CSSC 中船海洋与防务装备股份有限公司 CSSC OFFSHORE & MARINE ENGINEERING (GROUP) COMPANY LIMITED





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ABOUT THIS REPORT

This report is the thirteenth 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.

The board of directors (the "Board") is fully responsible for the Company's environmental and social strategies and reporting, and has reviewed and approved this report.

TIME FRAME

Unless otherwise stated, the period covered by the information and data in this report is 1 January 2020 to 31 December 2020 (the "Reporting Period"). As some statistical data are related to continuity and comparability, some contents in this report will be extended as necessary.

SCOPE OF REPORT

During the Reporting Period, the Company disposed of 27.4214% of equity interest in GSI and consequently lose control of the firm. As of the end of the Reporting Period, the Company held a direct interest in a subsidiary in Huangpu Wenchong. Unless otherwise stated, this Report provides information and key performance data regarding CSSC Offshore & Marine Engineering (Group) Company Limited, its direct subsidiary CSSC Huangpu Wenchong Shipbuilding Company Limited, and its subsidiaries during the Reporting Period.

BASIS FOR PREPARATION

This report is prepared in accordance with the Guiding Opinions on the Performance of Social Responsibilities by Central State-Owned Enterprises and the Opinions on Better Performance of Social Responsibility of State-Owned Enterprises issued by the State-owned Assets Supervision and Administration Commission of the State Council of the People's Republic of China, the Environmental, Social and Governance Reporting Guide (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") on The Stock Exchange of Hong Kong Limited (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 Sustainability Reporting Guidelines issued by the Global Reporting Initiative (GRI Standards) and the Guidelines for Special Equipment Manufacturing Industry set out in the Guidelines for the Preparation of Social Responsibility Reports by Chinese Enterprises (CASS-CSR 4.0) issued by the Research Centre for Corporate Social Responsibility, Department of Economics, Chinese Academy of Social Sciences in the preparation of this report.

The reporting principles summarised in the Environmental, Social and Governance Reporting Guide, being materiality, quantitative, balance and consistency, have been adopted in the reporting practices of the Company. This report complies with the "comply or explain" provisions set out in the Environmental, Social and Governance Reporting Guide. For detailed cross-references of the provisions, please refer to the index to the Environmental, Social and Governance Reporting Guide set out in Appendix II to this report.

RELIABILITY ASSURANCE

The Company undertakes that this report contains no false statements, misleading statements or material omissions.

ABBREVIATIONS

In this report, unless the context requires otherwise, the following terms shall have the following meanings:

CSSC	China State Shipbuilding Corp
COMEC, Company	CSSC Offshore & Marine Engin
Group , we	CSSC Offshore & Marine Engin
Huangpu Wenchong	CSSC Huangpu Wenchong Shi the Company as of the end of
GSI	Guangzhou Shipyard Internati of the Company as of the end
China or PRC	the People's Republic of Chin

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.

W HOW TO ACCESS THIS REPORT

Stakeholders can access this report on the website of the Company (www.comec.cssc.net.cn) and the HKEXnews website of the Hong Kong Stock Exchange (www.hkexnews.hk).

RESPONSE TO THIS REPORT

If readers 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.

In addition, a reader feedback questionnaire is set out on page 80 of this report. You are welcome to complete and send it to the above email address.

poration Limited	
eering (Group) Company Limited	
eering (Group) Company Limited and its subsidiaries	
pbuilding Company Limited, a 54.5371% owned subsidiary of the Reporting Period	
ional Company Limited, a 46.3018% owned invested company of the Reporting Period	
а	

PERFORMANCE IN 2020

KEY PERFORMANCE

KEY PERFORMANCE

RMB **38,938** million

VALUE OF SOCIAL CONTRIBUTION PER SHARE

кмв **3.75**

OPERATING INCOME

RMB **11,608** million

COMPLETION AND DELIVERY OF SHIPS DURING THE YEAR

34. shi

RESEARCH AND DEVELOPMENT EXPENSES

RMB **590** million

PRODUCT QUALITY AND SAFETY GUARANTEE INVESTMENT

RMB 141.60 million



 \heartsuit

COMPREHENSIVE ENERGY CONSUMPTION PER RMB10,000 OUTPUT VALUE

0283 tonne of standa coal/RMB10,000



TONNE OF STANDARD COAL

NUMBER OF EMPLOYEES

7,618

PERCENTAGE OF FEMALE EMPLOYEES

15.46%

TOTAL NUMBER OF SUPPLIERS

1,970

TARGETED POVERTY ALLEVIATION EXPENSES RMB 2.4.18 million



Note: During the Reporting Period, upon completing its disposal of 27.4214% of equity interests in GSI, the Company will hold only 46.3018% equity interests in GSI and thus will lose its control over GSI, and GSI shall cease to be included in the consolidation scope of the Company from 1 March 2020. The Company balance sheet's closing balance does not consolidate the data of GSI, and the amount for the period shown in income and cash flow statements include consolidated GSI data only from January to February. The financial data involved in this report are all applicable to this principle.

MAJOR HONOURS



Shanghai Stock Exchange Assessment of Information Disclosure Category A (2019-2020)



Jinniu Investor Relations Management Award by China Securities Journal





Most Popular Brand Listed Company on Sina Finance Golden Unicorn Hong Kong Stock Value List





The Best Board by National Business Daily



LETTER TO STAKEHOLDERS

Dear readers,

It is my pleasure to share with you our efforts and achievements in the operation, environmental protection and social responsibility of the Company in the past year.

In 2020, the COVID-19 pandemic drove the world economy into recession, creating unprecedented challenges for the Group. The Group's response was directly influenced by "Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era", as it continued work toward high-quality development while coordinating pandemic prevention and control measures. As a result, the Group was able to resume work and production, and resolutely performing its prioritized responsibility as a strong army to aggressively seize market opportunities, continue to consolidate production management, overcome technical difficulties, and move further towards the goal of creating "a first-class enterprise with leading technology and excellent service in the global marine and heavy equipment market".

We focus on our major business and build a strong marine country. As a state-owned military and industrial central enterprise, we bear in mind the mission and responsibilities given by the country, follow the direction of equipment upgrades, lead the development of the industry with technological innovation, and successfully cutting-edge projects such as drill ships, 4,500 square trailing suction dredgers, intelligent unmanned mother ship support systems, etc. The Group's delivery of high-quality military and civilian ships includes integrated geophysical scientific research ships, the first bolt-on jack-up self-propelled rescue and salvage engineering ship, multiple batches of feeder container ships, and a new generation of Mini Cape bulk carriers and other high-tech and high value-added products were successfully listed. Heading to deep blue ocean,

we comprehensive, serving a strategy which encompasses of marine power in the four major areas of ocean development, ocean utilization, ocean protection, and ocean management.

We adhere to green development to build beautiful homes together. We firmly establish the idea of "lucid waters and lush mountains are invaluable assets", and actively assume the responsibility of environmental protection. Environmental protection factors are inherently considered for every corporate decision, and are integrated into the entire processes of R&D, production and operation. To minimise the negative environmental impact of our products on the environment, we put every effort to promote energy-saving and environmentally friendly ship products which fully meet international convention, for the purpose of leading the sustainable development of the shipbuilding industry, contributing wisdom to the construction of a resource-saving and environmental friendly society, and helping improve the ecological environment.

We insist on being grateful for feedback and pursuing mutually beneficial outcomes. While pursuing high quality development of the enterprise, we are actively pursuing our corporate responsibility and exploring ways to work together with our stakeholders. As part of this, we strive to protect the interests of employees while providing them with a personal business platform to enhance their sense of belonging and accomplishment. We undertake supply chain management on the basis of open and transparent procurement, and work with suppliers toward upgrading the industry chain. In terms of social responsibility, we act within the national anti-poverty strategy while participating extensively in community volunteer charity activities, and pass on love through our own efforts to gather positive social energy.

The world is still in the throes of fighting COVID-19 and adjusting to a new post-pandemic reality. There are still many uncertainties ahead. The Group will move forward by exploring and implementing new concepts as necessary, creating and grasping new opportunities. Amid change, we will work with stakeholders to create a bright future within the framework of the 14th Five-Year Plan.



CHAPTER I ABOUT US

COMPANY PROFILE

operation and are engaged in manufacturing and providing customers w 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 industrial chain

During the Reporting Period, the Company completed the disposal of 27.421 equity interest in GSI and lost control of GSI. As of the end of the Reporting Period the Company directly controlled a subsidiary of Huangpu Wenchong



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.

2018

Guangzhou Shipyard International Company Limited acquired Guangzhou Wenchong Dockyard Co., Ltd.

2015

Renamed as CSSC Offshore & Marine Engineering (Group) Company Limited, and all physical business and assets were transferred to CSSC Guangzhou Longxue Shipbuilding Co., Ltd., and later renamed the then wholly-owned subsidiary as Guangzhou Shipyard International Company Limited

2014

Acquired CSSC Guangzhou Longxue Shipbuilding Co., Ltd.

1993

Guangzhou Shipyard International Company Limited (the previous name of the Company) was established and became the first listed shipbuilding company

1914

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

HISTORY AND DEVELOPMENT



PRODUCTS AND BUSINESS

The Group actively responded to the "Belt and Road Initiative" and implemented international development strategies in order to integrate into global development and promote world connectivity. It focused on the principal industry, strived to realize transformation and upgrading, extended to the high end of the industrial chain, and continuously optimized the industrial structure.

PRODUCTS AND BUSINESS

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.







CORPORATE GOVERNANCE

Under the guidance of the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and the guiding principles of the 19th National Congress of the Communist Party of China, the Group complied with the requirements for regulation of state-owned assets and securities and effectively performed our duties under the Company Law of the People's Republic of China and the Articles of Association of the Company. 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.

In the future, we will continue to improve our governance measures for sustainable development, ensure the establishment and implementation of appropriate business supervision and management procedures and regularly review them to fulfil our responsibilities to shareholders and the society.

COMPANY STRUCTURE

The Group 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, implemented our governance polices, and continued to deepen and improve our "trio-governance" comprising general meetings, the Board and the Supervisory Committee and various governance policies. Through improving our governance level and standardizing our operation management, the Group ensured that all decisions are made in the principles of trust and fairness and that information is published in an open and transparent manner to protect the interests of all shareholders.

