



CSSC OFFSHORE & MARINE ENGINEERING  
(GROUP) COMPANY LIMITED  
SOCIAL RESPONSIBILITY REPORT

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2021

# ABOUT THIS REPORT

This report is the fourteenth social responsibility report issued by CSSC Offshore & Marine Engineering (Group) Company Limited. This report is addressed to all stakeholders of CSSC Offshore & Marine Engineering (Group) Company Limited, and its purpose is to describe the Company's concept of sustainable development and disclose the opportunities and challenges faced by the Company in creating values together with its stakeholders, the measures adopted by the Company to achieve sustainable development and the results.

## TIME FRAME

The period covered by this report is 1 January 2021 to 31 December 2021. To strengthen the continuity and comparability, some contents in this report were extended.

## SCOPE OF REPORT

This Report provides information and key performance data regarding CSSC Offshore & Marine Engineering (Group) Company Limited and its subsidiary CSSC Huangpu Wenchong Shipbuilding Company Limited.

## REFERENCES AND BASIS

This report is prepared in accordance with the *Guiding Opinions on the Performance of Social Responsibilities by Central State-Owned Enterprises* issued by the State-owned Assets Supervision and Administration Commission of the State Council, the *Environmental, Social and Governance Reporting Guide* set out in Appendix 27 to the *Rules Governing the Listing of Securities (the Main Board Listing Rules)* of the Hong Kong Stock Exchange, and the *Notice on Strengthening the Fulfilment of Social Responsibilities by Listed Companies and Publishing the Guidelines on Disclosing Environmental Information of Companies Listed on the Shanghai Stock Exchange* issued by the Shanghai Stock Exchange. In addition, references were also made to the *GRI Sustainability Reporting Standards* (GRI Standards) issued by the Global Sustainability Standards Board and the Guidelines for Special Equipment Manufacturing Industry set out in the *Guidelines for the Preparation of Social Responsibility Reports by Chinese Enterprises (CASS-CSR3.0)* issued by the Research Centre for Corporate Social Responsibility, Department of Economics, Chinese Academy of Social Sciences in the preparation of this report.

## RELIABILITY ASSURANCE

The Board and all directors of the Company undertake that this report contains no false statements, misleading statements or material omissions, and accept responsibility for the truthfulness, accuracy and completeness of its content.

## NOTE ON INFORMATION

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

This report is published in Simplified Chinese, Traditional Chinese and English. If there are any discrepancy among three versions, the Simplified Chinese version shall prevail.

## ABBREVIATIONS

For the convenience of presentation and reading, "China Shipbuilding Group Co., Ltd. and China State Shipbuilding Corporation Limited" 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 the "Group", "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".

Note: As of the end of the reporting period, Huangpu Wenchong was a 54.5371% owned subsidiary of the Company, and GSI was a 46.3018% owned invested company of the Company.

## AVAILABILITY OF THE REPORT

This report is released in the form of an electronic version. You may visit the website of the Company ([www.comec.cssc.net.cn](http://www.comec.cssc.net.cn)) and the HKEXnews website of the Hong Kong Stock Exchange ([www.hkexnews.hk](http://www.hkexnews.hk)) to access this report.

## RESPONSE TO THIS REPORT

If you have any comments and suggestions on this report or the Company's sustainable development performance, please send an email to [comec@comec.cssc.net.cn](mailto:comec@comec.cssc.net.cn).

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## RESPONSIBILITY STATEMENT

Years like songs depicting a beautiful past, in a new chapter we set off strong. 2021 is the 100th anniversary of the founding of the Communist Party of China, the first year of the 14th Five-Year Plan and the beginning of the new journey of building a modern socialist country in an all-round way. Facing the new situation and demand, the Group has always followed the guidance of Xi Jinping's thought on socialism with Chinese characteristics for a new era, focused on the business direction of strengthening civil-military, perfecting marine and refining non-ship businesses, and made strides in the "14th Five-Year" high-quality development. We forged ahead, overcame trials, made breakthroughs, scaled new heights and opened a brilliant new chapter with operational orders and other business indicators reaching new highs.

**Remaining true to our original aspiration, we draw strength from the century-old history of the Party.**

We conducted in-depth learning and education of the Party's history, implemented special rectification missions, promoted integration of Party building and our key task, and earnestly "did practical things for the masses". The Company has completed a number of important livelihood projects such as the factory history museum, staff service station, youth home, staff canteen, shift lounge and living environment renovation, which further strengthen confidence, warm hearts, and unite employees' hearts and minds.

**Pursuing innovation and development, we focus on high-quality development of core business.**

As a state-owned military and civil product central enterprise, we always bear in mind our mission and responsibility, and are dedicated to operating our three major businesses, namely maritime and defense equipment, shipbuilding and offshore engineering equipment and marine technology innovation application business. We orders for 17 types of new vessels totalling 85 ships, with effective contract amount of RMB32 billion during the year. We have led the industry with science and technology innovation, and successfully and independently developed 1900TEU and 3000TEU container ships and 85000DWT bulk vessel, which provides us with pivotal advantage in the highly competitive market. We build excellent ships with outstanding quality, and completed and delivered 35 ships and 2 offshore engineering platforms during the year, among which, the world's largest train carrier and China's first 10,000-ton marine patrol vessel "Haixun 09" we built was included in the List of the "Nation's Machines" of the year of SASAC; the total installed power, maximum winch power and intelligence level of the 7800kW dredger "Haohailong" rank first in Asia and leading in the world; the 9500-cubic meter gas carrier "Hongli" is equipped with a LNG low pressure dual-fuel low speed engine independent developed by CSSC and has cylinder with the smallest bore in world, contributing to the "carbon neutrality and carbon peaking" goals of the country.

**Upholding righteousness, we fortify our foundation for long-term stability.**

We firmly establish the philosophy of safety development, constantly reinforce bottom-line thinking, improve the responsibility system of production safety, implement safety control, create a safe working environment and raise the standard of safety management, ensuring ourselves to be a fundamentally safe enterprise to safeguard the lives and health of employees. During the year, there were no work-related serious injury or case of acute occupational disease, no major fire, explosion or traffic safety incident. We hold ourselves accountable for our products and customers, conduct responsible marketing, emphasize customer relationship management, and provide customers with satisfactory products and services.

**We put environmental protection in practice and seek green development.**

We actively respond to the "carbon neutrality and carbon peaking" goals and vision, and have constructed a comprehensive environmental protection system and environmental management organisation system, laying a solid foundation for the enterprise's green development. Meanwhile, we adhere to the path of green, low carbon and high-quality development, integrating green development philosophy into the whole production and operation process including R&D, production, procurement, etc. We promote green factory construction, continue to step up energy conservation and emission reduction, and strengthen waste disposal management in an effort to spread green footprint and contribute to building a beautiful China with blue sky, green land and clear water.

**Working with all parties for harmonious development and mutually beneficial outcomes.**

We respect every employee creating value for the Group, strive to protect the legitimate interests of employees, support staff development, and enhance employees' sense of happiness and belonging, joining hands with them to create a better future. We also value the harmony and stability of our supply chain, continuously improve supply chain management and create a transparent and fair procurement environment. We seek to grow and advance with our suppliers to realise a more sustainable future. We are also care for the community and people's livelihood and actively respond to the government's call to alleviate poverty through consumption, contributing our effort in achieving common prosperity. In addition, we motivate employees to act as volunteers for social welfare to convey warmth and positive energy to the society.

Starlight leaves no regrets for those who struggle, and the years do not disappoint those who pursue their dreams. Standing at a new starting point in 2022, we will keep our original intention and missions in mind, ride on the momentum and press forward. We will pay tribute to the 20th National Congress of the Party with our new look, new achievements and new commitment, and create a better future and happy life together.



## PERFORMANCE IN 2021

### KEY PERFORMANCE

TOTAL ASSETS  
(in RMB100 million)

441.81

VALUE OF SOCIAL  
CONTRIBUTION PER SHARE (RMB)

1.17

RESEARCH AND DEVELOPMENT  
EXPENSES (in RMB100 million)

6.17

COMPREHENSIVE ENERGY  
CONSUMPTION PER  
RMB10,000 OUTPUT VALUE  
(tonne of standard coal/RMB10,000)

0.0249

NUMBER OF EMPLOYEES

8,188

TOTAL NUMBER OF SUPPLIERS

1,806

OPERATING INCOME  
(in RMB100 million)

116.72

COMPLETION AND DELIVERY  
DURING THE YEAR

35 ships+ 2 offshore  
engineering platforms

PRODUCT QUALITY AND SAFETY  
GUARANTEE INVESTMENT  
(in RMB10,000)

15,480

ENVIRONMENTAL PROTECTION  
INVESTMENT  
(in RMB10,000)

1,130.40

PERCENTAGE OF FEMALE  
EMPLOYEES (%)

14.84

TOTAL CONSUMER ASSISTANCE  
(in RMB10,000)

219

### MAJOR HONOURS

Champion Manufactured Product  
(2021-2023)

by the Ministry of Industry and Information  
Technology of the People's Republic of China and  
the China Federation of Industrial Economics

Greater China Best Listed Compa-  
nies Award

by Gelonghui

Second prize of National Defense Science  
and Technology Progress Award for  
"Large QD ship model test and ground  
assembly and integration test technology"

by the Ministry of Industry and Information  
Technology of the People's Republic of China

Second prize of Science and Technology  
Progress Award for  
"Advanced welding machine technology and  
engineering applications for high-strength  
aluminum alloys"

by People's Government of Hebei Province



# ABOUT US

## COMPANY PROFILE

COMEC is a large key shipbuilding enterprise under China State Shipbuilding Corporation Limited and a holding platform company for capital operation of CSSC. The Company was formerly known as Guangzhou Shipyard International Company Limited. The Company became listed in Shanghai (stock code: 600685 for A shares) and Hong Kong (stock code: 00317 for H shares) in 1993 and 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 in South China, COMEC has achieved the listing of core military assets in China, it has become a large comprehensive marine and defense equipment enterprise group incorporating four sectors of maritime equipment being maritime defense equipment, maritime transport equipment, maritime development equipment and maritime expedition equipment.

As a holding company, COMEC currently focuses on asset operation and investment management. Its subsidiaries conduct independent production and operation and are engaged in manufacturing and providing customers with high-quality products through research and development of ships, seeking orders and implementing customised order production. The Company is mainly at the assembly and construction link in the shipbuilding and offshore engineering industrial chain. It has extended to shipbuilding and offshore supporting products at the front end of the industrial chain and full life guarantee at the back end of the industrial chain.

## DEVELOPMENT HISTORY

In over 100 years since the establishment of Guangnan Shipyard in 1914, COMEC experienced trials and hardships and moved forward. In the tide of reform and opening up and the development course of China's shipbuilding industry, we bravely rode the tide and actively played a leading role. We built a strong foundation with the historical mission of making China a strong marine power and manufacturing power and has an important position in the modern history of industrial development and the shipbuilding industry in the PRC.

1914

Tan Liting, an overseas Chinese merchant, established Guangnan Shipyard on the west bank of Nanshitou, Guangzhou

1954

Guangzhou Shipyard was established

1993

Guangzhou Shipyard International Company Limited was established and became the first listed shipbuilding company

2006

2014

Acquired CSSC Guangzhou Longxue Shipbuilding Company Limited

2015

o Acquired CSSC Huangpu Wenchong Shipbuilding Company Limited

o Renamed as CSSC Offshore & Marine Engineering holding platform company (Group) Company Limited, and all physical business and assets were transferred Guangzhou Shipyard International Company Limited

2016

COMEC started to independently operate as a holding platform company

2018

Guangzhou Shipyard International Company Limited acquired Guangzhou Wenchong Dockyard Company Limited

2020

Successfully sold the controlling interest of Guangzhou Shipyard International Company Limited

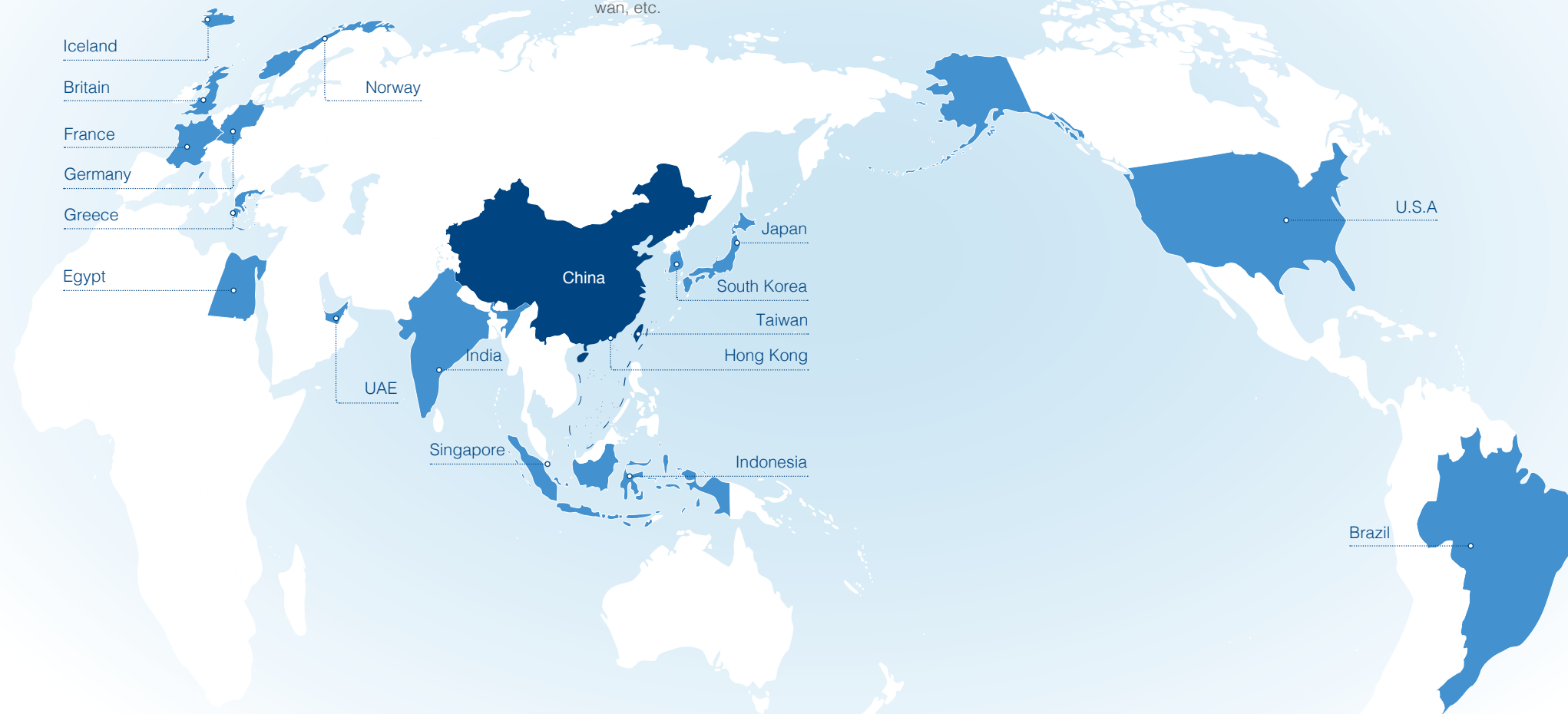


## PRODUCTS AND BUSINESS

The Group is committed to become a first-class enterprise in the global marine and heavy equipment market with leading technologies and prominent services and a building and supply facility for Chinese navy in South China, and to actively carry out the responsibility of the times of “Serving the country through marine and shipbuilding business”, embracing the ocean and sailing to the “deep blue” with a new attitude.

## BUSINESS DISTRIBUTION

Our extensive customer base covers much of the world, including Greece, Germany, USA, UK, France, Norway, Brazil, Iceland, UAE, Egypt, South Korea, Japan, Indonesia, India and Singapore, as well as China, Hong Kong and Taiwan, etc.



## MAJOR CUSTOMERS



## MAIN PRODUCTS

The Group's products include military vessels, maritime police equipment, public service vessels, feeder container vessels, dredgers, rescue and expedition vessels, offshore engineering platforms, steel structure products, etc.



