

# 2023

Environmental, Social and Governance Report

海洋石油工程股份有限公司  
Offshore Oil Engineering Co.,Ltd.

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Offshore Oil Engineering Co.,Ltd.

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# About This Report

This report presents the efforts and achievements of Offshore Oil Engineering Co., Ltd. (hereinafter referred to as "Offshore Oil Engineering", "COOEC", "the Company", or "We") in implementing the ESG (Environmental, Social, and Governance) principles in 2023, with the purpose to enhance communication and connections with stakeholders and to address their concerns and expectations.

## Reporting Period

- The period covered by this report starts from January 1, 2023 to December 31, 2023. Some content extends beyond this scope.

## Scope of Reporting Organization

- Unless otherwise indicated, this report is concerned with Offshore Oil Engineering Co., Ltd. and its subsidiaries.

## References

- This report is prepared in accordance with relevant guidelines set forth in the Guiding Opinions on State-owned Enterprises Fulfilling Social Responsibilities Better issued by the State-owned Assets Supervision and Administration Commission of the State Council, the Research on the Preparation of ESG Reports for Central Enterprises Holding Listed Companies, the Guidelines of the Application of Self-Regulation Rules for the Listed Companies on the SSE STAR Market No. 1 – Regulated Operation by Shanghai Stock Exchange (SSE), the GRI Standards by Global Reporting Initiative, and the Sustainable Development Goals (SDGs).

## Data Source

- Unless otherwise indicated, all information and data referenced in this report is based on the Company's internal documentation or relevant public documents. This report has been reviewed and approved by the Company's Board of Directors. The Board of Directors of the Company warrants that this report contains no inaccurate records, misleading statements or major omissions.

## Currency

- Unless otherwise indicated, all monetary amounts are listed in RMB for this report.

## Access to the Report

- This report is available for reading and downloading at SSE website ([www.sse.com.cn](http://www.sse.com.cn)), the cninfo ([www.cninfo.com.cn](http://www.cninfo.com.cn)), and the official website of the Company ([www.cnoocengineering.com](http://www.cnoocengineering.com)).

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## | Message from Chairman

The year 2023 is the first year for fully carrying out the guiding principles of the Party's Twentieth National Congress, a crucial year for continuing to implement the "14th Five-Year Plan", and a milestone year for COOEC to overcome difficulties, win honors and achieve leapfrog development. COOEC attaches great importance to sustainable development, and integrates ESG into operation to help the Company develop with high quality and take new steps towards building a world-class enterprise.

### **COOEC' s Belief to Accumulate Strength and Achieve Steady Growth.**

We constantly transformed the theme education achievements into the actual results of the Company's high-quality development, tempered our political responsibility in the implementation, and resolutely shouldered the mission and responsibility of "ensuring national energy security and firmly grasping equipment manufacturing in our own hands". Actions to deepen and upgrade reforms have been taken in an all-round way. We also keep promoting company governance, operation management and control, and technological innovation. Value management was fully implemented, and the index of "one benefit and five rates" achieved increase in both quantity and quality. The Company won a series of important honors such as the "Gold Round Table" Award for the Board of Directors of Chinese Listed Companies for the first time, Excellent Practice Case Award of the Board of Directors, "Pegasus Award" for Investor Relations, and Top 100 ESG Awards.

### **COOEC' s Power to Forge Ahead and Strive for Excellence.**

Through lean management, we proudly debuted on both the ENR Top 250 International Contractors and the Top 250 Global Contractors lists, and successfully delivered large-scale overseas projects such as the Shell LNG project in North America. We have crafted outstanding projects such as the cylindrical Floating Production, Storage, and Offloading (FPSO) unit named "Lihua" and the Haiji-2 jacket platform. We have initiated the establishment of a technological innovation ecosystem focusing on "promoting one generation, researching one generation, and reserving one generation", achieving the transformation of 31 key outcomes throughout the year. We have achieved significant milestones in over 10 core technologies, including the development of deep offshore floating wind turbine platform and ultra-deep water pile hammer. We have strengthened our efforts in safety production, with a cumulative completion of approximately 95.6 million work hours, consolidating the foundation, upholding fundamental principles and breaking new ground.

### **COOEC' s Responsibility to Temper Our Mind, Keep Thinking, and Empower with Low Carbon Initiatives.**

We are committed to green development, anchoring our green development strategy, fortifying ecological protection measures, intensifying innovation in low-carbon technologies, and completing 39 annual tasks related to energy conservation and carbon reduction initiatives, such as "golden ideas", key energy-saving technical reform project, low carbonization in all scenarios, etc. In 2023, the comprehensive energy consumption intensity for per RMB 10,000 of output value was 0.0676 tce per RMB 10,000, and the carbon emission intensity for per RMB 10,000 of output value was 0.1760 metric tons per RMB 10,000. We are dedicated to providing excellent green and low-carbon solutions. Throughout the year, we have constructed a total of 33 LNG storage tanks, successfully connected the first domestic deep offshore floating wind turbine platform "CNOOC Guanlan" to the grid, and officially commissioned the first domestic offshore carbon storage demonstration project, the Enping 15-1 central platform.

### **COOEC' s Sentiment to Care for the Community and Front-line Workers.**

We always uphold the fundamental principle of "serving the people", focusing on meeting the needs of our employees and implementing ten practical measures for "livelihood projects". We have launched "heart-warming projects" to improve the working environment in construction sites, enhancing employee satisfaction, sense of accomplishment, and happiness. We have provided industrial assistance in rural areas, and conducted charity events such as visits to Hope Primary Schools and charity sales, with an investment of RMB 2.63 million, actively fulfilling our responsibilities as a central government enterprise.

In the new era, COOEC will continue to improve our ESG governance structure and related policies, enhance our ESG performance, collaborate with stakeholders to achieve high-quality development, and accelerate the pace of building a world-class enterprise.

# ABOUT COOEC

Organizational  
Structure

Business Layout

Company Profile

Strategy and Culture

Achievements in 2023

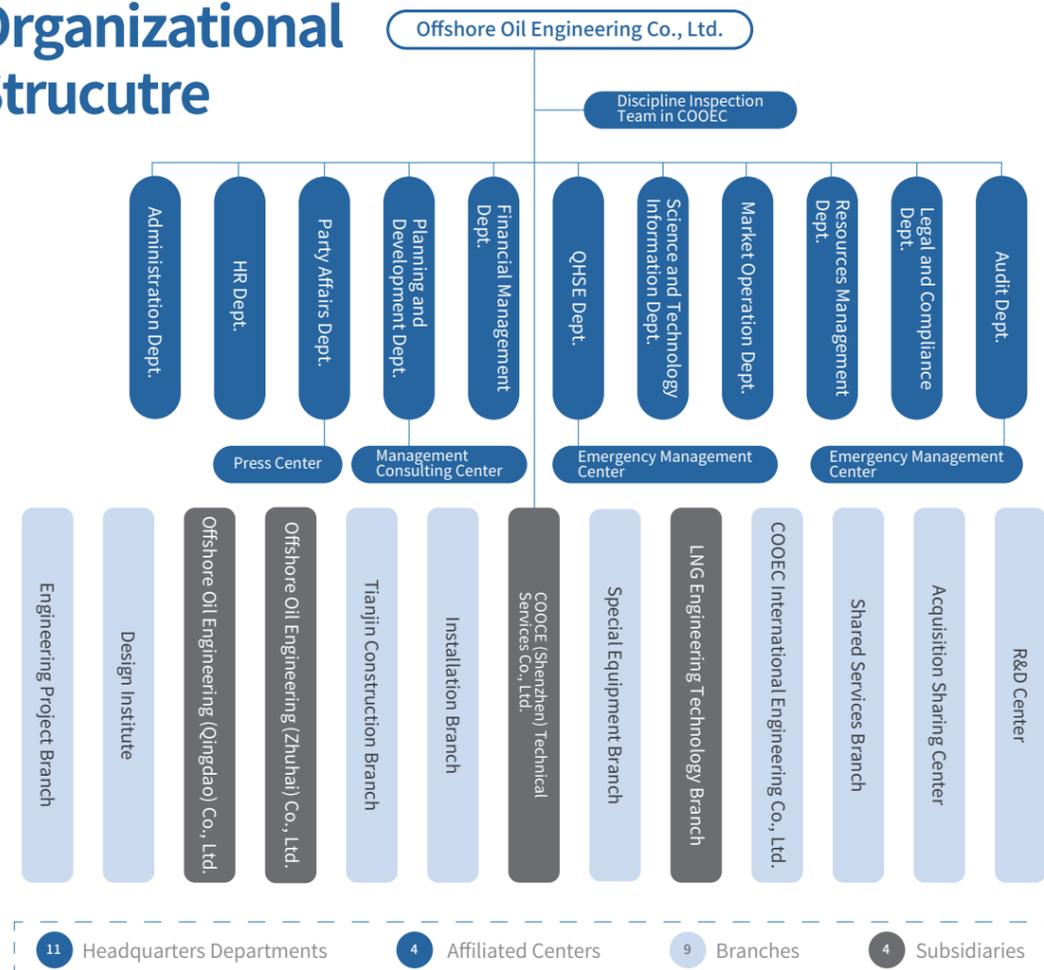


## Company Profile

Offshore Oil Engineering Co., Ltd. (hereinafter referred to as "COOEC") is the only large-scale EPC company in China that integrates the design, land manufacturing and offshore installation, commissioning and maintenance of offshore oil and gas development projects, as well as liquefied natural gas and refining and chemical projects. It is also one of the largest and most powerful EPCI (design, procurement, construction and installation) contractors of offshore oil and gas projects in the Asia-Pacific region. The Company is headquartered in Binhai New Area, Tianjin. It was listed on the Shanghai Stock Exchange in February 2002 (COOEC, stock code: 600583).

The Company currently has 9,755 employees, and has built an all-round, multi-level, and wide-ranging professional team competent for EPCI projects. It has the world-class qualifications and has established the operating procedures and management standards in line with international standards. The overall design level of the Company has reached the advanced design level in the world. The Company possesses the large offshore engineering manufacturing bases in Tanggu, Tianjin City, in Qingdao, Shandong Province, in Zhuhai, Guangdong Province, etc., with a total area of nearly 4 million m2. The layout of such bases stretches across the South China and the North China, involves the mutual supplementary functions, covers both the deep and shallow water areas and faces the whole world. The Company has a professional offshore construction fleet consisting of 19 vessels, including Class 3 dynamic positioning deepwater pipelay vessels, 7,500 metric tons crane vessels and other vessels, so that the offshore installation and pipe-laying capacity of the Company is in the leading position in Asia.

## Organizational Structure



## Strategy and Culture



**MISSION**

Empower the Future  
with Excellent Engineering



**VISION**

To Build a World-Leading  
Offshore Energy  
Engineering Company



**CORE VALUE**

Commitment  
to Excellence, Innovation  
for Sustainability



**EMPLOYEE CODE OF CONDUCT**

Persist in Truth and  
Pragmatism, Excel in  
Action and Results

## Business Layout

COOEC has clearly defined the development strategy of "taking the development of the EPCI capacity as the only core with design as the main driving factor, the operation management capacity and the technology leading capacity as the two bases, the internationalization, deepwater engineering and new industrialization as the three development directions, and the talents, markets, costs, risk control and information construction as the five important aspects". It has systematically formed ten core equipment, including "large-scale pipe-laying crane vessels", "1,500 m deep-water operating ROV series", "construction site equipment", and ten core technologies, including "deepwater floating platform technology", "underwater system and product technology", "ultra-large offshore facility and module technology", The Company has successively provided high-quality products and services to many Chinese and foreign owners, such as CNOOC, ConocoPhillips, Shell, Saudi Aramco, Petrobras, Technip, MODEC, FLUOR, with its business in more than 20 countries and regions.

## Achievements in 2023

2023 Highlights			
Reduction of GHG emissions <b>11,789.01 tCO2e</b>	Investment in environmental protection <b>RMB 47.2627 million</b>	R&D investment intensity <b>3.86%</b>	Overall labor productivity <b>RMB 771,300 /man-year</b>
Rural revitalization investment <b>RMB 2.63 million</b>	Number of participants of anti-corruption training <b>3,000</b>	Cumulative number of investors received <b>509</b>	Return on Assets (ROA) <b>6.22%</b>
Coverage rate of training on safety risk protection <b>100%</b>			

# Honors & Awards

## January

The project "Upgrade Technology and Application of Construction Equipment and Operational Capability for 3000-meter Deepwater Heavy Pipe-laying Vessels" was awarded the First Prize for 2023 Science and Technology Progress by China Association of Petroleum Engineering Construction

## February

The Zhejiang LNG Terminal Phase II Project was honored with 2022-2023 National Quality Engineering Award

## May

Received the 14th "Pegasus Award for China Listed Companies Investor Relations"

## June

Won the "Scenario Innovation Award" in China Association for Public Companies' "2023 Typical Cases of Digital Transformation of Listed Companies"

## Augusts

Landed on two ENR lists, ranking No.68 among "Top 250 Global International Contractors" and No.98 among "Top 250 Global Contractors"

## September

Won the Third "ESG Top 100" China Listed Companies by Securities Times and was included in the "Securities Times ESG Top 100 Index" (931253.CSI)

Honored as one of the "2022 Top 100 Health Index of Chinese Listed Companies" issued by China Association for Public Companies.

Received the "Outstanding Contribution Award" for 2023 Shell China Supply Chain Development

## December

Included in the Top 50 List of "2023 Excellent ESG Cases of Chinese Corporates" by the Forum on "High-Quality Development and Corporate Social Responsibility in China"

The short film "Jam's Oil Dream in Africa" received the "Belt and Road" Special Award at the Fifth Global Chinese Lifestyle Short Video Competition

## November

Honored as one of the "Top 100 Valuable Main Board Listed Companies" in the 17th China Listed Companies Value Selection

Honored as a "2023 Excellent Case for BOD Practice of Listed Companies" in China Association for Public Companies' "2023 Best Practices Creation Activity for Listed Companies' Boards of Directors"

Won the Silver Award in National Competition and Benchmark Competition Finals of the 6th "Blooming Cup" 5G Application Competition

Recognized with the "Golden Disclosure Award" by China Securities Journal

## Special Topic

### Charting the Ten-Year Journey of the "Belt and Road" Initiative

As 2023 marked the 10th anniversary of the "Belt and Road" Initiative, COOEC has proactively responded to the Initiative in the past decade by engaging in extensive cooperation and exchanges with 31 countries and regions along the "Belt and Road", undertaking nearly 70 projects with a total contract value exceeding RMB 20 billion. These super projects have not only burnished the "Made in China" brand but also contributed significantly to the energy development and high-quality socioeconomic progress of countries along the "Belt and Road".

#### Exquisite Projects Craft a Golden Name of "Made by COOEC"

In the past decade, COOEC has successfully delivered a series of globally influential projects, including the Yamal Project in Ruassia, Zawtika 1B Project, and the LNG project in Hong Kong. The Company has been shortlisted as a FPSO EPC contractor by Petrobras and Saudi Aramco's LTA, advancing into hot markets like South America, the Middle East, and Southeast Asia. Its outstanding engineering performance has gained high recognition both domestically and internationally, marking "a significant step" towards transitioning from an international engineering subcontractor to an international engineering contractor, while paving a way that suits its own international development strategy.



The Yamal LNG Plant:

it represents a pioneer for Chinese enterprises to independently complete the construction of international LNG core process modules.



The Kingfisher EPC3 Project in Uganda marks the country's first commercial oil and gas discovery.



#### Local Management Ensures the Smooth Development of Overseas Operations

Over the past decade, the Company has established a comprehensive overseas market operation and management system. In terms of overseas expansion, the Company has established three major overseas regional centers in Europe and America, Asia-Pacific, and the Middle East and Africa, focusing more sharply on the strategic objectives of overseas development. In terms of market strategy, the Company has formulated an overall market development strategy of "1-3-8-33", making the implementation path of overseas development clearer. Regarding risk prevention and control, the Company has identified 20 major risks across six aspects, formulated the Overseas Project Risk Prevention and Control Guide, and established a full-process risk management system from market bidding to project execution. These improvements in systems and mechanisms have made international development more robust, response times more agile, and risk management more precise.



#### Sincerity Nurtures the Flower of International Friendship

Over the past decade, COOEC has not only propelled the economic and social development of countries along the "Belt and Road" with outstanding engineering achievements, but has also actively engaged in charitable donations, free clinical treatment and other activities to help improve the lives and income of local residents, nurturing the "flower of friendship" with genuine care.



The decade of challenges and trials have filled the future sail of COOEC with strong favorable winds. Facing the constantly emerging new changes, challenges and opportunities, the Company is confident, determined and steadfast in strengthening its presence in overseas markets. In the next decade of the "Belt and Road" Initiative, it aims to achieve even greater accomplishments!

#### Uganda Kingfisher EPC3 Project:

Local recruitment in rural areas has provided employment opportunities for **50** local residents

with the local labor proportion reaching **97%** in the project.



#### Experiential "Summer Camp" for Saudi Arabian Students:

Twelve Saudi Arabian students immersed themselves in COOEC to broaden their international perspectives, enrich experiences, enhance professional knowledge, and improve their project management skills.

#### Uganda Kingfisher EPC3 Project:

Collaborating with the 22nd Chinese medical aid team to Uganda, a free clinical service was organized at the Buhuka Medical Center in the Kingfisher field, providing proper treatment or effective advice to over 400 patients.



# ESG MANAGEMENT

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ESG Governance

Stakeholder Engagement

Materiality Analysis

# ESG Management

COOEC actively responds to national policies by integrating ESG concepts into the Company's production and operations, and proactively exploring the path of sustainable development.

## ESG Governance

COOEC attaches great importance to ESG management and has gradually improved its ESG management level. The Company actively explored ESG governance frameworks, strengthened ESG performance management, enhanced the ESG awareness and capabilities of all employees, and reinforced its ESG brand image. ESG concepts have been integrated into the Company's production and operation to facilitate its sustainable development.

### ESG Performance Management

The management of COOEC has signed Business Performance Responsibility Agreements to incorporate ESG indicators into business performance assessments that cover dimensions such as safety management, quality management, occupational health, technological innovation, digital transformation, and the commercialization of technological project outcomes. In cases of unsatisfactory performance or failure to meet the bottom line of key indicators, the entire performance bonus for the year would be deducted.

### ESG Capability Enhancement

In order to implement policies and requirements of SASAC's Work Plan for Improving the Quality of Listed Companies Controlled by Central Enterprises and CSRC's Work Guidelines for the Investor Relations Management of Listed Companies (2022), COOEC focused on value creation to solidly promote high-quality development. The Company has fully implemented the new development concept and accelerated the establishment of a new development pattern. Experts in ESG were invited to give themed ESG training sessions concerning the current status and trends of ESG development, the ESG status in the petroleum refining industry, ESG strategic planning and risk management, ESG governance framework construction, ESG management cases, ESG report preparation, and information disclosure, so as to comprehensively enhance employees' ESG awareness. In 2023, the Company conducted two special ESG training sessions for the management and all employees, utilizing both offline and online methods across different locations.

Number of ESG training sessions  
**2**

Number of ESG training participants  
**76**

### ESG Image Building

COOEC actively enhanced its ESG brand image through official website, official WeChat accounts, special reports, and other means to strengthen ESG information disclosure. Meanwhile, the Company took a positive part in ESG-related best practice applications and award applications, shared its ESG management experience, and established a responsible brand image.

In 2023, COOEC garnered a widespread recognition by winning various awards, including the 1st CRHC Cup ESG Golden Bull Award - "Top 50 Carbon Neutrality Listed Companies in China", the "2023 ESG Best Practice of China Listed Companies" in 2023 Conference on Sustainable Development of Listed Companies in China, the "2023 Excellent ESG Cases of Chinese Corporates" by the Forum on "High-Quality Development and Corporate Social Responsibility in China", and the "Top 100 ESG Companies Award" at the 3rd China Listed Companies Award.

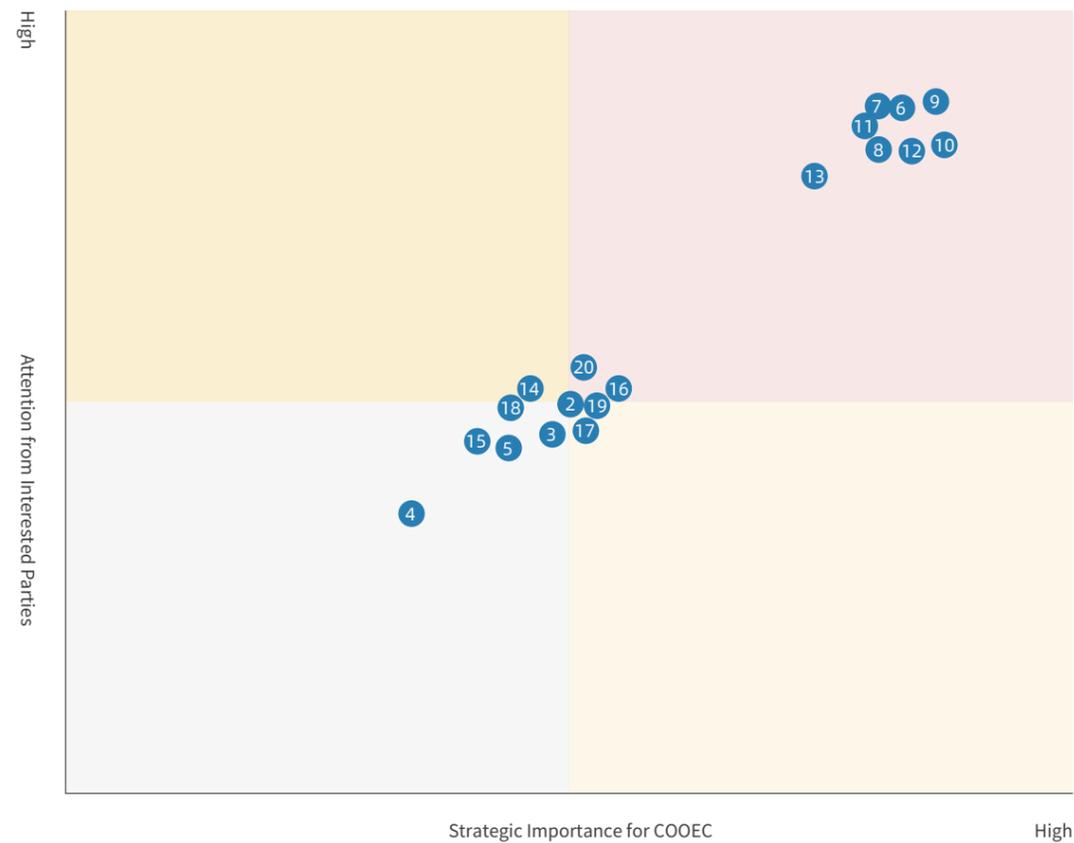
## Stakeholder Engagement

COOEC understands that sustainable development of the Company requires the support of all stakeholders. The Company has established a normalized communication mechanism for stakeholders to understand and respond to their demands through diverse communication channels, safeguarding the rights and interests of all stakeholders, and profoundly practicing environmental, social, and governance work.

