

2024

Environmental, Social
and Governance
Report



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About This Report

Reporting Overview

This is the third environmental, social and governance (ESG) report issued by CSSC Offshore & Marine Engineering (Group) Company Limited, which has issued 14 corporate social responsibility reports in a row. This report mainly discloses the Company's policies, strategies, objectives and overall performance in the ESG field. All information disclosed comes from the official documents or statistical reports of the Company. The Board of Directors, fully responsible for the Company's ESG strategy and report, has reviewed and approved this report.

Reporting Principles

In preparing this report, COMEC follows four core reporting principles, including materiality, quantitative, balance and consistency. Details are shown below.

Materiality

When the Board of Directors determines that environmental, social, and governance matters have material impacts on investors and other stakeholders, it shall report.

Quantitative

This report discloses key ESG performance indicators in a quantitative way as much as possible, and sets targets to reduce some impacts.

Balance

The content of this report is impartial and avoids the selection, omission, or presentation format that may inappropriately affect the decision-making or judgment of the report readers.

Consistency

The same statistical disclosure methods are adopted as in previous years to make meaningful comparisons of ESG data.

Reporting Period

The time frame of this report is from January 1, 2024 to December 31, 2024. To strengthen the continuity and comparability, some contents would date back to previous years or refer to later years.

Reporting Scope

This report covers sustainability information and key performance data regarding CSSC Offshore & Marine Engineering (Group) Company Limited, its holding subsidiary CSSC Huangpu Wenchong Shipbuilding Company Limited.

Preparation Basis

This Report is prepared in accordance with the Environmental, Social and Governance Reporting Code set out in Appendix C2 to the *Main Board Listing Rules* ("Main Board Listing Rules") of The Stock Exchange of Hong Kong Limited, and the *Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)*. In addition, the report refers to the *GRI Sustainability Reporting Standards (GRI Standards)* issued by the Global Reporting Initiative and the *Reference of ESG Indicators System for ESG Reports of Listed Companies Controlled by Central State-owned Enterprises* issued by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC).

Preparation Process

This report is prepared by the following steps: the establishment of ESG Task Force, stakeholder interviews, stakeholder questionnaire survey, data collection, framework determination, report preparation, report design, departments and senior management review, etc.

Data Sources

All information disclosed in the report comes from the official documents, statistical reports and annual reports of the Company. Unless otherwise specified, all amounts are expressed in Chinese RMB. In case of any discrepancy between the financial information disclosed in this report and those in the annual report of the Company, those in the annual report shall prevail.

Abbreviations

For better presentation and readability, "China State Shipbuilding Corporation Limited and China Shipbuilding Group Co., Ltd." are also referred to as "CSSC", "CSSC Offshore & Marine Engineering (Group) Company Limited" is also referred to as "COMEC" or "the Company", "CSSC Offshore & Marine Engineering (Group) Company Limited and its subsidiaries" are also referred to as "we" or "us", "CSSC Huangpu Wenchong Shipbuilding Company Limited" is also referred to as "Huangpu Wenchong", and "Guangzhou Shipyard International Company Limited" is also referred to as "GSI", and "Guangzhou Wenchong Shipyard Heavy Industry Co., Ltd" is also referred to as "Wenchong Shipyard Heavy Industry".

Note: As of the end of the reporting period, Huangpu Wenchong was a 54.5371% owned subsidiary of the Company, and GSI was a 41.9170% owned invested company of the Company.

Report acquisition method

This report is released in in Traditional Chinese, Simplified Chinese and English. In case of ambiguity, the simplified Chinese version shall prevail. You may visit our official website (www.comec.cssc.net.cn) and the website of The Stock Exchange of Hong Kong Limited (www.hkexnews.hk) to view this report.

Response to this report

If you have any comments and suggestions on this report or the Company's sustainability performance, please send an email to comec@comec.cssc.net.cn.

Message from the Board



The ship of dreams is setting sail. In his 2025 New Year message, President Xi Jinping mentioned that "the Mengxiang drilling vessel explored the mystery of the deep ocean. The Shenzhen-Zhongshan Link now connects the two cities across the sea." This was not only a commendation of the commissioning of "Dream" (deep-ocean drilling vessel Meng Xiang) but also a high praise for the transformative power of our cutting-edge technology. As we embark on our journey toward the vast oceans, we remain committed to integrating social responsibility into our development DNA and charting a sustainable course guided by innovation.

With compliance as our measure and risk control as our anchor, we ensure stable governance.

COMEC drives its development through refined governance to ensure accountability and deepen governance reforms. We have established a diverse and collaborative Board structure that blends professional expertise with strategic vision to shape our growth blueprint. Our management framework is structured around decision-making, supervision, and execution to foster a full-cycle investor engagement platform and set a benchmark for capital market value through a transparent disclosure mechanism. Additionally, we consolidate our risk prevention and control matrix and uphold compliance as the bedrock of corporate development. Cultivating a culture of integrity, we build strong defenses against corruption, and embed ethical principles throughout the decision-making process.

Built on the foundation of digital technology and driven by innovation, we advance in technological breakthroughs.

Guided by President Xi Jinping's directives on technological innovation, we embrace our mission and take on our responsibilities as a central military SOE. Following national strategies, we are reshaping the maritime equipment industry ecosystem with new quality productive forces by embedding innovation across the entire industrial chain, from research and design to intelligent manufacturing and systems integration. We actively drive digital transformation by enhancing the integration of information technology with resource allocation, production workflow optimization, and flexible manufacturing to facilitate the reallocation of production resources and the collaborative capacity utilization. These initiatives are not only a response to the evolving maritime landscape but also exemplify our commitment to reshaping the value chain through innovation.

Drawing from green sustainability and committed to protecting our planet, we take on our environmental responsibility.

The report to the 20th National Congress of the Communist Party of China underscored that we will advance the Beautiful China Initiative by accelerating the transition to a model of green development, intensifying pollution prevention and control, and working actively and prudently toward the goals of reaching peak carbon emissions and carbon neutrality. In response, we fully implement the national strategies of the Central Committee of the Chinese Communist Party and the State Council. Adhering to the path of green development, we integrate green development concept into our overall strategy, focus on carbon peaking and neutrality goals, and advance energy conservation and carbon reduction initiatives in a coordinated manner. By building "green vessels", we drive the low-carbon transformation of the maritime sector, foster green and low-carbon industries, and take a leading role in green development. As industrial progress aligns with the rhythms of nature, we are writing a new chapter of harmony between human and nature.

Driven by compassion and guided by dedication, we promote employee growth and assume social responsibility.

In our corporate journey, we navigate alongside our employees and build a workplace that nurtures growth and provides a safe harbor where every employee can realize their value and achieve both personal and professional fulfillment. We collaborate with partners to drive innovation, creating a mutually beneficial ecosystem. Moreover, we remain responsive to societal needs, investing in community welfare initiatives that enhance people's well-being and foster social harmony. Guided by a strong sense of national and social responsibility, we continue to forge ahead, carrying the aspirations of the people as we chart the course for a prosperous future in the new era.

In the midst of a turbulent world, we reveal our true nature and sail forward with a sense of responsibility and commitment.

The year 2025 marks the final lap for implementing China's 14th Five-Year Plan (2021-2025) and for initiatives to deepen and upgrade SOE reform; it is also a year for a decisive test of our progress over the past three to five years. Confronted with new challenges, tasks, and opportunities, COMEC remains dedicated to the development model that is driven by "innovation, coordination, green, openness and sharing". Focusing on China's carbon peaking and neutrality goals, we will continue to advance green and low-carbon solutions in design, manufacturing, and management. By deepening ESG governance with a focus on green transformation, people first, and social harmony, we aim to achieve synergy between technology and green development, intelligence and people-centric progress, and enterprise-society harmony. Meanwhile, we will integrate green development with value creation to ensure both high-quality and sustainable development.



About Us

Company Profile

COMEC is a large key shipbuilding enterprise under China State Shipbuilding Corporation Limited (CSSC) and a holding platform company for capital operation of CSSC. The Company was formerly known as Guangzhou Shipyard International Company Limited. Listed in Shanghai (stock code: 600685 for A shares) and Hong Kong (stock code: 00317 for H shares) in 1993, it was the first shipbuilding enterprise in the PRC with listing of both A+H shares.

Through the merger and consolidation of high-quality shipbuilding assets of CSSC in South China, COMEC has achieved the listing of core military assets in China, and has become a large comprehensive marine and defense equipment enterprise group incorporating four sectors of maritime equipment, namely, maritime defense equipment, maritime transport equipment, maritime development equipment and maritime sci-tech application equipment.

As a holding company, COMEC specializes in asset operation and investment management. Our subsidiary Huangpu Wenchong has established a modern shipbuilding model centered on assembly, refined management, and information integration. Focusing on shipbuilding and manufacturing of offshore engineering equipment, Huangpu Wenchong delivers high-quality products to customers through research and development of ships, seeking orders, and implementing customized order production. The Company is mainly at the stage of assembly and construction in the shipbuilding and offshore engineering industrial chain. It has extended to the shipbuilding and offshore supporting products at the front end of the industrial chain and full lifecycle guarantee at the back end of the industrial chain.

Cultural Philosophy

Serving the country through marine and shipbuilding business

- Corporate spirit**
 - Innovation
 - Efficiency
 - Cooperation
 - Win-win development
- Corporate vision**

Becoming a first-class enterprise in the global marine and heavy equipment market with leading technologies and prominent services and a manufacturing and supporting facility for Chinese navy in South China.
- Corporate mission**

Providing high-quality products and services to create value for customers and maximizing returns to shareholders, staff and the society.



Strategic Goals

With the aim of building military strength to serve the country, we are committed to creating high-quality marine equipment, becoming a world-class listed company in the marine defense equipment sector with a well-established industrial structure, leading core technologies, excellent quality services, and strong international competitiveness.

Main Businesses

We strive to establish ourselves into a company with diversified business portfolio and become one of the world's largest shipbuilders. To this end, we apply advanced and scientific management methods as well as flexible operation modes to manufacture a wide range of high-quality products that will fuel the growth of the shipping industry both domestically and internationally. Moreover, we actively explore overseas markets to ensure that all our shareholders can reap satisfactory economic benefits.

By 2035

We will basically build ourselves as a world-class listed company in marine defense equipment sector and rank among the top listed companies of CSSC, and our technologies, brands, staff, and management will all reach first-class levels. And we will go a step further in the development speed, quality and efficiency of all business segments, fostering a fast-growing and coordinated development landscape.

By 2045

We will be a fully-fledged world-class listed company in the marine defense equipment sector, boasting world-leading technological advancement, talent pool, management system, and business layout, and emerging as a regional industry leader. We will fulfill our foremost responsibility of serving the country by empowering its defense capabilities, contributing to China's transformation as a maritime power, a manufacturing power, and a technological power based on our development fruits as a world-class listed company.

Maritime defense equipment

We are the major military ship manufacturing base of the Chinese Navy in the south of the Taiwan Strait and in the South China Sea, and the major public service ship construction base in China. Our frigates, missile boats, and aircraft carrier support ships have demonstrated exceptional performance in long-distance escort missions, and national military exercises, and have achieved numerous military accomplishments. Additionally, we actively explore and summarize a new model of full-lifecycle guarantee aligning with the equipment system development, continuously promoting the expansion and upgrade of military repair and maintenance businesses around ship maintenance guarantee projects.

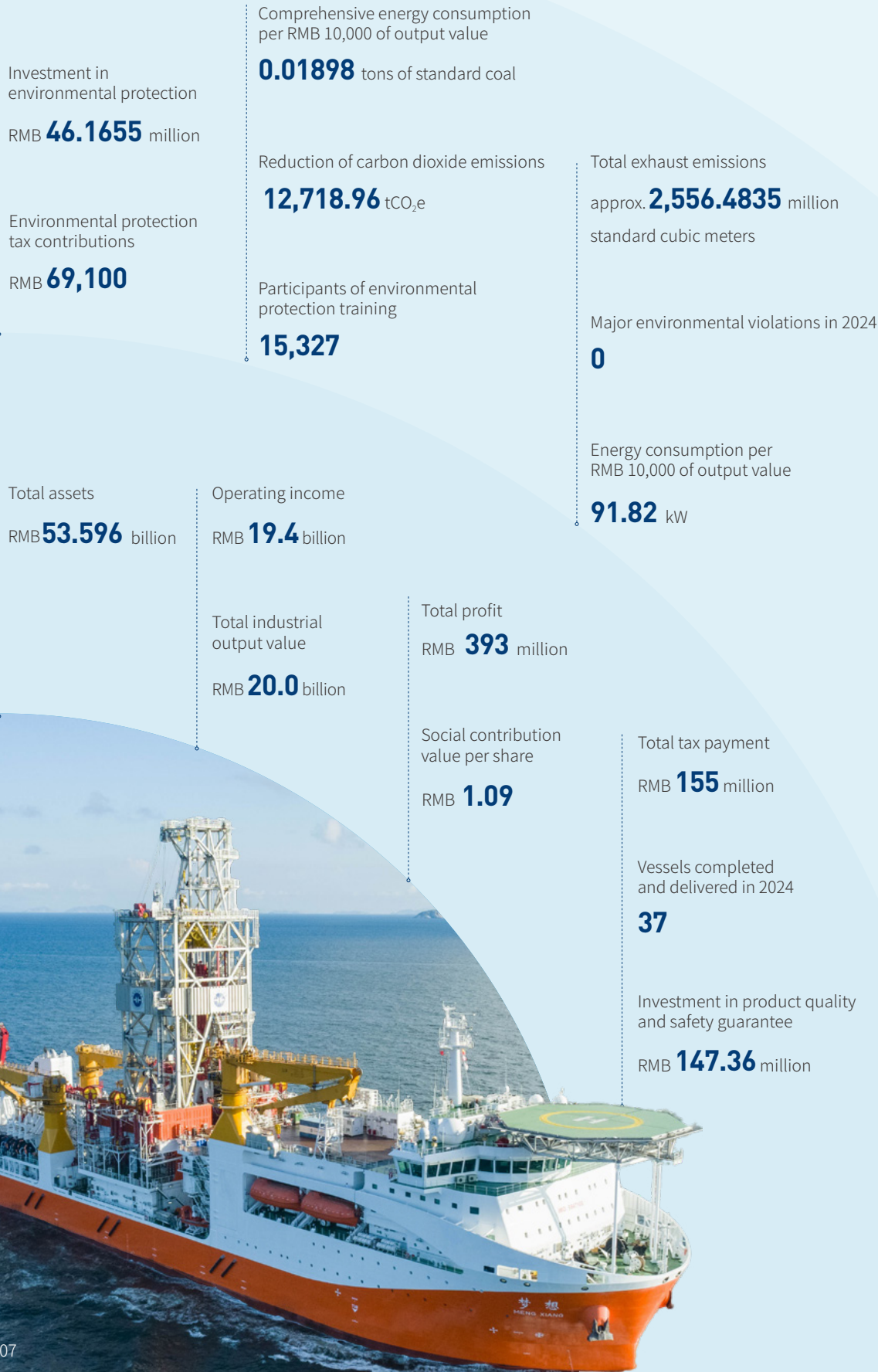
Marine transportation and engineering equipment

We hold a leading position in feeder container vessels, dredgers, research vessels, and offshore support vessels and platforms. We have successfully built multi-functional subsea support vessels, large survey ships, special transport vessels, platform supply vessels, and other offshore engineering ships. Additionally, self-elevating drilling platforms, wind farm installation platforms, and other offshore platforms have been developed, making our entry into the high-end field of the offshore equipment manufacturing industry. At the same time, we keep pace with market hotspots such as environmental protection and energy conservation, developing ship maintenance, installation, and conversion services.