Public service ships



Feeder container ships



Scientific expedition ships



Bulk carriers



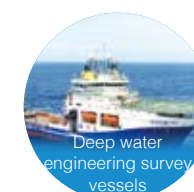
Rescue ships



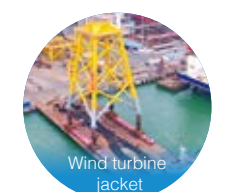
Military ships



Dredgers



Deep water engineering survey vessels



Wind turbine jacket



Integrated vessels for floating transportation and installation of immersed tube tunnels



Rescue and salvage engineering ships



Steel structures for bridges

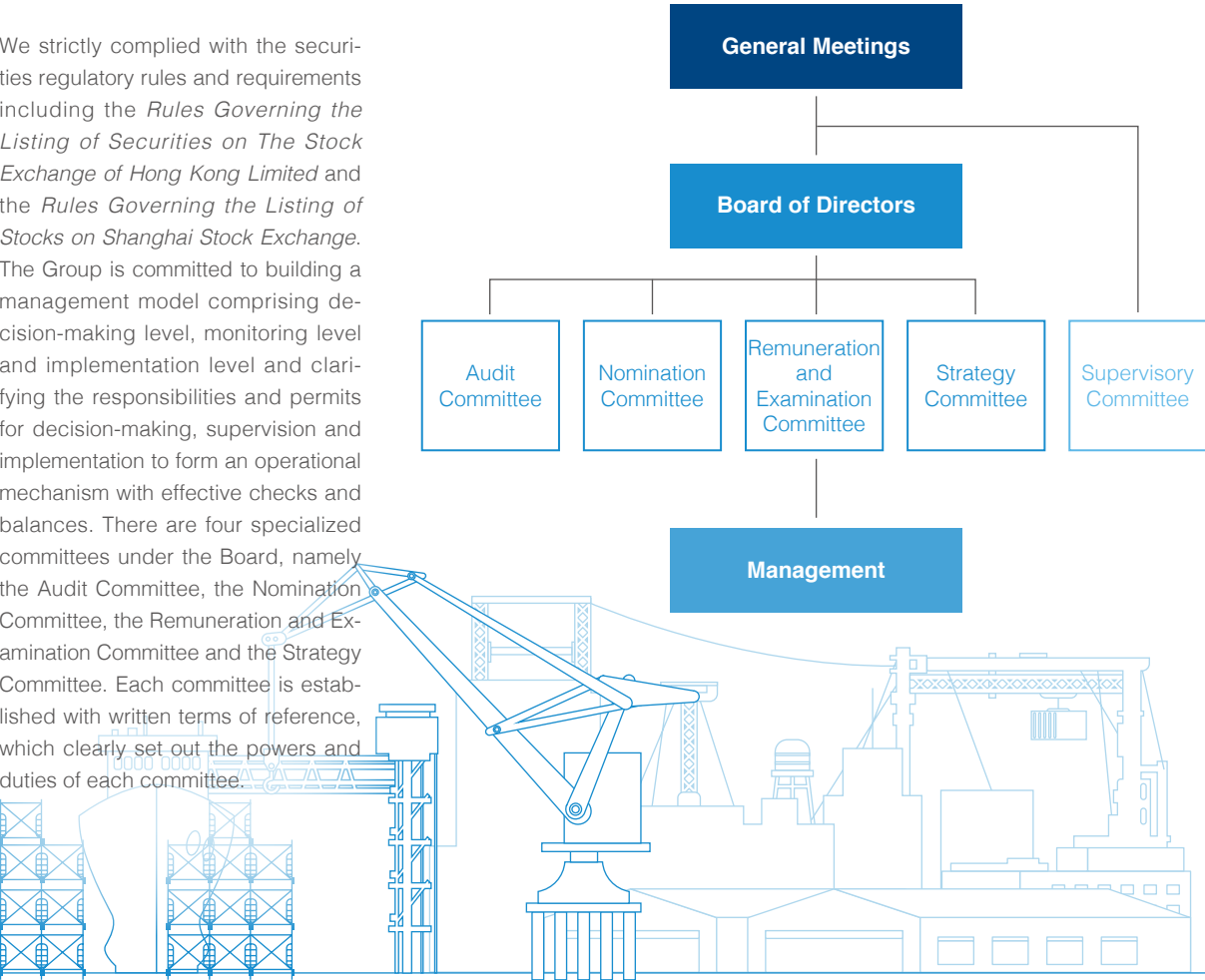


# CORPORATE GOVERNANCE

The Group complied with the requirements for regulation of state-owned assets and securities, effectively performed our duties under the *Company Law of the People's Republic of China* and the *Articles of Association of the Company* and the Party's leadership has been strengthened as we improved our corporate governance. The Group has amended the *Articles of Association of COMEC* as a continuous effort to improve its governance systems such as corporate governance system and articles of association. The Board continuously improves the Group's quality of operation with an emphasis on decision-making control, internal control, risk prevention, governance improvement and incentive constraints. To this end, the respective functions of the Board, Supervisory Committee and senior management have been clarified, and communication between the Board and senior management strongly facilitated. The Group has accelerated the development of an authorisation system and worked to optimise the corporate governance structure at all levels. It has driven financing innovations in the capital market, expanded communications between minority shareholders and regulatory authorities, examined the Supervisory Committee's long-term supervision mechanism, buttressed executive power, and has continued to effect the transformation of corporate governance from normative to effective and scientific.

## ORGANISATIONAL STRUCTURE

We strictly complied 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*. The Group is committed to building a management model comprising decision-making level, monitoring level and implementation level and clarifying the responsibilities and permits for decision-making, supervision and implementation to form an operational mechanism with effective checks and balances. There are four specialized committees under the Board, namely the Audit Committee, the Nomination Committee, the Remuneration and Examination Committee and the Strategy Committee. Each committee is established with written terms of reference, which clearly set out the powers and duties of each committee.



### TRIO-GOVERNANCE

#### GENERAL MEETINGS

The general meeting is the Company's highest authority. It exercises the voting rights for the Company's significant matters such as operation policy, investment plan, election of Directors and Supervisors and profit distribution in accordance with law. The Company convenes general meetings in strict accordance with the requirements of listed companies, ensures that shareholders can fully exercise their rights, treats all shareholders equally and safeguard the legitimate interests of the Company and shareholders.

#### BOARD

The Board is the chief operating decision maker of the Group and is responsible to the shareholders of COMEC.

As of the end of the Reporting Period, the Board comprised 11 directors, including 3 executive Directors, 4 non-executive Director and 4 independent non-executive Directors. Members of the Board have different industry backgrounds and 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 diversity of Board members to our development and has adopted a Board diversity policy.

#### SUPERVISORY COMMITTEE

The Supervisory Committee shall ensure that the information disclosed by the Company is true, accurate and complete. It shall examine the Company's financial information and monitor the Directors, manager and other senior management members in performing their duties to the Company in accordance with law. As at the end of the reporting period, the Company has completed the change of session of the Supervisory Committee, and the Supervisory Committee comprised 5 supervisors, one of which acted as the chairman of the Supervisory Committee.

### SPECIALIZED COMMITTEES UNDER THE BOARD

Audit Committee	Nomination Committee	Remuneration and Examination Committee	Strategy Committee
<p>The principal responsibility of the Audit Committee is assisting the Board in reviewing the financial reporting procedures, the effectiveness of the internal control and risk management system, monitoring the audit procedures, making normal and transparent arrangements for maintaining proper relationship with the Company's auditor, communicating with internal audit department and external auditors independently, considering and monitoring the Company's environmental, social and governance matters, and it reports to the Board.</p>	<p>The Nomination Committee is principally responsible for selecting the candidates for Directors and senior management, determining selection criterion and procedures and making recommendations to the Board, and it reports to the Board.</p>	<p>The Remuneration and Examination Committee is responsible for developing assessment standards for the senior management of the Company, carrying out assessment and making recommendations, and researching and reviewing the remuneration policies and programs for the senior management of the Company, and it reports to the Board.</p>	<p>The Strategy Committee researches and makes recommendations on the Company's long-term development strategy and significant investment decisions, and it reports to the Board.</p>

Regular reports

4

Interim announcements were published

33

General meetings

3

Meetings of the Supervisory Committee

8

Board meetings

8

Meetings of the Audit Committee

6

Meeting of the Nomination Committee

1

Meetings of the Remuneration and Examination Committee

2

Meeting of the Strategy Committee

1



## INVESTOR RELATIONS MANAGEMENT

We fully fulfill our responsibilities and obligations as a listed company and actively broaden the communication channels for investors by accepting investor inquiries through enquiry hotline and the SSE e-interactive platform, maintain contact with institutional investors, analysts and other small and medium-sized investors, as well as actively hold results presentations, participate in securities firms' strategy meetings, conference calls and video conferences, and disclose information related to the Company's operations and development in a timely, comprehensive and transparent manner.

In 2021, the Group responded to 24 e-interactive queries, received 30 person-times institutional investor visits, held 2 regular results presentations and participated in 5 strategy meetings.

## RISK CONTROL

We have formulated the *Comprehensive Risk Management Measures* to stipulate the principles of comprehensive risk management, organization system, supervision and assessment, and other management requirements to provide institutional assurance for comprehensive risk management. In 2021, the Company insisted on completing the *Table of Quarterly Tracking and Monitoring of Major Risks* on a quarterly basis to strengthen the process of monitoring and tracking of major risks; completed the *2021 Annual Comprehensive Risk Management Report* to evaluate and identify 8 major risks in 2022, and divided and implemented risk prevention tasks; organized the risk assessment of import and export business compliance, published the *Risk Assessment Report* on the Company's import and export business, and organized the formulation of the *Company's Export Control Compliance Guide* to further regulate the Company's import and export business compliance. During 2021, the Group had no additional major risk and occurrence any related risk event.

## AUDIT AND SUPERVISION

We establishes a complete internal control and internal audit system at the governance level, continuously amend and improve rules, regulations and systems such as *Internal Control Manual* and *Internal Control Evaluation Manual* based on actual management to ensure the effective operation of the Company's internal control system in daily management. We have established the "one regulations and two rules" system related to responsibility investigation of operation and investment non-compliance, and the "trigger-verification-treatment-rectification-compliance-improvement" procedures for quick response to non-compliance events and reduction of operational risks of the Company.

During 2021, we continued to carry out an internal audit with the aim of "preventing risks, promoting management and creating value", and emphasised on the effective operation of the compliance system and the effectiveness of key controls. The audit covered key business segments, including budget management, procurement, audit of the economic responsibility, special audit of outsourcing, special audit of overseas investments and assets, special audit on the efficiency of the Zhongshan factory, etc. The audit therefore fulfilled the professional value of internal audits: "informing risk, promoting management, and creating value".



- Greater China Best Listed Companies Award by Gelonghui
- List of Chinese Listed Companies with Good Reputation – Best Board of Directors of Listed Companies
- 2021 Innovation Enterprise Award for High-end Equipment Manufacturing Industry at the 4th Asian Economic Conference
- China Business Top 100 Award at the China Business Top 100 Forum

Legal review rate for contracts

**100** %



There was **0** litigation case related to corruption during the year

Total person-times of director anti-corruption training **14**

Total hours of director anti-corruption training **16**

Total person-times of employee anti-corruption training **4,357**

Total hours of employee anti-corruption training **12,911**

Give a Party lesson on the topic of anti-corruption and integrity

## ANTI-CORRUPTION AND INTEGRITY

A solid dike may collapse because of an ant nest, and the problem of corruption may ruin the foundation of the whole enterprise. We integrate the Party conduct and integrity construction into every aspect of business management, always maintain a high pressure, focus on key areas, key links or important positions to carry out special supervision and inspection, and promote the realization of the target of dare not corrupt, cannot corrupt and do not want to corrupt, creating a clean and honest business environment for work and entrepreneurship.

Reinforce the deterrent of **"DARE NOT CORRUPT"**

- We seriously investigated petitions and reports and handled problem clues. As at the end of November, we accepted 35 letter complaints and pursued accountability of 13 persons in "four forms".
- The Group's discipline inspection and supervision team made preliminary investigation of the cases, and strictly investigated and treated the problems of weak discipline awareness of middle-level management staff and violation of discipline by junior management staff.

Fasten the cage of **"CANNOT CORRUPT"**

- We have opened channels for reporting corruption issues, and the sources of clues include letters, phone calls, visits, internet reports, and referrals from human resources, audit, finance and other relevant departments.
- We revised and published systems such as the *Main Responsibility and Supervision responsibility Management Regulations for Party Conduct and Integrity Construction* and the *Party Committee Inspection Measures* to gradually improve the prevention mechanism.
- All middle and above management staff signed the Party conduct and integrity responsibility letter to firmly implement "two responsibilities for one position" and pass the sense of responsibility down the hierarchy.

Enhance the self awareness of **"DO NOT WANT TO CORRUPT"**

- We supervise the grass-roots Party organizations to study the warning records and educational videos of typical non-compliance cases of the Company, and educate the persons around the cases with cases around them.
- We strengthen the promotion of the *Integrity Culture Handbook* and make it a compulsory integrity course for new university students, reserve cadres, new sensitive positions and newly promoted managers.





# RESPONSIBILITY MANAGEMENT

The Group is committed to becoming an outstanding corporate citizen with global influence and strong social responsibility. We integrate our economic, environmental and social responsibilities into our daily operation and practice our social responsibilities in terms of staff development, charity and public welfare, energy saving and emission reduction, in order to realize the sustainable development of the Group and economy, society and environment and strive to become a leading value creator in the world trusted by the public. We are well aware that practicing social responsibility is not just preparing a report meeting requirements, but more of a long-lasting and systematic task which should be integrated into our vision, mission and spirit.

## RESPONSIBILITY CULTURE



## BOARD STATEMENT

In order to ensure the sustainable, regulated and healthy development of the Company and to meet the expectations of stakeholders, to enhance the level of ESG governance of the Company, to promote the effective participation of the Board in ESG management and to strengthen the regulated management of ESG matters. In 2021, after consideration and specified by the Board, the Company has established a whole process ESG control system to further standardize the ESG governance of the Company under the overall leadership of the Board, with the participation of the executive directors and the directors assuming responsibilities.

## Sustainable Development Goals

Dimension	Goals (2025)	Measures
Safety	<ul style="list-style-type: none"><li>Further improvement in quality, safety and management indicators</li></ul>	<ul style="list-style-type: none"><li>Promote refined management of safe production</li><li>Implement standardization of safe production of the ship industry, covering all subsidiaries</li><li>Promote "6S" management in depth</li><li>Sound safety planning and emergency plan</li></ul>
Environment	<ul style="list-style-type: none"><li>All indicators meet regulatory requirements and lower than "13th Five-Year" period</li></ul>	<ul style="list-style-type: none"><li>Constantly promote clean production, strict control of environmental pollution, accelerate the construction of VOCs emission equipment and facilities, strengthen the promotion of water-based paint and strengthen source control of VOCs</li></ul>
Science and technology	<ul style="list-style-type: none"><li>Annual investment intensity of R&amp;D expenses not less than 3%</li><li>5-8 breakthroughs of major process and equipment improvement or innovation</li><li>Strive to achieve a zero breakthrough in hosting or participating in international standards</li></ul>	<ul style="list-style-type: none"><li>Improve technological innovation system and mechanism</li><li>Strengthen the new technology, new rules and standardised research of ships</li><li>Promote the establishment of an innovative system for intelligent manufacturing of ships</li><li>Continue to develop the application of advanced manufacturing technologies</li></ul>
Employees	<ul style="list-style-type: none"><li>Total number of employees not exceeding 15,000</li><li>Technical staff account for 50% of total number of production workers</li></ul>	<ul style="list-style-type: none"><li>Optimize employment structure and deepen employment reform</li><li>Use innovative ways to cultivate technical talent and improve the quality of all employees</li><li>Establish a flexible and effective incentive mechanism</li></ul>

## Organizational structure of sustainability management

In 2021, after consideration of the Board, a new ESG management function was added in the duties of the Audit Committee, and the *Environmental, Social and Governance Matters Management Measures of CSSC Offshore & Marine Engineering (Group) Company Limited* was formulated to further specify the ESG management duties and responsibilities of the Board, Office of the Board, and the departments of COMEC and subsidiaries. In March 2022, the Company reported to the Board the material issues identified, reviewed and assessed the sustainability risk of the Group and made recommendation on the final determination of material issues.

**Board**

The Board provides overall leadership for the Company's ESG management and is responsible for approving the management policies, objectives and strategies of the Company's ESG work; regularly reviews the progress of ESG work and promotes the effective implementation of ESG management policies, objectives and strategies; regularly reviews the Company's ESG-related risks and opportunities, assesses the extent of the impact of the relevant risks and opportunities on the Company's business; approves the progress of material ESG issues and actions; reviews and considers the Company's annual ESG report and continuously promotes the improvement of the quality of information disclosure.

