

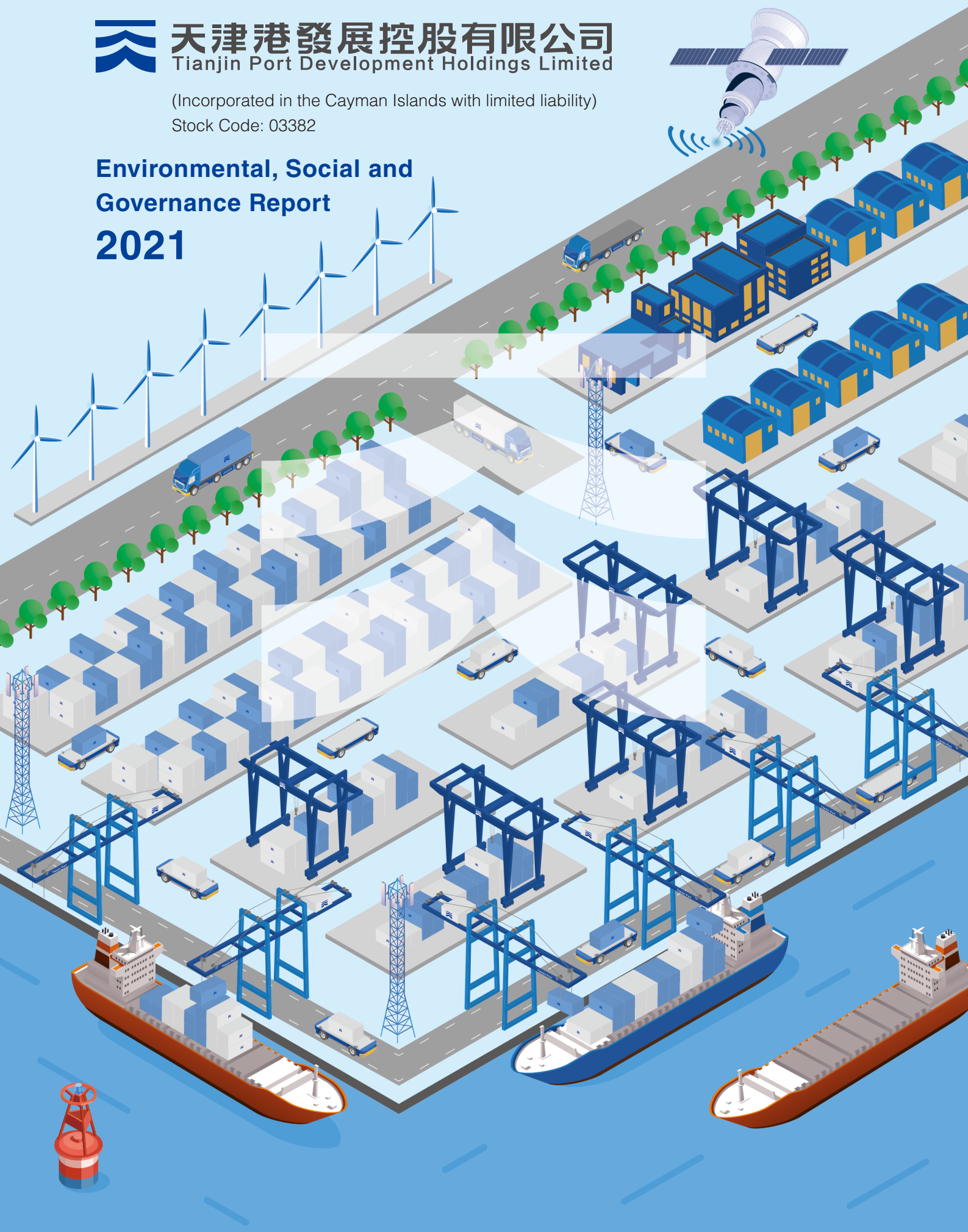


天津港發展控股有限公司
Tianjin Port Development Holdings Limited

(Incorporated in the Cayman Islands with limited liability)

Stock Code: 03382

**Environmental, Social and
Governance Report
2021**



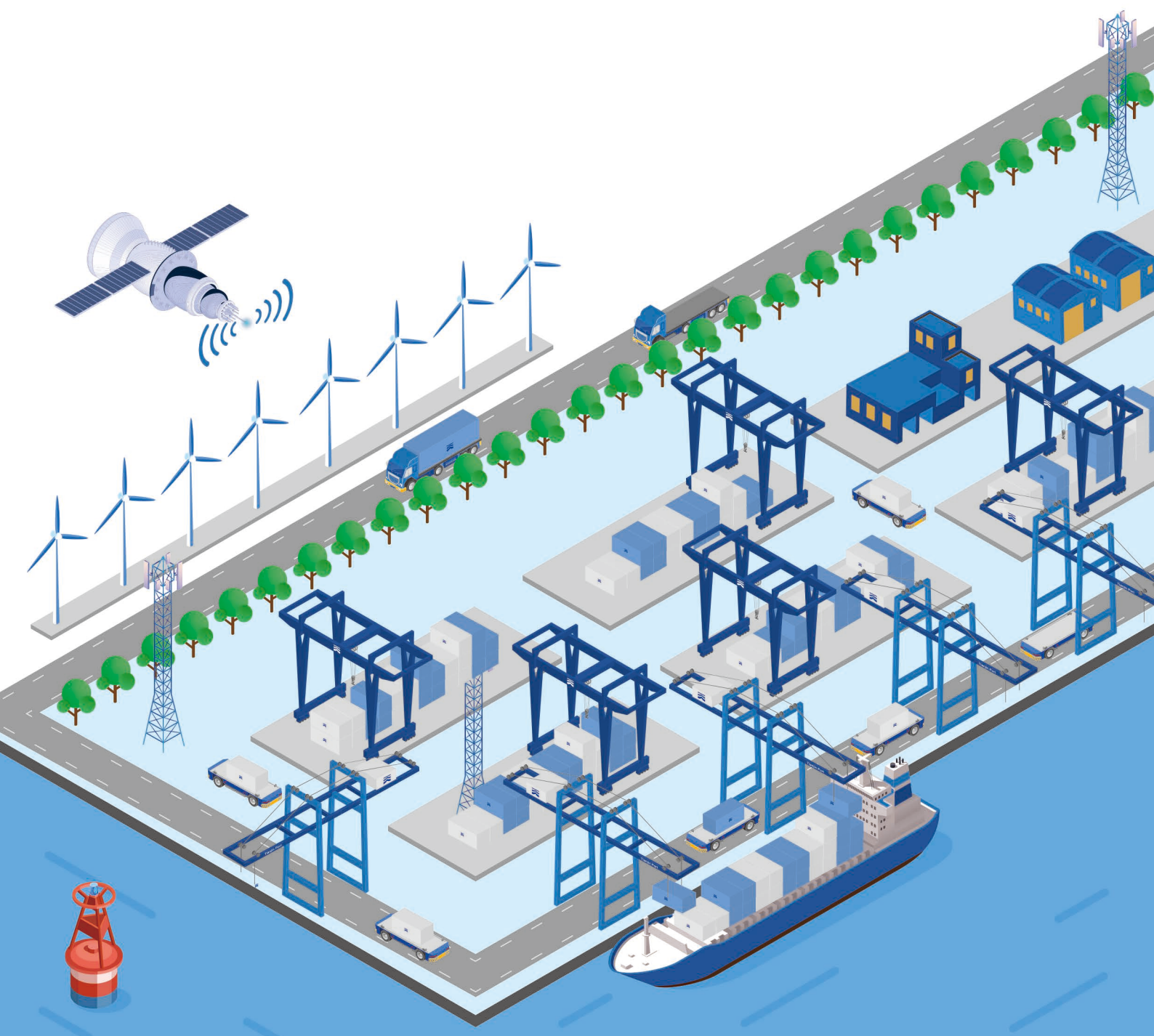
CONTENTS

ABOUT THIS REPORT	2
CHAIRMAN'S STATEMENT	4
ESG MANAGEMENT APPROACH	5
SUPPORT THE UNITED NATIONS	
SUSTAINABLE DEVELOPMENT GOALS	9
SUSTAINABLE DEVELOPMENT FEATURE:	
FIGHTING AGAINST THE PANDEMIC	10
SUSTAINABLE DEVELOPMENT FEATURE:	
SMART PORT	12
ENVIRONMENTAL COMMITMENT	15
PEOPLE FOCUS	30
QUALITY FIRST	39
CUSTOMER ORIENTED	43
COMMUNITY CARE	47
SUSTAINABILITY AWARDS	49
LAWS AND REGULATIONS	50
PERFORMANCE DATA SUMMARY	53
CONTENT INDEX	56

ABOUT THIS REPORT

This is the sixth Environmental, Social and Governance Report of Tianjin Port Development Holdings Limited, presenting the Group's management approach and performance in environmental, social and governance ("ESG") aspects. The report expected to deepen stakeholders' understanding of the Group's sustainable development strategies and actions.

The Board acknowledges its responsibility for ensuring the integrity of this report. To the best of its knowledge, this report objectively discloses the Group's actions and performance on material issues. The Board has reviewed and approved this report and confirms its accuracy, truthfulness and completeness of contents.



ABOUT THIS REPORT

REPORTING GUIDELINES AND PRINCIPLES

This report is prepared in accordance with the ESG Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("HKEX") and based on the reporting principles of "Materiality", "Quantitative", "Balance" and "Consistency". The specific practices are as follows:

Materiality:

- We undertake stakeholder engagement and materiality assessment annually to identify material ESG issues and ensure that stakeholders' concerns are addressed in this report.

Quantitative:

- The data contained in this report have been examined and analysed to illustrate the year-on-year changes. Please refer to the "Performance Data Summary" of this report for references used in calculating the environmental performance indicators.

Balance:

- We disclose the Group's efforts and performance on each ESG issue in a transparent manner for objective review by stakeholders.

Consistency:

- In order to maintain comparability of information, unless otherwise stated, the disclosure and calculation methods in this report are consistent with those in the past and are presented in a way that allows meaningful comparison.

REPORTING SCOPE

This report discloses the Group's actions and performance on material environmental and social issues for the period from 1 January 2021 to 31 December 2021. Unless otherwise stated, the scope of this Report covers all business operations of the Group. For corporate governance section, please refer to pages 23 to 36 of the Annual Report.

FEEDBACK

Your comments on this Report or the Group's sustainability management will help the Group to continue its sustainability efforts. If you have any comments or suggestions, please contact the Group:

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CHAIRMAN'S STATEMENT

To all stakeholders:

In 2021, with novel coronavirus (COVID-19) pandemic largely contained and China's robust economic recovery, the Group has made remarkable breakthroughs in operations, achieving total container handling volume of over 20 million TEUs for the first time. Despite the upbeat outlook of our operations, we continue to implement strict pandemic prevention measures to boost the safety of business operations and that of employees. During the year, the Group continued to push forward the development of a green and smart port and invest resources to promote sustainable development. Through this Environmental, Social and Governance ("ESG") Report, we present to our stakeholders the Group's progress in sustainable development in the past year.

To better understand and effectively respond to its own sustainability risks, the Group has incorporated ESG-related risks into its regular risk management procedures during the year. This strengthened the Board's oversight on ESG risks, helped with avoidance of significant losses and steady development of the Group's sustainability initiatives.

In response to China's target of reaching carbon peak by 2030 and carbon neutrality by 2060, the Group has been constructing a high-quality green port and promoting ecological concepts with the goals of people-focused, safety and health and environmentally friendliness in mind. In 2021, the Group strengthened environmental management, continued to improve the environment and quality of the port area, carried out specialised research on "carbon peak and carbon neutrality", implemented the construction of "zero-carbon port area", and strived to achieve the low-carbon production mode of "zero emission and zero pollution".

Building a smart port is a major undertaking of the Group. We continue to propel port automation with advanced smart, automatic and communication technologies, aiming to improve service efficiency while reducing service costs and offering customers with better experience. During the year, the Group continued to make use of artificial intelligence algorithms and big data to develop new smart projects, implement innovative business operation and analytics systems to enhance operating intelligence and customer service efficiency. In addition, we kept on accelerating the automatic transformation of traditional terminals, and self-designed fully-automated facilities and equipment. For example, Tianjin Port International Pacific Container Terminal Co., Ltd. completed the automatic transformation of its gantry cranes which have been in operation, thus improving port service efficiency.

The Group implemented a highly rigorous management system to protect the health of employees and prevent imported cases of COVID-19 during the pandemic. In addition to monitoring movements of all personnel aboard the ship, the Group also conducted disinfection and environmental testing of imported cold chain food containers to ensure zero lapse in the port's pandemic prevention work. We also actively encouraged employees to get COVID-19 vaccination and took comprehensive preventive measures to reduce the risk of infection, so that employees could work at ease.

In 2022, we shall make unswerving efforts to implement the concept of sustainable development and pay more attention to topics such as green development, smart and safe production. We will continue to explore and further integrate the concept of sustainable development with the actual operations of the Group. In the meantime, we will keep on strengthening close communication and cooperation with various stakeholders to continuously improve our sustainability management. Last but not least, I would like to take this opportunity to express my sincere gratitude to our employees, customers, partners, investors and the public for your attention and dedication to the Group and look forward to your relentless support.

Chairman

CHU Bin

Hong Kong, March 29 2022

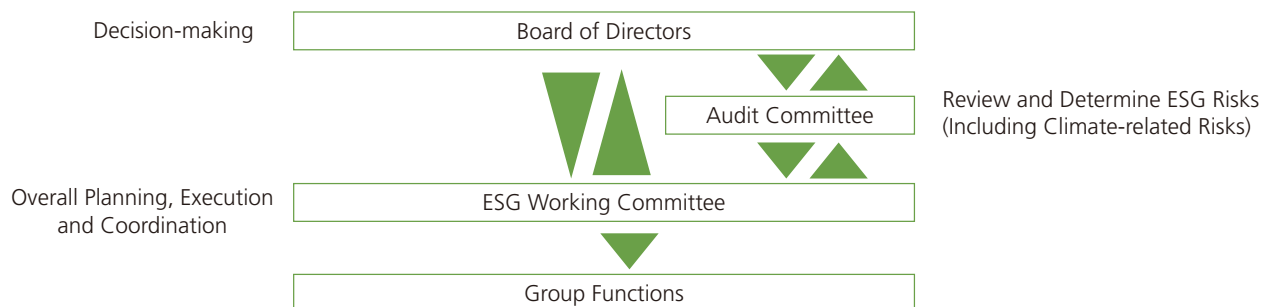


ESG MANAGEMENT APPROACH

BOARD STATEMENT

As a major port operator at the port of Tianjin, the Group is principally engaged in container and non-containerised cargo handling business, sales business and port ancillary services business. Adhering to the core values of “people focused, quality first and customer oriented”, we have formulated five sustainable development principles including “Environmental Commitment”, “People Focus”, “Quality First”, “Customer Oriented” and “Community Care”, and are committed to integrating the concept of sustainable development into our daily management and operations. The Group actively promotes the construction of a green port and creates a safe working environment for its employees. In the process of building the port of Tianjin into a world-class port, we will continue to create long-term value for the enterprise, the society and the environment.

The Group has established a hierarchical of governance structure for ESG initiatives. The Board is responsible for sustainability matters, reviewing and considering ESG strategies, policies, systems, measures and indicators, and monitoring the implementation of plans. The Group’s Audit Committee has incorporated ESG risks into the routine risk management process. Through the Audit Committee, the Board reviews all risks of the Group, including ESG risks. The Environmental, Social and Governance Working Committee (the “ESG Working Committee”) is responsible for supporting the Board in managing ESG matters and supervising the implementation of ESG-related systems by various functional departments. The Group has also formulated relevant management measures to clearly define the authority and responsibilities of the Board, the Audit Committee and the ESG Working Committee.



During the Reporting Year, the Group held a meeting of the ESG Working Committee to comprehensively sort out and summarize the ESG work for the whole year, and subsequently reported the outcome to the Board.

Currently, the Company and its subsidiaries and affiliates¹ have obtained GB/T 19001, GB/T 24001, GB/T 23331 and GB/T 45001 certifications for quality management, environmental management, energy management and occupational health and safety management systems, respectively.

To continuously improve its sustainability performance, the Group regularly evaluates the impact of its daily operations on the environment, society and stakeholders, and takes corresponding measures in a timely manner to continuously optimize communication with stakeholders for ensuring their participation in identifying, evaluating and managing material ESG topics.

¹ Subsidiaries and affiliates refer to the Group’s subsidiaries, associates and joint ventures.