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

- determining the Group's operational policies
- considering and approving financial budgets and profit distribution plans, etc.

BOARD

The Board is the chief operating decision maker of the Group and is responsible to the shareholders of COMEC. The Board has (but not limited

- to convene general meetings and report work at general meetings
- to implement the resolutions passed at general meetings
- to decide on the Company's business plans and investment plans
- to formulate financial budgets and profit distribution plans, etc.
- to determine the establishment of internal management institutions and formulating basic management systems
- to manage information disclosure matters of the Company

fully understands the benefits of diversity of Board members to our development and has adopted a Board diversity policy. During the Reporting

SUPERVISORY COMMITTEE

true, accurate and complete. Supervisors shall comply with the laws, administrative regulations and the articles of association of the Company.

- to examine the Company's financial information;

- to examine the financial information such as the financial report, business report and plans for distribution of profits to be submitted by the Board to the general meetings and, should any queries arise, may engage, certified public accountants and practicing auditors to conduct re-

• electing and replacing Directors and shareholder representative Supervisors, and deciding on the remuneration of Directors and

.....



SPECIALIZED COMMITTEES UNDER THE BOARD

Audit Committee 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, and communicating with internal audit department and external auditors independently.

Nomination Committee

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.

Remuneration and Examination Committee The Remuneration and Examination Committee is responsible for developing assessment standards for the Directors, Supervisors and senior management, carrying out assessment and making recommendations, as well researching and reviewing the remuneration policies and programs for the Directors, Supervisors and senior management.

Strategy Committee The Strategy Committee is responsible for the review of the strategic development of the Company. It implements the strategic planning of the Company, monitors the execution of the strategic planning, and timely adjusts the strategic and governance structure of the Company.

RISK MANAGEMENT AND CONTROL

The Group's comprehensive risk management work enables it to maintain a tight focus on attaining its goal of becoming a first-class shipbuilding enterprise. To this end, the Group continuously consolidates audit and supervision efficiency, improves its level of corporate governance and risk prevention, and provides ample support for accelerating the realisation of high-quality development strategies.

Comprehensive risk management ------

The Group has strengthened its management foundation by establishing a compliance committee, organizing leadership and coordinating compliance management work. It closely examines major issues of compliance management, coordinates the handling of major compliance risk events and provide guidance, supervision and evaluation. Notably, the Group had developed an array of systems and rules concerning compliance management, illegal operations, and implementation of the eight-point frugality code as issued by CPC Central Committee, with a focus of three-major and one-large and middle-level personnel management. It continuously optimizes management process, strengthens management foundation, improve work efficiency and quality while minimising the Company's compliance risks.

Audit supervision --

The Group establishes a complete internal control and internal audit system at the governance level, and through its Internal Audit Charter, Internal Control Manual and Internal Control Evaluation Manual, provides the rules, regulations and day-to-day management for the effective operation of the system. The Group has also emplaced "trigger-verification-treatment-rectification-compliance-improvement" procedures for quickly response to non-compliance events and reduction of operational risks of the Company.

During the Reporting Period, the Group carried out an internal audit with the aim of "preventing risks, promoting management and creating value". The audit also encouraged the effective operation of the compliance system and emphasised effective system implementation and key controls. The audit covered key business links, including shipbuilding costs, material procurement, sub-outsourcing, audit of the economic responsibility of the legal representative of the subsidiary, etc. The audit therefore fulfilled the professional value of internal audits: "informing risk, promoting management, and creating value".



RESPONSIBILITY MANAGEMENT

The Group is committed to becoming an outstanding corporate citizen with global influence and strong social responsibility. We integrate our and economy, society and environment and strive to become a leading value creator in the world trusted by the public.

The Group is well aware that practicing social responsibility is not just preparing a report meeting requirements, but more of a long-lasting and

RESPONSIBILITY CULTURE

Corporate vision

Corporate mission

SOCIAL RESPONSIBILITY MANAGEMENT

Social responsibility organisation system	We set up a social responsibility work network with cooperation between departments and implementa the implementation of the requirements for social the way for systematic advance of the social response
Social responsibility practice activities	We actively integrate into community developmer responsibility practice activities in various forms, a service, energy conservation and emission reduction and charity.
Stakeholder engagement	We value the communication with stakeholders. We stakeholders by way of communication and exchang used as important reference when formulating the C plans and conducting responsibility practices and m



deep involvement by key management, coordination and ation by subsidiaries of the Company, in order to facilitate responsibility management at all departments and pave sibility work.

ent, make full use of our advantages, conduct social and practise social responsibility philosophy in customer n, partner cooperation, employee care and public welfare

Ve strive to understand the expectations and demands of ges through various channels, levels and forms, which are Company's sustainable development strategies and action naking information disclosure.

STAKEHOLDER COMMUNICATION PRACTICES

The Group has always maintained a harmonious and mutually beneficial cooperative relationship with stakeholders. It actively responded to the concerns of stakeholders from the perspective of stakeholders and established a smooth, standardized and characteristic stakeholder communication mechanism in order to achieve common development and win-win harmony with all stakeholders.

After a comprehensive analysis of industry chains and macro-environment, the Group's stakeholders mainly comprises seven groups, being government, shareholders, customers, business partners, employees, environment, and community and the public.

STAKEHOLDER ENGAGEMENT



INVESTOR RELATIONS MANAGEMENT

We full accord with the responsibilities and obligations of listed companies to ensure that improving the quality of disclosed information is concise, clear and easy to understand, so that investors can obtain the information necessary for sound judgment and investment decisionmaking. At the same time, we always emphasize good communication and interaction with investors. Through maintaining diversified communication channels such as investor hotline and E-interaction, we respond to investors' concerns in a timely manner; by participating in large-scale strategy meetings, external roadshows and reception of investors research, we actively contact domestic and overseas institutional investors to continuously convey value to the market.

We gradually paid attention to public opinions in the market, especially false statements about the Company, and made timely responses to maintain the Company's image in the market.

During the Reporting Period, the Group received a number of awards, including: Shanghai Stock Exchange Assessment of Information Disclosure Category A (2019-2020), Most Popular Brand Listed Company on Sina Finance Golden Unicorn Hong Kong Stock Value List, Jinniu Investor Relations Management Award by China Securities Journal, and The Best Board by National Business Daily.

VALUE CREATION

In the face of a challenging market environment, we move forward upon the overall national strategy, conform to the industry upgrade trend and practise corporate economic responsibilities in a responsible manner. We are determined to develop our major business, drive transformation and upgrading with technological innovation, build high-quality ships, cultivate stable and sustainable development capabilities of the Company, and promote high-quality development of the Company. Through our own efforts, we create greater value for shareholders and customers, and also contribute to the future development of the shipbuilding industry.

STEADY BUSINESS GROWTH

have be me

BUILDING HIGH-QUALITY SHIPS

INDEPENDENT TECHNOLOGICAL **INNOVATIONS**

Total operating income for the year of RMB

Completion and delivery of **R** ships during the year

Value of social contribution per share of RMB





In 2020, the Group actively tackled the complicated and variable international political and economic situation and industry challenges, persistently developed its major business and optimized production management in order to seize market opportunities. The Group completed the delivery of high-quality ships and marine products, expanded the marine application business and promoted the steady development of the Company to create more value.

Marine 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. The frigates, missile speedboats and carrier support ships built by the Group 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 business



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 equipment

The Group has excellent large-scale processing capability, with business covering energy equipment, engineering machinery, environmental protection equipment 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.

Items Year	Operating income (in RMB100 million)	Orders secured in operation (in RMB100 million)	Total profit (in RMB100 million)	Net profit attributable to the Company (in RMB100 million)	Equity attributable to shareholders of the Company (in RMB100 million)	Value of social contribution per share (in RMB)
2020	116.08	111.29	36.52	36.62	144.32	3.75
2019	218.29	319.46	9.91	5.48	101.48	3.02
2018	192.14	241.29	-24.6	-18.69	97.27	0.44

Case

maritime expedition equipment - "Experiment 6" scientific exploration ship

On 18 December 2020, the "Experiment 6", an integrated geophysical scientific exploration ship finely built by Huangpu Wenchong for the South China Sea Institute of Oceanology, Chinese Academy of Sciences, has been delivered and gone into operation at Changzhou production area.

The ship has a total length of 90.60 metres, a width of 17.00 metres and a depth of 8.00 metres, with economical/ maximum speed of 12.0/17.27kn, generator set + pod electric propulsion and endurance 12000n miles (at 12kn). Its features include moderate tonnage, flexible operation, powerful scientific research function, low fuel consumption, low operating cost, etc.

- The first medium-sized integrated ocean-going scientific exploration ship in the PRC with a main function of geophysical investigation and a combination of multidisciplinary scientific investigation.
- The first scientific exploration ship in the PRC using the latest and most advanced international hybrid cooling D-pod propulsion technology and a new generation of low-noise frequency converters, which reduces the high-frequency electromagnetic noise of the propulsion motor. At the same time, due to the use of permanent magnet motor, the electromagnetic noise of the motor can be minimized.
- A specially-designed seakeeping ship that has excellent performance in wind and wave resistance with innovative use of integrated ship design technology to control bubble interference and a high-web bilge keel.
- The environmentally friendly emissions meet the requirements of IMO TIER III for nitrogen oxide emissions, and at the same time meet the requirements of the Clean mark of China Classification Society CCS.
- The cabin comfort has reached the current scientific exploration ship's leading level in the PRC, meeting the level 2 comfort requirements of China Classification Society CCS.

As a scientific and educational infrastructure construction project of the "13th Five-Year Plan" approved by the National Development and Reform Commission, the delivery of this ship will fill the gap of the PRC's medium-sized integrated geophysical scientific exploration ship. It is also extremely important for facilitating the enhancement of the PRC's ocean exploration capabilities and data sample acquisition capabilities, as well as the development and utilization of ocean space resources, oil and gas minerals and biological genetic resources; maintaining national sovereignty and maritime interests, safeguarding the sustainability of the economic society of the PRC, and accelerating the building of maritime power.