**The departments of the Company and subsidiaries**

In accordance with the division of labor, they are responsible for the ESG work within their business scope. Each department is equipped with full-time (part-time) staff to implement its ESG work.



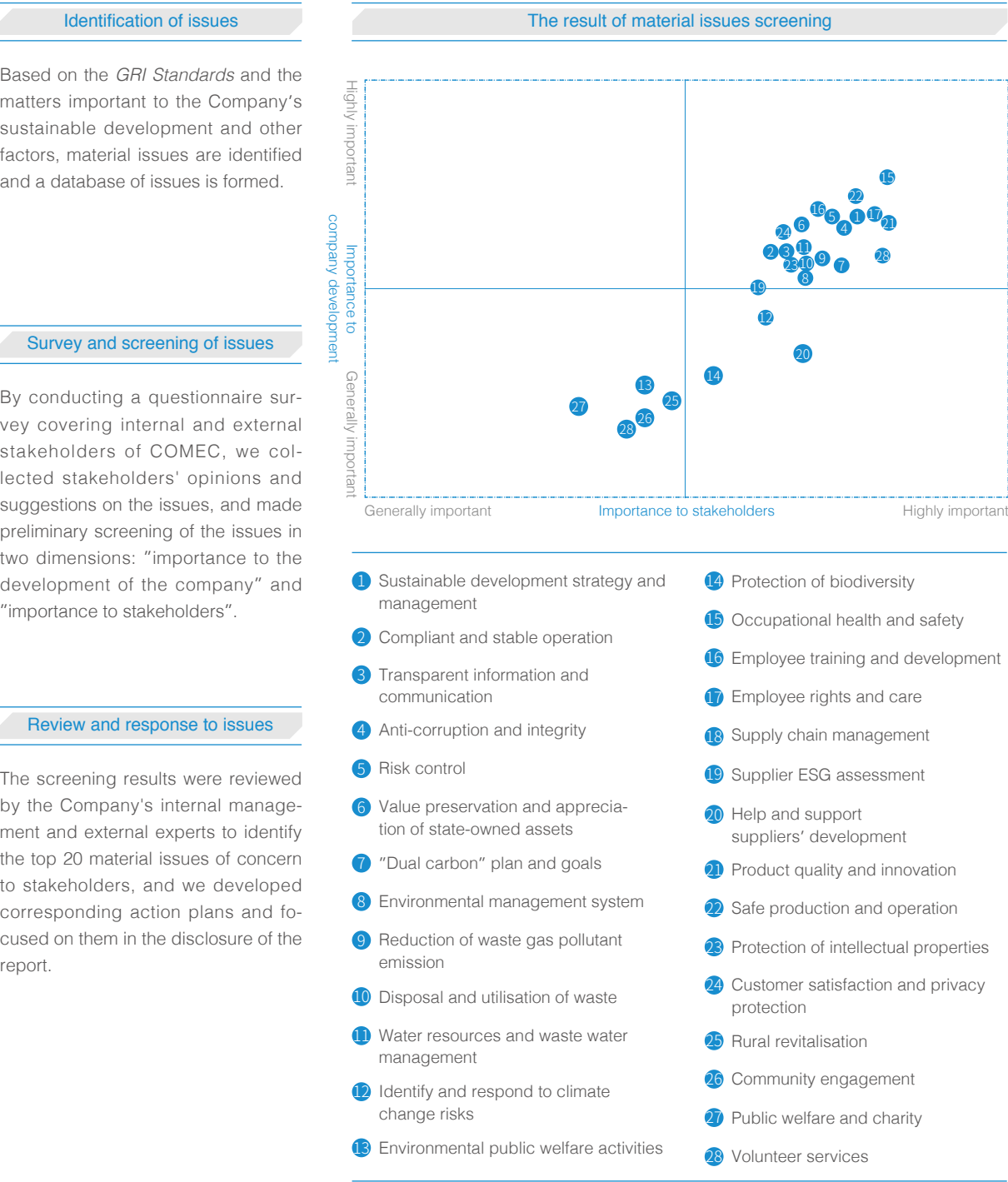
**Office of the Board**

It is the day-to-day management organisation of ESG management, and collaborates with various business departments to promote the ESG work of the Company, which mainly include: implementing the resolutions of the Board on ESG matters; preparing ESG management objectives and work plans, promoting and supervising the implementation of annual ESG work by each business department, and reporting the progress of ESG work to the Board on a semi-annual basis through emails, meetings, etc.; identifying ESG risks and opportunities of the Company and reporting them to the Board for consideration, formulating corresponding management strategies and plans in collaboration with business departments and promoting their implementation; organizing the selection, survey and assessment of material ESG issues of the Company and reporting the assessment results to the Board for consideration; and summarizing ESG-related information, preparing the Company's annual ESG report, and organizing regular ESG-related internal and external stakeholder communication.







INDENTIFICATION OF MATERIAL ISSUES

We followed the recommended materiality testing process of the *GRI Guidelines and Standards for Sustainable Development Reports* (GRI Standards), collected stakeholders comments and the impact of the Company’s operations on the economy, society and environment by various ways. On such basis, we determined key issues with higher materiality to ensure the content and disclosure of this report are more in line with the concerns and demands of the stakeholders.



STAKEHOLDER ENGAGEMENT

We use a variety of communication methods to maintain active two-way communication and collaboration with key stakeholders, including government and regulatory bodies, employees, customers, suppliers and partners, the environment, community and the public.

Stakeholders	Expectation and demands	Communication methods	Responses and measures
 Government	<ul style="list-style-type: none"><li>Serve national defense</li><li>Technological innovation</li><li>Value preservation and appreciation of assets</li><li>Abide by the laws and regulations and pay tax in accordance with the law</li></ul>	<ul style="list-style-type: none"><li>Meetings with regulatory bodies</li><li>Accept regulatory review</li><li>Regular reports</li></ul>	<ul style="list-style-type: none"><li>Regular reports</li><li>Information submission</li><li>Public information disclosure</li></ul>
 Shareholders	<ul style="list-style-type: none"><li>Continuous stable returns</li><li>Transparent information disclosure</li></ul>	<ul style="list-style-type: none"><li>General meetings</li><li>Information disclosure</li><li>On-site visits</li></ul>	<ul style="list-style-type: none"><li>Receive investor visits</li><li>Publish 2021 annual report</li></ul>
 Customers	<ul style="list-style-type: none"><li>High-quality products and services</li><li>Strictly comply with contracts</li><li>Win-win cooperation</li></ul>	<ul style="list-style-type: none"><li>Business communication</li><li>Respond to customer feedback</li></ul>	<ul style="list-style-type: none"><li>Delivery ordered products on time</li><li>Provide reliable, safe and high-quality products and services</li><li>Perform contracts and agreements</li><li>Strengthen contract performance management</li></ul>
 Business partners	<ul style="list-style-type: none"><li>Keep promises</li><li>Fair, just and open</li><li>Win-win cooperation</li><li>Share experiences</li></ul>	<ul style="list-style-type: none"><li>Regular meetings</li><li>Senior management exchange visits</li><li>Special inspections</li></ul>	<ul style="list-style-type: none"><li>Conduct strategic cooperation</li><li>Hold seminars</li><li>Carry out technical exchanges</li></ul>
 Employees	<ul style="list-style-type: none"><li>Protect basic rights and interests</li><li>Employee health and safety</li><li>Fair promotion and development</li><li>Employee care</li></ul>	<ul style="list-style-type: none"><li>Democratic life meeting</li><li>Staff congress</li><li>Physical examination for employees</li><li>Visit employees with difficulties</li></ul>	<ul style="list-style-type: none"><li>Sound compensation system</li><li>Provide a safe and healthy working environment</li><li>Provide fair promotion channels</li><li>Strengthen staff training</li><li>Carry out employee care</li></ul>
 Environment	<ul style="list-style-type: none"><li>Energy conservation and emission reduction</li><li>Waste disposal</li><li>Reduce pollutant emissions</li><li>Green office</li></ul>	<ul style="list-style-type: none"><li>Strengthen environmental statistics and monitoring</li></ul>	<ul style="list-style-type: none"><li>Research and develop green products</li><li>Recycling resources</li><li>Strengthen environmental protection training</li><li>Public disclosure of environmental information</li></ul>
 Community and the public	<ul style="list-style-type: none"><li>Community development</li><li>Poverty alleviation</li><li>Community communication</li></ul>	<ul style="list-style-type: none"><li>Donations and aids</li></ul>	<ul style="list-style-type: none"><li>Consumer assistance</li><li>Conduct volunteer service activities</li></ul>



# RESPONSIBILITY TOPIC

## REMAIN TRUE TO ORIGINAL ASPIRATION "PASSING ON THE SHIP" MISSION

2021 marks the 100th anniversary of the founding of the Communist Party of China. In the course of its 100-year struggle, the Party has united and led the people to create development achievements that "astonished the world" and gained valuable experience and spiritual wealth. Standing at the new starting point of the second century of struggle, the Group is bravely taking up the mission of the times, inheriting the "red gene", encouraging the cadres and employees to insist on studying history and practicing, drawing strength from the Party's 100-year history of progressing, and turning it into concrete actions to overcome difficulties, work and practice entrepreneurship, striving to build a world-class shipbuilding enterprise.

### STUDY PARTY'S HISTORY TO REINFORCE COMMON GROUND

We actively carried out various kinds of Party history learning and education activities, and developed implementation plans, a list of key tasks and a list of key livelihood items. Based on our planning, we solidly promoted the leadership team members to study, discuss and carry out research and other work, and promoted the Party history education and learning into the mind. In 2021, we promptly convened an extended meeting of the central group to learn the spirit of the important speech made by General Secretary Xi Jinping

at the celebration of the 100th anniversary of the founding of the Party. In conjunction with the 170th anniversary of the founding of the plant, we organized Party history learning and education activities such as revisiting the oath of Party membership, seminars, reading classes, speech contests, micro Party lessons collection, field observation of red resources, and Party history knowledge contests, to educate and guide Party cadres and employees to know Party history, understand Party history, and to be grateful to the Party.



Opening ceremony of the Factory History Museum



Party history learning and education mobilization



Visiting Party Building Exhibition Hall of the Guangzhou Social Organisation



At the award ceremony on the First of July

### EMPHASISE ON LEARNING HISTORY AND IMPROVE PARTY BUILDING WORK

We insist on combining learning and application, turn the result of Party history education into the driving force for the Company's development, encourage all Party members to give full play to their initiative and strive for excellence in their posts, further promote the deep integration of core task and Party building work, and realize high-quality development led by high-quality Party building.

#### Organisation building

Completed change of session for 20 Party branches, established 5 party branches and added committee members for 17 branches in strict accordance with procedures; in response to the feedback from the inspection, the feedback from the Group's Party building assessment and inspection, and the problems that exist in some party branches of the state-owned enterprise Party building committee, such as "three meetings and one class" not being standardized, not being integrated enough into the center, and the development of party members not being timely, we organized rectification and achieved certain results.

#### Team building

Completed the annual training for secretary of grass-roots Party organizations, conducted two training courses for new secretary of Party organizations as required, and strived to improve the ideological and political theoretical level and business quality of grass-roots Party members and cadres; organized quarterly appraisals of Party members as pioneers in ship delivery and cost reduction and efficiency improvement to promote Party members to show their identities, set an example, integrate into the center and make achievements at their posts; carried out Party member appraisal and commendation on the First of July and visited Party members in difficulty on holidays to enhance their sense of honor and belonging.

#### System building

Issued a compendium of Party building systems and organized the revision of 5 Party building work systems, including the list of responsibilities of the Party committee of the Company to implement comprehensive and strict governance of the Party; insisted on promoting the improvement and innovation of grass-roots Party building work, and preliminarily determined 77 innovative Party building projects and 89 research thesis topics on Party building ideology and politics in early 2021, and completed the acceptance and conclusion of the projects at the end of the year.

#### Deep integration

Organized the grass-roots Party organizations to plan and carry out specific pioneering and striving for excellence activities around key projects and annual goals and tasks. Party members and cadres actively responded by working hard to take the lead and making achievements in their positions in major tasks such as the construction of key product capacity, the early delivery of the "four spud legs" and the Shenzhen-Zhongshan Bridge project, achieving good working results.





# THE WAY OF DEVELOPMENT

We aim to serve the country in our industry, follow the trend of industry transformation and upgrading, vigorously promote the concentration of technology, talents, capital and other resources to the main industry. Taking product quality and service as the core and continuous innovation as the main line, we constantly promote high-quality extension in the industrial chain and value chain, creating greater value for shareholders and customers.

Total operating  
income for the year  
**116.72**  
(in RMB100 million)

Completion  
and delivery of  
**35** ships +  
**2** offshore engineering  
platforms during  
the year

Value of social  
contribution per  
share of RMB  
**1.17**





# STEADY BUSINESS GROWTH

We grasp the opportunity of Guangdong-Hong Kong-Macao Greater Bay Area construction, take reform and innovation as the fundamental driving force, take manufacturing and service as the main way, continue to build industrial coverage in three major businesses, namely maritime and defense equipment, shipbuilding and offshore engineering equipment and marine technology innovation application, continue to make structural adjustment, and transformation and development to realize the Company's stable operation and value creation.

Maritime and defense equipment

The Group is the most important production base of military ships of the PRC navy in southern China and an important public service ship building base in the PRC. Various types of medium and large ships such as landing crafts and frigates we built have outstanding performance in carrying out long-distance escort and major national military exercises and have won many military honours. The Group actively explores and summarizes a new comprehensive lifetime maintenance model matching the equipment system construction and continues to facilitate the expansion and upgrading of military service and maintenance business.

Shipbuilding and offshore engineering equipment

The Group occupies a leading position in the building of feeder container ships, dredging engineering ships, multipurpose deep-water survey ships; it has successfully built marine engineering ships including multi-function underwater operation support ships, large survey ships, scientific exploration ships and platform supply ships, as well as marine engineering platforms including jack-up drilling platforms and wind power installation platforms, and smoothly entered the high-end field of marine equipment manufacturing. Meanwhile, the Group closely followed the market trends like environmental protection and energy conservation to develop ship maintenance, retrofitting and modification business.

Marine technology innovation application

The Group has excellent large-scale processing capability, with business covering energy equipment, engineering machinery and steel structures for bridges and buildings, etc. It undertook some substantial projects such as the Shenzhen-Zhongshan Bridge project and the Hong Kong-Zhuhai-Macau Bridge project. Meanwhile, the Group strives to build ship application business products represented by industrial Internet platforms.



	2021	2020	2019
Operating income (in RMB100 million)	116.72	116.08	218.29
Orders secured in operation (in RMB100 million)	325.24	111.29	319.46
Total profit (in RMB100 million)	1.15	36.52	9.91
Net profit attributable to the Company (in RMB100 million)	0.7939	36.62	5.48
Equity attributable to shareholders of the Company (in RMB100 million)	155.24	144.32	101.48
Value of social contribution per share (in RMB)	1.17	3.75	3.02

Note: The statistical scope of data in 2020 and 2021 includes Huangpu Wenchong, while the statistical scope of data in 2019 includes Huangpu Wenchong and GSI.

## Key projects of the year

01



The self-developed first 10,000-ton marine patrol vessel "Haixun 09" was delivered and entered into service, which is the world's first certified intelligent large public service ship, and is also China's largest tonnage public service law enforcement vessel of world class with advanced equipment and strong comprehensive capacity, which is of great significance in strengthening China's maritime traffic dynamic control and emergency protection capabilities and safeguarding national maritime rights.

02



The world's largest train carriers "Cherokee" and "Mayan", which were designed and built independently, were delivered to the U.S. owner and put into operation between the U.S. and Mexican ports, which is of symbolic significance in enhancing the recognition and competitiveness of Chinese manufacturing in the European and American markets.

03



The new generation of ultra-large intelligent self-propelled suction dredger "Haohailong" independently developed by China was successfully delivered. The maximum winch power of 7,800 kW set a new power record for existing suction dredgers in Asia, making it a flagship product for the development of large, multi-functional and highly intelligent dredging equipment in China.

04



Successfully delivered China's first dual-fuel powered multi-purpose gas carrier "Hongli" equipped with self-developed main engine. The world's smallest cylinder bore and highest performance index of dual-fuel marine engine, CX40DF engine, developed by CSSC, was applied for the first time on board.



## SOPHISTICATED SHIPBUILDING

The Group always adheres to the philosophy of “quality is life”, strictly complies with the laws and regulations relating to quality management where it operates, and insists on high standard and requirement in every segment of the full life cycle of product manufacturing to ensure the quality of product delivered.