ESG MANAGEMENT APPROACH

STAKEHOLDER ENGAGEMENT

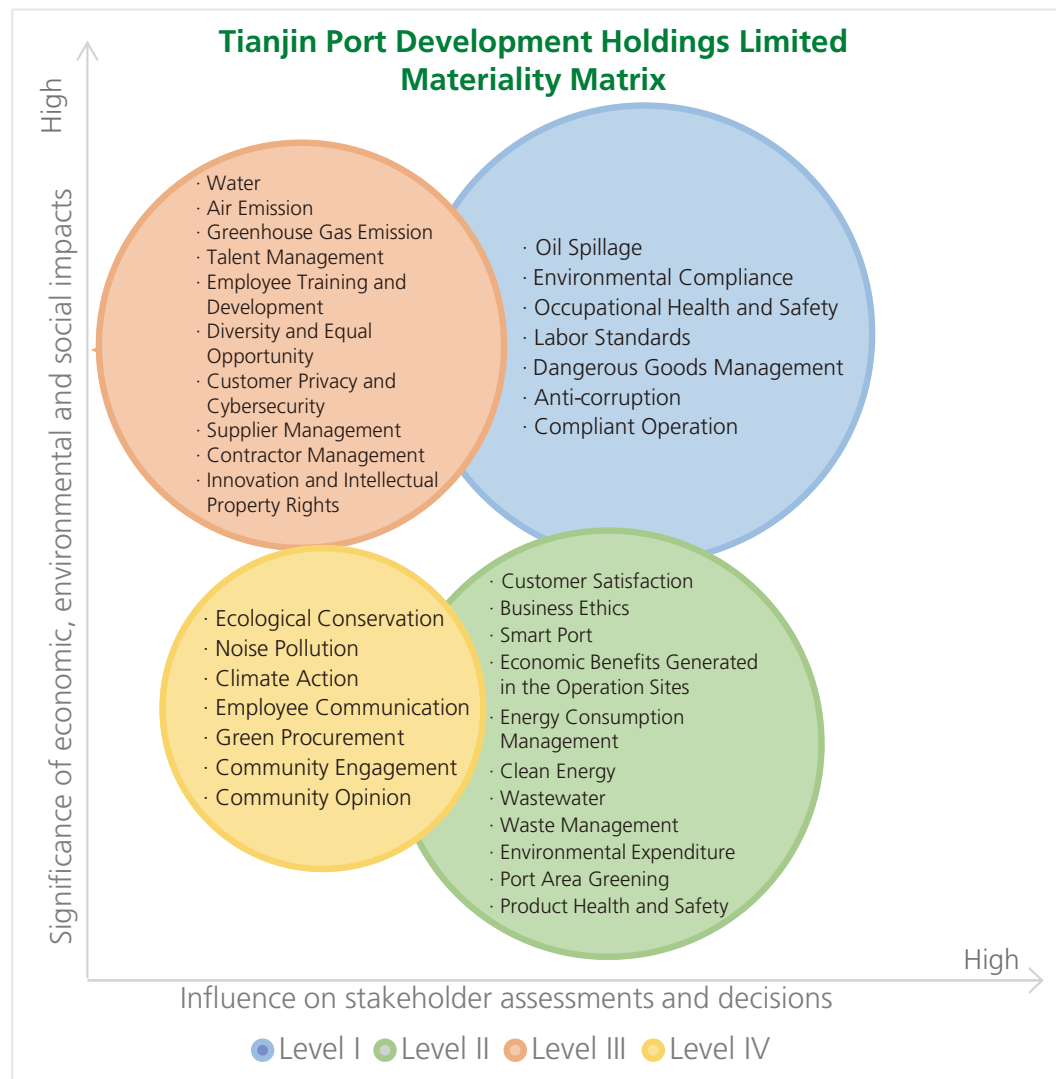
The Group has been maintaining close communication with its stakeholders, responding to their opinions and needs in a timely and effective manner, and improving sustainability strategies and management measures to facilitate long-term development of the Group.

Stakeholder Groups	Communication Channels	Issues of Concern
Employees	<ul style="list-style-type: none"> Internal communication Seminars and questionnaires Labour union Employee activities 	<ul style="list-style-type: none"> Talent management Occupational health and safety Employee training and development
Customers	<ul style="list-style-type: none"> Satisfaction surveys Complaint handling mechanism 	<ul style="list-style-type: none"> Product health and safety Customer satisfaction Customer privacy and cybersecurity
Shareholders/investors	<ul style="list-style-type: none"> Annual report Shareholder meetings Investor meetings 	<ul style="list-style-type: none"> Corporate governance Compliant operation
Suppliers	<ul style="list-style-type: none"> Supplier assessment Procurement platform Materials trading platform Supplier meetings 	<ul style="list-style-type: none"> Supplier management
Government	<ul style="list-style-type: none"> Regular meetings Policy advocacy 	<ul style="list-style-type: none"> Business ethics Compliant operation Environmental compliance Anti-corruption
Community	<ul style="list-style-type: none"> Volunteering activities Donation 	<ul style="list-style-type: none"> Community engagement

We prioritized the outcome of stakeholder communication in two dimensions, namely “significance of economic, environmental and social impacts” and “influence on stakeholders’ assessments and decisions” and determined the following materiality matrix. The Board of the Group has reviewed and validated the outcomes of this materiality assessment.



ESG MANAGEMENT APPROACH



The topics in the materiality matrix are classified into four levels, of which topics in the first level are the material topics for the Group. According to the analysis results, the material topics of the Group in 2021 focus on **oil spillage, environmental compliance, occupational health and safety, labor standards, dangerous goods management, anti-corruption** and **compliant operations**. The following are our responses to the material topics during the year.

Material Topics	ESG Key Risks and Opportunities	Actions in 2021
Oil Spillage	Oil spills may pollute the surrounding water body of the port and cause fines and damage to the Group's reputation	<ul style="list-style-type: none"> Established an emergency leadership team for offshore oil spill Established a Safety Management System Established an offshore oil spill contingency plan Conducted regular oil spill emergency drills








ESG MANAGEMENT APPROACH

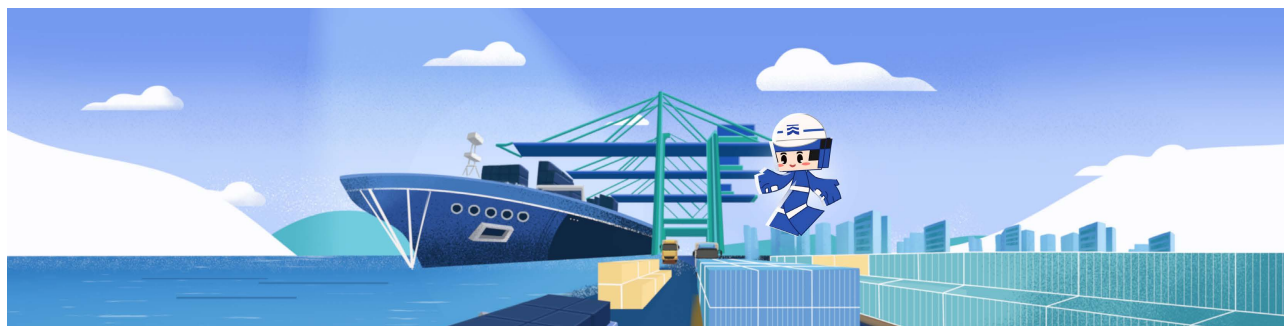
Material Topics	ESG Key Risks and Opportunities	Actions in 2021
Environmental Compliance	Violations of pollution prevention and environmental protection laws may result in fines and damage to the Group's reputation	<ul style="list-style-type: none"> Optimised the environmental protection system Strengthened environmental supervision and inspection
Labor Standards	Non-compliance with labour standards can result in fines and damage to the Group's reputation and affect the Group's competitiveness to attract talents	<ul style="list-style-type: none"> Adopted collective employment contracts to ensure equal remuneration, benefits and promotion opportunities for male and female employees Implemented a well-rounded training, education, remuneration and promotion system
Occupational Health and Safety	Employee safety incidents can lead to operational disruptions, legal proceedings and reputational damage	<ul style="list-style-type: none"> Established a comprehensive occupational health and safety system and monitored the work safety of subsidiaries and affiliates and their employees Carried out 683 safety training and education sessions with a total of around 108,000 participants Strengthened safety assessment and adopt advanced technologies to carry out full-coverage safety hazard investigation on operating sites Formulate occupational disease prevention work plan
Dangerous Goods Management	The handling of dangerous goods is subject to safety, health and environmental risks, the occurrence of which could disrupt operations, increase financial expenditures and result in fines and damage to the Group's reputation	<ul style="list-style-type: none"> Established Regulations on the Administration of Dangerous Goods Business Standardized the operation process of dangerous goods, and regularly carried out relevant training and inspection work
Compliant Operation	Non-compliance in operations could result in fines and damage to our Group's reputation	<ul style="list-style-type: none"> Kept abreast of developments in national and regional laws and regulations, and prepared or revised internal rules and regulations to ensure compliance Conducted dangerous goods operations in strict accordance with the management regulations for dangerous goods
Anti-corruption	Corporate and supply chain fraud can severely disrupt the Group's operations and cause reputational and financial losses	<ul style="list-style-type: none"> A whistle-blowing mechanism was in place to provide channels for anonymous reporting of suspicious cases Participated in anti-corruption training activities, including special training for discipline inspection cadres and theoretical basis learning Conducted ethical assessment when selecting suppliers



SUPPORT THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The Group actively takes measures to support sustainable development. In addition to gradually incorporating sustainable development goals into our business development strategies, we are committed to aligning the responses of our stakeholders with the relevant sustainable development goals.

SDGs	The Group's Five Sustainability Policies	Relevant Sustainability Topics
	Environmental Commitment We drive to build a green port at sea, promote the use of clean energy, continuously reduce the impact of operations on the environment, and move towards a low-carbon port	<ul style="list-style-type: none"> Oil Spillage Environmental Compliance Energy Consumption Management Clean Energy Climate Action Water Air Emission Greenhouse Gas Emission Wastewater Waste Management Environmental Expenditure Port Area Greening Ecological Conservation
	People Focus The Group is committed to creating a good working environment and atmosphere, optimizing talent policies, gathering and attracting talents, and promoting the development of the Group	<ul style="list-style-type: none"> Labor Standards Employee Communication Talent Management Dangerous Goods Management Diversity And Equal Opportunity Occupational Health and Safety Employee Training and Development
	Quality First By selecting high-quality suppliers and improving the product management system, we continuously improve the operation process to improve the service quality	<ul style="list-style-type: none"> Smart Port Compliant Operation Supplier Management Contractor Management Innovation and Intellectual Property Rights
	Customer Oriented We keep regular communication with customers to maintain customer satisfaction and provide professional and reliable services to customers to meet their needs.	<ul style="list-style-type: none"> Product Health and Safety Customer Satisfaction Customer Privacy and Cybersecurity
	Business Ethics Adhering to business ethics, we undertake to operate our business in a fair, honest and legal manner, and adopt a zero-tolerance attitude towards corruption	<ul style="list-style-type: none"> Anti-corruption Business Ethics







SUSTAINABLE DEVELOPMENT FEATURE: FIGHTING AGAINST THE PANDEMIC

With the continuous evolution and spread of the COVID-19 pandemic, the Group further strengthened measures for prevention and control of the pandemic. Adhering to the principle of “preventing imported cases from spreading inside”, we established a specialised epidemic prevention team at the beginning of 2021 to coordinate the epidemic prevention and control work. Through the normalized management of “ten aspects”², we built a standardized and long-term epidemic prevention and control safeguarding system to address the challenges.

JOINT EFFORTS TO FIGHT AGAINST THE PANDEMIC

The Group views prevention of COVID-19 as an important element of work. We actively promote vaccination for protection against COVID-19 infection, by adhering to the principle of “informed consent and get vaccinated as much as possible”.

 Thorough inspection	<ul style="list-style-type: none"> We established an efficient and unified joint adjustment mechanism, set up special team and special personnel to quickly investigate the vaccination status of personnel, and ensure that vaccination work is carried out in a solid and orderly manner.
 Staff Publicity and Mobilization	<ul style="list-style-type: none"> With a strong emphasis on publicity, employees can learn about national vaccine policies, vaccination and other related knowledge from new media, publicity boards, etc. so that they are mobilized to take action to get vaccinated.
 Volunteering	<ul style="list-style-type: none"> We arranged volunteers to participate in the frontline of vaccination work, such as staffing coordination and maintenance of order, and adding isolation belts for waiting areas on the vaccination site to improve the vaccination efficiency.
 Technology empowerment	<ul style="list-style-type: none"> The Company developed smart graphical mobile application systems for pandemic prevention and control, such as the QR code based “Vessel Boarding Management System” and the “Centralized Residential Site Scanning Management System”, to provide technical support for port pandemic prevention.



² “Ten aspects” normalized management refers to: temperature measurement, code verification, wearing mask, sanitation and sterilization, nucleic acid and vaccine management, special arrangement for epidemic prevention in group activities, epidemic prevention in and out of Tianjin, visits and departures from Tianjin port, integration of production and epidemic prevention, and normalized emergency drills.



SUSTAINABLE DEVELOPMENT FEATURE: FIGHTING AGAINST THE PANDEMIC

Safeguarding workforce

During this special period of epidemic prevention and control, the Group actively promoted the protection of our staff and rolled out various policies. In terms of personnel control, we strictly controlled the flow of people, optimized the shift allocation and enhanced the personnel reserve; In terms of remuneration, we strengthened the existing measures and enhanced the protection efforts, such as providing timely subsidies for staff who stayed in centralized residences in Tianjin, staff on vessels, staff boarding the vessels, and staff wearing protective clothing under high temperature and hot weather, and providing them with extra remuneration. In terms of mental wellbeing of employees, the Group has launched Employee Assistant Program (EAP), to provide for psychological care and mental health counseling.

Work safety

Epidemic prevention measures are of great importance to the China government and Tianjin municipal government. In order to guard against imported cases, the Group has executed the epidemic prevention tasks strictly and carefully, and did all it can do to ensure the safe operation of the port in response to the COVID-19.

Port personnel management

Employees, relevant contract workers and third-party personnel who enter the port area should abide by the same infection prevention and control policies, including nucleic acid testing, vaccination, and protective gear inspection. We carried out targeted controls for specialised personnel such as personnel returning to Tianjin, staff staying in centralized residences, management personnel, cold chain operators, and personnel working on board vessels. These measures include implementing "Three-code joint inspection"³, outbound control, standardized disinfection and other measures for key personnel.

Strict epidemic prevention measures on cold chain and vessels

Established a comprehensive cold chain prevention and control system, such as the construction of "Three cold chain zones and two passageways"⁴, centralized management of personnel, etc. The Company pioneered an epidemic prevention supervisor system for vessels. Each terminal company allocated full-time epidemic prevention supervisor(s) on every inbound vessel to, monitor all personnel on board throughout the whole process, responded to and report emergencies in a timely manner to ensure the safety of epidemic prevention at the front line.

Actively implementing material management

Managed the preparation, distribution and use of epidemic prevention materials, and put more focus on the collection, transfer and management of waste protective equipment. For imported cold chain food containers, we implemented six-sided disinfection and environmental nucleic acid testing. The waste protective equipment from the vessels shall be "double-packaged and double-disinfected".

³ "Three-code joint inspection" refers to health code, travel code and COVID-19 vaccination record verification

⁴ "Three cold chain zones and two passageways": Three zones refer to contaminated areas, and potentially contaminated areas and cleaning areas, Two passageways refer to cleaning passageway (for medical personnel and cleaning items) and contaminated passageway (for patients and contaminated items)



SUSTAINABLE DEVELOPMENT FEATURE: SMART PORT

Tianjin Port is located at the intersection of the Beijing-Tianjin-Hebei urban cluster and the Bohai Economic Rim. Tianjin Port is the principal maritime gateway in Beijing-Tianjin-Hebei and the Three Northern Regions of China. It is and a critical sea-land convergence point along the “Belt and Road”. The establishment of a “smart port” has always been a key task of Tianjin Port. As one of the major port operators in the port of Tianjin, the Group continues to explore and apply advanced technologies, compatible with its own actual situation, and gradually foster port intellectualisation, so as to cooperate with the construction of Tianjin into an international maritime hub in Northern China. By increasing investment in remote smart logistics and smart cargo loading and unloading technology, the Group is able to further improve loading and unloading efficiency and facilitate port operations, so as to efficiently provide our services to customers.

SMART COMMUNICATIONS

The Group continues to improve the construction of information infrastructure to facilitate the work of the port area. Currently, fiber optic networks cover all port operation areas. During the year, we intensified the implementation of 5G usage scenarios, continued to optimize the construction of 5G base stations, and installed base stations in all key areas to ensure in-depth signal coverage, so as to strengthen the application of 5G technology in remote gantry cranes, quay cranes and unmanned container trucks.

SMART OPERATION

During the year, the Group continued to promote the construction of smart ports. We built a comprehensive management and control system, carried out large-scale equipment automation transformation and upgraded information technology. Through continuous upgrading of construction projects, introduction of various cutting-edge technologies, coupled with the use of the TOS system⁵, we have continuously improved our loading and unloading efficiency and kept hitting record high of global port vessel operating efficiency. In addition, we have also adopted technologies different from other automated terminals in the world to design smart container terminals. While maintaining the current level of operational efficiency, we expect to reduce investment by more than 30%, energy consumption by more than 20% and operating costs by 25%. Breakthrough progress achieved by the Group during the year included:

Tianjin Port Pacific International Container Terminal Co., Ltd (“TPCT”)

1. Automatic transformation of four-rope rubber-tyred gantry cranes

TPCT succeeded in the stand-alone test for the fully automatic four-rope rubber-tyred gantry cranes (“RTG”), with the operating efficiency of the same position in the storage yard reaching 28Mov/h, thereby solving the problem of automation at the four-rope tire-tyred gantry cranes.

Compared with the eight-rope RTG, the lifting appliance of the four-rope RTG shakes and twists violently in the operation process, making it more difficult to realize the automatic stacking of containers.

The technical team of TPCT formed the “Pacific Plan”, which involved a number of key technologies such as anti-shaking and anti-twisting of cranes, “wave catheter + 5G” wireless communication, integrated identification of vehicle information, smart safety protection, and variable lane operation technology, all of which were firsts in the industry, and were all patented.

