <li>· Client visits and surveys</li> </ul>	<ul style="list-style-type: none"> <li>· Complaint handling</li> </ul>	<ul style="list-style-type: none"> <li>· Client satisfaction surveys and feedback</li> </ul>
	<ul style="list-style-type: none"> <li>· Regular communications</li> </ul>		

## Determination of Material Issues

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 issue disclosure for a more accurate and comprehensive disclosure of ESG information.

To rank issues by importance, we conducted questionnaires to learn more about stakeholders' views about the Company's ESG work, and asked open-ended questions to understand their expectations and suggestions to make specific responses and improvements in the future.

## Determination process of ESG issues

<b>Identification</b>	Step 1:	Material issues were identified by the Company's independent third-party advisor. A total of 19 ESG issues related to economy, environment, labor, human rights, and other social affairs were gathered from a large number of data sources, including the HKEx <i>ESG Reporting Guide</i> , GRI Standards, stakeholders' opinions, corporate policies, management strategies, industry benchmarks, ESG rating system analysis, and internal publications and media reports.
	Identifying relevant issues	
	Step 2:	Seven groups of stakeholders were surveyed by our independent adviser. They were invited to assess and rank the importance of each issue based on their own understandings. In total, 204 effective questionnaires were collected.
<b>Ranking</b>	Assessing the degree of concern	
	Step 3:	
	Analyzing the impact on our operations	We asked senior managers at CNOOC Limited for their opinions on the materiality of identified issues from the perspective of company operations.
	Step 4:	We analyzed the data collected from surveyed stakeholders and company management, and determined the results in the materiality matrix. The matrix will be used as an important reference for formulating strategies and objectives for the
	Confirming issue prioritization	Company, and direct our ongoing information disclosure.

## 2018 ESG Materiality Matrix of CNOOC Limited

Degree	Priority	Issue	Category
Highly important issues	1	Production safety	Operation
	2	Scientific research and technological innovation	Operation
	3	Emissions and waste management	Environment
	4	Occupational health and safety	Labor and community
	5	Risk control	Operation
	6	Energy saving and emission reduction measures	Environment
	7	Stable energy supply	Operation
	8	Protection of biodiversity and environmentally sensitive areas	Environment
	9	Employee training and career development	Labor and community
Moderately important issues	10	Sustainable profitability	Operation
	11	Product quality management	Value chain
	12	Employees' rights and interests	Labor and community
	13	Anti-corruption	Operation
	14	Supply chain management	Value chain
	15	Staffing diversification and equal employment	Labor and community
	16	Customer service management	Value chain
Least important issues	17	Investment in social welfare	Labor and community
	18	Community development and contribution	Labor and community
	19	Material and resource saving	Environment

## Energy Supply

CNOOC Limited is committed to promoting sustainable energy supply. Through innovations in technology and management, we consistently make breakthroughs in energy exploration, development, production and technology research. CNOOC Limited makes great effort to ensure the steady supply of energy to satisfy reasonable demand from society and promote the sustainable development of both the Company and society.

## Oil and Gas Exploration, Development and Production

One of CNOOC Limited's main responsibilities is to ensure the stable supply of crude oil and natural gas. To achieve this goal, the Company has pursued innovation in technology, management and equipment for a long time. The Company consistently overcomes difficulties in exploration, actively drives the integration of exploration and development in order to improve product quality and work efficiency. The Company continuously expands oil and gas reserves and production at a steady pace, and manages for better oil and gas development and production.

In 2018, CNOOC Limited devoted greater effort in its oil and gas exploration, and its exploration activities reached a record high. Adhering to value-driven and business exploration and anchoring on its exploration and discoveries of mid-to-large sized oil and gas fields, several major discoveries were made. This continuously maintained a good development momentum of oil and gas exploration. Various exploration breakthroughs were achieved in new frontier areas in offshore China, and a strategic core exploration area was gradually formed on both sides of the Atlantic Ocean. Our management capability and technological innovation capability have been further enhanced, and the efficiency of exploration operations has been significantly improved. In addition, the Company continued to maintain a reasonable proportion of exploration investment and a relatively high level of exploration activities so as to ensure mid-to-long term sustainable development. In this year, 17 commercial discoveries were made and 17 successful appraisals of oil and gas structures were achieved. Weizhou 6-13 Oilfield and Penglai 19-3 oilfield 1/3/8/9 comprehensive adjustment project in offshore China as well as Stampede Oilfield in the U.S. Gulf of Mexico, came on stream. By overcoming various challenges, we have successfully met our production and operation targets.

In 2018, the Company ensured base production level and laid a solid foundation for production profile of existing oilfields through refined management. Meanwhile, we strictly controlled costs, encouraged conservation and improved efficiency. Furthermore, we coordinated devoted great efforts in promoting "the water injection year" work of Bohai oilfield in order to further tap the potential of producing oilfields received favorable results.

## **Gas field of 100 billion cubic meters scale was discovered in the Bohai Bay**

As accredited by the Oil and Gas Reserves Accreditation Office of the Ministry of Natural Resources of the People's Republic of China, the proved in-place volume of natural gas in the Bozhong 19-6 gas field exceeds 100 billion cubic meters, while the proved in-place volume of condensate exceeds 100 million cubic meters. As the largest natural gas field in the Bohai Bay, the Bozhong 19-6 gas field will contribute more to the "lucid waters and lush mountains" of the Bohai-Rim-Region with low-carbon energy.

**The production of the Eastern South China Sea Oilfield exceeds 15 million cubic meters for the fourth consecutive year**

The Eastern South China Sea Oilfield was faced with many challenges including frequent and strong typhoons, dock repair work of two tankers, as well as offline maintenance of several oilfields in 2018. By expanding oil and gas exploration and development, conducting streamline management, and constructing smart oil fields, the overall production and operation safety were ensured, and the oil and gas production exceeded by 7.34%. By end of the year, the Eastern South China Sea Oilfield had produced more than 10 million cubic meters of oil and gas per year for the twenty-third consecutive year since 1996, and produced more than 15 million cubic meters of oil and gas per year for the fourth consecutive years since 2015.

## Securing a Stable Supply of Natural Gas

In order to meet domestic demand for natural gas and develop a low-carbon economy with energy consumption and emission reduction through energy structure transition, the Company has optimized our production schemes, to improve our upstream productivity. Meanwhile, we employed a reasonable price to stabilize the natural gas market. Natural gas demand is secured with the Company's efforts on providing and promoting clean energy.

### **Increase production and supply:**

We arranged for overhauls on upstream and downstream to make sure our producing gas fields are operating safely, and at the same time produce at full capacity. In 2018, the Company supplied natural gas 12.8 billion cubic meters, which exceeds the annual plan by 800 million cubic meters, contributing to the overall supply of natural gas.

### **Ensure sufficient natural gas supply in Hong Kong:**

As China's largest offshore gas field under production sharing contract, the Yacheng 13-1 Gas Field has supplied gas for residents in Hong Kong for 23 years, providing a stable and clean energy for the economic and social development of Hong Kong.

### **Prepare for emergencies in advance:**

The quantity of natural gas supply was settled at the end of September, 2018. Meanwhile, the Company put more emphasis on trend research and forecasts, signed interruptible gas contracts with users and made clear supply priorities, making full efforts to meet residents' gas demand.

## Technological Development

In 2018, CNOOC Limited proactively implemented its "innovation-driven" strategy, deepened the reform of the technology system and mechanism, and kept improving its technological innovation system. Within the reporting period, the Company launched the construction of scientific research platforms such as the Key Laboratory of Geophysics, the Key Laboratory of Enhanced Oil Recovery, the Key Laboratory of Deepwater Engineering, and the



Offshore High-temperature and High-pressure Oil and Gas Reservoir Exploration and Development Laboratory. Meanwhile, the “State Key Laboratory of Offshore Oil Exploitation” was assessed as “outstanding” in the evaluation by the Ministry of Science and Technology of China which is hosted once every 5 years. The construction and operation of the laboratory receives national recognition.

During the year, the Company continued to develop key technologies for exploration and development of deep-water oil and gas fields, offshore viscous oil, low-permeability oil and gas fields. We have achieved remarkable results including “Rock-Crust-Fracture” Reservoir Evaluation Technology Series of Metamorphic Reservoirs, Tapping Strategy of Injection-production of Development Well Pattern Based on Fine Characterization of Reservoir Model, Key Drilling and Completion Technologies for Deep-water Development Wells in the South China Sea, etc. These technologies provide technical support for reducing cost and increasing efficiency, and expanded oil and gas reserves and production. The establishment of “Key Technologies Study of the Continuously Stable Production of 30 Million Tons Oil of Bohai Oilfield” provided a strong technological support for the production of Bohai oilfield.

### **Findings of key national science and technological projects support stable production of 30 million tons in the Bohai Oilfield**

In 2018, the key national scientific and technological project “Key Technologies for Mid-depth Seismic Exploration in Offshore China” successfully developed an offshore wide-azimuth seismic acquisition design technology, and improved sub-azimuth acquisition and OVT (Offset Vector Tile) domain design and evaluation method, forming a quantitative evaluation technology system for wide-azimuth observation systems. Using this technology, the Company completed wide-azimuth seismic acquisition design for submarine cables on buried hills in the Bozhong 19-6 Oilfield. The technology provided strong technical support for seismic data acquisition in an area of 1,820 km<sup>2</sup>, helping achieve the major target of stable production of 30 million tons oil and gas in the Bohai Oilfield, and facilitating our full implementation of secondary 3D seismic acquisition.

### **After-effect perforation significantly increased production in Lufeng 13-1 Oilfield**

In Lufeng 13-1 oilfield, we actively explored new methodology to increase production of low-porosity and low-permeability deep layer oil reservoirs. We applied the after-effect perforation technology to two directional wells and received significant results. After the application of the technology, the production of the two wells increased significantly. The production capacity index of the directional wells was approximately 3 to 4 times higher than conventional perforation, whose performance was much better than similar deep directional wells. The successful well stimulation method created a new way to further tap the potential of producing oilfields.

### **Research breakthroughs - another frontier in oil and gas exploration**

In 2018, the Shenzhen branch made a technological breakthrough in the Yangjiang Sag, Pearl River Estuary, Northern South China Sea. Based on newly acquired 3D seismic data, as well as a systematic study of structure, sedimentology and reservoir formation, we made a series of geological discoveries. The Shenzhen branch proposed a specific geologic pattern of reservoir difference control, developed a key technology for complex mid-depth fault block image processing and bright-spot oil and gas recognition of mid-shallow layers. This research allowed us to identify an advantageous reservoir formation zone in this area and an exploration region target. After exploration drilling, oil reserves were discovered in the Neogene marine sandstone formation. By successfully discovering a frontier area, in which there have been no significant discoveries for over 40 years, we have developed a new growth point for our oil and gas reserves and production.

### **Patents and Intellectual Property Rights**

In order to ensure and protect intellectual property, the Company has formulated and implemented management methods such as *CNOOC Limited Intellectual Property Management Measures* and *CNOOC Limited Patent Management Implementation Rules*. Besides, internal control inspections of intellectual property rights were carried out by the Company.

In 2018, there were 115 patents granted, 278 patents accepted and 14 software copyrights registered. The patent for the equivalent characterization method of reservoir genetic unit interface won the 12<sup>th</sup> China Patent Excellence Award. Meanwhile, we released 48 standards, including 4 national standards, 4 industry standards, and 40 company standards. One of the standards, *SY/T 7391-2016: Underwater Emergency Blowout Equipment*, was awarded the first prize for Standard Innovation and Contribution by the National Petroleum Drilling and Production Equipment and Tool Standardization Technology Committee in 2018.

## Product Service

CNOOC Limited follows international industry practices, benchmarks against peer performance, and complies with international and domestic quality management systems to produce and supply energy products. We provide clients with qualified crude oil and natural gas products in accordance with international standards, national standards jointly published by the State Administration for Market Regulation and the Standardization Administration of China, contractual provisions on natural gas quality agreed with clients, and the latest crude oil standard of *GB 36170-2018*.