Stakeholders	Expectations and Demands	Communication and Engagement Methods
 Government and regulators	<ul style="list-style-type: none"> <li>• Paying taxes in accordance with the law</li> <li>• Response to national policies</li> <li>• Regulatory compliance in business practices</li> </ul>	<ul style="list-style-type: none"> <li>• Special meetings and reports</li> <li>• Government dialogs</li> <li>• Work report</li> </ul>
 Shareholders	<ul style="list-style-type: none"> <li>• Financial performance</li> <li>• Guarantee of investors' rights</li> <li>• Risk Management</li> <li>• Sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>• General Meeting of Shareholders</li> <li>• Result presentations and announcements</li> <li>• Investor exchanges</li> <li>• Annual report and ESG information disclosure</li> </ul>
 Employees	<ul style="list-style-type: none"> <li>• Guarantee of rights and benefits</li> <li>• Performance and promotion</li> <li>• Training and development</li> </ul>	<ul style="list-style-type: none"> <li>• Labor union organization</li> <li>• Complaint and feedback box</li> <li>• Workers' Congress</li> </ul>
 Customers	<ul style="list-style-type: none"> <li>• Quality products</li> <li>• Information security</li> <li>• Integrity management</li> </ul>	<ul style="list-style-type: none"> <li>• Customer satisfaction survey</li> <li>• Daily contacts</li> </ul>
 Business partners	<ul style="list-style-type: none"> <li>• Anti-corruption efforts</li> <li>• Win-win cooperation</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic collaboration</li> <li>• Experience sharing</li> <li>• Contract negotiation</li> <li>• Business exchange meetings</li> </ul>
 Community	<ul style="list-style-type: none"> <li>• Charitable activities</li> <li>• Community economic development</li> <li>• Community cultural preservation</li> </ul>	<ul style="list-style-type: none"> <li>• Community events</li> <li>• Field research</li> <li>• Whistle-blowing and complaint hotline</li> </ul>

## Materiality Analysis

COOEC has followed the ESG requirements proposed by SSE in Chapter Eight "Social Responsibility" of Guidelines of the Application of Self-Regulation Rules for the Listed Companies on the SSE STAR Market No. 1 – Regulated Operation and the SASAC in the Work Plan for Improving the Quality of Listed Companies Controlled by Central Enterprises, as well as suggestions on relevant issues provided by the Reference System of Special ESG Reporting Indicators for Listed Companies Controlled by Central Enterprises, to collect topics and concerns of major stakeholders through questionnaire, business review and internal interviews. The topics were then analyzed and prioritized based on their importance levels to determine the Company's material topics in the areas of environment, society and governance. A total of 967 questionnaires were collected, with 20 material topics with significant impact on the Company identified. Please refer to the Material Topic Matrix for their importance ranking.



### Environmental

- 01 Resource and Environmental Management System Measures
- 02 Prevention and control of pollution
- 03 Resource consumption
- 04 Biodiversity
- 05 Combating Climate Change

### Social

- 06 Employees' Rights and Interests
- 07 Employee Training and Development
- 08 Employee Care and Assistance
- 09 Employee Health and Safety
- 10 Products and Services Management
- 11 Innovative Development
- 12 Supply Chain Security and Management
- 13 Social Contribution

### Governance

- 14 Governance Strategy and Organization Chart
- 15 Investor Relation Management and Shareholders' Rights
- 16 Risk Management
- 17 Compliance Management
- 18 Leading Role of Party Building
- 19 Transparency of Information
- 20 Combating Corruption & Encouraging Integrity

# LEAN MANAGEMENT EMPOWER AN HONEST FUTURE

Adhering to Party  
Building and Guide

Consolidating the Foundation  
of Governance

Protecting Shareholders'  
Rights and Interests

Strengthening Integrity  
Construction

## Adhering to Party Building and Guide

Adhering to the leadership of the Communist Party and strengthening Party building are the "root" and "soul" of state-owned enterprises that serve as the cornerstone and guiding star for promoting the high-quality development of the Company. COOEC has comprehensively integrated Party building work into its Articles of Association, rigorously implementing the "three pre-reviews" mechanism involving the Party committee, the special committees of the Board of Directors, and independent directors. The legal status of the Party organization within the corporate governance structure is clarified, with Party leadership integrated into all links of corporate governance. The corporate Party organization has been embedded into the corporate governance structure, to fully leverage the leading role of the Party organization in "setting directions, overseeing the overall situation, and ensuring implementation".

### The Party Committee prioritizes "direction"

CNOOC Engineering has established the "Regulations on Major Decision-Making Management," which clarifies the content, rules, and procedures for deliberation and decision-making on "major and critical" issues. It has formulated the "Pre-research Checklist for Major Business Management Issues by the Party Group," specifying 38 major decision-making items related to Party building, personnel appointments and dismissals, etc. The Party Committee exercises pre-approval, and the board of directors or shareholders' meeting decides on 54 items. This clarifies the boundaries of authority and responsibility among the governance entities, ensuring from a system design perspective that the Party organization participates in the pre-research process for major decision-making, effectively playing the Party Committee's role in setting the direction, managing the overall situation, and promoting implementation.

### The specialized committees focus on "expertise"

Before the board of directors makes decisions, its specialized committees play an effective role in professional review from their respective perspectives of strategy, investment, finance, accounting, risk control, project management, etc., offering opinions and suggestions on proposals to the board of directors, thus significantly enhancing the decision-making efficiency and scientific level of the board. The Audit Committee provides professional opinions on financial management, internal control, and auditing; the Strategy Committee reviews the company's strategic development planning and major investment decisions in advance; the Nomination Committee is responsible for nominating directors and management, offering suggestions on selection criteria and procedures; and the Compensation and Evaluation Committee discusses and studies the standards for evaluating directors and senior management, making evaluations and suggestions, as well as reviewing compensation policies and plans for directors and senior management. These four specialized committees of the board of directors each play their roles, ensuring scientific and efficient decision-making by the board.

### The independent directors focus on "risk"

In accordance with the requirements of the China Securities Regulatory Commission's "Corporate Governance Code" and "Independent Directors System," CNOOC Engineering has formulated and strictly implemented the "Independent Directors System" and the "Annual Work System for Independent Directors." Independent directors fully leverage their professional knowledge and work experience in corporate governance, law, finance, etc., actively contributing ideas and suggestions for the company's development. They focus on reviewing the hiring of financial and internal control audit firms, providing guarantees for subsidiaries, selecting candidates for company directors, appointing senior management personnel, managing own funds, provisioning for impairment, and other issues, offering independent opinions and constructive suggestions to enhance the scientific and objective nature of the board's decision-making.

**Strengthening the Party Building Management System.** COOEC strictly implements the requirements of the "four systems" of Party building and has worked out the last mile in Party building to ensure the profound and effective integration of Party building with production and operation management. The Company has formulated The List of Major Operational and Management Issues for Pre-research by the Party Committee, clarified 38 major matters to be decided regarding Party building, personnel appointments, and other issues, and 54 matters to be decided in the Party committee's pre-research discussions or by the Board of Directors or the General Meeting of Shareholders, so as to delineate the rights and responsibilities of various governing organs.

**Fostering New Dynamics in Cultural Construction.** The Company strives to cultivate a corporate culture system that meets the needs of market competition, reflects the intrinsic requirements of transformation and development, and enjoys broad recognition among employees, thereby enhancing the strategic confidence and cohesion of all cadres and employees. The Company is vigorously promoting brand leadership initiatives, streamlining its brand system, refining branding strategies, and enhancing brand awareness and acceptance in the market.

**Creating a New Ecology of Clean Governance.** The Company keeps intensifying efforts to promote integrity and discipline and combat corruption, maintains an unwavering commitment to strict governance, adopts a zero-tolerance attitude towards corruption, and severely investigates and punishes disciplinary and legal violations. The full supervision framework is under continuous improvement, with efforts made to extend supervision to grassroots employees, overseas operations, and contractor engagements. "Look-back" reviews of rectification efforts were promoted to re-assort, review and re-evaluate the rectification status of issues identified in previous inspections and audits, so as to ensure thorough rectification and drive high-quality development. The Company is rigorously improving its style of work and enforcing norms of conduct, strengthening the cultivation of a work style characterized by "strictness, practicality, efficiency and innovation", and vigorously fostering an atmosphere of "willingness, capability, and achievement" in getting things done promptly and effectively.

### Case: Reinforcing Ideological Foundations Through "Thematic Education"

COOEC innovatively proposed the "461" model of thematic reading sessions, leveraging platforms like "Learning from the Advanced" and "Cloud Bookstore of Party Building" to deepen and solidify thematic education. With the study and implementation of the spirit of the 20th CPC National Congress as a top political priority, the Company established a five-tiered matrix for disseminating Party teachings, including lectures by theoretical experts, demonstrations by Party members and cadres, leadership by branch secretaries, tours by young cadres, and presentations by model workers. Over 700 lectures and presentations at various levels and of different types have been conducted to achieve fully-covered education. Additionally, the Company prioritizes the study and implementation of important directives and instructions from General Secretary Xi Jinping as the "first topic" of Party committee meetings and a standing focus of study sessions of Party committee central group, with 35 meetings and 12 study sessions held throughout the year.

Conducted over 700 lectures and presentations  
**700**

Number of the "first topic" of Party committee meetings held  
**35**

Number of study sessions held  
**12**

## Consolidating the Foundation of Governance

COOEC strictly adheres to the requirements of laws and regulations such as the Company Law and the Securities Law, continuously improves its corporate governance system, enhances the Company's competitiveness, transparency, and credibility, gains the trust and support of stakeholders, and achieves sustainable development.

### Governance Strategy

COOEC takes "fully implementing consistency in Party leadership and modernized corporate system, ensuring scientific and effective decision-making, and achieving lawful and compliant operations" as its central ideology, continuously explores ways to strengthen and improve corporate governance and actively constructs a governance model for state-owned listed companies with Chinese characteristics while considering the Company's actual situation. The "Five Meetings and One Layer" governance structure that consists of the Party Committee, General Meeting of Shareholders, Board of Directors, Board of Supervisors, Workers' Congress and Management is constructed, with each decision-making organ performing its own duties and responsibilities, and coordinating with each other in a check-and-balance relationship.

**Organizational Chart and Responsibilities.** The Company has established the Board of Directors' Strategic, Nomination, Audit, and Remuneration and Assessment Committees in strict accordance with the requirements of the Code of Corporate Governance of Listed Companies, implements the independent director-as-convener system, and carries out a separate communication mechanism between independent directors and external audit institutions to fully leverage the professional expertise of independent directors to provide advice for the Company's development, and continuously promote the modernization of the Company's governance system and governance capabilities, thereby facilitating its high-quality development.

**Strategy Committee**

Conduct research on the long-term development strategy of the company, major investment decisions, major investment and financing projects, and strengthen the strategic decision-making function of the board of directors. Provide suggestions on other major issues that affect the company's development.

**There are 3 members, with the chairman as the convener, including the president and external directors.**

**Audit Committee**

Responsible for inspecting the company's accounting system and financial status, assessing the implementation of the company's internal control system, evaluating and nominating registered accountants, and discussing company financial issues with accountants.

**There are 3 members. Independent directors in the accounting profession serve as conveners, and all members are independent directors.**

**Nominating Committee**

Research the selection criteria and procedures for directors and managers, and be responsible for establishing nomination procedures; Responsible for submitting plans for the size and composition of the board of directors; Responsible for recommending candidate directors and senior management personnel to the board of directors.

**There are 3 members., with independent directors as conveners, including the chairman and one independent director.**

**Remuneration and Appraisal Committee**

Studies the standards for the assessment of directors and managerial staff and matters regarding the remuneration of senior management; develops a comprehensive remuneration policy; discloses policy-related information about director compensation.

**There are 3 members, the independent director is the convener, and the members include the full-time deputy secretary of the Party Committee and 1 independent director.**

**Diversification in the Board of Directors.** COOEC adheres to the leadership system of "dual entry and cross appointment". The Board of Directors consists of seven members, including three internal directors and four external directors. Among them, three are 3 independent directors, accounting for more than one-third of the total number of directors. These three independent directors are senior professionals, respectively engaged in macro-research, accounting management and risk control, and construction engineering. Their knowledge structures and professional fields complement each other within the overall structure of the Board of Directors, ensuring professional, scientific, and effective supervision in various fields, and laying a systemic foundation for the implementation of the Board's authority and responsibilities.

**Appointment of Board of Directors and Board of Supervisors.** The seventh session of the Board of Directors and the Board of Supervisors of COOEC commenced in December 2020 and concluded at the end of 2023, with a term of three years. According to the provisions of the Company Law and the Company's Articles of Association, it was required to elect members for the eighth session of the Board of Directors and the Board of Supervisors. To ensure the Company's lawful and compliant operation as well as standard scientific governance, the Company communicated in advance with the controlling shareholder, completed the nomination of directors, and, during the General Meeting of Shareholders in review of the election of Boards, introduced a cumulative voting system for the first time to safeguard the voting rights of minority shareholders. The Company successfully completed the election of new members of the Board of Directors and the Board of Supervisors at the General Meeting on November 14, 2023, providing a guarantee for the standardization of corporate governance.

**Remuneration Transparency of the Board of Directors.** The Company established a Remuneration and Assessment Committee under the Board of Directors and set up a mechanism for directors and supervisors to manage remuneration of the leadership, so that the assessment, remuneration, and welfare distribution of the Company's directors, supervisors and executives are regulated from an institutional perspective. Meanwhile, as a listed company, the Company annually discloses in the Listed Company Annual Reports required by SSE the shareholding changes and remuneration of current and departing directors, supervisors, and executives during the reporting period, ensuring the rationality and transparency of the remuneration of directors, supervisors and executives.

**Regulatory Compliance in Business Practices**

COOEC attaches importance to corporate compliance management, by incorporating it into the Company's "14th Five-Year Plan". It has established a sound compliance management system with COOEC characteristics while adaptive to industrial characteristics and the Company's operation scale and business scope. The Company revised the Compliance Management System and the Sanctions and Export Control Compliance Management Measures to normalize compliance management when striving to achieve "compliance of all employees on all matters".

**Improving Organizational Construction of Compliance Management.** Clarify the compliance management responsibilities of the Party Committee, the Board of Directors, and the Management Team. Under the Management Team, establish the Legal and Compliance Committee for Legal Construction and Internal Control Compliance and Risk Management to coordinate and promote compliance management work. Appoint the Chief Compliance Officer, who also serves as the Company's Chief Financial Officer and General Counsel. And "three lines of defense" for compliance management were constructed, namely, a special compliance management division, leading compliance management divisions, and compliance supervision and evaluation division. The Chief Compliance Officer leads the leading compliance management division to carry out the Company's compliance management work. Special compliance management divisions are responsible for daily compliance management in their respective fields, with business backbone personnel serving as compliance managers. Subordinate units shall establish Business Contract Divisions or Legal Contract Divisions and set up compliance management positions or clarify relevant functions to carry out compliance management in such units. The Company's Discipline Inspection Commission, Audit Department and the Leading Group Office for Party Committee Inspection Work are the third line of defense for compliance risk prevention and control, which supervises the implementation of compliance requirements, investigates violations and holds individuals accountable.

**Clarifying Compliance Management Content.** The company thoroughly reviewed the laws and regulations relevant to its business operations, collecting and identifying 1,596 domestic laws and regulations related to corporate governance, engineering, bidding, labor, and anti-corruption, as well as 1,517 foreign laws and regulations. Compliance obligations identified in Laws and regulations were enacted in job responsibilities. The compliance management approval process was clarified with the Compliance Management Checklist formulated and a total of 335 coping measures developed to ensure the implementation of compliance obligations.

**Consolidating Compliance Culture Construction.** In order to further internalize the compliance concept of "keeping in mind and putting into practice" and make it the guiding principle for every employee, COOEC strengthened compliance knowledge dissemination through training in 2023. Specialized compliance training sessions were organized, covering areas such as data compliance, sanctions and export controls, blacklist screening, anti-corruption, and corporate compliance officers. A total of 367 individuals participated in these training sessions. The Company is embedding compliance concepts into its corporate culture, strengthening the promotion of compliance concepts, and continuously enhancing employees' compliance awareness to cultivate a corporate culture of compliance. Through public legal education activities such as collecting employee signatures, distributing legal education materials and conducting legal training sessions, the Company has promoted the concept of legal compliance, popularized knowledge of legal compliance among employees, and enhanced the overall compliance awareness throughout the Company.

**Case: Organizing Training of Corporate Compliance Officers**

COOEC conducted certification training for Corporate Compliance Officers, by inviting a professional firm to train 49 compliance managers from the Company's headquarters and subordinate units, 25 among which then obtained the first batch of "Certificates of Corporate Compliance Officers". This has improved the compliance literacy and capabilities of grassroots compliance managers.

## Risk Management

The Company has continuously improved its risk management system and organizational structure, drafted the Risk Management Regulations to standardize its risk management functions, work measures and requirements, and ensured the systematic and standardized implementation of risk management. Three lines of defense for risk management have been established in the Company and subordinate units, namely, business departments and units, risk management and compliance departments, and internal supervisory organs. With each line of defense undertaking its own responsibilities, risk management efforts were made in a coordinated manner.

### Establishing the Company's Procedures, Systems and Framework

Three major categories of procedures, namely, strategic leadership procedures, core business procedures and business support procedures, have been established, covering 12 primary procedures, 58 secondary procedures, 191 tertiary procedures, and 467 final-level procedures, to form a vertically and horizontally intertwined company-wide procedure map based on the interrelations between different procedures. The four core business procedures have been comprehensively reviewed and optimized. Based on the characteristics of the Company's production and operation and focusing on both "income" and "expenses", comprehensive review and optimization were conducted on the four core business procedures of engineering project lifecycle management, supply chain management, investment management and R&D informatization management, with four core business procedure manuals formulated.

### Optimizing and Enriching Risk Management Methods and Tools

The layered risk management mechanism has been optimized. A three-level management system that includes the Company (strategic level), subordinate units (operational level) and grassroots units (execution units) is established to take charge of the risk management mechanism at each level.

### Introducing the Concept and Tools of Risk Scenario Management

Two risk scenario bundles, decision-making risk scenario bundle and contract counterpart risk scenario bundle, were introduced into various procedural links throughout the lifecycle management of engineering projects (contracts), to further strengthen the ability for proactive prevention, in-process control, and post-event supervision. In combination with the implementation experience in projects, ten important typical risk cases such as geopolitical factors, contract negotiations and contract changes, were summarized as reference for risk management in the Company's key engineering projects.

### Strengthening the Lifecycle Risk Management of Engineering Projects (Contracts)

The Engineering Project (Contract) Lifecycle Risk Management Manual is formulated, covering the five stages from market development management, bidding management, contract management, project implementation management to closure management, and over 270 specific risks under five categories, to provide guidance and reference for comprehensive risk management throughout the engineering project, with supervisory measures to ensure the practical and effective implementation of the Manual.

## Audit Supervision

The Office of the Company's Audit Committee further plays its functional role in promoting and ensuring the significance of the Party Committee Audit Committee in enhancing audit efficiency and advancing audit rectification. Throughout the year, the Company convened two meetings of the Party Committee Audit Committee, ensured strict reporting of major audit issues and promoted the alignment and consistence of audit efforts. The spirit of the First Meeting of the 20th Central Audit Committee was timely disseminated to all subordinate units and departments of the headquarters, ensuring the implementation of the Party's leadership in the entire process and all links of audit work.

## Case: IT-supported Audit Promotes the Company's Digital Transformation

Through special audits, COOEC investigated the status quo of the Company's IT construction, operation, and management, and revealed problems or risks in aspects like IT construction procedures, IT funds usage, effectiveness of IT asset management, efficiency of information system operation and maintenance, and information system and data security. In the audit rectification stage, a comprehensive rectification mechanism of "audit + functional departments + rectifying units" was formed to establish a long-term mechanism that covered the organizational, institutional and technical levels, and effectively promote profound and solid rectification.