Innovative marine technology equipment

We boast excellent large-scale processing and production capabilities, covering diverse fields such as offshore wind power facilities, energy equipment, complete equipment, engineering machinery, and bridge building steel structure. We have contributed to major projects such as the Shenzhen-Zhongshan Bridge and the Hong Kong-Zhuhai-Macao Bridge. Moreover, we are committed to ship application represented by the industrial Internet platform.

2024 Performance



Investment in public welfare
RMB **2.356** million

Employee volunteers
1,538

Volunteer activities
8,187.54 hours

Volunteer organizations or groups established
3

Employees in total
6,238

Percentage of female employees
11.59%

Employee labor contract signing rate
100%

Employees received training
93.63%

Proportion of ethnic minority employees
4.07%

Employee social insurance coverage
100%

Total investment in employee training
RMB **11** million

Employee labor union membership rate
100%

Investment in volunteer activities
RMB **130,000**

Standard for each employee to buy poverty alleviation agricultural products
RMB **350**

Investment in helping people out of poverty with targeted measures (including materials equivalent)
RMB **2.226** million

Investment in rural vitalization (including materials equivalent)
RMB **2.226** million

Honors and Awards

Included in "ESG · Pioneer 100 Index of Central State-owned Enterprises" by SASAC's research group on the *Research Report on the ESG of Listed Companies Controlled by Central State-owned Enterprises* for the fourth consecutive year, ranking **38th**

Received the "2024 Most Socially Responsible Listed Company" award by National Business Daily

Won the GoldenBee 2024 Great Bay Area Outstanding Corporate Sustainability Report Award

ESG Management

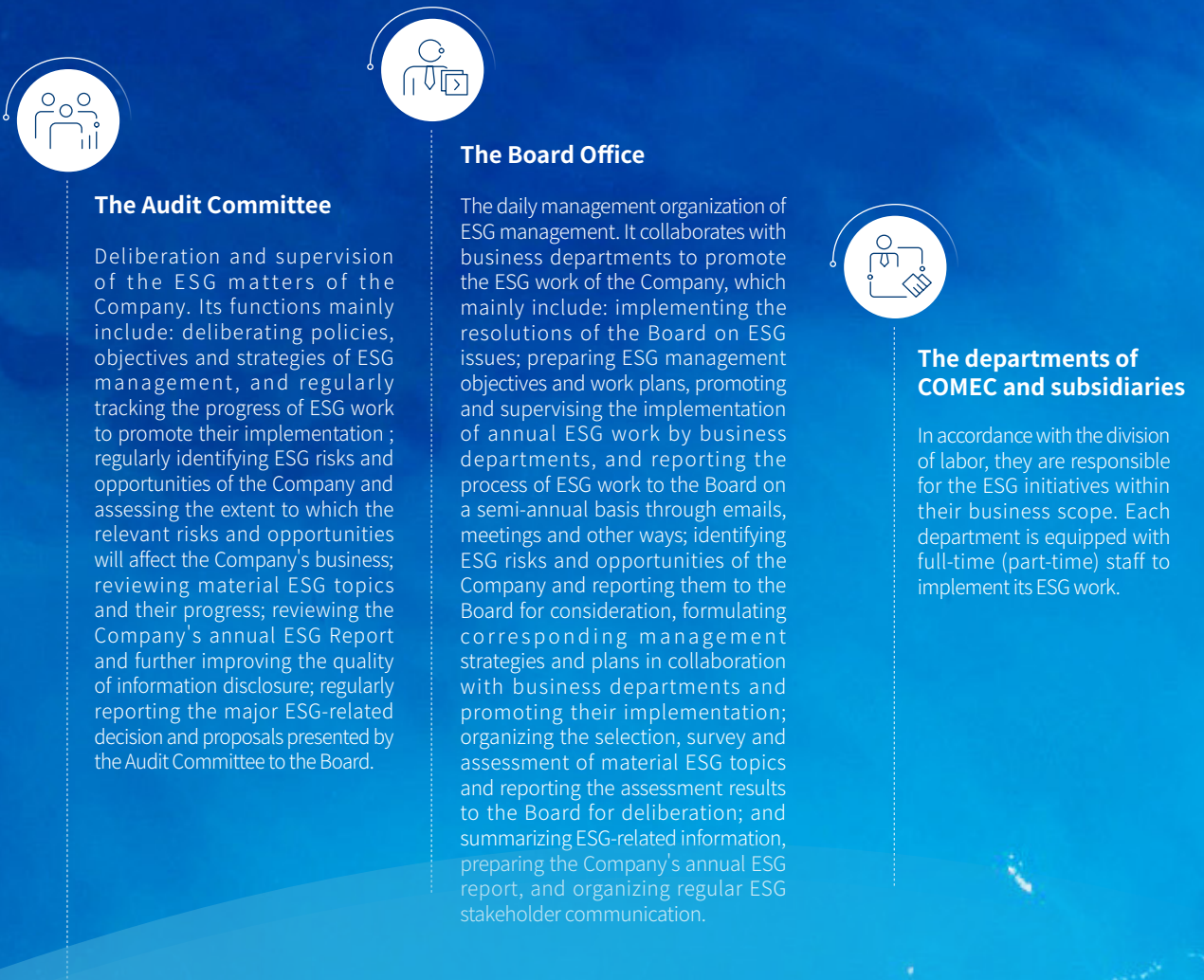
Our commitment to improving ESG governance remains a pivotal force driving our robust growth and the pursuit of sustainable value. We dedicate our efforts to enhancing the efficiency of the Board of Directors, refining our internal supervision and regulation mechanisms, and improving the quality of information disclosure, thus winning trust from stakeholders through exemplary ESG governance.

Board Statement



ESG Governance Structure

The leadership function for the Company's ESG management performed by the Audit Committee covers the deliberation, supervision and decision-making of major ESG issues. The promotion function for ESG management is performed by the Board Office, mainly including the overall promotion of ESG-related initiatives. The implementation function for ESG management is performed by each department of the Company and our subsidiaries, which are responsible for the implementation of ESG-related initiatives.



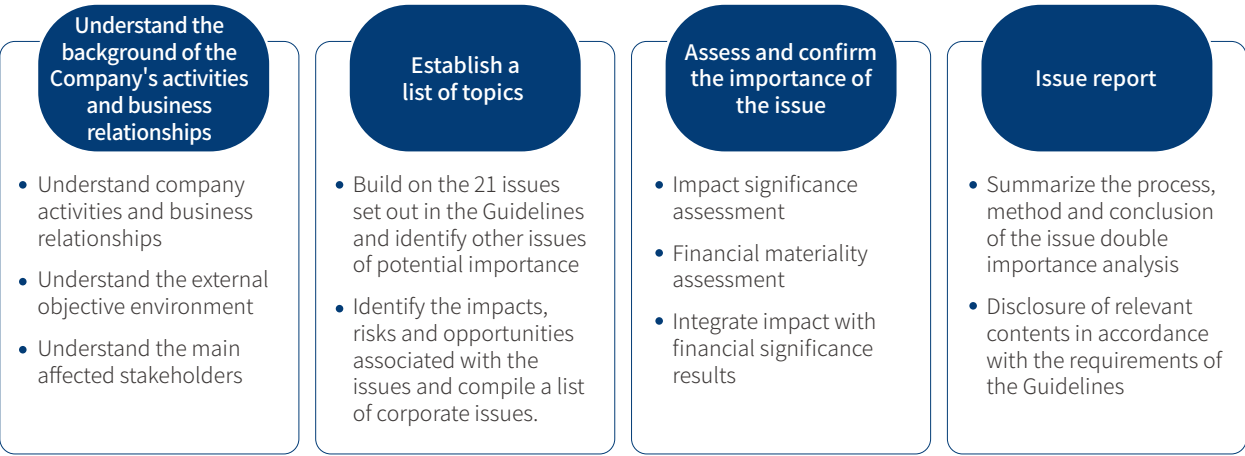
Stakeholder Engagement

We attach great importance to stakeholder communication and commit to building a fair, just, open and win-win partnership. In order to better identify various ESG risks and opportunities and develop reasonable sustainable goals, we have established a variety of communication channels with stakeholders and carried out different forms of communication on topics of common concern.

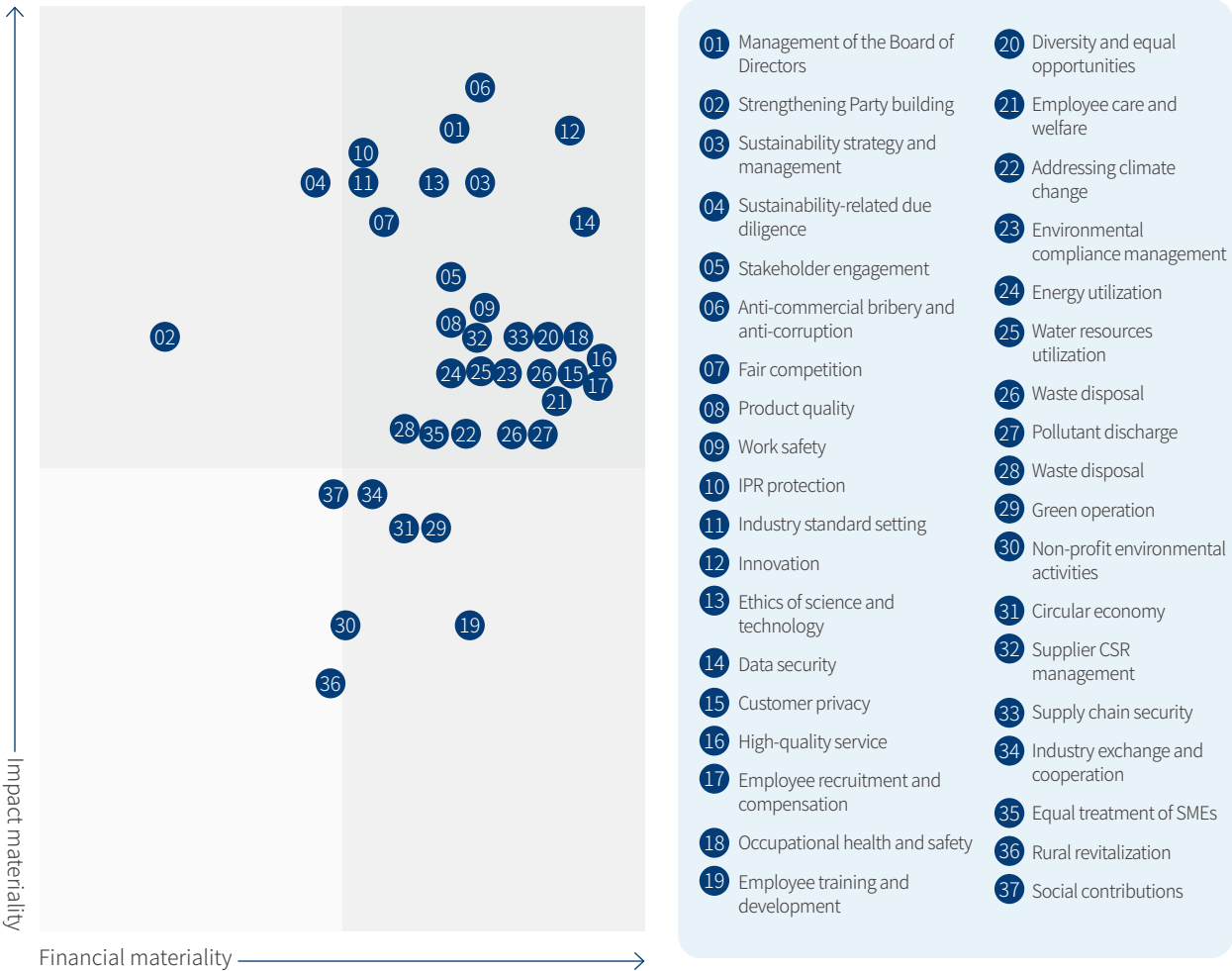
Stakeholders	Expectation and demands	Communication methods	Responses and measures
<div> Government</div>	<ul style="list-style-type: none">Serving national defenseTechnological innovationValue preservation and appreciation of assetsAbiding by the laws and regulations and paying tax according to the law	<ul style="list-style-type: none">Meetings with regulatory bodiesAccepting regulatory reviewRegular reports	<ul style="list-style-type: none">Regular reportsInformation submissionPublic information disclosure
<div> Shareholders</div>	<ul style="list-style-type: none">Continuous stable returnsTransparent information disclosure	<ul style="list-style-type: none">General Meeting of ShareholdersInformation disclosureOn-site visits	<ul style="list-style-type: none">Receiving investor visitsPublishing 2024 annual report
<div> Customers</div>	<ul style="list-style-type: none">Quality products and servicesStrict contract fulfillmentWin-win cooperation	<ul style="list-style-type: none">Business communicationResponse to customer feedback	<ul style="list-style-type: none">Delivering customized products on timeProviding reliable, safe and quality products and servicesPerforming contracts and agreementsStrengthening contract performance management
<div> Partners</div>	<ul style="list-style-type: none">Keeping promisesBeing fair, just and openWin-win cooperationSharing experiences	<ul style="list-style-type: none">Regular meetingsHigh-level visitsSpecial inspections	<ul style="list-style-type: none">Conducting strategic cooperationHolding seminarsCarrying out technical exchanges
<div> Employees</div>	<ul style="list-style-type: none">Protecting basic rightsEmployee health and safetyFair promotion and developmentEmployee care	<ul style="list-style-type: none">Democratic life meetingWorkers' congressHealth check-upsVisiting employees with difficulties	<ul style="list-style-type: none">Sound compensation systemProviding a safe and healthy workplaceProviding fair promotion channelsStrengthening staff trainingOffering employee care
<div> Environment</div>	<ul style="list-style-type: none">Energy conservation and emission reductionWaste disposalReducing pollutant dischargeGreen office	<ul style="list-style-type: none">Strengthening environmental statistics and monitoring	<ul style="list-style-type: none">R&D of green productsRecycling resourcesStrengthening environmental protection trainingPublic disclosure of environmental information
<div> Communities and the public</div>	<ul style="list-style-type: none">Community developmentPoverty alleviationCommunity communication	<ul style="list-style-type: none">Charitable assistance	<ul style="list-style-type: none">Pairing assistanceOffering volunteer servicesOffering thematic research and education

Materiality Assessment

To gain deeper and more precise understanding of stakeholders' expectations regarding COMEC's ESG management and disclosure, we have identified material sustainability topics through dual lenses of impact significance and financial materiality. This approach enhances stakeholder engagement. In compliance with disclosure requirements of both The Stock Exchange of Hong Kong Limited and Shanghai Stock Exchange (SSE), we launch the material topic survey and assessment, followed by the disclosure of the process and results.