CNOOC Limited has invited renowned internationally inspection agencies and state-certified commercial inspection agencies to inspect and test the quality of crude oil and natural gas, such as the Exit-Entry Inspection and Quarantine Bureau. Based on the result of the inspection, the third-party inspection agencies issued objective and accurate test reports. We managed the quality of products publicly, transparently, in compliance with laws and regulation, and strictly. At the end of 2018, we had not received any client complaints regarding our crude oil and natural gas products and services. Should any complaint arise, we will actively communicate with the clients in accordance with the signed contracts and national standard *GB 36170-2018*, and properly handle the complaint to protect their interests from any loss.

## Procurement Management

CNOOC Limited has established and implemented a series of management policies, including the *Procurement Management Measures*, *Supplier Management Methods*, and *Bidding Management Methods*. Based on these policies, the Company carries out supplier management and bidding procurement tasks, avoiding environmental and social risks caused by improper choice of suppliers. Since 2008, CNOOC Limited has continuously optimized supply chain management and implemented a supplier database management system. Upon the end of 2018, the Company had more than 3,500 suppliers, including about 270 overseas ones.

By sharing supplier information and optimizing performance assessment, the Company dynamically manages the entire process, from onboarding to offboarding. In 2018, we continued to shortlist suppliers through public qualification examinations in written form and on-site investigations. We invited internal and external experts for on-site investigations of more than 50 suppliers in four product categories: oil casing, steel, transformers, and valves. During the investigation, we comprehensively assessed suppliers' qualifications, CSR performance, risk control, process control, quality control, personnel quality, technological capability, and HSE management, establishing a strategic cooperation relationship with shortlisted suppliers. We annually evaluate the performance of all suppliers in our database, including but not limited to their product quality, price, date of delivery, after-sales service, and HSE execution. We then adjust their ratings and update the database accordingly. The Company has also established a risk control system to handle violations of regulations, enhancing our ability to control overall supplier management risk.

In addition, our *Procurement Management Measures* include regulations on supplier management, qualified supplier selection and credit rating. We conduct supplier audits, inspect supplier management systems, application processes and evaluation processes, and review the quality of our daily management and supervision of suppliers. We have included anti-bribery provisions in a wide range of contract templates, articulating the corresponding legal consequences.

### **The Eastern South China Sea Oilfield refines supply chain management**

In 2018, the Procurement Sharing Center of the Eastern South China Sea Oilfield introduced a new procurement method and visualized general material procurement management through the online “material delivery platform”, enabling intelligent management of the process. Meanwhile, the Center strictly controlled incremental inventory, and optimized the stock inventory. The Procurement Sharing Center connected the production operational plan and the inventory information effectively, improving the utilization of inventory and the accuracy of the demand plans. Through this method, advanced purchasing and excess reserves were avoided.

### **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*. We operate honestly and legally and pay attention to risk management and internal control. We emphasize ESG management and the Board of Directors’ whole-process participation in 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.

### **Governance Standards**

The Company has always been upholding high standards in business ethics and its transparency and good corporate governance have been recognized by shareholders and the public. We believe that maintaining the high-standard corporate governance is essential to the steady and effective operation of the Company and serves the long-term interests of the Company and its shareholders.

In 2018, the Company executed its corporate governance policies in strict compliance with the relevant codes on corporate governance of the *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited*. The Company’s adherence to these codes ensures that all decisions are made on the principles of trust and fairness and in a transparent manner to protect the interests of all shareholders.

As of December 31 2018, the Board of the Company consisted of 8 members, including two Executive Directors, two Non-executive Directors and four Independent Non-executive Directors. The resumes of all directors are shown in the annual report of the Company and available on the Company’s website at [www.cnooc ltd.com](http://www.cnooc ltd.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 steady 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 Joint Company Secretary of CNOOC Limited in 2018. Mr. Wang Dongjin has been appointed as a Non-executive Director and a member of the Remuneration Committee of the Company with effect from 27 April 2018. On the same day, Mr. Wu Guangqi has resigned as a Non-executive Director and a member of the Remuneration Committee of the Company. With effect from 16 August 2018, Mr. Liu Jian has resigned as Vice Chairman and a Non-executive Director of the Company. And on 19 November 2018, Ms. Li Jiewen resigned as a Joint Company Secretary of the Company, and Ms. Wu Xiaonan, the General Counsel and the Compliance Officer of the Company, was appointed as a Joint Company Secretary of the Company with effect from the same day. Mr. Wang Dongjin, a Non-executive Director, has been appointed as the Vice Chairman of the Company with effect from 5 December 2018.

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 apprised 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 also 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 navigating oil and gas through the energy transition. The trainings covered a broad range of topics including latest trends of Energy demand and industry development. In addition, the directors read materials prepared by its advisers on topics such as case studies on inside information and insider dealing. Directors also attended various e-training launched by the Hong Kong Stock Exchange on topics such as corporate governance update 2018, appointment of Independent Non-executive Directors, Independent Non-executive Directors' role, directors' attendance at meetings and dividend policy, etc.

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. With their support and trust, we have achieved a long-term sustainable development. We have established open and transparent communication channels with our minority shareholders. The Company is aware of and pays attention to the shareholder's concerns, and will 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 activities.

The effective management of the Board and the Committees further enhanced the governance standards of the Company. The Company continued to receive recognition and awards for our corporate governance. We were awarded for several corporate governance awards from *Corporate Governance Asia* and *The Asset*.

#### **Awards & Honors won by the Company in 2018**

*Jan*

- Awarded “Most Valuable Energy & Resources Companies” in 2017 Golden Hong Kong Stocks Awards
- Awarded “Top 100 Global Energy Leaders” by Thomson Reuters

*Jun*

- Awarded “Best Investor Relations Company (China)” by Corporate Governance Asia Magazine

Mr. Yuan Guangyu, CEO of the Company, awarded Asia’s Best CEO (Investor Relations (China)) by Corporate Governance Asia Magazine

*Oct*

- Honored in the Securities Times 2018 "Golden Wing Award" HK Stock Connect Valuable Ranking List

*Dec*

Awarded 2018 "China Securities Golden Bauhinia Awards - Best Listed Companies" and Mr. Yuan Guangyu, CEO of the Company awarded "Best CEO of Listed Companies" by Ta Kung Wen Wei Media Group

· Awarded "Corporate Awards - Platinum" by The Asset

- Awarded "Golden Lion Award - The Most Valuable Listed Company with Investment" by Sina Finance

## ESG Management

The Company is highly concerned with ESG management and has incorporated ESG into corporate governance. The Board takes full responsibility for the Company's strategy and reporting on ESG, evaluates and clarifies all related risks and ensures implementation of proper and effective risk management and an internal ESG monitoring system.

In October 2016, CNOOC Limited established an ESG Audit Committee responsible for evaluating and auditing the ESG report disclosures, then submitting the report to the Board. The director of this Committee is the CEO, and executives serve as its members. Committee members can be adjusted accordingly with management turnover.

CNOOC Limited has also founded a working group for the Committee, made up of the General Manager of the Investor Relations Department, and management members of the QHSE Department, Human Resources Department, Sales Department, Procurement Department, Audit Department, President's Office and Legal Department. The group is responsible for preparing ESG reports as directed by the Committee, reporting progress to the Committee regularly, and handling other affairs assigned by the Committee. The Chief Safety Official of the Company also reports QHSE related matters to the Board in May every year, and the Risk Control Office reports risk control matters twice a year. The Board reviews and approves the annual corporate governance report, ensuring participation in the full process of ESG management and disclosure.



## Code of Ethics

In 2003, the Board of the Company approved the *Code of Ethics for Directors and Senior Officers* (“Code of Ethics”). The Code of Ethics provides guidelines and requirements with respect to regulations, insider trading, market malpractice, conflict of interests, company opportunities, protection and proper use of Company assets, and reporting requirements for directors and senior management.

As a part of our efforts to enhance the standard of corporate governance, the Board conducts annual review of 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 on the Company's website. All senior managers and directors are required to familiarize themselves with and obey the Code of Ethics to ensure that the Company's operations are honest and legal. Any violation of the Code of Ethics will be penalized and serious breaches will result in dismissal.

## Risk Management and Internal Control

CNOOC Limited has treated risk management and internal control as a top priority since our establishment. The Company recognizes that it is the duty and obligation of the 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 ensures that the Company has a proper and effective risk management and internal control system in place, and reviews its effectiveness. The Board receives reports from the management on corporate strategy, finance, operations, and compliance twice a year, as well as the establishment, review and evaluation of the risk management and internal control system. All material risks are reported to the Board, which will evaluate the risks and response plans accordingly.

CNOOC Limited has established a risk management committee directly managed by the Company's Chief Executive Officer. 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 periodic reports to the Board regarding the status of the risk management and internal control system.

With respect to risk management, the Company has adopted the enterprise risk management framework developed by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission of the US, and established a risk management system covering design, implementation, monitoring, assessment and continuous improvement based on the ISO 31000: 2009 *Risk Management - Principles and Guidelines*. The Risk Management Committee established

the overall targets and policies of the risk management system which are in line with the strategic objectives of the Company, and identified, analyzed, and assessed the overall risks, including 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 for major risks, as well as following-up and periodically reviewing the implementation of response plans, in order to make sure that sufficient attention, monitor and responses will be paid to all key risks of the Company.

With respect to internal control, the Company has chosen and 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 to ensure the timeliness, accuracy and completeness of all information reported.

In 2018, the Company focused on updating and modifying international theoretical frameworks and standards of risk management and internal control. We benchmarked our risk control system to the latest ISO 31000 *Risk Management Guideline (2018)* and COSO *Enterprise Risk Management Framework (2017)* to analyze and evaluate the management model, organizational structure, and personnel structure of our existing risk control system, to further improve our risk management and internal control.

On the overseas compliance system, after nearly 7 years of field operations, Uganda subsidiary has built an overseas compliance system that meets both overseas operation requirements and Uganda's national conditions. Since the startup of the project, no material compliance risk or problem has occurred. For example, it has founded a compliance management committee with partners, and stays informed of the latest regulations by local governments and updates company policies accordingly. Meanwhile, Uganda subsidiary cooperates with local government on external audits, and has established its procuring procedures that are strictly compliant with *Anti-monopoly Law* and *Anti-unfair Competition Law*. Excessive procuring must go through public bidding process.

#### Audit and Supervision

In order to ensure the effectiveness and suitability of business operations, internal control, and risk management, the Company has set up a supervision management system focusing on risk control, internal control and its supporting mechanism. The system is safeguarded by internal audits, forming a vertically integrated management and reporting system as follows: Audit Committee - Compliance Officer - Audit Department - Audit Departments of Subsidiaries.

The Company follows the principle of "Finding Problems, Controlling Risks, Improving Efficiency and Promoting Development" to improve the audit management system and optimize audit resource distribution. We implement the full coverage of audit supervision in key areas, important processes and major projects. We continuously improve our risk sensitivity, enhance risk management and monitoring, and use audits as an immune system for risk management, efficiency improvement, compliance and sustainable development. The Company pays close attention to rectification, prevention and control of risks, and has established and implemented audit rectification and accountability 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. Through the use of various forms of auditing, the Company has improved audit efficiency and effectiveness. At the same time, it has taken a number of measures to continuously promote overseas audit work, establishing a normal working mechanism for overseas auditing and an overseas audit reporting mechanism, as well as regularly organizing communication between various units.

**Financial Control Complaints: Reporting Channel and Handling**

CNOOC Limited and subsidiaries have set up full-time and part-time positions to handle complaints and grievances. Both internal employees and external individuals can report and make accusations and appeal of violations of



discipline and law to the relevant departments of local organizations of CNOOC Limited, including management, supervising personnel, legal advisers and the internal audit department, and to other related departments. Reporting methods include letters, visits, phone calls and e-mail. The channels for complaints on financial control are disclosed on the Company's official website.

