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PORT OF **KAOHSIUNG**

ENVIRONMENTAL REPORT

TAIWAN INTERNATIONAL PORTS CORPORATION, LTD.

TIPC



2026

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Message from Port of Kaohsiung, TIPC

The Port of Kaohsiung is Taiwan's largest International Port. Located at the shipping hub of Asia, it is a vital artery of Taiwan's economic development and also plays a key role in world trade. For many years, in addition to pursuing diversified port operations, the Kaohsiung Branch has recognized the importance of environmental sustainable development and of fulfilling Corporate Social Responsibility. Since 2013, it has been promoting the "Taiwan Ports Green Port Initiative," focusing on four major areas: "Passenger Transport," "Freight Transport," "Port Environment," and "City/Community Development," and integrating the concept of "environmental friendliness" into operational development. To review the results of environmental improvement, in 2014 it applied for and passed the "Eco Ports Certification" of the European Sea Ports Organization (ESPO) on its own initiative, becoming the first port in the Asia-Pacific region to obtain Eco Ports Certification. To date it has passed five consecutive re-assessment verifications and has established an environmental management mechanism. With intelligence, low carbon, and resilience as its core, it continues to promote the sustainable transformation of the port.

In accordance with the "Future Development and Construction Plan of International Commercial Ports" approved by the Executive Yuan, and in conformity with the maritime shipping trend of the larger sizing of vessels and in response to the changes in the domestic and international economic and trade environment, as well as improving the situation in which the handling of bulk and general cargo with higher fugitivity and the higher-risk petrochemical and oil products operation sites are adjacent to the urban area, the Kaohsiung Branch continues to innovate and refine in promoting various port constructions and optimizing the operational environment, thereby completing the "Kaohsiung Port Intercontinental Container Center Phase II Works Project"; relevant port-area operators moved into the new area of the Intercontinental Phase II during 2023 to 2024. Among them, the Seventh Container Center (Taiwan's most highly automated container wharf) has been moved into and operated by Evergreen Marine, the largest maritime shipping company of our country. In addition, in order to promote the international cruise industry, besides commissioning the Kaohsiung Port Passenger Terminal (a green building) in 2023, the "Kaohsiung Port Penglai International Cruise Terminal" has also been renovated and commissioned for operation this year (2026); the Port of Kaohsiung has the capacity to accommodate 4 international cruise vessels berthing simultaneously, and spares no effort in enhancing the passenger transport service quality of the Port of Kaohsiung, demonstrating a new phase of port-city co-prosperity.

In recent years, after undergoing the test of Severe Pneumonia with Novel Pathogens (COVID-19), the Port of Kaohsiung has continued to face the international political and economic situation, maritime trends, and global initiatives and actions in response to climate change, such as requirements for net-zero emissions by 2050, energy transition, and the promotion of ESG and SDGs environmental sustainability goals. Changes in the overall internal and external environment have made port operation full of challenges. Facing environmental challenges, the Kaohsiung Branch continues to uphold a steady and pragmatic attitude and integrates various environmental issues into the company's core business, formulating diversified sustainable development strategies covering net-zero carbon reduction, energy transition, smart digital transformation, transformation and regeneration of the old port area, Cruise tourism, green incentives, and marketing incentives. In addition to complying with central and local government policies, it strengthens collaboration and consultation with shipping companies, the industrial chain, and local communities. Plans including the LNG receiving station already planned for construction in the port area and the development of the Offshore Wind Energy industry will enable the port not only to serve economic development but also to provide green services, with the aim of creating a high-quality, mutually beneficial, and sustainable port.

The challenges of international hidden risks and the opportunities for upgrading and transformation often coexist. The Port of Kaohsiung continues to evolve. The Kaohsiung Branch will comprehensively strengthen port development, environmental resilience, and adaptability, creating a more diverse and rich cultural environment. In the future, the Kaohsiung Branch will continue to collaborate with all sectors, and hopes that through the deepening of the smart and sustainable port, with "strengthening port and shipping, promoting tourism, smart management, and achieving sustainability" as the core, it will promote the digital transformation of port affairs, strengthen environmental sustainability, and join hands with relevant stakeholders to move toward the era of smart and sustainable ports.



President of Port of Kaohsiung
Taiwan International Ports Corporation, Ltd.



Environmental Policy and Objective

Taiwan International Ports Corporation
Environmental Policy

"Leverage innovation effectively to connect and communicate with global trade flows. Mature into a world-class port management group" is the vision of Taiwan International Ports Corporation (TIPC). TIPC manages and operates commercial ports in Taiwan and is engaged in maritime transport related services, free trade zones, and the development of relevant tourism and recreational projects.

While TIPC pursues business growth, we are well-aware of the importance of our social responsibility, which is to ensure both environmental and economic sustainability. With the goal to establish green and sustainable ports, we will proactively identify environmental risks that may be associated with our activities and manage the risks accordingly to minimize the environmental impacts.

We commit to:

1. Implement and follow through with the Green Port Policy to establish extraordinary world-class ports.
2. Comply with applicable environmental regulations to fulfill corporate environmental responsibility.
3. Execute pollution prevention, monitoring, and control mechanism to enhance environmental quality in and around port areas.
4. Reinforce environmental education to cultivate environmental awareness among employees.
5. Strengthen the communication with local communities, and pursue sustainable development for both the ports and the cities where we are operating.

Date: 2025 / 10 / 22

Joe Y. Chou
Chairman of TIPC

Date: 2025 / 10 / 22

Chin-Jung Wang
President of TIPC

Environmental Policies

Port of Kaohsiung

As the lifeline of Taiwan's economic development and a key gateway in global trade, the Port of Kaohsiung recognizes the imperative of balancing regional prosperity with ecological and environmental equilibrium. Only by enabling the port and its surrounding environment to develop in harmony can the long-term sustainable development of the Port of Kaohsiung be secured.

In affirmation of our unwavering commitment to environmental stewardship, the Port of Kaohsiung has established the following Environmental Policy, embedding environmentally responsible principles at the core of our operational development, and dedicating ourselves to positioning the Port of Kaohsiung as a leading model of green port excellence.

- The Port of Kaohsiung is committed to the effective implementation of its environmental management system to advance the sustainable development of a green port.
- The Port of Kaohsiung is committed to full compliance with environmental protection laws and regulations, and to fulfilling its corporate social responsibility.
- The Port of Kaohsiung is committed to providing appropriate environmental education and training to strengthen employees' environmental awareness and professional competencies.
- The Port of Kaohsiung is committed to continuous environmental monitoring and pollution prevention, conserving energy and reducing carbon emissions to minimize its overall environmental footprint.
- The Port of Kaohsiung is committed to the regular disclosure of environmental information to foster transparent and effective communication with all internal and external stakeholders.
- The Port of Kaohsiung is committed to deepening community engagement in port-adjacent areas, co-creating a harmonious and inclusive environment where port and city thrive together.

President of Port of Kaohsiung, TIPC Wang, Chih-Jung

Date 2026/ 7 / 13

Port of Kaohsiung, Taiwan International Ports Corporation, LTD. No.62.Linhai 2nd Road, Gushan District, Kaohsiung, Taiwan, R.O.C

Environmental Objectives

Port of Kaohsiung

To implement the commitments of environmental policy, the following environmental objectives are set based on the ten major environmental issues from the Port of Kaohsiung.

Climate Change Adaptation Strategy
Progressively advancing net-zero emission strategies through greenhouse gas inventory management, promoting green port services, implementing green incentive programs, and strengthening infrastructure to achieve sustainable port development.

Improvement of Port Air Quality
Conducting regular monitoring of air quality within the port area and establishing designated air quality maintenance zones. Strengthening environmental inspection activities to supervise and identify sources of pollution.

Enhancement of Energy Efficiency and Energy Transition Planning
Promoting energy conservation, carbon reduction, and green procurement. Developing and refining intelligent energy management systems, and advancing renewable energy and green fuel bunkering services, such as biofuels, methanol, and LNG.

Reduction of Vessel Environmental Impact
Promoting vessel speed reduction and expanding the use of shore power, also known as cold ironing. Effectively managing vessel emissions and conducting long-term monitoring of water quality within the port area.

Strengthening of Port Development
Advancing comprehensive port-area master planning, completing the relocation of the Intercontinental Container Terminal, and commencing operations at the Kaohsiung Port Passenger Terminal. Revitalizing resources in the old port district, optimizing waterfront recreational facilities, fostering port-city co-prosperity, and achieving sustainable development.

Prevention of Fugitive Dust in the Port Area / Enhancement of Transport Vehicle Controls
Conducting awareness campaigns and inspections to ensure that operators implement dust prevention measures. Refining the automated gate control system, developing and improving intelligent traffic flow management systems, and cooperating with competent authorities in the management of aging vehicles.

Enhancement of Port Waste Management
Implementing resource recovery, recycling, and reuse, and improving the efficiency of waste treatment and processing within the port area.

Strengthening of Dangerous Goods Management in the Port Area
Establishing a dangerous goods safety management system, intensifying on-site supervision, and rigorously implementing disaster prevention measures.

Monitoring of Marine Sediment Contamination
Conducting long-term sediment quality monitoring to safeguard the ecological environment of the port.

Strengthening Community-Friendly Relations
Creating environmentally friendly spaces for port-city coexistence, organizing environmental education activities, and strengthening public participation and engagement with local communities.

President of Port of Kaohsiung, TIPC Wang, Chin-Tang

Date 2026 / 7 / 13

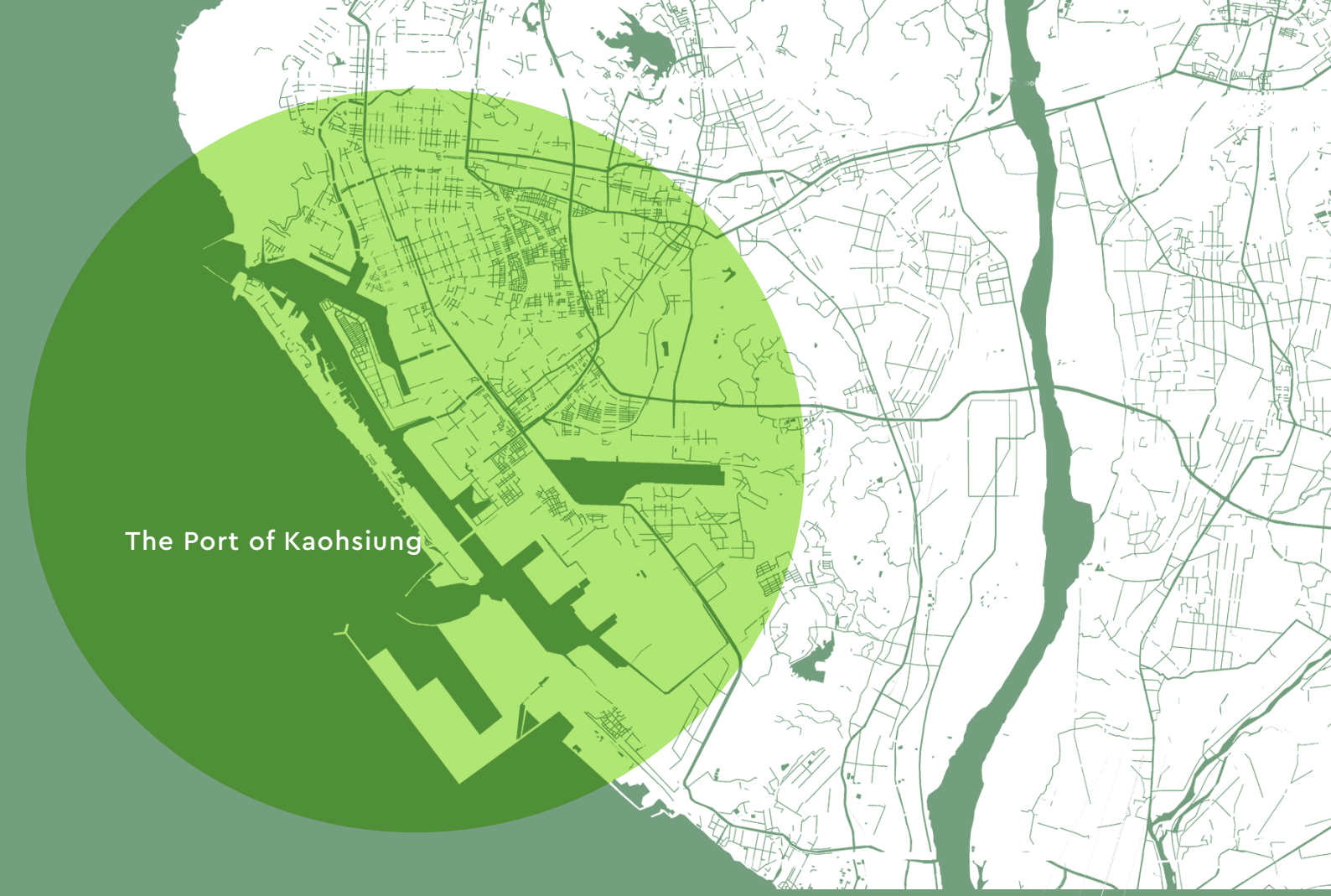
Port of Kaohsiung, Taiwan International Ports Corporation, LTD. No.62.Linhai 2nd Road, Gushan District, Kaohsiung, Taiwan, R.O.C