Screening results



CSR Spotlight

New Journey in the New Era: Party Leadership Guides the Future

Following the guide of Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, we deepen our understanding of and apply the guiding principles from the 20th CPC National Congress and the third plenary session of the 20th CPC Central Committee. We uphold the fundamental requirements for Party building in the new era, carry forward the guiding principles of the National Conference on Party building in State-Owned Enterprises and fulfill our principal responsibility for the full and strict Party governance. To foster deep integration between Party building and our business operations, it is imperative to profoundly understand the decisive significance of "Two Affirmations", strengthen awareness of the "Four Consciousnesses" and "Four-sphere Confidences", and act on "Two Upholds".



Enhancing Party education for in-depth learning

With studying and implementing Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era as a major political task, we combine intensive education with ongoing learning and enforce the fundamental activities within the Party, such as the "Three Meetings and One Lecture" system and themed Party day events. Through various approaches, including centralized study, rotational training, and self-learning, we aim to make the Party's innovative theories deeply internalized and guide Party members to align their thoughts, political stance, and actions closely with the Party Central Committee that upholds Comrade Xi Jinping's core position.

Taking the initiative to increase awareness of Party discipline as an important political task, we promptly organized the session to carry forward the guiding principles of CSSC's leading Party members group to ensure the alignment of our Party members' thoughts and actions with discipline initiative. Focusing on the study of Party discipline, particularly the *Chinese Communist Party Disciplinary Regulations* (hereinafter referred to as the "Regulations"), we launched a series of activities, including studying the Regulations, conducting Party discipline lectures, and implementing anti-corruption cautionary education. Through these initiatives, we aim to guide Party members to study, understand, respect, and adhere to Party discipline and safeguard our stable and high-quality development through discipline enforcement.



Party conduct and clean governance education through a visit to Haizhu Honest and Clean Cultural Park in Haizhu National Wetland Park



Top-of-agenda discussion on President Xi Jinping's congratulatory letter to the "Dream" (deep-ocean drilling vessel Meng Xiang) organized by the Huangpu Wenchong CPC Committee



Strengthening the foundation for strict Party governance

The COMEC Party branch integrates institutional development into all aspects of Party building. In accordance with Party regulations and CSSC policies, and tailored to the Company's specific context, we have revised and developed six Party building regulations, including the *Implementation Measures for the Top-of-Agenda System of the COMEC Party Branch Committee*, to advance the governance of the Party through institutions and regulations.

To enhance the Party building framework, we have developed the *2024 Responsibility List for Implementing Full and Strict Party Governance* and the *2024 Priorities of Party Building*, laying a solid foundation for enforcing Party responsibilities throughout the year. Additionally, we released the *COMEC Three-Year Sailing Action Plan for Party Building (2024-2026)*, which emphasizes system building, action-oriented initiatives, brand creation, and leadership strengthening, providing a clear direction and pathway for improving Party building initiatives.



Integrating Party building with business operations

We continue to align Party leadership with corporate governance. Under the "two-way entry and cross appointment" leadership system, we successfully completed the election of the 11th Board of Directors, Board of Supervisors, and senior management team in 2024. This has enhanced the leadership and decision-making capacity of the Party branch committee and improved overall corporate governance efficiency.

COMEC ensures the parallel deployment and evaluation of Party building initiatives and business operations. We issued the *Evaluation Measures for Party Building Responsibilities of COMEC Departments and Middle Management* to integrate Party building responsibilities, including full and strict Party governance, an accountability system for Party conduct and clean governance, and ideological work, into leadership evaluations.

We conduct Party building initiatives tailored to the characteristics of a listed company. A series of themed Party activities have been organized to strengthen the role of the Party branch as a stronghold of leadership. Additionally, we have established Party member demonstration positions for key business personnel and outstanding Party members, encouraging them to serve as role models. Our theoretical learning focuses on Party building, state-owned enterprise reform, and financial capital management, seeking to drive our business growth.



Signing of the Party conduct and clean governance accountability agreement by COMEC

2024

Party member
meetings conducted

6

Party lectures
conducted

5

Themed Party day
events organized

12

Top-of-agenda learning
initiatives carried out

21

Pursuing Deep-Sea Dream: Exemplifying the The Pillars of a Great Power with Tangible Deliverables

On November 17, 2024, China's first domestically designed and built "Dream", deep-ocean drilling vessel Meng Xiang, was officially commissioned in Guangzhou. As China's first deep-sea drilling vessel, "Dream" boasts the world's most powerful drilling capabilities, the most comprehensive research functions, the highest level of intelligence, and the lowest operational and maintenance costs. This milestone marks a significant step forward in China's deep-sea access, exploration, and development, representing China's progress in becoming a maritime and technological powerhouse with far-reaching strategic significance.

Constructed by Huangpu Wenchong, a subsidiary of COMEC, "Dream" was recognized among the "Top 10 Mega-Projects of China's Central SOEs". Completed within three years (over a year ahead of comparable international vessels), "Dream" sets a new benchmark in key performance indicators.



Chasing the dream: Overcoming challenges across the seas

Chinese ocean and geoscience researchers have long pursued the ambitious vision of developing an independent deep-ocean drilling vessel and elevating China from a participant to a leader in international ocean drilling. Initiated in 2017 and entering full-scale construction in November 2021, "Dream" was built to fulfill this vision.

However, the journey was far from smooth. On the one hand, for key technologies, we faced strict international restrictions on deep-sea drilling technology; on the other hand, faced with the challenge of developing an unprecedentedly powerful drilling system, traditional shipbuilding techniques fell short of the vessel's complex functional demands, which necessitated breakthroughs in construction methods. Moreover, the COVID-19 pandemic disrupted supply chains and hindered workforce mobility during the construction. Consequently, the journey toward realizing this dream was fraught with obstacles and challenges.

Build the conditions when none exist; define the precedents where none are found. Undeterred, the vessel's builders rose up to the challenges and achieved multiple "world-first" breakthroughs, forging an innovative path for China's deep-sea drilling industry.



Building the dream: Pioneering excellence in innovation and quality

Equipped with the world's leading drilling system, "Dream" can drill to depths of up to 11,000 meters. It features four drilling modes and three coring techniques, providing a crucial platform for deep-sea resource exploration, key technology development of equipment, and deep-sea drilling research conducted by global scientists. Dedicated four years to its construction, Huangpu Wenchong overcame 18 technological challenges, such as the parallel construction of giant sections and control of gravity's center and weight, and introduced 57 innovative engineering solutions, including precision control via digital twin technology and horizontal assembly of a super-sized derrick. Major breakthroughs include the integration of a new generation of hydraulic drilling systems, the application of multifunctional integration and new closed-loop power grid technology with energy storage, and the construction of the most advanced offshore laboratory. These advancements transformed "Dream" into a golden key to unlocking the secrets of the deep sea and benefiting a community with a shared future.

- Huangpu Wenchong pioneered the world's first dual-project management system for single vessel, established a dedicated drilling system team, and developed the world's first hydraulic lifting drill rig capable of both oil and gas exploration and core drilling, with a maximum drilling depth of 11,000 meters.
- Huangpu Wenchong innovated in the parallel construction technology of giant segments, and pioneered a multi-site, zoned, and phased construction method, which significantly improved project efficiency and quality.
- By adopting a "segmented and vertical assembly" method for derrick, Huangpu Wenchong became the first in the industry to assemble a lightweight non-load-bearing derrick in a single operation, setting a new record for bolt-connected derrick assembly speed.
- Huangpu Wenchong developed the closed-loop power grid technology with energy storage, featuring a 30 MW power station capacity. This technology enables shared power supply across the entire vessel while preventing cascading failures across compartments.

Huangpu Wenchong overcame challenges in high-pressure pipeline construction by introducing phased array ultrasonic testing (PAUT), improving efficiency by over 3 times. This innovation reduced the welding inspection period for "Dream" by three months.



Fulfilling the dream: A mega-project venturing into the deep sea

As China's first independently designed and constructed deep-ocean drilling vessel, "Dream" not only cements China's place among the world's leading deep-sea exploration nations but also showcases numerous globally unprecedented innovations. It has underscores China's advancements in shipbuilding expertise of ocean drilling equipment technology and in innovation capacity.

On November 17, 2024, it was a moment of triumph for the "Dream" builders as they overcame immense challenges, fulfilled their national responsibilities, and completed the construction of a significant vessel. In recognition of this achievement, President Xi Jinping sent a congratulatory letter for the official commissioning of the vessel, and on December 31, 2024, he highlighted "Dream" in his 2025 New Year message, stressing that "the Meng Xiang drilling vessel explored the mystery of the deep ocean".

Looking ahead, COMEC will remain committed to President Xi Jinping's guidance and embrace the pioneering spirit of "Dream" characterized by innovation, collaboration, perseverance, and excellence. We will continue to strengthen our sense of mission and responsibility, drive new achievements, and leverage our role as a listed company to support real economy-based enterprises to increase their sci-tech investment. By fostering new quality productive force, COMEC aims to contribute to China's progress in becoming a maritime and technological powerhouse.

Sound Governance

With the aspiration and pursuit of "becoming a world-class enterprise", we have dedicated ourselves to optimizing operation, and establishing a scientific, standardized, and effective modern corporate governance system with effective checks and balances. We keep strengthening communication with investors, strictly honor our obligations in information disclosure, strengthen risk and compliance management, and uphold clean operation, thus ensuring the Company's long-term and steady development.



Work-related fatalities

0



Participants in safety training

44,216

- Being rated **A-level** (Outstanding) in Information Disclosure Evaluation by the Shanghai Stock Exchange **three consecutive years**.
- Being awarded the Golden Bull Award for Listed Companies - Golden Information Disclosure Award by the China Securities Journal for **two consecutive years**.



Responding to SDGs



Corporate Governance

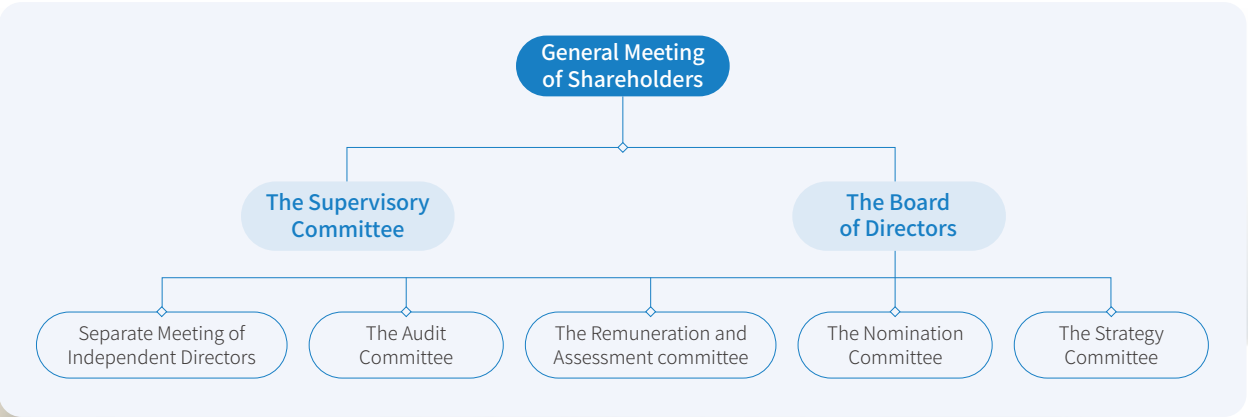
“We make continuous efforts to enhance our corporate governance, optimize governance structure, and promote Board diversity. With a focus on investor relation management, we build a transparent and timely information disclosure system, and also strengthen risk prevention capabilities as well as our moral and anti-corruption mechanism. These efforts lay a solid foundation for the Company's long-term sustainable development.”



2024		
General meetings of shareholders held	Board meetings convened	Meetings of Supervisory Committee held
4	8	9
Separate Meetings of Independent Directors held	Meetings of Audit Committee held	Meetings of Strategy Committee held
3	6	2
Meetings of Nomination Committee held	Meetings of the Remuneration and Assessment Committee held	
2	3	

Governance structure

We strictly comply with the securities regulatory rules and requirements including the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited* and the *Rules Governing the Listing of Stocks on Shanghai Stock Exchange*. Committed to building a management model comprising decision-making level, monitoring level and execution level, we clarify the responsibilities and permits for decision-making, supervision and execution to form an operational mechanism with effective checks and balances. In strict accordance with the newly revised Measures for the Administration of Independent Directors of Listed Companies, the Company further specified the responsibilities of all specialized committees, and established a separate meeting of independent directors in 2024. At present, the specialized committees of the Board and the separate meeting of independent directors perform their respective functions in a standardized manner, providing vital support to sound decision-making of the Board and standardized operation of the Company.



Board diversity

As of the end of the reporting period, the Board comprised 8 directors, consisting of 1 executive director, 3 non-executive directors, and 4 independent non-executive directors (including 1 female director). The Company values the balance and diversity of the backgrounds of its board members. Members of the Board have expertise in corporate governance, finance and accounting, investment strategies, marine engineering and equipment, and legal affairs. On the diversity of Board members, the Company fully understands the benefits of Board diversity to our development and has adopted a Board diversity policy.