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.

#### Anti-corruption Practices

CNOOC Limited focuses on anti-corruption, and sets strict internal punitive mechanisms and management policies strictly abiding with national and local policies, laws and 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 Should there be any practice of employee corruption and and malpractice with no exception, we would take down with no exception.

The Company has a high ethical standard for behaviors of its employees. It requires employees to stick to integrity and self-development with self-discipline and honesty. In order to strengthen the internal management of the Company, improve the self-discipline of employees, and ensure that the Company's production and business activities proceed smoothly without business ethics violation, the Company has formulated a set of rules and established an effective system to punish and prevent fraud, such as the *The Code of Commercial Behavior and Conduct of Employees of CNOOC Limited*, *The Procedures for Handling Rule Violations*, *Regulations on Conflicts of Interest*, *Petition and Visiting Reporting and Appeal Management Measures*, and *Financial Control Complaint Management Measures*. All new employees receive training on the contents of all such documents and sign a letter of confirmation about *The Code of Commercial Behavior and Conduct of Employees of CNOOC Limited*. At the same time, the general managers and senior managers of the Company departments are responsible for the construction of clean and incorrupt governance.

The *Code of Commercial Behavior and Conduct of Employees* describes the code or standard of conduct that employees should follow in the workplace and clearly states 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 rules of production and operation management, violations involving financial discipline, corruption and bribery. The articles from Article 53 to 61 clearly outline punishments for corruption (embezzlement) and bribery. Article 74 clearly stipulates penalties for economic transactions between contractors and suppliers that have business dealings with the company, and Article 19 states explicitly that employees facing criminal liability from breaking the law will be dismissed.

The *Regulations on Conflicts of Interest* regulate directors' and employees' commercial behaviors, preventing them from bringing risks to the Company due to conflicts of interest. The Regulations on Conflicts of Interest define 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 also defines measures to protect whistleblowers' lawful rights and interests.

## Safety and Environmental Protection

Safety and environmental protection is the foundation to achieve sustainable development for CNOOC Limited. In order to "Achieve world-class safety and environmental protection", we adhere to the core HSE values of "Safety First, Environment Paramount, People Oriented and Equipment Integrated" to improve our HSE management system constantly, promote safety culture and enhance emergency response capability. We have put significant effort into environmental protection and emission reduction, and incorporated the idea of safe, green and low-carbon development into every aspect of the Company's operations.

## HSE Philosophy

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

9. Comply with laws, regulations and industrial standards, and strive for HSE excellence.
10. HSE performance mirrors the comprehensive quality of the company.

Safety criteria “5 DON'Ts until DOs”

Don't act until safety risks are clearly assessed

Don't act until safety measures are fully prepared

Don't act until safety tools are ready for the job

Don't act until safety conditions are secured

Don't act until safety skills are well obtained

## HSE Management System

CNOOC Limited has consistently upheld its goal of “Achieving World-leading Safety and Environmental Protection.”

In 2018, based on the business risk exposure and practical management needs, the Company summarized its successful experience in systematic HSE management and reviewed the HSE management system. Based on international industry best practices, the Company developed the CNOOC Limited HSE Management System (CHSEMS), which represents the Company’s features and international advanced management ideas. CHSEMS consists of 10 core elements such as “leadership and responsibilities,” and 70 specific management requirements. By adopting a risk-based and improvement-focused planning, the Company has continuously improved its HSE management level.

In 2018, CHSEMS was trialed in selected subsidiaries. Taking into account their business risks, each subsidiary conducted a benchmarking against CHSEMS's requirements and formulated an improvement action plan to enhance HSE management quality.

## Production Safety

In 2018, in order to implement our production safety responsibility system on a corporate scale, CNOOC Limited benchmarked against world-leading peers and enhanced the foundations of onsite safety management such as work permit and job safety analysis, to build a dual prevention mechanism with hierarchical risk management and potential hazard identification. Meanwhile, we have been promoting a safety culture within the Company that reflects our unique requirements. All these measures have supported the high-quality development of CNOOC Limited.

## Risk Management and Control

In 2018, to ensure safe and compliant implementation of new projects, CNOOC Limited continued to strengthen the safety review of project feasibility studies and initial planning, organized safety inspections prior to trial production, and conducted an acceptance inspection on each project upon its completion.

In terms of pipeline quality risk control, CNOOC Limited organized a series of spot inspections on pipeline quality during construction phase. In 2018, we carried out 7 spot sampling inspections in one major project. During the year, we held a seminar on underwater facility plugging technology and equipment to prevent underwater operation risks.

### **Intelligent detection of submarine pipelines, ensuring safe development of offshore oilfields**

After years of use, problems may arise with submarine pipelines such as scaling, wax deposition and corrosion, which must be identified and processed properly. The Bohai Oilfield now has a mechanism in place to ensure the healthy operation of the “lifeblood”, realizing effective early warning for areas above and under water.

### **Audit and Inspection**

For production safety supervision, CNOOC Limited optimized the audit mode, and increased investment in system audits from the perspective of audit duration, format, content and degree of participation to strengthen the management of the production safety responsibility system, work permit, job safety analysis and management change in 2018. Meanwhile, the Company further identified safety weaknesses, enhanced high risk control and inspected safety in extreme weather. We organized 24 inspections throughout the year.

### **Strengthen the management and audit of diving contractors**

In 2018, CNOOC Limited performed special audits on nine diving contractors, and gradually raising the portion of simulated field work assessment, thus promoting the implementation of the Association of Diving Contractors International's standards in the field.

### **Enhancing the helicopter safety management**

In order to enhance helicopter safety, in October 2018, CNOOC Limited held a seminar on the safety of helicopters used for offshore oil exploitation in Zhuhai. During the seminar, requirements were put forward for the helicopter hardware management, pilot management and maintenance. Five key tasks were assigned including continuing to execute major accident scenario assessment; following and applying the standards; making full use of available audit resources to strengthen audits and rectification, to put forward management standards and requirements for helicopter hardware configuration, helicopter safety management and maintenance; improving the service and safety management of Company personnel such as pickup operators and dispatchers; and improving pilots' simulation

training and night flight training.

#### Strengthen Safety Execution Capability

The CEO and other senior managers are directly responsible for safety strategy and management, with safety and health performance linked to executive compensation. In 2018, the Company's management actively practiced the *CNOOC Limited Safety Identifier Behavior*, and played an exemplary role in visiting frontline units to conduct safety inspections. They gave "safety lectures" to improve the staff safety awareness and safety management efficiency for a well-executed safety culture.



In 2018, the Company paid more attention to its safety culture “People Orientation, Execution and Intervention”. We issued *Document No. 1 - Opinions on Building a Safety Culture in CNOOC Limited*, to define targets and principles, and to assign responsibilities, in order to foster a safety culture and build a long-term mechanism to raise awareness and guide the implementation of safety culture promotional activities.

2018 is the "Year of Implementing the Responsibility System for Work Safety for All Personnel". We actively promoted the construction and implementation of a risk-based production safety responsibility system for all staff. We organized seminars on the implementation of the safety responsibility throughout the Company, and incorporated the implementation into the scope of audit and inspection, and promoted subsidiaries to build a four-in-one (risk, responsibility, ability and assessment) safety system for all personnel based on job requirements. A work system of "layers of responsibility, everyone's responsibility and each one's responsibility" for production safety is promoted within the Company.

In 2018, the Company continued to carry out remote safety education and training. More than 15,000 employees attended 10 popular safety courses offered on the “overseas learning” platform in six months.

#### Overseas Safety Management

To address challenges in social security, operational risk management and public health, we continuously improved our HSE management system for overseas business and strengthened the supervision and management of overseas business to enhance our overseas subsidiaries’ safety leadership and culture. We achieved good HSE performance in overseas operations and there were no major accidents, or environmental pollution or safety incidents during the reporting period.

In 2018, CNOOC International improved the security management system by evaluating threats in high-risk areas, and revising the Iraqi subsidiary’s security program. We continuously monitored the security situation, and issued over 900 early warnings and held 4 overseas safety training sessions. We revised 9 integrated plans, held 1,277 different types of emergency exercises, and effectively responded to emergencies, including the Mexico earthquake and Basra demonstration. We organized 3 desktop emergency exercises, effectively improving CNOOC International’s safety and emergency management capability. CNOOC International organized a self-inspection of production safety for overseas business, eliminating 98% of the safety threats identified.

#### The Iraqi Subsidiary’s Safety Emergency Mechanism

1. Set up a safety information reporting system

- Update security warning information daily
- Update man-vehicle matching information daily
- Update personnel plan daily
- Report Iraq's security situation to the Head Office in China daily

2. Strengthen security intensity in the oilfield

- Set up a checkpoint and lookout post outside the oilfield
- Set up a police force in the oilfield to enhance security patrols
- Enhance access control and no irrelevant personnel is allowed

3. Make an effective emergency plan

- Update and upgrade the comprehensive emergency plan
- Update the Emergency Response Plan for Natural Disasters
- Make an emergency treatment plan for demonstrations, medical operations and tribe conflicts
- Build the emergency treatment process for high-risk jobs
- Estimate contractors' emergency capacity

4. Carry out emergency exercises

- Compile an emergency evacuation guide
- Maintain and update emergency resources
- Test emergency communication equipment
- Carry out comprehensive maneuver and special emergency exercises

Special production safety inspections in overseas projects:

In July, we conducted a pre-exit safety inspection of the SES Oilfield in Indonesia to ensure that the exit process would take place safely and legally.

In September, CNOOC International conducted research and inspections on safety emergency response and security for our business in Mexico.

In December, CNOOC International conducted a post-drilling safety inspection for the Missan Oilfield in Iraq.

### Safety Management Performance

The Company still adhered to a high HSE standards in 2018. The Occupational Safety and Health Administration (OSHA) occupational safety record for the year is as follows:

Scope	Total Work Hours (200 thousand man-hours)	Number of Recordable Incidents	Rate of Recordable Incidents	Cases of Lost Work Days	Rate of Lost Work Days	Casualties
2018 Employees	202	16	0.08	10	0.05	1
2018 Employees and Direct Contractors	557	44	0.08	22	0.04	2
2017 Employees	205	12	0.06	6	0.03	0
2017 Employees and Direct Contractors	545	48	0.09	17	0.03	1
2016 Employees	200	12	0.06	6	0.03	3
2016 Employees and Direct Contractors	560	68	0.12	25	0.04	5

### Equipment and Facility Integrity Management

To produce quality products, the Company has been relentlessly perfecting its management in keeping the equipment and facilities integrated and working smoothly to maintain safe and clean production for the Company. We have seen a steady downward trend in our safety accident rate, and the rate of breakdowns on production dropped after the bounce back in 2017, resulting in a drastic decline in accident impact by the measure of average repair costs for individual facilities.

In 2018, as we continued our efforts in refining the management system, we issued *the CNOOC Limited Equipment and Facilities Integrity Management System (Version B)* and made revisions for 50 documents and 332 clauses. In August 2018, we invited Det Norske Veritas (DNV GL) to conduct a pilot audit of the integrity management of equipment and facilities on our Shenzhen branch, and verification from the independent third party showcased the considerable progress we have made in integrity management implementation.

We have a regular mechanism for risk identification and elimination of potential equipment and facilities, “fastening the seat-belt” for our production and operations. We have prioritized the inspection and maintenance of submarine pipelines, floating production equipment, drilling rigs, wellbores and electrical equipment. In 2018, we conducted random examinations at our branches on equipment and facilities safe operations, further strengthening the supervision and process control.

We launched a three-year action plan for environmental protection in the Bohai Oilfield. Following the action plan, we detected potential hazards for submarine pipelines, installed riser protection racks and controlled annulus access flow for risers. In addition, we added requirements to the baseline tests on all new pipelines in the Bohai Bay, and embarked on power supply planning in the Bohai Oilfield.