## Protecting Shareholders' Rights and Interests

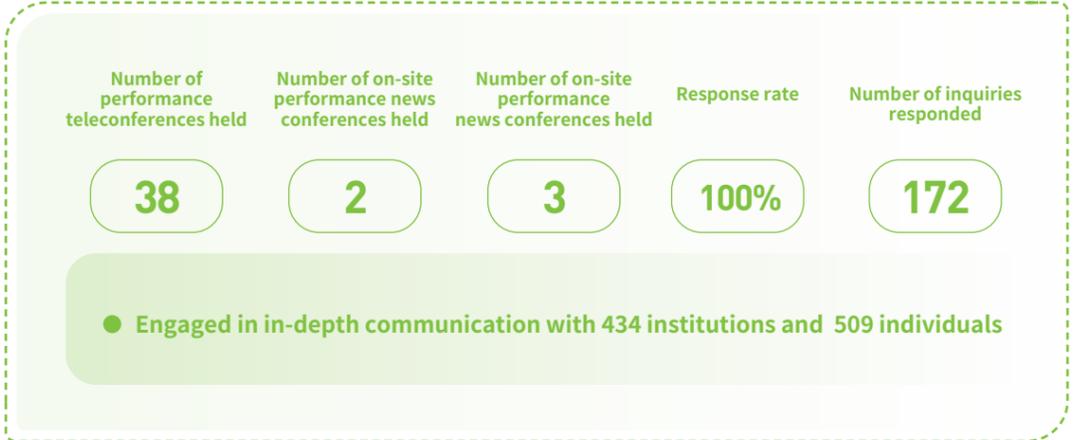
COOEC attaches great importance to the protection of shareholders' rights and interests and strictly adheres to laws and regulations such as the Company Law, Securities Law, and Work Guidelines for the Investor Relations Management of Listed Companies. The Company has established a sound mechanism for protecting shareholders' rights and interests, actively engaged in investor relations management, safeguarded shareholders' rights to information, participation and decision-making, and strengthened communication and cooperation with shareholders to jointly promote sustainable development of the Company.

### Investor Relation Management

With the goal of establishing high-quality investor relations, COOEC continuously improves the mechanisms and contents of investor relations management work to respect, reward and protect investors. In accordance with relevant laws and regulations such as the Company Law, Securities Law, and provisions of the Company's Articles of Association, the Company has formulated Investor Relations Management Guidelines and appointed dedicated personnel to manage related work, as ways to institutionalize and streamline daily investor relations management.

### Organizing Various Investor Relation Activities

The Company actively organizes institutional investors to visit its production sites and participates in brokerage strategy meetings, roadshows, reverse roadshows and other activities to engage with investors and promote the Company proactively. As of the present, the Company has held 38 performance teleconferences, 2 on-site performance news conferences, and 3 on-site performance exchange meetings, engaged in in-depth communication with 434 institutions and 509 individuals, and responded to 172 inquiries with a response rate of 100%.



### Facilitating Investor Communication Channels

The Company has established an investor hotline staffed by dedicated personnel, which received 72 calls from minority shareholders during the reporting period, with a total response time of 75 hours. Timely responses were given to inquiries on investor interaction platforms. Following the annual, interim and quarterly performance disclosures, the Company conducted three online performance presentations in a "text + image" live broadcast format via the SSE Roadshow Center. Additionally, it actively participated in activities like Investors Communication Day in Tianjin Area to construct platforms for communication with minority investors. In such activities, a total of 68 inquiries were responded to, achieving a response rate of 100%.



### Exploring New Media Communication Channels

The Company actively explores the use of new media in communication for investor relation maintenance. Following the regular reporting, the Company utilized visual reports and videos of live performance conferences to provide investors with a clearer and more concise presentation of its operating status through its official website and official WeChat account. The Company compiles the Investor Relations Activity Records quarterly and publishes them on the SSE E-interaction Platform to help investors' learn about key issues of the Company.

#### Case: COOEC Held Reverse Roadshows for Investors in 2023

On July 5th and December 21st, 2023, COOEC held the first and second 2023 Reverse Roadshows for investors in Tianjin. An investigation team of nearly 80 institutional investors, analysts, and media friends visited COOEC's Tianjin Intelligent Manufacturing Base to have first-hand experience of the results of intelligent transformation there. During the reverse roadshows, investors paid visits to the exhibition halls, prefabricated workshops, final assembly sites and ongoing projects at the Intelligent Manufacturing Base.

### Shareholders' Rights and Interests



#### Perfecting Policies to Ensure the Orderly Operation of General meeting of Shareholders

As a domestically listed A-share company, COOEC has formulated the Rules of Procedure for the General Meeting of Shareholders in accordance with the Company's Articles of Association to further clarify the functions and authority, proposal methods, voting procedures and other matters of the General meeting. The Company strictly follows the provisions of the Articles of Association by inviting law firms with securities expertise to attend each General Meeting to witness and issue legal opinions, ensuring that the convening, holding, deliberation, and voting procedures of the meeting are legal and compliant.



#### Improving Procedures to Safeguard the Exercise of Shareholders' Rights

Firstly, online voting is implemented. COOEC stipulates that the General Meeting of Shareholders must have online voting available, which saves costs and provides convenience for minority shareholders to exercise their voting rights. Secondly, a cumulative voting system is adopted. The Company clearly stipulates in its Articles of Association and Rules of Procedure for the General Meeting of Shareholders that director and supervisor elections should adopt a cumulative voting system, providing institutional and procedural guarantees for minority shareholders to elect directors representing their interests. Thirdly, votes of minority shareholders are counted separately. During deliberations on significant matters affecting the interests of minority investors, votes from minority investors are counted separately at the General Meeting of Shareholders, and the results of separate voting are publicly disclosed to protect the information rights of minority shareholders. Fourthly, a mechanism for related parties to abstain is implemented. When deliberating on related-party transaction proposals, the Company strictly implements a mechanism for related parties to abstain, and voting is conducted by minority shareholders to effectively safeguard their legitimate rights and interests.



#### Efficient Mechanism to Ensure the Smooth Passage of Proposals.

To ensure the proposal approval rates at the General Meeting of Shareholders, COOEC has established a smooth communication mechanism with minority shareholders through standardized and transparent information disclosure and proactive investor relations. Opinions of shareholders were fully listened to before the General Meeting of Shareholders to gain the support of minority shareholders. In 2023, three the General Meetings of Shareholders were held, and all proposals were passed. As of now, the Company has achieved a 100% response rate for the hotline dedicated to minority investors, a 100% response rate on the SSE E-interaction Platform, and a 100% response rate of online questions in investor communication activities participated by the company.

Until now

Response rate for the hotline dedicated to minority investors

100%

Response rate on the SSEE-int raction Platform

100%

Response rate of online questions in investo communication activities participated by the company

100%

### Information Disclosure

COOEC' s Board of Directors has formulated the Management Measures for Related Party Transactions and the Management Measures of Voluntary Information Disclosure in 2023 and fully carried them out to standardize transactions with related parties and voluntary information disclosure practices. These efforts aim to enhance the Company's operational compliance in the capital market, thereby increasing its influence in the capital market, demonstrating the brand value as a responsible listed company, and effectively serving the Company's strategic development.

### Strengthening Integrity Construction

The Company has insisted a strict tone in strengthening discipline and integrity, continuously carried out anti-corruption and integrity activities, kept improving its supervision and management systems, established and improved mechanisms for preventing corruption risks in major projects, intensified supervision over key engineering construction projects, and strove to create a clean and upright corporate environment.

#### Building an Institutional System of Integrity

The Company timely issues and adjusts relevant systems, actively implements important work deployments and formulates supporting measures. The Chairman of the Board is the first person in charge of the Company's integrity construction. In terms of Party conduct and integrity building and anti-corruption work, the Company has formulated regulations such as the Responsibilities for Party Conduct and Integrity Building and Anti-Corruption Work, Regulations on the Implementation of the Party Committee's Main Responsibilities for Comprehensively Strict Party Governance, and Measures for Strengthening Supervision of "Top Leaders" and Leadership Teams. These regulations provide guidance and requirements to directors and senior executives, while systematically promoting the deepening of comprehensively strict Party governance.

#### Improving the Integrity Risk Control System

The Company strengthens the "embankment" role of the integrity mechanism, focuses on "petty corruption" problems at the grassroots level, and, through the practice of 4 pilot units in 2 organs, establishes "two lists and one chart", including the responsibility list, position integrity list and business operation flow chart, and risk prevention and control guidelines. These risk lists and prevention and control measures are upgraded each year according to the implementation and application situation.

### Launching a Campaign on Party Conduct and Clean Governance Education

The Company adheres to the principles of “learning lessons, clarifying discipline and promoting integrity through case studies”, guides all cadres and employees to strengthen their awareness of bottom lines, and firmly upholds the defense line of integrity and self-discipline. Intensive efforts have been made to better cultivate a culture of integrity, including the release of the Company’s Integrity Culture Construction Manual and the organization of the Company’s 2nd Party Conduct and Clean Governance Month. Activities of “Passing Integrity Barriers, Walking Integrity Paths and Stamping Integrity Marks” were held in seven venues across Tianjin, Qingdao, Shenzhen, and Zhuhai. The “Let Me Teach Contractors a Lesson” activities have been offered to subcontractors with a focus to clarify the boundaries of interaction and standardize behaviors, aiming to actively build a cooperative partnership that is both close and clean. In 2023, the coverage rate of integrity education for employees reached 100%.

### Enhancing Integrity Management During Major Festivals

Attentions were paid to major festivals such as New Year's Day, Spring Festival, Labor Day, Dragon Boat Festival, Mid-Autumn Festival, and National Day. Pre-festival integrity reminders were issued and learning materials were distributed to make clear relevant disciplinary requirements during the festivals. The “Integrity Moment” learning and education mechanism is fully implemented, utilizing various platforms such as “Three Meetings and One Lesson”, work meetings, departmental session meetings, etc. to conduct flexible and targeted integrity education in 1-3 minute sessions, guiding cadres and employees to unify their thinking, deepen their understanding, stimulate self-awareness and cultivate habits.

### Establishing a Sound Mechanism for Complaints and Reports

Discipline inspection organs at all levels of the Company keep channels open to receive letters, visits, calls, and online reports. They publicize the scope of acceptance for complaints and reports, postal addresses, locations for receiving visits, hotline numbers, email addresses for reporting, and related procedures, with an aim to strengthen publicity on complaints and reports, guide the public to report lawfully, orderly and truthfully, timely handle reports and accusations, and leverage the supervisory role of Party members and the public. The Company adheres to the principles of seeking truth from facts, democratic centralism, and handles complaints and reports within the scope of its duties in accordance with regulations, discipline, and laws. Meanwhile, it implements the requirements of the Implementation Details of Supervision and Discipline Work, effectively protects the legitimate rights and interests of real-name informers, and does not disclose the name, workplace, or other relevant information of any informer without his or her consent. If any complaint or report is found to be false, it will be dealt with seriously according to regulations, discipline, and laws. For Party members, cadres, and employees affected by false accusations, appropriate measures will be taken to clarify the problems, protect their legal rights, and eliminate negative impacts in an objective and fair manner.

### Case: COOEC holds the 2nd Party Conduct and Clean Governance Month

In August 2023, the Party Committee of COOEC held the second Party Conduct and Clean Governance Month under the theme of “Leaving No Trace of Corruption and Being Meticulous in Governance”. Centered around the principle of building a clean culture based on the “Four Clean and Four Integration” Principles, the Company concentrated its efforts on implementing measures such as specialized learning, warning education, joint creation and construction, and special improvement to systematically promote the construction of a clean culture and guide cadres and employees to strengthen their ideological and moral foundation. The Company organized activities of “Passing Integrity Barriers, Walking Integrity Paths and Stamping Integrity Marks” to provide in-person guidance to help more than 3,000 employees pass through the first barrier on their career paths and take every step with integrity. To promote clean governance, a “clean” gift and a letter were sent to families of all division-head level leaders and young cadres. The Company solicited “family rules and family teachings” from various departments and teams, invited 20 family members of leading cadres to participate in an integrity symposium, and launched a month-long activity of reading and logging family rules and family teachings to make political and family life more transparent. The Company organized 31 division-head level cadres to visit Liyuan Prison in Tianjin for warning education, where they entered the living and working areas of inmates, listened to inmates stories, then reflected on themselves, and voluntarily accepted supervision. The Company also conducted the “Let Me Teach Contractors a Lesson” activity, teaching a total of 162 sessions covering 395 subcontractors and 13,055 employees to strengthen the line of defense for cooperation and win-win integrity.



Image: The Activity of “Passing Integrity Barriers, Walking Integrity Paths and Stamping Integrity Marks”

### Case: The First Lesson on Integrity for New Employees

On July 25, the Secretary of the Disciplinary Committee of COOEC, Chen Mao, delivered the First Lesson on Integrity for new employees in 2023, titled “Integrity Escorts Fresh Waves as They Join in the Sea”. In order to enhance the training effect and follow the principle of demand orientation, an online questionnaire was conducted before this Lesson. More than 1,000 questions in 13 categories were collected from new employees, providing in-depth insights into their thoughts and concerns. The Lesson outlined disciplinary requirements in terms of political discipline, organizational discipline, integrity discipline, work discipline, mass discipline, and personal life discipline, and gave new employees warning education and reminders on integrity upon joining with typical cases combined, to help them establish a strong sense of discipline and rules.



# ENGINEERING EXCELLENCE EMPOWER QUALITY FOR THE FUTURE

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Building Quality Projects

Constructing Safe Projects

Building Innovative Projects

## Excellence in Engineering Empowers the Future of Quality

COOEC has always upheld the culture of "Quality is the Meal, Safety is the Bowl" in continuous solidification of the foundation for its development. It remains committed to systematic management without change, striving to achieve world-class safety management. The Company insists on source control without relaxation, ensures strict control over sources and responsibilities, further improves the fully-covering accountability system, makes all deployment and execution in place, and dissolves quality and safety risks at the source.

### Building Quality Projects

COOEC has been committed to achieving high-quality development and continuous improvement of engineering quality in an organized, standardized, methodical, and step-by-step manner. It keeps providing consumers with products that meet legal requirements and standards in a responsible manner. The Company strictly adheres to relevant quality management laws and regulations such as the Product Quality Law of the People's Republic of China, Regulations of the People's Republic of China on Certification and Accreditation, and Regulations of the People's Republic of China on the Administration of Production License for Industrial Products. It has formulated multiple quality management methods and implementation rules, promoted the construction and certification of quality management systems, implemented quality responsibilities at all levels, and strengthened process quality control as well as terminal quality supervision and management.

In order to promote the implementation of the strategy of Building a Country Strong on Quality and in line with the Company's development strategy, the Company has formulated an implementation plan for building an enterprise strong on quality that prioritizes quality of products, engineering and services and clarifies the main goals for 2025 and 2035. 19 tasks were listed in six aspects: enhancing the innovative driving force for quality development, enhancing the Company's quality competitiveness, improving product quality reliability, enhancing project quality, enhancing the capability to provide quality services and enhancing quality development capabilities, as ways to facilitate the implementation and supervision of various quality work.

### Undertaking Standardized Management

The Company has established standardized physical quality control specifications, applied pre-production quality planning tools, and developed standardized inspection and test guidelines for quality control of engineering entities such as shallow water jackets, deep water jackets, topsides on offshore platforms, subsea pipelines and offshore platform pressure pipelines. It evaluated the welding quality management regulations and pressure pipeline quality management regulations for trial operation, discussed 39 issues and suggestions identified during the evaluation, and issued welding quality management guidelines and pressure pipeline quality management guidelines.

### Enhancing Quality Risk Management

With the help of common quality techniques like procedure classification framework, performance mode and key quality risk control points, COOEC decomposed its core business, operation support business, and management support business into 26 secondary procedures (procedural groups), 116 tertiary procedures, 497 fourth-level procedures (activities), 1,280 fifth-level procedures (items) and 218 sixth-level procedures (tasks). For each tertiary procedure, 198 key quality control points (KQCs) were identified, with control indicators, control measures and responsible departments specified to ensure comprehensive business processes and system requirements.

### Improving Special Quality Management

The Company reviewed, discussed, and improved 12 welding quality management regulations and 7 pressure pipeline quality management regulations for trial operation over the past year, and issued the Welding Quality Management Work Guide, which sets requirements for welding worker qualification management, welding appearance inspection personnel management, welding equipment management, welding material quality control and acceptance, welding material storage, drying and use, and welding construction requirements in special environments. It also published the Offshore Platform Pressure Pipeline Quality Management Guide to guide projects in identifying differentiated requirements for project control based on the published guidelines.

### Strengthening Quality Inspection

COOEC evaluated the comprehensive quality management situation of the Company from six aspects: leadership, strategy, customers and market, resources, process management, and analysis and improvement, according to the Excellence Performance Evaluation Criteria, and initially introduced the Excellence Performance Management Model. Focusing on the construction of the "Offshore Equipment Design and Manufacturing Center", the Company used pre-production quality planning tools, and developed standardized inspection and test guidelines for quality control of engineering entities such as shallow water jackets, deep water jackets, topsides on offshore platforms, subsea pipelines and offshore platform pressure pipelines. It guides projects to identify differentiated requirements for project control based on standardized inspection and test guidelines, ensuring that all inspections and tests are carried out as required.

### Increasing Quality Management Awareness

The Company encourages all employees to participate in quality management enhancement and monthly quality activities. 25 initiatives were held in five aspects, including cultural promotion, quality education and training, special quality inspections, quality breakthroughs and skills competitions, engaging over 20,000 individuals, with over 10,000 employees participating in training sessions, resolving 191 quality issues. During the reporting period, COOEC established and completed registration for 230 quality control teams and quality breakthrough projects, marking a synchronized growth of 2.8 times. Work of 10 stages, including countermeasure formulation, countermeasure implementation, effect evaluation and standardization have been completed. Additionally, the Company standardized the construction of trustworthy quality teams, registering 17 such teams comprising 312 employees. Following the guidelines of the Trustworthy Quality Team Construction Standard, activities were standardized for 11 items in four aspects, including demand assessment, construction planning, construction process and effect evaluation.

### Case: Quality Awareness Enhancement in Tianjin Construction Division

The Tianjin Construction Division of COOEC rigorously upholds "people-related" quality standards, meeting all required quality targets and the overall quality objectives of the Company. It has improved institutional safeguards and optimized subcontractor entry certification assessments. By the end of October, a total of 2,017 subcontractors had completed skill level certifications, ISO3834 qualifications renewal, and passed external audits of CWB qualification. It also systematically enhanced quality service awareness by strengthening statistical analysis of inspection data. Weld defect tracking table, inspection submission failure table of construction units and various professional inspection progress tables were formulated to establish a systematic quality optimization mechanism for inspection information sharing, project progress guarantee, defect cause analysis, formulation of preventive measures, and personnel training, aiming to continuously approach the goal of zero defect in quality inspection. This year, the Branch carried out technological reforms to improve quality and efficiency for high quality development. It completed the utility model patent Rapid Detection Scale for Longitudinal Misalignment of Offshore Oil Engineering Structural Steel Pipes, and invented Pipeline Deformation Corrector and Pipeline Internal Supercharging Cleaning Device. Two technological reform projects, Multipurpose Pair Auxiliary Installation Positioning Tool and Equipment Base Measurement Auxiliary Tool, were set up to reduce inspection manpower by approximately 2,000 man-hours, decrease re-work rate and increase construction quality index by about 35%.

**Case: Special Equipment Branch Keeps Improving Quality Control**

The Quality Assurance Center of COOEC Special Equipment Branch actively responded to the Company's requirements for "reducing costs, improving quality and increasing efficiency", took initiative at work and obtained "Special Equipment Manufacturing, Supervision and Inspection Certificates" for four pressure vessels for the Company's first onshore terminal project, the "Bozhong 19-6 Condensate Gas Field Phase I Carbon Dioxide Compressor Project".

In response to the Company's development needs, it actively enhanced the electromechanical and explosion-proof inspection knowledge of QC inspection personnel. During this fiscal year, the Branch completed recertification for 2 domestic explosion-proof electrical personnel and obtained certification for 2 international IEC explosion-proof electrical qualifications, laying a foundation for quality assurance in future international projects and avoiding high subcontracting costs due to incomplete qualifications.

**Case: COOEC Special Equipment Branch Leads Quality Service with Technology and Creates "Chinese Precision" with Strong Capabilities**

Facing the challenges of ultra-large workload, highly complex operations and extremely strict tolerance requirements in the Canadian project, the Branch tackled these challenges with a dual focus on process control and technological innovation. This approach fortified the quality defense line of the project. Notably, the precision of SWHU-type pipeline positioning reached an astonishing  $\pm 3$  millimeters, leaving a profound impression on the client. The team was honored as an "Excellent Precision Management Team" by the Canadian LNG project owner and JGC Holdings Corporation. Additionally, the dual-coordinate precision control system contributed to the successful completion of Asia's first cylindrical FPSO vessel construction, achieving an overall main scale precision deviation of within 6 millimeters (with a tolerance requirement of  $\pm 25$  millimeters), marking a 75% improvement in precision. The closure precision compliance rate reached 100%. With superb professional expertise and steadfast work ethic, the team earned accolades from foreign clients for "Chinese Precision".

**Constructing Safe Projects**

COOEC has, following relevant laws and regulations such as the Law on Production Safety and the Law on Prevention and Control of Occupational Diseases and strictly abiding by provisions and rules on safety and occupational health, established a comprehensive and effective safety management system to profoundly implement safety responsibility system and strengthen risk control, with all efforts put to construct the defense line of safe production and continuously improve the governance system and governance capability. In the year 2023, the overall work safety situation remained stable, with no safety violation events that might significantly impact the Company occurring.