2024		
Male directors	Female director	Independent directors
7	1	4

Title	Name	Gender	Term of office	Expertise			
				Industry experience	Risk management	Accounting	Legal affairs
Executive director	Chen Liping	Male	2027.02	●			
Non-executive director	Gu Yuan	Male	2027.02	●			
Non-executive director	Ren Kaijiang	Male	2027.02	●			
Non-executive director	Yin Lu	Male	2027.02	●			
Independent non-executive director	Lin Bin	Male	2027.02			●	
Independent non-executive director	Nie Wei	Male	2027.02		●		
Independent non-executive director	Li Zhijian	Male	2027.02				●
Independent non-executive director	Xie Xin	Female	2027.02				●

Investor management

As a means to boost return of investors, we conducted two shareholder dividends in a year for the first time in 2024. We participated in 30 strategy meetings held by securities dealers such as China Securities, aiming to expand communication channels with potential institutional investors. Through strengthening communication and interaction with institutional investors, small and medium-sized investors, industry analysts, and authoritative media, we actively communicate the Company's value to investors.



Articles published in media outlets, including the China Securities Journal, Securities Times, etc.

6

Being awarded

Best Practice Cases of Investor Relations Award for Listed Companies

Best Practice Cases of Annual Report Performance Briefing of Listed Companies

Excellent Practice Cases of Office of Board of Directors of Listed Companies

by China Association for Public Companies

2024

Performance briefings organized

5

E-interactive queries responded

76

Reception of institutional investors for research

600+

Investor surveys conducted

28



Investor reception

Risk compliance

Under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, we have adopted a compliance risk identification and warning mechanism, and formulated a list of compliance risks within the Company centered around CSSC's "1234" high-quality development strategy, and with a focus on the "triple wins" concept. In terms of identified compliance risks, we have developed targeted measures, in an effort to ensure no significant and systematic risks arise.

Internal audit

We have formulated rules such as the *Internal Audit Charter*, the *Implementation Rules of the Audit Committee*, and so on, as a means to fully address identified and prevent potential cases of non-compliance. Audits are conducted in accordance with the Company's annual plan, with compliance reviews throughout all audit projects over the year, further improving efficiency of supervision.

Internal control

We continue to improve systems in all business lines, and make solid efforts to carry out internal audits and evaluation. Efforts have also been made to sort out systems, straighten out procedures, and warn risks, thus preventing problems before they start.

Legal management

With a focus on improving law-based shipbuilding and the compliance management system, we adhere to the coordinated advancement of lawful governance, operations, and management, consistently optimizing the operating mechanism for law-based corporate governance. We comprehensively standardize legal and compliance reviews, reinforce contract and risk management, and increase legal awareness, aiming to steadily enhance the rule of law in corporate governance.

Tax compliance

To strengthen tax risk management, we carry out self-checks based on key points in the Company's tax management measures on a regular basis. We pay taxes in accordance with law and effectively prevent tax risks so as to ensure legitimate operation.

Intellectual property rights

The Company monitors products that may involve in violations of others' intellectual property, analyzes possible disputes and their damage, and formulates preventative plans to defend our rights against infringements with lawful measures.

Clean operation

We strictly follow national laws and regulations, and industry regulations, uphold honest operation and transparent management, and work to build a sound internal control and anti-corruption mechanism, ensuring that all employees can fulfill their responsibilities in a fair and equitable environment.

Implementing the accountability system for Party conduct and clean governance

We have revised the discipline inspection regulations, such as the *Implementation Rules of Further Implementing Eight-point Decision* on Improving Party and Government Conduct to further strengthen institutional constraints. Middle-level and above managers are organized to sign integrity commitment letters, reaching 100% signing rate. We have launched "Party Discipline Education and Anti-corruption and Integrity Promotion Month" activities to organize all Party members to learn Party discipline and rule, thus forging a strong sense of discipline and rule.

Strictly carrying out discipline enforcement and accountability

Giving prominence to the "key few", key areas, and key links, we strengthen political oversight, make concrete, meticulous, and effective efforts in daily supervision, and promote concrete, targeted and regular enforcement of oversight. We conduct a thorough self-examination to strengthen the supervision of the top leaders and leading bodies, and launch a special campaign to address cases of violations of the eight-point decision on improving Party and government conduct. According to feedback of CPC disciplinary inspection and Group inspection, we actively conduct self-examination of similar problems, aiming to improve our behaviors with tough and solid measures. We take disciplinary action against Party members and officials who violate the eight-point decision on improving Party and government conduct in accordance with regulations and report it to the whole Company in accordance with regulations, to ensure that Party members learn lessons, hold discipline in awe and respect, do not cross the line.

Jointly building an honest and harmonious business environment

We strictly obey Chinese laws and regulations, including the *Anti-Money Laundering Law*, the *Anti-Unfair Competition Law*, and the *Interim Provisions on Prohibition of Commercial Bribery*, ensuring legitimacy and compliance of the Company's operation. We strictly forbid violations of national laws including any form of money laundering, commercial bribery, unfair competition, etc. We have established a complete internal compliance management system to strengthen compliance management, and safeguard market order. These efforts are committed to building a fair and honest business environment.

2024

Trainees for employees' anti-corruption training

18,680

Total length of anti-corruption training for employees

21,764 hours

Litigation cases on corruption filed and concluded against the issuer or its employees in 2024

1



Work Safety

We strictly follow Chinese laws and regulations such as the *Work Safety Law*, and the *Basic Norms for Standardization of Enterprises' Work Safety*. We rigorously implement the work safety accountability system, strengthen emergency drills, prioritize the cultivation of safety culture, and focus on employees' occupational health, thus laying a solid foundation for high-quality corporate development.

Safety management

Holding related parties responsible

We have built a horizontal and vertical network for safety management, established the work safety accountability system, and formulated a list of work safety responsibilities. Upholding the principle of "hierarchical management and respective accountability", we specify responsibilities of employees at each post in all departments to ensure work safety, enabling the Company to enhance duty performance of all staff and implement independent management.

Taking solid efforts to enhance work safety

2024

Minor injury accidents

0

Serious injury accidents

0

Major accidents

0

Complaints regarding occupational health and safety that have material impact on the Company

0

We take solid efforts to build basic norms for standardization of work safety, and maintain the routine activities, obtain first-level certification of work safety by military-industrial system, and build a long-term mechanism for the standard work safety based on continuous improvement.

We promote the establishment of work safety standard for teams with Wenchong's characteristics, thus comprehensively improving the teams' independent safety management, and laying a solid foundation for work safety.

We have formulated 6 collections, including the *Compilation of Systems for Work Safety Management*, and the *Compilation of Regulations for Operation Safety Management*, ensuring that the Company's production and operation comply with national laws and regulation and relevant protocols and operation specifications.

We have established an identification, hierarchical management and control system of safety risks, and a hazard management system, made a list of safety risks and hazards, filed records of hazards, and developed management measures.

Leaders conduct safety inspection and give safety lectures on a regular basis. Primary- and middle-level officials carry out the "three inspections" work at the primary-level level every month. We adopt a regular mechanism for bringing major work accidents to a dynamic zero.

We have formulated the *Work Plan to Prevent and Defuse Major Risks in Work Safety*, and set up nine teams for the special inspection of hazards.



Emergency management

A new round of revision and review of the *Emergency Plan for Work Safety Accidents* (HPWC-YA-2024) has been completed. Emergency drills are carried out regularly as planned, in order to enhance emergency awareness and response capability of employees at all levels.

We figure out supplies for fire control, theft prevention, and explosion prevention, emergency personnel, and records of key parts, and closely monitor the typhoon situation to make accurate predictions, issue warnings, and make emergency preparations. In 2024, extreme weather and typhoon caused no injuries or damage to financial assets.



A comprehensive drill

2024

Hidden hazards identified and rectified

29,868

Vehicles investigated for violations

43

Papers selected in the collection of excellent papers by the Guangdong Emergency Management

13

Comprehensive drills conducted in three plants

5

Special drills conducted in three plants

39

Safety culture

We make continuous efforts to build a safety culture and conduct safety culture activities and safety knowledge training on a regular basis, as a means to improve employees' safety awareness and skills, and create a safety workplace.



Safety culture activities

- We organized a Company-wide Work Safety Month activity with the theme of "Everyone Focuses on Safety, Everyone Can Respond to Emergencies - Smooth Lifeline".
- We organized Work Safety Law Awareness Raising Week in 2024 themed "Strictly Following the Law on Work Safety, and Implementing Work Safety Responsibility System for All Employees".

Safety culture training

- We strengthened training courses on safety performance for management cadres, and actively carried out training on work safety performance for a total of 215 middle- and primary-level employees. We launched targeted training sessions for team leaders and supervisors to improve their safety management capabilities, involving 578 participants.
- We organized about 3,000 team leaders, production supervisors, leaders at primary level and above to participate in online learning program on the Group's Jun'an Development Training Platform.
- We promoted the development of an information platform for safety education. 20 short safety videos close to production were completed and available on the platform.



Carrying out training on preventing sectional lifting injuries

Occupational health

We strictly observe Chinese laws, regulations, and relevant standards, including the Law on Prevention and Control of Occupational Diseases. In accordance with the three-year action plan to strengthen work safety and the special investigation and rectification of major accident hazards launched by the CPC Central Committee and the State Council, we work to solve the most prominent practical problems, forestall and defuse major safety risks through investigation and rectification with a focus on the Company's key projects. All indicators of 33 projects met the standards in 2024 and no work-related accidents or occupational diseases with serious injuries or above arose.

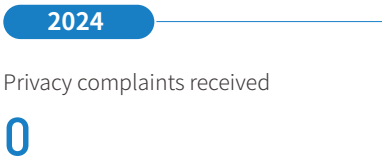
Year	Work-related fatalities	Work-related fatality rate(%)	Days lost due to work-related injuries
2024	0	0	0
2023	0	0	0
2022	0	0	0

Customer Service

We keep improving customer service system and protect customers' legal interests. Service quality and customer relationship management, as well as service efficiency are improved to give customers a more satisfying service.

Protecting customers' interests

Upholding the concept of "quality first, customer foremost", we make all-out effort to protect employees' interests. We act in accordance with the Regulations on Corporate Integrity Management and comply with social ethics, business ethics and related industry norms to improve business practices, maintain the title of "honest enterprise", and protect customer privacy.



Maintaining good customer relationships

Strengthening customer communication

We implement the Regulations on the Management of Communication, Participation, and Consultation, and the Measures for the Management of Shipowners' Ship Inspection Opinions to keep effective communications with customers and track their opinions, suggestions, and complaints, thus building a good relationship with equality and mutual trust. During the construction period, we completed all milestones of our projects guided by the spirit of excellence and deliver high-quality products.

Improving after-sales management

We organize monthly after-sales service meetings to ensure that responsible units promptly implement closed-loop measures. According to the Regulations on the Management of After-sales Service of Military Products, the Measures for the Management of Warranty Services for the Full Life Cycle of Military Products, and the Regulations on the Management of After-sales Service of Civil Products, we provide customers with a comprehensive range of after-sales services and technical support after delivering the ship to ensure the smooth operation of products and normal and effective use of equipment.

Implementing customer suggestions

We ensure sound statistical analysis on after-sales information and implement the category-based management. As for key problems, we list after-sales projects subject to supervision, see responsibilities are fulfilled by corresponding departments, and ensure closed-loop management.

Gaining recognition from shipowners again and giving new name to heavy-lift ships

On April 26, 2024, Huangpu Wenchong named the 32,000DWT heavy lift vessel (H2469), the first heavy lift vessel of Schoeller Holdings Group's orders under bulk shipbuilding mode. At the same time, the company signed another order for two 32,000DWT heavy-lift vessels with Schoeller Holdings Group. At the ceremony, Mr. Kyriacos Panayides, General Manager of SHL Group and Executive President of AAL Shipping, and Ms. Marina Hadjimanolis, Deputy Minister of Shipping of the Republic of Cyprus, recognized the quality of the ship and showed their appreciation for all parties involved in the construction.

COMEC has forged a profound friendship and cooperation with Schoeller Holdings Group. Since 2008, the Company has built about 30 vessels in multiple types for Schoeller Holdings Group, including 1700TEU, 1900TEU, 2700TEU, and 2800TEU container ships, and 32000DWT heavy-lift vessels. During the cooperation, the Company received many letters of thanks.



Huangpu Wenchong and SHL Group exchange gifts

Quality Management

“We further advance the operation of quality management system to enhance quality control in production process, actively build quality culture, and launch extensive quality education activities. With these efforts, we maintain stringent control over quality metrics, ensuring no occurrences of serious or above quality problems.”

Quality management system

The Company's top management have signed quality accountability pledges with the heads of our subsidiaries. All staff members have signed quality accountability pledge and quality integrity commitment letter. According to new edition of 25 military standards, we review the suitability of systems and documents of the Company, and have revised 30 documents. We have completed the annual supervision and audit of China Xinshidai Certification Center and China Certification Society, and successfully passed external audits. Internal audits and rectifications of national standard and military standard quality management system of the three plants have been completed. The plan of building quality management system for equipment construction in the new era has been formulated. We also completed the research on the development of new systems, and invited external experts to offer training on this aspect. Besides, we have renewed the Company's CNAS laboratory and radiation license, and completed the on-site assessment and expansion of the Company's national defense measurement standards of the national defense measurement station.

Quality control

Technical process management

- By formulating and revising multiple quality documents and templates of process documents, we optimize the management of ship equipment software changes, and promote the update of the refined atlas of ship equipment and the display of actual ship.

Process quality control

- We have optimized the military inspection project, strengthened welding quality management, and implemented special rectification of control of deformation in thin plate. We have formulated the management plan of shipowner's ship inspection opinions, significantly reducing the number of military inspection projects and shipowners' ship inspection opinions.

Rectification

- We conduct special rectification of particular problems in building ships, such as corrosion of outer plates, and dislocation of steel fence panels, and realize comprehensive issue resolution. In addition, we strengthen quality control of raw materials to put an end to these problems.

Penetrating quality control

- With the help of penetrating quality control, we strengthen supplier review and quality analysis of supporting equipment, implement the negative list system, and improve the claim mechanism for quality problem, effectively reducing the loss caused by the quality of supporting equipment.

Product quality

- In accordance with management measures such as the *Material Procurement Management System*, and the *Management Measures on the Inspection of Civil Ship Supplies*, we carry out procurement and supplier management. Throughout the process of building a ship, we enforce the *Release Control Measures for Products and Services*, and each process is subject to a system of self-inspection, mutual inspection, and special inspection based on the list.

2024

First-pass rate of hull welding X-ray film

97.58%

First-pass rate of process

98.9%

First-pass rate at external delivery

98.75%

First-pass rate of parts procured from external suppliers

99.96%

Percentage of total products sold or shipped that must be recalled for safety and health reasons

0

Quality culture

Adhering to our quality guidelines of "putting quality and customers first, delivering reliable and top-notch products and services with excellence, and upholding integrity in all aspects of our service," we conduct a range of quality publicity activities to foster a vibrant quality culture atmosphere and instill a "quality first" mindset among our workforce.