#### **2018 Equipment and Facilities Design Integrity Audit and Production Adaptability Assessment:**

- Completed integrity audits on 10 projects in the preliminary research stage, such as the Lingshui 17-2 gas field.
- Completed integrity audits on 7 projects in the production stage, such as the Enping 23-1 oilfield.

Impact rate of equipment and facilities breakdowns on production (breakdown impacted/planned output)

#### **Dock repair of South China Sea Shengli and Offshore Oil 111 FPSOs**

In 2018, due to serious corrosion of the cabin and subsea valves of the South China Sea Shengli Floating Production Storage and Offloading (FPSO) unit, the mooring rope broke and the mooring chain was badly abraded. As Offshore Oil 111 FPSO was seriously corroded as it was approaching the end of its service life, the Shenzhen branch carried out thorough dock repairs on two of the FPSO units. It took more than two months to replace the severely corroded hull parts and all potential hazards identified were eliminated. Both FPSOs are now in great form, have been put back into production and operation, and are well-prepared for future safe production.



## Enhance Emergency Response Capability

The Company focuses on strengthening its emergency management in establishing an emergency rescuing system that emphasizes emergency preparedness and prevention. In 2018, the Company remained committed to improving the collaborative emergency response mechanism and the Tianjin branch hosted a joint emergency drill with CNOOC Limited, Sinopec and CNPC. The drill further tested and upgraded the Company's capabilities for emergency response and participating in regional coordination with Sinopec and CNPC.

In 2018, the Shenzhen, Zhanjiang, and Shanghai branches were struck by typhoons 12 times, from Ewiniar on June 4 to Yutu on October 26. We mobilized 68 ships and 761 helicopters, evacuated 16,238 people at sea, and effectively responded to emergencies.

### **Mangkhut, the most violent typhoon of the year**

With the 22nd typhoon, Mangkhut, approaching in 2018, we carried out overall deployment following the requirements of the Ministry of Emergency Management of the People's Republic of China and the Company's typhoon emergency plan. We maintained close communications with the National Meteorological Center of CMA as well as Emergency Response Departments around the clock to supervise the preparation. Offshore facilities with a total of 5,365 people were evacuated in advance with 230 helicopter trips and 39 sea trips.

The Shenzhen branch organized the evacuation for its entire responsible area, activated the "Typhoon production mode" for offshore gas fields, and delivered about 45 million cubic meters of natural gas by unmanned production. The Zhanjiang branch provided temporary electricity generators to ensure continuous power supply during the typhoon.

### **Launching the "Well Control Week" Activities**

In October 2018, the Company held a series of activities for its "Well Control Week", with the theme of "Fulfilling Responsibilities for Safe Development, Preventing and Controlling Major Risks of Blowouts". The activities were focused on well control tasks and well control emergency exercises. Meetings and publicity events were held to facilitate employee understanding of well control management.

## Cyber Security



With severe challenges and strict regulations, the Company recognizes the importance of cyber security work and conducted comprehensive evaluation and monitoring throughout its management system. We have elevated the security for infrastructure, production systems and sensitive data, and boosted our defenses against cyber-attacks, providing strong protection for company operations.

### **The European and North American Subsidiaries Enhanced Data Security Management**

On May 28, 2018, the EU's General Data Protection Regulation (GDPR) officially took effect, which had great implications for our Europe and North America subsidiaries operations. Seeing the regulation coming ahead of time, the European and North American subsidiaries set up special taskforces a year before its release and conducted deep research on data protection. The taskforces developed a data protection upgrade plan to ensure that the subsidiaries transition smoothly and comply with the regulations in the shortest term possible. After the introduction of the regulation, the taskforces made prompt updates on relevant procedures, contracts and privacy provisions, and carried out activities such as interpretation of regulations and online training for all employees, keeping them informed of key terms of the regulation, as well as their rights and obligations in data protection. As the result, data security was strengthened by employees and suppliers and the subsidiaries as a whole according to the new standards.

## Environmental Protection

CNOOC Limited fulfills corporate responsibilities for environmental protection in all aspects and in a multi-dimensional way, strictly managing our environmental performance throughout the operational process, and improving water utilization efficiency. The Company is fully committed to protecting marine ecology.

## Environmental management

Adhering to the idea of a “Green, Low-carbon, Clean, and Circular Economy”, the Company has stepped up our efforts to become an “Energy-saving and Environmentally friendly” enterprise, and has continuously implemented environmental management.

Following the management principle of “in-process control better than post-control, pre-control better than in-process control, and whole process control better than pre-control”, the Company has managed environmental protection with environmental impact assessment as the core. Using the *CNOOC Limited Environmental Protection Management Information System* as the platform, we have performed environmental protection management, emphasizing strict environmental impact assessment, pollutant emission monitoring and overall emission reduction throughout the project construction process.



*Note: The scope of the environmental data in the report only includes the Tianjin, Shanghai, Zhanjiang, and Shenzhen branches, and excludes China United Coalbed Methane Co., Ltd. and overseas units.*

## Emission Reduction

Under the framework of ecological protection, the Company has put significant effort into green development, imposed rigorous control of marine environmental protection, and complied with the requirements of the *Environmental Protection Law*. During the year, the Company continued to revise the marine environmental protection system through the *Regulations on the Environmental Impact Assessment of Domestic Offshore Oil and Gas Fields* and the *Management Rules for the Completion of Environmental Protection Facilities in Domestic Marine Oil and Gas Development Projects*, which effectively reduced environmental risks and potential hazards at various stages, and improved the Company's environmental management.

In 2018, in response to the Group's environmental risk investigation, the Company carried out comprehensive marine environmental risk investigation and environmental hazard control. We conducted environmental protection supervision on key environmental risks to complete environmental hazard remediation.

Meanwhile, the Company performed annual special emission compliance monitoring on offshore platforms, and strengthened the supervision of pollutant discharge in the production process. We consolidated the monitoring of key environmental protection processes through information technology, carrying out special environmental inspections and promoting rectifications to achieve a coordinated and healthy development relationship between production and environmental protection by continuously regulating environmental management.

Regarding the management and control of hazardous chemicals in the oilfield, we adhere to the five principles of locating, quantifying, designating persons in charge, specifying accountability and timing. We clarify the properties of hazardous chemicals, determine the location of hazardous chemicals, and include hazardous chemical management in the safety production procedures to fix flaws and prevent risks.

## Emission of the Company's Main Pollutants

Indicator	Unit	2016	2017	2018
Non-hazardous wastes	Tons	14,647	16,490	13,970
Hazardous wastes	Tons	20,101	22,326	29,426

Oil content in discharged water			
	Tons	2,460	2,535 2,437
Off-shore End Use			
Chemical oxygen demand (COD)			
	Tons	114.4	99.8 128.7
Off-shore End Use			
Sulfur dioxide SO <sub>2</sub>			
	Tons	9.5	8.4 17.9
Off-shore End Use			
Nitrogen oxides NO <sub>x</sub>			
	Tons	199.0	272.2 341.3
Off-shore End Use			

**The Shenzhen branch strictly controlled production-used water discharge to mitigate pollution**

In 2018, the concentration of petroleum hydrocarbons in production water and the COD in domestic sewage from the offshore facilities of the Shenzhen branch were both lower than the national emission standard. In particular, the concentration of petroleum hydrocarbons was lower than the national standard by 50%, and was eligible for the reduction and exemption of national environmental protection tax.

**Water Resource Management**

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 2018, 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 desalinization; the Company consumed less freshwater per unit of production by optimizing the production process; employees' awareness of water resources crisis and water conservation was enhanced by active water conservation promotion.

Indicator	Unit	2016	2017	2018
Total Freshwater Consumption	Million tons	1.879	1.813	1.859
Freshwater Consumption Per Ton of Oil and Gas Production	Cubic meters/ton	0.0335	0.0332	0.0335
Water saving	Thousand tons	113	88	108

**Penglai 19-3 Oilfield RUP Platform Turbine Flue Waste Heat Seawater Desalination Project (Phase II)**

The RUP platform of Penglai 19-3 Oilfield contains two gas turbines. We installed a heat exchanger on the turbine flue to transfer the heat from the gas to the circulating water. With a pump circulating hot water, the absorbed heat from turbine gas is brought to distill seawater for freshwater. The project is divided into two phases: the 2017 and 2018. After being put into operation, it produces 18,000 tons of freshwater per year, which not only helps realize the water self-sufficiency for production and for people to live on this facility, and also can supply freshwater to the surrounding offshore platforms, significantly reducing the frequency of water exchanges between ships and effectively saving production costs.

## Marine Ecological Protection

The Company has fulfilled the requirements outlined in the *Measures for Environmental Protection Management During Production* and *Measures to Manage Accountability for Environmental Damages*, and has strictly maintained our ecological “red line” for harmonious coexistence with the ocean to achieve mutual benefits. For newly built and refurbished environmental protection projects, we have implemented *the Measures to Manage Newly Built and Refurbished Environmental Protection Projects*.

In 2018, we actively participated in environmental protection initiatives, focusing on research and protection of biodiversity, and promotion of resource restoration and environmental improvement in the operating regions. We sponsored a variety of projects such as protection, artificial propagation and release of spotted seals.

### **Active restoration, artificial propagation, and release of fishery resources**

Artificial propagation and release is a way to actively reduce the impact of marine engineering on the environment. In 2018, the Shenzhen branch restored, artificially propagated, and released fishery resources for the Enping 23-1 Oilfield Project, with a total of more than 3 million pompanos, black porgy, sparus latus and more than 31 million giant tiger prawns released. While increasing the amount of biological resources in the area of artificial propagation and release, we also improved the ecological community structure to realize ecological, social and economic benefits.

### **Protection of marine wildlife**

CNOOC Limited takes part in measures to protect the marine ecological environment. The offshore operation areas often become a refuge for wild animals, and marine life which are highly demanding on their habitats such as national-level protected wild animals.

- **Rescue a Lost Falco:** Employees in Weizhou Oilfield found a national level 2 protected falco subbuteo, during a deck inspection. According to initial judgment, it was foraging in the water near Weizhou Island, lost direction in the strong and cold winds, and landed on the platform. The bird was taken good care of for a week, and it eventually recovered and flew away.

- **Rescue an Entangled Hawksbill Turtle:** During the inspection of Ledong 22-1 gas field, a hawksbill turtle (national level 2 protected wild animal) was entangled tightly in a fishing net near the jacket. The turtle was rescued and

released into the sea.

- **Rescue an Injured Finless Porpoise:** Employees on platform C of Penglai 19-3 oilfield immediately arranged for the standby ship, HYSY 688, to rescue a finless porpoise upon notice. The animal was trapped 50 meters northwest from the platform. In 5 minutes, the ship arrived and quickly took the injured finless porpoise onboard. Upon inspection, the finless porpoise was marked with multiple scars from fishing nets. After about 20 minutes, the net was untangled; the finless porpoise recovered and was released.

**Ecological Restoration by CNOOC Nexen Company**



In 2015, CNOOC Nexen Company discovered a pipeline release of a mixture of bitumen and water at our Long Lake Oil Sands operations in Fort McMurray, Alberta, Canada. Together, teams quickly collaborated with internal and external stakeholders and built comprehensive plans to support the remediation efforts in a unique muskeg (swamp like) environment. This included working with local stakeholders (e.g. Aboriginal communities, Regional Municipality of Wood Buffalo community members, etc.) and the Alberta Energy Regulator (AER) to maintain regulatory compliance and ensure all relevant stakeholders' views were considered and incorporated into our plans.

**Wildlife protection measures:**

- Installed fences and flags to deter ungulates such as deer, bears, foxes and coyotes.
- Placed predator effigies and scare canons to deter birds and other small wildlife.
- Engaged qualified wildlife biologists to observe the release site.
- Placed white silage tarps on the exposed bitumen to deter birds from thinking it was a landing spot.

**Ecological and environmental remediation:**

Due to the remote location of the release site and the swamp-like vegetation (muskeg), extra remedial steps were required. This included:

- Using coconut matting as a barrier to contain the release.
- Using rig mats to help construct roads to get to the site.

