CHAPTER 10 NATURE



Material topics covered:



While promoting corporate sustainability, the Group also shoulders responsibility for protecting the ecosystem and the environment. The Group is committed to reducing the negative impact of its operations on the environment and continues to strengthen the management of natural resources and the protection of the ecosystem and the environment, to fulfil its responsibilities and obligations as a global citizen.

PERFORMANCE HIGHLIGHTS IN 2024

Water Resources Management – By ensuring proper utilisation of water resources through the implementation of strict management measures, the Group is able to improve water use efficiency, reduce unnecessary consumption and promote sustainable utilisation of water resources.

Target	Performance ¹²
To enhance the management of water resources and improve water use efficiency	Water consumption intensity:
	7.98 m³ per US\$10,000 of revenue
	↓ 5.9% year-on-year
	↓ 21.9% against 2020

Waste Management – As always, the Group maintains rigorous protocols for waste storage and disposal, advancing waste reduction targets through recycling and reuse initiatives.

Targets	Performance ¹²
Hazardous waste:	All hazardous waste was processed by certified recyclers for hazard-free disposal.
To maintain 100% hazard-free disposal	
Non-hazardous waste:	_
To reduce domestic waste and, in the long term, achieve the goal of zero landfill disposal	

Biodiversity – During the process and upon completion of the construction of CSP Chancay Terminal in Peru, the Group implemented proactive measures to rescue local wildlife and restore adjacent wetlands and habitats, contributing to biodiversity conservation.

During the year, the subsidiaries in China conducted a minimum of two third-party monitoring tests, with no instances of wastewater discharge exceeding the standard. The Group's quarterly environmental inspections of the subsidiaries in China identified zero material pollution incidents or hazardous substance leaks.

MANAGEMENT SYSTEM

For management policies to each topic, please refer to the section headed "Sustainability – Approach & Frameworks" on the Company's official website.

In 2024, a total of 10 subsidiaries obtained the ISO 14001 Environmental Management System certification. For details, please refer to Chapter 8 of this report.

ECOLOGICAL AND ENVIRONMENTAL GOVERNANCE

GOVERNANCE FRAMEWORK

As a leading port logistics service provider in the world, the Group is fully committed to the protection of natural resources, the ecosystem and the environment. The Group has established a robust ecological and environmental governance framework to mitigate the negative environmental impacts of the Group's business, and promote environmental sustainability through a top-down approach to foster a green future.

The Chairman of the Board is the primary person responsible for ecological and environmental protection, bearing overall leadership responsibility. The Group has established an Ecological and Environmental Protection Working Group, composed of senior management and heads of relevant functional departments of the Company, responsible for reviewing and approving environmental protection plans and systems. The Ecological and Environmental Protection Management Office has been set up under the Ecological and Environmental Protection initiatives across the Company and each subsidiary in China. Each subsidiary in China is the responsible entity for the management of its own ecological and environmental protection performance and is responsible for the daily management and supervision of ecological and environmental protection initiatives.

CONSTRUCTION OF POLICIES AND SYSTEMS

Ecological and environmental protection is complementary to corporate development. In the process of promoting high-quality development, the Group integrates corporate social responsibility and adheres to the path of green and circular development. During the year, the Group conducted a comprehensive review of ecological and environmental protection policies, revised and issued the Comprehensive Contingency Plan for Environmental Emergencies to strengthen the Company's overall command capabilities, emergency rescue response, and coordination level across the subsidiaries in dealing with environmental emergencies, and to specify the responsibilities and obligations of relevant personnel in emergency rescue, with the goal of preventing and minimising the occurrence of various types of environmental emergencies.