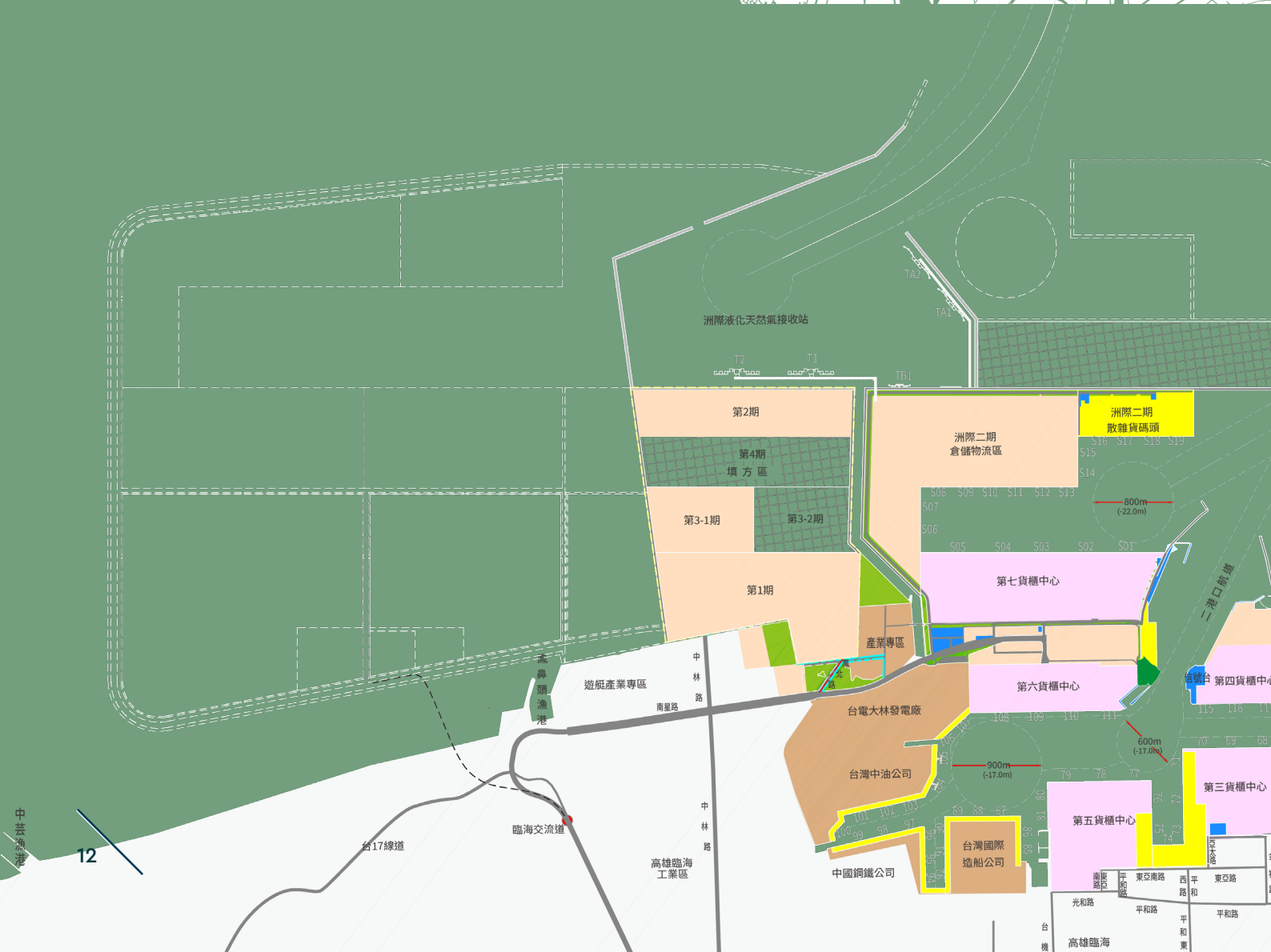


01

Port Profile

The Port of Kaohsiung





1.1 Port Location and Port Area

The Port of Kaohsiung is located on the southwest coast of Taiwan (22°27 north latitude and 120°10′ East longitude) at the intersection of Taiwan Strait and Bashi Channel. The Port enjoys a geographic position at the hub of shipping routes, and serves as an essential point for American, European, Australian and Asian shipping routes. With a vast hinterland, the port occupies 18.71 km2 of land, and the water area of the Port reaches 158.65km2. The maximum draft of its inner port is 17.5 meters. Average tidal range is 0.74 meters. The Port has two entrances: No. 1 and No.2.

Geographically speaking, the Port was a natural lagoon before it became a port (Takao Bay). The Port is situated on a plain area, and the coastal area of the Port includes: rocky foreshore, tidal flats, sea walls, offshore island (Chichin Peninsula), offshore banks and sandy beach. The Port neighbors the downtown area of Kaohsiung City, industrial parks (Linhai Industrial Park, Export Processing Zone) and waterfront recreational area (Chichin Seashore). In addition, the Love River, Canal No. 5, Qianzhen River and Yanshui Stream all flow into the ocean through the Port.

1.2 Legal Basis and Port Operator

To promote the reform of a modernized commercial port management system, Taiwan promulgated the "Statute for Establishment of State-owned Port Companies" on November 9, 2011; the amendment to the Commercial Port Act was passed on December 28, 2011; and in March 2012, the maritime and port system adopted the approach of "separation of government administration and enterprise operation," establishing the Maritime and Port Bureau and the Taiwan International Ports Corporation, Ltd. (hereinafter referred to as TIPC). Matters involving public authority in maritime administration formerly belonging respectively to the Port of Kaohsiung, the Port of Taichung, the Port of Keelung, and the Port of Hualien, Taiwan International Ports Corporation, Ltd. were assigned to the Maritime and Port Bureau, and port operations were assigned to TIPC; therefore, the operation of the port corporation can be less constrained by law and system, increasing its ability to respond to market changes and enhancing its competitiveness. Business related to the operation of the Port of Kaohsiung is undertaken by the Kaohsiung Branch, while maritime administration and management matters within the port area are handled by the Southern Maritime Affairs Center, Maritime and Port Bureau, MOTC (hereinafter referred to as the Southern Maritime Affairs Center).



1.3 Main Commercial Activities

The Port of Kaohsiung currently has 139 wharves (including 46 non-operational wharves), with a total length of 34,290.02 m. The types of wharves include bulk and general cargo wharves, container wharves, and industrial wharves. Commercial activities within the port include shipbuilding and repair, petroleum product processing, yacht marina and leisure and recreation, the chemical industry, general manufacturing, storage and packaging, refrigerated containers, and other types.

1.4 Major Cargo

The two-year average of the major import cargoes of the Port of Kaohsiung in 2024 and 2025 comprised mineral products (60.38%), base metals and articles thereof (14.04%), vegetable products (8.70%), and products of the chemical or allied industries (5.31%). The major export cargoes were base metals and articles thereof (37.76%), plastics, rubber and articles thereof (23.52%), products of the chemical or allied industries (12.40%), and mineral products (10.27%).

Petroleum	Pyrites minerals
Crude oil Refined products	Aluminium Cement Phosphates Sulphur
Dry bulk	Liquid bulk (non-oil)
Animal feed Chemicals Grains Scrap (iron) Timber Wood products	Liquid chemicals Liquefied gases
Ores	Other
Coal Iron ore	Fish Fruit

Source: Kaohsiung Branch, TIPC., Ltd



1.5 Port Business

2024-2025 Business of Port of Kaohsiung

Business Item		2024	2025	Increase/Decrease Between 2024 and 2025	
				Absolute Number	%
Incoming and Outgoing Ships	Number of Vessel	30,074	28,899	-1,175	-3.91
	G.T.	773,926,252	748,992,334	-24,933,918	-3.22
Volume of Cargo Handled	Cargo (Revenue ton)	329,038,623	316,598,787	-12,439,836	-3.78
	Dry bulk and Groceries (Revenue ton)	50,722,969	50,409,831	-313,138	-0.62
	Pipeline cargo (Revenue ton)	27,657,004	26,816,072	-840,932	-3.04
	Total (Revenue ton)	407,418,596	393,824,690	-13,593,906	-3.34
Number of Cargo Handle	Incoming Cargo (TEU)	4,609,044.75	4,441,052.00	-167,992.75	-3.64
	Outgoing Cargo (TEU)	4,619,377.00	4,444,802.75	-174,574.25	-3.78
	Total (TEU)	9,228,421.75	8,885,854.75	-342,567.00	-3.71
Volume of Imports & Exports	Imports (ton)	69,735,667	65,981,551	-3,754,116	-5.38
	Exports (ton)	25,380,558	23,404,465	-1,976,093	-7.79
	Domestic (ton)	9,321,175	9,267,890	-53,285	-0.57
	Total (ton)	104,437,400	98,653,906	-5,783,494	-5.54
Incoming and Outgoing Passenger	Domestic Line (number)	101,793	102,339	546	0.54
	International Line (number)	90,805	142,307	51,502	56.72
	Total (number)	192,598	244,646	52,048	27.02