Innovation-driven Progress

We regard technological innovation as the core driving force for strengthening military capabilities to win wars, advancing industrial upgrades, and achieving high-quality development. To align with national strategies, we are dedicated to integrating next-generation productive forces and combat-ready capabilities. As the key driver and hallmark of this synergy, innovation has been deeply embedded in the end-to-end innovation system for marine equipment.



RMB **888** million
R&D investment



1,345
R&D personnel



43
External technology awards received



Responding to SDGs:



Technological Innovation System

Guided by market-oriented mechanism, we implement a trinity governance model integrating operation, production, and research and development(R&D). By establishing robust mechanisms for innovation governance, performance evaluation, and incentive alignment, we have created a self-reinforcing ecosystem where technological innovation originates from and feeds back into operational and production processes, while these processes continuously drive iterative technological advancements. This systemic approach sustains our strategy for sustainable high-value growth.

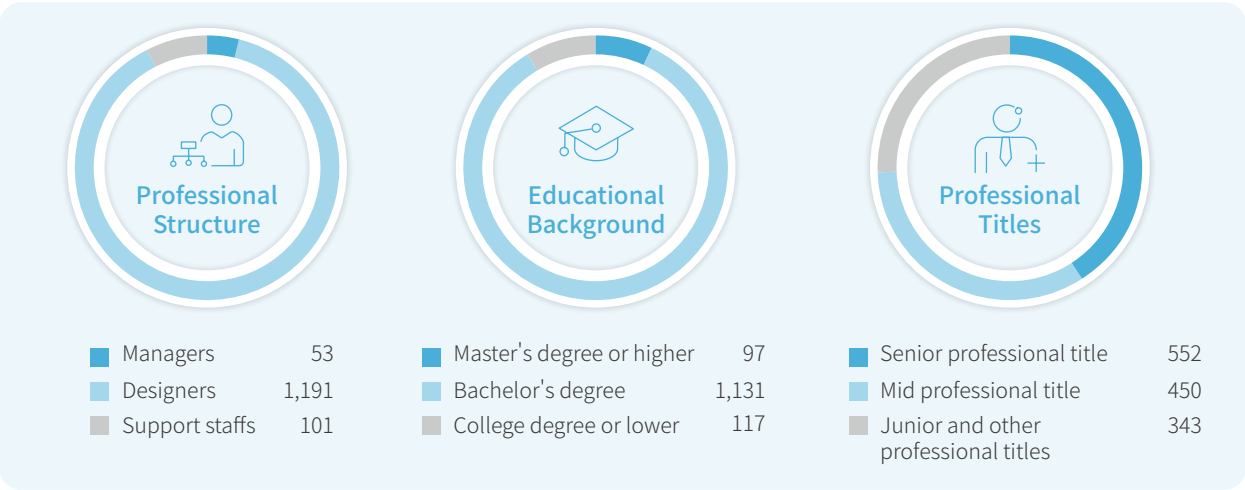
Cultivating Innovation System

As part of our innovation-driven development strategy, we have established technological innovation platforms at national, national-defense related and provincial levels, including enterprise technology centers, post-doctoral research workstations, the National Engineering Laboratory for Marine Engineering R&D and Design, Guangdong Provincial Key Laboratory of Advanced Welding Technology for Ships, and Guangdong Engineering Technology Research Center. In 2024, Huangpu Wenchong successfully obtained recognition as the high-tech enterprise, while its subsidiary, Guangzhou Wenchuan, was recognized as an innovative enterprise in Guangdong Province and completed the application for the certification of "Specialized and Sophisticated Small and Medium-sized Enterprise.



Cultivating the Talent Team

We continuously promote the construction of the innovative talent project. We integrate internal and external resources, adopt models such as training, cultivation, cooperation and exchange, and participate in or lead product R&D, to improve the overall quality of the R&D talent team by integrating the employment of external high-end talents and internal cultivation. We cultivate a group of chief experts, discipline leaders, chief technicians and technical masters, to drive the Company's technology talents to grow faster and better. In 2024, while strengthening the cultivation of internal technological personnel, we introduced one doctor or postdoctoral researcher to continuously consolidate and enhance our R&D capabilities.



Case Two Employees of Huangpu Wenchong were Recognized as "Huangpu Craftsman"

As shown in the latest selection results of the 7th Skilled Craftsman Awards in Guangzhou Development District (Huangpu District) in 2024, Xie Zukao, a senior welding technician, and Chen Guanghua, a second-level hull assembly technician from Huangpu Wenchong, were honored as "Huangpu Craftsman". The selection process, which began in May 2024, attracted 137 applicants from 82 companies. After a rigorous evaluation, including employer recommendations, qualification reviews, expert assessments, investigations, and public announcements of candidates, etc., 20 highly skilled craftsmen were selected for their dedication, pursuit of excellence, frontline contributions, and outstanding achievements.



First prize winner Xie Zukao

Senior ship welding technician at Huangpu Wenchong, who has been recognized with the titles of "National Technical Expert", "May 1st Labor Medal of Guangdong Province", "Guangdong Province Technical Expert" and "Technical Expert of China Shipbuilding Group", etc.

Chen Guanghua Second prize winner

Second-level hull assembly technician at Huangpu Wenchong, who has been recognized with the titles of "National Technical Expert" and "Technical Expert of China Shipbuilding Group", etc.



Fostering Technological Achievements

In 2024, Huangpu Wenchong focused on several research projects, including the *Research on Key Technologies for the General Assembly and Construction of Natural Gas Hydrate Drilling Vessels (Deep-Sea Drilling Vessels)* and the *Special Testing of Core Equipment for Deep-Sea Resource Exploration and Development of Key Domestically Produced Equipment*. For the natural gas hydrate drilling vessels in the *Research on Key Technologies for the General Assembly and Construction of Natural Gas Hydrate Drilling Vessels (Deep-Sea Drilling Vessels)*, significant efforts were dedicated to the research on the installation and commissioning of the drilling system and the hydrate testing system in 2024. These efforts were summarized in a series of commissioning documents and test reports to support the design and construction of the associated vessels effectively.

Case Two Manufacturing Achievements of Huangpu Wenchong were Selected as National Mega-projects

On December 23, 2024, China Media Group (CMG) released the top 10 scientific news stories from China and the top 10 scientific news stories from the world for 2024. Among them, two shipbuilding-related news were selected into the top 10 scientific news stories from China, namely "The Meng Xiang, China's first domestically designed and built deep-ocean drilling vessel was officially commissioned" and "China opened the Shenzhen-Zhongshan Link in Guangdong Province". The first deep-ocean drilling vessel, the Meng Xiang, which was officially commissioned in November 2024, was constructed by Huangpu Wenchong. Additionally, GSI and Huangpu Wenchong jointly undertook the steel shell manufacturing project for GK01 and GK02 sections of the immersed tunnel of the Shenzhen-Zhongshan Link in February 2018, and the project was completed successfully on December 10, 2022.

In 2024, we received a total of 43 external science and technology awards, including 16 ministerial, provincial- and national-level awards from academic societies and associations and 16 awards from China Shipbuilding Group:

<div>Ministry of Industry and Information Technology of the PRC</div> <div>Development of a 10,000-ton large maritime patrol vessel (Haixun 09) Second prize</div> <div>Formulation of technical standards for the design and construction of air-cushioned landing craft Second prize</div>	<div>The Chinese Society of Naval Architects and Marine Engineers</div> <div>Development of the smart unmanned mother ship (Zhu Hai Yun) Top award</div> <div>Design and construction of Antarctic krill fishing and processing vessel First prize</div>
<div>China National Association for Automation in Petroleum and Chemical Industry</div> <div>Design and construction of a dual-water layer adaptive built-in saturation diving support vessel First prize</div> <div>Design and construction of a deep-water multi-purpose service platform Second prize</div>	<div>Research and application of large-scale complex thin-walled aluminum alloy structure construction technology based on multi-factor deformation control Second prize</div> <div>Development of the 85,000-ton energy-saving and eco-friendly new Panamax smart bulk carrier (Haijing Series) Second prize</div>
<div>China Communications and Transportation Association</div> <div>Research and application of digital key technologies for design, manufacturing, and management of bridge-island-tunnel cluster engineering First prize</div>	<div>Development of a walkway-equipped offshore vessel for 300-person accommodation and operational support Second prize</div> <div>High-efficiency manufacturing and installation technology for heavy-load jack-up foundations of large-scale wind turbine installation platform Second prize</div>
<div>China Nonferrous Metals Industry Association</div> <div>High-efficiency swing arc welding technology and complete equipment for thick and large components Second prize</div>	<div>China General Chamber of Commerce</div> <div>High-efficiency manufacturing and installation technology for heavy-load jack-up foundations of large-scale wind turbine installation platform First prize</div>

China Institute of Navigation		China Machinery Industry Federation	
Design and construction of Antarctic krill fishing and processing vessel	Technology and application of modulated light field 3D high-precision online measurement	Research and application of high-efficiency swing submerged arc welding technology for medium-thick high-strength steel plates	
First prize	First prize	Second prize	

China Shipbuilding Group			
High-efficiency manufacturing and installation technology for heavy-load jack-up foundations of large-scale wind turbine installation platform	Research and application of large-scale complex thin-walled aluminum alloy structure construction technology based on multi-factor deformation control	Development of a 7,800 kW intelligent self-propelled cutter suction dredger	Development and special testing research of berthing platform
First prize	First prize	First prize	First prize
Development and construction of a 2,000-ton self-propelled jack-up wind turbine installation platform	Development of a 10,000-ton large maritime security vessel (Haixun 09)	Development of the 4500m ³ trailing suction hopper dredger with "single-operator dredging"	Development of a 9,500 m ³ multi-product gas carrier and bunkering vessel
First prize	First prize	Second prize	Second prize
Design and construction of a high-speed intelligent 2038 TEU feeder container ship	Design and construction of a self-elevating multi-purpose engineering vessel for emergency	Development of a walkway-equipped offshore vessel for 300-person accommodation and operational support	Research on key technologies for the construction of a 4500m ³ marine C-type LNG cargo tank
Second prize	Second prize	Second prize	Second prize
Development of the energy-efficient 1900 TEU container ship (Honghu)	Research on key technologies for the construction and towing of floating offshore wind turbine platform	Development of the 85,000-ton Energy-Saving and Environmentally Friendly New Panamax Smart Bulk Carrier (Haijing Series)	Research on secondary node construction technology and industrial collaboration application of the shipbuilding industry based on identification and resolution
Second prize	Second prize	Second prize	Second prize

Guangdong High-Tech Enterprise Association			
Research on secondary node construction technology and industrial collaboration application of the shipbuilding industry based on identification and resolution	High-efficiency manufacturing and installation technology for heavy-load jack-up foundations of large-scale wind turbine installation platform	Research on key technologies for the construction of a 4500m ³ marine C-type LNG cargo tank	Research and application of large-scale complex thin-walled aluminum alloy structure construction technology based on multi-factor deformation control
First prize	First prize	First prize	First prize
Development of the 85,000-ton Energy-Saving and Environmentally Friendly New Panamax Smart Bulk Carrier (Haijing Series)	Research on key technologies for the construction and towing of floating offshore wind turbine platform	Development of a 9,500 m ³ multi-product gas carrier and bunkering vessel	Design and construction of a self-elevating multi-purpose engineering vessel for emergency
First prize	First prize	First prize	First prize
Development of a walkway-equipped offshore vessel for 300-person accommodation and operational support	Development of the 4500m ³ trailing suction hopper dredger with "one-man dredging operation"	Research and application of key low-stress manufacturing technologies for large-curvature aluminum alloy thin-walled structures	
Second prize	Second prize	Second prize	

Cybersecurity and Information Security

As a key enterprise in China's shipbuilding industry, COMEC regards cybersecurity and information security as a crucial component in safeguarding its core competitiveness and ensuring national strategic security. In response to the industry's digital and intelligent transformation trends, we have established a comprehensive and multi-layered cybersecurity protection system and promoted digital transformation and upgrades, building a solid foundation for the digital development of smart ships and marine equipment.

Fostering a Cybersecurity Culture

We conduct publicity, education and training for part-time information personnel to familiarize them with the newly complied network and information security and confidentiality management regulations to ensure their thorough understanding of these regulations.

We provide data security and confidentiality training, covering essential knowledge and requirements, for on-site technical personnel in accordance with our data security policies to emphasize the importance of data security.

We organize a series of activities for the 2024 China Cybersecurity Week, formulating the *Huangpu Wenchong 2024 China Cybersecurity Week Work Plan*, producing a special edition of Team Learning for China Cybersecurity Week and creating a specialized computer screensaver. We conducted publicity on cybersecurity laws and regulations through company-wide campaigns to disseminate knowledge about cybersecurity, data security and classified information protection.

We conduct awareness campaigns to enhance employees' cybersecurity consciousness, with personnel from the science and information department and other relevant departments participating in cybersecurity technology summits, and cybersecurity product and service networking events. These activities help employees stay informed about the latest developments in cybersecurity technologies and products while facilitating exchanges with cybersecurity vendors to explore advanced security solutions.

We engage a professional cybersecurity firm to conduct penetration testing and reinforcement of core application systems. Additionally, the National Security Science and Technology Evaluation Center (China Shipbuilding Group) System Evaluation Laboratory carried out security evaluations of four classified application systems, including the collaborative office system, electronic document management system, ship products data management system, and HR management system of the Group, all of which have passed the on-site evaluation.

Digital Transformation and Upgrades

We have significantly strengthened its secondary development capabilities for design software. We have established a collaborative SPD secondary development team and fostered talent development through training and expert guidance. The team has created a development framework and an integrated development environment (IDE). Over the past year, 12 SPD secondary development projects were successfully completed, including critical functionalities such as hull component management, pipe installation sequencing, and outfitting production drawing categorization. These advancements have effectively improved the efficiency of SPD software design and enabled the integration between in-house development projects and SPD software.

We have established a workflow for distributing 3D models designed in SPD software. We have achieved breakthroughs in extracting information and reconstructing lightweight models from heterogeneous systems and completed the development and validation of key technologies in this domain. These advancements lay the groundwork for replacing installation drawings with 3D models, and facilitate the realization of paperless shipbuilding.

We have largely completed the development of a next-generation PDM system, which encompasses functionalities such as project planning, material coding, drawing management, bill of materials and data tray management, process data management, detailed design submission and review, and design data utilization and development. By integrating design data with supply chain and manufacturing execution systems, we have facilitated seamless and unified data application. The system has been fully implemented across our military and civilian vessel projects.