DEVELOPMENT OF ASSESSMENT SYSTEM

To implement the ecological and environmental protection initiatives of the Group and to strengthen each subsidiary's primary responsibilities, the Group has established a mechanism for the supervision, operation, accountability and performance assessment of ecological and environmental protection, fostering employee awareness and promoting green development and sustainability. The Company has signed responsibility agreements for safe production, and ecological and environmental protection with each subsidiary, and has set ecological and environmental protection management targets, which include:

- 1. Zero environmental emergencies at the level of relatively serious (inclusive) or above. A relatively serious environmental emergency refers to an emergency that results in at least 2 fatalities, 10 severe injuries or poisoning, direct economic loss of RMB5 million, or evacuation or transfer of more than 500 people;
- 2. Zero administrative penalties, such as suspension of construction or production for rectification, issued by relevant national and local government departments; and
- 3. Zero major violations of laws and regulations related to ecological and environmental protection.

The Ecological and Environmental Protection Management Office of the Group conducts an annual ecological and environmental performance assessment for all the subsidiaries. In the event of any environmental emergency at the level of relatively serious or above, or in case of any concealment, false reporting, omission or delayed reporting of an environmental emergency, the annual performance bonus of the responsible personnel of the relevant subsidiaries will be deducted.

During the year, the Group had no violation cases against the above-mentioned.

TRAINING AND EDUCATION

The Ecological and Environmental Protection Management Office of the Group is responsible for organising, implementing and launching ecological and environmental protection campaigns, training and exchanges. The subsidiaries are required to include ecological and environmental protection into the staff training programmes, and to systematically organise ecological and environmental protection campaigns, so as to raise the employee awareness and promote environmentally friendly practices. In 2024, the Group's training rate for safe production and ecological and environmental protection reached 35.7%, with a total of 1,777 people participating in the relevant training sessions.

WATER RESOURCES MANAGEMENT

RISK ASSESSMENT

In 2024, the Group conducted a climate scenario analysis of water risks for its terminal subsidiaries and supply chain companies based on the water stress data provided in Aqueduct 4.0, a water risk assessment tool released by the World Resources Institute, combined with the water consumption data of the year, to identify whether these assets are located in water-scarce regions. The results indicate that under both low-carbon and high-carbon scenarios, some of the regions where these assets are located will face the risk of water scarcity by 2030, 2050, and 2080 However, the overall water pressure and drought risks are relatively low in future scenarios.

During the year, the total water consumption of the terminal subsidiaries and supply chain companies totalled 1,196,389 m³. According to the water consumption of the water-scarce regions identified in the water stress assessment results, approximately 15% came from regions with high water stress. Among the assets located in these water-scarce regions, approximately 98% of the water usage was sourced from municipal water supplies, and 2% from other water supply facilities, with no groundwater extraction. According to the assessment results, the Group will actively implement water-saving measures for assets located in high-risk water-scarce regions.

2024 Water Consumption by Water Stress Risk Level of Relevant Location



In terms of water usage, since the Group is primarily engaged in the provision of port logistics services, water resources are not a necessary resource for business operations. The domestic water used by the subsidiaries is mainly for office buildings and canteens, while the production water is primarily used for daily facility construction, equipment maintenance and repair, dust suppression sprinkling, and cleaning of berths and yards. These uses do not involve any critical business processes. Therefore, the overall water stress risk faced by the Company's terminal subsidiaries and supply chain companies is relatively low.

WATER CONSERVATION

The Group advocates water conservation in its daily operations by monitoring the monthly water consumption of its subsidiaries through the energy efficiency management platform to reduce unnecessary consumption. The subsidiaries are strictly required to enhance water management by conducting regular inspections and maintenance of water supply networks and water-saving equipment and systems, monitoring water usage, repairing leaks promptly to avoid unnecessary consumption or waste. The Group raises the awareness of water-saving among employees through educational campaigns and posted notices to emphasise the importance of water resources management.

During the year, the Group's water consumption totalled 1,199,888 m³, representing a decrease of 2.7% yearon-year. The water consumption intensity was 7.98 m³ per US\$10,000 of revenue, representing a decrease of 5.9% year-on-year.