BUILDING HIGH-QUALITY SHIPS

In the process of focusing on high-quality development, the Group has always strengthened the philosophy of "quality is life", insisted on quality first and comprehensively implemented the quality management system by strictly following the national standard and the national military standard of the Quality Management System Requirements. It continuously innovates the Company's quality management approach to promote the refinement of management, in order to ensure the Company is able to stably provide products and services that meet the customer's requirements and applicable laws and regulations, and continuously enhance customer satisfaction.

During the Reporting Period, the Compny produced and supplied products in strict accordance with the laws and regulations relating to quality management where it operates and customers' requirements, and there was no product recall which had a material impact on the Group.

QUALITY MANAGEMENT SYSTEM

As a programmatic document for the establishment, implementation, maintenance and continuous improvement of the quality management system, the Quality Management System Requirements (Manual) illustrates the quality policy and quality objectives, and stipulates the leadership, planning, support, operation, performance evaluation, and improvement. This is a criteria for action in starting various quality activities.





Implementer

Standardized

operation

Each production team implements the quality rules and regulations and carries out quality standardization operation.



QUALITY CONTROL PRACTICES





materials meet specifications

ship construction process



Before signing the contract, we fully communicate with the customers to understand their requirements on ship type, function, quality and standards etc. We conduct full research, planning and review of customer requirements and formulate corresponding plans

We supervise the ship design so that it meets the quality management requirements, and carry out design review in stages to ensure that the design meets the quality output requirements



 $\bigcirc \bigcirc$

ality inspectio

Business management, materials, technology production and procurement departments cooperate in supplier management and carry out inspections of purchased materials such as raw materials and equipment to ensure the quality of materials procured

We set nodes in the full shipbuilding process for quality inspection and control and conduct comprehensive quality inspection of the

We carry out ship inspection with shipowners and follow up on



OUALITY 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 the quality requirements of the product contracts and technical specifications delivered to customers.

The following manners will be adopted according to the stage of the substandard products:

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 reinspection 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

98.24%

First pass rate of process

First pass rate at external delivery 98.49%

First pass rate of parts procured from external suppliers

Product quality and safety guarantee investment

RMB in ten thousand

_ Unit

National excellent quality teams

Unit

Excellent quality teams in Guangdong Province

Outstanding QC teams in Guangdong

h Unit

Province

Participation in training for quality management

Person-times

Case 1 | "Refined Quality Management" writing activity

In 2020, we have organized a writing activity themed "Refined Quality Management". Our staff actively participated and there were altogether 88 essays. After the selection of 38 excellent essays, we compiled and issued The Collection of Huangpu Wenchong 2020 Refined Quality Management Essays for exchange and study among units.

Case 2 | Application technology training of quality management system

On 29 October 2020, Huangpu Wenchong invited the researchers of the quality and reliability centre of CSSC to its factory for the application technology training of quality management system which totalled 92 participants. The experts gave speeches on the reviews and application of the quality management of the new FMEA, the ships supply chain and the quality management capability of the ships research and production unit. Through practical experiences and case analysis, the participants' quality management of the new FMEA and the ships supply chain, and also their quality management capabilities of the ships research and production unit were enhanced.



CSSC Huangpu Wenchong Company Limited was awarded as outstanding enterprise of quality management team of Guangdong province 2020; The management team of CSSC Huangpu Wenchong Company Limited shipbuilding business supporting department was awarded as domestic quality assurance team.

中船黄埔文冲船舶有限公司 优秀企业称号。 特发此证,以资鼓励。

☆

Pores:







© INDEPENDENT TECHNOLOGICAL INNOVATIONS

The Group always regards the building of scientific and technological innovation system as its top priority for high-quality development. We actively respond to scientific and technological innovation policies. With our own development strategy as the base, we strengthen capital investment and scientific research team development to facilitate the industrialization of patent research and development and achievements as the sustainable development of the Group and the industry.

and large-scale R&D companies as well as internal independent structure. Together with the Company's technological innovation system of various business divisions and the technology and process engineering department, we establish a technological innovation system. We have

Research and development expense in RMB 100 million



Research and development expense as a percentage of operating income

19%

Note: During the Reporting Period, upon completing its disposal of 27.4214% of equity interests in GSI, GSI shall cease to be included in the current period included the full year data of Huangpu Wenchong and data of GSI for the period of January to February 2020.



RESEARCH AND DEVELOPMENT TEAMS

The Group maintains the vitality of its scientific research and innovation team by integrating internal and external resources and adopting models such as training, nurture, cooperation and exchanges, participation and self-development of product, which means the Group leverages on both external talent and internal trained staff to improve the quality of its technological team. By stepping up our effort in training elites and talents as well as strengthening our effort in building expert team, the Group will focus on nurturing technical leaders and experts, thereby allow the faster and better development of the Group's scientific and technological talents.





RESEARCH AND DEVELOPMENT PLATFORM

The Group has established 11 scientific and innovation platforms that are above provincial level, examples being a state-level enterprise technology centre, a post-doctoral research station, the Offshore Construction R&D National Engineering Laboratory, the Advanced Ship Welding Technology Enterprise Key Laboratory in Guangdong Province, and the Guangdong Engineering Technology Research Centre (廣東省工程技術研 究中心). The various forms of scientific and technological innovation activities carried out by these innovation platforms have enabled the Group to significantly improve its basic common technology as well as product development capabilities.

state-level and enterprise technology centres



the Technology Centre of CSSC Huangpu Wenchong Shipbuilding Company Limited

Technology Centre of Guangzhou Wenchong Shipyard Co. Ltd



key laboratories

the Offshore Construction R&D National Engineering Laboratory

Advanced Ship Welding Technology Enterprise Key Laboratory in Guangdong Province.

SCIENTIFIC AND TECHNOLOGICAL ACHIEVEMENTS

The Group continuously facilitated the development and technical research of new green, energy-saving and environmentally-friendly ships and ships with high technologies and added-values, strengthened product research and development, and constantly increasing investment in technological innovation. Meanwhile, since scientific research projects and project management are carried out from various perspectives, such as new product development, new technology and new process assembly development, basic technology and common technology research and development, digital and intelligent manufacturing technology research and development, applied technology and achievement promotion as well as standard research, the Group has achieved breakthrough in the critical technological issues it encountered during product design and development, which in turn strengthens the Company's independent innovation capabilities and offers technical support to the Group for realizing its strategic goals.

During the Reporting Period, we focused on in approximately 160 key projects, including an Antarctic krill ship, Sanya carriers and large maritime patrol ship, of which, 61 have been completed research tasks and passed inspection and acceptance. These key projects that completed development include high-tech products including a pile-inserted salvage engineering ship, an emergency command vessel for offshore hazardous goods, and a new geophysical scientific comprehensive research vessel.

Meanwhile, the Group also continues to pay attention to the application of AI technology in the shipbuilding sector, and actively reserves intelligent technology for the shipbuilding industry. During the Reporting Period, the Group followed on from its 2017 delivery of the world's first intelligent merchant ship, the Dazhi, by winning a mother ship construction contract, with the construction work to be supported by an intelligent unmanned system.



Case

Pile-inserted salvage engineering ship

The ship has overcome key technology hurdles such as for the construction of ultra-large diameter pile anchors and pile shoes, the design and commissioning of a double-acting ring beam lifting system, and the installation and commissioning of large-scale leg encircling cranes. This ensures the successful development of pile-inserted salvage engineering ship and enables the ship to become the pile-inserted model with most advanced performance as well as the strongest hoisting and lifting capacity.

Emergency command ship for offshore hazardous goods:

The development and completion of this vessel entailed new hightechnology approaches to the design, construction and testing of wholeship airtightness, the installation and commissioning of the power battery system, the installation and application of the operation safety system in a hazardous gas area, vibration and noise control, the installation of an intelligent integrated information system as well as a grid connection between diesel generators and the power battery pack AC busbar. The successful result of the effort is China's first oil-electric hybrid offshore public service ship, and the first to feature airtight cabin micro-positive pressure to maintain the safety protection system in China have filled a number of technical gaps in the vessel industry.



Note: The statistics for 2020 cover Huangpu Wenchong. Statistics for 2018 and 2019 cover Huangpu Wenchong and GSI.



Patents applied for



Patents granted

Invention patents obtained during the year 7? Utility model patents obtained during the year

62





Patents applied for



Utility model patents applied for and granted

IMPROVING OPERATIONAL EFFICIENCY

Upgrades in management and improvement in technology have made the effect of IT development and integration of digitalization and intelligence in improving production efficiency and the overall business operation. The Group will continue its transform and upgrade towards digitalization and intelligence, facilitate the development of integrated information platform, rebuild the PDM system and the material logistics system and further explore the development and application of workshop management system, with the aim to achieve a balanced and efficient use of resources. In the meantime, the Group will continue to leverage its R&D, and promotion of new technologies and new processes so that the front line of production can reap the benefit from technological innovation, which in turn enables improvement in production efficiency.



Case 1

Digitalisation and tooling facilitate the ground installation of energy-saving guide rollers

Based on big data analysis, Huangpu Wenchong utilised a process that combined total station digital simulation installation with quickpositioning tooling to enable the front to ground section guide rollers to be installed at its shipyard. The moving of work from height to the ground significantly reduced the guide roller construction cycle, as well as the eight-day cycle of ship cabin delivery. The new installation continues to reduce crane load and construction safety risk while improving the construction environment and work efficiency, as evidenced by the reduction in single shipyard period of seven days on average.



Case 2

Application of offshore nickel-copper pipe automatic welding machine on board

In conjunction with design institutions and welding equipment vendors, Huangpu Wenchong unveiled an automatic machine suitable for welding nickel-copper pipe on board and used on scientific exploration ships under construction. According to the physical and inspection data of the welding site, the automatic welder can generate fine weld bead, smooth weld, sharp edges, uniform height, full filling and wonderful appearance, all of which are difficult through manual crafting. The welder can work continuously, enhancing productivity while reducing labour intensity and improve the workshop working environment. It also enable the Company to launch a nickel-copper pipe automatic welding equipment business from scratch, laying a solid foundation for moving forward its intelligent pipe manufacturing and automatic welding business.