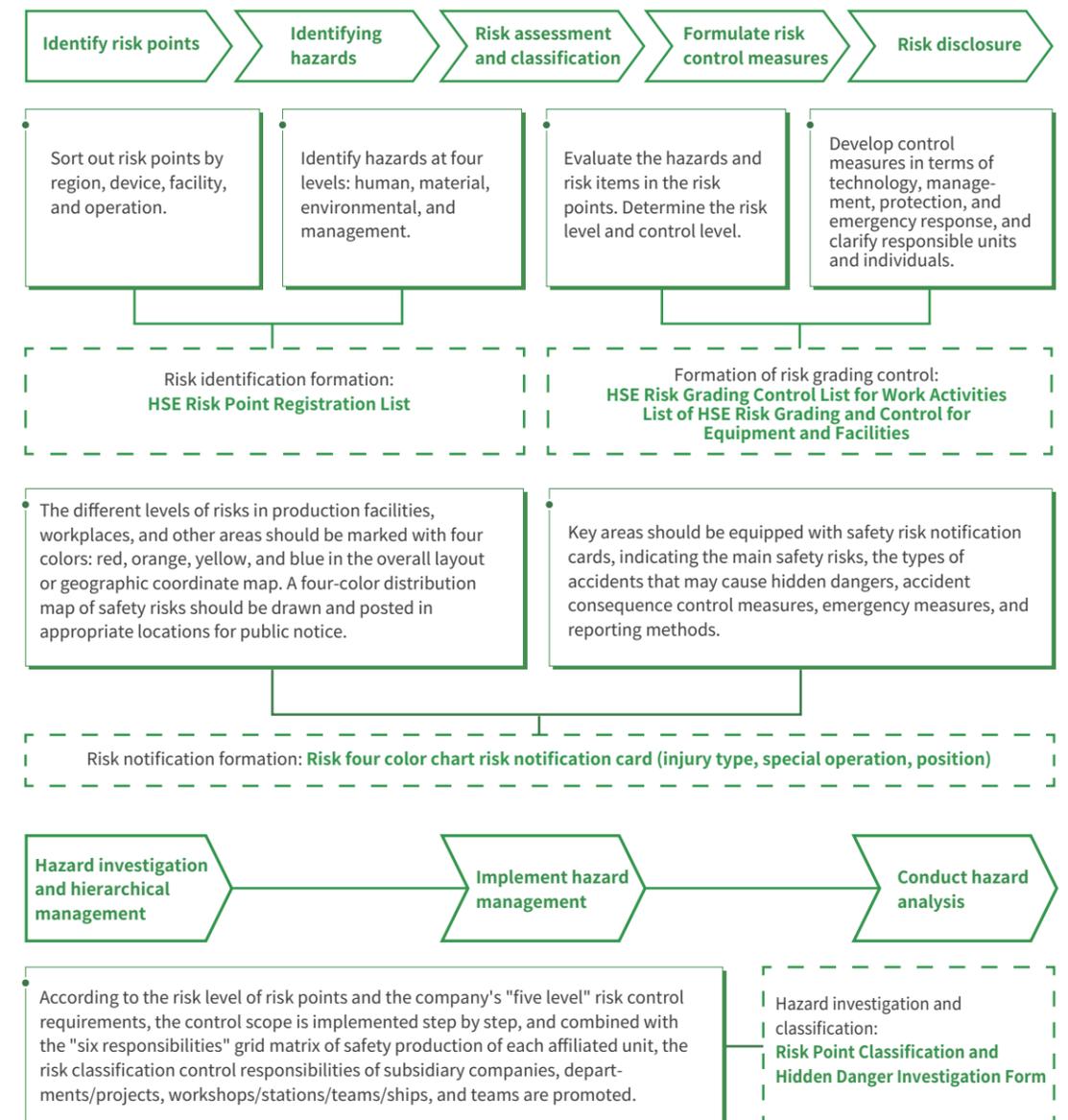
**Construction of Safety Management System**

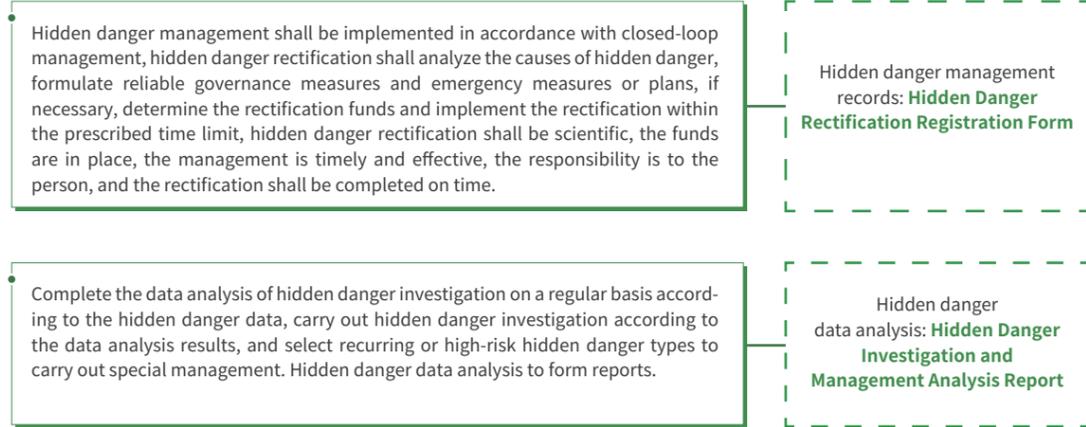
The Company integrated work safety as a core corporate value into various aspects and processes of its production and operation, actively advancing the construction of a long-term mechanism for work safety. In accordance with the Company's development strategy and safety management requirements of national and industry laws, regulations, standards, norms, and relevant safety management requirements of superior units, the Company has identified its safety management risks in business development, established and improved corresponding work safety management requirements, including Work Safety Management Procedures, Health and Safety Environment Risk Management Procedures and on-site operation management regulations.

As required by safety-related national laws and regulations, the Company established and improved the work safety responsibility system for leaders at all levels, functional departments, engineering and technical personnel and operational staff during the production process. Annual safety management objectives and assessment management requirements were set to supervise, inspect and assess the implementation. Risk identification, assessment and control were carried out, with more attention put on process management and risk control measures adopted. The Company kept investigating and treating accident hazards, with inspections and remediation work carried out in a hierarchical manner. Work safety analysis, work permit system and other policies were strictly followed to enhance operational risk control. Safety accident accountability, hazard investigation and treatment, emergency rescue, work injury identification and relevant policies have been formulated.

In 2023, COOEC further organized the formulation and revision of the safety management system, and developed systematic documents and special plans for risk aspects to guide the relevant work of risk prevention and control in the Company. The Company drafted the Implementation Plan for the Dual Prevention Mechanism and formulated nine work plans throughout the year to promote the effective implementation of risk classification management, hazard investigation and remediation work. Based on the characteristics and patterns of work safety in the Company, we focused on risks and adopted investigation and treatment of hidden hazards as the means to ensure proactive prevention and early intervention. All types of company data and information were sorted out to analyze and evaluate the risk trends in next stage, and provide suggestions for key work safety prevention. The requirements for risk classification were further clarified, risk control efforts were enhanced, and control measures and requirements were refined based on the "four-level risk" and "five-level control" model. Efforts were made to target both static and dynamic risks in organizational and project dimensions, with special contents and characteristics of the Company's actual business considered. For production-oriented units, static risk points were assorted in the organizational dimension, which were then decomposed into specific risks in equipment and facilities, operational activities etc. For project-oriented units, dynamic risks were analyzed in the project dimension, including but not limited to risks in joint operations, major operations, and seasonal or cyclical circumstances occurring during project implementation. A mechanism of "proactive prevention and early intervention" has been established. Throughout the year, the Company has identified a total of 1,223 risk points, including 193 large-and-above risk points; and 12,635 risk items related to operational activities and equipment, including 662 large-and-above risk items. The Company has cumulatively investigated and treated 35,468 hidden hazards.

**Construction of Dual Prevention Mechanism**





Focusing on deepening the implementation of the "six responsibilities" for work safety, COOEC has established a grid matrix for work safety responsibilities with a "horizontal 1+5" and "vertical N+1" structure. The aim was to promote the execution of work safety, solidify the grassroots foundation for work safety, and construct a sophisticated work safety responsibility system that covers all staff members.



With the core idea of "ensuring safety in all business, industries and production operation", these horizontal elements have clearly defined the work safety responsibilities of all systems.



"5+1" vertical elements of the responsibility matrix is determining the responsibility subjects at each level in a layered manner, specifying the work safety responsibilities at all levels, with the core principle being "everyone at each level fulfilling his responsibilities".

The grid matrix helped the Company to clarify the work safety responsibilities of each system and each level, covering all personnel and extending to contractors, thereby enhancing the transmission of work safety responsibilities. By progressively defining the safety work items of each grid node, the Company ensures that the work safety responsibilities of all personnel are hierarchical, dynamic, and spirited, creating a situation where everyone pays attention to safety, participates in safety, and supervises safety together. The Company integrates the responsibility matrix with the "four-color risk chart", "dual prevention mechanism construction", "information system construction", "responsibility checklist of work safety positions", and "operation permits", taking the responsibility matrix as a foundation. These efforts give a continuous boost to the grassroots management level and execution of work safety.

COOEC adheres to standardized control without wavering, safeguards the "pass of standards" of quality and safety in a unified manner, and continuously promotes the transformation of contractor management from "roles of managing and being managed" to a relationship that generates "complementary advantages, shared risks, mutual coordination, and cooperation". By implementing unified standards and establishing a unified culture, the Company builds a management pattern of "grand quality" and "grand safety" characterized by joint efforts and efficient coordination.

### Case: Tianjin Construction Division - Ushering in a New Phase of Safety and Sustainability

Tianjin Construction Division has clearly defined the work safety responsibilities at all levels and systems, achieving full coverage among all staff and extending to contractors. This has strengthened the transmission of work safety responsibilities and promoted the implementation of the "contractor guarantee system". Forty-eight "contractor guarantee system" notices have been posted on-site, essentially achieving full coverage over all production sites. In 2023, Tianjin Construction Division closely followed COOEC's 2023 edition of Emergency Plan, revised its own emergency plan and participated in emergency duty during extreme weather periods in Bohai Mining Area to further enhance its capabilities of flood control and emergency response.

### Case: International Engineering Company - Overseas Safety Management

To continuously enhance safety management and strengthen overseas risk protection capabilities, COOEC has continuously improved its overseas public safety management mechanisms and risk monitoring and early warning systems. This includes organizing overseas public safety drills and tabletop simulations. The Company has established a multi-level, comprehensive overseas medical emergency support system consisting of overseas personnel insurance, international SOS emergency response, overseas national medical care, and overseas project-site medical rooms to ensure overseas medical emergencies effectively.

### Case: The Canadian LNG Project



Delivery Site of the Canadian LNG Project

COOEC's Canadian LNG project prioritizes the safety and health of its employees, striving to create "the safest project in the world". In collaboration with various participating units, the Company has systematically built a project-specific safety culture, with an extensive utilization information management tools. As a result, the project has been built into the SPOE - the safest project on Earth, setting a record for the highest safety work hours in global LNG modular construction with 43.76 million safe work hours. In the meantime, the Company has consistently adhered to the goal of "zero defects" in quality. All delivered modules have ultimately achieved "zero punch" export, and the cleanliness upon completion has earned unanimous praise from the owner, realizing clean manufacturing and defect-free delivery.

### Strengthening Emergency management

In accordance with relevant national laws and regulations as well as the Company's requirements, COOEC has formulated policies such as the Guidelines for the Compilation of Emergency Plans for Work Safety Incidents in Production and Operation Units and Emergency Plans to stipulate the emergency plans for safety incidents. On the basis of a sound emergency plan system, efforts were made to improve the emergency system construction, continuously strengthen the sense of responsibility among personnel in emergency organizations at all levels, and enhance the prevention, reception, early warning, and response capabilities of emergencies.

### Continuously Deepening the Construction of Full-time and Part-time Emergency Response Teams

A series of special training sessions were offered to strengthen practical emergency response skills and theoretical knowledge, continuously enhance the emergency awareness of emergency management personnel, and comprehensively improve the emergency management capabilities.

### Improving Safety Emergency Plans

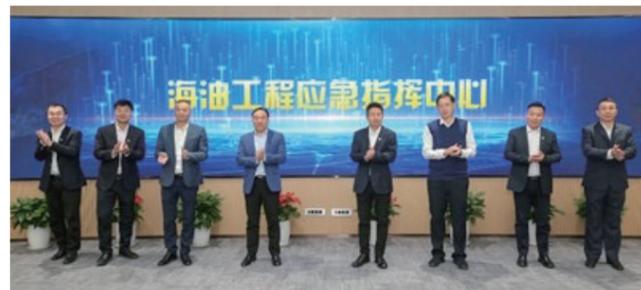
Efforts were made to effectively enhance the emergency response capabilities to handle accidents reasonably and promptly in emergency situations, improve the Company's capabilities to coordinate and cooperate with government and jurisdictional agencies in emergencies, and further enhance disaster prevention, mitigation, relief, and control capabilities. We have guided all units in and tracked their upgrading and improvement of Emergency Plans, Special Emergency Plans, and On-site Disposal Plans at the level of subordinate units. With the foundation laid by a sound emergency plan system, the construction of emergency systems was focused on to continuously strengthen the sense of responsibility among personnel in emergency organizations at all levels, and enhance the prevention, reception, early warning, and response capabilities of emergencies. The upgrading of emergency plans at all levels of the Company were finished in 2023, revising total of 1 company-level Comprehensive Plan, 11 Special Emergency Plans, 12 subsidiary-level Comprehensive Plans, 90 Special Emergency Plans, and 611 On-site Disposal Plans.

### Strengthening Safety Emergency Drills

Efforts were made to effectively enhance the emergency response capabilities to handle accidents reasonably and promptly in emergency situations, improve the Company's capabilities to coordinate and cooperate with government and jurisdictional agencies in emergencies, and further enhance disaster prevention, reduction, relief, and control capabilities. During the reporting year, the Company organized 4 company-level emergency drills, 29 subsidiary-level emergency drills, and 1,761 on-site emergency drills. The main drills included: ship anti-typhoon and personnel overboard emergency drills, joint emergency drills for oil spills in Lingang, fitting-out quay anti-terrorism practical emergency drills, COOEC building fire and personnel evacuation emergency drills, etc.



### Case: Upgrading the Emergency Command Center to Enhance Emergency Support Capability



Handover activity at Emergency Command Center

COOEC has rigorously implemented General Secretary Xi Jinping's important instructions on work safety and disaster prevention and reduction. Upgrading and renovating our Emergency Command Center was an important measure for the Company to implement the construction of a grand safety and grand emergency framework, which boasted great significance for improving the Company's emergency response and support capabilities.

The total construction area of the Command Center is approximately 806 m<sup>2</sup>. The construction started in May 2023 and was completed in merely 6 months, setting the fastest record for the construction of an emergency command center within the offshore oil industry. 2,530 sets of equipment and facilities were upgraded, achieving flexible application of 21 functional modules and 135 functional points for 4 key application scenarios in production operations. Meanwhile, the Command Center has fully considered the use of energy-saving and low-carbon technologies and domestic substitutes, practicing the green low-carbon concept of grand safety and grand emergency work.

The Emergency Command Center can serve as the central hub for production emergency support under both "peace" and "war" guarantee modes.

#### "Peace"

During "peace" time, the Center functions as a data cockpit, enabling real-time access to video surveillance and display of core business-related data.

#### "War"

While in "war" time, it would integrate the Company's video surveillance, ship dynamics, personnel statistics, weather, and meteorological information to achieve interconnection, emergency auxiliary decision-making, and other functions.

### Case: Subsidiary company COOEC Subsea Technology Enhances Emergency Response and Support Capabilities

A subsidiary of the Company, COOEC Subsea Technology Co., Ltd. has, relying on the Engineering Emergency Center, completed 6 special emergency maintenance plans for 6 national key protected subsea pipelines and 7 company-level key protected subsea pipelines. They conducted 2 large-scale drills for equipment protection and 1 special drill for subsea pipeline plugging, signed a corporate guarantee agreement with CNOOC, established an emergency equipment information sharing channel with CNOOC Well Control Center, and established an emergency repair materials depot, construction equipment depot and sharing mechanism for subsea pipelines, effectively fulfilling responsibilities of the Engineering Emergency Center. Regarding typhoon prevention and emergency response for ships, they organized 4 ship-shore emergency drills, effectively responded to 5 influential typhoons, organized 27 instances of ship typhoon prevention/avoidance for their own and leased ships, involving 1,402 personnel and 1,920 man-hours of typhoon duty, with no casualties or equipment losses, achieving a 100% success rate in typhoon prevention.

On May 5, 2023, the Company organized a specialized offshore oil spill training at the CNOOC Oil Spill Emergency Center, attended by personnel from subordinate units, onshore oil spill disposal personnel, captains, and experienced rail staff, to enhance oil spill emergency awareness and improve oil spill prevention, management, and disposal capabilities.

On May 19, 2023, a training on the Company's new version of the Emergency Plan was organized to enhance emergency management level and response capabilities. International SOS's Chief Risk Management Consultant and Director in China Region were invited to conduct training on international SOS travel safety awareness and overseas medical evacuation case sharing so as to improve employees' overseas travel safety and risk response capabilities.

On September 22, 2023, meteorological experts from Dalian Maritime University were invited to give lectures on meteorological professional knowledge to enhance the comprehensive capabilities of emergency personnel. Part-time emergency rescue team training for obtaining certificates was organized throughout 2023, with a total of 418 people completing the training, including 16 commanders, 45 team leaders, and 357 team members, as a means to continuously solidify the professional level of emergency team members and their emergency response capabilities.

### Building Innovative Projects

COOEC has deeply implemented the decisions and plans of the Party Central Committee and the important instructions and comments of General Secretary Xi Jinping. Centering around the Company's "1235" Overall Development Strategy, it takes the implementation of the "Three Major Projects and One Action" as the main axis, the construction of the "Four Centers" as an important leverage, and the "Three Orientations" as the main direction of scientific and technological innovation. COOEC comprehensively implements the decisions and arrangements of the Company's Party Committee, focuses on solidifying the foundation of innovation, and promotes the "1333N1" Scientific and Technological R&D Blueprint to provide strong technological support for accelerating the construction of world-class offshore energy engineering with Chinese characteristics.

### Enhancing Technological Innovation

The Company put great efforts to solidify the foundation of innovation, launched the reform to combat against innovation difficulties and continuously optimized the scientific and technological management system, with mechanisms like the project chief responsibility system, open competition leadership, and fault tolerance and correction mechanism improved. Severe "races" were initiated in science and technology department, and supporting policies and incentive mechanisms have been launched, including issuing negative lists on research personnel, allowing the entry of external scientific research projects into R&D centers, and differentiated precise incentives for research personnel. The "Five Adherences" Principle for Scientific and Technological Awarding and Evaluation was established to realize the rewards and evaluations orientation centered on scientific and technological innovation quality, performance, and contribution, while stimulating the vitality of scientific and technological innovation through innovative institutional mechanisms.



Optimizing R&D and Innovation Management System.



Establishing High-level Innovation Platforms.

The Company has been certified by the Ministry of Industry and Information Technology as a 5G Applications Industry Array (AIA), becoming the first 5G AIA innovation center in China that focuses on high-end offshore equipment 5G integration innovation. Progress has been made phase by phase in the declaration of National Technology Innovation Center and National Key Laboratory in the field of offshore oil and gas equipment, marking a continuous improvement in the construction of the high-level innovation platform system. We have formulated and developed 35 technical brands such as "Haifeng", 9 product brands such as "Qingtian", and 12 software brands such as "Pipeline Doctor".



Realizing High-quality Achievement Commercialization.

We have been focused on "engineering + products + services", boosting the advantages and bring up weaknesses in order to strengthen the EPCI overall contracting capability. Throughout the year, 202 achievements were successfully commercialized and implemented with "new principle, new system and new mechanism" by the principle of "internationalization, marketization and industrialization", with key technologies such as the design and construction of 300-meter deep water jackets and marine engineering digital twin technologies being applied in projects like Lihua 11-1, Lufeng 12-3, and Lingshui 25-1.

Awards won in industry skill competitions

31

National honors for workers' technical innovation achievements

76

### Case: Multiple Breakthroughs in Key Technologies in the Project of "Research and Development of Ultra-deepwater Piling Hammer System"

Project of the Ministry of Industry and Information Technology, the "Research and Development of Ultra-deepwater Piling Hammer System" made breakthroughs in multiple key technologies. The project completed the overall design and detailed system design of the ultra-deepwater piling hammer, as well as the manufacturing and testing of prototype systems. It also conducted unit testing of the ultra-deepwater piling hammer and designed and developed a system integration testing platform. Furthermore, research was carried out on the mechanics analysis of the underwater impact system, along with the vibration control technology, drive design and pressure compensation technology. Studies were also conducted on digital integrated control technology, construction techniques and specialized tooling, and system testing methods. The manufacturing of air compressor units, diesel generator units, and five key components including ultra-deepwater umbilical cables, deepwater motors, driving hammer rods, cylinder bodies, and hammer cores was completed. The project completed its sea trials on June 27th, filling a technological gap in China's domestic ultra-deepwater piling core equipment.