Green Development

The vast expanse of blue waves and sky have witnessed our green efforts. With a focus on green development, COMEC responds to the call of low-carbon era in China's vast land. Our efforts have been devoted to areas from climate change response to carbon emission management, and from energy use to environmental risks prevention. We are injecting sustainable vitality into global marine equipment with green momentum created by China's intelligent manufacturing, enabling industrial civilization to resonate with the pulse of the earth, thus safeguarding blue waters and skies for our future generations.

Comprehensive energy consumption per RMB 10,000 of output value **0.01898** tons of standard coal

Reduction of carbon dioxide emissions
12,718.96 tCO₂e

Major environmental violation in 2024
0



Responding to SDGs

3 GOOD HEALTH AND WELL-BEING	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	

Climate Change Response

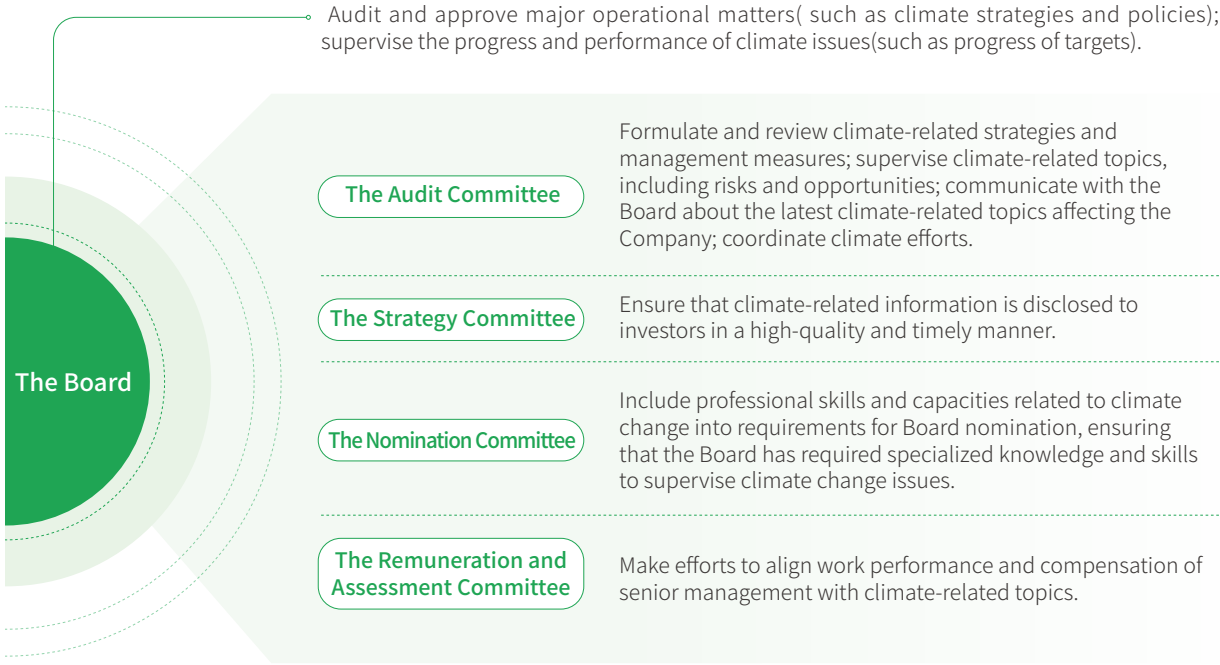
Being fully aware of the urgency to address climate change, we put climate-related work under the overall leadership and supervision of the Board, incorporate climate risks into our enterprise risk management (ERM) system, and actively respond to risks and grasp opportunities brought by climate change. In 2024, we disclosed climate change information in accordance with the *Implementation Guidance for Climate Disclosures Under HKEX ESG Reporting Framework*. Huangpu Wenchong was awarded the title of "2024 China Industrial Carbon Summit Leader", and was invited to the Carbon Summit Forum.

Climate risk management

Governance

The leadership function for the Company's ESG management performed by the Audit Committee covers the deliberation, supervision and decision-making of major ESG issues, including deliberation of climate change issues, risks and opportunities, as well as work progress. The Audit Committee is responsible for implementing decisions of the Board on climate change response, implementing and reviewing climate-related strategies, coordinating climate-related work, and reporting climate change issues to the Board on a regular basis, so as to ensure smooth progress and compliant performance.

To supervise performance of related personnel, we set climate-related targets at the management level every year, such as carbon emission targets to assist the Board in assessing the effectiveness of its climate strategies and measures. To keep the Board informed of the latest climate-related risks and opportunities, we actively employ external experts to conduct consultations and training programs related to climate change, thus continuously improving professional skills and capabilities of related personnel.



Strategy

We identify and analyze risks and opportunities of climate change every year and update them timely. Climate risks we are facing are mainly divided into two categories, physical risks and transition risks. The above risks may generate varying degrees of impact on our business operation and financial status. As a result, we actively develop response strategies, aiming to avoid risks or mitigate the adverse effects. We also make timely adjustments to our services and business model based on the market trend, in an attempt to grasp business opportunities brought by climate change.

Risk categories	Physical risks		Transition risks		
	Acute physical risks	Chronic physical risks	Policy and legal risks	Technical risks	Market risks
Climate-related risks	<div>The severity of extreme weather events increases, such as :</div> <ul style="list-style-type: none">• Cyclones• Floods• Typhoons and rainstorms• Wildfires	<ul style="list-style-type: none">• Shifts in rainfall patterns and extreme changes in climate patterns• Average temperature increases• Sea-level rises	<ul style="list-style-type: none">• Increased carbon pricing• Higher requirements for emission reports• Compulsory supervision over existing products and services• Facing litigation risks	<ul style="list-style-type: none">• Replacing existing products and services with lower-emission alternatives• Investments in new technologies fail• Costs of transitioning to lower emission technologies	<ul style="list-style-type: none">• Changing customer demand• Uncertain market signals
Impact on business model	<ul style="list-style-type: none">• Increased risks of permanent and non-recurring impairments to asset values• Extreme weather may expedite deterioration of facilities• Efforts to deal with extreme weather and related risks are projected to elevate operational expenditures• Posing personal security risks to employees and customers		<ul style="list-style-type: none">• Higher compliance cost and increased risks of non-compliance fine• Early retirement of some assets due to policy changes• Expected energy efficiency standards change• New operational process is adopted/deployed for compliance	<ul style="list-style-type: none">• Early retirement of existing assets(such as some energy-intensive equipment)• The development of low-carbon energy technologies and intelligent operation and maintenance technology will incur transition costs and risks of transition failure or falling behind peers in the evolving market• Developing new technologies• Upgrading project operating procedures	<ul style="list-style-type: none">• Increased green operating costs• Increased risks and opportunities of market expansion
Impact on the value chain	<ul style="list-style-type: none">• Extreme weather may affect the stability of the supply chain		<ul style="list-style-type: none">• Demand for high-emission products and services is expected to decrease	<ul style="list-style-type: none">• Demand for high-emission products and services is expected to decrease	<ul style="list-style-type: none">• Customer preference is expected to change• hange of revenue mix and source
Impact time frame	Short-, mid-, and long-term		Short-, mid-, and long-term	Short-, mid-, and long-term	Short-, mid-, and long-term
Response strategies	<ul style="list-style-type: none">• Develop measures and emergency plans to tackle extreme weather; make special emergency plans in response to typhoon, rainstorm, high temperature, and frost; continuously optimize emergency systems, mechanisms, measures and plans.		<ul style="list-style-type: none">• Focus on the latest policies and regulations to ensure that the Company's business operation complies with the latest regulatory requirements.	<ul style="list-style-type: none">• informed of technology trends, and use the latest technologies to strengthen energy consumption management so as to promote green operation across the board.	<ul style="list-style-type: none">• Timely monitor changes in market demand, optimize product structure, continuously enhance green manufacturing capabilities, and transform risks into opportunities.

Risk management

Climate change risk management is part of our ERM system, which was fully updated in 2021 in accordance with the *Guidelines on Enterprise Risk Management for Central State-owned Enterprises* to ensure correct identification, and full assessment, management, and supervision of major corporate risks. Under the ERM system, we carry out risk investigation, assessment and prioritization every year, and establish a company-wide risk list with possible risks arising from climate change included, which will be updated and renewed on a yearly basis. In the same time, we will formulate corresponding plans according to identified risks, and actively roll out these plans, thus enhancing our climate risk management and response efforts.

Metrics and targets

We continue to disclose energy consumption data and greenhouse gas(GHG) emissions data, as a means to keep stakeholders informed of the progress and results of the Company in terms of energy conservation and emission reduction.

2024 GHG emissions	Source	Unit: tCO ₂ e
Scope 1	Purchased natural gas consumption	5,248.1049
	Heavy oil consumption	5,653.1860
	Gasoline consumption	469.3545
	Diesel consumption	30,596.5035
Scope 2	Purchased electricity	75,334.5088
Total		117,301.6577

Note: Figures are from Huangpu Wenchong

Decarbonization action

In 2024, we reported the Huangpu Wenchong Action Plan for Carbon Peaking to China State Shipbuilding Corporation, with an aim to incorporate carbon peak and carbon neutrality into the overall development of the Company.

Before 2030

Huangpu Wenchong plans to reduce comprehensive energy consumption per RMB 10,000 of output value by **38.3%**, and carbon dioxide emission per RMB 10,000 of output value by **37.6%** compared with 2020, and peak carbon emissions at **180,000** tons.

Before 2060

Huangpu Wenchong plans to take full control of GHG emissions, make significant progress in innovating in and applying negative emissions technologies, realize decarbonization, zero-carbon and green transformation in production, and reach extended carbon emissions neutrality, that is, GHG emissions neutrality.

Improving intelligent and refined energy consumption monitoring

We advance trials of carbon data tracking mechanism to workstations, aiming to promote precise origin-tracing of carbon emission. We have set process quantity-based standards for oxygen and gas consumption per unit of processed products, carbon dioxide consumption per unit of load, electricity consumption per unit of painting area, electricity consumption per unit of load, electricity consumption per unit of processed products, etc. and developed a process evaluation indicator system. We improve the control mechanism for peak-hour electricity consumption goal in the Maritime Business Department, and make the proportion of shore power as a new assessment indicator, so as to promote the transformation of energy structure.

Improving collection of carbon emission data

We have established standards for collecting and converting carbon emission data for the Company and business departments, and created a template for calculating carbon emission data. A reporting and tracking mechanism has been put in place, producing monthly, quarterly, and annual carbon tracking data reports.

Applying the method of "one department, one documentation", and "one ship, one sheet"

According to the "one department, one documentation" method, all production departments are under control based on both indicators and action plans. The indicators include disaggregated indicator, energy consumption indicator per unit of output, and on-site control indicator that the CSSC arranges for our company. Action plans will be formulated at the beginning of a year, tracked during the whole process, and assessed at the end of a year. In accordance with the "one ship, one sheet" method, fuel consumption, rated generator units, and proportion of shore power of a single ship are under control.

2024

0.01898

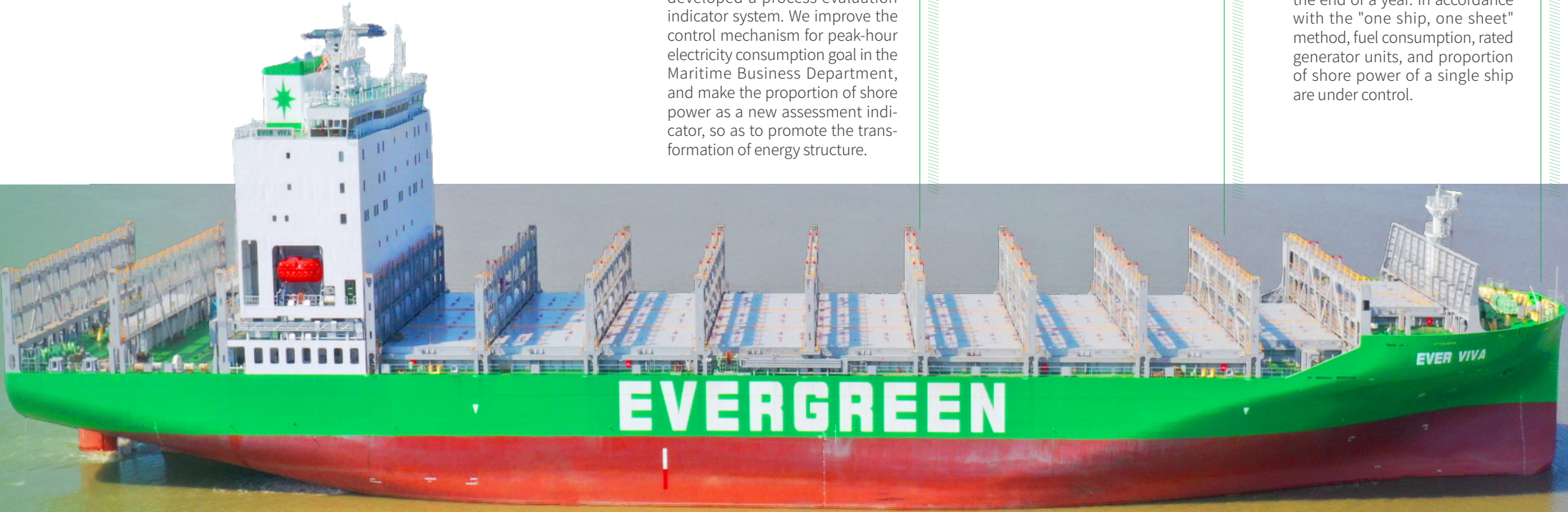
tons of standard coal

Comprehensive energy consumption per RMB 10,000 of output value

91.82

kWh

Energy consumption per RMB 10,000 of output value



Environmental Compliance Management

“ We strictly follow national laws and regulations, including the *Environmental Protection Law*, the *Law on the Prevention and Control of Atmospheric Pollution*, the *Law on the Prevention and Control of Water Pollution*, the *Law on the Prevention and Control of Noise Pollution*, and the *Law on the Prevention and Control of Environmental Pollution by Solid Wastes* to pursue green development. The year 2024 saw no major environmental violations in the Company.



Environmental management system

Revising environmental management system

In 2024, we revised the *Measures for Environmental Protection Responsibility System*, the *Measures for Environmental Incident Reporting and Investigation*, the *Measures for Solid Waste Management*, the *Measures for Clean Production*, and the *Measures for Preparing for and Responding to Environmental Emergencies* based on our actual production status, in order to make the environmental management system more suitable for the Company, and further standardize environmental compliance management.