Automatic welding of nickel-copper pipes on board and its finished products







UPHOLDING INTEGRITY

impact to stakeholders.

SAFETY MANAGEMENT

INTEGRITY CONSTRUCTION PROMOTING RESPONSIBLE PROCUREMENT

CUSTOMER SERVICES

Provided production safety training for **43,033** person-times

We integrate sustainable development into corporate development. We strictly abide by national laws, regulations and business ethics, uphold higher standards in market practices, and build an accountability structure covering employees, suppliers and customers during the course of operations, thereby creating economic value while taking into account the



Localised procurement rate of



The Group fundamentally adheres to the environmental and occupational health and safety policy of "obeying laws and regulations, caring for health, green shipbuilding and peaceful development". The Group also insists on a people-oriented safe production philosophy that stands firm to protect the lives and health of employees, strictly observes the safety guidelines, deepens the promotion of the construction of safety production standardization in the shipbuilding industry, promotes the application of safety technology research, enhances the level of fundamental safety, actively improves the workplace environment, strengthens the safety monitoring at workplaces and continuously strengthens the governance of hidden dangers to prevent the occurrence of safety production accidents.

	Unit	2020
Minor injury accidents		3
Serious injury accidents	case	0
Major accident		0
Improper wearing of labour protection equipment dealt with	case	639
Lost days due to work injuries	Day	250
Complaints regarding occupational health and safety that have material impact on the Company	case	0



During the Reporting Period, the Group had not receive any complaints regarding occupational health and safety while had a material impact.

SAFETY MANAGEMENT PRACTICES

Production safety management

The Company operates under a safety production accountability system of "same responsibility for the party committee and corporate management, two responsibilities for one position, joint management and accountability for dereliction of duty" . The Group has prepared occupational health and safety and environmental objectives and broken down the objectives for implementation and regular monitoring. The Group has formulated 14 categories and 34 clauses under its production safety management system; 18 categories and 82 clauses under equipment and facilities management regulations; 46 clauses under operational safety management regulations; 79 clauses under workplace safety management regulations; 18 categories and 124 clauses under position operational safety procedures; and 13 categories and 284 clauses under equipment and facilities safety operation regulations.

Occupational health management

In regards to employee health and safety, the Group follows the principle of "focusing on prevention, combining prevention with control and comprehensive management" to emphasise accountability and build a comprehensive occupational health management network. Our occupational disease prevention and control work covers leaders, managers, employees and departments at all levels of the Company. The Group's occupational health management system includes 10 ancillary measures under one category, including a detailed which covers responsibility system for prevention and control of occupational diseases and health examination of employees, publicity, education and training of occupational disease prevention and control, monitoring and evaluation of occupational hazards, etc. Through quantitative assessment of occupational health targets, the Group has been able to strengthen legal education on occupational health, comprehensively improve occupational health levels, facilitate the establishment of self-discipline and constant improvement to the occupational health governance system, and protect workers' occupational health rights.

Occupational health Occupational Detection of occupational hazards examinations for employees health training

Emergency management

We comply with the policy of "Safety first, focusing on prevention, combining prevention with control" . Under the unified leadership, we implement an emergency management system of classified management and responsibility at different levels. We strictly implement a safety responsibility system at all levels, and arrange accident rescue in a fast and effective manner in order to minimize the damages of accidents and disasters. In view of the increasingly frequent extreme weather, we developed an emergency drill plan based on the characteristics and main risk points of our production to cope with the severe situation of typhoon and flood. During the Reporting Period, we organised a total of 31 emergency drills.



Fire-fighting and in-plant transportation

We have implemented a firefighting policy of "prevention first, combining prevention with elimination" to prevent fires and reduce fire accidents. We integrated fire safety work into our overall work plan and earnestly implemented a fire safety responsibility system for organisations at all levels. We standardized traffic safety management in the plant area to ensure orderly, safe and smooth traffic.

Supervision over use of labour protection supplies Occupational disease management

O INTEGRITY CONSTRUCTION

An honest, consistent and open working and entrepreneurial environment is a strong guarantee for the orderly and stable operation of an enterprise. To this end, the Group operates under the guiding principles of the 19th National Congress of the Communist Party of China and the Second, Third, Fourth and Fifth Plenary Session of the 19th Central Committee to strengthen "4 consciousnesses", uphold "4 believes" and achieve "2 maintenances". The Group also operates in full compliance with all relevant laws and regulations. We strengthen honesty and selfdiscipline operation and improve our internal control mechanism and comprehensive management system. By consolidating Party conduct and integrity construction and anti-corruption, the Group can facilitate the in-depth development and enable the high-quality development of enterprises.

The Group implements the "two responsibilities for one position" requirement under the Party conduct and integrity construction to further consolidate its two responsibilities of comprehensively and strictly governing under the Party, and organizes management personnel at all levels of the Company to execute 623 letters of responsibility for the Party conduct and integrity construction, passing the sense of responsibility down the hierarchy.

During the Reporting Period, the Group organised a "2020 Disciplinary Education Study Month" aimed at refreshing employees' integrity education. This included a series of "integrity culture" promotions, self-learning and group learning sessions, document and film reviews, and internal learning as well as interactive learning between government and enterprise, to educate integrity comprehensively, instill an anticorruption and anti-temptation philosophy and enhance the awareness on compliance and discipline, laying down a solid foundation for creating a clean, honest, efficient business environment that deliver good atmosphere for work and entrepreneurship.

Through petitions and reports to discipline inspection and supervision departmen audits, internal control evaluation as well as a number of special methods for review and supervision, the Group strengthened the integrity risk prevention and control education, supervision and accountability for key areas, links or positions, which has effectively prevented corruption, By condare not corrupt, cannot corrupt and do not want to corrupt, the management personnel at all levels of the Cc

Case 1 "Integrity Culture Manual"

Huangpu Wenchong's "Integrity Culture Manual" to facilitates integrity education and promotes integrity concepts via multiple channels and perspectives. The Manual refines the Company's integrity philosophy of "building uprightness, observing rules, strict selfdiscipline and doing practical things" , setting out five provisions under the Integrity Code of Conduct for Managers with 15 clauses for the negative behaviour list, as well as 5 provisions under the Code of Integrity and Conduct for Sensitive Positions with 50 clauses for the negative behaviour list.

Case 2 Study and exchange during the Disciplinary Education Month

On 28 October 2020, the Company organized its managers, who are party members, and all other party members to exchange ideas on work and measures related to the Disciplinary Education Study Month with the Discipline Inspection Committee and Supervision Committee of Guangzhou Tiahe District Government. This is to echo the Company's educational theme of "Discipline; Respect; Prudence; Persistence; and Leadership" in its disciplinary education 2020 for providing further integrity training and promote integrity culture. At the end of the exchange activity, the participants visited the "Bright Sky and Clear River - Tianhe District Integrity Culture Painting and Calligraphy Exhibition" organized by Tianhe District Discipline Inspection Committee and Supervision Committee together with Tianhe District Federation of Literary and Art Circles.



SUPPLIER INTEGRITY MANAGEMENT

The Group also attaches special importance to the anti-corruption management of suppliers. Through our anti-corruption management framework, we include suppliers in the management scopes to ensure that their suppliers operate business in compliance with regulations and maintain integrity and self-discipline in the industry.

The Group enters into an Integrity Agreement with cooperating suppliers. The Integrity Agreement serves as an appendix to contracts, in which the parties agree to strictly implement the contract terms in the course of business and comply with the provisions in the Integrity Agreement. If any supplier is found to be in breach of the Integrity Agreement, our subsidiaries shall have the right to terminate the contract. Any resulting damages shall be borne by the supplier, which will also be added to the blacklist. Those who have breached the law will be held responsible under the law.

In 2020, there was 0 litigation case arising from the violation of laws and regulations relating to prevention of bribery, extortion, fraud and money laundering that have a material impact on the Company. There was also 0 litigation cases against the employees regarding bribery, extortion or money laundering.



PROMOTING RESPONSIBLE PROCUREMENT

As a large-scale ship assembly company, the Group regards a stable and reliable supply system as a strong guarantee for its sustainable development. By upholding the concept of "integrity, cooperation and win-win", we take into account the value realisation and compliance status of suppliers while advancing the Company's development. The Group insists on creating an open and transparent procurement environment, and generating a good atmosphere for joint development, cooperation and innovation, with the aim to facilitate the improvement in supply chain products and services.

SUPPLIER MANAGEMENT

The Group adheres to the "Sunshine Procurement" policy and advocates survival of the fittest and fairest competition. Through strictly executing relevant regulations and implementation rules of supplier management, the Group carries out standardised and dynamic management over suppliers from admission, daily supervision and management, annual evaluation and removal perspectives. Meanwhile, we will continue to facilitate the development of supplier management informatisation to allow comprehensive and permanent traceability, thereby creating an open, fair and just supply chain.

We have in place a process for adding interim suppliers and carry out standardized review for supplier admission, including qualification certification, product and service quality, design and process technology, production acceptance period and other factors.

Through problem information collection and collation, interviews with suppliers, problem rectification evaluation and supplier accountability, we carried out real-time collection, collation, evaluation and accountability for the problems in suppliers' product quality, product price, supply capacity, technical reliability, service level and contract performance, and conducted statistics and analysis of different suppliers for use as basis for annual review.

We check and comprehensively evaluate the qualifications, supply quality and service attitude of suppliers at least once a year.

According to the severity of the suppliers' problems, we have a list of suppliers "under watch". We suspend further cooperation with them, require them to carry out rectification within the specified period, or we will cancel their qualified supplier qualifications and include them in the blacklist. For example, if a supplier's products have major quality problems or major safety and environmental hazards, we will terminate our cooperation with it, cancel its qualified supplier qualification and include it in the blacklist.



Supplier admission Daily supplier supervision and management Annual evaluation

Removal of suppliers

During the Reporting Period, the Group carried out an annual supplier review in terms of product quality, service and financial position

selected a total of



qualified civil product suppliers

4.54

COOPERATION WITH SUPPLIERS

The Group enhances its mutual understanding and strengthens the cooperation foundation with suppliers in the ordinary course of business through specific interviews and site visits to temporary qualified suppliers before they are admitted. At the same time, the Group strengthens its quality management and assistance to suppliers by organizing various kinds of interviews with 39 suppliers as well as providing them professional opinion and advice on contract delivery progress, quality and service, from which jointly facilitate the improvement in quality of supplied products.