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- Waiting until the outside temperature cooled to start excavating, as this would help solidify the bitumen and reduce the environmental impact and waste volume from remedial activities.
- Taking confirmatory samples from the bottom of the excavation to determine if any further work was required.
- Moving soil to synthetically line holding cells to prevent further seepage into the muskeg.
- Backfilling the release site with clean peat once samples were determined clean.
- Trucks safely following a haul plan to transport material to the landfill.

### **Solid and fluid waste management measures:**

CNOOC Nexen Company accomplished site closure within two years with no requirements for long term monitoring. Shortly after the AER Environmental Protection Order was lifted, the site was given back to operations. Today, the release site looks like any other pipeline right-of-way in the region, with natural vegetation returning to pre-disturbance health and abundance with no outstanding visual evidence of the release.

#### Response to Climate Change

As a responsible energy company, we adhere to the concept that “lucid waters and lush mountains are invaluable assets”. With our low-carbon strategy implemented, we strive to promote clean energy and improve energy efficiency, and boost energy-saving and emission-reducing projects to proactively tackle climate change.

## Energy Conservation

In 2018, we upgraded and optimized our energy and carbon control system to automatically collect energy invested consumption data from key energy-consuming units. The Company invested special funds for energy conservation and emission reduction, and promoted energy conservation and emission reduction via technological advances. We implement systematic energy conservation based on a clear and complete organizational structure. With division of work and management principles as the parameters, we carried out energy conservation planning covering fixed asset energy conservation evaluation methods, special funds management and publicity work for energy conservation. Procedures pertinent to energy conservation management were articulated and incorporated into our overall risk management system. In addition, we have also carried out extensive energy-saving publicity and education to boost employees' energy-saving awareness.

In 2018, we increased our investment in energy conservation and emission reduction, transforming technologies to achieve our targets. This year, we rolled out 39 technology transformation projects to achieve energy conservation goals, with total investment of RMB 210 million. Nanshan Terminal of the Zhanjiang branch was awarded as a "Green Factory" in the petroleum and petrochemical industry. In 2018, the Company saved energy equivalent to 165 thousand tons of standard coal.

In 2018, the Company organized the revision of five enterprise energy-saving standards, including *the Guidelines for Construction of Online Energy Consumption Monitoring Systems*, *Guidelines for Utilization of Residual Heat and Pressure in Offshore Oil and Gas Fields* and *Guidelines to Evaluate Green Plants in Offshore Oil and Gas Fields*.

## Main Energy Consumption of the Company.

Indicator	Unit	2016	2017	2018
Crude Oil	Thousand tons	313.9	323.2	324.1
Natural Gas	Million cubic meters	1,732	1,766	1,881
Diesel	Thousand tons	25.1	28.3	29.4
Electricity	Million kWh	132	150	203
Comprehensive Energy Consumption per Ton of Oil and Gas Production	Tons of standard coal equivalent/ton	0.0470	0.0494	0.0515

## Energy Conservation Targets

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Indicator	Unit	2016	2017	2018
Energy Conservation Targets	Tons of standard coal equivalent	86,952	130,767	93,723
Actual Energy Saving	Tons of standard coal equivalent	159,416	155,299	165,148

## Gas recovery project at the HZ 21-1 Platform

HZ 21-1 Platform of the Shenzhen branch evaluated its existing facilities and processes. Its small compressors were repaired and rebooted to recycle and utilize the associated gas, extending the production life of the field. After completion of the project, 45,000 cubic meters of natural gas were recycled each day. From January to December 2018, a total of 11.48 million cubic meters of gas was recycled, conserving 15,269 tons of standard coal equivalent and reducing 24,822 tons of CO<sub>2</sub> emissions equivalent. The annual economic value created was RMB 18.36 million.

## Bozhong 34-2/4 CEPA Platform low-pressure natural gas recovery project

In the Bohai Oilfield, we introduced low-pressure gas recovery technology. In 2018, we selected the Bozhong 34-2/4 CEPA platform as a pilot and applied jet supercharging technology for the first time. The gas released from the secondary separator was recovered, exemplifying the Venturi effect. With the recovery capacity of 3 million cubic meters of low-pressure gas, it could reduce 7,200 tCO<sub>2</sub>e of GHG emissions.

## Low Carbon Management

Under the instructions of *the Plan to Control Greenhouse Gas Emissions* under the 13th Five-Year Plan (NDRC Document No. 61 [2016]), *the Notice on Earnestly Launching a National Carbon Emissions Trading Market* (NDRC Climate Document No. 57 [2016]) and other relevant documents and policies in China, the Company manages energy conservation, emission and carbon reduction throughout the year and tackles major issues. We set up a set of metrics and KPIs for energy conservation and carbon emission reduction in light of the regulations, and reviewed the annual performance of subsidiaries accordingly.

In 2018, we 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 was found based on one measure and five rules: *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<sup>2</sup> Project Development Management*, *Rules for Carbon Asset Management*, and *Rules for Carbon Assessment*. Through this system, the Company has worked out the “division of work” for the overall carbon management and the corresponding data collection methods, and laid out managing rules for carbon reduction work including CCER projects, carbon evaluation and carbon assets assessment.

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<sup>2</sup> 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 trading institutions of China.

In 2018, we initiated the compilation of a "Green Low-Carbon Development Roadmap" and its implementation plan, which outlines the short-term, medium-term and long-term carbon emission reduction action plans for the Company. The Plan aims to optimize and integrate the energy control and low-carbon management information system that combines production with energy saving and carbon emission reduction. We have made a more progressive annual plan on energy-saving and low-carbon targets, incorporating KPIs of carbon emissions, emission intensity and emission reduction completion into the performance evaluation of each unit.

In 2018, the Company further optimized its technology, evaluation, and management systems regarding carbon emission impacts, and formulated standardized procedures and work flows. During the year, our research center analyzed and researched the feasibility of carbon dioxide storage and CO<sub>2</sub> flooding technology in offshore oil and gas fields, keeping an eye on related advanced technologies, focusing on both preliminary research and technology application. We conducted carbon dioxide engineering application transformation projects in Shenzhen, Zhanjiang and Shanghai and formulated the implementation plan and application exploration.

In 2018, we conducted carbon emission impact assessments and audits of fixed asset investment for projects that consumed more than 20 thousand tons of standard coal equivalent of comprehensive energy or produced more than 10 thousand tons of CO<sub>2</sub> equivalent of GHG direct emissions. In total, we have conducted six projects, including assessment of the Lingshui 17-2 Gas Field and Luda 6-2 Oilfield. We verified the carbon emissions of companies that are subject to emission control, and urged companies participating in the pilot carbon trading program to comply with regulations and fulfill their contractual responsibilities. We developed the *CNOOC Limited Carbon Asset Management Plan* and participated in state-led studies on carbon emission benchmarking to improve comprehensive carbon management.

#### **New discovery at ocean carbon sequestration observation station**

The Zhanjiang branch established an ocean carbon sequestration observation station in the Western South China Sea, discovering a strain of marine roseobacter which could play an effective role in desulfurization, carbon sequestration, and produce polyhydroxyalkanoates (PHA), an intracellular polyester synthesized by many bacteria. It is the main compound used for carbon and energy storage in organisms, and characterized by excellent properties such as biocompatibility, optical activity, thermoplasticity, and complete biodegradability. It is a green bio-polymer with promising application prospects, and now being widely used in the industrial and medical fields.

#### **Alberta carbon conversion technology center opened, funded by the North American subsidiary**

The Alberta Carbon Conversion Technology Center, funded by the North American subsidiary, was opened on May 25, 2018. The center can test commercial carbon capture and conversion technology using flue gas generated by natural gas combustion.





Mr. Paul Khanna, a consultant at the North American subsidiary for governmental relations and climate change, said at the opening ceremony: "We are so proud to bring this building to Calgary, so innovators can test their technologies on real-world emissions from natural gas-fired power plants. Knowing that these innovations could be applied to oil sands operations in the future is very encouraging."

#### **Green factory pilot program**

The low-carbon oil and gas field pilot program covered the Tianjin branch's Jinzhou Oilfield 9-3, the CNOOC China Limited\_Zhanjiang Dongfang Operations Co. , and the Shenzhen branch's Enping Oilfield. A green oil and gas field management system was designed, integrating online monitoring, data collection, calculation, analysis, optimization, management and other functions. The system was developed to combine technology, energy use and emissions and achieve a dynamic monitoring and intelligent process optimization.

#### **Key Greenhouse Gas Emissions data of the Company**

Indicator	Unit	2016	2017	2018
Total Greenhouse Gas Emissions	Thousand tons of carbon dioxide equivalent	7,095	7,829	7,480
· Direct Greenhouse Gas Emissions	Thousand tons of carbon dioxide equivalent	6,735	7,736	7,345
· Indirect Greenhouse Gas Emissions	Thousand tons of carbon dioxide equivalent	360	93	135
Greenhouse Gas Emissions per Ton of Oil and Gas Production	Tons of carbon dioxide equivalent/ton	0.12000	0.14090	0.1328

## **Environmental protection in the life cycle of the Bohai Oilfield**

The Bohai Oilfield has adhered to the principle of “protect the environment while extracting, and extract while protecting the environment”. We strive to “take nothing but oil and gas, and leave nothing but a green environment” throughout the process of development, extraction and production.

### **The Three-Year Action Plan for Upgrading Environmental Protection in Bohai Oilfield**

From 2018 to the end of 2020, the Bohai Oilfield will enforce a three-year action plan for upgrading environmental protection in the Bohai Oilfield, strengthening its environmental monitoring and emergency response capabilities, and making contributions to the environmental protection of Bohai.

#### **Goals:**

- Achieving “zero discharge” of production water from offshore facilities
- Ensuring “zero accidents” in well control
- Pursuing “zero spill accidents”

#### **Plan:**

- Achieving “zero discharge” of production water from offshore facilities
- Ensuring “zero accidents” in well control

- Pursuing “zero spill accidents”
- Reducing domestic sewage discharge
- Reducing natural gas emissions
- Reducing solid waste
- Improving environmental protection management

**Green management concepts in offshore oilfields**

The Company has minimized the impact of offshore oilfield development by shifting from supplying power, gas, and water individually to establishing a regional network that provides oil, gas, water, power, information and offshore and onshore internet.

Exploration/Development	Construction	Extraction
No drilling before proper environmental protection measures in place. No oil contamination discharged into the sea. No litter generated in any form. Aiming for zero pollution, protect the environment from the source.	Construction was scheduled to circumvent the fish spawning period (as the main economic product in the area) and reduce the impact on fishery resources and the marine environment.	Hundreds of oil extracting platforms aim for “no leakage from equipment and no oil contamination on the platform,” acting as guardians of the blue ecosystem. For example, our platforms have achieved near-zero sewage discharge.

### **Offshore wastewater management**

In the Nanpu 35-2 Oilfield, all domestic sewage was treated. Wastewater such as gray water from kitchens, toilet water and other waste was collected and treated by bacterial decomposition. To ensure the effectiveness of the treatment system, tanks were regularly cleaned to remove non-degradable dirt and transport it back to land for treatment. After a series of treatments, sewage such as flushed toilet water met national discharge standards.

### **Offshore emergency response team**

The Bohai Oilfield has a leading offshore emergency response team among global oil companies in terms of oil spill response capability. Emergency exercises are held every week on hundreds of offshore facilities to continuously improve emergency responses. Meanwhile, the teams also promptly clean up garbage produced by passing ships. The Company Postdoctoral Environmental Protection Research Station also developed bioremediation technology for shoreline oil pollution, using bacteria and fungi to consume crude oil and release environmentally harmless substances. The station has played a leading role in the industry in accelerating the self-recovery of the marine environment.

## Care for Employees

CNOOC Limited regards employees as its most precious resource and asset. Adhering to our people-oriented development concept, the Company focuses on employees' rights and interests, complying with employment related labor law and regulation, constantly perfecting 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, and endeavors to build a safe production environment for employees, benefitting everyone with a shared growth.