Source: TIPC Statistical Yearbook, 2024 and 2025



02

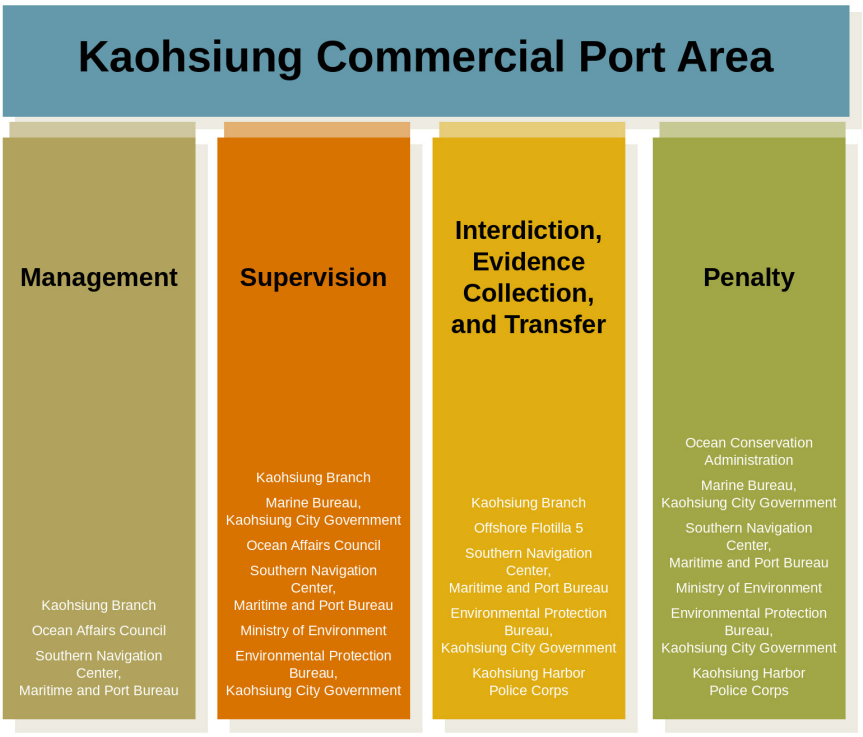


Environmental Management

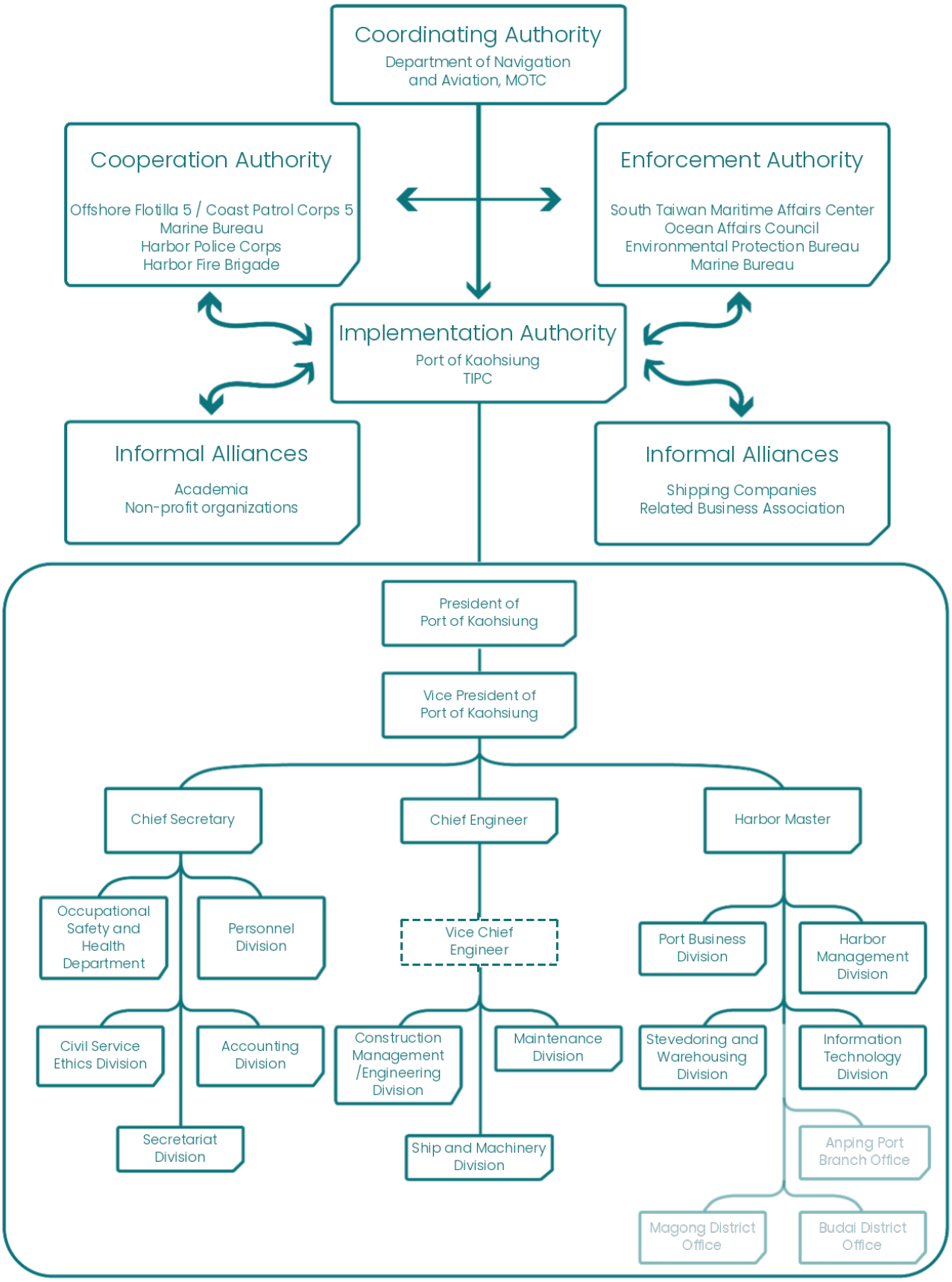
2.1 Organizational Structure and Description

In addition to being implemented by the Kaohsiung Branch, environmental management in the Kaohsiung port area is allocated according to the attribution of responsibilities under The Commercial Port Law and the Marine Pollution Control Act: the Kaohsiung Branch is responsible for the environmental issues involved in port operation and management; the Southern Navigation Center, Maritime and Port Bureau, MOTC handles the environmental issues involving the exercise of public authority; and the Marine Bureau, Kaohsiung City Government is exclusively responsible for the relevant environmental issues under the Marine Pollution Control Act. Among these, the inspection and supervision work in the commercial port area involves the management and monitoring of the port and the adjacent urban area. In addition to the Kaohsiung Branch conducting regular inspections to verify the port area environment, the Southern Navigation Center of the Maritime and Port Bureau, the Marine Bureau, Kaohsiung City Government, the Environmental Protection Bureau, Kaohsiung City Government, and the Ministry of Environment also conduct port area audits from time to time. The work of interdiction, evidence collection, and transfer of pollution acts is assisted by Offshore Flotilla 5, Fleet Branch, CGA, OAC and the Kaohsiung Harbor Police Corps, NPA, MOI. As for penalties for environmental pollution, in accordance with environmental protection laws and regulations, the Ocean Conservation Administration, OAC, the Environmental Protection Bureau, Kaohsiung City Government, the Marine Bureau, and the Ministry of Environment all have the authority to impose penalties; where The Commercial Port Law is involved, penalties are executed by the Southern Navigation Center, Maritime and Port Bureau, MOTC. For emergency response to disaster incidents and rescue of personnel, in addition to the aforementioned units, the Kaohsiung Harbor Fire Brigade, NFA, MOI also assists in implementation.

Within the internal organization of the Kaohsiung Branch, there are 15 departments: the Business Department, Harbor Affairs Department, Stevedoring and Warehousing Department, Information Technology Department, Engineering Department, Maintenance Management Department, Marine Engineering Department, Occupational Safety and Health Department, Personnel Department, Civil Service Ethics Department, Accounting Department, Secretariat Department, Anping Port Operations Department, Magong Management Department, and Budai Management Department. The Occupational Safety and Health Department, which is primarily responsible for environmental management, comprises the Safety and Health Management Section (in charge of occupational safety and health management affairs), the Sanitation and Prevention Section (in charge of port area pollution prevention and control, environmental protection laws and regulations, environmental monitoring, oil pollution, assistance in liaison and handling of toxic chemical substance leakage, environmental education, and other affairs), and the Site Safety Section (in charge of oil pollution within the port, ecological conservation, plant maintenance, waste treatment, resource recycling, and other affairs). A total of 40 personnel are engaged in environmental protection-related work.



Units Involved in Environmental Issues in the Kaohsiung Port Area



Remarks: Anping Port Operation Office is responsible for the operation and management of Anping Port, Magong Management Office is responsible for the operation and management of Magong Port, and Budai Management Office is responsible for the operation and management of Budai Port

2.2.1 International Environment-Related Laws and Regulations

The Kaohsiung Branch follows international environment-related regulations and conventions. Among these, international ship conventions such as the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78), the London Convention (Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter), the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, the International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS Convention), and the International Convention for the Control and Management of Ships' Ballast Water and Sediments are all actually complied with.

2.2.2 Domestic Environment-Related Laws and Regulations

With regard to compliance with domestic environmental laws and regulations, the Kaohsiung Branch also cooperates with local law enforcement agencies in carrying out port area environmental management operations. The domestic laws related to the port environment are compiled in the following table:



Relevant Environmental Laws and Regulations Related to Ports in Taiwan

Competent Authorities	
Sectors in the Ministry of transportation and communications	The Commercial Port Law
	The Law Of Ships
	The Shipping Act
	Act for the Establishment and Manageme Zones
Sectors in the Ministry of the Interior	Fire Services Act
Sectors related to agricultural	Wildlife Conservation Act
Sectors related to environmental protection	Marine Pollution Control Act
	Basic Environment Act
	Air Pollution Control Act
	Water Pollution Control Act
	Waste Disposal Act
	Environmental Impact Assessment Act
	Environmental Education Act
	Noise Control Act
	Indoor Air Quality Act
	Toxic and Concerned Chemical Substance
	Soil and Groundwater Pollution Remediat
	Environmental Agents Control Act
	Climate Change Response Act
	Resource Circulation Promotion Act
	Public Nuisance Dispute Mediation Act
Intersectoral	Disaster Prevention and Protection Act

Source: Kaohsiung Branch of TIPC

Laws Title		Central Competent Authority	Local Law Enforcement Agencies
	2026/02/04	Ministry of Transportation and Communications	South Maritime Affairs Center, Maritime and Port Bureau, MOTC
	2026/01/05		
	2014/01/22		
nt of Free Trade	2019/01/16		
	2024/11/29	Ministry of the Interior	Fire Bureau, Kaohsiung City Government
	2025/02/18	Council of Agriculture	Marine Bureau/ Agriculture Bureau, Kaohsiung City Government
	2023/05/31	Ocean Affair Council	Marine Bureau, Kaohsiung City Government
	2002/12/11	Ministry of Environment	Environmental Protection Bureau, Kaohsiung City Government
	2018/08/01		
	2018/06/13		
	2026/07/15		
	2025/11/28		
	2017/11/29		
	2025/12/26		
	2011/11/23		
es Control Act	2019/01/16		
ion Act	2010/02/03		
	2016/12/07		
	2023/02/15		
	2026/06/17		
	2009/06/17		Public Nuisance Disputes Mediation Committee, Kaohsiung City Government
	2025/05/28	Ministry of the Interior	Kaohsiung City Government

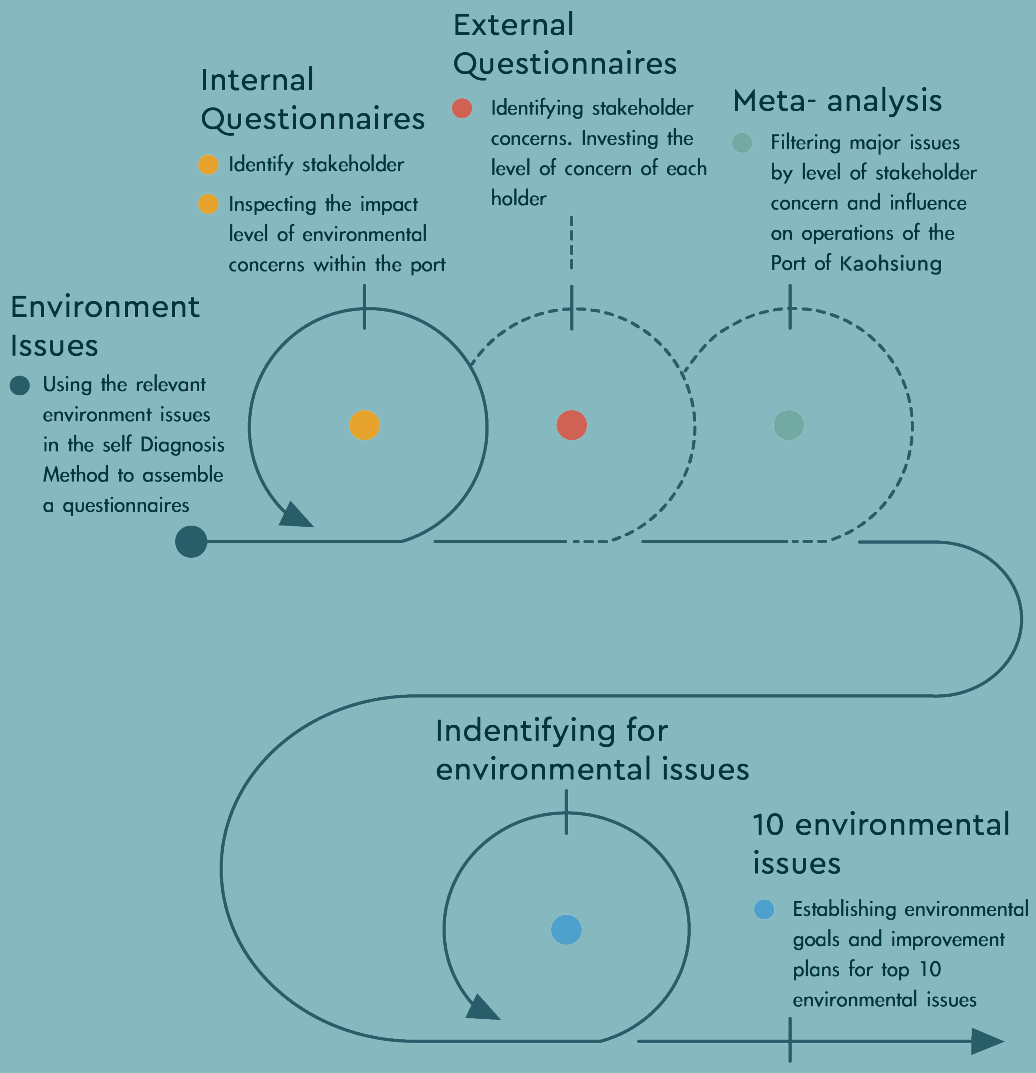
2.3 Stakeholder Analysis

As an important enterprise of the harbor city of Kaohsiung, the Kaohsiung Branch communicates with stakeholders through diverse channels. It attaches importance to the expectations of each stakeholder for the Port of Kaohsiung, collects the issues of their concern, and refers to and incorporates them into the company's operations and the promotion of environmental management strategies. The Port of Kaohsiung believes that only by establishing smooth and effective communication channels with stakeholders can it grasp the pulse of the environment and create value. For this renewal of the Eco Ports Certification, a total of 101 stakeholder questionnaires were used to understand the environmental needs of stakeholders.