Improving management of environmental risks

Waste gas treatment

In 2024, 11 sets of waste gas treatment facilities were transformed. The new VOCs treatment facility adopts zeolite runner+catalytic combustion process and RTO treatment process, significantly increasing treatment efficiency of VOCs and reducing the pollution.

Hazardous waste management

By launching the industrial waste reduction program, the amount of industrial waste generated per unit of output value in three plants fell by 8.5% year on year. We standardize management of hazardous waste in accordance with the *National Inventory of Hazardous Wastes*, and enhance supervision and management of all production links to ensure that all hazardous wastes are collected. Compared with 2023, annual gross product increased, the volume of hazardous wastes increased by 12%, and all hazardous wastes were compliantly disposed in 2024.

Noise treatment

By implementing noise control measures at night, we significantly reduce night operations and lower the risk of noise complaints. Thanks to the application of low-noise fans, the impact of noise on surrounding residents is further reduced, and the industrial enterprises noise at boundary meets emission standards.

Radiation management

We have revised the *Rules for Operation Safety in Industrial X-ray Radiography* to improve regulations, thus further standardizing radiography.

2024 environmental protection goals	2024 targets	Performance
Environment pollution incidents	0	0
Compliance rate of wastewater discharged	Up to standard	Up to standard
Compliance rate of waste gas (VOCs, dust) emissions	Up to standard	Up to standard
Compliance rate of industrial enterprises noise at boundary	Up to standard	Up to standard
Compliant disposal of hazardous waste	100%	100%
Industrial solid waste reduction	5%	8.5%

2024

Total waste gas emissions
2,556.4835
million standard cubic meters

Industrial waste disposed by the Company in compliance with regulations
20,769.94 tons

2024	Solid waste (ton)				Liquid waste (ton)	
	Hazardous solid waste		Non-hazardous solid waste			
	Volume generated	Volume recycled	Volume generated	Volume recycled	Volume generated	Volume recycled
	5,345.32	5,345.32	36,354.35	36,354.35	1,057.02	1,057.02

Note: Hazardous solid waste contains hazardous waste and non-recyclable industrial waste.

R&D of green products

We pay attention to new energy ships. Targeting the development opportunities presented by low-carbon fuels (such as LNG and methanol) and zero-carbon fuels (like ammonia and hydrogen) in light of the restructuring of the energy mix, we have developed multiple types of new energy ships, obtained Approval in Principle (AiP) from several classification societies, and independently developed ships powered by alternative fuels, which paves the way for the development of subsequent types of ships.

Methanol

Independent design and research of methanol system has been carried out based on the 2400TEU methanol dual-fuel container ship, producing a major system configuration checklist, and finishing catalogue compilation of main design drawings, and the preliminary design of surveillance layout. In addition, we work to apply methanol-fueled system to bulk ships based on the 65000 dwt methanol dual-fuel bulk ship. We have finished system configuration research and confirm the status of this technology.

Ammonia

Based on 25000 CBM LPG transportation ship, we carry out risk evaluation with a focus on key and difficult points such as safety control, exhaust gas treatment, and simulation analysis of ammonia leakage, clearing the path for applying WinGD 6X52DF-A-1.0-HPSCR, the first ammonia-fueled vessel.

Battery

We analyze the challenges of battery safety, design of battery management system and battery position caused by the installment of high-capacity storage battery on CSOV that can accommodate up to 120 people on board. With these efforts, we address key challenges, such as battery position, protection, and heat dissipation, protection design and coordination of power system, as well as system dynamics simulation.

2024

Participants of environmental protection training

15,327 headcount

Major environmental violation in 2024

0

Environmental protection tax contributions

69,100 RMB



For the environment and ecosystem

We launch environmental awareness campaigns to celebrate World Environment Day, and National Ecology Day, etc. in different ways, as a means to improve employees' environmental awareness.

- Participating in the training program on guidelines of emission reduction accounting for volatile organic compounds and clean production technologies to reduce emissions held by Guangzhou Environmental Technology Center , so as to improve the management level of the Company in the accounting of organic compounds and clean production.
- Participating environmental training organized by the subdistrict office to improve the Company's management capacity of environmental protection.
- Participating in the training program for building Guangdong into a waste-free city, to improve the Company's management of solid wastes.



World Environment Day promotional poster

Energy and Resource Utilization

We attach great importance to the efficient utilization of energy resources and sustainable development. For this reason, multi-dimensional measures have been taken to promote green operation, including new energy development, energy conservation, and recycling of water resources. These efforts aim at comprehensively reducing the negative impact of shipbuilding enterprises on the environment, and building a clean, low-carbon, safe and efficient energy and resource utilization system.

Energy-saving technology application

5G+ frequency conversion transformation of air coolers

To control the sharp increase in electricity demand due to industrial refrigeration in high temperature season in Guangdong, we conversed the frequency and transformed communication settings of 30 equipment in 2024. After full completion of the renovation project, it is expected to save 2.75 GWh of electricity per year, reduce comprehensive energy consumption by 380 tons of standard coal, and reduce carbon dioxide emissions by 1,600 tons.

Replacing fuel-powered forklifts with electric ones

To adjust the Company's energy structure gradually, we work to phase out fuel-powered forklift with electric ones in an orderly way in light of the Company's larger installed capacity of photovoltaic power plants, and the development of China's green power system in the future. 26 fuel-powered forklifts were replaced first in 2024 and we are planning to phase out all 65 fuel-powered forklifts in the plant with electric ones in 2026. This move will reduce comprehensive energy consumption by 218 tons of standard coal per year, and reduce carbon dioxide emissions by 464 tons per year.

Ice-slurry cold storage of Longxue plant

In partnership with the Guangzhou Institute of Energy Conversion, Chinese Academy of Science, Huangpu Wechong formulated the green transformation plan of ice-slurry cold storage for dehumidification system of paint shops in Longxue plant, enabling the plant to save RMB 716,000 every year and reduce the costs of energy use in sandblasting by 15%.

Energy management system

In 2024, following an internal audit of energy management system, we identified 13 general non-compliances, and proposed 91 improvements, which were rectified and submitted to Enterprise Management and Planning Department for verification. We rectified two general non-compliances identified by the annual audit, submitted them to classification societies for verification after a closed-loop rectification, and passed the system's annual review.

In January 2024

COMEC conducted energy accounting self-assessment in key energy-consuming subsidiaries.

In May 2024

China Classification Society was entrusted to conduct 2023 energy audit of Huangpu Wenchong. The above work results were written into reports and made to the record on the Guangzhou Energy Management Center Basic Platform.

In August 2024

The Company reviewed the renewal of clean production certificate in Changzhou plant and completed site acceptance test in November. At present, it passed the review and was published on the website of Guangzhou Municipal Industry and Information Technology Bureau.

Water recycling and reuse

In 2024, 250,000 tons of wastewater was treated in sewage treatment stations of Longxue plant. The treated reclaimed water is used for greening and toilet flushing in the plant area. Our efforts in water recycling and reusing have been recognized by the Nansha Water Authority. As a result, the plant got a reduction of RMB 1.4148 million for annual sewage treatment fee.

2024

Total water consumption
1,747,300 tons

2024	Wastewater discharge(10,000 tons)				Pollutant emissions (ton)	
	Discharged into rivers	Discharged into the municipal pipeline network	Total volume	Wastewater Emission Intensity (tons/RMB 10,000 of output value)	COD	Ammonia Nitrogen
	19.52	57.33	76.85	1.19	17.56	2.82

Efficient operation of the smart air compressor station in Longxue plant

Smart air compressor station in Longxue plant compressed a total of 262 million cubic meters of air in 2024, and electricity consumption per unit of air volume produced is 0.1145 kWh/cubic meter, saving 10.39 GWh of electricity, reducing comprehensive energy consumption by 1,276.95 tons of standard coal, and reducing carbon dioxide emissions by 5,476.64 tons.

Higher proportion of shore power

The proportion of shore power usage is included in the assessment indicator system. We have set target proportion of shore power for each production unit, and collect and analyze the data on a monthly basis so as to enhance the use of shore power, and reduce fuel consumption. The year 2024 saw a 14.5% year-on-year increase in shore power proportion.

Stable photovoltaic power generation

In 2024, photovoltaic power stations of Longxue plant and Changzhou plant generated a total of 12.987 GWh of electricity, saving RMB 1.3251 million on its electricity bill, reducing carbon dioxide emissions by 5,642.32 tons, and reducing comprehensive energy consumption by 1315.58 tons of standard coal.

Shared Happiness

Committed to a people-oriented principle, COMEC prioritizes employee care and growth. While reinforcing cooperation and exchanges in the industrial chain, we adopt a proactive approach to social issues, and respond promptly and effectively. We strive to improve people's living standards and spread our warmth and care, contributing our strength to a harmonious society.



Employees
in total

6,238

2024年8月



Percentage of
female employees

11.59%



Investment in
public welfare

RMB 2.356 million



Responding to SDGs:



Employee Care

COMECC provides employees with a fair and just work environment as well as equal opportunities for their development. Besides valuing the professional growth, we advocate for work-life balance and care for employees' physical and mental well-being. We also work to foster a supportive and inclusive corporate culture conducive to both personal fulfillment and sustainable business growth.

Protecting employee rights

We strictly observe Chinese laws and regulations, including the *Labor Law* and follow the principles of fair and open recruitment. On the basis of employee rights protection, we improve our compensation and benefit system, enhance democratic communication and create an equal and inclusive workplace.

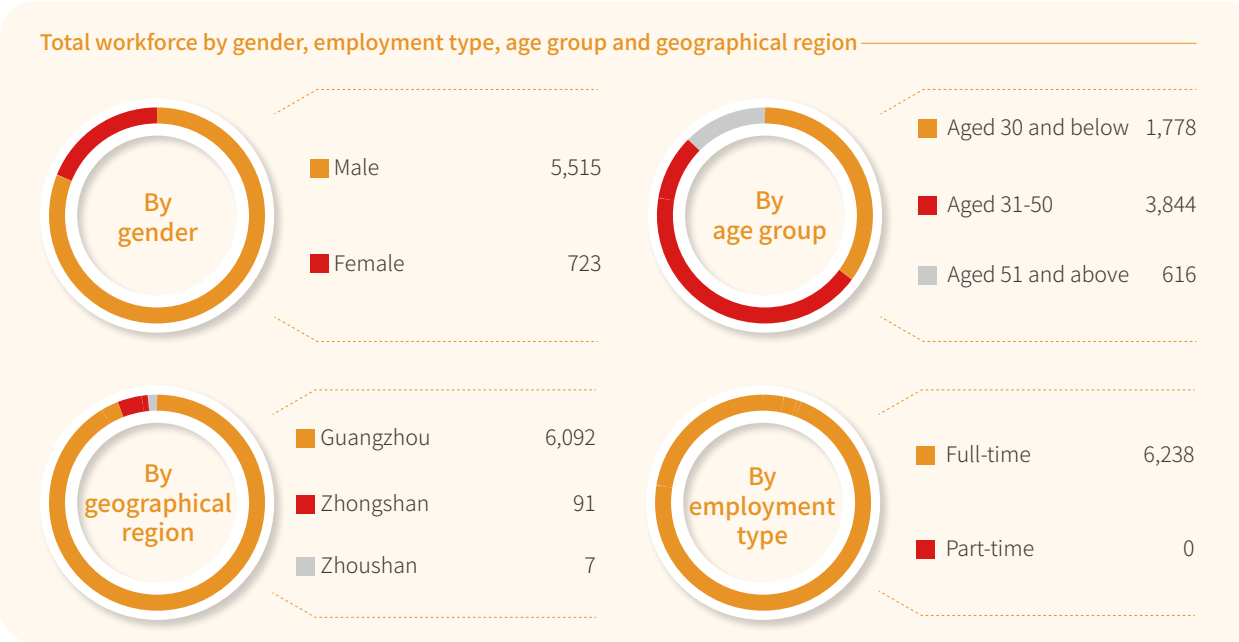
Equal employment

We have formulated management regulations, such as the *Human Resources Management System*. Following the principles of legality, fairness, and equality, we standardize the process of concluding, performing, modifying, rescinding and terminating labor contracts on a voluntary basis. Illegal employment such as child labor and forced labor is forbidden. The year 2024 saw no child labor or forced labor in the Company.



Diversity and inclusion

Upholding the principles of equality, diversity, and inclusion, we fully respect employees' diversity and differences and treat all employees fairly regardless of their nationality, ethnic groups, gender, age, religion and cultural background.



Employee turnover and turnover rate by gender, age group and geographical region

Indicator	2024
<div>By gender</div>	Employee turnover-Male
	106
	Employee turnover-Female
	14
<div>By age group</div>	Employee turnover rate - Male
	1.7%
	Employee turnover rate - Female
	0.22%
	Employee turnover-Aged 30 and below
	94
	Employee turnover-Aged 31-50
	26
<div>By geographical region</div>	Employee turnover-Aged 51 and above
	0
	Employee turnover rate - Aged 30 and below
	1.51%
	Employee turnover rate - Aged 31-50
	0.42%
	Employee turnover rate - Aged 51 and above
	0
	Employee turnover-Guangzhou
	120
	Employee turnover-Zhongshan
	0
	Employee turnover-Dongguan
	0
	Employee turnover rate - Guangzhou
	1.92%
	Employee turnover rate - Zhongshan
	0
	Employee turnover rate - Dongguan
	0



Huangpu Wenchong dormitory area library completed

Compensation incentives

Continuous efforts have been made to improve compensation system and performance system under a motivational culture. We promote a professional manager model in management personnel, leading personnel, and high-level personnel, replacing the present fixed contract system with the tenure target assessment incentives. To encourage scientific innovation, we launch a pilot program, paying dividends to commercialization of technological achievements to encourage researchers to engage in innovation. We pilot a personalized benefit policy for key employees, such as commercial insurance and cultural tourism, in order to attract and stabilize talent.

Employee benefits

In 2024, we revised the *Insurance Benefits Management Regulations* and the *Enterprise Annuity Scheme Implementation Rules*, which strengthen employee benefits management. We raised the contribution ratio for employee enterprise annuities and successfully allocated the balance of public accounts to individual employee accounts. Additionally, we provided employees with supplementary commercial medical insurance.

Democratic management

We implement and improve the democratic management system, which takes basic shape in the form of Workers' Congress. By regular Workers' Congress, work communication conferences among employees (including retired employees), and public disclosure of Company affairs, the Company's production and operation conditions, production schedule, and major decisions are transparent to employees and subject to their supervision, effectively empowering employees to exercise their rights to know, to participate, and to supervise within the framework of democratic management.