### QUALITY MANAGEMENT SYSTEM

We take the *Quality Management System Requirements (Manual)* as a programmatic document to clearly stipulate the objectives, policy and organizational system of quality management. Various quality management activities are centrally planned, arranged and managed to guarantee that the production process is constantly under control and the product quality is stable.

### QUALITY CONTROL PRACTICES

In order to strengthen the supervision and management of product quality, we conduct quality control in the whole process from customer requirements, product design, raw material procurement, production and manufacturing, quality inspection, and product use to ensure product quality. In 2021, there were no products sold or shipped subject to recalls for safety and health reasons.

We have revised documents such as the *Quality Management System Requirements*, *Quality Issues Zero Management Measures*, *Quality Issues and Responsibility Management Measures*, *Civilian Product Ship and Material Warehousing Inspection Management Measures* and *Quality Information Management Regulations* to further improve the integration of quality system.

We carry out annual internal audit of the quality management system, through audit, assessment, process monitoring and other means to implement improvements to deficiencies identified, to ensure that the quality management system has a certain ability of self-improvement, and the quality management system continues to operate effectively.

Before signing the contract, we communicate with the customer to understand the customer's requirements on ship type, use, quality, applicable standards, etc., and conduct adequate research, planning and review of the customer's requirements, and develop corresponding proposals.

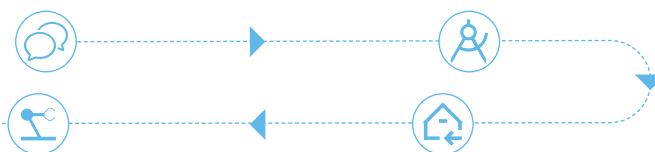
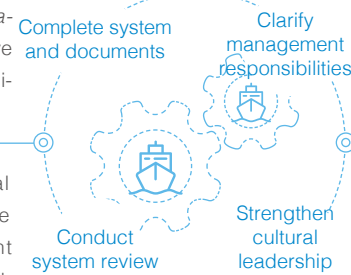
Customer requirements

We implemented the “three chief engineers and six managers” system to refine and clarify the duties and responsibilities of each chief engineers and managers, conduct monthly evaluation of performance of duties and responsibilities and related subsidies, and refine and realise quality management of each single ship.

We thoroughly carry out the activity of “communicating the Company's quality culture and quality situation” to strengthen the quality awareness of staff at all levels; organize all employees to participate in the knowledge contest on comprehensive quality management of central enterprises to enhance their enthusiasm in learning quality knowledge; actively carried out special quality training and exchanges such as “process quality management” and “quality problem management” to develop quality management concept and perspective.

We supervise the ship design to meet the quality management requirements; carry out the design assessment in phases to ensure that the assessment and design meet the quality output requirements.

Design and planning



#### Ship owner inspection

We sorted out and completed the grid-base management of shipowners' ship inspection opinions, implementing the person responsible for a single ship, and promoting the closed-loop processing of shipowners' ship inspection opinions; set the target of shipowner inspection opinion control and reduction measures in 2021, and identify and implement the common opinions of the first-made ships and delivered ships in advance on subsequent products, so as to reduce the number of shipowner inspection opinions on ship series.

#### Production and manufacturing

During the whole process of shipbuilding, quality inspection control points are set up to carry out complete quality inspection on the shipbuilding process.

#### Raw material procurement

Our departments such as enterprise management, materials, technology, quality and production departments cooperative to carry out supplier management; inspect raw materials, equipment and other materials purchased to ensure their quality. We conducted on-site audits of three batches of 10 suppliers to strengthen on-site quality control of procurement suppliers.

## QUALITY MANAGEMENT AND CONTROL

The Group strongly emphasizes the management and control of quality issues. It formulates and implements the *Quality Information Management Regulations*, *Quality Issues and Responsibility Management Regulations* and *Quality Issues Zero Management Measures* and other systems, and continues to carry out quality issue information collection and disposal, issue classification, investigation and handling, assessment, rewards and punishments and closed-loop management for ensuring the timely and effective handling of quality issues, and to ensure that the product delivered meets the quality requirements of the contracts and technical specifications.



Recognised as China  
Benchmarking Enterprise in  
Terms of Quality and Integrity

#### Substandard products in the procurement of raw materials and equipment

Physical isolation and identification of raw materials and equipment with quality issues to prevent unintended use of substandard products.

#### Substandard products in the production and construction process

Implement a quality issues information feedback mechanism that the competent department and the quality department work together to make professional judgments on the substandard products, formulate treatment measures such as rework and scrapping of the substandard products, and then implement upgrade inspection on products after rework and re-inspection and re-production of discarded products.

#### Substandard products found after delivery

The Company's professional after-sales service department decides professional and appropriate (including but not limited to repair and replacement) treatment measures based on the impact or potential impact caused by the substandard products.

First pass rate of hull welding X-ray film

98.59 %

First pass rate of process

98.71 %

First pass rate at external delivery

98.99 %

First pass rate of parts procured from external suppliers

100 %

Product quality and safety guarantee investment

15,480

(in RMB10,000)

National excellent quality teams

2 unit

Outstanding QC teams in Guangdong Province

6 unit

Excellent quality teams in Guangdong Province

6 unit

Participation in training for quality management

6,526 person-times

Quality safety training hours

26,104 hours

Quality safety training hours per capita

4 hours





INDEPENDENT TECHNOLOGICAL INNOVATIONS

IMPROVING SCIENTIFIC RESEARCH SYSTEM

We actively integrate into the national innovation-driven development strategy, combine our many years of experience in the market, build a “three-in-one” technological innovation system of operation, production and R&D, continuously stimulate the innovation enthusiasm of all employees, continue to carry out cutting-edge technology research and application of project results, and strive to build a technology ship-building enterprise with core competitiveness.

- Innovation management

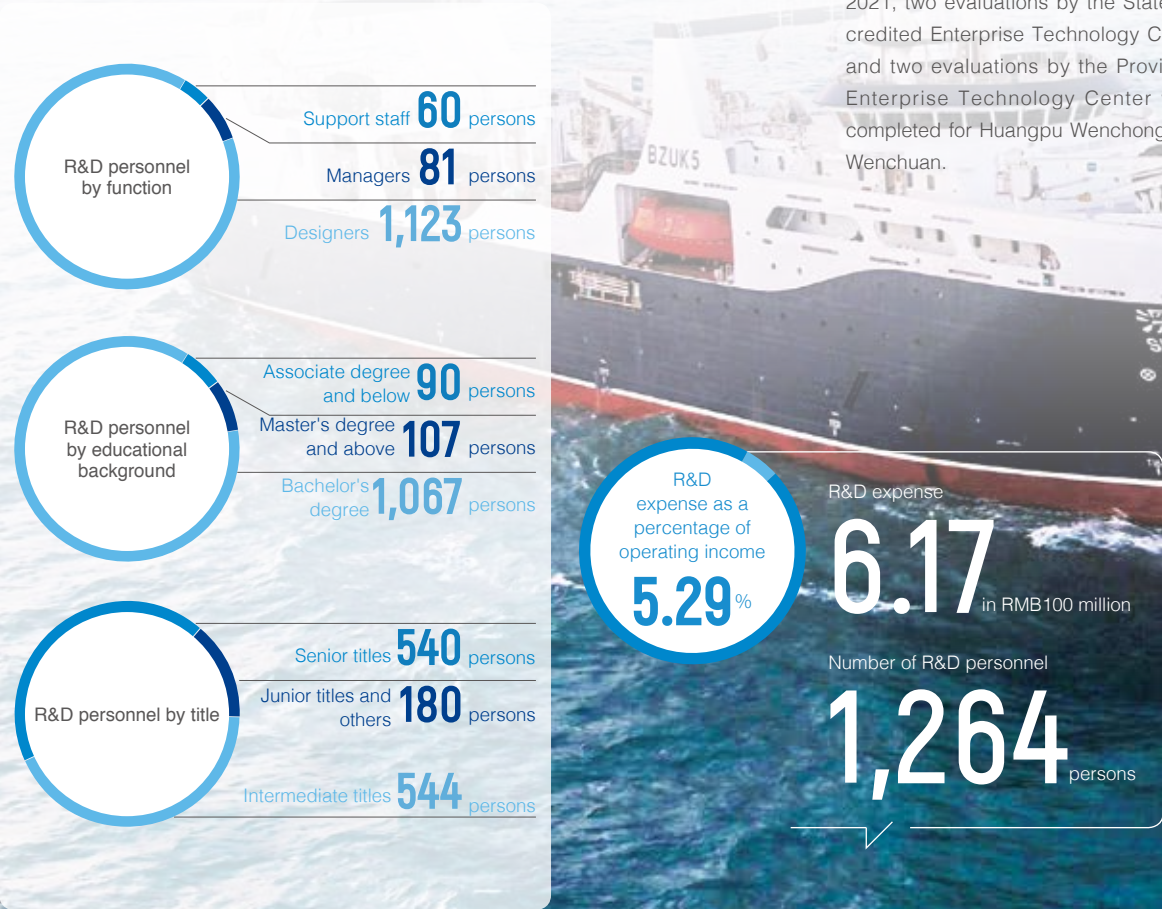
Scientific research team

Scientific research platform

The Group has formed an independent scientific research management system integrating R&D, design and manufacturing, established an organizational structure including strategic decision-making, R&D management and R&D execution, and set up a science and technology committee to promote the scientific and professional development of scientific and technological innovation decision-making.

With the combination of external high-end talents and internal training, we accelerate the cultivation of professional elites and expert talents, strengthen the construction of expert teams, and drive the Company's scientific and technological talents to grow faster and better. In 2021, the Group had 1,264 scientific research and technical talents, who are the backbone of the Group's sustainable and healthy development.

The Group has established 11 science and technology innovation platforms at or above the provincial and ministerial level, such as national enterprise technology center, postdoctoral research station, national engineering laboratory for marine engineering R&D and design, advanced ship welding technology enterprise key laboratory in Guangdong Province, Guangdong engineering technology research center, etc. During 2021, two evaluations by the State-Accredited Enterprise Technology Center and two evaluations by the Provincial Enterprise Technology Center were completed for Huangpu Wenchong and Wenchuan.



PROMOTING COMMERCIALISATION OF TECHNOLOGICAL ACHIEVEMENTS

We attach importance to the actual application of technological innovation, actively promote the organic integration of technology and production and operation, accelerate the deployment of forward-looking technical research, pursue major breakthroughs in leading and original achievements, and continuously enhance the Company's technological capability.

Case

Achieving a major breakthrough in modern fishing boat and equipment - an Antarctic krill ship

In 2021, leveraging on the ship construction and sea trials of “Shen Lan” and the related verification of the key technology research on Antarctic krill fishing and deep processing, we overcame the technical difficulties of Antarctic krill ship, filling the domestic technical gaps in the construction technology of professional krill fishing vessels, Antarctic krill efficient ecological fishing equipment and technology, a number of shipboard deep processing system integration technology, etc. This will improve the domestic design and manufacturing capability, achieve technological independence and control, make a major breakthrough in the field of modern fishing vessel and equipment, promote the healthy development of China's ocean fishing industry and build a strong marine country, further improve China's voice in the Antarctic region, and lay a solid foundation for the national offshore fishing strategy.

- 2 achievements

obtained second prizes of Science and Technology Progress Award issued by the Department of Science and Technology of Guangdong

1 achievements

obtained first prize of Science and Technology Progress Award issued by the Chinese Nonferrous Metals Industry Association

2 achievements

obtained second prizes of Science and Technology Progress Award issued by the Chinese Society of Naval Architects and Marine Engineers

2 achievements

obtained second prizes of Science and Technology Progress Award issued by China Institute of Navigation
- 1 achievements

obtained third prize of Science and Technology Progress Award issued by Shanghai Municipal People's Government

2 achievements

obtained first prizes of Science and Technology Progress Award issued by the Chinese Society of Naval Architects and Marine Engineers

1 achievements

obtained second prize of Technical Invention issued by China Institute of Navigation

1 achievements

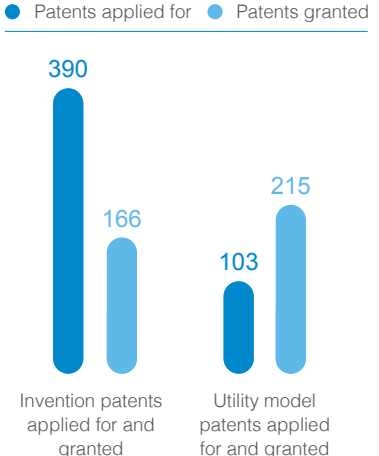
obtained third prize of Science and Technology Progress Award issued by China Institute of Navigation





# PROTECTON OF INTELLECTUAL PROPERTIES

We strictly comply with the requirements of the *Trademark Law of the People's Republic of China* and other laws and regulations, compiled the *Intellectual Property Risk Management and Control Procedures*, fully respect our own intellectual property rights and those of our partners, and at the same time cultivate an internal intellectual property culture and raise the importance of intellectual property rights among our employees through training and effective motivation.

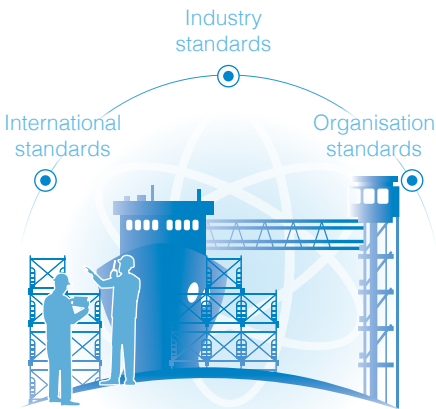


# PROMOTING COOPERATION AND DEVELOPMENT

We actively participate in industry-related discussions, promote the development and revision of regulations and standards, and improve the quality management level of the industry.

We undertook the research project on ship industry technical basic research standards, the *Research on Ship Assembly Intelligent Manufacturing Standards*, of the Ministry of Industry and Information Technology, and completed the preparation of 5 draft standards and the collection of opinions as scheduled.

The revision proposal on international standard ISO 5483 *Ships and marine technology — Drain facilities from oil and water tanks* we submitted was approved for consideration by ISO in January 2021. The international standard application proposal on *Marine Platform Escape Ladder* was approved by the expert committee of CSSC and successfully obtained approval as a proposal.



We completed 6 applications of organisation standards of shipbuilding industry associations and they were successfully approved for consideration, including *Sea Trial Requirements for Intelligent Ships*, *On Board Short Circuit Test Procedures for Ships and Offshore Facilities*, *Requirements for Ship's Exhaust Pipe System Expansion Joints and Hanger Placement*, *Installation and Test Procedures for Rack and Pinion Side-Shift Hatch Covers*, *Marine Duplex Seawater Filtration Device* and *Tilting Test of Ships and Marine Platforms for Ballast Water Transfer*.

Protecting our own rights

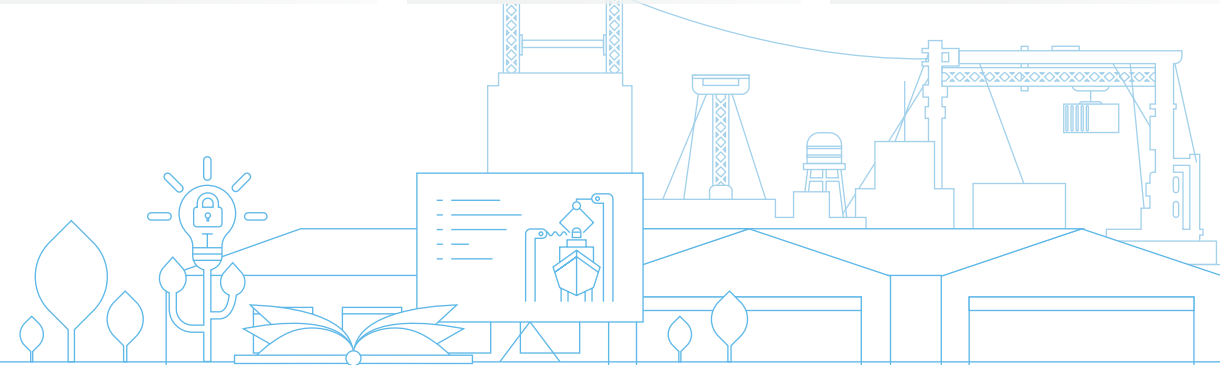
We investigate the possibility of infringement through search and investigation, issue investigation reports, and take measures to prevent infringement of the intellectual property rights of others; implement market monitoring of intellectual property rights, and if any infringement of the Company's intellectual property rights is found, the Technology Center will follow up and investigate the infringement of the relevant intellectual property rights, and defend the rights according to the law.