## Employment Policies

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*, *Employment Ordinance*, etc. We have established our own employment and labor contract management system to safeguard 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.

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.

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 prohibited to recruit child laborers under 18 years old. Our youngest employees are currently 21 years old. There is no forced labor in the Company.

The Company adheres to gender equality, encourages hiring female employees, and develops training program for female managements. In addition, we have organized various activities for female employees outside work and encourage their participation. As of 2018, we had 2,846 female employees, accounting for 16% of the staff, of whom the female mid-level and senior managers accounted for 18% of the management.

Along with the rapid growth in overseas business, we have been proactively fulfilled overseas employee responsibility. After years of development, we are currently operating in more than 20 countries and regions in five continents, including Indonesia, Nigeria, the United States, Brazil, Australia, and United Kingdom. We fully respect cultural diversity and local customs of the countries, and promote mutual understanding among staff with different nationalities, regional and cultural backgrounds. The Company promotes the integration and communication of domestic and overseas employees, so as to create a dynamic working environment.

As of the end of 2018, the Company had 18,312 employees. Domestic staff accounted for 83% of workforce while overseas staff accounted for 17%. Out of which 15,174 employees were located in Beijing, Tianjin, Shenzhen, Shanghai and Zhanjiang in China, and 3,138 employees were located in many countries and regions overseas, including 28% in Europe, 28% in Asia, 41% in the Americas, and 3% in elsewhere. 23% of the employees had a master's degree and above, 59% had a bachelor's degree, and 18% had a junior college degree and below. The employee turnover rate in 2018 was 1.6%.

#### **CNOOC Limited ranked sixth in Forbes' Global 2000 list of the World's Best Employers**

On October 11, 2018, *Forbes* magazine published its 2018 list of the World's Best Employers, which included 84 Chinese companies. CNOOC Limited was ranked No.6 on the list.

#### **Employee Rights and Interests**

CNOOC Limited endeavors to create an open, transparent, equal, and diversified environment, and pays attention to protecting the legitimate rights and interests of employees. We offer employees competitive compensation packages; implement a salary increase scheme and a remuneration allocation system that is consistent with the market. The Company's remuneration allocation, which put more emphasis on technical experts and the field employees, is closely associated with employees' quality of work, values and contributions. A pay mechanism that matches employee income to the Company profit growth has also been adopted to ensure employees benefit from the Company's ongoing development.

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, 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.





We respect and support the association freedom of our employees complying with the law. Guided by the *Trade Union Law of the People's Republic of China* and other laws in foreign countries, we have established labor unions, 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.

#### Employee Development

CNOOC Limited sticks to the concept of "growing together with employees" and has improved its training system. Through building an employee development system and creating development opportunities, the Company motivates employees to realize their self-worth.

#### Talent Strategy

Actively responding to the "innovation-driven" strategy, CNOOC Limited has put significant effort into developing innovative talents. We have built a number of innovative talent training centers to build a team of world-class scientists and high-level technological leaders.

We have intensified training of highly skilled personnel, with a focus on key experts, and promoted their exchange and communication to expand their knowledge and tap into innovation potential, and encourage them to play a role in quality and efficiency improvement of actual operation and production.

#### **Cultivating innovative talents, yielding satisfactory results**

The Company built a training center for innovative talents and promoted the cultivation of high-level technological leading talents and outstanding innovation teams. In 2018, the South China Sea High-Temperature High-Pressure Drilling Technology Research and Application Innovation Team led by Mr. Li Zhong, Chief Engineer of the Zhanjiang branch, won the top China National Science and Technology Progress Award, and 17 provincial and ministerial awards. The work won 122 nationally authorized patents and 34 software copyrights. The team published 7 enterprise standards, 7 books, and 169 papers, of which 35 were published by the Science Citation Index/Engineering Index (SCI/EI).

Meanwhile, the Company carried out professional skills assessment on a large scale, paid close attention to the proportion of highly skilled personnel. In 2018, the total number of employees to undertake skilled-level assessment reached 2,000. We employed 4,585 senior and above workers, accounting for 76.16% of all skilled workers, and 963 technicians and senior technicians, accounting for 16.00% of skilled workers.

**As of end of 2018, the percentage of highly skilled personnel to all skilled workers**

### **Career Growth**

In 2018, CNOOC Limited continued promoting its talent development scheme and implementing the five-year talent development plan. Based on the existing three streams of the talent system, in terms of management (M rank), technician (T rank) and worker (W rank), we have developed suitable career paths for employees based on professional skills and requirements. The Company has refined its professional title management system and talent assessments. According to our talent team structure and management levels, we formulated a full-coverage, hierarchical and distinctive talent development plan to promote knowledge development and engineering innovation, standardized expert selection, and coordinated the development of talent teams at all levels to further enhance our core competitiveness, as well as the overall quality and capabilities of our talent teams.

In 2018, we improved the selection process for technical experts. Based on the *13th Five-Year Talent Development Plan* set by the Company, we further expanded the technical expert promotion channel, and selected the first batch of senior experts. A review team of experts was composed of the Company's management, researchers in the engineering institute, field experts, and general managers of functional departments. They were responsible for the qualitative evaluation of senior experts, and ensured that the first batch of experts was selected in an impartial, authoritative, scientific and reasonable way.

#### **Introduction of Dr. Li Qingping (One of the first senior experts of CNOOC Limited)**

Dr. Li Qingping has worked in three major fields, namely underwater production technology, mobile safety technology and natural gas hydrate mining since she graduated with a doctorate degree and joined CNOOC Limited. She has become an academic leader in these three fields and has led 6 national-level projects and 16 production projects, published 80 papers on SCI and EI, and been awarded 52 invention patents. In recent years, she has won more than 20 provincial-level technological progress awards, including 4 special prizes and 6 first prizes. She was selected as one of the first batch of senior technical experts of the Company.

“Technology research is a self-cultivation practice at a neglected position. You cannot buy key technologies. Technology research is not only my responsibility, but also a source of fun,” said Dr. Li Qingping, chief engineer of the R&D Center of the Company Research Institute. Because of this commitment, she has never looked down on “unpopular technologies” in the industry, and made progress in new technical areas. Working on deep-water technology for 20 years, as the deputy manager of the project, she promoted the world's first deep-water semi-submersible oil storage production platform and deep-water subsea production system in China's first self-operated deep-water gas field Lingshui 17-2, she also led the team to develop a full set of marine gas hydrate test mining equipment, which was successfully tested in the South China Sea at a depth of 1,320 meters and made a historic breakthrough in China's natural gas hydrate exploration and development technology.

Dr. Li Qingping's consistency embodies the commitment and responsibility of a technology expert.

- 2017 Figure of the Ocean
- Expert receiving Special Allowance from the State Council
- National Women Red Flag Bearer
- Women of the year making outstanding innovations in the Chinese economy

## Employee Training

CNOOC Limited is growing together with employees and building multi-level training systems to continuously empower employees.

A talent diversified development strategy was implemented within the Company. In 2018, guided by the *Key Training Plan*, we continued to implement the talent development program specified in the *13th Five-Year Plan* and optimize allocation of training resources. We put the focus of training on key specialties 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, policy researcher ability enhancement training course, drilling expert training course, and advanced information technology training course, which helped the Company's business development while cultivating talents.

## 2018 Training Performance

157 key training programs  
1266,266 trainees  
11.24 million total training hours  
180,605 hours of online training  
1Average training per person for management personnel: 81 hours  
1Average training per person for technical personnel: 76 hours  
1Average training per person for skilled workers: 88 hours  
1Course developers and internal lecturers: over 300  
1Courses for development and production directors: 45  
1Training micro-courses for underground operation & supervision: 30  
1Special micro-courses related to QHSE: 10

Year	Total training sessions	Total number of trainees	Total training hours	Total training hours per person
2018	23,875	266,266	1,235,644	83
2017	22,468	213,167	1,084,229	72
2016	18,077	204,653	920,576	64

### **“Haixue” played a positive role in digital transformation of training**

In 2018, the Company stepped up its efforts in developing the “Haixue” online learning platform, which has 1,639 online courses and more than 70 online special training sessions, 196 online and offline training courses, and 727 online exams. With the improvement of the curriculum, materials, exams and other modules of the platform, more employees took the initiative to participate in online and mobile learning. The platform enables employees to learn through more channels and to build a learning culture within the Company.

To raise employees' safety awareness and enable them to identify and actively prevent safety risks in the workplace, the Company developed a systematic safety training course. Special training on safety was carried out on the “Haixue” platform for all employees, including 2 compulsory courses and 8 elective courses, each of which had 10 safety knowledge questions. Over 15,000 employees took and passed the test, and more than 93% of employees were trained and achieved the expected goals. Online training greatly reduced training costs, improved training efficiency, covered more employees and achieved better training results.

### **Cultivating International Experts**

In 2018, based on the international talent demands, and guided by the *13th Five-year Plan*, we formulated training and exchange programs in various forms to improve the business and management capabilities of expatriate employees and overseas support teams. With the help of our subsidiaries and overseas institutions, we 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 expatriates 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 international and domestic employees.



Based on national policies, we continued to promote our plan to cultivate “international leaders and core talents”, combining strategic opportunities for external development with current needs for talents. We carried out talent training in cooperation with universities in China and abroad. In 2018, we selected the second batch of 11 leading international experts, 4 of whom studied at the University of Texas, Austin for one year, and the remaining 7 participated in leading talent training for the Belt and Road Initiative by the National Development and Reform Commission. We continued to train the first batch of leading international experts selected in 2017, of whom, 35 participated in a 17-day training program held at the National Development Institute of Peking University. We have actively cultivated key experts in international business and high potential talents to serve the future development of the Company.

## Employee Health

CNOOC Limited complies with *the Production Safety Law of the People's Republic of China, Law of the People's Republic of China on Prevention and Control of Occupational Diseases, Fire Prevention Law of The People's Republic of China* and relevant laws and regulations of host countries and regions overseas. The Company continued to improve our occupational health management system. We took active measures to control noise hazards in the offshore operational environment, made further use of occupational health management information systems, and applied hierarchical management to achieve full coverage occupational health surveillance and regular monitoring of hazards that could lead to occupational disease.

We actively prevent and control occupational health risks from the source, make pre-assessment for occupational health risks. We would design and inspect on-site occupational health facilities to improve our occupational health management in the workplace. All subsidiaries are requested to make full use of our occupational health management information system to designate priority levels in occupational risk control for positions, to guide the identification of key workplaces, workforces, positions and type of risks, then implement effective targeted prevention and control.

The Company has continued rolling out stress management and mental health services for employees working in offshore facilities. We have invited professional mental health service institutions to give lectures on psychology, established psychological stations, extended on-site psychological behavioral training, and offered individual on-site psychological counseling and online services in offshore facilities to track and monitor employees' mental stress. The Company identifies employees with higher stress levels, actively intervenes and helps them reduce such stress, which is positively recognized by employees working in offshore facilities.

## Staff Care

CNOOC Limited takes good care of its employees and follows the concepts of "people-orientation" and "mutual development with employees" in practice. In order to help employees maintain their work-life balance, the Company offers paid vacations and home leaves, and also encourages employees to take vacations. Besides, the Company also grants a one-time settlement subsidy and comprehensive allowance and provides temporary dorms for migrant employees. We have "Mommy's Caring House" for breast-feeding female employees to keep them safe, healthy and happy.

### **The 11th Group Wedding for Youth group in the Bohai Oilfield**

In 2018, we organized a group wedding in the Bohai Oilfield. A total of 21 couples gathered and received blessings from crowds and employees of the Company. Charity events were carried out during the wedding as well. So far, the group wedding in Bohai Oilfield has been held for 11 consecutive years, creating happy memories for more than 500 young people, which has become a cultural highlight of the Bohai Oilfield.