Sector	Environmental Concerns	Relevant Environmental Objectives
Government	Climate Change, Air Quality, Energy Management Transformation, Ship Emissions, Dust/Vehicle Emissions, Port Area Business Pollution, Hazardous Goods, Marine Sediments, etc.	Issue 1 Climate Change Issue 2 Air Quality Issue 3 Energy Efficiency / Energy Transition Issue 4 Vessel Emissions Issue 5 Port Development Issue 6 Fugitive Dust / Vehicle Exhaust Emissions Issue 7 Garbage / Port Waste Issue 8 Dangerous Goods Issue 9 Marine Sediment
Employee	Climate Change, Air Quality, Environmental Hygiene Quality in the Port Area, Resource Utilization	Issue 1 Climate Change Issue 2 Air Quality Issue 3 Energy Efficiency / Energy Transition Issue 5 Port Development Issue 6 Fugitive Dust / Vehicle Exhaust Emissions Issue 7 Garbage / Port Waste Issue 10 Relationship with Local Communities
Clients	Climate Change , Air Quality, Port Area Business Pollution, Environmental Hygiene Quality in the Port Area, Port Development, Port Safety Maintenance	Issue 1 Climate Change Issue 2 Air Quality Issue 4 Vessel Emissions Issue 5 Port Development Issue 7 Garbage / Port Waste
Community	Air Quality, Vehicle Emissions, Ship Emissions, Pollutants Carried by Rivers Noise, Port Development, Port Safety Maintenance	Issue 2 Air Quality Issue 4 Vessel Emissions Issue 5 Port Development Issue 7 Garbage / Port Waste Issue 8 Dangerous Goods Issue 10 Relationship with Local Communities

Kaohsiung Port Branch has assessed the activities and services that may have a significant impact on the environment of Kaohsiung Port, including the significant environmental impacts caused by related businesses (tenants, contractors) in the port area, and sorts out the relevant environmental laws and regulations for each topic. Regulations, and the handling methods of Kaohsiung Port Branch, and through the third justice law firm to confirm the laws and regulations and operating norms that should correspond to various environmental issues. In addition, in order to review the environmental performance of Kaohsiung Port, the Kaohsiung Port Branch has established appropriate environmental performance indicators for the ten major environmental issues of Kaohsiung Port.

Stakeholders	Number of Questionnaires	Percentage
Government	26	26%
Employees (Colleagues)	55	54%
Suppliers or Contractors	3	3%
Port Operator	7	7%
Community or Local Groups	10	10%
Total	101	100%





Port of Kaohsiung

Environmental Issues

Top 10

1. Climate Change

indicator

- Greenhouse Gas Management
- Green Incentive
- Effectiveness of Planting Replenishment
- Water Resource Reuse

2. Air quality

indicator

-Air quality pass rate
($PM_{2.5}$ SO_2 NO_2)
-Number of air pollution patrols

3. Energy Efficiency / Energy Transition

indicator

- Electricity and Fuel Saving Efficiency
- Electrification of Official Vehicles
- Solar Power Generation (Installed through Investment Solicitation, Self-built)

4. Vessel Emissions

indicator

- Management of Vessel Waste Oil and Wastewater
- Vessel Exhaust Emissions
- Proportion of port service vessels using shore power
- Shore power consumption
- Vessel Speed Reduction achievement rate

5. Port Development

indicator

- Intercontinental Relocation Operation
- Wind Power Industry Development
- Public Waterfront Recreation Space

6. Fugitive Dust / Vehicle Exhaust Emissions (including large vehicles for cargo handling)

indicator

- Proportion of enclosed transport used for bulk cargo (cement, coal) handling in the Intercontinental Commercial Port Area
- Vehicle Washing
- Promoting transport operators' use of the automatic gate sentry post system

7. Garbage / Port Waste

indicator

- Resource Recycling Rate in the Port Area (Land Area)
- Port Area Water Body Waste

8. Dangerous Goods

indicator

- Conduct supervision of port-area dangerous goods in cooperation with the Maritime and Port Bureau
- The Kaohsiung Branch conducts inspection visits of port-area dangerous goods

9. Marine Sediment Pollution

indicator

- Sediment Monitoring

10. Relationship with Local Communities

indicator

- Community Engagement and Community Welfare Activities



03



State of the Environment

3.1 Responding to Climate Change

The ROC officially released the "Taiwan's Pathway to Net-Zero Emissions in 2050" in March 2022, and officially promulgated the domestic Climate Change Response Act on February 15, 2023. In coordination with national policy, TIPC also proposed in 2023 the greenhouse gas reduction targets of "a 50% reduction in Scopes 1 and 2 in 2030 compared with 2020, and net-zero emissions in 2050," and began planning a carbon reduction blueprint and pathway, promoting corporate transformation strategies, and cooperating with operators to reduce carbon. Through continuous greenhouse gas management, the net-zero emissions strategy is promoted step by step. At the same time, infrastructure is strengthened to achieve concrete actions for the sustainable development of the port.

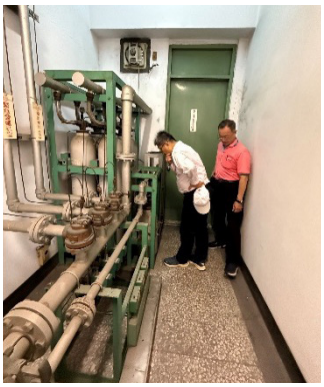
★ Greenhouse Gas Management

TIPC has proactively conducted greenhouse gas inventory operations since 2013 and, through refined management methods, has continuously kept track of energy use and the emissions generated by its operations.

Since 2022, the Port of Kaohsiung has conducted greenhouse gas inventories in accordance with the ISO 14064-1:2018 standard, and since 2023 this has been adjusted to an annual inventory. In addition, in 2025, the GHG Protocol and ISO 14064-1:2018 were incorporated so that the inventory is conducted under both international standards in parallel. The main activities are port area management operations and office administration. As for the method of setting the organizational boundary for greenhouse gases, all emission sources within the organizational boundary are identified according to the operational control approach, that is, the scope covered is 100% owned and controlled by the Kaohsiung Branch. Therefore, the emissions of the subsidiary ports (Port of Anping, Port of Budai, and Port of Penghu), the port service subsidiary, and the tenants are not included in the calculation. With regard to the greenhouse gas emission inventories for 2024–2025, the collection of activity data for the 2024 inventory was completed in September 2025, and the collection of activity data for the 2025 greenhouse gas emission inventory was completed in March 2026. In addition, for the greenhouse gas inventory and verification operation of Phase I of the Nanxing Free Trade Zone of the Port of Kaohsiung, the Comparison Table for the Third Change to the Environmental Impact Statement for "Phase I of the Free Trade Zone of the Nanxing Land Development Plan" (Greenhouse Gas Inventory) was carried out in October 2019 and submitted to the Environmental Protection Administration (now the Ministry of Environment), changing it to an arrangement under which the Kaohsiung Branch guides the resident operators in conducting voluntary greenhouse gas inventories and keeping records for future reference.

Voluntary Inventory Registration by Nanxing Operators

Area Name	Company Name	Scope 1	Scope 2	Scope 1 + Scope 2	Total Emissions (tons CO_{2e}/year)	Total Emissions (10,000 tons CO_{2e}/year)
Nanxing Free Trade Zone Phase 1	KAOCHUN LOGISTICS & STEVEDORING CO., LTD.	51.3211	30.4152	81.7363	81.736	0.008
	H&M METAL WAREHOUSING (TAIWAN). LTD.	0.0642	13.5161	13.5803	13.580	0.001
	Fumao Enterprise Co., Ltd. – Site A2	42.3269	36.0444	78.3713	78.371	0.008
	Fumao Enterprise Co., Ltd. – Site A3	10.7823	22.8032	33.5855	33.586	0.003
	LOTA INTERNATIONAL CO., LTD.	0.4436	15.8875	16.3311	16.331	0.002
	JYE CHI CORPORATION	0.5329	21.3087	21.8416	21.842	0.002
	J.SHINE INTERNATIONAL LOGISTICS CO., LTD.	47.9636	17.8423	65.8059	65.806	0.007
	TSOU SEEN CHEMICAL INDUSTRIES CORPORATION	7.1573	25.4002	32.5575	32.558	0.003
	CTCI MACHINERY CORPORATION	144.4536	999.5630	1144.0166	1144.017	0.114
	MAI HUA INTERNATIONAL CO., LTD.	32.0876	21.3087	53.3963	53.396	0.005
Total		337.1331	1204.089	1541.2224	1541.222	0.154



Conducting external verification under the GHG Protocol and ISO 14064-1:2018



Kaohsiung Branch GHG Protocol and ISO 14064-1:2018 Verification Statement



★ Promoting Green Port Services

To comply with the EU carbon reduction regulations and to meet the demand of shipping operators for alternative marine fuel bunkering, and in coordination with the MOTC's timetable for promoting alternative marine fuels, the Kaohsiung Branch has, since August 2023, actively planned green marine fuel (including biofuel oil, LNG, methanol, etc.) bunkering services at the Port of Kaohsiung, and has facilitated cooperation and exchanges among the competent authorities (such as the Maritime and Port Bureau), shipping companies, and relevant energy operators.
In addition, the Kaohsiung Branch is gradually approaching green energy service operators to discuss the operational matters of the subsequent green marine energy bunkering services at the Port of Kaohsiung, in order to facilitate the establishment of the relevant operating procedures and regulations, so as to fully establish the green service items of the Port of Kaohsiung and put a low-carbon and sustainable port into practice.

★ Implementing the "Green Port Incentive Program"

In order to encourage shipping operators to arrange for clean vessels to call at the port and port-area operators to use electrified handling machinery, this Corporation announced and implemented the "Green Port Incentive Program" from 2024. The program includes the "Environmental Ship Index (ESI) Incentive" and the "Handling Machinery Electrification Incentive," and applicant operators submit applications in accordance with the regulations via this Corporation's "Marketing Incentive Program Application Platform." This Branch Office uniformly grasps the case information of applicant operators on this platform and cooperates in carrying out inspection matters.

Port of Kaohsiung
A. "Environmental Ship Index (ESI) Incentive":
2024 – Number of applicant companies: 9; Number of qualified port entries: 1,610 vessel movements.
2025 – Number of applicant companies: 9; Number of qualified port entries: 833 vessel movements.

B. "Handling Machinery Electrification Incentive":
2024 – Number of applicants: 2; the number of machinery applied for by the 2 applicants is: A: 40 gantry/bridge cranes; B: 2 gantry cranes.
2025 – Number of applicants: 2; the number of machinery applied for by the 2 applicants is: A: 8 gantry/bridge cranes; B: 5 gantry cranes.



2025/05/22 On-site inspection of incentive applications – Evergreen Marine Corp. (Taiwan) Ltd. (Seventh Container Terminal)


2024/12/24 On-site inspection of incentive applications – CMA CGM Kaohsiung Terminal Co, Limited (Wharf No. 69)

★ Strengthening Port Area Infrastructure

The impacts of climate anomalies caused by global warming on all levels are becoming increasingly significant. To improve the adaptation capacity of the ROC's commercial ports in response to abnormal weather, TIPC commissioned the "Professional Services for the Assessment of the Impact of Abnormal Weather on Harbor Structures," and carried out basic data surveys and compilation for existing facilities such as breakwaters (including Sheltering breakwaters), wharves, and seawalls. The content includes location, use, type and structural form of the outer facilities, length, parapet height, type of Foot protection, wharf structural type, wharf use, tonnage of the berthing vessel types, dimensions and number of turning basins, navigation channel water depth, and water and land areas.
In addition, relevant cases of harbor structures at home and abroad in response to the impacts of abnormal climate are collected, and their response strategies and measures are compiled and analyzed, on the basis of which the reconstruction needs and urgency of old wharves in response to climate change are reviewed, including wharf deck elevation, wave resistance capacity, seismic resistance capacity, and the bearing capacity of the rail foundations; accordingly, health checks, safety assessments, and necessary repair operations for port facilities are carried out.
Routine inspection operations for the underwater facilities of the Port of Kaohsiung are carried out to understand the current condition of the underwater structures of the wharves and the seabed. This serves as the basis for repairs, so as to maintain the berthing of vessels and navigation safety.

★ Results of Environmental Education and Greening Actions in the Port Area

To promote environmental education and the concept of sustainability in the port area, the Kaohsiung Branch continued to hold related activities between 2024 and 2025. On Arbor Day 2024, the tree-planting activity "A Better Earth, Planting Forests in People's Hearts" was held, and plants such as golden trumpet trees were planted on the green space beside Wharf No. 10 of the Port of Kaohsiung, promoting the greening of the port area and the creation of a low-carbon environment. In 2025, the activity "Port Agriculture LOHAS – Little Farmers with Green Fingers" was held, promoting a food and farming experience on the green belt of the Penglai District, and deepening young children's understanding of the natural environment and the growth of crops through hands-on instruction.
Through the above activities, the environmental awareness of employees and their family members was raised and the concept of sustainability was rooted from the ground up, corresponding to SDG 3, SDG 4, SDG 12, and SDG 15. In addition, through the continued implementation of planting and greening operations, the results of green port development are demonstrated.