Protect the rights of our partners

In the cooperation assignment statement, the ownership of research results of science and technology projects and their forms of intellectual property rights are written down, allowing the business partners to decide on their own to implement, license others to implement, transfer, use them as consideration for equity interest and obtain corresponding income in accordance with laws, which fully protects the legitimate rights and interests of the intellectual property rights of our business partners.

Employee training

We organized the leaders of intellectual property (IP) department, IP managers and scientific research personnel to participate in the 2021 IP training video conference and gave a detailed explanation on patent risk prevention and control from three aspects: situation analysis, work requirements, patent risk prevention and control process and key points, so as to raise the awareness of IP managers and scientific research personnel on IP protection and anti-unfair competition.



Case

Conducting training and exchanges and helping industry standard development

In order to better implement the preparation of industry standards, the Company issued a work promotion plan for preparation of key standards, implemented responsible person arrangement, and conducted targeted training and exchanges in two major aspects based on industry military standards and industry standards (organisation standards). These efforts provide special and detailed guidance focusing on the standard classification, reporting process, keys of preparation, preparation requirements, precautions and other content, in order to lay a solid foundation for making more applications of national standards / industry standards (organisation standards) and military standards. The training and exchanges enable our employees to systematically understand the workflow and precautions of industry standards, understand the importance of such work in the appraisal, personal technical position promotion and incentives of the Company, and play a key role in the exploration and preparation of industry standards.



# THE WAY OF RIGHTEOUSNESS

We recognise the importance of safe production and customer satisfaction to the sustainable development of the Company, and continue to deepen the safe production responsibility system, integration of systems and standardization in the process of operation, and establish responsible marketing and a customer demand and feedback mechanism, so as to lay a firm foundation for the high-quality development of the Company and create a better tomorrow together with employees and customers.





## ENSURING PRODUCTION SAFETY

Minor injury accidents

1  
case

Serious injury accidents

0  
case

Major accident

0  
caseImproper wearing of labour protection  
equipment dealt with286  
casesComplaints regarding occupational health  
and safety that have material impact on the  
Company0  
case

Staff healthy archive coverage

100  
%

Labour supplies expenses

1,168.75  
(in RMB10,000)

Emergency supply expenses

213.58  
(in RMB10,000)

Production safety training

44,359  
person-times

We adhere to the environmental and occupational health and safety policy of “obeying laws and regulations, caring for health, green shipbuilding and peaceful development”, and insist on a people-oriented safe production philosophy. We have established a production safety responsibility system of “same responsibility for the party committee and corporate management, two responsibilities for one position, joint management and accountability for dereliction of duty”. We further upgraded safety management, implement safety control, ensure the construction of a fundamentally safe enterprise, and safeguard the lives and health of employees. In 2021, there were no work-related serious injury or case of acute occupational disease, no major fire, explosion or traffic safety incident.

### UPGRADING SAFETY MANAGEMENT

We use the refinement of safety management as the starting point to further clarify safety responsibilities, deepen the construction of integrated systems and standardization, and improve the level of safety management.

#### Improve production safety responsibility system

We have improved and refined the list of safety responsibilities of each position, and carried out supervision and assessment of the safety performance of each position; implemented the signing of production safety responsibility letters by all employees, with a total of 17,132 signed; and conducted talks on the performance of responsibilities upon personnel changes to ensure that the safety and environmental protection work continues.

#### Promote the construction of safety production standardization

The headquarters of the Company obtained the third round of military safety standardization level 1 compliance certificate, and promoted the second round of safety standardization in Wenchong and Longchun plants to complete external assessment.

#### Strengthen the safety management institution

We implemented the safety director system and added 6 new safety management personnel in the year. We have 30 nationally registered safety engineers and 8 safety production standardization assessment experts, and our safety management team is increasingly strong.

#### Deepen integration of systems

We strengthened the implementation of systems and carried out promotion and training on systems such as *Safe Production Management Regulations* and *Measures for Reporting, Investigating and Handling of Production Safety Incidents*. We have formulated 14 categories and 33 clauses under its production safety management system; 18 categories and 82 clauses under equipment and facilities management regulations; 42 clauses under operational safety management regulations; 72 clauses under workplace safety management regulations; 18 categories and 124 clauses under position operational safety procedures; and 13 categories and 283 clauses under equipment and facilities safety operation regulations.



The chairman promoting safety to frontline staff



Safety inspection of tricycle



Safety drill



Anti-terrorist special inspection

## IMPLEMENTING SAFETY ACTIONS

We strictly implement production safety training and education, carry out safety inspections, cultivate safety culture, strengthen traffic and fire emergency management, create a strong production safety atmosphere, and enhance the safety awareness of all employees, so that everyone can become a safety barrier.

#### ○ Safety training

We provide three-level safety education for new employees and contract workers; special training for personnel engaged in special operations, and they must have necessary certificates for their posts; and safety management knowledge training for management personnel and team leaders. Safety training was organized for 44,359 person-times in the year, covering all employees.

#### ○ Safety inspection

Through a variety of inspection methods, such as leader-led team inspection, professional team inspection, cross-inspection of three plants, massive inspection, post-event special inspection and seasonal inspection, a total of 2,893 hidden dangers were investigated and treated.

#### ○ Firmly implement the responsibility of occupational disease prevention and control

We sort out the Company's occupational health management network and refine the responsibility system for occupational disease prevention and control; strengthen the supervision and management of occupational disease prevention and control for contracted workers, medical checkups for construction workers and daily monitoring of chronic diseases, etc., seeking reduction of existing cases and curbing additional cases.

#### ○ Care for physical health of employees

We strengthen the monitoring of chronic diseases, strict control of pre-post physical examinations, and strictly organize on-duty occupational health examinations.

#### ○ Safety culture

We carried out extensive activities including “Safety Production Month”, “Safety Production Miles” and “119 Publicity Month”; organized a series of safety activities such as online double first-class construction prize quiz on safety and environmental protection knowledge, safety hazards shooting, micro fire station skills competition, etc. to build a solid safety concept with first-class safety culture.

#### ○ Traffic and fire emergency management

We regularly carry out daily fire safety inspections and fire extinguisher maintenance spot checks to ensure production fire safety; investigate and deal with non-compliant driving behavior through video surveillance, on-site inspections, and the use of automatic speed detection equipment. We completed production safety accident emergency plan compilation and revision, and completed the external expert evaluation and re-filing to Guangzhou City Emergency Management Bureau. 6 comprehensive drills and 30 special drills were held in the three factories in the year.

#### ○ Strengthen workplace health management

We allocate first-aid drugs and drugs to prevent heat stroke for the key production areas, key groups of persons; pay attention to high temperature weather to protect the health of high-temperature operators.

#### ○ Enhance emergency rescue ability

We organize emergency paramedic (licensed) training to enhance their theoretical knowledge and practical skills of, with a total of 52 persons trained.

#### ○ Pay close attention to regular epidemic prevention and control

We set up temporary vaccination points for the COVID-19 in the factory, extended the vaccination time in consultation with the streets, and improved the vaccination rate of employees to construct an immunization barrier.

## OCCUPATIONAL HEALTH AND SAFETY

We attach importance to the physical and mental health of each employee, strictly comply with the *Labor Law*, the *Law of Prevention and Treatment of Occupational Diseases* and other laws and regulations. We have established an occupational health management system covering the responsibility system for prevention and control of occupational diseases, employee health examination, publicity, education and training of occupational disease prevention and control, monitoring and evaluation of occupational hazards, etc. to strengthen employee occupational health control and create a safe working environment.

Year	Work-related fatalities (person)	Rate of work-related fatalities (%)	Lost days due to work injuries (day)
2019	0	0	1,265
2020	0	0	250
2021	0	0	52



## MAINTAINING PRODUCT RESPONSIBILITY

We uphold the attitude of being responsible for our products and customers, and continue to improve the management of product identification and traceability, customer satisfaction and privacy protection, and responsible marketing, in order to provide responsible products and services to our customers and win their satisfaction.

### RESPONSIBLE MARKETING

We comply with laws and regulations such as the *Advertising Law of the People's Republic of China* and the *Trademark Law of the People's Republic of China*, and have formulated system documents such as the *Product Identification and Product Traceability Control Measures* to standardize the management of product identification, product status identification, product traceability identification and the contents, methods and control requirements for batch management. We also manage and control our marketing and promotion activities to protect customers' right to know.

#### Responsible marketing and promotion

We strictly abides by the relevant laws and regulations and has developed and strictly implemented management rules on marketing and promotion. Information on marketing and promotion, such as the advertisements or product publicity materials, shall not be put into use until approvals from different levels have been obtained. We strictly controls the legitimacy, authenticity, science and accuracy of contents of publicity materials and prohibits any deceptive or misleading information to effectively protect the lawful interests of customers.

#### Product identification and product traceability

We have formulated the *Product Identification and Product Traceability Control Measures*, and standardize the identification and recording of products in the production process of purchased products, in-process products (semi-finished products), finished products and products provided by customers in the process of receiving, storing, transferring and delivering products; accurately distinguish and label products and make unique label for each or every batch of products, to achieve product traceability and to prevent confusion and misuse of different types of products or substandard products.



Clearly define the responsibilities and authority of each department in the management of product identification.



All types of products are stored in specified areas according to specifications, and product identification is made in appropriate ways such as hanging or sticking labels or tags, or directly marking on the products with steel seal or paint, or marking on its accompanying parts.



When tracing of product quality formation process is required, it may be done based on the uniqueness of product identification and records (product name, drawing number, piece number, furnace batch number, etc.).

## MAINTAINING CUSTOMER RELATIONSHIP

We pay close attention to the whole process coverage of customer relationship management. We have developed the *Customer Satisfaction Management Rules* to collect, count, analyze and utilize customer satisfaction information around the implementation and control of post-delivery services and technical support. At the same time, we pay attention to protect the rights and privacy of customers, open up customer feedback channels, handle customer complaints in a timely manner, and maintain a good relationship with customers.

#### Customer privacy protection

The Company attaches great importance to protecting customers' privacy in the course of business to protect information including customers' intellectual property rights and personal information. It maintains confidentiality control for intellectual property rights or personal information of customers or external suppliers which requires confidentiality, such as trade secrets including patented technologies, design proposals, etc. according the *Trade Secrets Management Rules of the Company*.

The number of complaints received for leaking customers' privacy in 2021 is

0

#### Customer feedback



##### Standardised management

We have developed and implemented the *Military Products After-Sales Service Management Rules*, *Military Products Full Life Cycle Support Service Management Rules* and *Civilian Products After-Sales Service Management Rules* to implement control and management for the service and technical support following product delivery; and established a service team for after-sales service projects to be responsible for the specific implementation of the service work and recording and retaining relevant after-sales service records.



##### Open channels

Customer feedback information is collected through channels such as direct communication with customers, information obtained from customer examination in product realisation, customer complaints, customer praises, customer survey, customer visits and after-sales feedback. Our relevant departments will timely analyse customer satisfaction and deal with the issues reported or pass them to the relevant responsible departments for handling. The operation department or quality department organizes the relevant departments to analyse the reasons for customer complaints and formulate rectification measures for improvement, identifies the departments responsible for the issues, supervises the responsible departments for timely handling and notifies customers of the handling results.

#### Customer satisfaction survey

In 2021, we conducted customer satisfaction survey through customer visit, discussion and written record survey, and distributed 74 questionnaires and collected 74 valid questionnaires with customer satisfaction score of 99.67. According to the survey, customers are generally positive about the product constructed by the Company.

In 2021, customer satisfaction score of

99.67





# THE WAY OF ENVIRONMENT

The realization of carbon peaking and carbon neutrality is a major strategic decision made by the Party Central Committee with Comrade Xi Jinping at its core after careful consideration, which is related to the sustainable development of the Chinese nation and the construction of a community of human destiny. To help achieve the carbon peaking and carbon neutrality goals, we are guided by Xi Jinping's thought on ecological civilization, and firmly implement the concept of green development. We establish a sound environmental management system, continuously promote energy conservation and emission reduction, actively convey the concept of green development to the public, construct a green path of harmonious coexistence between enterprises and the environment through green operation, and contribute to the construction of a beautiful China.





## SETTING GREEN DEVELOPMENT GOALS

We uphold the eco-friendly philosophy of “Lucid waters and lush mountains are invaluable assets”, and take “Zero environmental pollution, compliance with three industrial waste emission standards, solid waste reduction and harmlessness” as the goal. We have established environment management system and environment management organisation system to strictly implement responsibilities, strengthen supervision of the production and operation processes and guarantee capital investment to promote the sustainable and healthy development of the Group through energy conservation, emission reduction and carbon reduction.

The achievement of environmental protection goals in 2021			
Control item	2021 performance target	Actual performance	Remark
Substantial environment pollution incidents	0	0	
Passing rate of garbage classification	> 94%	94.475%	No. of compliant refuse hopper ÷ Total no. of refuse hopper in use ×100%
Wastewater meeting emission standards	100%	100%	
Waste gas (VOCs, dust) meeting emission standards	100%	100%	
Noise at boundary of factories meeting standards	100%	100%	
Compliant disposal of hazardous waste	100%	100%	
Industrial solid waste reduction completion rate	> 10%	10.58%	A 10% reduction in the volume generated over 2020 (annual basis)

## STRENGTHEN ENVIRONMENTAL MANAGEMENT

A sound environmental management system is the solid foundation and favorable guarantee for environmental protection work. We advocate the concept of “low-carbon, energy-conservation, green and environmental protection”, strictly comply with national environmental protection laws and regulations in production and operation, pay attention to the study and identification of environmental risks, grasp opportunities, and strengthen environmental management to realize the sustainability and sustainable use of environment and resources.

### ENVIRONMENTAL RISKS AND OPPORTUNITIES

We study the environmental risk identification methods, conduct regular internal audits and self-inspections to raise employees' awareness of environmental protection, improve the Group's environmental management level, seize new development opportunities brought by environmental risks, and enhance the Group's comprehensive strength and competitiveness.



## IMPROVING ENVIRONMENTAL MANAGEMENT

We strive to build an environmental management system and organization system with the Company's characteristics to realize standardized environmental management, and build a green, low-carbon, ecologically energy-conserving and environmentally friendly enterprise.

### ● Environmental management system

We strictly comply with national environmental protection laws and regulations such as the *Environmental Protection Law of the People's Republic of China* and *Air Pollution Prevention Law of the People's Republic of China*, and developed 15 environmental management systems according to actual business situation, namely the *Environmental Protection Responsibility System*, the *Environmental Monitoring Management System*, the *Measures for Managing and Control of Environmental Factors*, the *Measures for Reporting, Investigating and Handling of Environmental Pollution Incidents*, the *Environmental Risks and Hazards Identification System*, the *Environmental Protection Publicity, Education and Training System*, the *Environmental Protection Reward and Punishment Management System*, the *Environmental Protection Management Regulations*, the *Emergency Preparedness and Response Management Measures for Environmental Emergencies*, *Measures for Reporting, Investigating and Handling of Environmental Incidents*, the *Measures for Managing the Water Surrounding the Wharf*, the *Administrative Measures for Safety and Protection of Industrial X-ray Inspection Operation*, the *Measures for Managing Solid Waste*, the *Measures for Managing Clean Production* and the *Hazardous Waste Pollution Prevention and Control Accountability System*, to ensure environmental compliance management.

### ● Environment management organisation system

Department	Person-in-charge	Member	Duties and responsibilities
Environmental Protection Committee	General manager and the Chairman act as director and deputy director, respectively	Department heads	Highest command and coordination body for safety and environmental protection management
Energy Conservation and Emission Reduction Leading Group and Working Group	Generalmanager space acts as the leader and deputy leader	Department heads	Responsible for the daily management concerning the coordination, guidance, inspection, statistics and assessment of energy-saving and emission reduction
Environmental Protection Work Leading Team			The decision-maker at subsidiary level for major policies for environmental protection, responsible for safety and environmental protection at subsidiary level
Environmental Protection Management Leading Team	General manager as team leader, deputy general manager as deputy team leader	Leaders of various key departments	Responsible for the daily management concerning the coordination, guidance, inspection, statistics and assessment of energy-saving and emission reduction
Environmental Protection Management Work Team			Responsible for establishing and improving the Company's environmental management regulations and operating procedures as well as supervising the improvement in environmental management measures. The team also follows, coordinates and implements the Company's safety committee resolutions and work arrangements; complies data statistics; investigates pollution hazards; controls origin of pollution; investigates incidents and prepares emergency response plans; and other environmental management works
Execution department		The safety management department and the production security department	The safety management department is responsible for the guidance, supervision and inspection management of the environmental protection endeavours of various departments and subsidiaries. The production security department is responsible for the daily management concerning the coordination, guidance, inspection, statistics and assessment of energy-saving and emission reduction
Business department		Full-time and part-time environmental protection management personnel	Responsible for the specific environmental protection management work of the unit



## PRACTICING GREEN OPERATIONS

As a production and manufacturing enterprise, we integrate “low-carbon, energy conservation, green and environmental protection” into daily production and operation process, promote green R&D, green production, green procurement, green factory, green office, etc., practicing energy conservation, emission reduction and low-carbon initiatives and promoting green shipbuilding to achieve the coordinated development of the Company’s economy and the ecological environment.