Sea Trials and Demonstration Application of the Ultra-deepwater Piling Hammer

### Case: Research and Engineering Demonstration Project of Float-type Internal Turret Single-point Mooring Key Technologies Finished the Research on Single-point Mooring Scheme



"Nanhai Endeavor" FPSO

The Research and Engineering Demonstration Project of float-type internal turret single-point mooring key technologies completed the research on single point mooring scheme, liquid slip ring product scheme design, steel cable product scheme design, stack adaptability improvement scheme design for liquid slip ring application, manufacturing, testing, transportation, and offshore installation of steel cable products, manufacturing, testing, and integrated installation of liquid slip ring products, offshore installation of floating cylinders, and mooring system reconnection work, winch tension tests, and review of floating cylinder lifting schemes. The project broke through technologies such as mooring, mooring turret design and precision control, slip ring stack integration, etc., for float-type internal turret single-point mooring. The project aims to build the domestic industrial chain for core single-point products and develop "liquid slip rings" and "high-strength permanent mooring steel cables" for engineering demonstration applications on target FPSOs.

### Case: Completion of the Main Structure of Asia's First Deepwater Jacket "Haiji-2"

On November 21, the deepwater jacket "Haiji-2" under the EPCI general contracting responsibility of COOEC, successfully topped out in Zhuhai, Guangdong, setting two Asian records for height and weight.

The total height of the "Haiji-2" jacket is 338 meters, with a weight of 37,000 metric tons, approaching the limit of the load-bearing capacity of domestic construction sites and lifting equipment. For the first time in the construction of domestic jacket platforms, the project used S420 high-strength steel on a large scale, significantly reducing the total weight of the structure while increasing strength, overcoming technical challenges such as independent design of super-large deepwater jackets, joint lifting of ultra-large-tonnage structures, and independent development of high-strength steel welding processes. It leads in the field of design and construction technology for jacket platforms in water depths of over 300 meters in Asia.

Upon the completion of "Haiji-2" deepwater jacket platform, it will become the tallest offshore oil and gas production platform in Asia, to be applied in an area approximately 220 kilometers southeast of Hong Kong, with a water depth of about 325 meters, achieving a secondary development of the billion-ton-class deepwater oilfield - Lihua 11-1/4-1 oilfield.

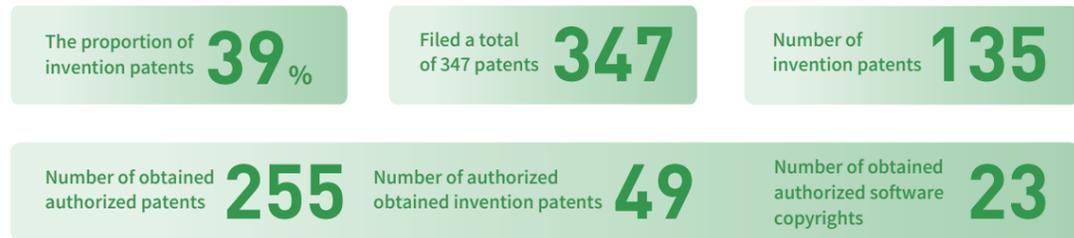


Successful Top Out of "Haiji-2"

## Protecting Intellectual Property Rights

COOEC continues to strengthen its intellectual property declaration management. In order to enhance the quality of IP declaration, it issued the Notice on Further Promoting High-Quality IP Declaration Work to strengthen its IP layout thinking and focus on value creation. Declarations of core patents with strong foresight, leading roles in industry development, high market value, and reserve, strategic and protective characteristics, were made based on the Company's research results. The objective is to gradually form a portfolio of patents for specific technologies or unique products, thus fostering core patented technologies or products. Furthermore, the Company conducts assessments of new patent applications and authorized patent maintenance based on technical value, strategic value, economic value, legal value, market value and other dimensions. This approach scientifically and objectively promotes the management of high-value patents.

In 2023, the Company filed a total of 347 patents, including 135 invention patents, accounting for 39% of the total, and obtained 255 authorized patents, including 49 invention patents and 23 authorized software copyrights.



## Accelerating Digital Transformation

Adhering to the general principles of "directed by strategies and serving the main business", "business-driven, IT-led, data intelligence-enabled development" and "unified planning, standards, construction, and management", COOEC focuses on the "1235" development strategy and business needs in its "14th Five-Year Plan". By taking a holistic approach and making engineering project management the core, the Company is digitizing the entire EPCIM business chain to promote the sharing of data assets, enhance core business capabilities, and improve management efficiency, ultimately building a "digital COOEC".

The Company is advancing the construction of "3+7+N" digital transformation scenarios, accelerating data governance, strengthening digital infrastructure, and fortifying network security. The digital transformation and data governance efforts have achieved fruitful results, providing strong support for the Company's high-quality development. Successfully selected as a national intelligent manufacturing demonstration factory by five ministries and commissions, the Company's "5G+ smart factory" construction has made new progress. It has won over ten ministerial and industrial awards, including the Silver Award in National Benchmark Competition Finals of the 6th "Blooming Cup" 5G Application Competition.

We kept building a fully digitized industry chain. The preliminary construction of three core scenarios has been completed. The collaborative design platform has been accepted, and the smart manufacturing in Lingang is continuously promoted, summarized and optimized. The engineering project management platform is online and in trial operation. While improving the business efficiency in our own sector, efforts were also made to realize the seamless connection of core professional data for collaborative design and intelligent manufacturing to enhance sectoral synergies.

With great attentions paid to the development of digital industries, the application of the digital twin health management system is expanding. The dual delivery of engineering projects is steadily progressing, aiming to support the construction of "intelligent oilfields" based on engineering and service expansion.

### Case: COOEC's Intelligent Manufacturing Base included in 2023 Typical Cases of Digital Transformation of Listed Companies

In a close response to characteristics and control requirements of offshore oil and gas equipment manufacturing, COOEC's Intelligent Manufacturing Base leveraged new technologies such as 5G+ industrial Internet to creatively implement automated production lines and three-dimensional warehouses based on discrete heavy steel structure processing. A digital control system was developed based on a single data source and an integrated platform to enhance operational capabilities, improve operational efficiency, deliver digital twins and offer other business values, thereby giving a boost to the Company's quality improvement, cost reduction, and efficiency enhancement. The Base focuses on digital scenarios such as intelligent safety control, intelligent production, digital operation of equipment and facilities, low-carbon energy management and product digital twinning. It effectively improves the working environment, significantly reduces labor intensity, reduces dependence on highly skilled workers and achieves remarkable results in production and operation efficiency. This effort has made a positive contribution to enhancing China's competitiveness in offshore oil and gas equipment manufacturing and safeguarding national energy security.

In June 2023, the project won the Scenario Innovation Award for 2023 Typical Cases of Digital Transformation of Listed Companies by China Association for Public Companies.



# WORK TOGETHER TO BUILD ENABLING A BETTER FUTURE

Practicing People-oriented  
Philosophy

Collaborating with  
Partners for Mutual Success

Community  
Development Initiatives

## Practicing People-oriented Philosophy

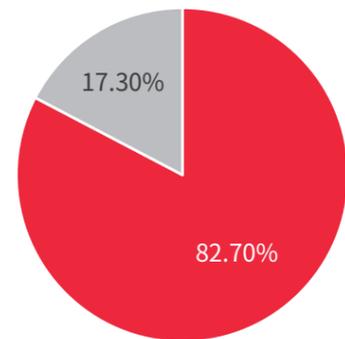
COOEC upholds the “people-oriented” management philosophy and implements an employment policy of equality and non-discrimination. The Company treats employees of different races, nationalities, beliefs, genders, marital statuses, and those under special legal protection equally. In the aspects of recruitment, remuneration and benefits, and career development, the Company provides equal opportunities for employees, actively creating an environment of equality, non-discrimination, and diversity.

### Safeguarding Rights and Interests of Employees

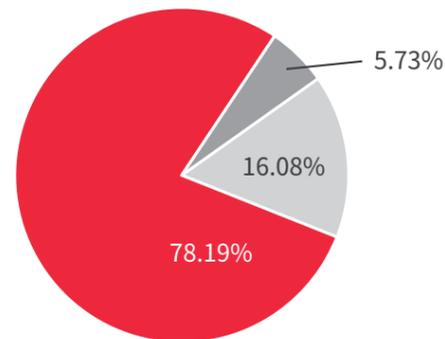
COOEC strictly complies with the requirements of Labor Law, Labor Contract Law, Employment Promotion Law and relevant policies and regulations to protect the basic rights and interests of employees.

#### Employee Recruitment

The Company has formulated the Employment and Recruitment Management Measures, which clarifies the principles, procedures and disciplinary requirements of recruitment management, ensuring that recruitment and employment management are conducted in compliance with laws and regulations. It strictly implements the national Special Rules on the Labor Protection of Female Employees, specifies matters related to the special protection of female workers in Collective Contracts, and effectively safeguards their legitimate rights and interests. There are a total of eight female leaders at the middle management level within the Company. The labor contract signing rate is 100%. As of the end of 2023, the Company had a total of 9,755 employees.



■ Man ■ Women  
Composition of Employee Genders



■ Under 30 ■ 30-50 ■ Over 50  
Composition of Employee Ages

#### Remuneration and Benefits

The Company has established a comprehensive and effective welfare system, ensuring timely processing of five major social insurances and housing provident funds for employees. Additionally, it has established an enterprise annuity system and provided insurance coverage for personal accidental injury, major illness, safety liability, as well as supplementary medical insurance for employees and their children. Moreover, it has established a global medical security system for expatriate employees. For mobile employees, the Company provides transitional housing, subsidies and other life guarantees, with transitional apartments offered to single employees to help them better balance work and life. The social insurance participation rate is 100%. Furthermore, the Company provides various benefits including health examinations, paid leaves, assistance for difficulties, and assistance for major illnesses.

Social insurance participation rate  
**100%**

#### Respecting Human Rights

The Company fully complies with the ten principles advocated by the United Nations Global Compact, respecting and protecting human rights throughout its operations. It strictly adheres to Provisions on the Prohibition of Using Child Labor and relevant labor laws and regulations, firmly prohibiting the recruitment and use of child labor. The Company also abides by local regulations regarding labor remuneration, working hours, rest and vacation, and mandated benefits, prohibiting forced labor. During the reporting period, no cases of child labor or forced labor were found to exist.

#### Remuneration Management

The Company has formulated the Employee Performance Evaluation Measures and established a market development incentive plan based on the principle of "precise motivation with clear highlights", providing immediate incentives to outstanding contributing employees. The Leadership Remuneration Management Measures has been developed to establish incentive and restraint mechanisms for senior leadership remuneration. Further improvements have been made to the performance management mechanism and pressure transmission chain that "specifies performance indicators of all individuals and responsibilities of all positions", where employee remuneration is dynamically linked to performance assessment results, achieving normalization of "remuneration changing according to performance". Leadership remuneration consists of basic annual salary, performance-based annual salary, term incentives, rewards for exceptional contributions and welfare subsidies. In cases where Company leadership violates relevant national laws and regulations and fails to fulfill their duties or fails to fulfill in a correct manner resulting in losses to company assets, the Company will deduct the annual performance-based salary or recover part or all of the already paid performance-based salary and term incentive income of the relevant leadership based on disciplinary actions and the results of asset loss responsibility determination according to Party discipline and government regulations.

#### Work and Leave Policy

The Company strictly adheres to relevant regulations concerning employee holidays in China and has formulated the Employee Attendance and Leave Management Measures to provide employees with annual leave, sick leave, marriage leave, bereavement leave, nursing leave, maternity leave, paternity leave, etc., fully guaranteeing the statutory holiday rights of employees. It also provides paid annual leaves and home leaves in addition to national statutory holidays, increasing the duration of maternity-related leaves.

#### Democratic Management

The Workers' Congress is functioning as the main carrier and basic form of democratic management in the Company. It conducts special reports on the Company's production and operation, financial situation, quality and safety management, reviews major decisions involving the enterprise and major issues concerning employees' vital interests, such as staff proposals, collective contracts, and employee handbooks, and accepts supervision from employee representatives. Special symposiums and open days of headquarters functional departments were held, along with surveys conducted to collect employees' opinions. Other channels included the "Reasonable Suggestions" App and a staff service hotline.

#### Case: Promoting Democratic Management for a Stable Development Environment

On November 22, COOEC held a Symposium for United Front Workers to deeply study and implement the spirit of the 19th National Congress of the Communist Party of China and the spirit of the Central United Front Work Conference, collect the opinions and suggestions of united front workers, and arrange the deployment of key tasks for the next step.

COOEC regards the Workers' Congress as the main carrier and basic form of democratic management. The First Session of the Sixth Workers' Congress was convened to announce special reports on the Company's production, operation and finance situation, and to review major decisions involving the Company and major issues concerning employees' vital interests. During the Second Session of the Sixth Workers' Congress, two employee supervisors were elected to join the Company's Board of Supervisors, thereby enhancing their supervisory function. Secondary units with Party committees were motivated to regularly convene Workers' Congresses to promote grassroots employees' participation in decision-making, management, and exercise of democratic management rights concerning the Company's operation.

### Providing a Growth Platform

COOEC deepens the implementation of the talent-strengthening strategy, continuously consolidating and enriching various employee training platforms, broadening employee development paths, innovating employee training methods, and strengthening the construction of talent echelons to inject new vitality into the Company's development.

#### Facilitating Promotion Systems.

To further plan the employee career system, and to reflect the equality of promotion channels and opportunities, the Company has issued and implemented the Employee Team Management Measures and Job Sequence Conversion Management Measures, clarifying the promotion channels and development paths for employees in each sequence. Research and development of the "Talent Growth Map" for COOEC aims to explore the optimal path for talent career growth, attaching greater importance to self-cultivation of talent, and providing standardized and procedure-based guidance for the growth of cadres and employees.

#### Consolidating Employee Training.

The Company strictly adheres to the requirements of the Training Management Measures and the Training Cost Management Measures, establishing a "1+4+1" training program framework. Leveraging the "Five-in-One" training system, it develops a hierarchical and categorized training system tailored to different talent pools, offering serialized courses and adopting a training approach that integrates offline and online learning with practical application. Utilizing resources from universities, institutions, and other sources, the Company conducts talent development initiatives to enhance professional capabilities and overall competence. For instance, under the specialized training for key talents, separate training programs are offered for leadership cadres, project management personnel, young employees, technology experts, international talents, and highly skilled professionals across management, technology, and skill sequences.

#### Case: Systematically Planning Talent Strategy Blueprint with "Talent Growth Map"

With the goal of "enabling talents to grow better and faster", COOEC has developed a "Talent Growth Map" to study and formulate talent development strategies. This system consists of two stages: common growth and differentiated growth, focusing on the optimal growth paths of four sequences. The system treats vertical promotion channels within the business, management, technology, and skills sequences as "expressways", and lateral rotation channels between regions, units, sequences, and professions as "interchanges". It establishes two types of promotion channels based on positions and ranks and systematically optimizes settings for growth milestones, job promotion standards, individual development directions, and organizational training measures. This provides standardized and procedure-based guidance for the growth of cadres and employees. For instance, it further clarifies job scoring criteria, encourages employees to actively engage in on-site experiences overseas, offshore, and in project production lines, and promotes the reasonable mobility and development of outstanding cadres among regions, organizations, and professions. The aim is to create a specialized, young, and internationalized cadre team with rich job experience and outstanding comprehensive abilities. Moreover, it sets up a series of training courses as a reserve pool and important reference for the promotion and growth of cadre talents, ensuring the dual advancement of the quality of cadre talent work and the speed of cadre talent training. This system establishes a reference standard for employee career growth and serves as an implementation guide for the Company's cadre talent cultivation.



#### Case: Establishment of the First Professional Training Center for Offshore Engineering Diving Skills Enhancement in China

Divers are indispensable professionals in the offshore engineering industry. However, due to the lack of specialized training centers for skill enhancement, the training efficiency and safety management level of engineering divers in China have been greatly constrained. In response to the specific needs of divers, COOEC independently designed and constructed the first professional training center for offshore engineering diving skills enhancement in China with high standards, aiming to promote the safe, standardized, and regulated development of the offshore engineering diving industry. The training center consists of the "COOEC Frogman" workshop and diving training facilities, primarily catering to skilled personnel who have obtained diving qualifications. It aims to establish a professional training center integrating training in safe marine engineering operations, certification of diving skill levels, underwater simulation tests for marine engineering, and marine scientific research.

### Caring for Employees

Adhering to the principle of "addressing issues promptly and efficiently", COOEC has implemented ten practical initiatives under the "People's Livelihood Projects" banner. This includes establishing a food committee to renovate canteen facilities, improve dining standards, and introduce specialty dishes. Initiatives such as the "Water Supply Equipment Upgrade" project, expanding and enhancing amenities such as shuttle buses in remote factory areas, installing charging stations, and constructing bicycle parking areas, have been launched to facilitate smooth transportation for employees.

Moreover, COOEC has created a diverse platform for cultural and sports activities, forming and managing associations for film, calligraphy and painting, and clubs for football, basketball, badminton, fitness, and yoga. These clubs provide employees with abundant opportunities for participation. COOEC has organized 4 grassroots outreach performances by the "Langhua" Art Troupe, along with activities like staff brisk walking, singing competitions, and short film and video contests. Additionally, COOEC encourages its subsidiary units to organize various recreational activities such as fun sports meeting and spring/autumn outing, further enriching the cultural and sports life of employees and meeting their diverse spiritual and cultural needs. Meanwhile, the Company provides professional psychological health checks and counseling services for employees, organizes group counseling sessions and psychological book clubs, and pays special attention to the physical and mental health of overseas employees, offshore workers, and female employees. With the completion and use of 14 nursing rooms, the Company aims to enhance the happiness and sense of belonging of its employees.



#### Case: Design Institute Union Organizes "Tracing Footprints, Building Dreams Together" Open Day for Employees' Families

On August 25, the Design Institute Union organized the "Tracing Footprints, Building Dreams Together" Open Day for employees' families. More than 120 family members of employees visited COOEC, experiencing the current development status of the enterprise and the working environment of their family members up close. After completing the "Smile Check-in", family members and "COOEC Little Sailors" toured the Digital Technology Center for Ocean Engineering, gaining insights into the profound impact of digital technology on offshore platform construction. Guided by professional interpreters, family members explored various equipment including the float-over simulation platform, crane lifting simulation platform, and underwater operation simulation platform.



"This close-up visit to our family members' working environment has made us deeply feel the Company's strong humanistic care, and we are proud to be family members of COOEC employees. In the future, we will do our best to support our family members and enable them to devote themselves wholeheartedly to their work."

- Employee's family member

### Safeguarding Occupational Health

COOEC fully implements the spirit of General Secretary Xi Jinping's important instructions on promoting occupational disease prevention and control and adheres to the concept of "great health and well-being" advocated by General Secretary Xi Jinping. The Company comprehensively fulfills the main responsibility of occupational disease prevention and control for employers, strictly controls occupational hazards, and has not experienced any occupational disease incidents, group food safety incidents, or infectious disease incidents throughout the year.

The Company has optimized and upgraded employee physical examination programs, strengthened screening for basic diseases such as cardiovascular and cerebrovascular diseases, differentiated the design of physical examination plans, enhanced the autonomy of employees in selecting physical examination items, and met the diverse needs of employees. In terms of mental health, the Company has comprehensively carried out employee mental health assessments and various mental health training activities, and established a mental health consultation hotline, providing employees with a green channel for mental health counseling. In accordance with the "Golden 4 Minutes" initiative, the Company has deployed automated external defibrillators (AEDs) comprehensively in all buildings, construction sites, and vessels to strengthen the Company's medical emergency response capabilities. The Company spares no effort in promoting health management and investment, comprehensively ensuring the physical and mental health and safety of its employees.

### Collaborating with Partners for Mutual Success

COOEC firmly believes that win-win cooperation is the only way for enterprise development. It continues to work closely with suppliers, customers, and other partners to jointly create greater business value and social benefits.

### Creating A Responsible Supply Chain

**Strengthening Suppliers Management.** The Company has established a supply chain management system with "clear responsibilities, efficient decision-making, controlled risks, and closed-loop management". This system focus on key control matters, clarify responsibilities, standardize procurement processes, effectively prevent human intervention, and enhance the Company's ability to prevent and resolve major risks. Specifically, the Company has established a closed-loop management mode for suppliers. It clarifies the full-process elements of supplier management. The Company has formulated the Supplier Management Measures and Supplier Compliance Management Guidelines, specifying nine management requirements for suppliers in terms of development, selection, use, and fulfillment of social responsibilities. Additionally, the system explicitly allows for moderate preferential incentives to be provided to suppliers of environmentally friendly and energy-saving products. Meanwhile, the Company conducted regular inspections of suppliers, primarily focusing on the quality of supplier products, whether they have been subject to government environmental and safety administrative penalties, and the risks of corruption and bribery. It was explicitly stated that discredited persons are not allowed to participate in the Company's procurement activities.

**Implementing Clean Procurement.** The Company organized a supplier compliance open letter campaign, sending clean compliance initiatives to 2,400 suppliers listed in the Company's directory. This initiative further disseminated the Company's compliance and integrity management requirements to suppliers, explicitly outlining the "Ten Prohibitions" for cooperation.

**Pushing for Green Procurement.** The Company formulated the Action Plan for Green Supply Chain Construction in the Green Development of COOEC Procurement Supply Chain, implementing actions in six areas: developing green suppliers, upgrading procurement standards to green, promoting green warehousing and logistics, strengthening resource recycling, deepening "decarbonization" cooperation with strategic suppliers, and advocating for green and low-carbon work methods. The green certification status of over 3,000 suppliers in the inventory was systematically reviewed, and supply chain carbon emissions and energy consumption were analyzed. A list of "high-pollution, high-energy-consuming" products not to be purchased was established, and energy consumption requirements for purchased equipment (level II and above) were clarified. Green transformation of warehouse facilities was actively promoted, achieving a 39.7% reduction in comprehensive warehouse energy consumption. The Company carried out green manufacturing support training for high-quality suppliers and organized the construction of a clean energy supplier resource pool, which includes 315 suppliers.