SEWAGE DISPOSAL AND MANAGEMENT

Terminals and container freight stations are important infrastructures along coastal areas. In particular, maintenance sites and vehicle cleaning sites generate sewage with oil, therefore proper treatment of wastewater is of great significance for protecting the surrounding area and the marine and ecological environment. The Group strictly complies with national and regional sewage treatment requirements, and implements the environmental impact assessment system for construction projects. It standardises the production wastewater and commercial sewage outfalls of the subsidiaries, connects them to the sewage treatment stations for treatment and purification, and discharges them after reaching standards. The control of stormwater outfalls is also regulated to prevent direct discharge of sewage into the stormwater network and leakage or excessive discharge, to avoid negative impacts on the ecological environment and marine life. In addition, the Group has strengthened the management of rainwater and sewage and environmental inspections. Regular inspections of the rainwater and sewage networks are carried out, and thorough cleaning is done before the flood season and sealing after it to ensure that problems such as pipeline aging and damage are detected in a timely manner, preventing sewage leakage and environmental pollution.

WASTE MANAGEMENT

WASTE REDUCTION

The Group strictly regulates the subsidiaries to implement waste separation and reduction to minimise negative impact on the environment and to prevent and control the risk of pollution. Solid chemical wastes generated by the Group's daily operation and production include waste oil-contaminated rag, waste wire rope, scrap metal, waste oil drums and waste oil sludge. Liquid chemical wastes include waste lead-acid batteries and waste oil. Non-hazardous wastes include wooden pallets and domestic rubbish. The Group's waste generation during the year is as follows. For detailed data on waste generation, please refer to Chapter 12 of this report.



CASE

Xiamen Ocean Gate Terminal has been selected for "Waste-free Terminal"

To keep up with the trend of green and low-carbon port development, and guided by the green, open and sharing concepts of the new development philosophy, Xiamen Ocean Gate Terminal is committed to building a "waste-free terminal" by promoting waste reduction and recycling at source, and has added a new rubbish collection service for vessels in its port services. The "waste-free terminal" assessment is consisted of 16 indicators including organisational management, waste management and publicity activities.

Currently, the Group's waste management requirements to the terminal subsidiaries have fully covered the local government's requirements for the "waste-free terminal".

WASTE SEPARATION, TREATMENT AND RECYCLING

In terms of waste management and separation, the Group follows the 3R principles, i.e. reduce, reuse and recycle, and strictly regulates the separation, storage and treatment of waste. Subsidiaries are required to separate and store hazardous waste, which is then removed by certified hazardous waste treatment companies. Non-hazardous waste is separated and stored in designated port area collection pools, which are treated by the local environmental hygiene department or by certified recyclers, so as to ensure "daily collection and daily clearance" and closed transfer. Meanwhile, the Group actively promotes the recycling of resources through restoration and innovation of old equipment and parts, which can be transformed into practical tools for daily work, hence reducing waste generation.

During the year, the Group's waste recycling is as follows. For detailed data on waste recycling, please refer to Chapter 12 of this report.



CASE

Quan Zhou Pacific Terminal promotes retrofitting and reuse of old equipment

Quan Zhou Pacific Terminal reduces waste through recycling and retrofitting outdated equipment. During the year, Quan Zhou Pacific Terminal recycled and repurposed discarded components through innovative design, assembling them into a mobile emergency fire truck to address on-site fire emergencies. Additionally, by enhancing operational efficiency through technological upgrades, the terminal improved equipment maintenance processes, reduced maintenance costs, and minimised environmental pollution.



Retrofitted mobile emergency fire truck

Practical training on the operation of the mobile emergency fire truck

BIODIVERSITY

Ports and terminals are located in coastal areas and are bound to have certain impacts on natural and marine ecosystems. As a leading port logistics service provider with a worldwide presence, the Group fully recognises that biodiversity is fundamental to maintaining the stability of the earth's ecosystem. Upholding the vision of building a maritime community with a shared future, the Group implements rigorous sewage and waste management systems, conducts ecological surveys and monitoring, and supports biodiversity conservation initiatives, striving to minimise negative impacts on ecosystems and biodiversity while actively compensating biodiversity loss.

ECOLOGICAL SURVEYS AND MONITORING

During the year, the Group required each terminal subsidiary in China to complete more than two third-party monitoring tests on noise and emissions of air and wastewater, in which the results confirmed that there were no exceedances or anomalies. In addition, the Group conducted quarterly inspections at each subsidiary in China on their ecological and environmental protection performance, and did not find any significant environmental pollution or leakage.