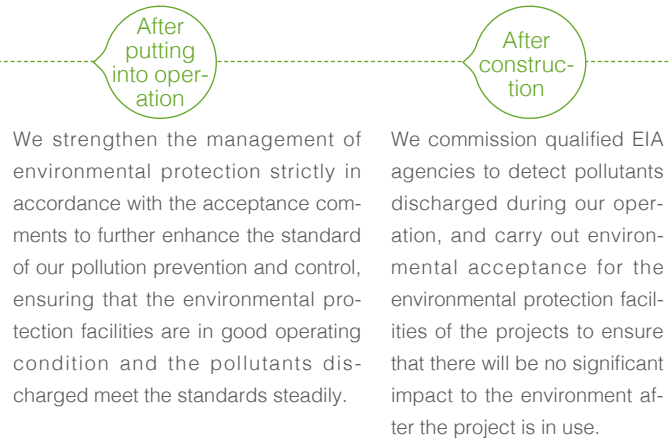
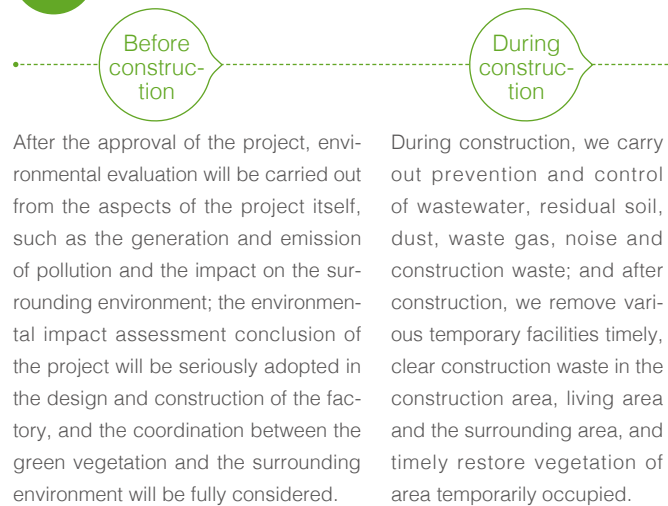


### Green research and development

In ship research and development programs, we promote desulfurization and nitrogen removal equipment, and environmentally friendly design solutions such as the LNG dual-fuel system has been successfully applied on feeder containerships.



### Green production



### Green procurement

For major equipment and materials purchased, the contract will require suppliers to deliver products free of harmful substances such as asbestos, Halon and CFC. The contract will clearly require the declaration and report of hazardous substances (SDOC and MD) to ensure compliance with the standards; the packaging of major delicate equipment and materials shall be in wooden packaging or other recyclable packaging, and bulk materials purchased shall be delivered without packaging to reduce possible environmental pollution.



### Green factory

- We introduced **3** sets of large-package two-component spraying equipment, which is expected to reduce the disposal of hazardous waste such as paint buckets and paint slags in the annual amount of approximately **29** tonnes, and reduce the emission of VOCs of approximately **13** tonnes.
- We are using **146** units (sets) environmental protection equipment, including equipment for the treatment of organic waste gas, removal of industrial dust, purification of welding flue, waste oil treatment, domestic sewage treatment and Industrial vacuuming.



### Green office

- We advocate water conservation, and convey the concept through energy conservation week, energy conservation special publication, etc. to raise water saving awareness of employees.
- Water saving promotion stickers are posted at all water dispensers in the factories and turn off tap reminders are posted in office area to educate employees to develop good water consumption habits and create a water saving atmosphere.

## IMPLEMENTING ENERGY CONSERVATION AND EMISSION REDUCTION

Our greenhouse gases mainly come from fossil fuel consumption. We pay close attention to the conservation and use of energy and resources, and endeavour to reduce energy and resources consumption and the discharge of waste to minimise impact to the environment.

### REDUCING GREENHOUSE GAS EMISSIONS

We adopt measures such as lowering energy consumption, developing and using clean energy and saving fossil energy to reduce the total greenhouse gas emissions and the pollution and impact to the atmosphere, and help achieving the “dual carbon” goals. In 2021, the total greenhouse gas emissions of the Company was 98,719.39 tonnes of carbon dioxide equivalent and the greenhouse gas emission intensity was 0.07724 tonnes of carbon dioxide equivalent/RMB10,000 output.

### 2021 energy efficiency targets

Indicator	Unit	2021 indicator value
The ratio of natural gas consumption to processed materials	kg/tonne	30.45
The ratio of carbon dioxide consumption to segmental materials	kg/tonne	28.52
Electricity consumption per unit of processed materials	kWh/tonne	48.85
Electricity consumption per unit of segmental coating	kWh/m <sup>2</sup>	4.45
Electricity consumption per unit of carriage	kWh/tonne	55.38
Rate of leakage	%	1.03

### Improve energy management

- Organise and carry out internal audit of energy management and make close-loop rectification tracking.
- Complete a version change of energy management system document and organize training for the change of version and internal auditors; organize and carry out management review and complete third party certificate renewal supervision and approval.
- Revamp the energy evaluation indicator system by changing from energy consumption per unit of output to energy consumption per unit of materials, and require all production units to make specific analysis when target is exceeded.

### Develop clean energy

- Construction of photovoltaic power generation projects in Longxue and Changzhou plant areas to promote the use of clean energy.
- The photovoltaic project in Longxue plant area commence trial operation on 30 August 2021. Its annual power generation will be not less than **6** million kWh and it will reduce comprehensive energy consumption by **737** tonnes of standard coal per year and carbon emission by **3,163** tonnes of carbon dioxide per year.
- The construction of the photovoltaic pilot project in the Changzhou plant area has been completed and put into operation with an annual power generation of approximately **120,000** kWh and a reduction of comprehensive energy consumption by **15** tonnes of standard coal per year.

### Carry out energy conservation management

- We developed an annual energy conservation and emission reduction plan, implemented a special and cross-coordinated inspection of one factory and four locations, conducted a total of **12** joint inspections, investigated and dealt with **84** areas of violating energy use. We promoted the **4** bright spots and **3** management improvement points found.
- We carried out industrial energy conservation technology diagnosis in the factories, and developed the smart air compression station construction plan for the Longxue plant area, the 5G communication transformation technical solution for the mobile air coolers in three plant areas, and the energy storage technical service plan for Longxue and Wenchong, to drive the demonstration and promotion of various energy conservation projects.

### Greenhouse gas emissions (Unit: tonne of carbon dioxide equivalent)

Greenhouse gas emissions	2021	2020	2019
Scope 1	Purchased natural gas consumption	<b>2,446.85</b>	<b>2,731</b>
	Heavy oil consumption	<b>7,593.70</b>	<b>8,321</b>
	Gasoline consumption	<b>399.18</b>	<b>478</b>
	Diesel consumption	<b>25,180.36</b>	<b>18,584</b>
Scope 2	Purchased electricity	<b>63,099.30</b>	<b>73,838</b>
Total		<b>98,719.39</b>	<b>103,955</b>
		<b>196,090.13</b>	

Note: The statistical scope of data in 2020 and 2021 includes Huangpu Wenchong, while the statistical scope of data in 2019 includes Huangpu Wenchong and GSI.

### Energy consumption

Type of energy	Unit	2021	2020	2019
Natural gas consumption (in gas state)	10,000 cubic metres	<b>114.738</b>	<b>86.29</b>	<b>387.14</b>
Natural gas consumption (in liquid state)	Tonne	<b>76.20</b>	<b>372.07</b>	<b>ND</b>
Fuel consumption	Tonne	<b>10,665.04</b>	<b>8,796.89</b>	<b>11,020.07</b>
Purchased electricity	10,000 kWh	<b>11,991.15</b>	<b>14,008.37</b>	<b>36,888.08</b>
Photovoltaic power generation	10,000 kWh	<b>158</b>	<b>ND</b>	<b>845.73</b>
Total energy consumption	Tonne of standard coal	<b>31,870.75</b>	<b>31,761.28</b>	<b>79,711.43</b>

Note: Fuel consumption includes total consumption of heavy oil, gasoline and diesel. Total energy consumption includes the consumption of natural gas, fuel and purchased electricity. Purchased electricity in the total energy consumption include electricity used by the canteen; only power generation of photovoltaic power generation is included in the statistics, it is unable to calculate its energy consumption.

Comprehensive energy consumption per RMB10,000 output of  
**0.0249**  
tonne of standard coal

Electricity consumption per RMB10,000 output of  
**936,700**  
kWh/RMB10,000



## WASTE GAS MANAGEMENT

The Company generates different types of waste gas in its production and operation, including dust waste gas, VOC (organic waste gas) and welding flue and dust. We use activated carbon adsorption, cartridge filtration and catalytic combustion treatment technologies to treat waste gas, and actively introduce environmental protection equipment. We regularly repair and maintain environmental protection equipment, and sample and monitor waste gas emissions to ensure that the facilities are operating normally and that the waste gas emissions comply with the *Air Pollutant Emission Limit* of Guangdong Province. In 2021, our total waste gas emissions was 1,846.03 million cubic metres.

We continued to carry out treatment of waste gas such as VOC and dust, and introduced 3 sets of large-package two-component spraying equipment and put them on trial use, which have effectively reduced VOCs emission and the generation of hazardous waste.

In the process of shipbuilding, we procure water-based paints instead of solvent-based paints for the painting operations of living cabins to reduce the emission of volatile organic compounds and the impact of toxic and harmful substances on operators.

Unit	Emission method	Vent height	Particulate matter		Toluene		Xylene		VOCs	
			Emission concentration	Emission rate	Emission concentration	Emission rate	Emission concentration	Emission rate	Emission concentration	Emission rate
		metre	mg/m <sup>3</sup>	kg/h	mg/m <sup>3</sup>	kg/h	mg/m <sup>3</sup>	kg/h	mg/m <sup>3</sup>	kg/h
Steel plate pretreatment line	Structural emission	15	29	0.35	ND	6.4*10 <sup>-5</sup>	1.35	0.017	11.4	0.14
Segmental coating	Structural emission	15	20	0.78	ND	1.9*10 <sup>-4</sup>	0.10	3.9*10 <sup>-3</sup>	0.20	7.8*10 <sup>-3</sup>

## WASTE MANAGEMENT

The Company generates waste including hazardous waste, industrial solid waste, domestic waste and construction waste during operation and production. Among which, industrial solid waste, domestic waste and construction waste are non-hazardous waste. We focus on reducing the generation of waste at the source, dispose waste generated according to their classification, strengthen the transfer and treatment of hazardous waste, manage and recycle non-hazardous waste based on classification to enhance comprehensive utilization and reduce environmental impact. In 2021, the Company disposed of industrial waste of 13,671.95 tonnes in compliance with regulations, and transferred and handled 2,200 tons of hazardous waste.

### WASTE PROCESSING DISPOSAL AND EFFECTIVENESS

Category	Type	Disposal method	Environmental effectiveness
Recyclable waste	Recyclable industrial waste (e.g. metal scraps and wood packaging materials), hazardous waste such as waste mineral oil, and recyclable domestic waste	Recycled depending on classification and sold to qualified buyers for disposal	Preventing reusable materials from being disposed into landfill and reduce the consumption of natural resources
Hazardous solids	Non-recyclable industrial waste such as dust, waste insulation materials, etc.	All are collected and stored in general industrial solid waste storage yard, and a qualified unit is entrusted for processing	Preventing hazardous substance from flowing into the natural environment and realising harmless disposal
	Hazardous waste such as oily waste, coating waste, waste activated carbon, etc.	All are collected and temporarily stored in a standardized hazardous waste warehouse, and a qualified unit is entrusted for processing and disposal	
Domestic waste	Mainly domestic waste generated in offices and living areas	Recycled depending on classification and sold to qualified logistics service providers for disposal	Preventing domestic waste from flowing into the natural environment



2021	Solid waste (tonne)				Liquid waste (tonne)	
	Hazardous solid waste		Non-hazardous solid waste			
	Volume generated	Volume recycled	Volume generated	Volume recycled	Volume generated	Volume recycled
	2,839.73	0	19,727.43	0	388.10	0

Note: Hazardous solids include hazardous waste and non-recyclable industrial waste.

## WATER RESOURCES MANAGEMENT

The Company's water consumption mainly arises from office and domestic water, water used in sea trial, ship ballast water, water for product tightness test, cooling supplementary water such as for air compressors, and water for greening, firefighting and canteen. We strengthen the management of water resources, advocate the water-saving concept, and reduce the use of water resources. In accordance with national and industry standards, we strengthen the collection and treatment of wastewater to prevent environmental pollution.

In 2021

The total water consumption is

**1,444,700** tonnes

The density of water is

**1.13** tonne/RMB10,000 output

### Water resources conservation

We attach great importance to water resource conservation, advocate "Water conservation, planned use of water, comprehensive utilization and improving efficiency", and ensure saving and effective use of water resources by measures such as conveying water-saving concept, regular inspection of water pipe network, regular energy conservation inspection and monitor water consumption.



We advocate water conservation, and convey the concept through energy conservation week, energy conservation special publication, etc. to raise water saving awareness of employees.



Water pipe networks are regularly checked to minimise leakage due to pipeline issues.



Energy conservation inspections are made regularly, cases of water wastage will be announced throughout the factory and economic assessment will be conducted on the unit concerned.



Water meters are installed in the wharfs of the factories to collect water consumption data.



Water consumption (Unit: 10,000 tonnes)						
	By water intake source		By water use		Total water consumption	Volume recycled
	Tap water	Pearl River water	Industrial	Domestic		
2021	102.25	16.21	74.86	69.61	144.47	26.01
2020	99.72	14.96	73.07	68.99	142.06	27.38
2019	235.46	18.55	207.08	46.93	254.01	31.16

**Note:**Total water consumption = tap water consumption + Pearl River water consumption + volume recycled, total water consumption = industrial water consumption + domestic water consumption.  
The statistical scope of data in 2020 and 2021 includes Huangpu Wenchong, while the statistical scope of data in 2019 includes Huangpu Wenchong and GSI.

Wastewater treatment

The Company generates production wastewater and domestic sewage in the process of production and operation. Production wastewater mainly comes from industrial wastewater and oily wastewater from mooring experiment and workshops. We pay great attention to wastewater collection and treatment to ensure that the wastewater discharged is harmless.

	Wastewater emissions		Pollution emissions	
	Total wastewater emission (10,000 tonnes)	Wastewater emission intensity (tonne/RMB10,000 output)	COD (tonne)	Ammonia Nitrogen (10,000 tonnes)
2021	53.73	0.42	7.10	0.61



We adopt comprehensive prevention and control measures for disposal of production wastewater in accordance with national and industry standards to achieve water recycling and reduce wastewater emission.



For the handling of wastewater, we implement rainwater and sewage diversion project, rainwater is discharged into the Pearl River area, and office wastewater is collected and discharged into the municipal pipe network.

MANAGEMENT OF OTHER ENVIRONMENTAL IMPACT

In addition to strengthening of the management and disposal of wastewater, waste gas and waste, we also pay attention to the management and handling of noise control, reduction of radiation, reducing the use of packaging materials to minimize the impacts on the environment and community.

Noise control

In 2021, the production unit of the Group recorded and analyzed the optimization test of the fan item by item in view of the problems of high noise, low wind pressure, heavy volume and high failure rate of traditional axial fans. We introduced new FRP fans with reduced noise and higher wind pressure with the first batch of 80 units received and all of them have been used on H1224 ships.