After repeated testings and verifications, all key indicators have reached the expected levels. This has successful experience and important reference for the port industry to widely promote automation of the four-rope RTG.

⁵ TOS system: terminal operating system, a computer management system used to manage and control all aspects of terminal operations



SUSTAINABLE DEVELOPMENT FEATURE: SMART PORT

Tianjin Port China Coal Hua'neng Coal Terminal Co., Ltd.**2. Smart anchor coal sampling**

The Company has integrated third-party testing and inspection of coal, smart coal sampling and professional equipment operation into one smart sampling equipment. It has two sets of smart sampling equipment, with functions such as smart collection of coal samples, system smart control, whole-process detection of coal samples, and fault smart diagnosis.

The Company could automatic collect coal samples without human intervention in the whole process, thus effectively eliminating safety hazards incumbent in manual sampling in the past.

Tianjin Port Euroasia International Container Terminal Co., Ltd. ("TECT")**3. Smart warehouse**

TECT's smart warehouse project involves three aspects: smart digital upgrading, visual construction of storage area, and standardized and customized management.

The visual platform was built on modern technologies such as information technology, Internet of Things and "digital twin" to complete automatic verification, stocktaking and report formation. Self-service mode has been used in the whole process of in-warehouse management and delivery of materials.

As the overall number of inventory space increased by approximately 77%, the accuracy rate of inbound and outbound documents reached 100%, and the efficiency of inbound and outbound materials increased by 50%, the operating costs of warehouse management and the labor intensity of warehouse management personnel were largely reduced. The overall warehouse management were greatly improved.

Tianjin Port Container Terminal Co., Ltd.**4. "Night light port terminal" nighttime operation**

At nighttime, when the kickstart order is placed, the unmanned electrical container truck loads the container from the unmanned automated storage yard. With the help of BeiDou navigation satellite system, visual identification, laser radar and other sensing devices, the truck enables the sensory perception and precise positioning, and automatically enters the smart unlocking station.

In the world's first commercially operating smart unlocking station, the robot, installed with a laser dual-eye visual positioning device scans the vehicle, automatically detects the location information of the lock hole at the container corner, and calculates the moving path in real time, so as to quickly and accurately complete the disassembly and lock operation.

The unmanned electrical container track drives to under the quay crane equipped with automatic remote control. With accurate positioning, the quay crane grabs the container loaded on the truck and places it at the pre-determined position on board the ship with the help of the latest high-precision cloud-point-map vessel scanning system. The work process of the nighttime operation can be the same as the daytime operation.



SUSTAINABLE DEVELOPMENT FEATURE: SMART PORT

ACCESSIBLE SERVICES

The Group adheres to technology-driven innovation and applies leading-edge technologies to continuously promote the construction of intelligent information-based ports, as well as providing customers with high-quality services. All subsidiaries and affiliates have utilised their abilities to actively design and promote new projects, so that customers can experience automated operations of terminals and keep track of the work progress at any time. Furthermore, we also cooperated with port authorities to optimize the port customs clearance process, set up the Beijing-Tianjin-Hebei port smart logistics collaborative platform, and continuously upgraded the e-commerce service platform to improve efficiency.

Smart customer service system

- Connect directly with Tianjin Port's container business system, container terminal TOS system, security monitoring system, etc., and synchronise real-time data sharing, so that customers can control container status and work in time
- Provide customised services to VIP customers with container business data, such as service alerts and solutions based on customer inquiries

Information technology construction

- Build an integrated equipment management platform to realize all-factor management, real-time monitoring of key equipment operation, and display of electronic sand table demonstration
- With the remote monitoring of CMS data of the quay cranes, the CMS data of the four container companies can be sent to the integrated platform of Tianjin Port Holdings Co., Ltd., thus enabling the accurate management, dynamic display and real-time monitoring of the operation status of the quay cranes

"Vessel to Vessel" mode of operation

- The traditional "vessel-field-vessel" operation mode is transformed to "vessel-vessel" operation mode
- We prepare the "Operation Plan for Quay Cranes" in a scientific way in advance to explore and formulate to the entire production processes
- Meet the needs of shipping companies for cargo turnover, shorten the transfer detention time of domestic transshipment containers, improve the efficiency of terminal operations, and reduce the pressure on the available terminal storage and operating costs






Online Container Business Reception Center

- Achieve an efficient service model of "single window access, full-service container business" with the upgraded intelligent technology and process engineering.
- Business consultation, fee charging and complaint handling are integrated into service-themed windows. Customers can greatly shorten the business processing time by choosing service projects only according to actual needs
- Through the online business hall of "Tianjin Port E-commerce Network", customers are able to enjoy convenient services such as 7×24-hour online business acceptance, payment and inquiry. The mobile platform is built into a "service window" to achieve paperless business processing, real-time electronic payment for fee settlement, and customers can handle various businesses at home
- At present, there are 1800 online customers, with an average number of orders exceeding 200,000 per month. The average order time is less than 5 minutes, and the online order rate is 93%, and the completion rate is 100%



ENVIRONMENTAL COMMITMENT

The Group adheres to the development concept of “people-oriented, safety and health and environmental-friendliness” and continues to build a green port at sea with the goal of “building a world-class green and smart port”. We actively adopt technologies such as clean energy and smart monitoring to minimize the impact on the environment, and actively identify environmental risks related to the our services and operations, so as to fulfill our environmental protection responsibilities while coping with challenges.

Relevant SDGs		Relevant Issues
6 CLEAN WATER AND SANITATION  14 LIFE BELOW WATER 	6.3 Reduction of Water Pollution 6.4 Improving water efficiency 14.1 Prevention and reduction of marine pollution, especially from land activities	<ul style="list-style-type: none"> • Oil Spillage • Wastewater • Water • Ecological Conservation
12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	12.5 Waste Reduction	<ul style="list-style-type: none"> • Environmental Compliance • Waste management
7 AFFORDABLE AND CLEAN ENERGY 	7.2 Increase renewable energy 7.3 Improving Global Energy Efficiency	<ul style="list-style-type: none"> • Clean Energy • Energy Consumption Management • Environmental Expenditure
13 CLIMATE ACTION 	13.1 Strengthen resilience and adaptation to climate-related hazards and natural disasters 13.3 Increasing awareness of climate change mitigation and adaptation	<ul style="list-style-type: none"> • Air Emission • Greenhouse Gas Emission • Port Area Greening • Climate Action

CONSTRUCTION OF A GREEN PORT

Ports are an important component of the transportation industry. They are not only the major source of energy consumption and carbon emission, but also a key area to promote green development of the transportation industry. With the goal of “striving to build a world-class green port”, the Group has formulated an implementation plan for the construction of a green port at sea, focusing on the development of clean energy and promoting the use of shore-based power, and has established a three-level gulf-chiefs mechanism to clarify the management boundary and content, so as to fully promote the construction of a green port.

Use of shore power

The use of shore-based power significantly reduces emissions of sulphur oxides, nitrogen oxides and particulate matter generated from power generation by auxiliary machinery during port operations, thereby improving the air quality. The Group actively promotes the use of shore-based power. At present, the Group is equipped with 26 shore-based power boxes and 28 berths have been covered by shore-based power supply, and all self-owned vessels use shore-based power. During the year, except for the failure to access shore power due to epidemic prevention and damage to electrical equipment, all 557 vessels that meet the power supply conditions arriving at the port were connected to shore power, achieving 100% shore power access rate. During the year, the accumulated shore-based power supply amounted to 5,285,000 kWh. The shore power utilization rate, the low-sulfur oil utilization rate of vessels and the compliance rate of direct discharge of pollutants into sea all reached 100%.



ENVIRONMENTAL COMMITMENT

During the year, TPCT, a subsidiary of the Company, completed the upgrade and transformation of shore power 2.0 to meet the power demand of the world's largest container vessels with capacity over 200,000 tonnes, further improving the flexibility of power supply and utilization rate of shore power. In 2022, the Group aims to achieve a 100% shore-based power connection rate for vessels at ports, while continuing to promote shore-based power construction to cover more berths.



Promotion of clean energy

The use of clean energy is an important way for the Group to reduce indirect emissions from traditional coal-fired power consumption and reduce environmental impact. During the year, the Group accelerated the construction of electric container truck-related supporting facilities, fully ensured popularization and application of electric container trucks in the port area, and introduced green electricity, mainly solar energy and wind power, to help build a world-class green port.

With the target of complete replacement of traditional diesel vehicles with electric container trucks and replacing diesel with electricity to effectively reduce the emission of hazardous substances, TPCT, a subsidiary of the Company, has built five charging stations with a capacity of 300KW electric trucks during the year, which can meet the charging demand of 30 electric container trucks. In addition, TPCT has built the shore power substation into a "zero-carbon cabin" and installed a photovoltaic power generation system on the roof of the shore power substation. Through the photovoltaic components set up on the roof, the solar energy is directly converted into electricity, ensuring the energy supply of the shore power substation during non-operating time.



ENVIRONMENTAL COMMITMENT



Electric container truck charging station



"Zero Carbon Cabin"

Green transportation

The Group kept increasing the volume of sea-rail intermodal transportation during the financial year, with the annual container throughput volume reaching 1,001,000 TEUs, representing a year-on-year increase of 24.3%. On the basis of the 100% railway transportation of coal coke, we promoted the dual "pendulum" transportation of ore and coal to increase the proportion of iron ore transportation and increase the handling volume of "bulk-to-container". During the year, the proportion of iron ore railway transportation reached 65%, and we have been striving to build the "rail transport + containerization" double demonstration port.

EMISSION CONTROL

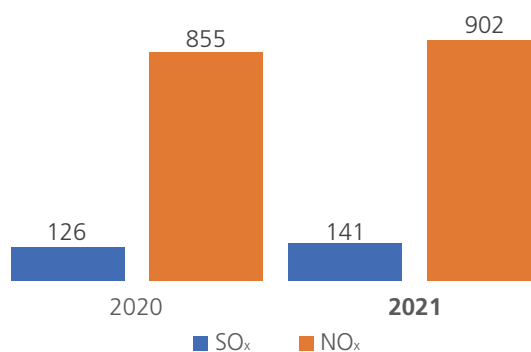
The Group deeply recognizes the importance of sustainable development and actively identifies the impact of its operations on the environment. The Group's subsidiaries and affiliates conduct regular inspections on pollution sources to ensure strict compliance with national and local laws, regulations and emission standards. In 2021, the Group and its subsidiaries and affiliates did not violate any laws and regulations that have a significant impact on the Group relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.⁶

Air emission management

In order to improve air quality in the port area, the Group continuously monitors air quality and takes different measures to improve air pollution control. In 2021, in order to comply with the latest laws and regulations on air pollution in Tianjin, the Group updated the relevant management regulations on internal air pollution prevention and control and required its subsidiaries and affiliates to strictly implement them to effectively control dust pollution and emissions from vessels, fuel vehicles and equipment.

In 2021, the Group's emissions of sulphur oxides (SO_x) and nitrogen oxides (NO_x) from fuel consumption of vessels, vehicles and loading and unloading equipment were 141 tonnes and 902 tonnes respectively, representing an increase of 12% and 5% as compared to 2020.

Total air pollutant emissions (tonnes)



⁶ Please refer to the Laws and Regulations section for the relevant laws and regulations on emissions such as exhaust gas, wastewater and waste.



ENVIRONMENTAL COMMITMENT

Our subsidiaries and affiliates use the intelligent air monitoring platform to conduct real-time testing on six pollutants indexes (i.e., PM2.5, PM10, nitrogen dioxide, carbon monoxide, sulphur dioxide and ozone), wind speed, wind direction and other indicators at 174 air monitoring points to understand the real-time changes of data, conduct analysis and predict future air quality changes to improve the operation mode and reduce air polluting emissions.

Exhaust pollution control of mechanical equipment and vehicles

The Group strengthens treatment of mobile pollution sources continuously and has phased out old port machinery and equipment and vehicles to adopt models that use renewable energy to improve the level of emissions control. In 2021, the Group purchased 31 pure electric container tractors to replace fossil fuel-based vehicles, all of which have been put into use. At the same time, small-tonnage electric forklifts are being introduced and tested at different terminals. We have also carried out technological transformation for loading and unloading production machinery in use for many years, which helps to reduce carbon emissions and exhaust gas pollution. In line with the task of promoting hydrogen energy in Tianjin Binhai New Area, the Group is also studying the possibility of deploying hydrogen energy vehicles in the port area.

The Group has set the target to stop using diesel trucks of National IV standard and below by 2023. The newly purchased diesel trucks are of National V standard and above. Currently, the Group only allows renewable energy equipment in the procurement of large equipment, and no longer purchases traditional fuel oil and gas equipment.

Vessel discharge at port

All self-owned vessels of the Group use fuel with sulphur content of 0.0003% – 0.0009%, which is far below the requirement of the Maritime Safety Administration of the Ministry of Transport of the PRC. In addition, the Group strictly follows requirements of government departments to ensure that all its vessels and vessels in the control area use low sulphur oil. We designate special personnel to conduct spot checks on vessel fuel from time to time, and require batch inspection of oil products to ensure the quality of oil products. At the same time, the Company has strengthened regular inspections of fuel supply units to ensure the quality of oil products.

Treatment of heavily polluted weather and prevention of dust pollution

To reduce peak pollution level during the heavily polluted days in Tianjin and protect public health, the Group has set up an emergency response work command center for heavy pollution weather and included this in the emergency response system. In 2021, in order to cooperate with the latest published "Emergency Plan for Heavy Pollution Weather in Tianjin" and "Work Plan of Tianjin Municipality for Deeply Winning the Battle of Prevention and Control of Pollution in 2021", the Group revised the implementation plan for emergency response to heavy pollution weather. When the government issues a heavy pollution weather warning, the subordinate units of the Group launch different levels of response plans according to different warning levels. Measures taken in such cases include ceasing outdoor works such as building dismantling, spraying, painting, cutting, slope spraying operations and traffic restrictions in and out of the port areas based on odd-or even-numbered license plates to immediately reduce air pollutant emissions. In 2021, the Tianjin government issued a total of two heavy pollution weather warnings, and the Group implemented relevant emergency response measures in a timely manner.

In 2021, the Group kept on strictly implementing the "Six 100%" measures to curb the dust generated by bulk cargo during loading and unloading, storage and transportation, as well as during construction of infrastructure facilities. These measures ensured the normal operations of various environmental protection facilities and equipment and controlled effectively the average dust reduction in the port area was effectively controlled below the average level of Tianjin Binhai New Area.

⁷ "Six 100%" refers to: "100% construction of wind-proof net in stacking yard, 100% ground hardening of stacking yard, 100% stack covering, 100% wet process operation, 100% tyre washing and 100% enclosed transportation of bulk cargos.



ENVIRONMENTAL COMMITMENT

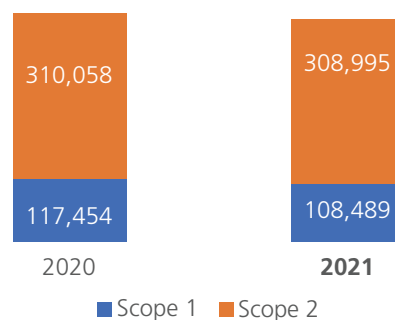
Three-dimensional dust prevention system

In 2021, Tianjin Port Coke Terminal Co., Ltd., a subsidiary of the Group, developed a three-dimensional dust prevention system with major dust prevention measures such as car wash station sprinkler and spray, automatic sprinkler system of the gantry crane, dust control barrier, misting cannon, sensor spraying at the entrance of the funnel, and multi-machine joint cleaning, as well as ancillary prevention and control measures such as air quality tracking, dynamic monitoring of leakage along the way, and use of shore power for vessels, thereby achieving 100% dust suppression. This "Three-dimensional Dust Prevention System" won the Third Prize at Tianjin and Binhai New Area Science and Technology Advancement Awards.

Greenhouse gas emissions

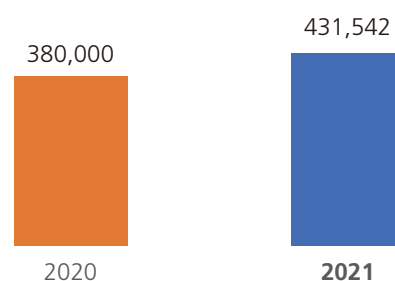
In 2021, the major source of greenhouse gas emissions was indirect emissions from the use of purchased electricity and heat (Scope 2), which amounted to 308,995 tonnes of carbon dioxide equivalent, and direct emissions from the use of fuel (Scope 1) were 108,489 tonnes of carbon dioxide equivalent. During the year, the Group's total GHG emissions amounted to 417,484 tCO₂e, with an emission intensity of 0.024 tCO₂e per HK\$'000 turnover. The total GHG emission decreased by 2.3% as compared with 2020.

In 2022, the Group aims to further reduce carbon emissions from terminal operations through the application of new energy equipment, and to align with the goal of zero carbon terminals.

Total GHG Emissions (tCO₂e)**Sewage Management**

The Group's sewage discharge includes sewage from daily use (such as office buildings and canteen), storm and operation (such as loading and unloading business, vessel cabin washing, etc.). In 2021, the Group's total sewage discharge was 431,542 tonnes, representing an increase of 13.6% as compared to 2020.