The Group fulfilled its responsibility as a state-owned enterprise to support the business of suppliers amid the unexpected outbreak of the COVID-19 pandemic. Subject to the practice is consistent with the management system, the Group took the initiative to approach, support and assist the business of suppliers. Considering that many high-quality suppliers were facing financial difficulties amid the COVID-19 pandemic, the Group reached out to the high-quality suppliers who were under stress and offer them to pay "early discounted interest". During the year, the policy was extended to a total of 15 suppliers, covering 39 contracts and allowing suppliers to get back RMB31.82 million in a timely manner. Not only did such move alleviate the pressure of suppliers but also ensure the stability of the Company's supply chain.





2020 Social Responsibility Report

13 %

Percentage of suppliers passing quality, environmental and occupational health ar safety management system certifications of



44



CUSTOMER SERVICES

We deeply understand the importance of product responsibility. We strive to improve the relevant management and carry out management and standardization in terms of product labels, product traceability, customer satisfaction, privacy matters and advertising. We are committed to maintaining product quality and protecting the rights and interests of customers.

Customer Services

- Product identification and product traceability
 Collection, statistics and analysis of customer
- satisfaction information
- Protecting customer privacy
- Marketing and promotion

PRODUCT IDENTIFICATION AND PRODUCT TRACEABILITY

The Group has developed and implemented product identification and traceability control related procedures to provide for product identification, product status identification, product traceability identification and the contents, methods and control requirements for batch management to regulate effective management and product traceability. The regulations mainly include the following:

Hanging or sticking labels or tags, or directly marking on the product with steel seal or paint or marking on its accompanying parts shall be adopted for product identification.
For products requiring traceability, they shall be uniquely identified and recorded.
Product status identification shall be carried out through hanging or sticking qualification cards, direct handwriting or marking on the record accompanied with products. Product status identification on production site shall also include labels for areas of products to be inspected, qualified, unqualified or to be determine

CUSTOMER SATISFACTION AND PRIVACY

In order to effectively fulfill product responsibilities, the Group has developed and implemented the relevant management rules as required covering control and management for the service and technical support following product delivery to generally improve customer satisfaction. Furthermore, to effectively understand customers' satisfaction of the services and products of the Group, all of our subsidiaries have developed and implemented the Customer Satisfaction Management Rules, which provide for the collection, statistics and measurement, analysis and utilisation of information on customer satisfaction.

The sources of information on customer satisfaction mainly include direct communication with customers, information obtained from customer examination in product realisation, customer complaints, customer praises, customer survey, customer visits and after-sales feedback.

The business department is responsible for collecting information on customer satisfaction including customers' feelings in the production process and after-sales service process and quality issues raised by customers and passing the information on satisfaction to the quality department. The operation department is responsible for collecting from ship owners, government authorities and fleet detachments information on the satisfaction of the products of the Company, asking for customers' opinions and suggestions and passing the information on satisfaction to the quality department. The quality department is responsible for collecting information on customer satisfaction during the product inspection and test process.

The relevant departments will timely analyse customer satisfaction and deal with the issues reported or pass them to the relevant responsible departments for handling. The quality department summarizes the information on customer satisfaction collected. The military product department or the quality department organises 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.

The Group also attaches great importance to protecting customers' privacy in the course of business by developing and implementing the Customer Properties Control and Management Measures to protect customer properties including their 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 product specifications, design drawings, management or trade secrets of patented technologies.

MARKETING AND PROMOTION

The Group 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. The Group 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.

ENVIRONMENTAL PROTECTION

GREEN PRODUCTION STRICT EMISSION

CONTROL

STRENGTHENING RESOURCE UTILISATION OTHER ENVIRONMENT



GREEN PRODUCTION MANAGEMENT

By upholding the eco-friendly philosophy of "Lucid Waters and Lush Mountains are Invaluable Assets", the Group takes the initiative to undertake environmental protection responsibilities. Our initiatives include incorporating ecosystem and environmental protection into our decisionmaking and integrate these elements into the entire production and operation process, with the aim to keep improving the Company's environmental protection management standard, exploring ways of reducing wastes, process control and end governance as well as consistently promote green shipbuilding to facilitate the coordinated development of economy and the ecological environment.



We strengthen our effort in introducing, accepting and absorbing high-tech products to improve product mix; actively develop marine products with rich technical content and high-added value; and develop and build energy-saving, environmentally-friendly and high-tech marine engineering equipment that satisfies new specifications.



specifications. By passing clean production review, Huangpu Wenchong is accredited as an outstanding clean production enterprise by Guangzhou City. We make the procurement of environmentally-friendly and energy-saving equipment as our priority

and use non-toxic and low-toxic raw materials as much as possible in the production process. We adhere to the procurement principle of "prioritizing environmental protection over cost" .



The Company concerns the greening and landscape of factories and living areas, prioritizes environmental protection in all aspects of new projects, and simultaneously implements measures like water and soil conservation, biodiversity and vegetation protection to create an excellent ecological environment.



ENVIRONMENT MANAGEMENT ORGANISATION SYSTEM

Environment management organisation system

Environmental Protection Committee:	Supreme command and coordi management; General manager a respectively, with department head
Energy Conservation and Emission Reduction Leading Group and Working Group:	Energy Conservation and Emissio manager and the deputy general reduction act as the leader and o members.
Environmental Protection Work Leading Team:	The decision-maker at subsidiar responsible for safety and environ environmental protection work.
Environmental Protection Management Leading Team:	With the general manager as team and the leaders of various key dep management concerning the coor energy-saving and emission reduct
Environmental Protection Management Work Team:	The team is responsible for est management regulations and oper environmental management meas the Company's safety committee re investigates pollution hazards; con emergency response plans; and oth
Execution department:	The safety management depart inspection management of the en- and subsidiaries. The production so concerning the coordination, guida and emission reduction.
Business department:	Full-time and part-time environme production units and precision m specific environmental protection r

Environmental management system

The Group establishes a long-term environmental protection mechanism, which has a complete environmental management system and creates a three-level system that incorporates individual environmental protection system, supporting system and implementation rules. The system covers 15 management system regulations, namely the "Measures for Managing Solid Waste", the "Environmental Monitoring Management System", the "Regulations on Managing the Water Surrounding the Wharf", the "Administrative Measures for Safety and Protection of Industrial Xray Inspection Operation", the "Measures for Reporting, Investigating and Handling of Environmental Emergencies", the "Environmental Protection Responsibility System", the "Environmental Risks and Hazards Identification System", the "Environmental Protection Publicity, Education and Training System", the "Environmental Protection Reward and Punishment Management System" and the "Hazardous Waste Pollution Prevention and Control Accountability System". The desirability of the management system is evaluated and amended every year.

ination body for safety and environmental protection and the Chairman ac t as director and deputy director, ads as kev members.

ion Reduction Leading Group and Working Group: General al manager in charge of energy conservation and emission deputy leader, respectively, with department heads as key

ary level for major policies for environmental protection, nmental protection at subsidiary level; Guide and coordinate

m leader, the deputy general manager as deputy team leader epartments as members, the team is responsible for the daily rdination, guidance, inspection, statistics and assessment of ction.

stablishing and improving the Company's environmental erating procedures as well as supervising the improvement in asures. The team also follows, coordinates and implements resolutions and work arrangements; complies data statistics; ntrols origin of pollution; investigates incidents and prepares ther environmental management works.

tment is responsible for the guidance, supervision and nvironmental protection endeavours of various departments security department is responsible for the daily management lance, inspection, statistics and assessment of energy-saving

ental protection management personnel are deployed at all matching units of the Company and are responsible for the management work of the unit.

STRICT EMISSION CONTROL

GREENHOUSE GAS MANAGEMENT

We closely monitor the global climate change trends, fully implements national and local requirements, and strictly abides by the relevant international conventions. Greenhouse gas management is integrated into energy management business. The objective of directly and indirectly reducing greenhouse gas emissions is achieved by saving energy and improving energy efficiency. During the Reporting Period, the Group launched the 10MW photovoltaic development project in Longxue plant area to promote the use of clean energy and consistently transformed the shore power set up at the wharf. We added 4 shore power sources with a power supply capacity of 1,000kva at the Changzhou plant area, further encouraging onshore ships to use electricity instead of oil.

The Company conducted statistics and quantification for greenhouse gas emissions for scope 1 and scope 2 in accordance with the relevant national guidelines. Scope 1 represents the direct emissions from the shipbuilding production activities of the Group, mainly greenhouse gases emitted from the use of fossil fuels (such as natural gas and oil). Scope 2 mainly comes from indirect emissions generated by electricity consumption of the Company, mainly including electricity consumption in production activities, office electricity consumption (including electricity consumption in offices and public lighting in the plant areas) and domestic electricity consumption (including electricity consumption in staff dormitories and canteens).

During the Reporting Period, the Group's greenhouse gas emissions amounted to 103,955 tonnes of carbon dioxide equivalent.

Greenhouse gas emissions (Unit: tonne of carbon dioxide equivalent)							
Greenhouse gas emissions		2020	2019	2018			
	Natural gas consumption	2,731.00	12,666.29	9,926.72			
Scope 1	Heavy oil consumption	8,321.00	14,860.42	13,747.82			
	Gasoline consumption	478.00	840.92	928.39			
	Diesel consumption	18,584.00	56,197.29	53,080.37			
Scope 2 Purchased electricity		73,838.00	111,525.21	91,033.16			
Total		103,955.00	196,090.13	168,716.46			

Note: The statistical scope of data in 2020 includes Huangpu Wenchong, while the statistical scope of data in 2018 and 2019 includes Huangpu Wenchong and GSI.