			2023
Suppliers management	Number of suppliers	-	2,713
	China (the Chinese mainland)	-	2,414
	China (Hong Kong, Macao and Taiwan) and foreign countries	-	291
	Number of suppliers reviewed	-	1,040
	Number of suppliers suspended for non-compliance	-	123
	Number of potential suppliers rejected for non-compliance	-	55
	Number of ISO 9000 certified suppliers	-	2,713
	Number of ISO 14000 certified suppliers	-	2,507
	Number of ISO 45001 certified suppliers	-	2,507
	Number of suppliers signing Integrity Agreement	-	2,713
Management of Supply Chain Links	Number of Major Risks and Impact Events in the Supply Chain	-	0

### Case: Conducting Green low-carbon Training for Suppliers

In 2023, COOEC organized green and low-carbon training for suppliers. In response to the low number of green certifications obtained by suppliers listed in the Company's directory, industry experts were invited to conduct green certification training for high-quality suppliers in the Tianjin area, assisting them in applying for green certification. 84 suppliers from the Tianjin area participated in the training.

### Providing Quality Services

COOEC adheres to a customer-centric approach, orienting its work towards customer needs to continuously enhance customer satisfaction, foster loyalty, maximize customer value, and optimize company profits. The Company has formulated the Customer Management Measures to achieve high-quality customer management.

COOEC has established a comprehensive and effective mechanism for customer satisfaction surveys. Each affiliated unit develops Customer Satisfaction Survey Questionnaires tailored to its business characteristics. Customer satisfaction measurement values are obtained through face-to-face customer interviews and questionnaire surveys, enabling real-time collection of various customer opinions, suggestions, complaints, praises, quality feedback, and other information. COOEC and its affiliated units conduct an annual comprehensive analysis of customer satisfaction, compile the Customer Management Work Report, identify management improvement points, propose improvement measures and advices, and focus on monitoring special cases to lay the foundation for the Company's long-term sustainable development.

In 2023, the overall customer satisfaction rate was 89.62%, with domestic and international customer satisfaction rates of 90.38% and 85.97%, respectively.

## Community Development Initiatives

COOEC prioritizes establishing positive interactions with communities, actively engages in community development projects, and grows together with local communities to contribute to their prosperity and progress, thereby supporting sustainable community development. In 2023, the total amount of philanthropic donations reached RMB 459,000.

Total amount of philanthropic donations reached  
**RMB 459,000**

### Promoting Rural Revitalization

COOEC fulfills its responsibilities as a central government enterprise by actively participating in rural revitalization efforts. The Company has formulated and implemented the Three-Year Plan for Assistance and Development and the Annual Plan for Assistance and Development. In the implementation of assistance work, COOEC leverages its industry characteristics and operational advantages, enriches and expands assistance measures, and adheres to the work philosophy of "tailored assistance and precision support", fostering a collaborative assistance framework characterized by "unified leadership by the Party Committee, concerted efforts from top to bottom, multi-party coordination, and participation by all" through the Company.

Through in-depth analysis of the shortcomings, strengths, and unique features of the assisted areas, the Company takes rural needs into consideration and identifies key assistance projects focusing on industries, infrastructure, rural governance, employment, healthcare, and education. It actively coordinates organization, resources, management, and talent, strengthens standardized management of assistance projects, and mobilizes broader participation from sister companies, partners, and other stakeholders in rural revitalization efforts, striving to build a strong synergy for assistance work. The Company spent over **RMB 4 million** on purchasing products from assisted communities throughout the year.

**Further Exploring Assistance Models.** In Libozhuang Village and Huangtukan Village in Tianjin, where assistance is provided, the Company has preliminarily explored a working model and coordinated operation mechanism characterized by "Party Committee's decisions guiding development, communication between enterprises and local communities promoting progress, discipline inspection and audit ensuring supervision, and deployment of officials ensuring implementation".

**Supporting the Development of Modern Urban Agriculture.** Targeting the demand for high-end agricultural products consumption in the Beijing-Tianjin urban agglomeration, supporting the in-depth development of characteristic agricultural resources in two assisted villages, developing the agricultural product processing industry, promoting the high-end, boutique, and green development of premium Xiaozhan rice and "Six-Clove Red" garlic production, further improving product quality, creating distinctive brands, extending the industrial chain, enhancing product added value, and promoting the connection between characteristic agricultural products and the high-end market.

### Case: LNG Branch conducts rural revitalization volunteer service activities

Mar. The LNG Subsidiary organized over 30 "Blue Force" volunteers to rush to Huangtukan Village for volunteer service activities, assisting in spring farming and clearing idle land. The team helped farmers manually break the unsplit skins of garlic cloves, covered the sprouting tips with soil, and cleared miscellaneous items, garbage, and weeds from the idle land. They also cultivated the idle land to improve the village's appearance.



Activity site

## Organizing Charitable Activities

COOEC actively fulfills its social responsibility, conveying positive energy through a series of public welfare activities to promote social harmony and progress.

**Charitable Donations.** Holding the third Love Charity Sale, raising a donation of RMB 200,000 for Tibetan children. Conducting visits and assistance for Hope Primary Schools, and pairing assistance for children in need and orphans in Tibetan areas.

**Donation for Education.** COOEC has repeatedly carried out charity and education poverty alleviation activities by donating teaching equipment and materials, awarding scholarships, etc., making the two Hope Primary Schools that received assistance gradually become well-known model schools in the local area. The company organized the "Childhood Dreams" volunteer service event, donating books to children in the partnered Tibetan areas, enabling these children to broaden their horizons, increase their knowledge, and feel love and warmth through reading.

**Volunteer Activities.** The Company's "Blue Power" youth volunteers have extensively engaged in volunteer service activities in areas such as rural revitalization and environmental protection. Throughout the year, they organized over 60 volunteer service events involving more than 810 participants, with a total service duration of 3,193 hours. They organized "voluntary blood donation" activities, with a cumulative blood donation of 92,600 milliliters. They received numerous honors, including the "Outstanding Volunteer of Jinwan District, Zhuhai City" and "Public Welfare Loving Enterprise of Jinwan District, Zhuhai City".

### Case: COOEC Youth League Committee organizes visits to Hope Primary School in Longhua, Hebei, supported by CNOOC

On October 31, the COOEC Youth League Committee visited Hope Primary School in Longhua, Hebei, to express condolences. They awarded certificates of honor to "Merit Students" and "Outstanding Teachers", presented a donation check to the school to help improve the learning environment and enhance the quality of education and teaching. The Deputy Director of the Company's Party and Mass Work Department and the Secretary of the Youth League Committee signed a pairing assistance agreement with representatives of children in need, committing to donate scholarships to them for three consecutive years to help them overcome practical difficulties.

While bringing donations and supplies to the children, volunteers also brought the "COOEC Classroom" to the school, sharing knowledge about the uses of petroleum, offshore oil and gas exploration, and the "Deep Sea No. 1" project. The vivid narration of volunteers brought fascinating classroom experiences to the children, who eagerly participated in discussions and interacted actively with the "COOEC teachers".



"COOEC Classroom" teaching

# PROTECTING THE ECOLOGY EMPOWERING A GREEN FUTURE

Combating  
Climate Change

Adhering to  
Green Operation

Optimizing Resource  
Utilization

Improving the Prevention  
and Control of Pollution



# Protecting the Ecology, Empowering a Green Future

## Combating Climate Change

COOEC has formulated and released the COOEC 2023-2025 Work Scenario Low Carbonization Plan and the 2023-2025 Energy Efficiency Enhancement Action Plan. Through measures such as technological breakthroughs and transformation of production modes, COOEC actively engages in the research and development of offshore wind turbine, CCUS (carbon capture, utilization, and storage), hydrogen energy projects, and industrial integration, continuously building a technology-led green core competitiveness and contributing to the realization of the "dual carbon" goals. At the same time, the Company is planning to establish a climate risk governance framework, incorporating climate risk management responsibilities into its ESG management work.

### Coping with Climate Risks

COOEC actively responds to the "dual carbon" goals, actively identifies and responds to climate change risks, and dynamically adjusts climate risk identification results and response measures regularly. It continuously strengthens energy management, explores low-carbon technologies, and supports the Company's green and sustainable development.

Risk or Opportunity Type				Risk and Opportunity Description	Actions	Financial Impact	
Climate-related Risks	Transition Risks	Policies Risks	Regulation of the oil and gas engineering industry	The dual carbon goals may cause regulatory restrictions to the oil and gas industry and impact the oil and gas engineering sector.	In the short term, oil and natural gas, as key pillars of energy security, still hold developmental potential, especially in the context that energy security is emphasized. In the long term, the Company is already leveraging its existing technological strengths to actively expand into businesses like offshore wind power construction and offshore carbon storage construction.	Revenue decline	
			Regulation of marine pollution	The Company's construction sites are predominantly offshore. Building materials and various ships used during and for construction could potentially harm the marine ecological environment.	The Company complies with marine-related laws and regulations of various countries. It has established a long-term mechanism for the protection of marine ecology and actively protects both the marine and terrestrial ecological environments. The Company is making all efforts to minimize the impact of its production activities on the surrounding environment and marine life. The Company actively explores and develop green, eco-friendly coating processes. In its portside material pre-treatment lines, water-based primer has been fully implemented, replacing the traditional solvent-based primers high in volatile organic compounds. The Company keeps prioritizing ship environmental management, strictly adheres to the Discharge Standard for Water Pollutants from Ships (GB 3552-2018) and Annex IV of MARPOL 73/78, Regulations for the Prevention of Pollution by Sewage from Ships, and has developed a Comprehensive Management Manual for Chartered Vessels.		
		Laws Risks	Regulation of the oil and gas engineering industry	Given the industry's stringent environmental regulatory measures, the Company could face administrative sanctions and legal litigation.	Consistent with 'Policies Risks'	Increase in non-operating expenses	
			Regulation of marine pollution	The Company's main construction locations are in countries with a series of laws and regulations regarding marine pollution. Violating these laws and regulations could lead to administrative penalties and legal litigation.	Consistent with 'Policies Risks'	Increase in non-operating expenses	
	Physical Risks	Short-term Risks	Typhoons and coastal flooding	The Company's primary production bases are located in coastal areas, which are prone to typhoons and coastal flooding. Typhoons and coastal floods can significantly impact the Company's production, such as obstructing the supply of raw materials and components, causing production interruptions and damaging factories and equipment, which can then lead to delays in production schedules, a decline in quality, and a reduction in sales.		Prior to the typhoon season and flood periods in each year, the Company organizes its departments to inspect, reinforce and repair facilities. The Company also conducts disaster prevention training for employees, purchases flood prevention equipment like water pumps, reviews production schedules and adequately restocks raw materials and components to effectively manage the acute impacts of climate-related physical risks.	Capital expenditure, decrease in revenue
			Natural disasters at sea	The Company's primary construction sites are offshore and may be threatened by catastrophic oceanic natural disasters like destructive waves, sea ice, tsunamis and storm surges. This is particularly true as the Company is actively expanding its capabilities in constructing deepwater oil and gas field projects in waters deeper than 300 meters, where maritime natural disasters are even more severe. These disasters can lead to construction delays, contract breaches, damage to engineering structures, and injuries or fatalities among personnel.		The Company prioritizes safety management and closely tracks and responds to adverse weather conditions like typhoons. It ensures early prevention, preparation, close monitoring and timely reporting of emergencies, initiating appropriate emergency response levels as needed, and employing various measures to minimize losses.	Capital expenditure, decrease in revenue

Risk or Opportunity Type		Risk and Opportunity Description	Actions	Financial Impact		
Climate-related Opportunities	Technology Risks	Investment failures in new technologies	Preliminary research into new green technologies such as offshore wind power construction, offshore carbon storage construction, undersea data center projects and hydrogen energy projects may face the risk of failure.	The Company has successfully implemented projects of offshore wind power construction, offshore carbon storage and undersea data center construction. The prospects for these new businesses are promising, and the likelihood of investment failure is relatively low.	Increase in expenses	
		Costs associated with transitioning to new technologies	Transitioning from traditional oil and gas engineering construction to new green business sectors like offshore wind power may incur significant transformation costs.	The Company aims to create value diversely by balancing traditional businesses such as oil and gas engineering construction with new ventures like offshore wind power. In the process of transitioning to new business sectors, the Company would fully leverage its accumulated technological strengths, management experience and client relationships to maintain its competitive edge and minimize transition costs.	Increase in costs	
	Market Risks	Client Preference for Oil and Gas Engineering Decreases	Against the backdrop of global energy transformation, major clients are adopting a cautious approach to oil and gas development. In contrast, projects such as offshore wind power, offshore carbon storage and hydrogen energy engineering are likely to attract greater interest from clients.	The Company, capitalizing on its existing technological advantages, has already begun actively expanding into areas such as offshore wind power construction, offshore carbon storage, undersea data center projects and hydrogen energy engineering.	Decrease in revenue	
		Reputation Risks	Failure to Implement Green and Low-Carbon Concepts	The lack of green, low-carbon technical service offerings may lead to dissatisfaction among stakeholders concerned about these issues, potentially affecting revenue.	The Company is utilizing its existing technological strengths to actively expand into offshore wind power construction and offshore carbon storage business.	Decrease in revenue
	Physical Risks	Short-term Risks	Negative ESG events/ESG	The occurrence of negative ESG events could damage the Company's reputation, leading to regulatory scrutiny and a reduction in revenue.	The Company has established a comprehensive ESG management system, integrating ESG management into its risk control processes to prevent the occurrence of negative ESG events.	Increase in Non-Operating Expenses, Decrease in Revenue
			Typhoons and coastal flooding	The Company's primary production bases are located in coastal areas, which are prone to typhoons and coastal flooding. Typhoons and coastal floods can significantly impact the Company's production, such as obstructing the supply of raw materials and components, causing production interruptions and damaging factories and equipment, which can then lead to delays in production schedules, a decline in quality, and a reduction in sales.	Prior to the typhoon season and flood periods in each year, the Company organizes its departments to inspect, reinforce and repair facilities. The Company also conducts disaster prevention training for employees, purchases flood prevention equipment like water pumps, reviews production schedules and adequately restocks raw materials and components to effectively manage the acute impacts of climate-related physical risks.	Capital expenditure, decrease in revenue
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Risk or Opportunity Type			Risk and Opportunity Description	Actions	Financial Impact	
Climate-related Risks	Physical Risks	Long-term Risks	Increase in average temperature	Some of the Company's production and construction sites are located in tropical and subtropical regions, which are more severely affected by the increase in average temperatures due to long-term climate pattern changes. This could lead to equipment overheating, resulting in production interruptions and construction delays, and may also affect the efficiency of workers' productivity and construction.	The Company provides adequate cooling measures in its production workshops and offers heat relief benefits to its employees, while mitigating losses caused by rising temperatures.	Increase in costs, decrease in revenue
			Water shortage	According to the World Resources Institute (WRI), the Company's Qingdao production base is located in an area with extremely high water pressure. A water shortage could lead to production halts. Additionally, the freshwater supply for the Company's offshore construction sites depends on replenishment from nearby land bases, which face the risks of drought and water scarcity, potentially affecting the progress of offshore construction.	Conduct key enterprise water balance tests and built water-saving enterprises. leverage digital systems to facilitate water conservation, promote measures such as water reuse for pressure testing, seawater desalination, renovation of old water supply systems, and organize water-saving campaigns to enhance water conservation awareness among employees. The annual water consumption per ten thousand yuan of output value decreased from 0.8231 in 2022 to 0.6127.	Decrease in revenue
Climate-related Opportunities	Resources efficiency			By improving the efficiency of production and distribution processes, buildings, machinery/equipment, transportation/mobility, and energy usage, along with broader management of materials, water, and waste, the Company aims to achieve effective emission reductions and transformation, leading to reduced costs.	The Company continuously improves its technology to reduce consumption of resources such as water, steel, aluminum alloys and concrete. It recycles and reuses water and metal resources consumed in production and construction processes. The Company advocates a conservation ethos, and regularly educates its employees on resource conservation.	Decrease in costs
		Energy Sources	Energy-saving measures	Extensive energy-saving measures help the Company reduce energy consumption in different processes, thereby lowering operational and production costs.	The Company promotes energy-saving techniques and reduces energy consumption. It has built an energy-saving carbon-reducing and water-saving information system for real-time detection and intelligent control.	Decrease in costs
		Use of green electricity	Increasing the use of green energy not only aids the Company in its low-carbon transformation but also promises to reduce corporate costs as green electricity prices continue to fall.	The Company has been promoting the construction of rooftop distributed photovoltaic projects in Lingang Economical Area of Tianjin, Qingdao and Zhuhai, reducing dependence on external electricity. By increasing the purchase and use of green energy, the Company will reduce its carbon dioxide emissions by 7,500 metric tons annually.	Decrease in costs	
	Products and Service	Wind power industry chain	Since wind energy is one of the clean energies with potential for large-scale application, the Company is involved in the construction of offshore wind power projects and sees a promising future in this field.	The Company is expanding its general contracting business into the offshore wind power field. Relying on its experience in offshore engineering, the Company is leveraging its comparative advantages to align with the European offshore wind development model in high-quality manner, and accelerating the development of the offshore wind industry. The focus is placed on deep-water wind power, large-scale booster stations and converter stations to initially establish an EPCI (Engineering, Procurement, Construction, and Installation) business chain centered on offshore wind design and extendable to construction and installation. By focusing on design optimization, modular manufacturing, intelligent manufacturing, digital delivery and innovative offshore installation methods, the Company is exploring ways to reduce costs throughout the entire lifecycle of the offshore wind industry.	Increase in revenue	

Risk or Opportunity Type		Risk and Opportunity Description	Actions	Financial Impact	
Climate-related Opportunities	Products and Services	CCUS industry chain	Carbon Capture, Utilization, and Storage (CCUS) technology is an important means to achieve carbon neutrality, with geological utilization, geological storage, and ocean storage being significant approaches. The Company can capitalize on its existing technological advantages to expand into CCUS engineering construction services.	The Company is developing a comprehensive competitive advantage in modular manufacturing of carbon capture units. Moving from device and facility construction to basic and conceptual design of engineering solutions, the Company is gradually building a CCUS engineering business capability that covers the whole industrial chain.	Increase in revenue
		Hydrogen energy industry chain	Hydrogen energy is one of the promising clean energies of the future. Therefore, the Company's business in hydrogen energy engineering construction boasts significant development prospects.	With a development priority of providing engineering and technical solutions for hydrogen production from offshore wind power, the Company focuses on areas such as EPCI general contracting of offshore wind hydrogen production platforms, design and installation of underwater pipelines for hydrogen/mixed gases, modular construction and offshore installation of hydrogen production units, and EPCM general contracting of liquid hydrogen/ammonia storage tanks. The Company aspires to be a leading enterprise in wind-powered offshore hydrogen production engineering in China.	Increase in revenue
	Market	Overseas markets	The global direction of new energy transition is consistent, and engineering businesses such as wind power, carbon fixation and hydrogen energy also have broad development prospects in overseas markets.	EPCI general contracting capabilities, led by design, are the foundation of the Company's existence. This is a unique advantage that distinguishes the Company from most domestic and international marine oil and gas engineering general contractors and is key to its participation in international competition. On this basis, the Company is actively transforming towards engineering businesses in wind power, carbon fixation and hydrogen energy, aiming to enhance its market image in the offshore wind power sector.	Increase in revenue
		Resilience	The Company's capacity to adapt to climate change allows it to better manage related risks and seize opportunities.	The Company has established a comprehensive climate risk and opportunity management system to predict and assess potential risks and opportunities, evaluate their impact and formulate response measures. The Company has developed a Green Development Action Plan, defined green development goals for the short term (2020), medium-term (2035) and long-term (2050) phases, and has set up three specific action plans for green oil fields, clean energy and green low-carbon initiatives. Now, the Company can effectively control relevant risks and seize related opportunities.	Increase in revenue, decrease in costs

### Strengthening Energy Management

COOEC's energy utilization mainly focuses on the onshore manufacturing of marine oil and gas equipment and offshore construction operations. The energy types primarily consist of outsourced diesel, electricity, and natural gas, with diesel accounting for over 80%.

In alignment with the spirit of the 20th National Congress of the Communist Party of China, and to further advance the Company's green and low-carbon development strategy, the Company has outlined its low-carbon development goals for the next three years in the 2023-2025 Work Scenario Low Carbonization Plan, guiding its future work.

- The Company will promote the low-carbon development of its manufacturing sites, engineering vessels, and office spaces by adopting high-efficiency equipment and technologies for new workplaces, implementing energy-saving process technology upgrades and enhancing equipment and facility efficiency, as well as changing energy utilization methods for existing workplaces.
- Furthermore, by enhancing the energy-saving and low-carbon management system, optimizing energy monitoring systems, and strengthening the construction of a green and low-carbon culture, the Company will solidify the management foundation for its low-carbon development.

The Company is committed to becoming a strong practitioner of low-carbon production and an effective provider of low-carbon solutions. To this end, COOEC has developed institutional documents such as the Energy Saving and Low Carbon Statistics, Reporting, and Monitoring Management Regulations and the Energy Saving and Low Carbon Management Regulations. Meanwhile, the Company adheres to the principle of simultaneous development and conservation, prioritizing conservation, and has incorporated energy-saving as a fundamental institutional practice, integrating it into the Company's daily production and operational management. It has established a comprehensive energy-saving and low-carbon management system covering energy, water, and carbon reduction, while continuously optimizing it in conjunction with the ISO 50001 Energy Management Systems.