The Group has a sewage treatment plant in the port area and 100% of sewage generated in the area undergoes treatment. After being purified and treated, the sewage is reused for road cleaning and dust suppression in terminals. At the same time, in accordance with requirements of Tianjin, oil wastewater in the port area is collected by the pipelines built by the government for unified treatment, and oil wastewater after treatment can also be used for greening and production operations in the port area. During the year, the Group's subsidiaries and affiliates were equipped with a total of 23 sets of sewage treatment facilities with a total daily handling capacity of 18,000 tonnes, and the equipment operating costs were approximately RMB6,350,000.

Total Sewage Discharge (tonnes)

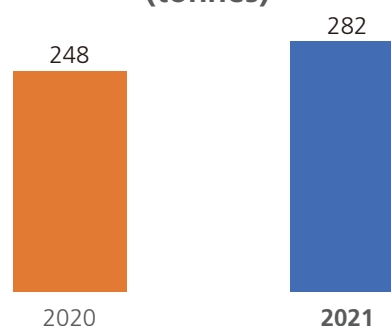
ENVIRONMENTAL COMMITMENT

The Group's sewage treatment facilities are listed as key sewage discharge units in Tianjin. The Tianjin Environment Bureau and the Tianjin Water Authority regularly take samples of sewage in the port area. The Group has set up 24-hour automatic testing equipment at entrances and exits of sewage in accordance with the regulations, which is sampled every hour and the data is uploaded onto the supervision platform of the Ministry of Ecology and Environment and the Tianjin Municipal Bureau of Ecology and Environment in real time. In 2021, the Group upgraded the automatic testing equipment, which significantly improved the accuracy of testing and ensured reliability of data, a big step towards a green port at sea.

Waste management

Hazardous wastes generated by the Group's operations include waste engine oil, waste mineral oil, waste paint buckets, waste lamps, waste batteries, waste filters, waste filter cartridges, waste batteries and waste ink cartridges, all of which are handled by firms with hazardous waste disposal qualifications to ensure legal compliance. In 2021, the Group generated a total of 282 tonnes of hazardous waste, representing an increase of 13.7% as compared to 2020. In terms of non-hazardous waste, we actively carried out waste sorting, and the waste sorting rate of all subordinate units of the Group reached 100%. During the year, non-hazardous wastes generated by us included 1,478 tonnes of scrap steel wire ropes, 4.44 tonnes of scrap cables and 4,770 pieces of scrap tires. In response to the need for prevention and control of the COVID-19 pandemic, the Group strictly controlled domestic waste on vessels entering the port in accordance with requirements of the National Health and Family Planning Commission and the Tianjin Municipal Health and Epidemic Prevention Department with reference to disposal methods for medical waste, and used centralized boxes for storage, which were delivered to designated third parties for treatment. We have set a target to achieve 100% household waste sorting coverage in 2022.

Total Hazardous Waste (tonnes)



Non-hazardous Waste	Unit	2020	2021
Waste wire rope	tonnes	1,201	1,478
Waste cable	tonnes	6.57	4.44
Waste tires	pieces	2,906	4,770

RESOURCE CONSERVATION

The Group actively adheres to national and regional resource management policies. We continuously improve the internal resource management system and implement a number of energy and water conservation measures, with the aim to reduce resource consumption and improve resource utilization efficiency.



ENVIRONMENTAL COMMITMENT

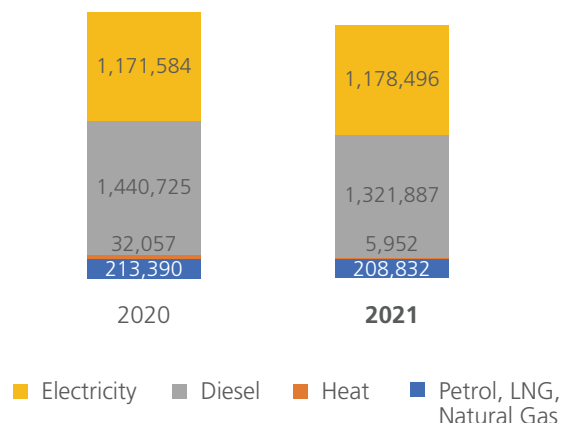
Energy management

As of the end of 2021, 9 subsidiaries and affiliates of the Group have obtained GB/T 23331 energy management system certification. In the past, the Group required this only for its subsidiaries and affiliates with a comprehensive energy consumption of 5,000 tons of standard coal equivalent or more. In 2021, we expanded the certification requirements to our subsidiaries and affiliates with an annual comprehensive energy consumption of 3,000 tons of standard coal equivalent and above. As of the end of the financial year, the energy management system certification coverage of subsidiaries and affiliates with comprehensive energy consumption of 3,000 tons of standard coal equivalent and above has reached 30%.

In response to the national appeals for energy conservation and emission reduction, the Group has set energy consumption indicators to evaluate energy conservation work along with rewards and penalties for the performance. In 2021, our subsidiaries and affiliates completed and met the assessment requirements on both total energy consumption and intensity.

The Group's energy consumption is attributed to loading and unloading equipment, freight vehicles and port operation vessels, which mainly involves the use of electricity, diesel, gasoline, liquefied natural gas, natural gas and heat. In 2021, the Group consumed a total of 2,715,167 GJ of energy, down 5% from 2020. The energy consumption intensity was 0.156 GJ per thousand HK dollar revenue. Electricity and diesel are the major forms of energy consumed, accounting for 92.1% of the total energy consumption.

Total Energy Consumption (GJ)



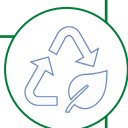
Energy saving measures

The Group actively explores energy-saving technologies, and strives to promote the use of new and clean energy equipment while reducing energy use. In 2021, the Group's subsidiaries and affiliates continued to pursue application of energy-saving technologies, including replacing lighting with LED lamps, and raising employees awareness through strengthening energy-saving promotion.

During the Natural Energy Saving Promotion Week 2021, online knowledge quiz activities were held to enhance employees' awareness of energy saving and improve the working atmosphere in energy conservation management.

A Proposal to Tianjin Port Employees to be Engaged in Electricity-Saving Practices to encourage all employees to adopt a moderately saving, green and low-carbon office and lifestyle.

Strengthening Energy Saving Promotion



Organized business units such as Tianjin Port Euroasia International Container Terminal Co., Ltd to build energy management systems to improve the energy efficiency.

Improving Energy Management



Completed LED transformation of 157 sets of high-pole lamps. In order to effectively reduce energy consumption, the original 1,000 W high-pressure sodium lamps have been replaced with new 400W LED energy-saving lamps with better energy-saving effect and lighting parameters. Tianjin Port Alliance International Container Terminal Co., Ltd replaced 290 sets of 400W LED energy-saving lamps.

Purchased a 3t battery forklift, which performed well in terms of comfort and operational noise, saving over 2,400 litres of diesel annually.

Energy-saving technology application



ENVIRONMENTAL COMMITMENT

Looking ahead, in keeping with the Group’s focus on energy saving and emission reduction, we will keep pushing for the replacement works for LED lamps and target to install energy-saving lighting for all high-pole lamps in 2022. We will continue to promote electric forklifts and replace old small-tonnage diesel forklifts to reduce the use of diesel and increase use of equipment with renewable sources of energy.

Water resources management

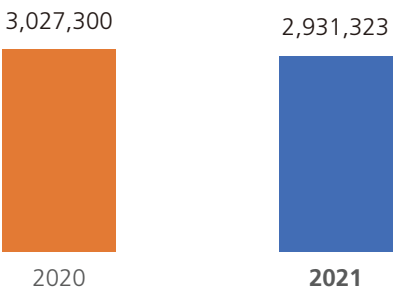
In response to national and Tianjin water-saving policies, the Group continues to manage its water resources in accordance with the four major principles of “total volume control, strengthened management, scientific utilization and energy conservation” so as to reduce operating costs while saving water resources. During the year, the Group revised its water resources management measures and strictly implemented various water resources management systems and timely issued water-saving plans to its subsidiaries and affiliates. Each water-consuming unit should introduce smart water service platforms, remote water resources monitoring systems and replace old equipment pipelines and water meters relevant to their water consumption level. Furthermore, enhanced efforts were made to further raise the employees awareness on water conservation.

The Group mainly consumes water for operation, living, greening, spraying and firefighting purposes. In 2021, the total water consumption of the Group was 2,931,323 tonnes, and the water consumption intensity was 0.168 tonnes per thousand Hong Kong dollars revenue, down 3.2% and 13.6% respectively from the previous year. The Group has no issue in sourcing water that is fit for the purpose.

Water Conservation

To reduce water usage, the Group’s subsidiaries and affiliates implement water-saving measures in accordance with the water management system and promote water-saving messages to employees. Water-saving signs are posted next to water taps to remind employees to treasure every drop of water and eliminate waste.

Total water consumption (tonnes)



ENVIRONMENTAL COMMITMENT

Since 2018, the Group has been actively using the intelligent water management platform to improve water supply management and service standard, as well as improve water usage efficiency. During the year, the Group completed real-time adjustment of water yield and real-time adjustment of pump operating power according to the pressure in water distribution network by using zone metering system in smart water platform and self-regulating water pump. The zone metering enables us to identify suspected leakage points in a timely manner and carry out timely pipe leakage maintenance work to effectively reduce the leakage rate of pipe network.

We aim to complete the inspection of all water supply pipelines by the end of 2022, identify more water leakage points and replace water meters as needed to reduce water loss rate. Simultaneously, we are actively expanding the use of unmanned operation technology to improve efficiency.

ECOLOGICAL PROTECTION

The Group places great importance on possible environmental accidents in the course of its operations and has adopted various measures to avoid possible risks.

A test was carried out for each stormwater outfall of coastal terminals and logistics companies. In an effort to minimize the marine pollution caused by roadside pollution, each outfall is registered in the file and centrally managed. In 2021, the Group has met the target setting for pollutant discharge in the sea. To further reduce pollution and spread of contaminants to the port, we collected and processed waste water, exhaust fumes and solid waste from ships through cooperation with third-party institutions, which can also prevent ships arriving at the port from discharging sewage or garbage in terminal area, port area or offshore areas without authorization. The Group has formulated a three-level gulf-chiefs mechanism to maintain the marine ecological safety and environmental health within 500 meters of the coastline.

To comply with the Law of the People's Republic of China on Environmental Impact Assessment, the Group engages third-party institutions with professional qualifications to conduct environmental impact assessment before the commencement of new construction, reconstruction and expansion projects and strictly follows the requirements stated in the Environmental Impact Assessment during the construction period.

Greening Construction and Ecological Protection

Committed to promoting greening and ecological recovery, we have enhanced ecological functions, landscapes, and restored the ecological environment of bare areas in accordance with the guidance of ecological restoration during the year.

The Group has all along been proactive in promoting greening and expanding its green areas in accordance with the measures on administration of city greening of the Group. During the year, the total greening area of our port area reached 6,699,950 square meters⁸, and the greening area for new construction, upgrading and renovation was 1,500 square meters.

In terms of marine ecological restoration, the Group carried out proliferation and release activities during the year, and nearly 10,000 fish fries were released to improve the offshore water environment and achieve ecological safety.

Oil spill management

The Group's business involves the risk of oil spills. Therefore, the Group has established a safety management system and its subsidiaries and affiliates also regularly conduct oil spill emergency drills or simulation drills in accordance with requirements of the contingency plan to provide practical training to emergency response personnel and ensure that they have the ability to handle marine pollution accidents.

⁸ The reason for the decrease of greening area was the change in scope.



ENVIRONMENTAL COMMITMENT

In 2021, the Group was not aware of any need for reporting oil spillage or leakage incidents to the relevant government authorities.

Oil Spillage Emergency Drill of Tianjin Port Yuanhang Ore Terminal Co., Ltd

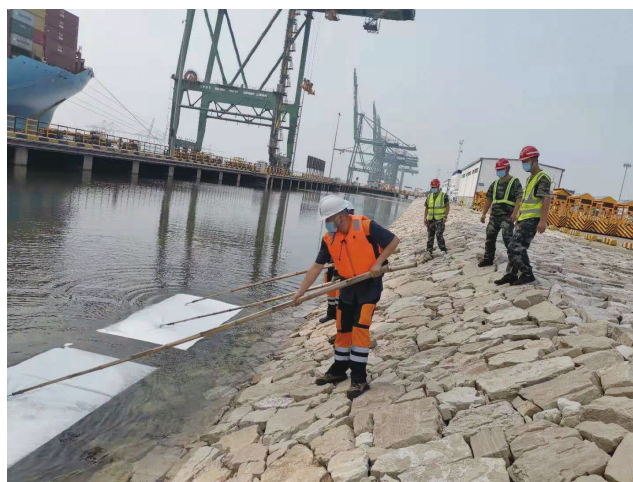
- Stevedores shall immediately notify the safety and environmental protection department and the operation department of the Company and report the leakage of diesel caused by a damage to a cargo loading and unloading machinery oil tank in the freight yard
- On-site personnel of the operation department shall immediately stop the production around the leakage area and eliminate all ignition sources
- The personnel of the safety and environmental protection department shall inform the operation department to dispatch personnel to clean up an oil spill
- Notify the mechanical team to use borax, spread it evenly on the areas contaminated with diesel and start to clean up
- Summative assessment is undertaken by the management at the end of the drill

Emergency Drill for Oil Spillage Accidents of Tianjin Port Pacific International Container Terminal Co., Ltd

Scenario: Under the No. 4 trestle of the dock front, a suspected oil spill on the sea surface is spotted by the stevedores, and there is an urgent need for clean up

Measures taken:

- Notified the team captain and the control centre of the operation department, asked relevant personnel and personnel of the safety and environment department to arrive at the scene as soon as possible
- The personnel of the safety and environment department offered guidance on the sea conditions after arriving at the site
- Notified the stevedores and the Company's emergency response personnel concerned to take out absorbent mats from the warehouse to absorb the oil spills on sea surface. Any oil that was removed from the absorbent mats was properly disposed and harmlessly treated by the waste treatment agencies
- At the end of the drill, a concluding meeting was held to analyse and evaluate the problems occurred in the drill.



ENVIRONMENTAL COMMITMENT

Oil Spillage Drill of Tianjin Port Tugboat Lighter Co., Ltd.

Scenario: A cargo vessel ran aground at full speed, near 100 meters east of Tianjin Port East Jetty

Measures taken:

- Driver stopped the vessel. Air horn and high-frequency phone were used to alert the routing and transport centre
- All crew members on board the vessel wore personal protective equipment and took action with leak plugging and measuring tools
- The emergency centre of the Company organized meetings, and members of the emergency centre provided corresponding support according to their responsibilities and skills.

TACKLING CLIMATE CHANGE**Disclosure related to climate change**

Climate change is not only a serious environmental topic, but also a substantial issue that may directly affect the Group's business operations. Therefore, in 2020, the Group began to align with TCFD recommendations when disclosing the climate-related management information of the Group in the four core areas of "Governance", "Strategy", "Risk Management" and "Metrics and Targets" to strengthen its ability to adapt and respond to climate change.

Governance

The Board of Directors of the Group is fully responsible for the work related to climate change. The ESG Working Committee ensures that the relevant requirements are met and makes recommendations, and reports to the Board at least once a year. The Board reviews and determines the risk management matters related to climate change through the Audit Committee.

Responsibilities of the Board and the ESG Committee	
Duties of the Board:	Supervise and make final decisions on climate change-related matters, including annual review of climate change management, identify climate change risks and opportunities, countermeasures, and relevant disclosures and announcements.
Duties of the ESG Working Committee:	Regular meetings are held to identify risks and opportunities of climate change; formulate climate change management strategies, policies and systems, measures and goals for the Board to make decisions; ensure distribution and completion of specific items of work, and supervise performance of subsidiaries and affiliates in implementation of relevant measures.

The Group has formulated the "Emergency Plans for Extreme Weather" to deal with extreme weather such as heavy rains, cold wave and frozen sea, and has established a three-level command system and a three-level management system covering the Group, Tianjin Port Holdings Company Limited and front-line terminal companies, setting out the corresponding responsibilities and tasks from the chairman of the Group to the front-line operators.



ENVIRONMENTAL COMMITMENT

Strategies

The Group recognises that climate change will bring various risks and opportunities to our business. We identify and assess the risks and opportunities that climate change may bring, taking into account various climate change scenarios, as well as potential financial impacts and possibilities. For a description of the more significant risks and opportunities, please refer to the “**Climate Change Risks and Opportunities**” section.

Physical risk assessment: We identify climate change-related risks, including extreme weather events, sea level rise, etc., according to the extreme climate scenarios under the Intergovernmental Panel on Climate Change (“IPCC”) Greenhouse Gas Representative Concentration Path (“RCP”) (assuming global average temperature rises by 4°C, RCP 8.5), which may have an impact on the supply chain, business operations and investors.

Transition risk assessment: The climate change-related risks faced by the Group include policy and legal risks, technology risks, market risks and reputational risks. We assessed two climate change scenarios — the International Energy Agency (“IEA”) Current Policy Scenario and Sustainability Scenario. Under the sustainable development scenario, the impact and possibility of transition risks faced by the Group are relatively high, so we will be well prepared to cope with the policy transformation.

For a description of the more significant risks and opportunities, please refer to the “Climate Change Risks and Opportunities” section.