The Group encourages each terminal subsidiary to conduct regular investigations on the nearby sea areas and the water quality around the sewage outfall, to assess the condition of the environment and the status of biological habitats.

SUPPORTING ECOLOGICAL AND BIODIVERSITY CONSERVATION

The Group is fully committed to ecological and environmental stewardship, proactively working with nongovernmental organisations and local communities to support biodiversity conservation initiatives with practical actions to offset negative impacts on the ecosystem and the environment. The Company is a member of the Hong Kong Business Environment Council, thereby joining hands with various sectors to promote partnerships and strengthen commitment towards environmental protection, and advocating the concept of sustainable development, with the aim of realising economic, social and environmental sustainability.

The Company is a corporate partner of World Wide Fund for Nature Hong Kong, and is keen on supporting the restoration of coral communities, thereby contributing to the protection and restoration of the marine ecosystems. Meanwhile, the Company supports the Conservation Hero Support Programme organised by the Ocean Park Conservation Foundation Hong Kong, funding research and conservation projects around Asia, and cetacean stranding response programme, among others, to support wildlife conservation and fight against illegal wildlife trades.

CASE

COSCO SHIPPING Ports held coral exploration publicity and education activity

Coral reefs, one of the most biodiverse and critical ecosystems on Earth, serving as a home for over 25% of marine life and providing habitat for a multitude of species, are vital to sustaining marine biodiversity, earning them the title of "rainforests of the ocean". Healthy coral reefs act as natural breakwaters that protect the coastline from wave erosion. They also absorb carbon dioxide through photosynthesis, which helps reduce global warming and plays an important role in the ocean carbon cycle.

In November 2024, the Company organised a "Coral Exploration Activity at Hoi Ha Wan Marine Park in Sai Kung" for employees and their families. Guided by World Wide Fund for Nature Hong Kong, participants learned about rare corals and marine life in the area, observed coral breeding facilities, and closely experienced the importance of marine conservation and biodiversity, hence raise their awareness of marine biodiversity conservation.





Participants saw coral and marine life through a glass-bottomed boat

Participants observed the coral nursery facilities in the laboratory

CASE

COSCO SHIPPING Ports conducted a series of biodiversity conservation initiatives at the Port of Chancay in Peru

CSP Chancay Terminal, the Company's first green and smart port invested in South America, was successfully inaugurated in mid-November 2024. During the construction phase, the Company firmly adhered to the concept of sustainability, fulfilled its corporate social responsibility, and undertook a variety of biodiversity conservation projects.

The Company actively supported the conservation of the Santa Rosa Wetland to the south of CSP Chancay Terminal, joining the environmental monitoring committee of the wetland and collaborating on wetland ecosystem protection. This included jointly organising publicity and educational activities, as well as wetland clean-up activities with local authorities, community committees, and fishermen's associations in the Santa Rosa Wetland, advancing the progress of biodiversity conservation in the area.

CSP Chancay Terminal is adjacent to the habitat of the Peruvian Booby. To control and compensate for the impacts of construction work, the Company has established buffer zones around the Booby habitat. Through weekly monitoring and protection efforts, the Company continuously observes the distribution and changes of the Booby population, and assesses the health of the ecological environment and the effectiveness of the protection measures. During the monitoring period, the number of Booby nests has increased rather than decreased.

The Company also cooperated with local community groups to organise a series of clean-up activities in the coastal areas of the Port of Chancay, to clean up waste along the shoreline and help protect local wildlife and ecosystems. In addition, the Company initiated a biological monitoring programme in the terminal operation area to observe the surrounding birds, reptiles, micro-algae and fish to assess the effectiveness of the conservation work of various species and the environmental protection efforts. In the future, the Company will further strengthen its ecological and environmental protection efforts with CSP Chancay Terminal and continue to contribute to the sustainability of the area.





Wetland education activity held on World Wetlands Day

Ecological monitoring the nests of Peruvian booby using drones