2024/03/12 "A Better Earth, Planting Forests in People's Hearts" tree-planting activity



2025/04/18 "Port Agriculture LOHAS – Little Farmers with Green Fingers" food and farming experience activity

★ Water Resource Reuse

After the wastewater of the Port of Kaohsiung enters the treatment facility, it goes through processes such as primary sedimentation, coagulation, aeration, filtration, activated carbon adsorption, and disinfection, and is discharged into the receiving water body after it complies with the effluent discharge standards. To achieve the purpose of water conservation, reclaimed water is also reused for irrigating the green spaces of the site. The volumes of reclaimed water in 2024 and 2025 were 1,363.4 t and 1,179.3 t respectively



Port area sewage treatment facility



Reclaimed water reused for plant irrigation

3.2 Air Quality

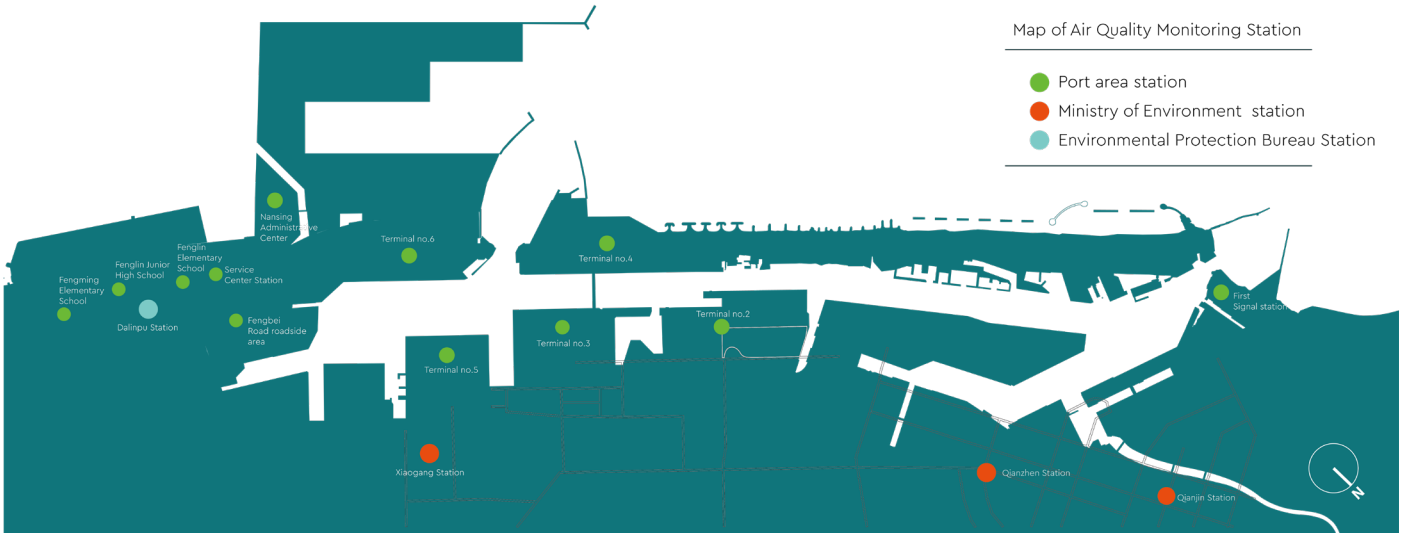
The main air pollutants of the Port of Kaohsiung include nitrogen oxides (NOx), sulphur dioxide (SO_2), and particulate matter (). Pollutant emissions come mainly from ocean-going vessels, followed by port area vessels, heavy-duty vehicles, and cargo handling equipment. The main source of pollution from ocean-going vessels is the combustion emissions of the fuel oil used by auxiliary boilers and auxiliary engines while berthing at the port; therefore, SO_2 emissions are high.

The pollutant emissions of heavy-duty trucks are mainly generated by engine idling during operations such as loading and unloading and weighing. Therefore, whether in pollution reduction or greenhouse gas reduction, the related advocacy directed at vessels entering the port and at freight operators, the improvement of cargo handling equipment and of fugitive emissions from operations, and the control of transport vehicles have all become the focus of implementation of the Kaohsiung Branch.

Air Quality Monitoring Status

The Port of Kaohsiung conducts long-term air quality monitoring, with a total of 11 points set up within the port for monitoring. The monitoring items include total suspended particulates (TSP), particulate matter (), fine particulate matter (PM2.5), sulphur dioxide, nitrogen oxides (NOx), and ozone (O_3), and the monitoring frequency is quarterly. In the vicinity of the Port of Kaohsiung there are also the Xiaogang Station established by the Ministry of Environment and the Dalinpu Station established by the Environmental Protection Bureau.
In 2019, a total of 3 continuous air quality monitoring stations were also completed at the First Signal Station, the Third Container Terminal, and the Nanxing Administration Center.

Indicator	Performance (Pass Rate%)		
	Target	2024	2025
Daily Ave.(<75μg/m^3)	100	99	98
$PM_{2.5}$ 24-hour Ave.(<30μg/m^3)	60	92	92
SO_2 Maximum Hourly Ave.(<0.065 ppmppm)	100	100	100
NO_2 Maximum Hourly Ave.(<0.1 ppm)	100	100	100



★ Establishing the "Air Quality Maintenance Area of the Port of Kaohsiung"

In coordination with the Kaohsiung City Government's announcement of the designation of the "Phase II Air Quality Maintenance Area," the First to Sixth Container Terminals of the Port of Kaohsiung are taken as the designated scope, and diesel heavy-duty trucks and tractors manufactured five years ago or more are given priority for inclusion in control, so as to improve air quality.
From the effective date of this announcement, diesel heavy-duty trucks and tractors that have no record of passing a smoke emission inspection within the two years prior to the inspection date are prohibited from entering the scope of the Phase II Air Quality Maintenance Area of Kaohsiung City. However, this shall not apply to those that meet one of the following conditions:
(1) Those whose year of manufacture is less than (inclusive of) five years.
(2) Other vehicles approved by the Environmental Protection Bureau, Kaohsiung City Government.

★ Strengthening Environmental Inspection in the Port Area

Personnel are assigned on a routine basis to strengthen on-site environmental inspection in the port area; if a pollution situation is found, improvement is advised immediately.

3.3 Energy Efficiency / Energy Transition

★ Developing Renewable Energy in the Port Area

A. Making Use of Port Area Buildings and Leasing Them through Investment Solicitation for the Installation of Solar Photovoltaic Systems

In order to reduce the environmental impact of the port area and to implement environmental protection, the Port of Kaohsiung has specifically set the improvement of energy use efficiency as one of the ten major environmental issues. Considering that the Port of Kaohsiung area has sufficient sunshine conditions and possesses the important conditions for solar energy development, and in order to make full use of port area resources, it was planned to lease the roofs of some port area buildings to energy companies for the installation of solar photovoltaic power generation equipment, with the leasing operators paying part of their electricity sales revenue to the Port of Kaohsiung as a management fee. This not only makes good use of space and increases revenue, but the installation of rooftop solar power can also block sunlight, lower the indoor temperature, and reduce electricity consumption. Solar photovoltaic power has therefore been made the mainstay of renewable energy of the Port of Kaohsiung. At present, the areas in the Kaohsiung port area where solar photovoltaic power generation equipment has been installed using the existing rooftop space of buildings are the Penglai, Qianzhen, Cijin Shipbuilding Zone, Zhongdao Commercial Port Areas and the Second, Third, and Fourth Container Terminals. The total power generation in 2024 was Approximately 10.9 million kWh, with an annual carbon reduction of approximately 5,165 t; the total power generation in 2025 was Approximately 11.08 million kWh, with an annual carbon reduction of approximately 5,174 t.



Zhongdao Commercial Port Area, Port of Kaohsiung (Warehouse No. 36)



Zhongdao Commercial Port Area, Port of Kaohsiung (Warehouse No. 46)

B. Planning and Installing Solar Photovoltaic Power Generation Equipment in Newly Developed Port Areas

During 2023 to 2025, TIPC has planned and installed solar photovoltaic power generation equipment at the newly opened Seventh Container Terminal:

Year	Installation Location	New Installation Area (m^2)	New Installed Capacity (kWp)	Annual Total Power Generation (10,000 kWh)	Carbon Reduction (t)
2023	Warehouse Building I	9,350	1,994	221	1,091
2024	Warehouse Building II, in-gate, out-gate	12,072	2,574	228	1,080
2025	Wharf main substation, container yard main substation, maintenance workshop, Phase II rear extension of the in-gate	5,123	1,102	309	1,443

Calculation of carbon reduction: based on the annual electricity carbon emission factor announced by the Energy Administration
2023: approximately 0.494 kg of carbon emitted per kWh
2024: approximately 0.474 kg of carbon emitted per kWh
2025: approximately 0.467 kg of carbon emitted per kWh



Container Warehouse, Seventh Container Terminal

C. Developing the Offshore Wind Energy Industry in the Port Area:

(A) In order to coordinate with the government's policy of developing offshore wind energy, the Port of Kaohsiung has adjusted the backline warehousing and logistics land of the Intercontinental Container Terminal Phase I Project to serve as an area for the manufacturing and assembly of offshore wind energy equipment, dividing it into the A6-A and A6-B plots for investment solicitation, and has constructed new wharves on reclaimed land in the adjacent seaward area, so as to provide an integrated development base for the preparation, assembly, and transport required for wind energy cargo.
(B) In 2022, the Port of Kaohsiung signed investment and construction contracts with two offshore wind energy localization operators respectively, with a combined leased area of 22.3 ha and a lease term of 20 years for both, and a total investment of more than NT$10 billion, which is estimated to be able to create more than 500 job opportunities. In addition, in 2024, the lease and operation contracts for the A6-A and A6-B wharves were signed respectively, and formal operations are expected to commence in the first quarter of 2027. In the future, a model of plant production combined with wharf transport will be adopted to strengthen the Port of Kaohsiung as a bridge in the underwater foundation and power system segments of the offshore wind energy industry, and to promote the integration of the existing industrial chain, so as to assist in advancing the goal of offshore wind energy localization.



2024/09/11 Beam-raising ceremony of Chouju Wind Power Energy Co.



2025/12/06 "Opening Ceremony of the Walsin Energy Submarine Cable Plant and Inauguration of Wharf A6-A of the Port of Kaohsiung"
(Photo / Provided by Walsin Energy Cable System Co., Ltd.)

★ Promoting Green Marine Fuel Bunkering Services

(A) Establishing the "Operating Regulations for Green Fuel Bunkering at the Port of Kaohsiung"

In response to the national net-zero emissions policy, to promote the energy transition of the port, and to meet the demand of shipping operators for alternative marine fuel bunkering, the green marine fuel (including biofuel oil, LNG, methanol, etc.) bunkering services at the Port of Kaohsiung have been actively planned, and efforts have been made to bring about cooperation among the competent authorities, shipping companies, and relevant energy operators. The "Directions for the Management of Biofuel Bunkering Operations at the Port of Kaohsiung" were announced in June 2025. In addition, the "Directions for Liquefied Natural Gas Bunkering Operations at the Port of Kaohsiung" were announced in May 2026.

(B) Investment Solicitation Planning for Green Fuel (Biomass Energy, Methanol, etc.) Bunkering Services

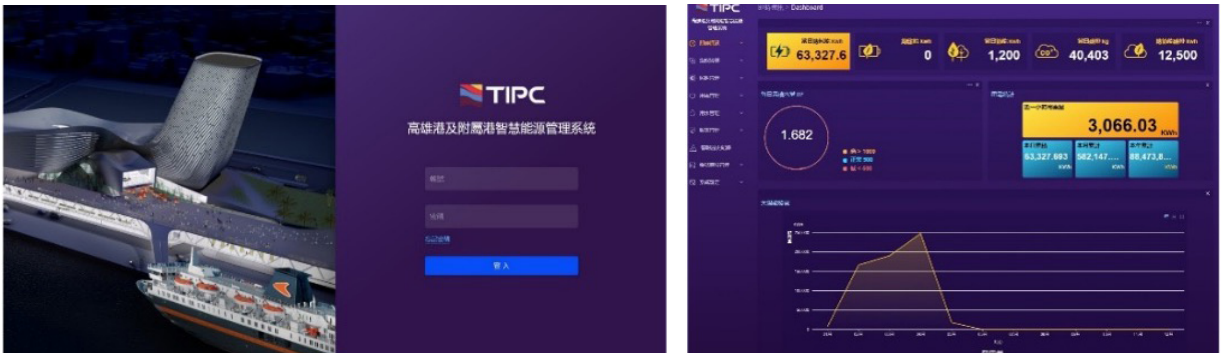
In coordination with the international carbon reduction trend and the demand of shipping companies, and in accordance with the Maritime and Port Bureau's stages for promoting alternative marine fuels (Stage 1: biofuel oil; Stage 2: liquefied natural gas and methanol; Stage 3: ammonia and hydrogen), the Kaohsiung Branch has, since 2025, launched the public investment solicitation for alternative marine fuel (biofuel oil) bunkering services at the Port of Kaohsiung. A public review was held In October 2025, April and August 2026 to collect the opinions of operators and to adjust the investment solicitation documents. The first public investment solicitation was held in April 2026 the third negotiation and pricing group meeting was held on July 22, 2026, and the second public tender was held from August 18 to September 7, 2026. The tender process is expected to be completed in September 2026, and the bunkering service will be launched in the fourth quarter of 2026.



2025/12/06 Submarine cable plant in Area A6-A on the back line of the Intercontinental Container Terminal Phase I Project, Port of Kaohsiung
(Photo / Provided by Walsin Energy Cable System Co., Ltd.)