In 2021, we had environmental protection training participants of

150  
person-times

Reduction of radiation

We pay attention to strengthening the control and management of radiation in production and operation, and have obtained the *Radiation Safety Permit* and equipped factories with Class II radiation devices. We manage the use of radiation devices strictly in accordance with national requirements to avoid pollution due to loss or loss of control. We establish a solid safety and protection management system related to industrial X-ray inspection operations and exercise whole process management for X-ray inspection operations. We regularly engage third parties to monitor environmental radiation of inspection operations.

EXTENDING GREEN FOOTPRINT

We advocate a low-carbon and environmental friendly life style, organize and carry out environmental public welfare activities, actively spread the green and low carbon philosophy, and join hands with more stakeholders to jointly protect our green home.

Holding environmental knowledge contest

On the 5 June World Environment Day, we organized an environmental protection knowledge contest and carried out poster board publicity activities on the laws, regulations and policy documents covering administrative measures for drainage permit, etc., to further enhance the environmental protection awareness of all employees.

Training to strengthen environmental protection awareness

On 20 May, a training on the theme of "Enhancing environmental protection awareness and carrying out low-carbon emission reduction" was organized in the form of video in our three factories, with a total of more than 150 participants. Through this training, environmental protection managers at all levels have strengthened their awareness of ecological civilization, green development and environmental responsibility, learned and understood relevant laws, regulations, policies and standards, and enhanced their ability to perform their duties.







# THE WAY OF SOCIETY

We always endeavour to join hands to build a harmonious and beautiful society. As an enterprise shouldering social responsibility, while pursuing the enterprise's own development, we always keep in mind inheriting the century-old legacy of CSSC, and strive to create a workplace providing protection, growth and warmth for our employees, build a more fair and transparent business platform for our business partners, create a harmonious and friendly atmosphere for the community, and participate in rural revitalisation with our strength, continuously conveying warmth and care to and promoting the harmonious development of the society.





## CREATING A HAPPY WORKPLACE

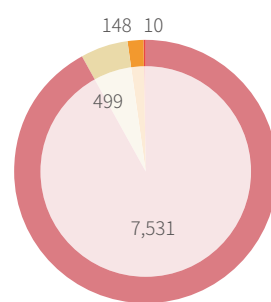
We see our employees as valuable assets. On the basis of protecting employees' rights, we provide employees with competitive salaries and benefits, enrich employees' spare time activities, create a harmonious and healthy working environment, and strive to grow and develop together with our employees.

## PROTECTION OF EMPLOYEES' RIGHTS

We strictly comply with the *Labour Law of the People's Republic of China* and other laws and regulations. We have established our human resources system such as the *Human Resources Management System* and *Rules for the Management of Employee and Labour Relationship* to create fair employment environment, continuously improve the salaries and benefit system, build an open communication environment and effectively protect the rights and interests of every employee.

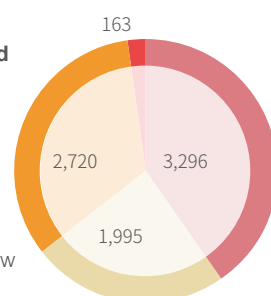
### By rank

- Senior management members
- Middle management members
- Basic management members
- Ordinary employees



### By education background

- Master's degree and above
- Beachelor's degree
- Associate degree
- Senior school and below



### Diversity and equal opportunities

We are committed to build an employment platform with diversity and equality, uphold the philosophy of inclusivity, attract talents with different background, promote workplace inclusion and motivate and cultivate a diversified and high-quality talent echelon.

Total workforce by gender employment type, age group and geographical region:

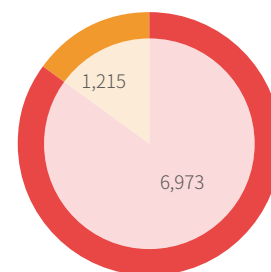
Total number of employees

# 8,188

Note: Including 7,465 employees of the Company and 723 contracted workers

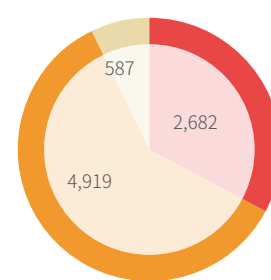
### By gender

- Male employees
- Female employees



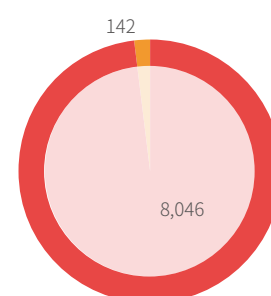
### By age

- Employees aged 30 and below
- Employees aged 31-50
- Employees aged 51 and above



### By region

- Employees in Guangzhou
- Employees in Zhongshan and Dongguan



Number and rate of employee turnover by gender, age group and region:

Total employee turnover

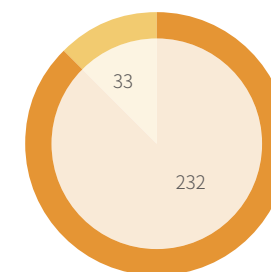
# 265

Employee turnover rate

# 3.23%

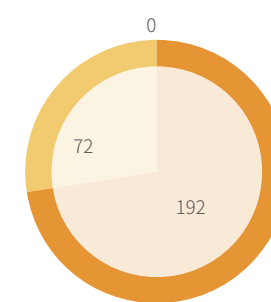
### By gender

- Male employee turnover
- Female employee turnover



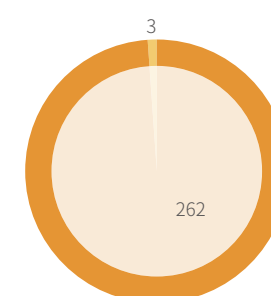
### By age

- Turnover of employees aged 30 and below
- Turnover of employees aged 31-50
- Turnover of employees aged 51 and above



### By region

- Employees in Guangzhou
- Employees in Zhongshan and Dongguan



### Equal employment

We strictly abide by the *Labour Law of the People's Republic of China*, the *Labour Contract Law* and other laws, regulations and policies. We have formulated sound human resources management system and established strict and transparent recruitment mechanism. We sign labour contract with employees on the basis of fairness, voluntary and agreement, ensure that employment opportunity, promotion and fair treatment are not impaired due to factors such as race, colour, gender or age, and eliminate child labour and forced labour in any form, providing a fair and just employment environment for talents.



### Transparent recruitment

We have formulated the *Recruitment Management Rules*. We make detail study on demand before recruitment, adopt scientific and strict recruitment process to attract extensive fresh graduates and talents from the society to submit their resume, and the process of recruitment interview is standardised, clear, fair and transparent, so as to attract talents with an open and inclusive attitude.



### Standardised employment

We have formulated the *Employee Attendance and Labour Discipline Management Regulation* to clarify management responsibilities and authorities, employees' working hours, attendance management, rest and vacation management, vacation benefits, appraisal requirements, etc. In strict accordance with relevant national laws and regulations, we prohibit the use of child labor. In the recruitment process, information is strictly reviewed to ensure those recruited comply with laws and regulations. The Company has never employed any child worker.

Employee labour contract signing ratio of

# 100%

Number of employees from community recruitment

# 21

Number of employees from campus recruitment

postgraduates

# 27

undergraduates

# 219

junior college and secondary school graduates

# 120



**Remuneration and benefits**

We have formulated and implemented performance and benefit management systems, and provide employees with diversified supplementary benefits in addition to the social security insurance contribution required by national laws. Meanwhile, we continuously improve the remuneration and performance management system, and establish salary increase plan and incentive mechanism that correspond to the value of talents to enable employees to enjoy decent work and a quality life.

**Sound remuneration system**

We have established a broadband remuneration system based on position salary and performance salary to take into account of employee's performance, and adjust employee's position salary and performance salary standard according to the salary management measures based on the promotion of employee's personal rank or position. We have formulated the management measures for the allocation of total salary, and link employee's performance salary with the performance of the organization.

Average days of paid leave  
per employee**12** daysEmployee social insurance cover-  
age ratio**100** %**Performance feedback mechanism**

We have revised the *Employee Performance Management Rules*, under which the performance appraisal of employees at all levels links with relevant KPI of their departments. The appraisal results will pass through the hierarchy with rewarding the good and punishing the bad. In addition, in order to motivate outstanding performance of employees, we have developed incentive policies such as key talent subsidies and milestone bonus.

**Diversified benefits**

In addition to paying various social security insurance and provident funds for employees in accordance with laws and regulations, we implement enterprise annuity protection plan and monetary housing allowance policy to provide diversified benefits to our employees.

**Democratic communication**

We actively promote democratic management, continue to improve and deepen the staff congress system, listen to employees' voices and address their concerns, in an effort to establish a harmonious and stable labour relations with employees.

Percentage of employees  
joining labour union**100** %Promote  
democratic  
constructioncollect  
reasonable  
suggestionsListens to  
employees'  
voice

We organized the fifth meeting of the 15th session of the Staff Congress and sorted out 20 opinions and suggestions from various employee representative groups. We organized functional departments to give replies and the implementation of the opinions and suggestions are supervised by labour unions quarterly.

We organized reasonable suggestion collection activities from employees on "double first-class construction and safety promotion" and "energy conservation and emission reduction". A total of 293 reasonable suggestions was received, and we publicized, promoted, applied and rewarded valuable and useful reasonable suggestions.

We insisted on collecting employees' thoughts in various forms to understand their opinions and suggestions in a timely manner. Throughout the year, we collected 50 opinions and suggestions from various aspects. The labour union categorized and summarized the collected contents, coordinated with the functional departments to deal with them, and provided feedback on their handling to the relevant teams.

**PROMOTE STAFF  
DEVELOPMENT**

The growth and development of our employees is very important to the enhancement of the Company's competitiveness. We have established a multi-channel and multi-level training system and a clear and diversified career development path for employees to facilitate their ability enhancement and help them realize their self-worth.

**Ability enhancement**

Combining "online + offline" modes, we develop various forms of training programmes catering for the training needs of employees of different kinds and in different positions to help each employee to enhance his ability and achieve the common growth of employees and the Group. In 2021, the Company developed a total of 106 training programmes, with 6,997 person-times of training completed and a training rate of 85%.

**Establishment of Huangpu  
Wenchong College**

It is an online learning platform of Huangpu Wenchong, and 4,000 courses were added on it. The platform is connected to the monitoring platform of Guangdong Province to carry out online government-enterprise cooperation projects

**Launching the "Ship Succession  
Plan" internal trainer course**

We have completed the development of learning maps and training of internal trainers, among which, the technology center team has produced more than 160 items in 30 syllabus for key positions and the production management team has produced more than 600 items in 93 courses for key positions, which can provide guiding materials for the subsequent internal training of employees.

**Establishment of military  
service training system**

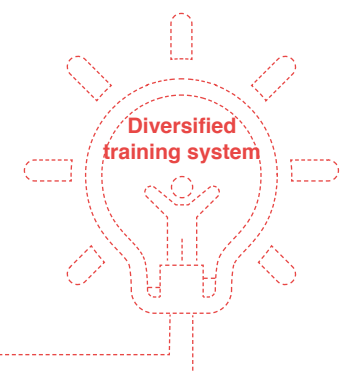
Targeting talents of military product construction, military service and maintenance and emerging industries, we strengthened key product adaptation training and localization training.

**Conducting training on  
comprehensive ability enhance-  
ment for non-job promotion**

We organized comprehensive ability enhancement for more than 240 non-job sequence staff who have joined the Company for nearly 5 years to further enhance the comprehensive ability of staff and improve work efficiency.

**Establishment of cadre  
training system**

We have established a pyramid-shaped cadre cultivation system to open up the full path of staff development from fresh graduates to managers.

**Setting Sail Programme  
— fresh graduate training**

We carry out two stages of training for new recruits, being pre-job training and job adaptation training. Pre-job training takes role change and workplace empowerment as the training objectives, while job adaptation training takes actual workplace scenarios as the teaching scenarios to complete the training of new employees from getting on board to job competency.



Setting Sail Plan —new employees participating development training



Navigation Programme—outstanding university graduate participating in centralized training

**Navigation Programme (Second term)  
—outstanding university graduate training**

With the goal of cultivating outstanding reserve cadres, the Navigation class aims to cultivate comprehensive workplace qualities and improve readiness by providing centralised training in various types of business and management for outstanding university graduates with potential in the Company.

**Yuanhang Programme (Second term)  
— training for outstanding young cadres**

Through the introduction of the action learning method, the programme strengthened the problem analysis and solving ability and political literacy of young cadres, and ultimately achieved the three major goals of "learning history and increasing confidence, management improvement and unity of knowledge and action".



Yuanhang Programme — the Company held training seminar for outstanding young cadres





## By gender

## Number of employees trained (persons)

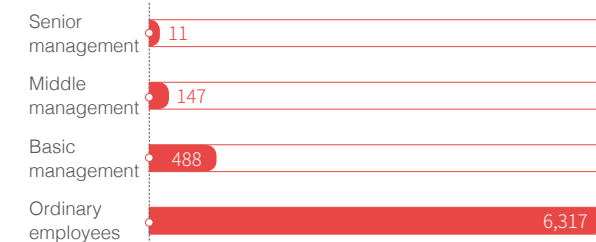


## Employee training time per capita (hours)

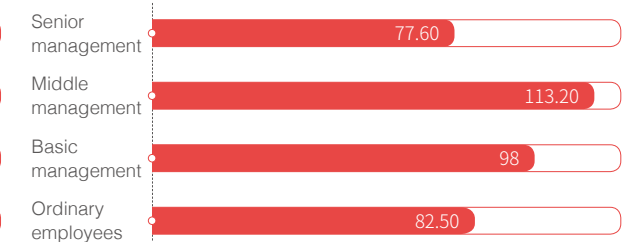


## By rank

## Number of employees trained (persons)



## Employee training time per capita (hours)



Training course for internal trainers of the Company

## Career development

We provide a variety of career development paths for each employee to broaden their development paths and provide multiple options for their career development.



### Opening up the career development path conversion mechanism between management and non-job sequence

We open up the exit mechanism for management personnel, giving full play to the role of personnel transferred to non-job duties in "passing on, helping and leading" and guiding other employees in various fields of the Company.

### Establishing multiple-position development mechanism for outstanding cadres

We select and place outstanding young cadres in important positions for training, and at the same time strengthen training and provide sufficient assistance to promote the rapid growth of cadres.

### Building a point-based development path to promote the rapid development of young staff

We established a "1-17 level" non-job sequence career development channel system, with the levels based on points and complemented by supporting system to fully stimulate the vitality of talents, and the talent structure has been transformed from "pyramid shape" to "olive shape".

### Establishing the "Qihang, Yuanhang and Yinhang" management development path

A reserve team of grass-roots, middle-level and high-level cadres is selected from them to form a talent pool with a clear hierarchy.



## FOCUS ON HUMANISTIC CARE

We not only care about the growth and success of our employees, but also care about their happiness. We actively provide assistance to disadvantaged groups such as employees in financial difficulties and female employees, and organize rich and extensive employee activities to balance their work and life so that more employees have a sense of belonging, happiness and gain.

### Enrich the life of employees

Taking the opportunities of the 100th anniversary of the founding of the Party and the 170th anniversary of the establishment of the factory, we promoted the organisation and establishment of recreational sports associations, arranged the opening of the employee service station and the cultural center venue. In 2021, we organized themed cultural and sport events, and held sports competitions such as the New Year's Day round the factory run, the Chinese New Year Cup soccer tournament and badminton games, and cultural and recreational activities such as dumpling banquet, staff's academy and culinary competition, which had more than 2,000 participants.



"New Year Cup" soccer tournament



The New Year Round the Factory Run



Outdoor off-road

### Care for employees

#### Visit special groups

On Taking the opportunity of major festivals, we visit model workers, employees working overtime on holidays, in financial difficulties, hospitalized due to injuries or sickness and disabled due to work, and bereaved family members of employees who died due to work. In 2021, we organized visit of hospitalized employees in a total of 353 person-times, distributed medical subsidies and subsidies for financial difficulties in a total of 100 and 627 person-times respectively, and established files of 64 employees in difficulties for labour union to arrange regular visit and assistance.



Sending coolness to the frontline



Culinary competition



Basketball game



Visiting key employees and families

#### Care for female employees

Our three factories held 2 female employee health lectures, 1 parent-child education lecture, and 2 female staff quality improvement lectures, with a total participants of 181 person-times. We arranged free gynecology two-cancer screening for 100 female employees, renewed and newly enrolled 155 female employees in the Guangzhou Women Workers' Health Insurance Scheme, and visited female employees in financial difficulties for 22 person-times. We have diligently maintained and managed the "mother's room" in two factories to provide humanized service to help female employees to go through their special physiological stages.