Risk management

Each year, the Group invites various stakeholder groups to conduct a materiality assessment to identify issues that are closely related to the Group’s business and are of major concern to stakeholders. The Group has evaluated various potential physical and transition risks in 2020 to identify climate change risks that have a greater impact on the business, and then actively responded to and managed such risks according to the materiality level. During the Group’s risk management in 2021, climate change management risks were added to the Group’s overall risk database. Among the significant risks identified by individual enterprises, two companies have identified climate change risks as significant risks.

Metrics and Targets

The Group measures and discloses indicators related to greenhouse gases and energy to monitor climate change management performance, including greenhouse gas emissions (Scope 1 and 2), greenhouse gas emission intensity (in terms of turnover), energy consumption (electricity, diesel, LNG, natural gas and heat), energy consumption intensity (in terms of turnover). We have calculated carbon emissions, energy consumption, water consumption and waste generation in 2021. For details, please refer to the section headed “Environmental Commitment”.



ENVIRONMENTAL COMMITMENT

Climate change risks and opportunities

The Group conducted a climate change risk assessment in 2020 to identify and assess various potential physical and transition risks. The assessment results for the year 2020 have been followed. The specific risks and opportunities are set out in the table below:

Description	Potential financial impact	Measures undertaken in 2021
Physical risks		
<ul style="list-style-type: none"> Storm surge or wave floods destroys or even swamps the port, making the port not able to operate normally during the storm (which may last for several hours/days) Damage to terminals, operating facilities, equipment, storage areas and cargoes Windstorms lead to siltation of port waterways and require additional maintenance and dredging of spoil 	<ul style="list-style-type: none"> Decrease in revenue: Business operations affected Decrease in assets: impairment of assets Increase in expenditure: Maintenance of damaged port infrastructure and equipment, maintenance of dredging work, construction of port breakwater to resist wind and wave 	<ul style="list-style-type: none"> Conduct flood control and storm prevention drills every year Establish corresponding emergency plans for extreme weather such as heavy rains, cold tide and sea ice Equipped with flood prevention emergency management team for the vessels gates in low-lying areas, and set up moisture-proof baffles to seal up when water level rises, which has achieved good results Strengthen the management of rain effects and damage prevention and tidal loss in key areas, evaluate the key points of damage prevention and the high-level changes in low-lying areas of each unit, form a statistical template for cargo conditions in key areas, and timely arrange cargo transportation and relevant records to further consolidate basic management
<ul style="list-style-type: none"> Transportation delays caused by extreme weather are becoming more frequent, affecting the reliability of marine transportation 	<ul style="list-style-type: none"> Decrease in revenue: Decrease in market demand for services 	<ul style="list-style-type: none"> The Group optimizes the operation level and improves service quality through the development of smart ports



ENVIRONMENTAL COMMITMENT

Description	Potential financial impact	Measures undertaken in 2021
Transition risk		
<ul style="list-style-type: none"> The implementation of carbon pricing mechanism by the government increases the operating costs of enterprises More government policies to mitigate climate change and increase corporate operational compliance 	<ul style="list-style-type: none"> Increase in cost: Increase in emission cost Increase in cost: Increase in renovation costs 	<ul style="list-style-type: none"> Regularly collect and update regulations through various channels such as government agencies and the Internet to ensure operational compliance
<ul style="list-style-type: none"> Stricter environmental regulations may expose enterprises to higher risks of claims and litigation 	<ul style="list-style-type: none"> Increase in costs: Legal cases of non-compliance claims 	<ul style="list-style-type: none"> Conduct environmental assessment on subsidiaries and affiliates with reference to the environmental protection assessment measures
<ul style="list-style-type: none"> Increasing investment in the development of smart green ports, such as increasing the use of renewable energy in ports The wide application of new energy-saving facilities has prompted enterprises to purchase new equipment and replace old equipment 	<ul style="list-style-type: none"> Increase in costs: increase investment in research and development of green technologies and purchase of new equipment Decrease in assets: Decommissioning of original equipment 	<ul style="list-style-type: none"> Promote the construction of smart ports and fully automate large equipment as planned Promote the use of new energy and clean energy, such as the use of electric container trucks, electric equipment, etc.
Opportunities		
<ul style="list-style-type: none"> Develop green ports and improve energy efficiency 	<ul style="list-style-type: none"> Cost reduction: reducing operating costs 	<ul style="list-style-type: none"> Promote the application of energy-saving technologies in production and operation, such as energy-saving lamps, clean energy equipment Promote the construction of energy management system and improve energy conservation management ability for the whole process of the system Strengthen the optimization of port energy structure
<ul style="list-style-type: none"> Change in investor preference towards focusing on investing in green port operators 	<ul style="list-style-type: none"> Cost reduction: Lower financing cost 	<ul style="list-style-type: none"> Promote the construction of smart green ports, and subsidiaries and affiliates should implement green port projects in accordance with the green port construction plan of Tianjin Port
<ul style="list-style-type: none"> Changes in consumer preferences, such as preference for more environmentally friendly products such as low-carbon marine fuel, reduced demand for fossil fuels 	<ul style="list-style-type: none"> Increase in revenue: Increase in sales volume of low-carbon fuel 	<ul style="list-style-type: none"> Accelerate the transformation into a low carbon business and actively participate in low-carbon construction



ENVIRONMENTAL COMMITMENT

ENVIRONMENTAL MANAGEMENT SYSTEM

In the context of building a world-class green port, the Group has drawn on the PERS environmental management standards of the European Port Organization (ESPO) ecological port to reduce the impact of operations on the environment. In 2021, a total of 20 subsidiaries and affiliates of the Group obtained GB/T 24001 environmental management system certification. We have formulated emergency response plans in accordance with relevant national and Tianjin laws and regulations,⁹ including natural disasters, offshore oil spills, and response to heavily polluted weather, etc., and clarified the responsibilities and action plans of each department of the subordinate companies to strengthen their response capabilities. In addition, the Group has established an emergency response team for environmental emergencies, which is responsible for implementing the national and Tianjin laws, regulations and decision-making arrangements on unexpected environmental emergencies, and is responsible for internal personnel, resource allocation and deployment of emergency response teams of the Group when environmental emergencies occur. At the same time, the Group has also formulated corresponding environmental management systems in terms of improving air and water quality, port greening, marine biological protection and ecological restoration, and actively urges its subordinate units and departments to take corresponding measures to implement them.

For assessment of environmental protection work, we require all subordinate units and their departments to submit self-inspection reports, and conduct scoring assessment on each department through regular inspections, spot checks and sampling tests. The assessment results become a part of the performance of each subordinate units and department and become one of the important bases for recognition and accountability. In 2021, all subsidiaries and affiliates of the Group passed the environmental protection assessment.

⁹ For environmental laws and regulations, please refer to the Laws and Regulations section of this report.



PEOPLE FOCUS

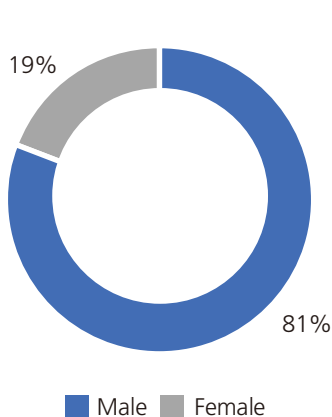
The Group has always adhered to the “people-oriented” talent development concept and regarded talents as the core competitiveness of its development. The Group formulates a well-rounded system in terms of employment, remuneration, benefits, promotion, training, safety and health, leave, etc., to protect the rights and interests of employees, and is committed to creating a good working environment and atmosphere for employees in all aspects, so as to achieve the long-term vision of mutual development with employees.

Corresponding SDGs		Relevant Issues
 5. C Adopt and enhance policies to promote gender equality	 10.4 Adopt policies, especially fiscal, salary and social security policies, to gradually achieve greater equality	<ul style="list-style-type: none"> • Diversity and Equal Opportunity • Talent Management • Labor Standards
 8.6 Promote youth's employment 8.8 Protect labour rights and promote safe and secure working environments for all workers		<ul style="list-style-type: none"> • Occupational Health and Safety • Employee Training and Development • Employee Communication • Dangerous Goods Management

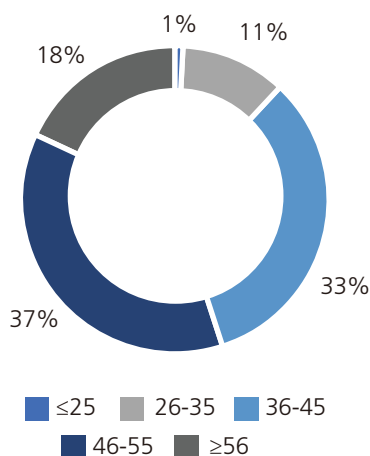
EMPLOYEE PROFILE

The Group builds a talent pool guided by market demand and development strategies. As at the end of 2021, the Group had a total of 7,545 employees, of which approximately 6,084 were male and 1,461 were female. The ratio of male to female employees was approximately 4:1. Among them, 37% of the employees were aged between 46 and 55, which was the age group with the largest number of employees. The annual employee turnover rate was 5.8%.

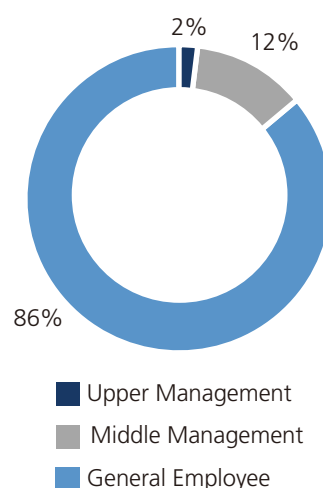
Employee Profile by Gender



Employee Profile by Age



Employee Profile by Position Level



HEALTH AND SAFETY

The Group strictly complies with relevant national and local laws and regulations¹⁰ such as the Production Safety Law of the People's Republic of China, the Regulations of Tianjin Municipality on Production Safety and the Regulations of Tianjin Municipality on Production Safety Responsibility System to build an occupational safety and health management system with the core safety values of "people first, life first, safety and health, and environmental friendliness". Based on its own production and operational conditions, the Group regularly reviews and improves the system, including strengthening the safety production supervision process, improving the safety management system, implementing safety training, and promoting safety production in an orderly manner, so as to provide maximum protection for the health and safety of employees. During the year, the Group did not violate any laws and regulations that have a significant impact on the Group relating to providing a safe working environment and protecting employees from occupational hazards, and no work-related fatalities or major work safety accidents were recorded.

Enhancing Safety Awareness

Safety awareness is one of the key areas of focus for promoting safe production. During the year, through the establishment of a safety culture, trainings on the newly revised production safety laws and implementation of production safety responsibility system for all employees, the Group aimed to get the employees to understand the importance of production safety and enhance safety awareness.

Safety Culture Nurturing

Weak awareness is often the largest potential hazard in safety management. Therefore, the Group regards the construction of safety culture as the top priority of safety management. During the year, the Group engaged a third-party agency to participate in the design of safety culture and encouraged all subsidiaries and affiliates to make internal adjustment and optimization in accordance with the Group's overall safety culture concept, comprehensively improved employees' safety awareness, and regularly evaluated the effectiveness of safety culture. In addition, we have normalized periodic inspections, field checks, interviews or on-duty behaviors of responsible persons at all levels, and arranged at least one safety knowledge test, emergency drills, ledger inspections and key field inspections at all levels to standardize safety work and help build a safety culture.

Through on-site investigations, the Group sought opinions from front-line employees to form a safety culture discussion atmosphere. At the same time, we promoted safety culture education through training and education, video publicity, network communication, slogan production, team safety culture wall and other communication methods, so that the concept of safe production can be deeply rooted in the hearts of people.

Safety Training

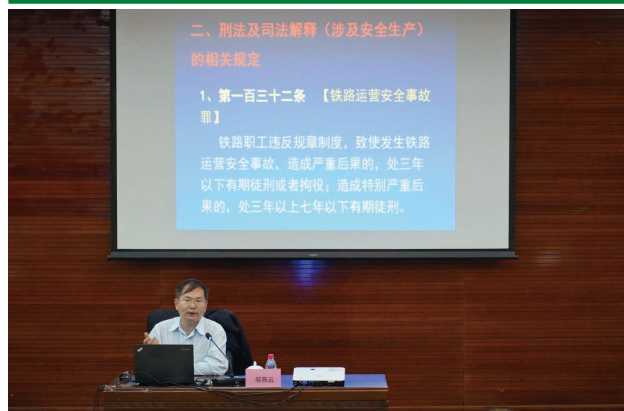
The Group held a number of safety-themed training seminars during the year. Among them, leaders from the Policy and Regulation Department of the Ministry of Emergency of the People's Republic of China vividly promoted safety regulations and terms to employees with easy-to-understand practical cases and received positive feedback. In addition, the Group held two lectures on safety in production for senior management, two rounds of training on improving the quality of safety supervision cadres and one round of specialised training on production safety laws, and carried out the safety knowledge competition of "implementing safety responsibilities and promoting safety development" to promote the enthusiasm of participating in production safety knowledge learning and education activities and comprehensively improve the safety awareness of employees. In 2021, the Group carried out a total of 217,028 hours of safety production training and education, with 108,162 participants.

¹⁰ Please refer to the Laws and Regulations section for health and safety-related laws and regulations.



PEOPLE FOCUS

Wu Yanyun, Deputy Director of the Policy and Regulation Department of the Ministry of Emergency, was invited to give lectures



"Implementing Safety Responsibility and Promoting Safety Development" Safety Knowledge Competition



Consolidating the foundation of safety management

Management Structure

The Group follows the policy of "safety first, prevention-oriented and comprehensive management", and implements "hierarchical responsibility" management for safety in production. Under the supervision of the labor union and employees, the Chairman and the President, as the first responsible persons for production safety, are fully responsible for production safety of the Group, who lead and supervise the initiatives of the safety production committee. Other management personnel adhere to the principle of "the person in charge shall be responsible", regularly study and deploy the safety initiatives within their scope and assume the leadership responsibility for safety incidents that occur within their scope.

Safety Management

The Group takes "zero violation, zero defect, zero tolerance, zero accident and zero pollution" as its safety production goal. 19 subsidiaries and affiliates have obtained the occupational health and safety management system GB/T 45001 certification. The Group requires the staff involved in handling dangerous goods and port operations to obtain the corresponding qualifications. Currently, 100% of all dangerous goods operators have obtained the safety management qualification certificate. The Group has incorporated the requirements of safety management performance and qualifications into the contractor selection standards and rating standards, and put forward strict requirements on the relevant work of contractors to ensure standardization and safety in operations.

During the year, the Group invested a total of approximately RMB114,000,000 on safety in production and employee health and safety, which was used for safety protection equipment maintenance, protective equipment upgrade, safety production technology upgrade, safety accident potential hazard investigation, safety consultation and standardization construction, so as to avoid occupational hazards as much as possible.



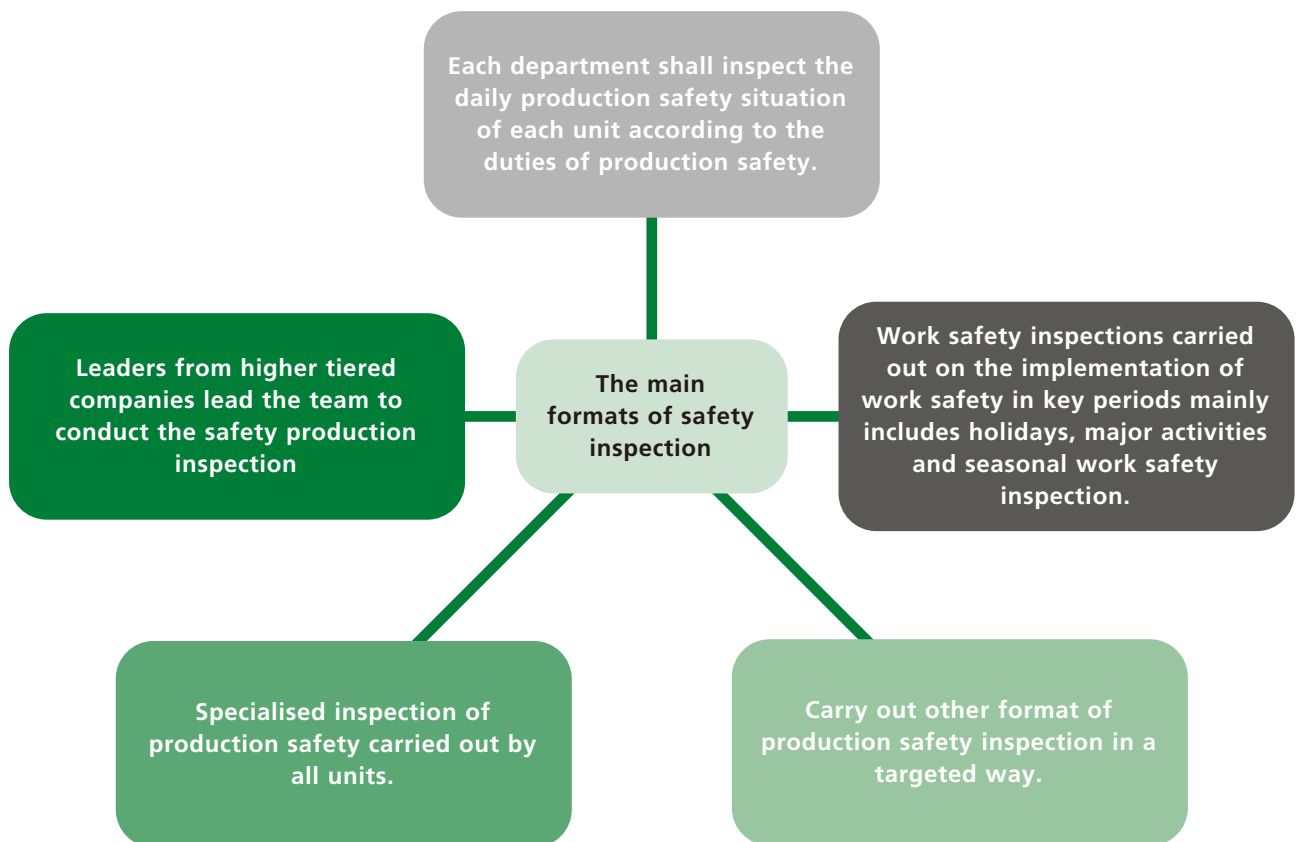
Elevating Safety Management Capability

Safety Assessment

The Group continuously improves the safety responsibility assessment system, conducts monthly, quarterly, semi-annual and annual assessments of safety production targets through a strict mechanism, and urges all subsidiaries and affiliates to effectively implement the main responsibility of safety production. During the year, the Group has conducted safety inspection and assessment on more than 70 subordinate units. The overall situation was satisfactory, and various safety indicators such as economic loss rate and mortality rate per million people were up to standard. At the same time, we link the safety assessment results with the management's remuneration and implement a one-vote veto system on serious safety accidents to ensure the implementation of safety management mechanism and the achievement of safety production goals. During the year, the Group did not have any safety accidents or work-related fatalities.