★ Establishing the "Smart Energy Management System" to Improve Energy Use Efficiency in the Port Area

n response to the national net-zero carbon emissions policy, the Port of Kaohsiung completed in October 2023 the planning and establishment of the framework of the smart energy management system (including smart water meters, smart electricity meters, and smart lighting) and the functions of the green power management subsystem, monitoring energy use in the port area at all times and promoting the optimization of energy use, so as to achieve sustainable development.
In 2025, the establishment of the "energy display board" was completed, displaying information on the smart electricity meters, smart water meters, and solar power generation of the Administration Center, as well as information on total electricity consumption, total water consumption, and total solar power generation.
In 2026, the optimization of smart energy management will be completed, including important functional items such as smart lighting control, green energy (carbon reduction) statistics, energy storage dispatch, smart security for energy sites, and air conditioning management. Subsequently, the scope of smart energy management will be optimized in coordination with port area management planning.



Establishing the Port Area Smart Energy Management System

★ Reducing Resource Consumption

A. Promoting the "Electricity Use Efficiency Management Plan for Government Agencies and Schools"
To enhance the efficiency of energy management, electricity and fuel consumption data are reported on the "Energy Conservation Reporting Website for Government Agencies and Schools" of the Bureau of Energy, MOEA. Energy saving measures for office buildings are also implemented, such as the comprehensive use of LED lamps and the application of heat-insulating film to office window glass. The existing office buildings have been renovated successively since 2024, and an energy management system (EMS) has been introduced.

B. Green Procurement
To implement the green port policy, the office equipment of the Kaohsiung Branch is procured with priority given to items bearing the "Green Mark," and registration is made on the "Green Living Information Platform." Green procurement reached 100% in 2024 and 99.75% in 2025.

C. Purchasing Electric Official Cars (and Motorcycles)
Fuel-powered vehicles that have reached the end of their service life are replaced by the purchase of electric official vehicles, and carpooling is arranged as far as possible to reduce the number of vehicle dispatches.

D. Responding to Green Office and Daily Office Energy Conservation Measures
(A) Electricity conservation: LED lamps are used for lighting equipment; a sleep mechanism is set for computer equipment; temperature control
is set for air conditioning; timers are installed for household appliances or their hours of use are adjusted manually; management of elevator equipment is strengthened to reduce standby power consumption; and electricity consumption is recorded regularly or smart electricity meters are installed to review and improve electricity use.
(B) Water conservation: water-saving products or devices are used; personnel regularly inspect and repair the lines to implement water-saving
measures; and reverse osmosis reclaimed water is reused.
(C) Paper conservation: office paper bearing the Green Mark is purchased; electronic operations replace paper printing to achieve a paperless office; paper is printed double-sided; blank paper is recycled and reused; and the quantity of paper requisitioned is recorded and controlled.
(D) Plastic reduction and sorting: reusable items are provided at activities (meetings); bringing one's own tableware is encouraged; waste sorting and resource recycling are implemented; and stationery is sorted, recycled, and reused.
(E) Advocacy activities: the "Earth Day 2025, I Respond!" low-carbon living and action questionnaire survey was held to encourage colleagues to participate actively and to voluntarily practice low-carbon living.

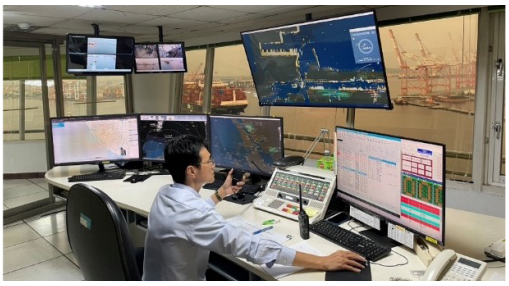
3.4 Reducing the Environmental Impact of Vessels

★ Management of Vessel Pollution Sources

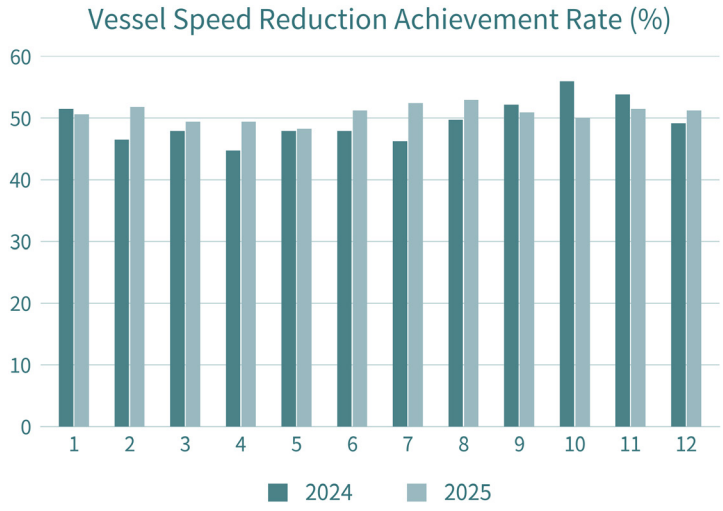
Vessel pollution management can be divided into two parts: air, and sewage and waste. In terms of air pollution sources, in addition to the emissions generated by vessel navigation, engines and boilers must keep running when vessels are berthed in order to maintain the supply of electricity and heat on board. Owing to such factors, vessels are one of the main sources of air pollution in the port area, and the Kaohsiung Branch has continued to promote work to reduce vessel pollution emissions.
In terms of vessel sewage and waste, the management of the reception operations for vessel discharge of waste oil and sewage and for waste disposal has been implemented.

★ Promoting Vessel Speed Reduction

The Port of Kaohsiung encourages vessels entering and leaving the port to implement Vessel Speed Reduction (VSR) measures, and through channels such as the VTS, advocates that vessels navigating within 20 nm of the International Port area cooperate by reducing speed to below 12 knots. Within the port area (3 to 5 nm), the Vessel Speed Reduction achievement rate is 100%, and vessels shall proceed at slow speed in accordance with the regulations. The achievement rates in 2024 and 2025 were 49.75% and 51.05% respectively.



VTC Tower



Vessel Speed Reduction achievement rate

year	(A)Vessels meeting the criteria	(B)Vessels with measured average speed	(C)VSR achievement rate(%) (C=A/B)
2024	11,236	22,587	49.75
2025	10,908	21,369	51.05

★ Vessels Using Low-Pollution Fuel Oil

The port service vessels of the Port of Kaohsiung all used low-pollution fuel oil from 2016 to 2025. Since 2019, it has been promoted that vessels in the port area shall use low-sulphur fuel oil with a sulphur content of 0.5% or below, or devices or alternative fuels with an equivalent emission reduction effect.

★ Management of the Reception of Vessel Waste Oil and Sewage

To reduce the environmental impact of vessel discharge, the Kaohsiung Branch requires vessels calling at the port to entrust legal environmental protection contractors with the collection and transport of waste oil and sewage, and this is handled in accordance with the "Operating Regulations for the Disposal of Oily Waste from Vessels at International Ports" established by the Kaohsiung Branch. Only disposal operators that have obtained a permit from the environmental protection competent authority and have been approved and registered by the Kaohsiung Branch may engage in the reception of oily waste from vessels in the port area.

★ Promoting the Use of Shore Power

The Port of Kaohsiung currently has 70 low-voltage shore power units and 8 high-voltage shore power units. First, it has been implemented that all port service vessels in the port area use shore power when berthed, so as to reduce the exhaust emissions of vessels in the port area. According to statistics, the shore power utilization rate of port service vessels (all of which are low-voltage shore power) is 100%. The consumption in 2024 was 902,027 kWh and the consumption in 2025 was 1,022,184 kWh. The matter continues to be handled in accordance with TIPC's "Taiwan Ports Vessel Shore Power Promotion Plan."





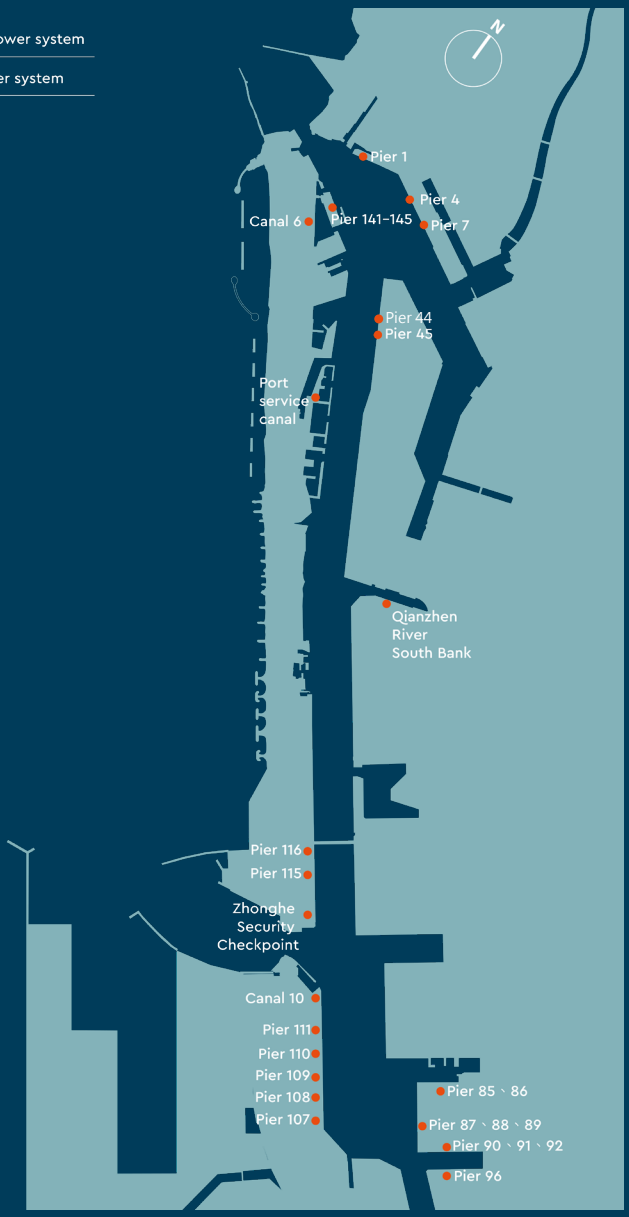
High-voltage shore power

Table of Voltages and Numbers of Shore Power Wharves — Installation Status of the Shore Power System of the Port of Kaohsiung
High-voltage shore power

Location	Voltage	Quantity
Wharf No. 1	220V	1
Wharf No. 4	220V	1
Wharf No. 7	220V	2
Wharf No. 45	440V	1
Wharf No. 85, 86	440V	5
Wharf No. 87, 88, 89	440V	7
Wharf No. 90, 91, 92	440V	7
Wharf No. 96	480V	1
Wharf No. 44	3.3kV	1
Wharf No. 107	6.9kV	1
Wharf No. 108	6.6kV	1
Wharf No. 109	6.6kV	1
Wharf No. 110	6.6kV	1
Wharf No. 111	6.6kV	1
Wharf No. 115	6.6kV	1
Wharf No. 116	6.6kV	1
Wharf No. 141	110V, 220V, 440V	4
Wharf No. 142	110V, 220V, 440V	5
Wharf No. 143	110V, 220V, 440V	2
Wharf No. 144	110V, 220V, 440V	2
Wharf No. 145	110V, 220V, 440V	2
Sixth Ship Basin	220V, 440V	12
Tenth Ship Basin	220V	3
Zhonghe Security Inspection Station	220V	1
Port Service Ship Basin	110V, 220V	11
South Bank of Qianzhen River	220V, 440V	3

Map of shore power system

Shore power system

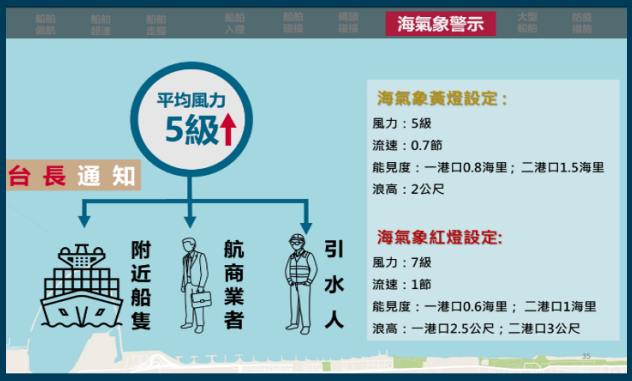


★ Enhancing the "Smart Warning Assistance System for Vessel Maneuvering"

The Port of Kaohsiung is an international comprehensive port for commercial, military, fishing, and industrial use, with approximately 70,000 vessel movements entering and leaving the port each year. Such a huge volume of maritime traffic places an extremely heavy load on the tower controllers and increases the risk to navigation safety. In order to promote a smart port and to improve operational efficiency and navigation safety, in 2020 TIPC established the "Smart Warning Assistance System for Vessel Maneuvering" by upgrading the VTS. Through digital technology, together with big data analysis, artificial intelligence, and innovative service concepts, the rate of human error is reduced, so as to improve port efficiency and service quality, strengthen maritime traffic safety, reduce the occurrence of harbor incidents such as wharf collisions, and reduce the marine impact and pollution caused by vessel accidents.