WASTE GAS MANAGEMENT

The Group generates different types of waste gas in our production, mainly including dust waste gas, VOC (organic waste gas) and welding dust waste gas. In order to ensure that emissions meet requirements, our subsidiaries adopted activated carbon adsorption, cartridge filtration and catalytic combustion treatment technologies to treat waste gas, regularly maintained environmental protection equipment, and sampled and monitored waste gas emissions. The Group carries out repair and maintenance to ensure that the facilities are operating normally and that the concentration of air pollutant emissions meets the level two standards of second time zone in type two controlling area of the "air pollutant emission limit" of Guangdong Province. During the Reporting Period, Huangpu Wenchong's exhaust gas emissions did not exceed the standard.

During the Reporting Period, the Group focused on VOC and dust exhaust gas treatment by installing additional waste gas collection devices in certain workshops and installing VOC online monitoring systems. The Group newly added the paint mixing room at Pier 5 of the Changzhou plant, pretreatment paint mixing room organic waste gas treatment device within 3m and 4m of Longxue plant area, and sprinkler facilities on the wall of the factory boundary.

	Emission Vent method height	ssion Vent	Particulate matter		Toluene		Xylene		VOCs	
		Emission concentration	Emission rate	Emission concentration	Emission rate	Emission concentration	Emission rate	Emission concentration	Emission rate	
Unit		metre	mg/m ³	kg/h	mg/m ³	kg/h	mg/m ³	kg/h	mg/m ³	kg/h
Steel plate pre- treatment line	Structural emission	15, 22	28.95	0.755	0.03	6.72X10 ⁻⁴	0.44	7.29X10 ⁻³	69.0	1.39
Segmental coating	Structural emission	15, 22	30.9	0.565	0.13	0.0055	0.344	0.0145	6.26	0.26

The total waste gas emissions were **383_28** million standard cubic meters

WASTE MANAGEMENT

The Group generate hazardous waste, general industrial solid waste, domestic waste and construction waste during operation and production. The Group focuses on reducing the generation of waste at the source and is committed to reduce their impacts on the environment. We strive to reduce waste disposal and realise recycling of resources through improving waste classification management and comprehensive utilisation efficiency.

Reducing

waste at

the source

Recycling

Transfer and disposal

Waste management measures

We prepared feasibility study reports for industrial waste disposal and resource utilisation equipment projects, completed the environmental impact assessment for the technical renovation project of paint bucket reduction, and facilitated the waste generation departments to reduce emissions at the source.

We strengthened industrial solid waste classification management, reviewed the industrial solid waste disposal process before emission, made specific rules on waste classification and weighing before emission, and implemented examination and assessment for waste classification, in order to avoid hazardous waste mixed with industrial waste.

We revised and improved the approval procedures for cross-province transfer of hazardous waste and timely carried out hazardous waste transfer disposal. We strengthened hazardous waste management and control, standardized the collection, storage and treatment process of waste paint buckets, paint slags and waste oil and water, improved disposal facilities and storage premises, and assigned full-time personnel for management to ensure reasonable manpower and financial investment. We have established hazardous waste records to ensure traceability.

Waste separation disposal and effectiveness

Category	Туре	Type Disposal method	
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	
Hazardous	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
solids	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		

		Solid	Liquid waste (tonne)			
	Hazardo	us solid waste	Non-hazard	ous solid waste		
2020	Volume generated (tonne)	Volumerecycled (tonne)	Volume generated (tonne)	Volumerecycled (tonne)	Volume generated (tonne)	Volumerecycled (tonne)
	1,473.64	0	14,812	6,183	594.66	0

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



WASTEWATER MANAGEMENT

The Group generates production wastewater and domestic sewage in the process of production and operation, of which production wastewater mainly comes from oily wastewater and industrial wastewater from mooring experiment and pipeline flushing process of ship terminal and workshops. The Group adopts comprehensive prevention and control measures for wastewater in accordance with national and industry standards to increase water reuse rate and reduce wastewater emission.

In addition, the Group adopts effective measures to collect and treat all wastewater generated, including carried out standard collection and transportation of oily sewage and using online monitoring facilities to dynamically monitor wastewater disposal process to prevent environmental pollution. During the Reporting Period, the Group's water pollutant discharge concentration complied with the third level standard for the second period of the "Water Pollutant Discharge Limits" in Guangdong Province, and discharged after the treatment standards are reached.



	n emissions t: tonne)
COD	Ammonia nitrogen
29.353	4.816
0'-	
Q.	
	(Uni

STRENGTHENING RESOURCE UTILISATION

ENERGY CONSERVATION MANAGEMENT

Enhancing the use of resources not only represents a critical way for enterprises to reduce costs and increase efficiency but also a necessary requirement for the coordinated development between society and environment. The Group actively practices low-carbon economy and consistently improves energy utilization efficiency, lowers energy consumption and reduces environmental pollution from management improvement, technical transformation, renewable energy utilization and energy monitoring system development perspectives.

Management improvement

The energy management standard is improved systematically after completing energy management system certification. Disintegrate rigid management layer by layer through strengthening the assessment on energy efficiency index. Take multiple measures from production planning perspective to increase production efficiency and reduce energy consumption.

Technical transformation

Eliminate high energy-consuming equipment in the factory in batches according to the catalog. Purchase and use the energy efficiency rating as an important parameter for purchasing equipment. We promoted the use of LED energy-saving lamps, installed LED lamps in newly-built plants and manufacturing workshops, and upgraded public lighting such as street lamps and corridor lamps to LED lamps.

Renewable energy utilization

Twe make further progress in developing the photovoltaic power generation project with an installed capacity of 10MW in Longxue plant area. Once the project has commenced operation, it is expected that its annual power generation would reach 8 million to 9 million kWh

Energy monitoring system development

The dynamic energy monitoring system of the Changzhou plant area is connected with the platform of Guangzhou Energy Management Center, further improving the metering point access while refining energy consumption measurement. The new dynamic energy monitoring system of the Longxue plant enables the real time monitoring and metering of electricity, gas and wind.



WATER CONSERVATION MANAGEMENT

The Group attaches great importance to water resource conservation. By sticking to our rules of "Water conservation, planned use of water, comprehensive utilisation and improving efficiency", through formulating water conversation plans, upgrading water conversation equipment, strictly monitoring water consumption and regularly inspecting water pipelines to prevent leakage and leakage, effective use of water resources is ensured.

Moreover, the Group also realizes that water conservation depends on the joint efforts of employees. We use energy-saving activity weeks, brochures, slogans and other means to create a water conservation atmosphere and instill a good water usage habits to employees. Resource conservation and environmental protection concepts are integrated into ordinary course of production to improve water usage and avoid waste of water resources.



OTHER ENVIRONMENT MANAGEMENT

In addition to the above waste gas, solid waste and wastewater generated and use of energy and water, the Group also generates noise, radiation and other environmental impacts in our business process. The Group manages such impacts in strict accordance with relevant laws and regulations to minimize the impacts on the environment and community.



We give priority to low noise process and equipment in procurement. We would install noise lowering and reduction devices for high-noise equipment to alleviate the impact on surrounding environment. We also engage a professional company to monitor the noise of each plant on quarterly basis, such that the noise impact can meet the requirements of the regional environmental noise standard.

In addition, we adhere to the principle of "people-oriented, prevention first" in managing environmental protection incidents and strengthen the monitoring and supervision of environmental factors, establish environmental factor prevention systems, improve our ability to prevent and cope with unexpected environmental pollution incidents, enhanced training and drills, and improved risk prevention and control measures for environmental emergencies. Upon occurrence of an environmental pollution incident, we will launch relevant emergency plan, establish investigation teams to investigate and rectify the incident and prepare relevant reports.



We manage the use of radiation devices in strict accordance with the 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.

EMPLOYEES INTERESTS

We always adhere to the people-oriented principle to respect and safeguard the rights and interests of employees and create a warm and peaceful working atmosphere for them. By opening up a broader space for development, we are able to meet the diverse needs of employees and strive to achieve value creation, benefit sharing and winwin solution together.

Total number of employees of **7,618**

Average number of hours of training provided to each employee of



10 days

Average number of hours of paid leave per employee of

PROTECTING EMPLOYEES' RIGHTS AND INTERESTS



MAGunea

FOCUSING ON EMPLOYEE CARE

MARINE PARTY

PROTECTING EMPLOYEES' RIGHTS AND INTERESTS

The Group strictly abides by the laws and regulations relating to employment, and has developed rules and regulations to set out the requirements of the Company for remuneration, dismissal, recruitment, working hours and leaves to ensure that all employees are protected by these rules and regulations. In addition, the Group adheres to the principle of fair, just and non-discriminatory employment and eliminates child labour and forced labour. We encourage employees to participate in management at will and respect and protect the legitimate rights and interests of all employees.

EMPLOYEE REMUNERATION AND BENEFITS

The Group adopts the principle of total salary budget management that focuses on effectiveness and efficiency. To motivate employees to realize their value, we determine salary level upon comprehensively considering their job requirements, personal abilities and performance. At the same time, we also focus on sharing the results of corporate development with employees and strive to improve employee remuneration and benefits to enrich their sense of belonging and happiness.

Employee Salary, seniority allowance, performance bonus, experience allowance and others, of which incentive allowances include remuneration key position allowance, confidentiality allowance, scientific research bonus and milestone bonus.

Employee benefits Social security insurance contribution, major disease insurance, supplementary medical insurance, corporate annuity, paid annual leave, bereavement leave, marriage leave, family visit leave, paternity leave, nursing leave and maternity leave.

TALENT RECRUITMENT

The Group regards human resources as our most valuable resources and actively implements the strategy of strengthening enterprise with talents. We are committed to developing talent resources, adjusting talent structure and ensuring talent investment. Through establishing comprehensive regulations relevant to recruitment management, we clarify the principles, methods and procedures of recruitment and enable a scientific and rigorous recruitment process with clear standards. Meanwhile, we vigorously eliminate employment discrimination as our recruitment notice does not include restrictions, such as gender and ethnicity, and we would not "create a position for anybody". We advocate diversity and provide fair and equitable employment opportunities for applicants.

Recruitment principles:

We adhere to the principles of openness, fairness and justice, selecting the best candidate for the position, and matching of personnel to positions.

Recruitment methods:

We adopt campus recruitment, community recruitment, placement of retired soldiers and internal recruitment. Through multi-dimensional talent solicitation, we allow applicants of different educational background, ages and sectors to have enough channels to participate in our recruitment activities.