Eliminating safety hazards

During the year, the Group revised the safety production inspection system. Through the inspection mechanism combining self-inspection, mutual inspection, expert inspection and supervision, the Group urged all units to eliminate potential safety hazards in a timely manner to ensure effective implementation of the safety production management system. The Group requires the management to achieve "Four Don'ts and Two Directs"¹¹ in safety inspection and requires each inspection to identify at least 17 safety hazards and rectify at least three issues.



¹¹ "Four Don'ts and Two Direct" refers to: don't have prior notice, don't flag up, don't listen to report, don't need accompanying party or entertainment, and go direct to ground level and on site.



PEOPLE FOCUS

Technological Development

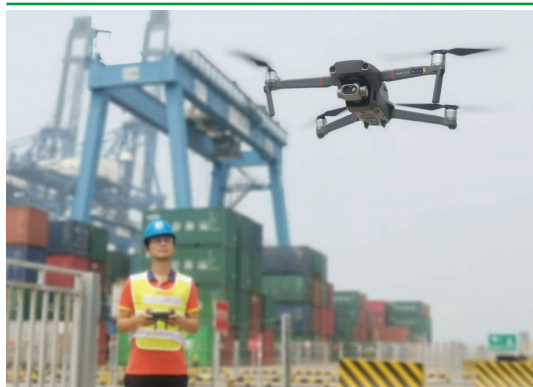
The Group applies smart security technologies and has achieved full coverage of sea, air and land safety inspections with the help of AI-assisted, unmanned aerial vehicle (UAV) and monitoring ball.

Smart security technology — AI-assisted, UAV, Monitoring balls



AI-assisted

- Realize the function of issuing early warning when personnel are close to mechanical equipment in human-computer interaction scenes



UAV

- Inspect on-site violations, vehicle speed, cargo unloading, equipment and facilities hazards, etc.
- Check whether the anti-epidemic measures of vessel operators are in place
- Achieving full coverage of vessel operation, terminal business and logistics company operation

Monitoring Ball

- 360-degree surveillance of illegal acts, cargo storage and violation of operating procedures in the cabin
- Conduct 24-hour unified monitoring of all subordinate production and operation units, timely discover violations, and achieve monthly inspection and monthly notification

Dangerous Goods Management

In order to strengthen the supervision and management of dangerous goods, the Group formulated the Regulations on the Administration of Dangerous Goods Business during the year. We fully cooperate with the relevant supervision and approval work of the Customs and Maritime Safety Administration, and continuously improve the internal management system to ensure safety in port operations.



PEOPLE FOCUS

The Group's business involves dangerous goods and therefore port safety is of paramount importance. Dangerous goods involved in the Group's business are mainly bulk-type dangerous goods, including bulk liquids and bulk gases, and different types of packaged dangerous goods. We strictly comply with national laws¹² and regulations and industry standards and implement strict control measures with regard to different types of dangerous goods.

Bulk-type dangerous goods	Packaged of dangerous good
<ul style="list-style-type: none"> Implement national and industrial standards, such as safe operations regulations for tanker wharf and fire prevention design specifications for paints and chemicals terminal Follow the international rules and regulations on dangerous goods 	<ul style="list-style-type: none"> Improve the construction of management system, formulate management measures for containing dangerous behaviors, and the corresponding measures for emergency response management Implement the relevant international codes at the practice level to ensure safe and controllable transportation of dangerous goods

The Group regularly conducts training and inspections on operations involving dangerous goods, strengthens the management of employees of subsidiaries and affiliates, and ensures the safety of employees.

Operators	<ul style="list-style-type: none"> Port operators and employees involved in handling dangerous goods such as safety management personnel and cargo loading and unloading management personnel, etc. must obtain relevant qualification certificates In order to enhance employees' knowledge of management of dangerous goods, regular training is provided to ensure that employees have a certain understanding of the way dangerous goods are managed Disseminate the informations that needs attention through Wechat Groups
Subsidiaries and affiliates	<ul style="list-style-type: none"> The storage and cargo handling enterprises should obtain the port dangerous goods operation certificate issued by the competent port administrative authority, which stipulates the scope and mode of operations within which they can operate. Subsidiaries and affiliates shall formulate and optimize management systems, and regularly monitor the operation process for compliance.

Emergency Management

The Group continues to improve the emergency response mechanism. Based on the actual situation of safety in operations, the Group has refined the emergency plan for accidents, and regularly holds drills. In 2021, the Group held a total of 1,099 safety emergency drills with 13,423 participants.

Occupational disease prevention

With the goal of avoiding the occurrence of acute occupational disease hazards and eliminating the incidence of occupational diseases, the Group continues to improve the workplace and working environment and disseminates information that helps occupational disease prevention and control, aiming to eliminate occupational disease hazards and improve the level of occupational health management. The Group's occupational disease prevention and control focuses on pneumoconiosis, noise disease, occupational poisoning and heat stroke. For different types of work, responsible departments formulate and implement occupational health training plans. For workers engaged in operations that expose them to occupational hazards, we entrust medical institutions having competent occupational health check qualifications with the task of occupational health examination before, during and after employment. During the year, Tianjin Port Holdings Co., Ltd., a controlling subsidiary of the Company, formulated the 2021 Occupation Disease Prevention Work Plan to strengthen the guidance and inspection of occupational disease prevention work at the subordinate units. In 2021, the Group recorded no cases of pneumoconiosis or noise disease.

¹² For laws and regulations related to management of dangerous goods, please refer to the Laws and Regulations section of this report.



PEOPLE FOCUS

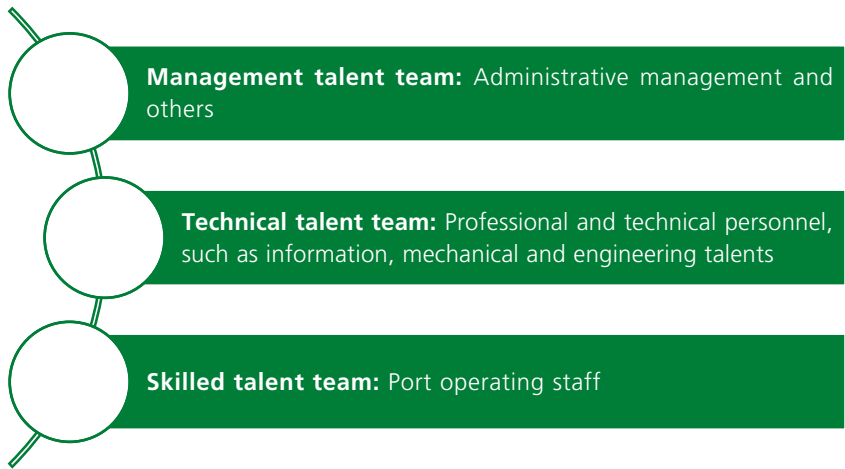
LABOR MANAGEMENT

Talent recruitment

The Group optimizes its employee management procedures, adheres to the principle of “fairness, openness and equality” in talent recruitment and selection and builds a benign competition mechanism. We provide a smooth promotion channel to achieve the goal of “making the best use of talents”, and form a long-term and excellent talent reserve for the construction and development of smart ports. During the year, the Group formally launched the new job position management system, improved the position management process based on the principle of “setting up positions based on the situation, optimizing the structure and making dynamic adjustments”, and promoted the recruitment and retention of talents according to the latest needs of business development. In addition, we strictly follow the requirements of national laws and regulations in the recruitment process of employees, and conducted special inspections during the year, and implemented the corresponding requirements to our contractors to ensure the elimination of child labor or forced labor. During the year, the Group was not aware of any non-compliance with relevant laws and regulations that have a significant impact on the Group relating to preventing child and forced labour.¹³

Talent Development

The Group recognizes that development of talents an important cornerstone for the sustainable development of the Group. By formulating relevant systems for employee training, the Group defines different training channels for employees and builds a high-quality workforce. During the year, we have continued to improve the employee training system by dividing the talent team into three categories: i.e. management, technical talents and skilled talents and equipped each talents category with different training systems.



Tianjin Port Talent Team Building

For management personnel, relevant training is provided according to different layers of senior management, middle management and youth. For technical and skilled personnel, we organize equipment management technology seminars and training courses, and specialised training on smart port.

¹³ Please refer to the Laws and Regulations section for child labour and forced labour-related laws and regulations.



PEOPLE FOCUS

The Group also attaches great importance to the mutual development of employees and the Group. According to the work priority and direction of the year, each department may list out professional training needs to match with the job requirements, then human resources department coordinates and formulates training plans to help employees achieve vocational skills improvement.

In 2021 years, the Group conducted a total of 18,801 employee training sessions to all employees with 163,563.5 hours in total.¹⁴

Protecting Employees' Rights and Interests

The Group strictly abides by laws and regulations¹⁵ related to labour standards, and is committed to creating a diversified, inclusive and equal workplace for employees by formulating and improving a series of internal human resources management policies. To the best of our knowledge, the Group did not violate any laws and regulations that have a significant impact on the Group relating to compensation and dismissal, recruitment and promotion, working hours, leave, equal opportunity, anti-discrimination, and other benefits and welfare during the year.

Remuneration and benefits

The Group continues to improve its employee management system. We attract, motivate and retain talents through competitive remuneration schemes, and ensure that relevant remuneration and benefits comply with the requirements of the laws and regulations¹⁶ of the places where we operate. In 2021, the Group optimized the subsidies for staff in centralized residence, vessel staff subsidies and, allowances for work in high temperatures, and provided a more attractive remuneration incentive system for employees in high-risk positions. In line with the formal launch of the new job position management system, the Group updated the supporting remuneration standards to increase the level of fixed salary income and ensure its competitiveness in the local labor market.

EMPLOYEE CARE

The Group is committed to building a comprehensive care system for employees. The labor union leads the work on communication with employees, organizes the annual employee representative conference, and formulates or revises the Collective Employment Contracts every three years. In terms of implementing the care and welfare policy, we provide employees and their families with a variety of additional protection, including critical illness subsidies, hospitalization visit consolation funds, etc., to enhance employees'sense of belonging and identity.

Employee communication

The Group maintains regular communication with employees, and listens to the voices of employees through multiple channels such as satisfaction surveys, Tianjin Port Workers' Forum, proposals of the employees' representative conference, symposiums, mailbox for leaders, and phone calls. In addition, the Group has set up employee complaint channels and interview mechanisms, and requires handling staff to investigate the complaint at the subsidiary level and prepare special research reports so as to solicit opinions in all aspects when formulating policies. During the year, the Group handled a total of 18 proposals at the employees' representative conference. According to an employee survey, the degree of satisfaction on complaint handling was 100%.

¹⁴ Employee training data include professional knowledge and skills training, occupational safety and health training and anti-corruption training

¹⁵ Please refer to the Laws and Regulations section for the remuneration-related laws and regulations.

¹⁶ Please refer to the Laws and Regulations section for labour-related laws and regulations.



PEOPLE FOCUS

Caring for mental wellbeing

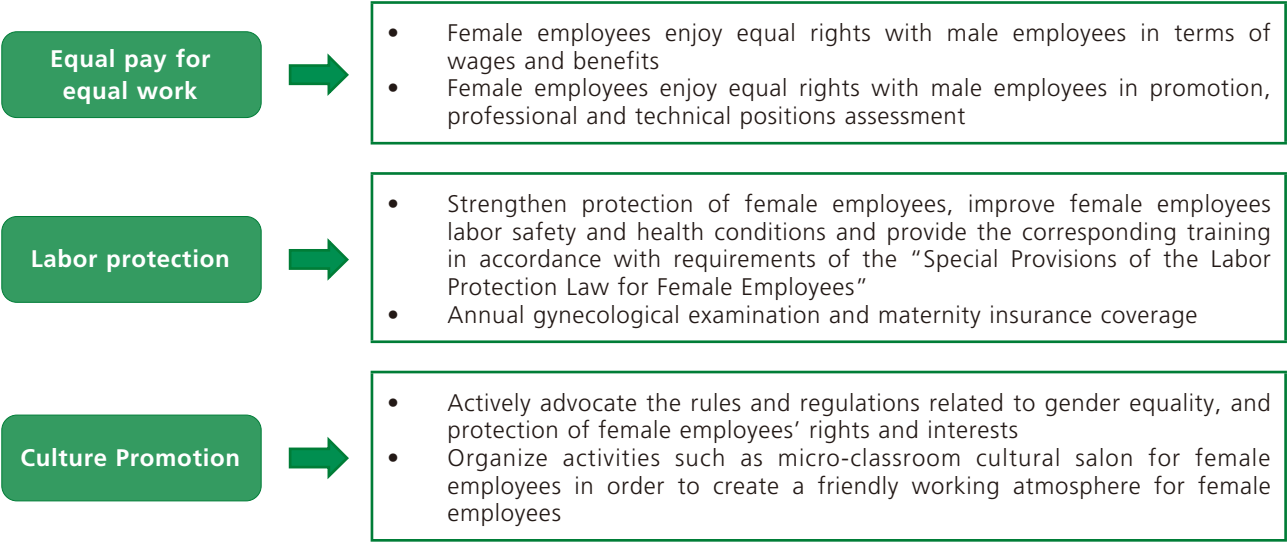
The Group pays attention to employee care and actively builds harmonious labor relations. During the year, the Group promoted the implementation of psychological care and Employee Assistance Program (EAP) projects. After understanding the mental health of employees, the Group provided timely attention and guidance to help employees relieve work pressure, improve physical and mental health, and promote work-life balance. We found that the EAP project not only elevates the happiness degree and work performance of employees, but also effectively stimulates the potential and creativity of employees. For the Group, the EAP project not only ensures production and operation safety, but also indirectly improves operational performance and efficiency, creating a win-win situation.

Diversity and inclusion

The Group advocates diversity and inclusion and is determined to eliminates any form of discrimination on gender, race, religion, age, region and physical condition. The Group supports the employment of disabled persons and protects the rights and interests of female employees in accordance with relevant laws and regulations such as the Measures for the Administration of Employment Security Fund for the Disabled in Tianjin and the Law of the People’s Republic of China on the Protection of Women’s Rights and Interests.¹⁷

The labor union and the female workers department are responsible for monitoring matters related to protection of rights and interests of female employees, and ensuring that welfare policies such as breastfeeding leave, gynecological examination and maternity insurance are in place. The Group has included protection of the rights and interests of female employees in the Collective Employment Contracts. Tianjin Port Tugboat Lighter Co., Ltd., a subsidiary of the Group, has carried out a control inspection of female rights and interests during the year. All female employees were invited to report any non-compliance with relevant contents in the section headed “Protection of Female Employees’ Rights and Interests” in the Collective Employment Contracts. In the case of non-compliance, the female employees committee would propose supervision and rectification opinions to the responsible departments, supervise the implementation of rectification measures, and safeguard the legitimate rights and interests of female employees in accordance with the law.

Tianjin Port Tugboat Lighter Co., Ltd. strongly supports and protects the rights and interests of female employees



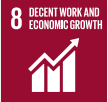
¹⁷ For laws and regulations related to women’s rights and interests, please refer to the Laws and Regulations section of this report.



QUALITY FIRST

Quality First

The management standards and procedures established by the Group cover quality, production and organization. They can be continuously adjusted along with the climate and the operating status of equipment and facilities, greatly improving service quality of the Group.

Relevant SDGs	Relevant Issues
 <p>8.2 Positive contribution to productivity improvement through technology upgrading</p> <p>8.8 Protection of labour rights and promotion of a safe and secure working environment</p>	<ul style="list-style-type: none"> • Smart Port* • Compliant Operation • Supplier Management • Contractor Management • Innovation and Intellectual Property Rights

SERVICE RESPONSIBILITY

The Group consistently improves the quality management system and controls the service quality on a strict basis. In 2021, we have established the Group-wide management standards and procedures on production safety and on-site operation procedures, thereby achieving an orderly control of the on-site operations. Meanwhile, the Group has been optimizing its operating systems with regard to quality, production and business organizations. Our operating systems can be adjusted in response to the climate and the operating status of equipment and facilities and are sufficient to handle temporary problems caused by the pandemic and production imbalance. During the year, the Group continued to improve the service quality to achieve both high loading and unloading efficiency and low fees.