A. Enhancing the Marine Meteorological Management Mechanism

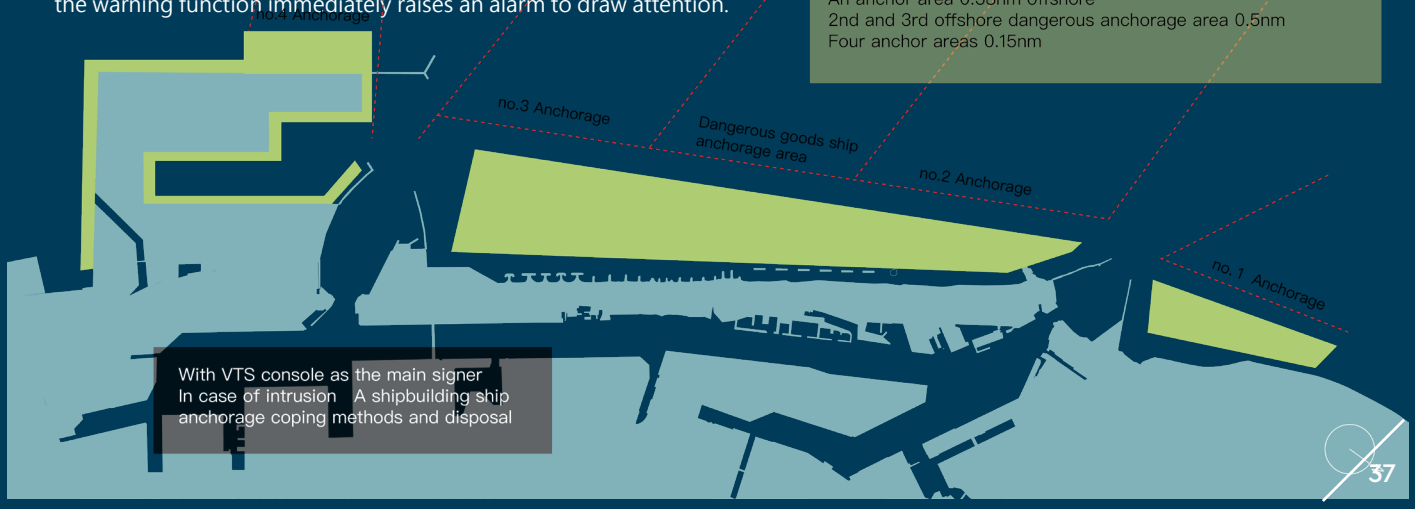
- Strengthening the Marine Condition Anomaly Warning Function
  A warning and notification mechanism for marine meteorological equipment was established, and a warning function was established in accordance with the relevant regulations of the port area. Since 2022, the enhancement of the marine meteorological warning function has been planned and established, so as to improve maritime traffic safety and to reduce the risk of pollution of the marine environment caused by maritime traffic accidents.
- Optimizing the Marine Meteorological Web Page
  Through the newly established function that is simultaneously interfaced on the web page, if the marine meteorological values reach the standards, a colored block will be displayed on the web page to strengthen the reminder function. This is established to provide a reference for vessels and shipping companies so as to accelerate voyage planning. In order to link marine meteorological information with port information, the page was optimized again in September 2025 to disclose the relevant information in a consolidated manner.
- Optimizing the Wave and Current Meters
  At present, 2 sets of wave and current meters (one primary and one backup) are installed at the First Entrance and the Second Entrance respectively, increasing the frequency of data updates and strengthening the observation and warning functions, so as to improve the safety of maritime navigation.





B. Strengthening Vessel Monitoring Functions

- Adding an Intrusion Warning Function
  To strengthen the water area management of vessel anchorage areas, and to prevent the risk of marine environmental oil pollution and the like caused by vessels running aground when they drag anchor or drift without power to shoal areas, a warning function for vessels intruding into the water area has been added through a smart electronic navigational chart. Once a vessel enters a shoal area, the warning function immediately raises an alarm to draw attention.



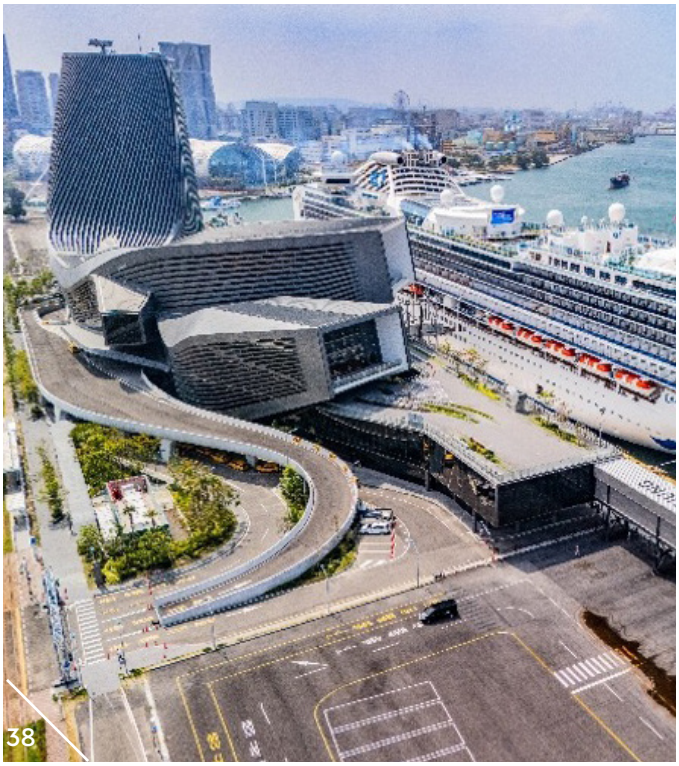
3.5 Strengthening Port Development

The Port of Kaohsiung is the largest international port in Taiwan and is located at the shipping hub of Asia. Its port development policy takes a sustainably operated green port as its goal; therefore, the overall environment and compatibility with the city are the primary considerations throughout the development process. Port construction is carried out in accordance with the "Future Development and Construction Plan for International Ports" approved by the Executive Yuan.

★ Completing the Relocation Plan of the "Intercontinental Container Terminal Project"

The Port of Kaohsiung has been in operation for over a hundred years. In order to respond to the maritime trend of larger sized vessels and to changes in the domestic and international economic and trade environment, the "Intercontinental Container Terminal Project" has been promoted to create opportunities for the future development of the Port of Kaohsiung. In addition to being designed and constructed with the concepts of green, sustainable, and environmental friendliness, this project can also readjust and redistribute the container terminals in the Kaohsiung port area, increase the number of berthing spaces at large container wharves, provide ample land for industrial chain integration, solve the problem of oil storage tanks in the port area being scattered in the core area near the urban district, create opportunities for the land development of the old port area, and revitalize waterfront tourism and recreation resources, so that the Port of Kaohsiung moves toward a green port with sustainable development in production, living, and ecology, creating a win-win situation for both the port and the city.

The land of the Intercontinental Phase II is planned into 3 major areas, including the "Seventh Container Terminal, the warehousing and logistics area (petrochemical and oil products storage and transport center), and the bulk and general cargo wharves," among others. Since the first half of 2023, operators have successively completed the construction of equipment and plants and have moved in to operate. Among them, Evergreen Marine Corp. has operated in phases in 2023 and 2024; its container yard is equipped with advanced loading and unloading machinery and a smart system, and it is the most highly automated container terminal in Taiwan, greatly improving the container handling capacity and operational efficiency. In addition, the bulk cargo handling (including coal, slag, and cement clinker, etc.) originally located in the Zhongdao Commercial Port Area was also relocated to the Intercontinental Phase II for operation in 2024.



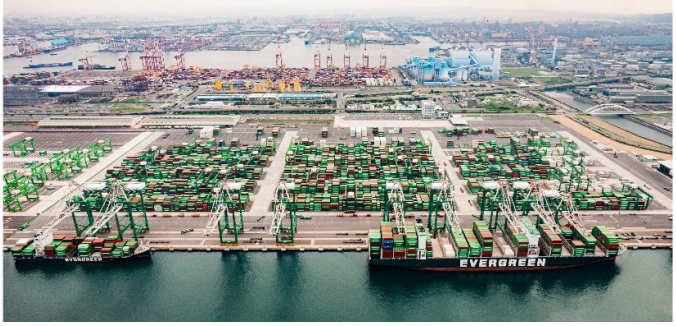
2023 Inauguration of the "Kaohsiung Port Cruise Terminal"

★ Constructing and Inaugurating the "Kaohsiung Port Cruise Terminal"

In order to revitalize the harbor space, enhance land use, and provide an elegant and leisurely waterfront space, the Port of Kaohsiung, in coordination with the Multi-functional Economic and Trade Park Project, carried out the construction of the "Kaohsiung Port Cruise Terminal." This construction project is an avant-garde building with 2 underground floors of reinforced concrete construction, 15 above-ground floors of steel construction, and a 3D curved surface of metal curtain walls. With the fluid imagery of ocean waves as its architectural design concept, it shapes a new landmark of Kaohsiung's maritime gateway to the nation. The "Kaohsiung Port Cruise Terminal" was inaugurated in September 2023. It will combine the existing shoreline of Wharves No. 17 to 21 (with a total length of 730 m and a water depth of 10.5 m), can accommodate the berthing of the largest 250,000-tonne-class tourist cruise ships, and can serve more than 2,100 passengers clearing customs per hour at peak times, providing cruise passengers with a convenient and comfortable transport space. It also promotes the establishment of waterfront recreation, dining, or cultural and leisure commercial activity facilities near the port, creating diversified public service facilities, spaces, and a commercial environment for citizens and consumers, enhancing international exchange activities, and promoting the development of the national and local tourism industries. This allows the Port of Kaohsiung to transform and upgrade from cargo transport into a harbor of international culture and tourism, while creating a new landmark of port waterfront architecture, so as to elevate the Port of Kaohsiung into a multi-functional major international port.

★ Building a High-Quality Port Construction Environment

In response to the larger sizing of container vessels and changes in the maritime shipping market, the Port of Kaohsiung continues to promote wharf reconstruction and functional adjustment, and carries out the deepening works of Wharf No. 70 of the Third Container Center and Wharves No. 77–79 of the Fifth Container Center, connecting the existing operation areas, enhancing the berthing capacity for large vessels and the operational efficiency of the port area, and optimizing the allocation of shipping operators. In addition, in coordination with passenger transport development, domestic-line bulk and general cargo is relocated to the Chung-Tao Commercial Port Area, and the demolition and reconstruction of Wharves No. 27–No. 28 is carried out, so as to strengthen operational safety and handling efficiency. The overall works give consideration to both operational development and environmental impact, promoting the development of the Port of Kaohsiung toward a high-quality port that is sustainable and environment-friendly.



2023–2025 Successive completion of the "Intercontinental Container Terminal" relocation plan

★ Port-City Cooperation and the Transformation and Development of the Old Port Area

The Kaohsiung port area is immediately adjacent to densely populated urban areas. In order to establish a channel for communication and for building consensus between the Port of Kaohsiung and the city, TIPC has, since 2015, established the "Kaohsiung Port-City Cooperation Platform" with the Kaohsiung City Government. Up to 2025, a total of 19 formal meetings had been held, and case-by-case consultations continue to be held as required by port-city cooperation issues. Through the integration of port and city resources, plans such as the transformation and development of the port area, the hardware construction of the old port area, and the monitoring of air pollution prevention and control in the port area have been promoted successively, effectively coordinating and resolving issues related to port-city development.

The old port area of the Port of Kaohsiung has a strong historical appearance and cultural connotation. In order to promote the transformation of port area land development and to revitalize waterfront tourism and recreation resources, TIPC and the Kaohsiung City Government jointly established the "Kaohsiung Port Land Development Co., Ltd." to establish a communication platform for accelerating the development of the old port area of the Port of Kaohsiung. To date, the land development company has completed the investment solicitation and development of KW2, the Kaohsiung Port Waiting Room, Dagang Warehouse 410, and Zone A of the Yacht Marina Area, and, in accordance with the consensus of port-city cooperation, it continues to promote investment solicitation plans such as the Penglai Commercial Port Area, the back-line land of Wharf No. 21, and Zone B of the Yacht Marina Area. The existing and planned waterfront spaces total 58.7 ha, in the hope of creating a new highlight of the Kaohsiung waterfront through reshaping the functions of the old port area, so as to achieve the goal of port-city co-prosperity and sustainable development.

★ Improving Road Traffic in the Port Area

In order to improve the connecting roads of the Kaohsiung port area, raise the efficiency of external transport, reduce the conflicts of mixed traffic flows, promote the coordinated development of the port and the city, make the traffic system of the port area and the surrounding areas more complete, and at the same time enhance the living quality of Kaohsiung City, the Kaohsiung Port External Elevated Road Project has been promoted, constructing a 3.4 km connecting corridor for the commercial port area and a 1.13 km extension corridor of National Freeway No. 1. In addition, in order to respond to the external transport demand arising from the Kaohsiung Port Intercontinental Container Terminal before the completion and opening of National Freeway No. 7, the MOTC has promoted the "Kaohsiung Port Intercontinental Container Terminal External Traffic Improvement Plan" in the short and medium term, and NT$1.916 billion was donated and subsidized by TIPC's operating fund and the Maritime and Port Construction Fund to the Kaohsiung City Government for implementation. It was completed and opened to traffic on July 17, 2025, separating passenger and freight vehicles in this area and reducing driving risks; in the long term, the National Freeway No. 7 project continues to be promoted.