Recruitment procedures:

We arrange recruitment procedures in accordance with different recruitment methods. For instance, we follow the sequence of "initiating request, planning, messaging, interview and signing tripartite agreement" in campus recruitment. In community recruitment, the sequence is "initiating request, selecting channel, messaging, interview and making offer".

Moreover, the signing and termination of employment contracts are all carried out in strict accordance with the laws and regulations where the Group operates to fully protect the rights and obligations of employees and the Group. Before executing the employment contract, the Group takes the initiative to check applicants' identity documents to prevent child labour. During the Reporting Period, the Group had not experienced any case of illegal employment of child labour which has had a material impact of the Group.



ELIMINATION OF FORCED LABOUR

The Group resists any act of ignoring and trampling human rights and actively eliminates the forced labour of employees by formulating employee attendance and labor discipline management regulations. Specific measures include:



We clearly stipulate the working hours of employees, attendance management, rest and vacation, vacation benefits, etc. We also report to the Human Resources and Social Security Department for special working hours and do a proper job in daily management.

If any violation is found, the relevant department will report to the management in accordance with internal rules, carry out detailed investigation, and adopt rectification measures for the violation based on the investigation results.

If it is indeed necessary for an employee to work overtime, the employee shall apply for approval, and will be compensated for through deferred holidays in the year arranged in view of the actual production and operation of the department. If no deferred holidays can be arranged, overtime allowance shall be paid by the department in accordance with the rules.

During the Reporting Period, the Group had not experienced any case of forced labour which has had a material impact on the Group.

Employee labour contract signing ratio of









PROMOTING DEMOCRATIC CONSTRUCTION

The Group respects the democratic rights enjoyed by employees, continues to improve its democratic management system with the Staff Council as the basic form, carries out a series of activities such as the collection of reasonable suggestions, listens to their voices, and motivates the establishment of harmonious and stable labour relations with employees.

During the Reporting Period, the Group continued to promote democratic supervision, adopted democratic voting and improved democratic management.

Democratic supervision: During the Reporting Period , the Group solicited 20 proposals and suggestions from employee representatives, allocated the same to respective functional departments for handling, and announced the handling results to all employees through the OA system, ensuring that employees' demands are responded to and the agreements with them are complied with.

Democratic voting: The Group organised regular staff congress meetings, at which the utilisation of benefit expenses and other rules relating to the human resources management were considered and passed, which had protected the lawful interests of employees in accordance with the law. In addition, the Group arranged the signing of collective contracts, including the contracts for protecting the interests of female employees, which were also filed with local labour unions. The Group protected the lawful rights and interests of employees in strict accordance with the terms of contracts and achieved a win-win situation for the interests of the Company and employees.

Democratic management: The Group conducted research on hot issues in labour relations, strived to establish a smooth mechanism for employees to express their claims, and did a good job in daily labour dispute mediation. The Group appointed lawyers in the relevant areas to provide labour consulting and legal assistance, to participate in the investigation and relevant compensation for work-related injury accidents, and to mitigate and resolve our conflicts with employees in accordance with laws and regulations, which has effectively safeguarded our development, implemented our rules to protect employees and promoted a harmonious relationship between the Group and our employees.





By age

61

SUPPORTING STAFF DEVELOPMENT

STAFF TRAINING SYSTEM

The Group has established a multi-channel and multi-level employee training system, and continues to provide employees with training that meets their job needs as well as growth and development, and improves the performance and overall quality of the workforce.

Requirements for training contents

Training for management: Mainly about ideological quality, management ability, leadership and execution ability, knowledge of operation, production and positions, implemented in accordance with the requirements of management hierarchy and professional requirements.

Training for professional business and engineering technical personnel: Mainly about job skills and the relevant business knowledge, carried out by profession in accordance with the job requirements and the needs for staff growth.

Training for employees in production positions and production supporting positions: Mainly about the knowledge required for positions (types of work). The training for and assessment of workers on vocational skills shall be carried out in accordance with the relevant requirements of the Professional Skill Appraisal Standard of the People's Republic of China.

Training for new employees: All new employees of the Company shall receive induction training mainly about corporate profile, enterprise culture, rules and regulations, professional ethics, production safety, quality management, security, family planning and occupational adaptation.

Training for new employees graduating from colleges or technical secondary schools: One-year position training and professional training. By attending training for and study of the production and function departments, new employees experience on-site operation environment and production process and learn about the operation of the relevant positions. Their positions will be determined after they pass the assessment. The department at which a new employee works is responsible for developing and implementing a proposal for professional position training and assigning designated mentor for him/her.

65.77

employees

526.590

average number of hours of train







Case 1 Leading cadres giving lecture on stage

"The central government expressly required leading cadres to give lecture on stage as it represents the extension and deepening of the party's mass line education activities".

In 2020, the Company launched the event which see our leading cadres giving lecture on stage with mid-level cadres joining as well. The Company's leaders led by example to give lecture on stage, tutoring mid-level cadres and relevant staff on 10 occasions. The lectures covered various aspects, including objective management, efficient execution, strategic planning, party-like integrity and production preparation. Midlevel cadres gave lecture based on their business and combining theories with business practice. The Company created a wonderful atmosphere for cadres to give lectures and employees to study, which laid a solid foundation for the developing a learning organization.

Case 2

Performance optimization training (senior management + middle management class)

The Company delicately planned and organized senior management interviews, corporate atmosphere surveys and senior management assessment, with the Company's management personnel whose rank are above the assistant to general manager have participated in the seminar.

We are able to achieve 3 anticipated targets through discussion: the first one is to create a culture of high performance and innovation through the examples set by top managers, from which laying down the foundation for developing a culture of high performance from top to down; the second one is to broaden the thinking of senior leaders on management reform through this executive seminar, allowing senior leaders to think deeply about the higher standards set by this performance reform, from which creating conditions for the Company to improve organizational performance; the third one is to assist senior managers to systematically understand the strengths and weaknesses of their leadership by building their self-awareness and mutual cognition, from which changing their way of thinking and using this as the starting point to consistently strengthen their leadership, improve corporate atmosphere and ignite the energy of employees.

Yuanhang – training for outstanding young cadres Case 3

This training was launched in accordance with the Company's management requirements for "improving execution" and the needs to have candidates with the abilities to "communicate and coordinate" and "teach subordinates". It aims to improve the young cadres' abilities in three aspects: self-management, business management and team management. The project lasted for 110 days, with 14 days of concentrated lecture and revision. A total of 80 outstanding young cadres were selected and recommended by various units to participate. After going through specific topic trainings, such as Sanheba Red Education, management strategies, cross-division communication and collaboration as well as staff counseling strategies and methods, we have strengthened the ideas and beliefs of the young cadres, from which we have improved their working plan during the ordinary course of business and achieved the expected training objectives.



SMOOTH CAREER DEVELOPMENT PATH

The Group pays attention to the cultivation and development of employees. Under a people-oriented corporate culture, it has established a clear, diverse and unobstructed career develop-ment channel for employees to motivate employees to grow rapidly, give full play to their talents, and realize a virtuous circle of enterprise and employee development.

The Group has established three career development paths in accordance with its business needs: management, technical and skill. The Group provides employees with professional technologies or skills with equal status, remuneration and development opportunities to those of management.

Management ladder			Technical lac	Skill ladder	
		onior monogoment	Chief engine	Tachnical avports	
Senior management		eniormanagement	Deputy chief engineers/dep	Technical experts	
evelop	Middle management		Project managers Principal engineers		Senior technicians
ment	Middle management	Construction project managers	Construction project managers Lead engineers		
by cate	Basic management	Project directors	Handling engineers	Senior workers	
egory		Project officers	Engineers	Senior workers	
	Ordinary employees		Project managers	Assistant engineers	Intermediate workers
			Interns	Junior workers	
		Managers	Technical perso	Skilled personnel	



Active participation in competitions to encourage training and nurture highly skilled talents

On 18 July 2020, the welder and fitter competitions of the inaugural "Guangzhou Craftsman Cup" officially began at the Huangchuan Technical School. The competitions attracted a total of 64 candidates from two types of work to participate.

The 2020 Huangpu Wenchong Provincial Second Class Competition was held at the Huangchuan Technical School between 19 and 20 September. A total of 156 hull assemblers, ship electricians and ship pipe system workers participated in the competition. The top 3 of each category would win the title of "Guangdong Province Technical Expert".

Huangpu Wenchong and Xinhang Company jointly won the "Outstanding Organization Award" at the 12th Company Technical Expert Contest of Huangpu District.



FOCUSING ON EMPLOYEE CARE

While consistently improving the working conditions of employees, the Group also cares for their humanistic needs. We satisfy the diverse needs of employees through the care services provided by frontline staff, the assistance given to employees in distress and the availability of a variety of cultural and sports activities. We strengthen the relationship between the enterprise and employees and enable employees to feel the warmth collectively.

VISITING EMPLOYEES

We distribute free supplies to employees on major holidays such as the New Year's Day, the Chinese New Year, the Labour Day and the Mid-Autumn Festival. The Group visited over 821 persons-times, including previous labour models, employees working overtime on holidays, employees in financial distress, hospitalized employees due to injury, disabled employees due to work-related injury and widows of employees dead due to work, and distributed consolation funds, medical allowance and subsidies for employees in financial difficulties in the total amount of RMB572,000.

Meanwhile, the Group purchased protective masks for all employees and labour amid the unexpected outbreak of COVID-19 pandemic to strengthen the preventive and control measures, and extended condolences to employees who affected by the pandemic, expressing the Company's best wishes.



CARING FOR HEALTH OF EMPLOYEES

We care for the physical and mental health of our employees and regularly organize them to participate in health checks to prompt them to duly understand their health conditions. We launch recuperation and leisure activities for employees to relax their minds and bodies, and create a work-life balance working atmosphere. In addition, the Group actively carried out employee care programs, including the Mutual Assistance Plan for Employees in Guangdong Province, the Mutual Assistance Plan for Employees in Guangzhou with Special Diseases, the Hospitalization Mutual Assistance Plan for Employees in Guangzhou and the Hospitalization Care Plan for Labour Union Members in Guangzhou, to alleviate the medical expense burden of employees.