### **The 2<sup>nd</sup> “Employee and Family Open Day”**

At the end of November 2018, the Tianjin branch held the 2<sup>nd</sup> "Employee and Family Open Day". Nearly 100 employees and their families participated in the event. The event aims to create a communication channel between the branch, employees and their family members. The participants visited the offshore engineering exhibition hall and HYSY 921 drilling platform. Science lectures and family interaction activities also helped to raise awareness of the corporate culture of the branch.

### **The Zhanjiang branch extended all-around care to employees**

The Zhanjiang branch provides all-around care to employees for birthdays, illness, weddings and childbirth. In 2018, the branch visited 2,888 employees and gave out RMB 1.32 million. In the hot summer season, the labor unions of various units were organized to carry out “Cooling and refreshing” activities, and offered RMB 268,000 of heatstroke prevention and cooling items to 1,380 front-line employees.

### **The Shenzhen branch held 2018 Regional Games**

On November 30, 2018, the Shenzhen branch hosted the Eastern South China Sea Games, which were attended by 33 teams formed by nearly 3,000 domestic and overseas employees from Shenzhen and Guangdong. The event included track and field competitions, fun sports and other activities. The games not only provided an opportunity for employees to enjoy fitness, but also attached importance to employee participation and demonstration of CNOOC Limited spirit. This biennial sports meeting is an important event for the Shenzhen branch to carry out the “Healthy Company” program and improve employees’ physical fitness, and instill the concept of “Participation, fitness and healthiness” in every employee.

### **The Shanghai branch held a series of cultural activities for female employees**

On March 6, 2018, the Shanghai branch organized a series of cultural activities for female employees, with content including scarf and dress making and women’s health. These activities helped to strengthen protection of the rights and

interests of female employees, and build a connection between the branch and employees.

## Social Contributions

While creating economic benefits from natural resources, CNOOC Limited shares value with society, which provides resources, opportunities and profits for our businesses. The Company has actively undertaken social responsibilities, aiming to become a driving force for progress among stakeholders together with society. In pursuit of sustainable development and to maximize environmental, social and economic benefits, we share resources with all parties in society.

Over the years, the Company and our subsidiaries have used our advantages in education, medicine and health, maritime rescue, marine environmental protection and community development to benefit society. The Company delivers on our commitment to serve society, contribute to social harmony, and benefit the people. In 2018, the Company donated RMB 22.95 million for public welfare.

## Economic Contributions

In 2018, our production and operations progressed steadily. Oil and gas production was in line with expectations. 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 2018, the Company recorded oil and gas sales revenue of RMB 185.9 billion with a net profit of RMB 52.7 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 2018, our all-in cost was USD 30.39 per BOE, which decreased by 6.61% year-over-year.

In 2018, the Company's tax payments (refers to paid-in tax in the year, including income tax, value-added tax, royalties, resource tax, etc.) reached RMB 44.0 billion, and more than 18,000 jobs were created globally, supporting local economic and social development.

## Maritime Rescue

When carrying out offshore operations, the Company keeps a close watch on the sea. We utilized our advantages in equipment and field professionals to collaborate in maritime and humanitarian rescues around the world. We also cooperated with government departments in maritime emergency rescue to fulfill our social responsibilities, helping protect ships, property, and the lives of people at sea.

In 2018, the Company participated in 41 maritime searches and rescues. We mobilized altogether 46 ships and 10 helicopter flights, and rescued 41 people and 13 ships. Those endeavors received formal praises for 6 times from the public. The Shanghai branch was recognized as a “Marine Search and Rescue Pioneer” by the Zhejiang Provincial Search and Rescue Center.

	Tianjin branch	Zhanjiang branch	Shenzhen branch	Shanghai branch
Rescue missions	23	8	3	7

Ships mobilized	249	67
Helicopters mobilized	8	0 02
People rescued	2014	61
Ships rescued	4	3 24

**The Tianjin branch successfully rescued 20 people at sea**

In 2018, the Tianjin branch made 24 sea trips and 8 helicopter flights in 23 rescues, and successfully rescued 20 people and helped 4 vessels in distress.

At 23:06 on August 14, a ship was found in distress 10 nautical miles to the east of the Nanpu 35-2CEP platform due to flooding water in the bilge. The Binhai 286 ship and Jingcheng 666 ship of the Tianjin branch, overcoming harsh sea conditions against strong winds and swells, arrived at the position of the ship in distress and successfully rescued 2 people.

At 4:08 on August 15, a fishing boat near the Chengbei Oilfield sank. Runhai 241 ship rushed to the site and rescued all 3 crew members. At 16:11 on the same day, a sand carrier on the north side of the anchorage at Huanghua Port made a distress call. Runhai 241 ship went into rescue mission and saved 4 people in distress and transferred them to land.

At 20:10 on August 15, the Tianjin branch received a distress call and issued instructions to the HYSY 642 ship working nearby to go for rescue at full speed. They successfully rescued 6 people.

**The Shenzhen branch rescued drifting boat and seriously injured crew**

On June 28, the Shenzhen branch received a notice from the Traffic Control of Bureau of Maritime Affairs that a fishing boat had lost its power in the waters near the Zhentou Rock, drifting with the wind and requesting assistance. The Shenzhen branch immediately sent the Detong standby ship to conduct search and rescue. They found the ship, successfully rescued 4 people on board, and safely escorted the ship back to Huizhou Wharf.

On September 17, the Shenzhen branch received a call from the Search and Rescue Center of the Huizhou Maritime Safety Administration that the Qinfeng 227 ship had been hit by the super-typhoon Mangkhut. Two crew members were seriously injured. The branch immediately dispatched HYSY 681 ship to No. 7 Huizhou Anchorage, and they successfully rescued 2 seriously injured crew members and safely transferred them to the Sea Patrol 0938 ship. The survivors were sent to the hospital for treatment. The rescue bought valuable time for their medical treatment.

## Public Welfare

### Targeted Poverty Alleviation

2018 was a crucial year for China's fight against poverty. To implement the national action on targeted poverty reduction and alleviation, the Company focused on six tasks: strengthening grassroots organizations, developing collective village economies, increasing farmers' income, improving infrastructure conditions, perfecting grassroots governance mechanisms and cultivating townships. All subsidiaries of the Company actively coordinated the support of funding, projects, and technology, which helped to promote local economies. Integrating poverty alleviation with knowledge and intelligence support, we focused on enticing villages' internal drive for development. We also fully utilized our advantages as a business to promote "one village, one strategy" and "one village, one product", considering the actual situation of individual villages, with the aim to cultivate long-term development mechanisms by paring villages with supplementary advantages and achieve win-win cooperation.



### **The Tianjin branch transformed a village into a model for environmental protection**

In 2018, the Tianjin branch's poverty alleviation team cooperated with in Renfengzhuang Village in Qilihai Town, Ninghe District, Tianjin, to improve the sanitary conditions of the village surroundings, turning it into a "model village" for environmental management. In addition, the team repaired and upgraded a road about 1.4 kilometers long under the requirements of "Rural roads Qualified in 4 aspects". After the main route was completed and put into use in mid-December, transportation has become much more convenient for the villagers.

### **The Zhanjiang branch took multiple measures to alleviate poverty**

The Zhanjiang branch stepped up in poverty alleviation during the year and carried out various supporting measures. In 2018, it invested RMB 12.45 million in poverty alleviation projects. During the year, it participated in a store renewal project and a photovoltaic power generation project for Shilong Primary School in Luxi Village to help villagers earn an income.

### **Community Building**

In 2018, the Company and its subsidiaries endeavored to fulfill the commitment to society and continued to provide a broad range of assistance in public infrastructure and community aid and made donations. We seek to participate in community life and boost its development, to protect and improve local livelihood. We take community building as our responsibility in giving back to society.

### **The Zhanjiang branch organized community medical checkups and treatment**

On October 27, 2018, the Zhanjiang branch collaborated with No. 2 Zhanjiang People's Hospital to carry out medical checkups and treatment in Gantang Town, ensuring the public to receive free medical services at their doorstep. Five doctors attended the activity and provided medical services for nearly 100 people.

### **The Shanghai branch aided road construction and donated to the needy**

In 2018, the Shanghai branch rendered road construction in Linkong Business Park in Changning District, Shanghai, and worked with the Weidong Village, Shanyang Township, Jinshan District, Shanghai, on charitable activities. In

addition, Lishui Operation Company donated to needy villagers and assisted them during the Spring Festival. In 2018, the Shanghai branch donated a total of RMB 118,000 for community building activities.

It is a tradition of the Company to establish harmonious relationships with local governments and residents. In addition to following disciplines applicable to our businesses, we study local customs and habits and respect residents religious beliefs and behaviors. Through deepening understanding and exchanges, we gradually establish mutual trust and reciprocal relationships with local governments and communities, which has paved the way for us to proceed more smoothly at various locations.

**The Iraqi subsidiary cooperated with the Iraq government to implement social contribution projects**

The Iraqi subsidiary actively implemented social contribution project aiming to assist local development. In 2018, the subsidiary continued to carry out infrastructure construction in Missan Province, upgrading power grids and building public facilities such as roads, bridges, schools, and sewage pipes. In addition, the subsidiary visited local residents and the government more extensively, and offered assistance and help as needed.

**The North American subsidiary donated to a friendship centers in northern Alberta**

National Indigenous People's Day, an opportunity to learn the culture and traditions of indigenous people, is celebrated in Canada on June 21 each year. Our North American subsidiary set up a Community, Counseling and Aboriginal Relations (CCAR) team which has regularly worked with communities where native populations are present. The subsidiary believes that native communities should share the economic benefits of the subsidiary, and therefore donated to the Nistawoyou Friendship Center and Lac La Biche Canadian Native Friendship Center, helping friendship centers continue to provide support programs and services to indigenous people.

**Humanitarian assistance by the Southeast Asian Subsidiary recognized by the Indonesian Ministry of Energy and Mineral Resources**

On December 17, 2018, the Husky CNOOC Madura Limited (HCML), a subsidiary of our Southeast Asian subsidiary, along with several other companies, won several awards from the Indonesian Ministry of Energy and Mineral Resources. These awards were presented by the Indonesian Minister to recognize HCML's humanitarian assistance activities. On September 28, 2018, HCML assisted survivors of the Palu and Tongara earthquakes and tsunami in central Sulawesi. In coordination with the Indonesian Oil and Gas Industry Task Force (SKK Migas), HCML donated funds and goods to survivors.

## Charitable Donations

CNOOC Limited has actively worked to diversify its philanthropic activities. We played the role of a charity funder to create social benefits and impacts by leveraging the Company's resources, while organizing employees to participate in philanthropic activities.

### **The Shenzhen branch donated to Changpo Primary School, Kaili City, Guizhou Province**

In December 2018, the Shenzhen branch once again visited Changpo Primary School in Kaili City, Guizhou Province. 119 employees of Shenzhen branch donated money and properties worth RMB 65,600 in total to help 119 poor students. Since the donation for constructing the teaching building in Changpo Primary School in 2006, the Shenzhen branch has supported the school for more than ten years. Up to now, more than 2,000 students have graduated from Changpo Primary School and moved on to a broader life stage with the help of the Shenzhen branch.

### **The Uganda subsidiary set up an “Excellent Scholarship Award” for outstanding students**

In 2012, the Uganda subsidiary launched an “Excellent Scholarship Award” in Hoima District, providing cash rewards to the top 90 students in local primary and secondary schools. As of 2018, the award scheme has benefited more than 630 local students. According to the statistics from the Hoima Regional Education Bureau, thanks to this award, students in all targeted grades have significantly improved their academic performance.

### **The North American subsidiary provided funds to Yemeni students**

Since 1998, the North American subsidiary has participated in the Yemen International Student Scholarship Program to help students there obtain higher education degrees. Up to 2018, The North American Subsidiary Yemen Scholarship Scheme had awarded 130 scholarships and benefited 117 students. Awardees have obtained degrees in various fields including Information Technology, Engineering, Business and Medicine.