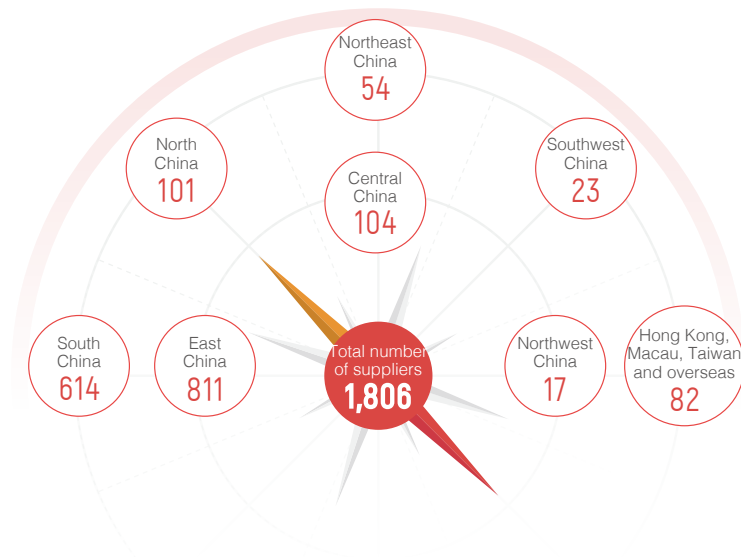


Caring for female employee activity on Women's Day



## BUILDING RESPONSIBLE SUPPLY CHAIN

Supply chain is an important foundation for enterprise development. We insist on creating an open and transparent procurement environment, improve the supplier management system and process, and strengthen communication and training of responsible suppliers. We help suppliers to grow while promoting the Company's development, creating a good atmosphere of common development and responsible supply, and realizing the sustainable development of upstream and downstream enterprises in the supply chain.



## COMPREHENSIVE SUPPLIER MANAGEMENT

The Company has established management system such as *Supplier Management Regulations*, and established a whole process operation and control mechanism for supplier admission, supervision and evaluation, and removal, so as to drive suppliers to grow and develop together with systematic management and professional support, and create greater value with supply chain enterprises in a broader space.

Number of supplier conference **1**

Number of supplier training **1**

Number of suppliers trained **30**

Suppliers trained as a percentage of total suppliers **1.30%**

Number of suppliers evaluated **2,190**

Suppliers evaluated as a percentage of total suppliers **100%**

Number of civil product suppliers evaluated as qualified **1,725**

Number of military product suppliers evaluated as qualified **465**

Number of suppliers eliminated due to ESG issues **0**

Number of suppliers selected by quality standards

Number of suppliers selected by environment standards **1,176**

Number of suppliers selected by occupational health and safety standards

### Supplier management

Suppliers are selected according to the criteria of "excellent quality, price contract, timely delivery and good after-sales service". Based on the annual evaluation results, the Purchasing and Supply Chain Management Committee identifies strategic suppliers and core suppliers, and gives preferential conditions such as preferential selection of procurement, increasing the proportion of orders, and helping suppliers to improve their brand influence.

Basic conditions for supplier admission are put in place and the admission mechanism includes site inspection, qualification review, admission review, etc. In 2021, through collecting and approval of supplier qualification materials enabled by information system, we admitted a total of 310 suppliers, and organized approval of interim suppliers and admitted a total of approximately 309 interim suppliers during the year, which ensured the smooth running of our procurement.

We have compiled the *2021 Supplier Annual Site Review Work Plan* to conduct a penetrating on-site review of the quality control of 15 key suppliers and their second-round packages in each region; and compiled the *2021 Supplier Annual Site Review Work Plan* to conduct review on suppliers in respect of quality management system and social responsibility requirements, and completed on-site review of 29 suppliers during the year.

We have established a supplier cyclical supervision and performance evaluation mechanism on an annual basis. The performance evaluation is in three forms including real-time evaluation, regular evaluation and annual evaluation. We timely organize supplier problems rectification, interviews and accountability, etc. In 2021, the supplier evaluation rate was 100%, and 30 suppliers were evaluated as outstanding and 2 as unqualified, and we black listed 2 suppliers and interviewed 13 suppliers and issue warning letters to 14 suppliers.

- **Supplier conference was held** with over 70 representatives from 33 qualified suppliers attended and integrity agreement signing ceremony was held, strengthening exchanges with suppliers;
- **Supplier forum was held** to interview 12 suppliers, and we conducted close-loop tracking of suppliers' subsequent rectification measures, in an effort to grow with suppliers together.



Screening



Admission



Review



Evaluation



Communication and training

### Case ▲ Holding the Second Supplier Conference

On 26 April 2021, the Company held the Second Supplier Conference of "Cooperation for win-win and creating and enjoying the future". At the Conference, outstanding suppliers were commended and the integrity agreement signing ceremony was held, with over 70 representatives from 33 qualified suppliers attended the Conference. Speech and exchanges were made at the Conference on the Company's supplier management, market operation, procurement, quality control, etc. Through the Conference, the "close" and "integrity" relationship was strengthened, mutual understanding increased and cooperation consensus reached, laying a solid foundation for better cooperation.



## OPEN AND TRANSPARENT PROCUREMENT

We insist on implementing the "sunshine procurement" project, following the principles of fairness, justice, openness and selection of the best, and formulated regulations and systems such as *Material Management System* and *Centralized Procurement Management Measures*. We promote the implementation and application of a unified e-commerce procurement platform, take multiple measures to standardize procurement, creating a fair and transparent environment of healthy competition for suppliers, and realizing the optimization of procurement quality, cost, service and efficiency.

Localised procurement rate of

**90.60**%

Ratio of procurement through public bidding for the year of

**100**%

## ENCOURAGE RESPONSIBLE SUPPLIERS

We value the work of our suppliers in actively fulfilling their corporate social responsibility, and fully control the environmental and social impact of our own business and that of our suppliers. We require and regularly review the compliance of qualified suppliers with national laws and regulations on quality, safety and the environment.

### Evaluate standards related to suppliers' social and environmental risks

#### Raising admission standard

Suppliers are required to provide system certifications in respect of quality, safety, environment, etc.

#### Regular checking

In the management of the suppliers using process, the supplier's safety, environmental protection, occupational health management and other aspects are effectively confirmed and periodically checked.

#### Raising the weighting of review

Regular on-site review of suppliers, including "environment, financial position and social responsibility" as the focus of the review, including environmental certification, environmental facilities, corporate legality, existing environmental factors and risks, environmental protection system or environmental management system, solid waste disposal, whether environmental incidents have occurred.

#### Ensuring integrity in procurement

We enter into an *Integrity Agreement* with qualified suppliers. If any supplier is found to be in breach of the *Integrity Agreement*, we will terminate the contract and blacklist the supplier. Those who have breached the law will be held responsible under the law. In addition, we evaluate the integrity of suppliers on an annual basis. In 2021, there was no integrity problem found.



# GIVING BACK TO THE SOCIETY

We respond to national calls and actively engage in rural revitalisation and public welfare volunteer service activities, building a stable and harmonious social environment with action and conveying warmth and love to the public with practice.

## ENTHUSIASM FOR SOCIAL WELFARE

We actively carry out public welfare and charitable activities and encourage our employees to give back to the community through practical actions. In 2021, the Company set up four volunteer service teams, namely Chunfeng, Yangguang, Qingnuan and Yuanmeng, and carried out 10 volunteer service activities, serving for a total of 1,000 person-times and approximately 4,000 service hours.

## HELPING RURAL REVITALISATION

In 2021, China has entered the opening year of the full implementation of the rural revitalization strategy. The Company continued to invest more resources and made use of its consumption to help poor rural areas improve their living standards. We purchased poverty alleviation agricultural products of RMB2.19 million from Heqing County and Mengla County, which completed our planned mission and conveyed the social commitment of CSSC people with love.

Enthusiastic employees are organized to form the domestic affairs assistance service team to provide home cleaning and laundry services for widows, orphans, and retirees with mobility problems, and provide them with attentive and considerate support services.

The Qingnuan domestic affairs warm assistance service team

Tutoring volunteer service team is formed to provide tutoring services such as academic tutoring for the children of employees and contracted workers in need.

The Yuanmeng tutoring volunteer service team

Young volunteers are regularly organized to provide services such as repairing bicycle and electrical appliances, mending work garments, haircut and mending shoe for our employees, contracted workers and retirees at the gate of the Company, the Huangchuan and Wenchuan living areas and the Longxue plant areas.

The Chunfeng convenience pioneer service team

The medical care service team is organized by enthusiastic people in the medical system. The team popularizes medical and health care knowledge in the Huangchuan community and carries out free medical consultation activities to provide convenient free medical services for our employees, contracted workers and retirees.

The Yangguang medical care service team

# OUTLOOK FOR 2022

Pursuing our dream in the new journey, endeavouring to create future.

2022 is the year of the 20th Party Congress and an important year for the implementation of the 14th Five-Year Plan. In the face of the still complex market environment and severe external situation, we will continue to be guided by Xi Jinping’s thought on socialism with Chinese characteristics for a new era, and thoroughly implement the spirit of the Central Economic Work Conference and the Group’s annual work meeting. Focusing on the business direction of strengthening civil-military, perfecting marine and refining non-ship businesses, we will seize the opportunities, ride the momentum and use science and technology innovation to seek new development of civil-military business and promote the optimization and upgrading of civilian products. We will make unremitting efforts to realize a strong shipbuilding country, a strong manufacturing country and a strong marine country, and make contributions to win the 14th Five-Year Plan battle for high-quality development and achieve the goal of the second century, so as to welcome the 20th Party Congress with excellent results.

Against the strong wind in a journey so long, shouldering the great mission we will stride again strong. Looking ahead, we will continue to fulfill our economic, social and environmental responsibilities and join hands with our stakeholders to achieve a brighter and more sustainable future with more impactful responsibility fulfillment practices.





LIST OF LAWS AND REGULATIONS

In order to ensure compliant operation, COMEC has timely carried out the identification of laws and regulations and compliance assessment, developed the relevant management rules and regulations and implemented the relevant requirements. The table below sets out the laws and regulations applicable and material to the Group. During the Reporting Period, the Group had strictly complied with the relevant laws and regulations and not violated any law or regulation.

Laws and regulations corresponding to the aspects set out in the ESG Reporting Guidelines <sup>1, 2</sup>	
A. Environmental	
Aspect A1: Emissions	
◦ Environmental Protection Law of the People's Republic of China	◦ Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste
◦ Environmental Protection Tax Law of the People's Republic of China	◦ Air Pollution Prevention Law of the People's Republic of China
◦ Land Resources Protection Law of the People's Republic of China	◦ Emergency Response Law of the People's Republic of China <sup>B2</sup>
◦ Soil Pollution Prevention Law of the People's Republic of China	◦ Administrative Measures for Hazardous Waste Disposal Forms
◦ Water Pollution Prevention Law of the People's Republic of China	
B. Social	
Aspect B1: Employment	
◦ Labour Law of the People's Republic of China <sup>B2, B4</sup>	◦ Law of the People's Republic of China on the Protection of Women's Rights and Interests
◦ Labour Contract Law of the People's Republic of China	◦ Law of the People's Republic of China on the Protection of Disabled Persons
◦ Social Insurance Law of the People's Republic of China	
◦ Labour Dispute Mediation and Arbitration Law of the People's Republic of China	
Aspect B2: Health and Safety	
◦ Production Safety Law of the People's Republic of China	◦ Occupational Health Examination and Management Measures
◦ Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases	◦ Measures for the Supervision and Administration of Employers' Occupational Health Surveillance
Aspect B4: Labour Standards	
◦ Law of the People's Republic of China on the Protection of Minors	◦ Provisions on the Prohibition against the Use of Child Labour
Aspect B6: Product Responsibility	
◦ Advertising Law of the People's Republic of China	◦ Tort Liability Law of the People's Republic of China
◦ Intellectual Property Law of the People's Republic of China	◦ Anti-Unfair Competition Law of the People's Republic of China <sup>B7</sup>
◦ Trademark Law of the People's Republic of China	◦ Anti-Monopoly Law of the People's Republic of China
◦ Patent Law of the People's Republic of China	
Aspect B7: Anti-Corruption	
◦ Criminal Law of the People's Republic of China	◦ Interim Provisions on Prohibiting Commercial Bribery
◦ Anti-Money Laundering Law of the People's Republic of China	◦ Tender Law of the People's Republic of China

**Note:** Certain laws cover several issues in the “Aspects” and are marked with asterisks and number of aspects that are covered. It is not an exhaustive list of all laws and regulations observed by the Group, but only the laws and regulations having major impacts on the Group are disclosed.

ESG INDICATOR INDEX

Key scope	Content	Page
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 exhaust and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste	P37-38、P41-42
A1.1	The types of emissions and respective emissions data	P40-42、P43
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	P40
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P41-42
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	P41-42
A1.5	Description of emissions target (s) set and steps taken to achieve them	P37、P39-43
A1.6	Description of how hazardous and non-hazardous wastes are handled,and a description of reduction target (s) set and steps taken to achieve them	P37、P41-42
Aspect A2: Use of Resources		
General disclosure	Policies on the efficient use of resources, including energy, water and other raw materials	P38
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in 1000s) and intensity (e.g. per unit of production volume, per facility)	P40
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility)	P42-43
A2.3	Description of energy use efficiency target (s) set and steps taken to achieve them	P39-40
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	P42-43
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced	Not applicable, packaging is not involved in the production of the Group's products
Aspect A3: Environment and natural resources		
General disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources	P38
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them	P39-44
Aspect A4: Climate Change		
General disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer	—
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	P37
B Social		
Employment and Labour 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, anti-discrimination, and other benefits and welfare	P47-48
B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region	P47
B1.2	Employee turnover rate by gender, age group and geographical region	P48
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.	P31-32



Key scope	Content	Page
B2.1	Number and rate of work-related fatalities occurred	P32
B2.2	Lost days due to work injury	P32
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored	P32
Aspect B3: Development and Training		
General disclosure	Policies on improving employees’ knowledge and skills for discharging duties at work. Description of training activities	P50
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management)	P51-52
B3.2	The average training hours completed per employee by gender and employee category	P51-52
Aspect B4: Labour 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 labour	P48
B4.1	Description of measures to review employment practices to avoid child and forced labour	P48
B4.2	Description of steps taken to eliminate such practices when discovered	P48
Operating Practices		
Aspect B5: Supply Chain Management		
General disclosure	Policies on managing environmental and social risks of the supply chain	P55-56
B5.1	Number of suppliers by geographical region	P55
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored	P55
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.	P33-34
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	P23
B6.2	Number of products and service related complaints received and how they are dealt with	P34
B6.3	Description of practices relating to observing and protecting intellectual property rights	P27
B6.4	Description of quality assurance process and recall procedures	P23-24
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored	P34
Aspect B7: Anti-corruption		
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	P11-12
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases	P11-12
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored	P12
B7.3	Description of anti-corruption training provided to directors and staff	P12
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, labour needs, health, culture, sport)	P57
B8.2	Resources contributed (e.g. money or time) to the focus area	P57

## FEEDBACK

Dear readers,

Thanks for reading this report. To improve our performance and our next report, we hope you can give us some feedback on the following aspects:

- Your capacity:

☐ Customer   ☐ Investor   ☐ Government   ☐ Employee   ☐ Partner   ☐ Environmental organisation   ☐ Community   ☐ Media  
☐ Peer   ☐ Others

### Multiple-choice questions:

- Are you satisfied with the overall report?

☐ Yes   ☐ No   ☐ Fair
- Is the information you care about presented in this report?

☐ Yes   ☐ No   ☐ Fair
- Do you think the Company’s corporate social responsibility compliance and the impact on stakeholders are accurately presented in this report?

☐ Yes   ☐ No   ☐ Fair
- Can you easily find the information of interest in this report?

☐ Yes   ☐ No   ☐ Fair
- Are you satisfied with the layout design of this report?

☐ Yes   ☐ No   ☐ Fair
- Which issues disclosed in this report are you most concerned about?

☐ Quality managemen

☐ Technological innovations

☐ Production safety

☐ Compliance operation

☐ Product liability

☐ Responsible procurement

☐ Green production

☐ Emission control

☐ Use of resources

☐ Staff development

☐ Rural revitalisation

☐ Others (please specify)

### Open questions:

- Is there any shortcomings in this report?
- Which contents in this report you wish them to be disclosed regularly?
- What comments and suggestions do you have for our future CSR performance and report?

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