PROVIDING EMPLOYEE BENEFITS

We also carried out various activities to provide services to employees, such as seeking property and vehicle purchase discounts for employees, and ordering train tickets during the Chinese New Year for cooperative workers and contract workers. We focused on solving the most concerned, direct and realistic interest issues of employees.

Case

ENRICHING EMPLOYEES' LIVING

We actively organise cultural and sports activities to encourage employees striking a work-life balance. Employees' sense of belonging and loyalty are strengthened by the enrichment in their leisure cultural life, the demonstration of their good spirit and the improvement in their overall quality.

We organised various cultural and sports activities such as badminton and men's basketball game. We set up staff lecture class, orgainsed special cultural and recreational activities such as the Chinese New Year Factory Run, film screenings, university orientation party and debates. We launched various livelihood projects and upgraded and renovated sports facilities. We also pay attention to the marriage and love issues of employees, organising single employee dating activities.





Dumpling feast











GIVING BACK TO SOCIETY

We always regards building a harmonious society as our mission, actively participate in poverty alleviation and public welfare undertakings, and concentrate our efforts to win the fight against poverty. We actively participate in community communication, organize and carry out various public welfare activities, actively engage in community volunteer services, as well as convey love and positive social energy.

BUILDING A HARMONIOUS COMMUNITY

> Volunteer services p during the year of n

Target poverty alleviation expenses of RMB



vided e thar .500

person-times



The Group believes that by listening and responding to the demands of the community, we can procure all parties to actively solve potential disagreements and build a sustainable development community together. As a responsible corporate citizen, the Group actively participates in the targeted poverty alleviation cause and community volunteer services, carries out commitments with practical actions, and strives to achieve a win-win situation for the common development of the Group and the community.

TARGETED POVERTY ALLEVIATION

1.601.200

1.549.500 51,700

626.300





VOLUNTEER SERVICES

Case

Volunteer services provided during the year of more than





Volunteer Services **6 1 1** hours

OUTLOOK FOR 2021

In light of the complex market environment and challenging external condition in 2021, the Group will continue to use Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era as the guidance to thoroughly implement CSSC's high-quality development outline. We adhere to the general principle of seeking progress while maintaining stability, and embrace new ideas and integrate them into new developments layout. We actively respond to the severe challenges posed by the persistent downturn in shipbuilding market by resolutely fulfilling its main responsibility of strengthening the army. We will continue to expand the ship and marine business as well as strengthen scientific and technological innovation to provide first-class equipment with high-quality and efficiency. By making solid progress on the path of high-quality development, we will strive for the best in becoming a strong nation in shipbuilding, manufacturing and maritime power, making greater contributions to realise the Chinese dream of rejuvenating the Chinese nation.

Mission calls for accountability and shapes the future. We will also undertake economic, environmental and social responsibilities, with the aim to become a world-class enterprise that is trusted by customers, embraced by employees and well-received by community.



APPENDIX I – 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 equirements. 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^{1, 2}

A.Environmental

Aspect A1: Emissions

Environmental Protection Law of the People's Republic of China

Environmental Protection Tax Law of the People's Republic of China

Land Resources Protection Law of the People's Republic of China

Soil Pollution Prevention Law of the People's Republic of China

Water Pollution Prevention 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

Air Pollution Prevention Law of the People's Republic of China

Emergency Response Law of the People's Republic of China $^{^{\ast}\text{B2}}$

Administrative Measures for Hazardous Waste Disposal Forms

B.Social

Aspect B1: Employment

Labour Law of the People's Republic of China *B2, B4

Labour Contract Law of the People's Republic of China

Social Insurance Law of the People's Republic of China

Labour Dispute Mediation and Arbitration Law of the People's Republic of China

Law of the People's Republic of China on the Protection of Women's Rights and Interests

Law of the People's Republic of China on the Protection of Disabled Persons

B.Social

Aspect B2: Health and Safety

Production Safety Law of the People's Republic of China

Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases

Occupational Health Examination and Management Measures

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 Intellectual Property Law of the People's Republic of China Trademark Law of the People's Republic of China Patent Law of the People's Republic of China Tort Liability Law of the People's Republic of China Anti-Unfair Competition Law of the People's Republic of China^{*B7}

Anti-Monopoly Law of the People's Republic of China

Aspect B7: Anti-Corruption

Criminal Law of the People's Republic of China Anti-Money Laundering Law of the People's Republic of China Interim Provisions on Prohibiting Commercial Bribery

1 Certain laws cover several issues in the "Aspects" and are marked with asterisks and number of aspects that are covered.

2 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.

APPENDIX II – ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDELINES INDEX

		Comply or explain	Page
A. Environ	mental		
	exhaust and greed and non-hazardo Note: Waste gas emis laws and regulations.	elevant laws and regulations that have a significant impact on the issuer relating to nhouse gas emissions, discharges into water and land, and generation of hazardous us waste. sions include nitrogen oxides, sulphur oxides and other pollutants regulated by national .Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, d sulphur hexafluoride.Hazardous waste is defined in national regulation.	P49-54, P75
	Key performance indicator A1.1	The types of emissions and respective emissions data.	P51-54
Aspect A1: Emissions	Key performance indicator A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P51
	Key performance indicator A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P54
	Key performance indicator A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P54
	Key performance indicator A1.5	Description of measures to mitigate emissions and results achieved.	P51-54
	Key performance indicator A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	P53-54
		ent use of resources, including energy, water and other raw materials. be used for production, storage, transportation, buildings, electronic equipment.	P55-56
	Key performance indicator A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in' 000s) and intensity (e.g. per unit of production volume, per facility).	P55
	Key performance indicator A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P56
Aspect A2: Use of	Key performance indicator A2.3	Description of energy use efficiency initiatives and results achieved.	P55
Resources	Key performance indicator A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	P56
	Key performance indicator A2.5	Total packaging materials used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	The Group is principal engaged in shipbuildin which does not involve th use of packaging materia for finished products. such, such indicator is n applicable.
Aspect A3: Environment and natural resources	General disclosure Policies on minimizi	ng the issuer's significant impact on the environment and natural resources.	P49-50
	Key performance indicator A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P51-56

	Comply or explain	Recommended disclosure	Page		
B. Social					
	1	Employment and labour practices			
Aspect B1: Employment	Comply or explain				
	 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. 		P59-61, P75		
	Recommended disclo	osure			
	Key performance indicator B1.1	Total workforce by gender, employment type, age group and geographical region.	P61		
	Key performance indicator B1.2	Employee turnover rate by gender, age group and geographical region.	P62		
	Comply or explain				
Aspect B2:		naterial non-compliance with relevant standards, rules and regulations on orking environment and protecting employees from occupational hazards.	P37-38, P75		
Health and Safety	Recommended disclosure				
	Key performance indicator B2.2	Lost days due to work injury.	P37		
	Key performance indicator B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	P37-39		
	Comply or explain				
Aspect B3: Development and training	Description of trainin	g employees' knowledge and skills for discharging duties at work. g activities. to occupational training, including internal and external courses paid for by	P63-65		
	Recommended disclosure				
	Key performance indicator B3.2	The average training hours completed per employee by gender and employee category.	P63		

	Comply or explain	Recommended disclosure	Page			
B. Social						
		Employment and labour practices				
	Comply or explain					
Aspect B4: Labour Standards		elevant laws and regulations that have a significant impact on the issuer g child and forced labour.	P59-61, P75			
	Recommended disclosure					
	Key performance indicator B4.2	Description of steps taken to eliminate such practices when discovered.	P61			
		Operating practices				
	Comply or explain					
	General disclosure Policies on managing	environmental and social risks of the supply chain.	P41-44			
Aspects B5:	Recommended disclosure					
Supply chain management	Key performance indicator B5.1	ce Number of suppliers by geographical region.				
	Key performance indicator B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are i mplemented and monitored.	P42-44			
	Comply or explain					
	relating to health a	elevant laws and regulations that have a significant impact on the issuer and safety, advertising, labelling and privacy matters relating to products ded and methods of redress.	P23-28 P45-46 P75			
Aspect PC:	Recommended disclo	sure				
Aspect B6: Product Responsibility	Key performance indicator B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P25			
	Key performance indicator B6.2	Number of products and service-related complaints received and how they are dealt with.	P46			
	Key performance indicator B6.4	Description of quality assurance process and recall procedures.	P23-28			
	Key performance indicator B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	P46			

	Comply or explain	Recommended disclosure	Page			
B. Social			1 480			
		Employment and labour practices				
	Comply or explain					
Aspect B7: Anti corruption		levant laws and regulations that have a significant impact on the issuer extortion, fraud and money laundering.	P39-40			
	Recommended disclosure					
	Key performance indicator 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.					
	Key performance indicator B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P39-40			
		Community				
	Comply or explain					
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.					
	Recommended disclosure					
	Key performance indicator B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P71-72			
	Key performance indicator B8.2	Resources contributed (e.g. money or time) to the focus area.	P71-72			

FEEDBACK

Dear readers,

_ _ _ _

Hello! Thanks for reading this report during your busy time. It is inevitable that there may be flaws and omissions in this report. In order to improve our report preparation, we sincerely hope to hear your opinions and suggestions. Please feel free to contact us! Your opinions and suggestions will become an important basis for us to improve our report.

Multiple-choice questions: (Please mark " $\sqrt{\ }$ " in the corresponding box)					
	Very good	Good	Fair	Bad	Very bad
Your overall impression of this report:					
You think the quality of information on social responsibility disclosed in this report is:					
You think the structure of this report is:					
You think the layout design of this report is:					
You think the readability of this report is:					
Which issues disclosed in this re	port are you mo	ost concerned abc	out? (L	Jp to three	items)
□ Quality □ Production management □ safety	Technological innovations	Compliance operation		Green management	Green research and development
Green Environmental- production Friendly industry	Staff development	Targeted poverty alleviation	′ □ .	Win-win cooperation	Others (please specify)
Open question: What further opinions or recommendatio	ns do you have on th	is social responsibility	report (or our social re	esponsibility performance?
↔ Mail: 15/F, 137 Gexin Road, ✓ Email: COMEC@ COMEC.CS		Guangzhou			020-81636688 MEC.CSSC.NET.CN