### **The North American subsidiary raised \$30,000 in its annual cycling activity**

In August 2018, the North American subsidiary participated in a cycling activity, raising about US\$ 30,000 for the Calgary Heart and Stroke Foundation. The subsidiary has participated in large-scale cycling events for five years. Senior leaders such as Mr. Quinn Wilson, CEO of the North American subsidiary, and Ms. Geng Jie, Senior Vice President, took part in the activity. By the end of 2018, the subsidiary had raised more than US\$ 133,000 through the annual event for medical research on heart disease and strokes, helping more than 45,000 patients each year.

## Employee Volunteers

CNOOC Limited regards employee volunteer activities as an important way for the Company to fulfill its social responsibilities and strengthen stakeholder communications. In 2018, a number of subsidiaries of the Company organized employee volunteer activities, including caring for students and environmental protection, to spread social responsibility concept among employees and enhance employee identity with the Company.

### **Various environmental protection activities forging the Company's Blue Force**

Every year, all units of the Company carry out environmental protection activities themed as the “Blue Force”. Activities take various forms to act out the theme, displaying that the Company is taking responsibilities and making commitment to protecting the marine environment. In 2018, volunteers from the Company went to schools, beaches, and museums to spread the idea of environmental protection and demonstrate the “Blue Force” forged by CNOOC Limited.

- Every year, volunteers from the Tianjin branch give environmental protection lectures, release marine animals and clean beaches. In October 2018, the Tianjin branch invited near 190 teachers and students from elementary and middle schools in Beijing and Tianjin, 50 representatives from Tianjin University and 100 young volunteers to participate in the 7<sup>th</sup> Coastal Environmental Protection Activity, in which volunteers experienced and spread the concept of "Blue Bohai".

- The Zhanjiang branch organized “Blue Force” youth volunteer activities to promote calligraphy and offshore petroleum science in class. In October 2018, the Zhanjiang branch recruited over 20 volunteers from the Zhanjiang Municipal Party Committee Publicity and Communications Department and Zhanjiang Youth Calligraphers Association to teach calligraphy to 600 students from 13 classes at Haidong Primary School. Also, we organized 60 teachers and students to visit the Nanyou Underground Palace and rock core repository.

- In November 2018, employees of the Shenzhen branch organized a “Blue Force” charity activity in Dingtai Experimental Primary School in Nanshan District, Shenzhen. The volunteers deepened the students’ understanding of the offshore oil industry with physical models and educational science videos.

- In June 2018, on the eve of World Oceans Day, five “Blue Force” volunteers from the Shanghai branch came to interpret marine life science at the Shanghai Natural History Museum to Shanghai residents and students from primary and secondary schools. Volunteers also appealed to the public to protect the ocean and care for the natural environment.

- During the "Lei Feng Month" in 2018, the “Blue Force” volunteer team of the Beijing Research Center visited Baijiaquan Primary School in Yangyuan County, Zhangjiakou to donate 15 bags of clothing and 11 boxes of books and stationery. They also discussed future aid plans with the school and Education Aid Office of the local Education Bureau. In November 2018, Beijing Research Center again donated six boxes of spare clothes, children's books and daily necessities, as well as some stationery purchased using employee donations, to Baijiaquan Primary School. Three of the volunteers gave 3 lectures to left-behind children whose parents work away from their hometown,

introducing geographic and biological knowledge of oceans, oil and gas formation processes, offshore oil and gas development and mining methods to the class.

### **The Southeast Asian subsidiary planted trees on World Environment Day**

On World Environment Day in 2018, HCML once again demonstrated its commitment to the environment and sustainability by planting 12,000 mangrove seedlings on the shores of Samare in the Pasuruan Regency District of East Java – an annual event of HCML on World Environment Day since 2014. Since then, HCML has altogether planted 20,000 mangrove seeds along the coast of Semare Village, including 8,000 seedlings planted in 2017.

### **The Zhanjiang branch initiated a variety of volunteer activities**

#### **Blood donations**

In 2018, 449 employees of the branch voluntarily donated blood, with a total of 134,700 ml collected. The branch was recognized as an advanced unit for blood donation in Guangdong Province and Zhanjiang City.

#### **Joint activities with Clear Water Blue Sky Volunteer Association**

In December 2018, the branch joined the Clear Water Blue Sky Volunteer Association to organize charity activities for the elderly. During the event, the volunteers visited nine seniors and three orphans, bringing care and happiness to them in winter.

#### **Caring for children**

The branch organized visits to more than 1,000 teachers and students in four kindergartens in the drilling area. In 2018, the branch made donations worth nearly RMB 40,000.

#### **Volunteers from the Shenzhen branch participated in beach-cleaning**

On World Environment Day on June 5, 2018, volunteers from the Shenzhen branch participated in a Shenzhen Bay volunteer beach-cleaning event. They cleaned up “white trash” which was not fully biodegradable, contributing to the environmental protection of the Bay Area.





## Prospects

Looking into 2019, the international and domestic macro-environment will be complicated and volatile. The global crude oil market will proceed with fluctuation. Under the new trends, CNOOC Limited will firmly adhere to the path of high-quality development, and fully commit to providing clean, reliable and stable energy to society.

With the goal of building a world-leading energy company, we will continue to further step up our efforts in oil and gas exploration and production. Adhering to our low-carbon development strategy, natural gas development and more opportunities of renewable energy such as offshore wind power will be explored. Our progress on digital transformation is accelerating to enable us to develop new driving forces for industrial growth and enhance our comprehensive value in the economy, environment and society.

In the year of 2019, the Company will continue to take health, safety and environmental protection as our top priority, abiding by the core HSE value of “Safety First, Environment Paramount, People Orientation, and Equipment Integrity”. We will further improve the safety management system and safety culture building and have the safety production responsibility rest on everyone’s shoulder. Prevention and control of safety risks in key areas, important operational processes and major issues will be enhanced to lay a firm foundation for safe production.

As a driving force of sustainable development, we always give priority to environmental protection and green development, and implement the idea of low-carbon development throughout the life cycle of oil and gas exploration and production. We will promote energy conservation and emission reduction through continuous technological innovation and management upgrades to establish a full-scale low-carbon management system. Meanwhile, we will strengthen water management and improve water consumption efficiency, attach much importance to the bio-diversity protection around our operation areas and actively fulfill our environmental responsibility through diverse endeavors.

As for social responsibility, we will consistently uphold the philosophy of win-win cooperation, to implement a transparent and efficient corporate governance, and continuously improve management standards for the mutual development of the Company and our stakeholders. Meanwhile, we will actively participate in community building, fulfill our social responsibilities and contribute to the long-term development of communities. We are and will be enforcing the strategy of mutual development with employees, and improve employees’ sense of accomplishment, happiness and security, to achieve growth for the Company, employees and communities.

A new year starts, and the world is rejuvenated. Standing at the new starting line of high-quality development, CNOOC Limited will start a new journey towards development of green and low-carbon energy with determination and courage. With our continuous hard works and efforts, we look forward to writing a new chapter on the

“dream-seekers” of offshore oil.

## Key Performance Data

<b>Indicator</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Total assets (million RMB)	637,681	617,219	678,779
Net assets (million RMB)	382,371	379,975	417,365
Total revenue (million RMB)	146,490	186,390	226,963
Net profit (million RMB)	637	24,677	52,688
Tax payment <sup>1</sup> (billion RMB)	23.7	37.2	44.0
Earnings per share (RMB)	0.01	0.55	1.18
Net production of the year <sup>2</sup> (million BOE)	476.9	470.2	475.0
Net proven reserves (billion BOE)	3.88	4.84	4.96
Dividend per share (HKD)	0.35	0.50	0.70
Crude oil consumption (thousand tons)	313.9	323.2	324.1
Natural gas consumption (billion cubic meters)	1.732	1.766	1.881
Diesel consumption (thousand tons)	25.1	28.3	29.4
Electricity consumption (million kWh)	132	150	203
Energy saving (tons of standard coal equivalent)	159,416	155,299	165,148
Comprehensive energy consumption per ton of production (tons of standard coal equivalent/ton)	0.0470	0.0494	0.0515
Direct total GHGs (million tons CO <sub>2</sub> equivalent)	6.735	7.736	7.345
Indirect Total GHGs (million tons CO <sub>2</sub> equivalent)	0.360	0.093	0.135
Total GHGs (million tons CO <sub>2</sub> equivalent)	7.096	7.829	7.480
GHGs per ton of production (tons CO <sub>2</sub> equivalent/ton)	0.1200	0.1409	0.1328
Non-hazardous waste (tons)	14,647	16,490	13,970
Hazardous waste (tons)	20,101	22,326	29,426
Fresh water consumption (million tons)	1.879	1.813	1.859
Fresh water consumption per ton of production (cubic meters/ton)	0.0335	0.0332	0.0335
Water saving (thousand tons)	113	88	108
Number of employees	19,436	19,030	18,312
Number of female employees	2,514	2,605	2,846
Total training hours (hours)	920,576	1,084,229	1,235,644
The rate of occupational health examination (%)	100	100	100

<sup>1</sup>Tax payment refers to paid-in tax in the year, including income tax, value-added tax, royalties, resource tax, etc.

<sup>2</sup>Unless otherwise stated, all amounts of reserve and production in this report include our interests in equity investments.

## ESG Reporting Guide Index

Subject Areas, Aspects, General Disclosures and KPIs	Locations in the Report	External Verification
A: Environment		
Aspect A1: Emissions		
General disclosure	P41 P49-52	Yes
A1.1 The types of emissions and respective emissions data.	P41	Yes
A1.2 Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P50	Yes
A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P41	Yes
A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P41	Yes
A1.5 Description of measures to mitigate emissions and results achieved.	P49-P50	Yes
A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	P41	Yes
Aspect A2: Use of resources		
General disclosure	P42-P43 P47-P48	Yes
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).	P47	Yes
A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P42	Yes
A2.3 Description of energy use efficiency initiatives and results achieved.	P47-P48	Yes

A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	P42-P43	Yes
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	N/A	N/A
Aspect A3: Environment and natural resources			
General disclosure		P29-P30 P43-P45	Yes
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P43-P46	Yes
B: Society			
Employment and Labor Standards			
Aspect B1: Employment			
General disclosure		P56	Yes
B1.1	Total workforce by gender, employment type, age group and geographical region.	P56	Yes
B1.2	Employee turnover rate by gender, age group and geographical region.	P56	Yes
Aspect B2: Health and safety			
General disclosure		P35 P63	Yes
B2.1	Number and rate of work-related fatalities.	P35	Yes
B2.2	Lost days due to work injury.	P35	Yes
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	P63 Aspect B3: Development and training	Yes
Aspect B3: Development and training			
General disclosure		P59 -P61	Yes
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P59	Yes

B3.2 The average training hours completed per employee by gender and employee category.	P61	Yes
Aspect B4: Labor guidelines		
General disclosure	P55	Yes
B4.1 Description of measures to review employment practices to avoid child and forced labor.	P55	Yes
B4.2 Description of steps taken to eliminate such practices when discovered.	--	N/A
Operational practices		
Aspect B5: Supply chain management		
Aspect B5: Supply chain management General disclosure	P16	Yes
B5.1 Number of suppliers by geographical region.	P16	Yes
B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	P16	Yes
Aspect B6: Product responsibility		
General disclosure	P14-P15	Yes
B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	--	N/A
B6.2 Number of products and service related complaints received and how they are dealt with.	P15	Yes
B6.3 Description of practices relating to observing and protecting intellectual property rights.	P14	Yes
B6.4 Description of quality assurance process and recall procedures.	P15	Yes
B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	--	N/A
Aspect B7: Anti-corruption		
General disclosure	P26	Yes

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.	--	N/A
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P26	Yes
Community			
Aspect B8: Community investment			
General disclosure		P67-P76	Yes
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	P67-P76	Yes
B8.2	Resources contributed (e.g. money or time) to the focus area.	P67-P76	Yes

## Feedback

Dear readers,

Thank you very much for reading the 2018 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

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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

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