No.	COOEC	Unit	Rolling Development Forecast Targets for 2023-2025		
			2023	2024	2025
1	Total Energy Consumption	TCE	165,542	192,340	194,729
2	Total Carbon Emission	10,000 metric tons	430,789	490,582	473,800
3	Comprehensive energy consumption per RMB 10,000 of output value (comparable price)	TCE/RMB 10,000	0.07	0.07	0.07
4	CO2 emissions per RMB 10,000 of output value (comparable price)	metric ton/RMB 10,000	0.18	0.17	0.16

In terms of energy conservation, COOEC firmly adheres to the priority of conservation and considers energy efficiency as the most direct, effective, and economical decarbonization measure. Through measures such as the application of energy online monitoring systems, optimization of production processes, and upgrading of old and high-energy-consuming equipment, COOEC vigorously promotes energy conservation and efficiency improvement. Throughout the year, it cumulatively achieved a total energy-saving of 3,319 tce and a reduction of 11,789 metric tons of carbon dioxide through technological measures.

### Case: Promoting Energy Conservation and Carbon Reduction in the Process of Production Through Digital and Intelligent Means

In recent years, COOEC has vigorously strengthened the construction of its Energy Management Center and established the Tianjin Lingang Dynamic Energy Monitoring System and the Intelligent Water Supply System in Qingdao Site. Leveraging instruments and monitoring points deployed on-site, real-time monitoring of energy and water usage within each site has been realized, and data analysis and statistics have been implemented for key processes. In 2023, the Tianjin Intelligent Manufacturing Base, through the application of the energy online monitoring system, promptly identified and addressed issues, eliminated equipment failures, and optimized energy-consuming processes, resulting in an annual electricity saving of 3.05 million kWh and water saving of 7,000 cubic meters. The Qingdao Subsidiary, through the intelligent water supply system, promptly detected large hidden leaks, and through pipeline repairs and transformations, saved a total of 131,000 cubic meters of water, driving overall energy and water efficiency improvement.



Intelligent Water Supply System in Qingdao Site

### Case: Building an Integrated Production Mode to Enhance Production Efficiency

COOEC actively promotes project modularization and integrated construction, implementing modular management concepts at various project stages. Compared with traditional construction processes, modular and integrated construction significantly reduces high-altitude lifting operations, making it easier to control product quality, remarkably improving assembly efficiency, significantly reducing construction costs, further shortening project construction cycles, and achieving maximum paint spraying resource savings. The LNG Canada Project completed in March 2023 realized the integrated construction of core process module and pipe rack module together as one for the first time in the world, with a module integration rate as high as 94%. Compared with similar projects in the previous period, efficiency increased by 28%, significantly improving energy utilization efficiency and achieving energy conservation and carbon reduction in the production process.



Building a Modular and Integrated Construction Mode

### Greenhouse Gas Emissions

As a provider of marine oil and gas equipment, COOEC's greenhouse gas (GHG) emissions mainly come from the consumption of fossil energy and electricity during the manufacturing and installation of marine oil and gas equipment, with emissions primarily from carbon dioxide and nitrogen oxides emitted by diesel combustion.

		2021	2022	2023
Scope 1 Emissions	tCO2e	255,622.64	283,192.12	312,714.14
Scope 2 Emissions	tCO2e	94,230.19	101,457.85	118,074.5
GHG Emissions per RMB 10,000 of output value	tCO2e/RMB 10,000	0.22	0.18	0.18
Reduction of GHG emissions	tCO2e	9,969	11,425	11,789.01

### Empowering Low-Carbon Development

While delving into traditional oil and gas engineering construction, COOEC actively explores low-carbon production models. By leading and promoting green factory, low-carbon fleet, and green supply chain construction through top-level design, COOEC is creating a green production model. In 2023, the Company was successfully recognized as a Ministry of Industry and Information Technology (MIIT) Green Supply Chain Management Demonstration Enterprise and ranked among the "Top 50 Carbon Neutrality Listed Companies in China".

**Expanding the Development of Clean Energy.** The Company strategically plans the development of clean energy businesses. Focusing on floating wind turbine as a breakthrough point, it vigorously conducts research on comprehensive energy utilization technologies, striving to achieve the strategic goal of balancing clean energy businesses with domestic oil and gas operations. The Company vigorously develops LNG business, with a total of 33 LNG tanks under construction throughout the year, which is expected to provide an LNG storage capacity of 7.53 million cubic meters upon completion. Efforts are made to expand offshore wind turbine business, and the world's first floating semi-submersible wind turbine platform "CNOOC Guanlan" was successfully built, breaking the records for water depth and offshore distance. Active exploration of hydrogen energy utilization was carried out, completing the basic and detailed design of the first domestic submarine pipeline for transporting high-purity (99.9%) hydrogen gas. Research was conducted on the application of marine energy generation technology, hydrogen production and transportation technology, as well as surveys on offshore floating wind turbine and FPSO. Research on multi-energy complementarity and electric power control technology was also improved. The grid-connected power generation of three photovoltaic projects at Tianjin Lingang, Qingdao, and Zhuhai sites has been successfully promoted, reducing carbon dioxide emissions by 7,500 metric tons annually.

**Exploring Low-Carbon Technologies.** Efforts are dedicated to building a low-carbon fleet. The Company jointly developed and manufactured Asia's first set of ship rotary sail systems, which were installed on the "HYSY 226" vessel, achieving an expected annual fuel-saving rate of approximately 12%, equivalent to 132 metric tons of fuel savings per year. The Company successfully achieved the official operation of China's first offshore carbon storage demonstration project, Enping 15-1 central platform, with an annual carbon storage capacity of 300,000 metric tons, marking another significant breakthrough in CCUS technology for the Company.

### Case: China's First Offshore Carbon Storage Demonstration Project Enping 15-1 Officially Launched

The Enping 15-1 carbon storage project was completed and put into operation in June 2023. As the first domestic offshore carbon dioxide storage demonstration project, it captures carbon dioxide associated with the offshore oilfield and reinjects it into underground formations at a certain burial depth after treatment for permanent storage, achieving zero emission of carbon dioxide. With an annual sequestration capacity of 300,000 metric tons, equivalent to planting nearly 14 million trees annually, the project fills the gap in China's offshore carbon dioxide sequestration technology.



Enping 15-1 Platform

### Case: Significant Breakthrough in the Independent Development and Demonstration Application of Deep Offshore Floating Wind Turbine Platform

The Company has completed the construction of the world's first floating semi-submersible wind turbine platform "CNOOC Guanlan", which broke through the "double hundred" water depth and offshore distance barriers. In May 2023, it was successfully integrated into the field grid, marking the first time in China that a deep offshore floating wind turbine platform directly supplies power to offshore oil and gas fields. The Company has achieved breakthroughs and mastery of 13 key technologies in this project, applied for 7 patents, formulated 6 standards, and fully achieved localization and independent controllability of equipment and facilities. The platform has a total draft weight of 11,000 metric tons, a height exceeding 200 meters, and an installed capacity of 7.25 MW. After it is put into operation, its annual power generation is expected to reach 22 million kilowatt hours, reducing carbon dioxide emissions by 22,000 metric tons. The successful implementation of the project has raised China's independent development capability of floating wind turbine from water depths of less than 50 meters to depths of 100 meters and above, propelling the overall localization of equipment manufacturing for deep offshore wind turbine to a new level.



## Adhering to Green Operation

COOEC is committed to implementing the requirements of the Environmental Protection Law, actively promoting green operation, continuously strengthening green management, and optimizing and improving operation and production methods to contribute to a better future.

### Emergency Management for Environmental Incidents

Emergency management plans have been established, including systematic planning for the prevention, early warning, emergency response, and emergency recovery of emergency events, including sudden environmental incidents, clarifying emergency response processes, personnel division of labor, emergency measures, etc., to ensure that emergency response to sudden environmental incidents follows established procedures. Emergency special plans for sudden environmental incidents have been established for each production unit according to their environmental characteristics and filed with the local government's ecological and environmental protection authorities. The Company has equipped various types of emergency materials for sudden environmental incidents according to emergency needs and joined the local government-enterprise emergency linkage mechanism, establishing cooperative relationships with professional emergency rescue forces. The Company has also established dedicated and part-time emergency rescue teams internally, conducting regular emergency training and drills to ensure rapid and effective response to sudden environmental incidents. In 2023, the Company and its subsidiaries did not experience any illegal or irregular environmental violations.

### Creating a Green Production Base

COOEC actively plans the layout of green industries, strategically deploys the construction of a green manufacturing system, and meticulously builds green manufacturing bases. Through the efforts of the Company and its subsidiaries, as of now, the three major manufacturing bases in Tianjin, Qingdao, and Zhuhai have obtained multiple national and provincial-level "Green Manufacturing" titles. In 2023, relying on the Tianjin Lingang Intelligent Manufacturing Base, the Company is in the process of establishing a Tianjin municipal-level "Green Factory".

No.	Certified Units	Honors Received	Granting Units	Award Time
1	CNOOC-Fluor Heavy Industry Co., Ltd.	Green Factory	Ministry of Industry and Information Technology	2019
2	Offshore Oil Engineering (Qingdao) Co., Ltd.		Ministry of Industry and Information Technology	2020

### Advocating Green Office

The Company actively promotes energy conservation and low-carbon propaganda, advocates a green and low-carbon production and lifestyle, and promotes the concept of green and low-carbon to the public. It organized the replacement of energy-saving lighting fixtures and the renovation of old and high-energy-consuming equipment in major office locations and production workshops, promoted paperless office, and built charging piles to facilitate employees' green travel, promoting energy saving and carbon reduction in production and life with practical actions.

#### Case: Conducting Voluntary Service Activities on "World Oceans Day"

On June 3rd, the COOEC Youth League Committee organized the "Blue Force" volunteers to conduct voluntary service activities at the East Dike Park of China-Singapore Tianjin Eco-city on "World Oceans Day". More than 60 young volunteers and family members participated in this activity. At the event, young volunteers read out the marine environmental protection initiative, promoted and mobilized the public to protect the marine environment, invited employees, family members, and tourists to sign on the theme banner, distributed promotional materials, popularized marine knowledge, and advocated everyone to participate in marine protection public welfare activities with practical actions.



Volunteers distributing promotional materials for World Oceans Day

## Optimizing Resource Utilization

COOEC enhances the efficiency of environmental resource allocation through scientific planning and rational scheduling, continuously promoting the green utilization and efficient management of environmental resources, and contributing to the creation of a better future.

### Protecting Water

COOEC always aims for efficient water utilization and implements comprehensive water management. In 2023, COOEC conducted key enterprise water balance tests and built water-saving enterprises, leveraging digital systems to facilitate water conservation. It promoted measures such as water reuse for pressure testing, seawater desalination, renovation of old water supply systems, and organized water-saving campaigns to enhance water conservation awareness among employees. These measures and technological initiatives resulted in a continuous reduction in total water consumption and improved water use efficiency. Despite a continuous increase in workload, the Company's fresh water consumption for the year was **1.5044 million** metric tons, a decrease of **0.26** million metric tons compared to the same period last year. The predicted annual water consumption per **RMB 10,000** of output value decreased from **0.8231** in 2022 to **0.6127**, indicating a significant improvement in water utilization efficiency.

### Safeguarding Biodiversity

The Company attaches great importance to biodiversity conservation, integrating biodiversity conservation concepts and requirements into its development strategy and daily operations. It actively takes measures to reduce the impact of its production and operation activities on biodiversity and ecosystems. During project planning and design, the Company strives to use sustainable and environmentally friendly raw materials and resources, prohibiting the use of materials from illegal mining, looting, or other violations of relevant laws and regulations. Environmental impact assessments are conducted before commencement, especially for projects and activities that may affect biodiversity. If the assessment results indicate a potential negative impact on biodiversity, corresponding management measures and protection actions are actively formulated to effectively protect biodiversity. During project construction and operation, targeted measures are taken to minimize ecological damage.

## Improving the Prevention and Control of Pollution

COOEC strictly implements the requirements of laws and regulations such as the Environmental Protection Law, the Law on Prevention and Control of Water Pollution, the Law on Prevention and Control of Air Pollution, the Law on Prevention and Control of Pollution from Environmental Noise, and the Law on the Prevention and Control of Environmental Pollution by Solid Waste. By strengthening source control, classified treatment, and regulatory monitoring measures, pollution emissions can be effectively reduced, and environmental quality can be protected.

### Strengthening Wastewater Management

The Company generates wastewater primarily from staff domestic sewage, winter boiler blowdown, high-salinity wastewater and backwash water from deionization purification equipment, pressure test wastewater, cleaning wastewater, etc., with the main pollutants being chemical oxygen demand, ammonia nitrogen, suspended solids, etc. The wastewater generated by the Company is discharged to the sewage treatment plant through the municipal pipeline network, and the wastewater discharge meets local sewage discharge standards.

**Domestic Wastewater Treatment.**

The oily wastewater from the staff canteen is treated through an oil-water separator, the wastewater from staff washing is treated through septic tank sedimentation, cleaning wastewater is treated through the sedimentation tank, and other wastewater is discharged into the local municipal sewage pipeline network through the factory area domestic sewage pipeline network for further treatment at the local sewage treatment plant.

**Reducing Discharge of Wastewater.**

The Company has formulated the Noise and Water Pollution Prevention and Control Management Regulations to standardize pollution prevention and control management. Efforts are made to strengthen management at the source of wastewater generation, promote the optimization of production plans and fresh water consumption matching, and minimize the use of fresh water. In the newly built site in Tianjin Lingang, pipeline design optimization is carried out, and pressure test water is recycled. In the existing site, recycling tanks are set up to increase the recovery and reuse of pressure test water. Awareness of water conservation is enhanced among all employees to reduce water consumption in production and daily life.

		Tanggu	Lingang	Qingdao	Zhuhai
Chemical oxygen demand emissions	metric ton	0.42	33.08	1.27	2.45
Chemical oxygen demand emission concentration	mg/L	25.25	260.25	40.7	64
Ammonia nitrogen emissions	metric ton	0.01	2.23	0.07	0.57
Ammonia nitrogen emission concentration	mg/L	0.89	17.51	2.45	14.8

**Strengthening Waste Gas Management**

The waste gas generated by COOEC mainly comes from particulate dust produced during sandblasting operations, organic waste gas produced during painting operations, welding fume dust produced during welding operations, and grinding dust produced during grinding operations. The main pollutants in various waste gases are particulate matter, xylene, non-methane hydrocarbon, volatile organic compounds (TRVOC), etc. The exhaust emissions from all production sites owned by the Company comply with local sewage discharge standards.

For pre-treatment, the Company generally uses "cyclone + filter cartridge" dust removal for shot blasting waste gas, "dry filtration + activated carbon adsorption + CO/RTO" treatment for painting, "cyclone + filter cartridge" secondary dust removal for sandblasting waste gas, and "dry filtration + zeolite wheel + CO/RTO" treatment for painting/drying waste gas. The waste gas meets the standard after treatment and is discharged in an organized manner through exhaust pipes. Welding fume dust and grinding dust in the workshop are generally filtered and dusted by methods such as "high-negative pressure welding fume purification + filter cartridge dust removal" and "mobile welding fume purification". Welding fume dust and grinding dust in the final assembly site are filtered and dusted by "mobile welding fume purification" methods.

		Tanggu	Lingang	Qingdao	Zhuhai
Benzene emission concentration permitted by the pollution discharge permit	mg/m	1	1	0.5	1
Benzene emissions	kg	0.85	/	6.45	/
Benzene emission concentration	mg/m3	0.004	/	0.003	0.04
Benzene series emission concentration permitted by the pollution discharge permit	mg/m3	20	20	/	60
Toluene emissions	kg	0.85	/	7.61	/

		Tanggu	Lingang	Qingdao	Zhuhai
Toluene emission concentration	mg/m3	0.004	/	0.003	3.63
Xylene emissions	kg	0.85	2,008.71	142.28	1,494.14
Xylene emission concentration	mg/m3	0.004	1.25	0.003	3.63
Non-methane hydrocarbon emission concentration permitted by the pollution discharge permit	mg/m3	/	40	70	/
total volatile organic compounds emission concentration permitted by the pollution discharge permit	mg/m3	50	50	/	90
Nitrogen oxide emissions	kg	100	200	558	/
Nitrogen oxide emission concentration	mg/m3	132	68.5	16	/
Sulfur dioxide emissions	kg	4.29	0	63	/
Sulfur dioxide emission concentration	mg/m3	14	3	3	/
Particulate matter emissions	kg	2,149.05	551	2,526	5,981.02
Particulate matter emission concentration	mg/m3	5.09	6.37	3.5	20

**Enhancing Waste Management**

COOEC follows the principles of "reduction, recycling, harmlessness", classified management, and full-process management, and has established the Waste Management Regulations to clarify the responsibilities and obligations of each department and employee, ensuring effective management of the generation, collection, classification, storage, transportation, and disposal of solid waste.

**Disposal of General Industrial Solid Waste.**

The Company constructs solid waste storage sites and temporary storage points in accordance with the requirements of Standard for Pollution Control on the Storage and disposal site for General Industrial Solid Waste (GB 18599), equipped with conditions for rain prevention, dust prevention, and leakage prevention. Based on the characteristics and treatment methods of solid waste, the Company strengthens the classification, collection and storage of solid waste. A ledger for solid waste is established to record information such as the type, quantity, source, destination, and treatment method of solid waste, achieving traceability and searchability of industrial solid waste.

**Reduction of General Industrial Solid Waste.**

Through the adoption of advanced production technology, actively promoting the construction of intelligent factories, strengthening process control, improving product quality and production efficiency, while reducing the generation of waste. Strengthening material management to avoid waste generation during the production process due to raw material issues. Enhancing employee environmental protection and conservation training to increase employees' awareness and skills in environmental protection, making them an important force in reducing waste generation.

## Outlook for 2024

### Embarking on a new journey with steadfast progress

In 2024, COOEC will be guided by the spirit of the 20th National Congress of the Communist Party of China and follow the important instructions and directives of General Secretary Xi Jinping, striving to achieve new results in the promotion of the "Three Major Projects, One Action" and the construction of the "Four Centers", and fully exerting efforts to create a new situation of high-quality development for the Company. With ESG management as our mission, we will better leverage our core functions to support the construction of a world-class marine energy engineering company with Chinese characteristics, in line with the vision of Chinese path to modernization.

### Building Quality Projects and Comprehensively Advancing the Implementation of the "Quality-driven Enterprise" Strategy.

We will strictly fulfill our quality main responsibilities, innovate comprehensive quality management models for all employees and all elements throughout the entire process, deeply implement actions to improve quality, establish national-level welding laboratories, continuously break through new materials and welding technologies, improve welding quality and efficiency, and build an international image of excellence in engineering markets.

### Consolidating and Deepening the Foundation of Safety Management at the Grassroots Level.

We will continue to improve the safety environment of our sites, control the sources, responsibilities, and standards of safety management, and ensure the effective investment of safety production costs. We will further improve the occupational health guarantee system, and increase investment in employee physical examinations and psychological counseling, to ensure the physical and mental health of our employees.

### Promoting Green Development and Accelerating the Construction of Green and Low-carbon Energy Capabilities.

We will vigorously promote green and low-carbon production and lifestyles, systematically build green factories and green supply chains, track the carbon footprint of products from the "front end of production factors" to the "end of product output", and promote carbon reduction throughout the entire production process through effective measures such as source green design, process improvement, and efficient equipment upgrades.

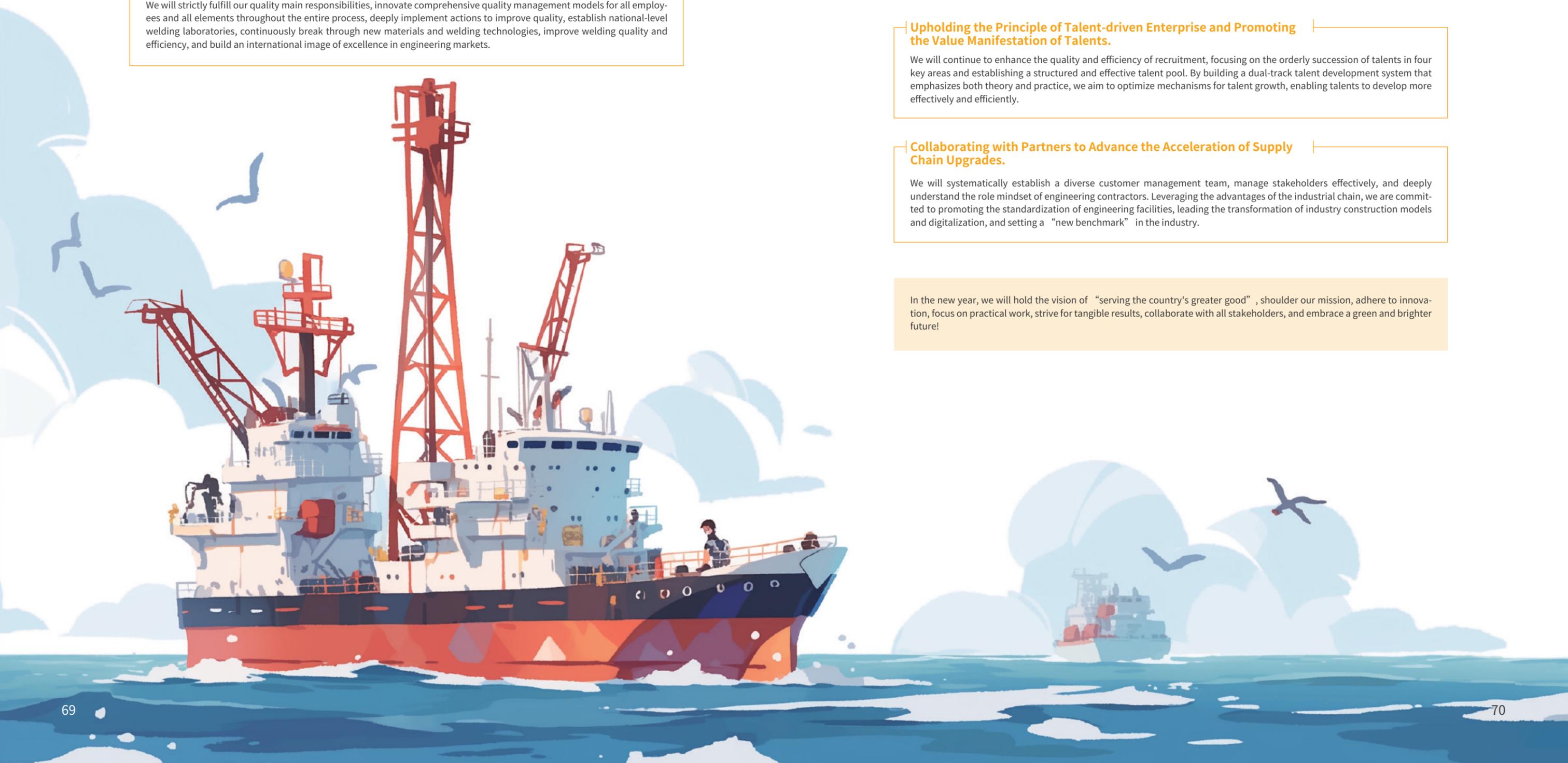
### Upholding the Principle of Talent-driven Enterprise and Promoting the Value Manifestation of Talents.