Efficiency improvement



- The Group has set the container handling efficiency records 18 times, 8 of which on the global records of foreign trade routes and remaining 10 on the domestic trade routes. We achieved the global ranking of No. 1 in terms of efficiency on major routes.
- We have launched the service brand of “Daily shift” within the feeder routes of Bohai Bay Rim, created focused routes of “one vessel between two ports”, and formed a transit trunk and feeder network around the Bohai Bay and a North–South Sea Transport Corridor with Tianjin Port as the hub. The Berth on Arrival Rate (BOA) and Berth Moves Per Hour (BMPH) have increased by 10.5% and 9.4% respectively, and consequently boosted the domestic trade container handling volume



* For the topic on “Smart Port”, please refer to P.12–14 of this report.



QUALITY FIRST

Increase of throughput and handling volume of cross-border land bridge

— As the Group has implemented the strategy of “1234” for flourishing port and developing enterprise, the container throughput exceeded 20 million TEUs. Our growth in container throughput ranked the first among the world’s top ten ports.

— The upgrade version of the “Maritime Expressway-FAST” brand was launched during the year. With the global trade routes expanded through the Belt and Road Initiative platform, the throughput handled through cross-border land bridge ranked first among coastal ports in China.



We are committed to providing quality services to our customers. During the year, a total of 22 subsidiaries and affiliates obtained GB/T19001 quality management system certification. In 2021, the Group assigned the responsibility of damage prevention management to specific personnel and departments and carried out special work for prevention of damage to cargo due to rains and tidal waves. During the year, there was no cargo damage accident caused by rains, water and other factors, and we achieved the goal of zero major cargo damage accident, and the rate of cargo damage and cargo error were far lower than the targeted 0.12%. During the year, there were no recall of sold or delivered products due to safety and health reasons.



QUALITY FIRST

During the year, the Group was not aware of a any violation on relevant laws and regulations¹⁸ that have a significant impact on the Group relating to health and safety, privacy issues and remedies for the provision of products and services. Our business does not involve advertising and product labelling and therefore it has no significant impact on our operations.

RESPECT INTELLECTUAL PROPERTY RIGHTS

Innovation is the driving force for quality development of an enterprise. In this regard, the Group has promulgated the “Innovation Management Measures” and the “Innovation Incentive Measures”, to encourage employees to innovate and create a top-down atmosphere for all-staff innovation and all-fields innovation. At the same time, the Group respects and protects intellectual property rights of its own and of others whom it does business with, strictly complies with relevant laws and regulations on intellectual property rights¹⁹, and formulates management measures for patent to coordinate the patent works within the Group. Through these improved patent and innovation management approaches, we have successfully promoted technological innovation and advancement, and accelerated the construction of a world-class green and smart hub port.

The Group continues to apply for national invention patents. In 2021, the Group carried out four technological reforms and obtained 54 national patents, including two invention patents, one design patent and 51 utility model patents. A number of patented technologies have yielded significant economic benefits and production efficiency.

SUPPLY CHAIN MANAGEMENT

Supplier management is the foundation and guarantee for effective operations within the Group. In order to build a world-class green and smart port, the Group strictly selects and manages suppliers to improve service quality on a constant basis. The Group has formulated internal management policies such as the Supplier Evaluation Plan and the Quality Occupational Health and Safety Management to standardize the supplier entry assessment mechanism. Meanwhile, we maintain communication with suppliers through various channels, including centralized procurement platforms, WeChat, trade conferences, visits, phone calls and announcements.

The Group’s suppliers are mainly divided into three categories, namely sales supply chain, labor supply chain and port production and construction materials supply chain. In 2021, the Group had a total of 801 suppliers, of which 799 or 99.8% were located in Tianjin.

Supplier selection and evaluation

The Group adopts a “three simultaneity” management approach for suppliers, that is, safety agreements and environmental protection agreements must be signed together with service agreements. Before entering into an agreement, we must carry out due diligence on suppliers to investigate their past performance in terms of safety and environmental violations. Environmental protection agreements are an important factor in evaluating suppliers. The Group conducts compliance and contract review on suppliers every year to check whether environmental protection terms are covered in the operating and safety agreements. After the agreements are signed, the Group makes inspections and spot checks on the suppliers, the results of which are used as one of the criteria when evaluating whether to renew the agreements/contracts in the following year.

The Group monitors and manages the environmental and social risks of suppliers based on the nature of business with them and clearly stipulates the evaluation methods and range of evaluation on suppliers to ensure the quality of products and services from them.

¹⁸ For laws and regulations related to product and service responsibility, please refer to the Laws and Regulations section of this report.

¹⁹ For laws and regulations related to intellectual property rights, please refer to the Laws and Regulations section of this report.




QUALITY FIRST

	Sales supply chain	Labour supply chain	Supply chain of port production and construction materials
Products and services	Provision of fuel oil to inbound vessels	Contract workers and outsourced workers	Supply of port operation and construction materials
Environmental and Social Risk Management	<ul style="list-style-type: none"> Formulate supplier contract standards, define requirements of suppliers on quality, safety, environmental protection, corporate social responsibility, compliance, anti-corruption, etc., and standardize supplier behavior Suppliers who violate the "Anti-commercial Bribery Commitment" are disqualified from entering the supplier database 	<ul style="list-style-type: none"> Review the basic information of contractors, including registered capital, management scale, social credit, illegal and criminal records, etc. Establish a special inspection team to supervise and inspect contractors to ensure and protect the basic rights of employees 	<ul style="list-style-type: none"> Make comprehensive assessment on suppliers, including employment standards, production safety, environmental safety, service satisfaction, community responsibilities and ethics, etc. Suppliers who meet the requirements are required to submit quality certification documents for the supplied materials, which are reviewed by a special evaluation team
Supplier Evaluation Methods	<ul style="list-style-type: none"> The procurement team formulates the supplier evaluation mechanism, conducts regular evaluation and annual review of suppliers, and summarizes the daily performance of suppliers at the end of the year The leadership group conducts a comprehensive review of the summary to determine the supplier database for the next year 	<ul style="list-style-type: none"> The labor service center undergoes regular evaluation and quarterly scoring on contractors The contractors are evaluated annually based on opinions from subcontractors and employees, combined with daily supervision and assessment performance, and the results are used as the basis for confirming the next round of contractors 	<ul style="list-style-type: none"> Conduct monthly evaluation and annual comprehensive evaluation on suppliers The Supplier Management Committee evaluates the annual rating of each supplier based on the monthly evaluation and other relevant evaluation conditions, and takes corresponding management measures for suppliers rated in the next agreement year



CUSTOMER ORIENTED

The Group adheres to the principle of “customer-oriented, service-oriented and win-win cooperation”. We understand the needs of customers through multiple channels, fully respect and safeguard the interests of customers, and provide customers with comprehensive and quality services to attain customer satisfaction.

Relevant SDGs	Relevant Issues
 8.2 Positive contribution to productivity improvement through technology upgrading	<ul style="list-style-type: none"> • Customer satisfaction • Health and safety product • Customer Privacy and Cybersecurity

CUSTOMER SATISFACTION

The Group attaches great importance to customers' feedback. We have a number of communication channels in place to collect customers' suggestions and carry out targeted optimization. With regard to the 24-hour service hotline for the customer service center, the Group has put in place corresponding management measures to standardize the complaint handling service process to ensure high-quality services to customers.

The Group conducts customer satisfaction surveys every year which cover customers in all business processes, including drivers, agents and vessel owners. In 2021, we carried out customer satisfaction surveys in two dimensions. From the dimension of marine services, the satisfaction rate of customer survey results reached 99%; from the perspective of land services, the satisfaction rate reached over 96%. The Group also has a complete set of complaint handling follow-up procedures and takes every complaint seriously. After the problems are solved, we actively review and improve the service process.

Looking back over the year, we proactively provided extended and improved services to our customers. In 2021, the continuous increase in the overall maritime storage volume, especially the storage volume of dealers, resulted in serious damage of maritime containers. In view of this, the Group took the initiative to carry out on-site inspection to timely detect damage of containers and vessels, so as to reduce the loss to customers caused by cargo damage during long-distance marine transportation.

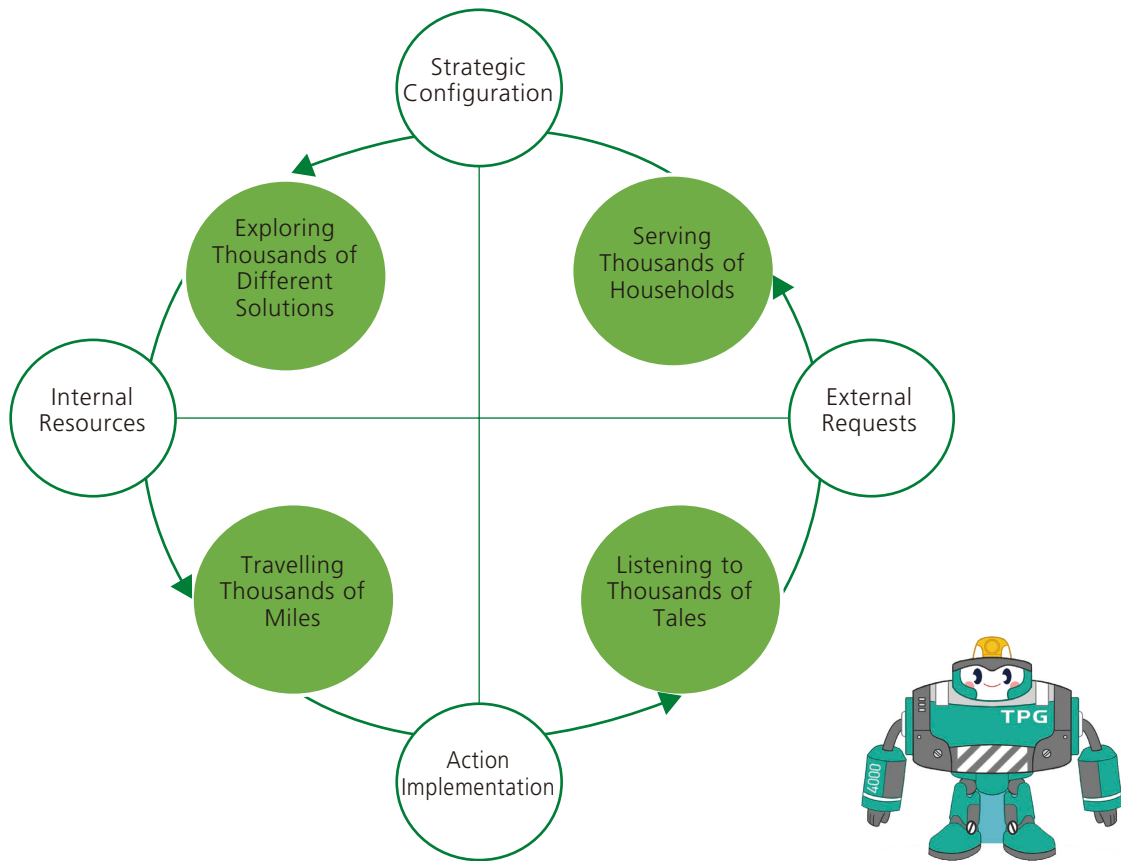
In 2021, the Group continued to improve overall service standards with the goal of improving quality and efficiency. We have implemented the “Four Thousand Actions”²⁰ and “Year of Marketing” activities further and carried out in-depth research to come up with effective solutions to meet customers' needs, striving to provide customers with high-quality services.



²⁰ “Four Thousand Actions” refers to travel thousands of miles, listen to thousands of tales, explore thousands of different solutions and serve thousands of households.



CUSTOMER ORIENTED



ENSURING NETWORK INFORMATION SECURITY

The Group regards network information security with high level of importance. We strictly abide by laws and regulations²¹ and constantly improve the network information security management system, through the systems, management and technology simultaneously, thereby fulfilling the responsibility of network security management.

In terms of the system, the Group has formulated a series of network security systems and implementation measures in accordance with relevant national and Tianjin regulations. In 2021, we established a new response system for network security. In terms of management, the Group regularly carries out inspection, monitoring and construction related to network security, implements specific requirements, arrange investigators on duty to ensure the Group's network security. During special festivals such as the Spring Festival, the anniversary of the founding of the Communist Party of China and the National Day every year, the Group issues the corresponding key security plans on network security to define software and hardware specification requirements. In addition, in accordance with the national network security requirements, the Company files and evaluates the Level-3 protection system every year to identify defects in the system and rectify loopholes in a timely manner. Technology wise, all computers of the Group have been installed with security systems to ensure safe use.

During the Year, the Group implemented on-site optical cable upgrading and transformation projects, built quayside wireless network systems, installed safety operation and maintenance equipment "fortress machine" and deployed end-point security protection system to uplift the safety level of enterprise network infrastructure and the overall information equipment security.

²¹ For laws and regulations related to network information security, please refer to the Laws and Regulations section of this report.




CUSTOMER ORIENTED

The Group regularly conducts network security drills and organises training programmes to strengthen employees' awareness of cyber security. The Group organizes two internal cybersecurity drills every year, rectifies and follow up on issues identified and then formulates improvement measures. The Group provides two specialised training sessions every year frontline cybersecurity practitioners that cover the latest national rules and regulations, software and hardware technical requirements, and network systems. In addition, we invite police departments and professional network companies to give professional technical lectures for network practitioners.

PRIVACY SAFETY

The Group is committed to safeguarding customer information and privacy and abide by the Regulations on Customer Information and Personal Data Privacy Management. All employees are required to protect both customer information security and personal data privacy. We continue to supervise the implementation of information security measures by requiring all units to conduct self-inspection, internal and external audits and self-assessment. Appropriate disciplinary will be taken actions in case of any violation by employees.

BUSINESS ETHICS

	Relevant SDGs	Relevant Issues
	16.5 Reduce corruption and bribery in all their forms	<ul style="list-style-type: none"> • Anti-corruption • Business Ethics

The Group adheres to the operating principles of fairness and honesty and adopts a zero-tolerance attitude towards all unethical behaviours such as corruption or bribery. In order to build a culture of integrity, we have stipulated a series of internal policies, implemented management regulations related to bribery, extortion, fraud and money laundering, and strictly regulate the behaviours of directors and employees, therefore progressively improving our anti-corruption works.

The Group has in place a specialised department with the requisite personnel to undertake integrity building and anti-corruption initiative. The Office of the Discipline Inspection and Supervision Commissioner supervises and enforces accountability of the Group's leaders on the lawful performance of duties, ethical compliance, honest practice and adherence to ethics. All employees are supervised and inspected in accordance with the Administrative Measures for Employee Reward and Punishment.

In order to maintain a high standard of business ethics, the Group invited the Independent Commission Against Corruption of Hong Kong to conduct anti-corruption training for employees in Hong Kong headquarters and Tianjin representative office. The Group also organized anti-corruption trainings with contents tailored to characteristics of each subsidiary company and in various forms, including group learning and specialised training for junior discipline inspection and supervision personnel. For middle-level management, the Group focused on case-study sharing of corrupt behaviour. During the year, the Group conducted a total of 62 anti-corruption training sessions, totalling 4,758 hours.

The Group has a sound corruption reporting mechanism in place. When reports are filed, specialised departments and personnel conduct investigations through the corresponding investigation department. All cases are confidential and protected by the National Secrecy Law and relevant laws. Channels for reporting include in-person visits, calls, letters, etc.



CUSTOMER ORIENTED

The Group was not aware of any non-compliance with relevant laws and regulations that have a significant impact on the Group relating to bribery, extortion, fraud and money laundering.²²



Integrity Education

- Normalise anti-corruption education, publish anti-corruption policy guidance to senior management
- Strengthen anti-corruption education through videos, Wechat public account and case studies
- Specialised training for discipline inspection cadres of subsidiaries and affiliates
- Group lecture for new employees, site visit at warning centre and anti-corruption talent training program



Strengthening Supervision

- Two rounds of routine inspections were conducted, covering nearly 20 companies
- 64 problems were rectified and 32 relevant systems were established and improved



Whistle-blowing Mechanism

- An anonymous corruption reporting mechanism is in place
- Set up a working group to review the reported cases and ensure the confidentiality of the whistle-blower's personal information during the transfer of the whistle-blower and the investigation
- Build reporting channels such as mail, visits and phone calls. A reporting hotline was set up, using the uniform hotline of national disciplinary and supervisory authorities



Declaration of Interests

- Implement employee management regulations to regulate the behaviour of directors and employees.
- Directors and employees are required to avoid conflicts of interest as much as possible and disclose conflicts of interest in expected transactions or relationships.
- If conflict of interest exists, it must be reported to the Group's relevant department well in advance.

Highlights of Anti-corruption Initiatives

²² For laws and regulations related to business ethics, please refer to the Laws and Regulations section of this report.



COMMUNITY CARE

As a socially responsible corporate citizen, the Group always adheres to the concept of “Giving back to the community”, actively participates in community investment, and is committed to facilitating development of the communities in which it carries out the business. By cooperating with non-profit organizations, the Group supports the underprivileged and delivers warmth and blessings to the people in need. Tianjin Port Tugboat Lighter Co., Ltd, a subsidiary of the Group has set up a caring team management system to encourage employees to participate in volunteer activities.