Huangpu Wenchong holds the unveiling ceremony for the Employee Service Center of Longxue plant

2024

Participants of employee training	Employees trained
69,263	5,600
Total employee training hours	Training hours per employee
249,596.5 hours	44.57 hours
Employee training investment	Employee training coverage rate
RMB 11 million	93.63%

Supporting employee growth

We continuously optimize our talent management system to create clear and diverse career development pathways for our employees. By strengthening job experience and practical training, we aim to build a solid professional talent pool that robustly supports the Company's high-quality development.

Talent cultivation



Indicator	2024
By gender	Percentage of male employees trained
	79.16%
	Percentage of female employees trained
	10.61%
By rank	Percentage of senior management trained
	0.18%
	Percentage of middle management trained
	1.94%
	Percentage of primary-level management trained
	7.69%
	Percentage of ordinary employees trained
	79.96%
By gender	Average training hours for male employees
	42.35 hours
	Average training hours for female employees
	7.73 hours
By rank	Average training hours for senior management
	140.77 hours
	Average training hours for middle management
	133.94 hours
	Average training hours for primary-level management
	48.25 hours
	Average training hours for ordinary employees
	41.84 hours

Employee promotion

We have revised the *Management Measures for the Appointment of Non-managerial Positions* to prioritize employees in key positions and with high performance. Our employees at level 9 and below are directly assigned ranks, while those at level 10 and above undergo performance evaluations. As a result, 23% of our employees receive promotions, while 10% experience rank adjustments, fostering a dynamic and merit-based career progression system. Our employees ranked level 12 to level 17 correspond to positions ranging from primary-level deputy head to GM's assistant. We recognize experience in non-managerial positions as valid managerial experience, which facilitates seamless integration between non-managerial and managerial career paths. Through the *Measures*, we create greater opportunities for outstanding young talent to emerge and advance.

Balancing employee life


We proactively engage with employees to understand their needs and regularly curate diverse cultural and recreational activities to ignite enthusiasm in the workplace. Our initiatives include tailored support for female employees and comprehensive assistance for those experiencing challenges, effectively alleviating concerns that may impact their well-being. Through these concerted efforts, we strive to bolster employee cohesion and cultivate a profound sense of belonging within the Company.

Diverse employee life


We have taken into account employee feedback and invested in small fitness equipment such as hand grip strengtheners, resistance bands, and back trainers. Additionally, we organize a variety of cultural and recreational activities, including spring and autumn outings, dumpling-making contests, and cooking competitions, with an aim to enhance team cohesion, enrich employees' leisure lives, and boost workplace enthusiasm.

Care for female employees


We take concrete actions to protect female employees' legal rights and organize various kinds of activities to care for them. With a focus on women's health, we improve service facilities and create a humane work environment for them.




- We organize female employees to study laws and regulations including the *Labor Law*, the *Law on the Protection of Rights and Interests of Women*, and the *Special Rules on the Labor Protection of Female*, aiming to enhance their rights awareness.



- We actively hold capability improvement courses targeting female researchers and officials and organize female employees to participate in lectures on business knowledge, health knowledge, children's education, home healthcare and treatment of common diseases.



- We care for women's health and organize gynecological examinations for female employees on a regular basis. A free screening program for cervical cancer and breast cancer has been provided to the front line female employees in financial difficulties.



- We provide assistance to female employees, contract employees and those in extreme difficulty or with serious diseases.

Sympathy visit to employees

We care for employees and their family, visit employees in difficulty timely, and provide all the assistance within our scope, to ensure their basic life.



Win-win cooperation

We commit ourselves to building a virtuous cycle of partnership, actively promote suppliers to fulfill their responsibilities, and build a win-win platform with our partners for shared growth of industry chain partners. A transparent, green, and sustainable cooperative environment is created to enable mutual benefits and win-win results.

Building a responsible supply chain

Suppliers management system

- Suppliers are required to provide qualifications on quality, safety, and environment, etc. when admitted. They are also required to provide reports and statements on hazardous substances for materials they supply to ensure compliant material quality.
- We review the effectiveness of suppliers' safety, environmental protection, and occupational health management and conduct supervision regularly.
- We sign safety management agreement with suppliers, requiring suppliers to provide training on labor protection as well as occupational health and safety, and necessary preventive supplies.

Prevention of supply chain risks

- Onsite reviews on suppliers are conducted regularly, with an emphasis on their efforts in the environment, social responsibilities, and their financial status, including environmental certification, environmental facilities, legitimacy of companies, existing environmental factors and risks, environmental policies or environmental management system, solid waste disposal, and occurrence of environmental events.
- We sign the *Integrity Agreement* with qualified suppliers, and both parties promise to strictly abide by the provisions of the Agreement in the form of contract in business. The integrity of suppliers is evaluated on an annual basis. No integrity issues were identified in 2024.

Number of suppliers by region

Total number of suppliers

1,708

South China	511
East China	677
North China	287
Central China	91
Northeast China	38
Northwest China	16
Southwest China	26
Hong Kong, Macao, Taiwan and overseas regions	62

Deepening exchanges and cooperation

We keep exploring new forms of cooperation, strengthen in-depth cooperation with institutions including the government, schools, and other enterprises, and hold exchange activities to promote industry innovation and build an ecosystem featuring win-win cooperation with all sectors of society.

Case

Huangpu Wenchong and Jiangsu University of Science and Technology forge strategic cooperation

On December 2, the signing ceremony for the strategic cooperation between Huangpu Wenchong and Jiangsu University of Science and Technology took place at the Longxue plant area of Huangpu Wenchong. This collaboration aims to drive technological innovation and talent development in key areas such as intelligent transformation, digitalization, and advanced welding technologies. Moving forward, Huangpu Wenchong will continue to implement the essential guidelines of the Third Plenary Session of the 20th Central Committee of the Communist Party of China on deepening industry-education integration. To this end, the company will strengthen exchanges and cooperation with first-class universities at home to explore new models and pathways for industry-education integration and university-enterprise cooperation. Through efforts to overcome various technological challenges, the company will contribute more to the development of a world-class shipbuilding group, working tirelessly toward building a strong maritime nation in the new era.



Social Contribution

2024

Investment in public welfare

RMB 2.356 million

Employee volunteers

1,538

Total hours of volunteer activities

8,187.54



We consistently uphold social responsibilities as a corporate citizen and actively engage in charity cause. Significant progress has been made to promote rural vitalization. We achieve our own development while remaining committed to giving back to society. This commitment drives our collaboration with stakeholders, which in turn helps create a warm and harmonious community and contributes to the sustainable development of society.



Serving the public

We actively fulfill our social responsibilities to engage in public service. Our employees are encouraged to participate in volunteer activities and give back to society with love and warmth.

Case

Spring volunteer activity in March to promote Lei Feng's spirit

To thoroughly promote and implement the guiding principles from the 20th CPC National Congress, as well as to execute General Secretary Xi Jinping's important guidance on volunteer service in the spirit of Lei Feng, the Company's Youth League Committee, in collaboration with the labor union, organized a public service activity titled "Love in Huangpu Wenchong." This activity was launched on the 61st Learn from Lei Feng Day and the 25th Youth Volunteer Service Day to guide young people to grasp the contemporary significance and practical implications of Lei Feng's spirit, which helped raise awareness of youth to learn from Lei Feng, promote a culture of dedication, establish new values, and encourage integrity within society.

Volunteers in the activity formed various groups to provide different services for residents and employees in living areas, such as haircut, home appliance maintenance, smartphone and computer maintenance, knife sharpening, and sewing. At the same time, the volunteers actively guided residents and employees to receive services in an orderly manner. Their volunteer services were highly spoken of.



Contributing to rural revitalization

We actively embrace the national rural vitalization strategy through industrial support that upgrades rural industries and generates additional employment opportunities in the region. Our commitment to educational assistance includes aiding rural schools in optimizing their educational facilities, which contributes to the advancement of rural education. With a strong sense of responsibility as a central state-owned enterprise, we infuse new driving forces into rural vitalization efforts and empower rural areas to achieve a more promising future.

Case

Boosting rural vitalization to craft an inspiring story

Centering on the "1310" plan of the Guangdong Provincial Committee, Huangpu Wenchong diligently fulfilled its social responsibilities to dispatch resident officials to Xinliao Town in Xuwen County, Zhanjiang City, which crafted an inspiring narrative for rural vitalization.

Strengthening primary-level Party building to empower rural development

The company dispatched Lin Ting to Xinliao Town in Xuwen County to serve as the first Party secretary of the village. He prioritized the enhancement of Party branch as his primary task. Through the integration of Party building learning with practical work, he effectively implemented various measures, fully leveraged the leading role of Party building, and enhanced primary-level Party building and organizational capacity. These efforts ensured the orderly advancement of rural vitalization initiatives.



Leveraging corporate strengths to support rural vitalization

Lin Ting fully utilized the company's advantages by organizing diverse thematic Party Day activities. He brought together primary-level Party branches from various supportive units, including the Youth League Committee of Guangzhou Shipbuilding Industry Co., Ltd under China State Shipbuilding Corporation, the Vocational School, the Zhanjiang Branch of Huangpu Wenchong, and the Guangxi Branch of Wenchong Shipyard Heavy Industry, to participate in rural vitalization efforts, which facilitated resource sharing and promoted mutual advancement.

Building up self-belief and providing access to education for village students to promote rural development

Lin Ting, along with the company's resident official Li Hui and others, engaged in thorough on-site investigations to carefully devise solutions. They visited students who have dropped out of school due to financial hardship and conducted research in every village elementary school. Efforts are intensified to build up self-belief and provide access to education for village students, so that sustainable rural development can be achieved through education.



With the continued efforts of resident officials, the enthusiasm of officials from "Two Committees" has been further stimulated. Through collective dedication, Xinliao Town has already completed the improvement of the environment surrounding those who have just emerged from poverty but whose position is far from secure. Moving forward, resident officials will utilize the "Yuezhomei" platform to further consolidate the results of their collaborative governance efforts.

2024

Standard of purchasing farm produce per employee

RMB 350

Investment in paired assistance (including the value of supplies)

RMB 2.226 million

Investment in rural vitalization (including the value of supplies)

RMB 2.226 million

Indicator Index

HKEX ESG Reporting Guide

Main categories	Content	Position
A Environmental		
Aspect A1:Emissions		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non- hazardous waste.	P45
	The types of emissions and respective emissions data.	P46
A1.1	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	/
A1.2	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P46
A1.3	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P46
A1.4	Description of emission target(s) set and steps taken to achieve them.	P45-47
A1.5	Description of how hazardous and nonhazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	P45
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources including energy, water and other raw materials.	P47-48
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	P43
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P48
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	P47-48
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	P48
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Inapplicable
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	P47
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P47-48
Aspect A4:Climate Change (Deleted in the latest guides)		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer. (Deleted in the latest guides)	/
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them. (Deleted in the latest guides)	/
B Society		
Employment and labor practices		
Aspect B1:Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, antidiscrimination, and other benefits and welfare.	P51、 P53
	Total workforce by gender, employment type (for example, full or part-time), age group and geographical region.	P51
B1.1	Employee turnover rate by gender, age group and geographical region.	P52
Aspect B2:Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	P23-25

Main categories	Content	Position
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P25
B2.2	Lost days due to work injury.	P25
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	P25
Aspect B3:Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	P53
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P54
B3.2	The average training hours completed per employee by gender and employee category.	P54
Aspect B4:Labor Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labor.	P51
	Description of measures to review employment practices to avoid child and forced labor	P51
B4.1	Description of steps taken to eliminate such practices when discovered.	P51
Operating conventions		
Aspect B5:Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	P56
B5.1	Number of suppliers by geographical region.	P56
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	P56
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P56
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P56
Aspect B6:Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	P26-27
	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P28
B6.1	Number of products and service-related complaints received and how they are dealt with.	P26
B6.2	Description of practices relating to observing and protecting intellectual property rights.	P37
B6.3	Description of quality assurance process and recall procedures.	P27-28
B6.4	Description of consumer data protection and privacy policies, how they are implemented and monitored.	P26
Aspect B7:Anticorruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	P22
	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P22
B7.1	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P22
B7.2	Describe of the anti-corruption training provided to directors and employees.	P22
Aspect B8:Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	P57
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport)	P57-58
B8.2	Resources contributed (e.g. money or time) to the focus area.	P57-58

Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)

Topics	Corresponding section of the present report
Climate response	Climate risk management/Decarbonization action
Pollutant discharge	Environmental management system
Waste disposal	Environmental management system
Ecosystem and biodiversity protection	For the environment and ecosystem
Environmental compliance management	Environmental management system
Energy utilization	Energy-saving technology application
Water resources utilization	Water recycling and reuse
Circular economy	Energy-saving technology application
Rural vitalization	Contributing to rural vitalization
Social contributions	Serving the public
Innovation	Cultivating innovation system/Cultivating the talent team/Fostering technological achievements
Ethics of science and technolog	Fostering a cybersecurity culture/Preventing and controlling IPR risks
Supply chain security	Building a responsible supply chain
Equal treatment of SMEs	Building a responsible supply chain
Product and service safety and quality	Quality management system/Quality control/Quality culture
Data security and customer privacy	Protecting customers' rights /Maintaining good customer relationships
Employees	Protecting employee rights/Supporting employee growth/Balancing employee life/Occupational health
Due diligence	/
Stakeholder engagement	Stakeholder engagement
Anti-commercial bribery and anti-corruption	Clean operation
Fair competition	Clean operation

Feedback Sheet

Dear readers,

Thank you for taking the time to read the 2024 ESG Report of CSSC Offshore & Marine Engineering (Group) Company Limited. To provide you and other stakeholders with more professional and valuable information, we sincerely invite you to fill out the relevant questions in the feedback sheet. Sincerely looking forward to your suggestions and opinions, thank you!

Your identity:

- ☐ Customer
- ☐ Investor
- ☐ Government
- ☐ Employee
- ☐ Partner
- ☐ Environmental organization
- ☐ Community
- ☐ Media
- ☐ Peer
- ☐ Others

Multiple-choice questions:

1. Are you satisfied with the overall report?

☐ Yes

☐ No

☐ Fair
2. Is the information you care about presented in this report?

☐ Yes

☐ No

☐ Fair
3. Do you think the Company's corporate social responsibility and the impact on stakeholders are accurately presented in this report?

☐ Yes

☐ No

☐ Fair
4. Can you easily find the information of interest in this report?

☐ Yes

☐ No

☐ Fair
5. Are you satisfied with the layout design of this report?

☐ Yes

☐ No

☐ Fair

Open questions:

6. Which issues disclosed in this report are you most concerned about?
7. Are there any shortcomings in this report?
8. Which contents in this report you wish them to be disclosed regularly?
9. What comments and suggestions do you have for our future ESG performance and report?