We will continue to enhance the quality and efficiency of recruitment, focusing on the orderly succession of talents in four key areas and establishing a structured and effective talent pool. By building a dual-track talent development system that emphasizes both theory and practice, we aim to optimize mechanisms for talent growth, enabling talents to develop more effectively and efficiently.

### Collaborating with Partners to Advance the Acceleration of Supply Chain Upgrades.

We will systematically establish a diverse customer management team, manage stakeholders effectively, and deeply understand the role mindset of engineering contractors. Leveraging the advantages of the industrial chain, we are committed to promoting the standardization of engineering facilities, leading the transformation of industry construction models and digitalization, and setting a "new benchmark" in the industry.

In the new year, we will hold the vision of "serving the country's greater good", shoulder our mission, adhere to innovation, focus on practical work, strive for tangible results, collaborate with all stakeholders, and embrace a green and brighter future!



# APPENDIX

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Key Performance  
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# Appendix

## Key Performance Indicators

### Section I: Environmental (E)

Resource consumption					
Indicator		Unit	2021	2022	2023
Water resources	Fresh water consumption	10,000 metric tons	135.19	176.51	150.44
	Recycled water consumption	10,000 metric tons	0	0	0
	Proportion of recycled water consumption	%	0	0	0
	resh water consumption per RMB 10,000 of output value	metric ton/RMB 10,0	0.86	0.82	0.61
Materials	Consumption of non-renewable materials	metric ton	83,338.01	108,114.98	139,851.78
	Consumption of toxic and hazardous materials	metric ton	3,411.74	2,890.42	3,454.03
	Material consumption intensity	metric ton/RMB 10,000	1.64	1.22	1.27
Energy	Total energy consumption	tce	135,148.69	148,928.69	165,541.91
	Fossil energy consumption	tce	119,183.47	131,970.52	146,847.24
	Diesel	metric ton	77,810.82	85,290.28	93,163.88
	Fuel oil	metric ton	2,274.83	3,440.4	4,501.11
	Natural gas	m <sup>3</sup>	1,052,706	1,409,392	2,194,260
	Heat	J	23,701,220,000,000	25,530,260,000,000	25,986,450,000,000
	Electricity consumption	kWh	12,332,6805	130,877,507	144,329,922
	Non-fossil energy consumption	tce	0	0	402.85
	Non-fossil energy use ratio	%	0	0	0.24
Comprehensive energy consumption per RMB 10,000 of output value	tce/RMB 10,000	0.086	0.069	0.067	

Prevention and Control of Pollution					
Indicator		Unit	2021	2022	2023
Wastewater	Discharge of wastewater	metric ton	92,735	244,495	213,443
	Discharge of industrial wastewater	metric ton	0	0	0
	Discharge of domestic wastewater	metric ton吨	92,735	244,495	213,443
	Chemical oxygen demand emissions	metric ton	7.78	13.55	37.22
	Ammonia nitrogen emissions	metric ton	1.19	1.64	2.88
Gas emissions	Benzene emissions	kg	95.00	34.20	7.30
	Toluene emissions	kg	247.00	68.60	8.46
	Xylene emissions	kg	5,841.90	5,979.22	3,645.98
	Nitrogen oxide emissions	kg	888.00	1,206.00	858.00
	Sulfur dioxide emissions	kg	2,678.00	1,282.00	67.29
Solid Wastes	Particulate matter emissions	kg	8,887.63	9,093.43	11,207.43
	Generation of general industrial solid waste	metric ton	13,599.25	17,070.49	19,128.88
	Generation of hazardous waste	metric ton	3,218.37	6,363.70	1,999.31
	Disposal of hazardous waste	metric ton	3,218.37	6,364.89	1,861.04

Climate Change					
Indicator		Unit	2021年	2022年	2023年
Greenhouse Gas Emissions	Scope 1 Emissions	tCO <sub>2</sub> e	255,622.64	283,192.12	312,714.14
	Scope 2 Emissions	tCO <sub>2</sub> e	94,230.19	101,457.85	118,074.5
	GHG Emissions per RMB 10,000 of output value	tCO <sub>2</sub> e/RMB 10,000	0.22	0.18	0.18
Emission reduction management	Reduction of GHG emissions	tCO <sub>2</sub> e	9,969	11,425	11,789.01

Resource and Environmental Management System Measures					
Indicator		Unit	2021	2022	2023
Green and environmental protection actions and measures	Investment in environmental protection	RMB 10,000	11,293.22	3,169.06	4,726.27

● Section II: Social (S)

Employees' Rights and Interests					
Indicator		Unit	2021	2022	2023
Employee recruitment and employment	Number of new employees	person	176	617	464
	Number of newly hired female employees	person	30	131	83
	Number of newly hired male employees	person	146	486	381
	Number of newly hired fresh graduate employees	person	142	332	328
	Number of newly hired social recruitment employees	person	18	617	464
	Employment contract coverage	%	100	100	100
	Complaints about human rights violations	piece	0	0	0
	Total number of employees	person	7,932	9,614	9,755
	Number of full-time employees	person	7,932	9,614	9,755
	Number of part-time employees	person	0	0	0
	Number of employees in China (the Chinese mainland)	person	7,931	9,576	9,738
	Number of employees in China (Hong Kong, Macao and Taiwan) and foreign countries	person	1	8	17
	Male	person	6,586	7,950	8,067
	Female	person	1,346	1,664	1,688
	Under 30	person	718	1,468	1,569
	30-50	person	6,722	7,569	7,627
	50 and above	person	492	577	559

Indicator		Unit	2021	2022	2023	
	Ethnic minorities	person	229	329	339	
	The disabled	person	23	26	30	
	PhD	person	29	39	41	
	Master' s degree	person	1,121	1,323	1,474	
	Bachelor' s degree or below	person	6,782	8,252	8,240	
Employee Remuneration and Benefits	Social insurance coverage	%	100	100	100	
	Employee critical illness insurance coverage rate	%	100	100	100	
	Employees participated in Workers' Congress	attendance	353	92	162	
Employee Health and Safety	Coverage rate of training on safety risk protection	%	100	100	100	
	Investment in occupational injury insurance for employees	RMB 10,000	700.45	921.99	1,397.05	
	Number of employee accidents occurred in workplace	—	1	2	3	
	Number of work-related fatalities	person	0	0	0	
	Number of lost work hours due to various safety accidents	hour	704	152	952	
	Investment in helping employees in need	RMB 10,000	117	91	181	
	Number of employees in need who received help	person	225	175	302	
	Employee Development and Training	Employee training coverage	%	100	100	100
		Training coverage of male employees	%	100	100	100
		Training coverage of female employees	%	100	100	100
Training coverage of senior management employees		%	100	100	100	
Training coverage of middle management employees		%	100	100	100	
Training coverage of primary employees		%	100	100	100	
Total training expenditure in the year		RMB 10,000	1,599.28	1,657.96	3,716.26	
Total length of training in the year		hour	1,364,992	1,410,325	1,783,306	

Indicator		Unit	2021	2022	2023
Employee Satisfaction	Average length of training per employee	hour	172	175	217
	Average length of training per senior management employee	hour	206	214	243
	Average length of training per mid-level management employee	hour	176	186	221
	Average length of training per primary employee	hour	171	174	217
Employee Satisfaction	Number of labor disputes in the year	piece	0	0	0
	Employee turnover rate	%	0.7	2.69	2.44
	Turnover rate of male employees	%	0.7	2.60	2.58
	Turnover rate of female employees	%	0.4	3.13	1.78
	Turnover rate of employees aged 30 and below	%	1.3	9.67	8.36
	Employee turnover rate (aged 30-50)	%	0.6	1.55	1.18
	Turnover rate of employees aged over 50	%	0.2	0.00	3.37

Products and Services Management		Indicator	Unit	2021	2022	2023
Customer Service and Rights	Customer satisfaction	%	/	89.48	89.62	
	China	%	86.87	90.49	90.38	
	Overseas	%	78.68	86.75	85.97	
Innovation and Development	Proportion of R&D personnel	%	17.70	14.74	18.37	
	Number of R&D personnel	person	1,404	1,417	1,783	
	R&D investment	RMB 10,000	92,881.87	112,193.53	118,628.34	
	Proportion of R&D investment to main business income	%	4.71	3.75	3.86	
	Number of invention patents	—	27	54	49	
	Number of utility model patents	—	233	319	206	

Safety and Management of Supply Chain		Indicator	Unit	2021	2022	2023
Suppliers management	Number of suppliers	—	3,860	3,065	2,713	
	China (the Chinese mainland)	—	3,523	2,750	2,414	
	China (Hong Kong, Macao and Taiwan) and foreign countries	—	237	315	291	
	Number of suppliers reviewed	—	152	256	1,040	
	Number of suppliers suspended for non-compliance	—	45	60	123	
	Number of potential suppliers rejected for non-compliance	—	23	23	55	
	Number of ISO 9000 certified suppliers	—	3,501	3,003	2,713	
	Number of ISO 14000 certified suppliers	—	2,605	2,555	2,507	
	Number of ISO 45001 certified suppliers	—	2,605	2,555	2,507	
Management of Supply Chain Links	Number of suppliers signing Integrity Agreement	—	3,860	3,065	2,713	
	Number of Major Risks and Impact Events in the Supply Chain	piece	0	0	0	

Social Contribution		Indicator	Unit	2021	2022	2023
Tax Payment	Total tax	RMB 10,000	54,385	108,549	117,763	
	Rural revitalization investment	RMB 1,000	0	75	263	
Response to National Strategies	Number of people benefited from rural revitalization	person	504	498	491	
	Number of rural revitalization projects	—	4	20	21	



Section III: Governance (G)

Governance Strategy and Organization Chart					
Indicator		Unit	2021	2022	2023
Organization Structure and Functions	External directors	%	57	57	57
	Board meetings held	time	6	10	8
	Average tenure of Board of Directors members	year	1.5	1.4	1.8
	Number of members of Board of Directors	person	7	7	6
	PhD	%	29	29	33
	Master' s degree	%	57	57	50
	Bachelor' s degree or below	%	14	14	17
	Male	%	100	100	100
	Female	%	0	0	0
	Independent directors	%	43	43	50
	Non-independent directors	%	57	57	50
	External supervisors	%	67	67	33
	Meetings of Board of Supervisors held	time	5	4	6
	Average tenure of Board of Supervisors members	year	1	2	1
	Number of senior management	person	8	9	7
	Senior management with PhD	%	0	0	0
	Senior management with Master' s degree	%	50	33.3	28.6
	Senior management with Bachelor' s degree or below	%	50	66.7	71.4
	Male senior management employees	%	100	100	100
	Female senior management employees	%	0	0	0
Average tenure of senior management employees	%	1.5	2.1	2	

Standardized Management		Unit	2021	2022	2023
Integrity Construction	Length of anti-corruption training	hour	25	30	37
	Number of participants of anti-corruption training	nce	2,000	2,700	3,000

Investor Relation Management and Shareholders' Rights		Unit	2021	2022	2023
Shareholders' rights and interests	General Meeting of Shareholders held	time	2	3	3
	Attendance rate of directors at the shareholders' general meetings	%	2,9	67	23
Investor Relation Management	Number of investor exchanges	time	7	36	53
	Cumulative number of investors received	attendance	66	279	509
Transparency of Information Disclosure	Periodic reports released by the stock exchange	—	4	4	4
	Temporary announcements released by the stock exchange	—	32	32	53

Word Substitution

Unless the context indicates otherwise, the following words in the report have the following meanings.

Abbreviations and Definitions		
CSRC	Refer to	China Securities Regulatory Commission
NDRC	Refer to	National Development and Reform Commission
SASAC	Refer to	State-owned Assets Supervision and Administration Commission of the State Council
SSE	Refer to	Shanghai Stock Exchange
LNG Engineering Technology Branch	Refer to	COOEC LNG Branch



## Indicators Index

Contents		Reference index system for ESG special report of listed companies controlled by central enterprises	GRI Standards	UN SDGs 2030
About This Report		/	GRI 1,GRI 2-2, GRI 2-3,GRI 2-4	/
Message from Chairman		/	/	/
About COOEC	Company Profile	/	GRI 2-1, GRI 2-6,	/
	Organizational Structure	/	GRI 2-9	/
	Strategy and Culture	/	/	/
	Business Layout	/	GRI 2-6	/
	Achievements in 2023	/		/
Special Topic: Charting the Ten-Year Journey of the “Belt and Road” Initiative		S4.4	GRI 411, GRI 413	SDG 9, SDG 11
ESG Management	ESG Governance	/	GRI 2-18	/
	Stakeholder Engagement	/	GRI 2-16, GRI 2-29	/
	Materiality Analysis	/	GRI 3-1, GRI 3-2, GRI 3-3	/
Lean Management Empowers the Future of Integrity	Adhering to Party Building and Guide	G1.1	/	/
	Consolidating the Foundation of Governance	G1.1, G1.2, G1.3, G2.1, G5.1, G5.2	GRI 2-10, GRI 2-12, GRI 2-13, GRI 2-14, GRI 2-18, GRI 2-20, GRI 405	SDG 4
	Protecting Shareholders' Rights and Interests	G3.1, G3.2, G4.1, G4.2	GRI 2-27	/

Contents		Reference index system for ESG special report of listed companies controlled by central enterprises	GRI Standards	UN SDGs 2030
	Strengthening Integrity Construction	G2.2, G2.3	GRI 205, GRI 206	/
Excellence in Engineering Empowers the Future of Quality	Building Quality Projects	S2.1, S2.2	GRI 2-27	SDG 9, SDG 12
	Constructing Safe Projects	S1.3	GRI 403	SDG 9
	Building Innovative Projects	S2.3	GRI 2-27	SDG 9
Joined Hands Bring a Better Future	Practicing People-oriented Philosophy	S1.1, S.1.2, S1.4,	GRI 2-7,GRI 2-7,	SDG 5, SDG 8,
		S1.5	GRI 2-19, GRI 202, GRI 401, GRI 402, GRI 404,GRI 405, GRI 406, GRI 407, GRI 408, GRI 409	SDG 10
	Collaborating with Partners for Mutual Success	S3.1, S3.2	GRI 2-8, GRI 204, GRI 308	SDG 17
	Community Development Initiatives	S4.1, S4.2, S4.3, S4.4	GRI 203, GRI 411, GRI 413	SDG 1, SDG 2, SDG 3, SDG 4
Protecting the Ecology, Empowering a Green Future	Combating Climate Change	E1.3, E3.1, E3.2, E3.3, E5.1, E5.3,	GRI 201, GRI 302	SDG 7, SDG 13
		E4.1, E5.4, E5.5, E5.6	GRI 303, GRI 304, GRI 307	SDG 6, SDG 14, SDG 15
	Optimizing Resource Utilization	E1.1, E1.2, E1.4, E5.2	GRI 301	SDG 14, SDG 15
	Improving the Prevention and Control of Pollution	E2.1, E2.2, E2.3	GRI 303, GRI 305, GRI 306	SDG 14, SDG 15
			/	/

## Third-Party Evaluation

Commissioned by Offshore Oil Engineering Co., Ltd. (COOEC), the China Capital Market Research Institute, a think tank under Securities Times, evaluated the 2023 Environmental, Social, and Governance (ESG) Report of Offshore Oil Engineering Co., Ltd. (hereinafter referred to as "the Report"). The specific conclusions are as follows:

### Stakeholder Inclusiveness

The Company places high importance on the expectations and concerns of stakeholders, including shareholders, employees, customers, business partners, communities, governments, and regulatory authorities. It has established a regular communication mechanism with stakeholders, utilizing various channels to understand and respond to their concerns, ensuring their rights are protected. This approach demonstrates the Company's deep commitment to environmental, social, and governance practices, reflecting excellent performance in stakeholder inclusiveness.

### Context of Sustainable Development

The Company has extensively engaged in cooperative exchanges with **31** countries and regions along the Belt and Road Initiative. While promoting the economic and social development of these countries through exemplary engineering projects, the Company also actively participates in charitable donations and medical services to improve the livelihoods and incomes of local populations. Addressing the specialized and scarce role of divers, it independently designed and constructed China's first professional diving skill enhancement training center for offshore engineering. This initiative advances the safety, standardization, and regulation of the offshore engineering diving industry, demonstrating excellent performance in the context of sustainable development.

### Materiality

The Company conducted questionnaires, business reviews, and internal interviews to collect issues of concern from key stakeholders. Through materiality analysis and prioritization, the Company identified **20** material issues significantly impacting the Company, providing a crucial reference for ESG information disclosure. The performance in materiality is excellent.

### Completeness

The Report comprehensively demonstrates the Company's efforts and achievements in practicing ESG concepts in 2023. Page 4 covers the "Scope of Reporting Organization" and "Reporting Period," indicating the scope and duration of content coverage. The disclosed range includes the Company and its subsidiaries, spanning from January 1 to December **31**, 2023, showing good performance in completeness.

### Accuracy

The Company collected **967** questionnaires from major stakeholders, providing data support to identify crucial issues. Referencing the SDGs, GRI, disclosure requirements by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council and Shanghai Stock Exchange, the Company conducted ESG information disclosure. The Company presented its practices and ESG management and performance in governance, products, employees, and environmental protection through practical cases, pictures, and other methods. The wording is accurate and concise, showing good performance in accuracy.

### Balance

The Report discloses negative data such as "number of accidents occurring to employees in the workplace," "number of lost working hours due to various safety incidents," and "number of significant or important internal control deficiencies." It also detailedly describes safety management, emergency management system construction, and enhanced management of exhaust gas, wastewater, and waste. The performance in balance is excellent.

### Clarity

The Report presents annual progress and achievements on key issues of concern to stakeholders from dimensions such as ESG management, corporate governance, product responsibility, employee responsibility, and environmental responsibility. It analyzes these aspects using numerous cases, offering a clear framework structure. Besides disclosing key performance indicators and Indicators Index List at the end, the Report also lists several data tables on supplier management, energy management, exhaust gas management, etc., at the end of multiple chapters, which facilitate readers' quick grasp of essential information, demonstrating excellent clarity.

### Comparability

The Report discloses over **130** key indicators, such as material consumption intensity, occupational injury insurance investment for employees, and the proportion of external directors, providing comparative data in three consecutive years from environmental, social, and governance dimensions. The comparability performance is outstanding, as evidenced through horizontal comparisons such as being ranked "**68**th among the Top **250** Global International Contractors" and "the Company's overall design level having entered the world-leading ranks."

### Reliability

The information and data cited in the Report are derived from the Company's internal documents or relevant public materials and have been approved by the Board of Directors of the Company. The Board of Directors of the Company warrants that this Report's content is free from any false records, misleading statements, or significant omissions, exhibiting excellent reliability.

### Timeliness

The Company has continuously disclosed its social responsibility report (ESG report) for **14** consecutive years since 2010, demonstrating outstanding timeliness.



## Feedback Form

### Dear Stakeholders,

Greetings! Thank you for taking your time to read our report. In order to provide valuable information to you and other stakeholders, and to promote continuous improvement in our environmental, social, and governance practices, we earnestly hope to receive your valuable feedback and suggestions on this report. We look forward to your evaluation and sharing. Once again, thank you for your support of our work!

 Address: No. 199, Haibin 15th Road, Tianjin Port Free Trade Zone

 Email: [tijing@cooec.com.cn](mailto:tijing@cooec.com.cn)

### What type of stakeholders do you belong to?

- Stockholders and Investors  
  Customers  
  Employees  
  Government and Regulatory Authorities  
 Suppliers and Partners  
  Communities  
  The Public and Media  
  Others

### Your overall comment on this report:

- Excellent  
  Good  
  Average

### Do you think the ESG performance of COOEC is fully presented in this report?

- Yes  
  Partially  
  No

### 5. Do you think the information, data and indicators disclosed in this report are clear, accurate and complete:

- Yes  
  Partially  
  No

### 7. Do you think the content arrangement and graphic design of this report are clear, understandable and legible:

- Yes  
  Partially  
  No

### Do you have any other suggestions for COOEC's report preparation and fulfillment of corporate social responsibility?




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## Disclaimer

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 If this report contains forward-looking statements, it does not constitute a constraint on the Company's future actions, and the Company is not obligated and does not undertake to revise forward-looking statements (if any) contained in this document.

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