In November 2021, In light of the rapid increase in demand for food assistance, Tianjin Port Development cooperated with the New Life Psychiatric Rehabilitation Association to participate in packaging of food products and deliver food packets directly to citizens in need to show care through the Environmental Protection Fund “Bamboo” Feeding Hong Kong Scheme. Food items, such as vegetables, rice, noodles, dried vegetables and biscuits, were donated by Tianjin Port Development and other organisations and distributed by the Tianjin Port Development Volunteer Team to the beneficiaries on a case-by-case basis.



In March 2021, Tianjin Port Tugboat Lighter Co., Ltd.’s Xianchuang Caring Team went to Xiangyu Autism Rehabilitation Center to carry out caring volunteering service activities and sent warmth and care to the disadvantaged groups in the community.



COMMUNITY CARE



In November 2021, Tianjin Port Petrochemical Terminal Company visited 300-Ton community in Tianjin to promote fire safety knowledge for retired employees, so as to raise their fire safety awareness and improve their capabilities on prevention and rescue.



SUSTAINABILITY AWARDS

Award-winning Company	Award
Tianjin Port Development Holdings Limited	Hong Kong ESG Reporting Awards 2021 (HERA) Best ESG Reporting Award — Mid Cap Commendation
Tianjin Port Development Holdings Limited	Hong Kong ESG Reporting Awards 2021 (HERA) Outstanding New Force Award
Tianjin Port Alliance International Container Terminal Co., Ltd. Tianjin Port Euroasia International Container Terminal Co., Ltd. Tianjin Port Pacific International Container Terminal Co., Ltd. Tianjin Port Container Terminal Co., Ltd. Tianjin Port Yuanhang International Ore Terminal Co., Ltd. Tianjin Port China Coal Huaneng Terminal Co., Ltd.	Four-star Green Port Rating
Tianjin Port Container Terminal Co., Ltd.	2021 “Maritime Silk Road” Annual Quality Terminal Service Award



LAWS AND REGULATIONS

For each ESG aspect, the Group and its subsidiaries and affiliates implement relevant internal policies to ensure that their business operations comply with all applicable laws and regulations. The applicable laws and regulations are as follows:

Aspects	Applicable Laws and Regulations	Corresponding Section
EMISSION	<ul style="list-style-type: none"> • Environmental Protection Law of the PRC • Marine Environment Protection Law of the PRC • Water Pollution Prevention and Control Law of the PRC • Law of the PRC on the Prevention and Control of Atmospheric Pollution • Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste • Law of the PRC on the Prevention and Control of Pollution from Environmental Noise • Regulations of the People's Republic of China on the Safety Operation of Ships and for Pollution Prevention • Tianjin Air Pollution Control Regulations • Emission Pollution of Motor Vehicles and Non-road Mobile Machinery in Tianjin • Emergency Plan for Heavy Pollution Weather in Tianjin 	Environmental Commitment — Environmental Management System Environmental Commitment — Emission Control
Use of Resources	<ul style="list-style-type: none"> • Energy Conservation Law of the PRC • Measurement Law of the PRC • Water Law of the PRC • Regulations of Tianjin Municipality on Energy Conservation • Regulations of Tianjin on Water Conservation • Water Consumption Quota for Industrial Products in Tianjin • Water Consumption Quota for Urban Domestic Water in Tianjin • Tianjin Agricultural Water Quota 	Environmental Commitment — Environmental Management System Environmental Commitment — Resource Conservation



LAWS AND REGULATIONS

Aspects	Applicable Laws and Regulations	Corresponding Section
The Environment and Natural Resources	<ul style="list-style-type: none"> Cleaner Production Promotion Law of the PRC Emergency Response Law of the People's Republic of China Environmental Impact Assessment Law of the PRC Regulation of the People's Republic of China on Flood Control Tianjin Clean Production Promotion Regulations Regulations of Tianjin Municipality on Ecological Environmental Protection Measures for Tianjin Municipality to Implement the Emergency Response Law of the People's Republic of China General Contingency Plan for Emergencies in Tianjin 	Environmental Commitment — Environmental Management System Environmental Commitment — Climate Action Environmental Commitment — Ecological Protection
Employment	<ul style="list-style-type: none"> Labor Law of the PRC Labor Contract Law of the PRC Law of the PRC on the Protection of Disabled Persons Law of the PRC on the Protection of Women's Rights and Interests Trade Union Law of the PRC Special Provisions on the Labour Protection of Female Employees Regulations on the Implementation of Labor Contract System in Tianjin Provisions on Employment of Disabled Persons in Tianjin Management Methods for Collection and Use of Employment Security Funds for the Disabled in Tianjin Tianjin Regulations on the Protection of Women's Rights and Interests Employment Ordinance of Hong Kong Employees' Compensation Ordinance of Hong Kong Sex Discrimination Ordinance of Hong Kong Race Discrimination Ordinance of Hong Kong Disability Discrimination Ordinance of Hong Kong 	People-oriented — Protecting Employees' Rights and Interests People-oriented — Employee Care
Health and Safety	<ul style="list-style-type: none"> Production Safety Law of the PRC Law of the PRC on the Prevention and Control of Occupational Diseases Provisions on the Supervision and Administration of Occupational Health in the Workplace National Plan for Prevention and Control of Occupational Diseases (2016–2020) Tianjin Safety Production Regulations Regulations on Safety Management of Hazardous Chemical Enterprises in Tianjin Tianjin Special Equipment Safety Regulations Measures for the Investigation and Treatment of Hidden Dangers in Work Safety Occupational Safety and Health Ordinance of Hong Kong Employees' Compensation Ordinance of Hong Kong 	People-oriented — Health and Safety



LAWS AND REGULATIONS

Aspects	Applicable Laws and Regulations	Corresponding Section
Labor Standards	<ul style="list-style-type: none"> • Law of the PRC on the Protection of Minors • Provisions on Special Protection for Juvenile Workers • Provisions on the Prohibition of Using Child Labour • Employment of Children Regulations of Hong Kong • Employment Ordinance of Hong Kong • Employees' Compensation Ordinance of Hong Kong • Occupational Safety and Health Ordinance of Hong Kong • Personal Data (Privacy) Ordinance of Hong Kong • Minimum Wage Ordinance of Hong Kong • Sex Discrimination Ordinance of Hong Kong • Race Discrimination Ordinance of Hong Kong • Disability Discrimination Ordinance of Hong Kong 	People-oriented — Protecting Employees' Rights and Interests
Product Responsibility	<ul style="list-style-type: none"> • Port Law of the PRC • Product Quality Law of the PRC • Production Safety Law of the PRC • Law of the PRC on the Protection of Consumer Rights and Interests • Regulations on the Safety Management of Hazardous Goods at Ports • International Maritime Dangerous Goods Regulations • Intellectual Property Law of the PRC • Cybersecurity Law of the People's Republic of China • Regulations of the People's Republic of China on the Security Protection of Computer Information System • Personal Information Protection Law of the PRC • Patent Law of the PRC • Personal Data (Privacy) Ordinance of Hong Kong 	Quality First — Product and Service Responsibility Quality First — Hazardous Goods Management Customer Focus — Respect for Intellectual Property Rights Customer Focus — Ensuring Network Information Security
ANTI-CORRUPTION	<ul style="list-style-type: none"> • Criminal Law of the PRC • Anti-Unfair Competition Law of the People's Republic of China • Supervision Law of the PRC • Prevention of Bribery Ordinance of Hong Kong • Competition Ordinance of Hong Kong 	Business ethics



PERFORMANCE DATA SUMMARY

ENVIRONMENTAL MANAGEMENT

	2021	2020	2019
Resource Consumption			
Electricity (kWh)	327,360,000	325,440,000	300,330,000
Diesel (tonnes)	31,012	33,800	34,155
Gasoline (ton)	250	306	314
LNG (tonnes)	3,520	3,560	2,909
Natural gas (m ³)	59,000	57,000	61,000
Heat (GJ)	5,953 ²³	32,057	30,007
Water resources (tonnes)	2,931,323	3,027,300	3,006,600
EMISSION			
Greenhouse Gas Emissions²⁴			
Total GHG Emissions (tCO ₂ e)	417,484	427,512	402,770
Scope 1: Direct emissions (tCO ₂ e)	108,489	117,454	116,588
Scope 2: Indirect emissions (tCO ₂ e)	308,995	310,058	286,182
Exhaust Gas			
Sulphur oxides (tonnes)	141	126	143
Nitrogen oxides (tonnes)	902	855	932
Waste water			
Wastewater discharge (tonnes)	431,542	380,000	620,000
Waste			
Hazardous waste (tonnes)	282	248	173
Non-hazardous waste			
— Waste wire rope (tonnes)	1,478	1,201	1,547
— Waste cable (tonnes)	4.44	6.57	16
— Waste tires (pieces)	4,770	2,906	1,773

²³ **Reasons for the significant decrease in heat consumption:** The main consumption of heat is from CHIMBUSCO Marine Bunker (Tianjin) Co., Ltd. Since the Group no longer holds any equity interest in CHIMBUSCO Marine Bunker (Tianjin) Co., Ltd. in 2021, there is no statistics on the energy consumption of CHIMBUSCO Marine Bunker (Tianjin) Co., Ltd. in 2021, resulting in a decrease in heat energy consumption.

²⁴ **Description of greenhouse gas emission calculation methods:** The GHG emission factor has been adjusted as compared to 2019, so the GHG data in 2019 in the above table has been recalculated and adjusted. The calculation methods and emission factors of greenhouse gas emissions are based on the "How to Prepare an ESG Report — Appendix 2: Reporting Guidance on Environmental KPIs" issued by HKEX, the "2019 Baseline Emission Factors for Regional Power Grids in China for Emission Reduction Projects" and the "Guidelines for Accounting and Reporting Greenhouse Gas Emissions from Enterprises in Other Industries (Trial)" issued by the National Center for Climate Change Strategy and International Cooperation. Global warming potential is referenced from the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).



PERFORMANCE DATA SUMMARY

STAFF MANAGEMENT

	2021	2020	2019
Workforce Distribution			
Total number of full-time employees	7,545	7,637	8,031
Geographical distribution			
Local ²⁵	7,545	7,635	8,031
Non-local	0	2	0
Age Distribution			
≤ 25	42	40	85
26–35	852	934	1,103
36–45	2,478	2,413	2,305
46–55	2,801	3,002	3,402
≥ 56	1,372	1,248	1,136
Gender Distribution			
Male	6,084	6,206	6,341
Female	1,461	1,431	1,690
Position Level Distribution			
Senior Management	152	133	117
Middle Management	906	865	890
General staff	6,487	6,639	7,024
Employee turnover rate²⁶	6%	9%	8%
Geographical distribution			
Local	6%	9%	—
Non-local	0%	0%	—
Age Distribution			
≤ 25	10%	8%	—
26–35	7%	8%	—
36–45	2%	3%	—
46–55	6%	6%	—
≥ 56	11%	29%	—
Gender Distribution			
Male	6%	10%	—
Female	6%	6%	—
By Position level			
Upper Management	13%	30%	—
Middle Management	4%	6%	—
General staff	6%	9%	—
Distribution of resignation reasons²⁷			
Resignation	7%	4%	11%
Dismissal	1%	1%	1%
Retirement	66%	71%	77%
Transfer to non-listed companies	26%	19%	7%
Others	1%	5%	4%

²⁵ Employees in Hong Kong and Tianjin, China are collectively referred to as local employees.

²⁶ Turnover rate of each category = number of resigned employees of the category during the year/total number of employees of the category as of the end of the year.

²⁷ The proportion of the reasons for resignation refers to the proportion of the number of employees who resigned due to a certain reason in the total number of employees who resigned during the year.



PERFORMANCE DATA SUMMARY

	2021	2020	2019
Staff training²⁸			
Total training hours of employees	163,564	308,231	215,469
Average training hours per employee	22	40	32
By gender			
Male	21	41	—
Female	23	39	—
By Position Level			
Senior Management	143	41	—
Middle Management	50	41	—
General staff	15	40	—
Percentage of employees trained			
By gender			
Male	100%	100.0%	—
Female	100%	99.8%	—
By Position Level			
Senior Management	100%	99.2%	—
Middle Management	100%	100.0%	—
General staff	100%	100.0%	—
Total hours of occupational safety and health training	13,037	10,200	—
Total person-times of occupational safety and health training	108,162	104,326	—
Total hours of anti-corruption training	6,758	7,590	—
Total person-times of anti-corruption training	2,360	1,698	—
Number of anti-corruption training participants by position level			
Senior Management	143	121	—
Middle Management	972	763	—
General staff	1,245	814	—
Health and Safety			
Occupational Safety and Health Performance			
Number of work-related injuries	1	0	0
Lost days due to work-related injury	22	0	0
Number of work-related fatalities	0	0	0

²⁸ Employee training data include professional knowledge and skills training, occupational safety and health training and anti-corruption training.



CONTENT INDEX

Indicators	HKEX ESG Reporting Guide Requirements	Section/Remarks
A. ENVIRONMENTAL		
Aspect A1: Emissions		
General Disclosure	Relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste: (a) the Policy; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer information.	Environmental Commitment — Emission Control
KPI A1.1	The types of emissions and respective emissions data.	Environmental Commitment-Air Emission Management Environmental Commitment — Wastewater Discharge Management
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Commitment — Greenhouse Gas Emissions
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Commitment — Waste Management
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Commitment — Waste Management
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	Environmental Commitment-Air Emission Management Environmental Commitment — Wastewater Discharge Management
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Environmental Commitment — Waste Management
Aspect A2: Use of Resource		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Environmental Commitment — Resource Conservation
KPI 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).	Environmental Commitment — Energy Management
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Environmental Commitment — Water Resources Management
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Environmental Commitment — Construction of Green Ports Environmental Commitment — Energy Management Environmental Commitment — Energy Saving Measures
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Environmental Commitment — Water Resources Management
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	The Group's business operation does not consume material packaging materials.



CONTENT INDEX

Indicators	HKEX ESG Reporting Guide Requirements	Section/Remarks
A. ENVIRONMENTAL		
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimizing the issuers' significant impact on the environment and natural resources.	Environmental Commitment — Environmental Management System Environmental Commitment — Tackling Climate Change Environmental Commitment — Ecological Protection
	KPI A3.1 Description of significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Environmental Commitment — Construction of Green Ports Environmental Commitment — Ecological Protection
Aspect A4: Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Environmental Commitment — Tackling Climate Change
	KPI A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Environmental Commitment — Tackling Climate Change
B. SOCIAL		
Aspect B1: Employment		
General Disclosure	Relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare: (a) the policies; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer information.	People Focus — Labor Management People Focus—Employee Care
	KPI B1.1 Total workforce by gender, employment type (for example, full-or part-time), age group and geographical region.	People Focus — Employee Profile Performance Data Summary
	KPI B1.2 Employee turnover rate by gender, age group and geographical region.	Performance Data Summary
Aspect B2: Health and Safety		
General Disclosure	Relating to providing a safe working environment and protecting employees from occupational hazards: (a) the policies; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer information.	People Focus — Health and Safety
	KPI B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Performance Data Summary
	KPI B2.2 Lost days due to work injury.	Performance Data Summary
	KPI B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.	People Focus — Health and Safety



CONTENT INDEX

Indicators	HKEX ESG Reporting Guide Requirements	Section/Remarks
B.SOCIAL		
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	People Focus-Talent Development
KPI B3.1	By gender and employee category (e.g. senior management, Percentage of employees trained by middle management Percentage.	Performance Data Summary
KPI B3.2	By gender and employee category, each employee Average training hours completed.	People Focus — Talent Development Performance Data Summary
Aspect B4: Labour Standards		
General Disclosure	Relating to preventing child and forced labour: (a) the policies; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer information.	People Focus — Labor Management People Focus — Talent Recruitment
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	People Focus — Labor Management During the year, no non-compliance was reported.
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Quality First — Supply Chain Management
KPI B5.1	Number of suppliers by geographical region.	Quality First — Supply Chain Management
KPI B5.2	Description of practices relating to engaging suppliers. Number of suppliers where the practices are being implemented, and How practices are implemented and monitored.	Quality First — Supply Chain Management
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Quality First — Supply Chain Selection and Evaluation
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Quality First — Supply Chain Selection and Evaluation



CONTENT INDEX

Indicators	HKEX ESG Reporting Guide Requirements	Section/Remarks
B.SOCIAL		
Aspect B6: Product Responsibility		
General Disclosure	relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress: (a) the policies; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer information.	Sustainable Development Feature — Smart Port Quality First — Product and Service Responsibility
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Quality First — Product and Service Responsibility
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Customer Oriented-Customer Satisfaction
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Quality First — Respect Intellectual Property Rights
KPI B6.4	Description of quality assurance process and recall procedures.	Quality First — Product and Service Responsibility
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Customer Oriented-Information Security Customer Oriented-Privacy Security
Aspect B7: Anti-corruption		
General Disclosure	Relating to bribery, extortion, fraud and money laundering: (a) the policies; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer information.	Business Ethics
KPI B7.1	during the reporting period Number of concluded legal cases regarding corrupt practices Litigation results.	Business Ethics
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Business Ethics
KPI B7.3	Description of anti-corruption training provided to directors and employees.	Business Ethics
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.	Community Care
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Community Care
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Community Care