★ Continuing to Conduct Environmental Monitoring in the Port Area

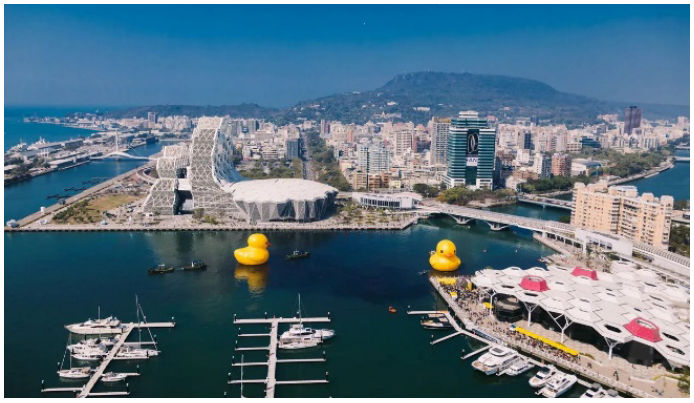
In order to keep track of the environmental changes around the port area, TIPC continues to conduct monitoring of air quality, noise, water quality, sediment quality, and the ecological environment in the port area. Through the results of environmental monitoring, the degree of impact of operational activities and engineering development on the environment, and the differences between the current status of engineering development and the results of the original environmental impact assessment, are understood. The monitoring results are also compared with environmental protection laws and regulations, so that abnormal phenomena are grasped at all times and improvements and adjustments to operating methods are carried out immediately, in order to maintain environmental quality.



Revitalization and development of Dagang Warehouse 410 (Photo source: Kaohsiung Port Land Development Co., Ltd.)



2018.03.31 KW2 officially commenced operation
(Photo source: Kaohsiung Port Land Development Co., Ltd.)



Investment solicitation and development of Zone A of the Yacht Marina Area (Photo source: Kaohsiung City Government)



Kaohsiung Port Area

★ Implementing Habitat Restoration

The location of the Port of Kaohsiung was in the past a mangrove habitat; the original natural coast was filled in for the development of the Port of Kaohsiung, and the increase of artificial coast has made the ecological environment and species diversity tend toward monotony. Therefore, while carrying out port development, TIPC also endeavors to maintain the ecological habitat environment of the port area, and actively maintains the existing green belt buffer areas of the port area to reduce the environmental load.

Taking the Nanxing Free Trade Zone as an example, because the location of the plan is remote and the degree of human disturbance is low, according to the environmental impact assessment survey of the Nanxing Phase I Land Development Plan in 2011, a total of 68 bird species were recorded, including autumn and winter transit birds (according to a survey by the Kaohsiung Wild Bird Society, there are more than 210 bird species in the Nanxing plan area), 8 mammal species, 6 amphibian species, 10 reptile species, and 40 butterfly species. In addition, 5 Taiwan endemic species (the lesser ricefield rat, Swinhoe's tree lizard, the Formosa grass lizard, etc.), 19 Taiwan endemic subspecies (the ring-necked pheasant, the crested goshawk, the black drongo, the Savanna nightjar, the besra, etc.), 2 precious and rare conservation species (the common kestrel and the little tern), and 3 other conservation-deserving species (the oriental pratincole, the brown shrike, and the cobra) were found. Therefore, during the construction and operation periods of the Nanxing Free Trade Zone Development Plan, the impact caused by the development is mitigated through methods such as retaining the existing windbreak forest, greening with native species, setting up isolation green belts, and restricting the speed of vehicles entering and leaving. At present, approximately 10 ha of land within the scope of Phase I of the Nanxing Free Trade Zone is reserved as a wild bird habitat.

According to the Kaohsiung Branch's "Environmental Monitoring Plan for the Operational Areas and Newly Developed Areas of the Port of Kaohsiung," the results of the quarterly terrestrial ecology–bird monitoring of Nanxing Free Trade Zone Phase I currently show that approximately 48 species were found in 2024 and approximately 53 bird species were found in 2025.

In 2025, the Kaohsiung Wild Bird Society was further commissioned to conduct a "Feasibility Assessment of the Short- and Medium-Term Management of the Nanxing Wild Bird Reserve as an Other Effective Area-based Conservation Measure (OECM)," and a total of 3 ecological surveys were conducted, mainly carrying out a systematic inventory of the ecological assets of the area, among other work.



Green building of the Nanxing Administration Center



Prinia inornata



Lonchia punctulata

★ Attaching Importance to Port Ecological Conservation and Environmental Sustainability

In order to reduce the impact of port engineering on the ecological environment and to implement the concept of sustainable development, the Port of Kaohsiung has promoted the "Ecological Checklist System for Port Engineering," introducing ecological considerations at each stage of planning, design, and construction, strengthening the integration of engineering and the environment, and reducing the impact of development.
The Seventh Container Terminal of the Port of Kaohsiung takes ecological engineering methods as its core, adopts a green container yard design that combines energy saving, resource reuse, and the planning of green spaces, and used surplus soil to backfill green belts during the construction period, implementing the reuse of the circular economy.
The overall project introduces eco-friendly design cross-sections and facilities, implements the four major strategies of ecological conservation — "avoid, minimize, mitigate, and compensate" — and, through measures such as low-disturbance design, ecological submerged breakwaters, and the creation of green belts, shapes a friendly habitat environment, putting into practice the Port of Kaohsiung's move toward green and ecological port sustainable development.



Seventh Container Terminal of the Port of Kaohsiung

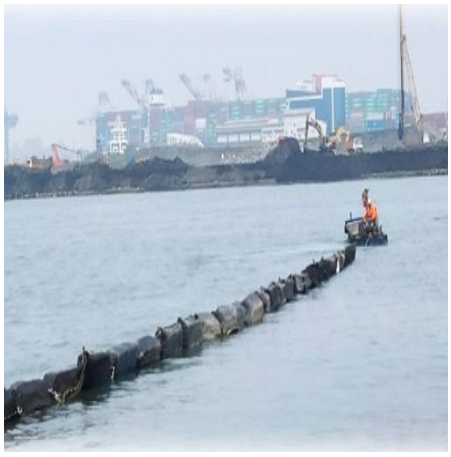
The project implements the four major strategies of ecological conservation — "avoid, minimize, mitigate, and compensate":

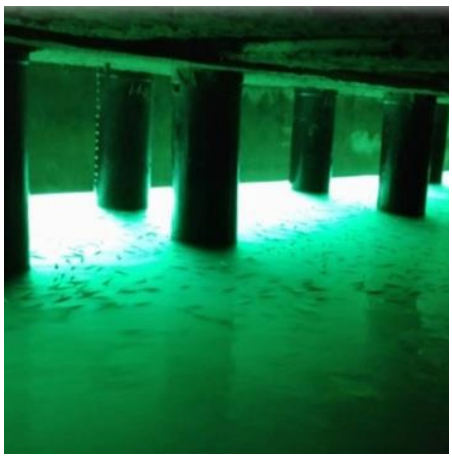
Avoid: The location of the work site avoids highly sensitive areas such as ecological conservation sites or important habitats.

Minimize: The design cross-section of the wharf structure adopts a steel pipe sheet pile pressure-relief structure, greatly reducing the time/scope of marine operations and lowering the impact on the underwater ecological environment; the design cross-section of the container yard tracks adopts a pile-beam structural foundation, greatly reducing the time/scope of excavation and lowering the impact on the ecological environment.

Mitigate: The design cross-section adopts a steel pipe sheet pile pressure-relief structure, greatly reducing the time/scope of marine operations and lowering the impact on the underwater ecological environment; a silt curtain is installed during dredging operations to mitigate the impact on the marine ecology.

Compensate: A pressure-relief wave-dissipation chamber is installed and the caissons of the south breakwater are relocated to serve as an ecological submerged breakwater, creating a friendly ecological habitat; ecological compensation is carried out; and green belts are added on the south and north sides of the base to create an ecological environment zone, achieving economic development while also giving consideration to environmental/ecological sustainability.


Installation of a silt curtain


Ecological habitat results of the pressure-relief wave-dissipation chamber beneath the wharf


Underwater ecology of the circular caissons relocated as an ecological submerged breakwater


Ecological habitat results of the pressure-relief wave-dissipation chamber beneath the wharf

3.6 Preventing the Occurrence of Fugitive Dust in the Port Area / Strengthening the Control of Transport Vehicles

★ Air Pollution Prevention and Control for Loading and Unloading Operations

To prevent pollution from loading and unloading operations, the Port of Kaohsiung has implemented a number of pollution prevention and control measures, including setting up dust nets in the operational areas, deploying misting machines and water trucks to sprinkle water at regular intervals to keep the ground moist, and cleaning the roads. In addition, 4 vehicle washing pools were set up at Wharves No. 50, 52, 54, and 55 of the Zhongdao Commercial Port Area and 2 were set up at Wharves S17 and S18 of the Intercontinental Commercial Port Area, so as to effectively suppress the particulate matter generated during the loading and unloading of fugitive cargo, and to avoid the fugitive dust problem caused by vehicles driving out of the port area, thereby improving the ambient air quality.
In addition, in order to effectively improve the fugitive dust pollution generated by the loading and unloading operations of bulk and general cargo in the port area, and to reduce the impact of loading and unloading operations on the industries and residents of the nearby urban district, since January 1, 2024, the Port of Kaohsiung has relocated the loading and unloading operations of cargo types with greater fugitive properties (coal, slag, cement clinker, etc.) originally in the Zhongdao Area to the Intercontinental Commercial Port Area. At present, the operators stationed in the Intercontinental Phase II, such as S16 Formosa Plastics Corporation (which has set up 1 salt warehouse) and S19 Jian Tong Company (which has set up 2 coal warehouses), have all adopted "enclosed machinery" for loading and unloading operations.

Number of Vehicle Washing Times at the Washing Pools

Year	Number of Washing Times (Zhongdao and Intercontinental Commercial Port Areas)
2024	Approximately 20,000
2025	Approximately 25,000



Installing dust nets to suppress fugitive dust



Vehicle washing pool in the Intercontinental Commercial Port Area



The operator at Wharf S19 of the Intercontinental Commercial Port Area has set up enclosed coal unloading equipment to prevent the fugitive dust pollution during the coal loading and unloading process. The coal unloading volumes in 2024 and 2025 were approximately 2,172,882 t and 2,150,973 t respectively.



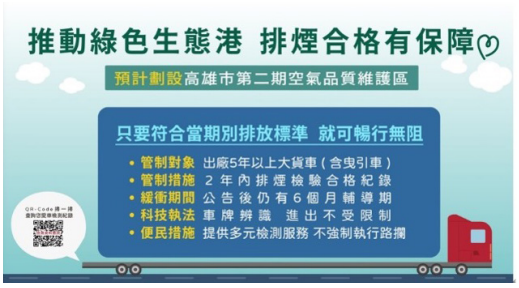
Carrying out joint inspections

★ Management of Land-Based Mobile Air Pollution Sources

The land-based mobile transport tools of the Port of Kaohsiung are another main source of air pollution emissions. In recent years, in addition to cooperating with the Environmental Protection Bureau, Kaohsiung City Government in carrying out joint inspections and providing mobile testing station services in the port area for Stage 3 to Stage 5 heavy-duty diesel vehicles, the Kaohsiung Branch has also coordinated with the Kaohsiung City Government's planning for the designation of the "Air Quality Maintenance Area of the Port Area." In addition, through measures such as the "enhancement of the automatic gate sentry post system" and the optimization of the "Kaohsiung Port Area Smart Traffic Flow System — Port Affairs 168," it is hoped that the exhaust emissions of operating vehicles can be effectively improved.

Among these, in order to reduce the idling time of trucks so as to lower engine exhaust emissions, the Port of Kaohsiung currently has a total of 72 entry and exit lanes, of which 40 are automatic gate sentry posts. The main reason why automatic gate sentry posts have not been fully installed is that, in order to accommodate the demand for the entry and exit of some special-specification cargo, general lanes are retained. However, for the lanes newly built subsequently, apart from retaining a small number of general lanes, the rest will all be planned as automatic gate sentry posts.





Designation of the Air Quality Maintenance Area in the port area

Number of Vehicle Passages Through the Automatic Lanes and Carbon Reduction

After the automatic lanes were set up, the average customs clearance time improved from 4 minutes to 10 seconds. Each vehicle passage can reduce diesel consumption by approximately 24.6 g and carbon emissions by approximately 0.152 kg. It is calculated that the number of vehicle passages in 2024–2025 reached approximately 20,150,000 passages, which is estimated to be able to reduce carbon emissions by approximately 3,063 t.



Nanxing Control Station

Year	Number of Vehicle Passages	Reduction in Fuel Consumption	Emission Reduction (kg)	Fuel Reduction (kg)	Carbon Reduction (kg)
2020	12,600,997	24.6 g/passage	0.152 kg/ passage	309,985	1,915,352
2021	12,904,406			317,448	1,961,470
2022	13,795,966			339,381	2,096,987
2023	13,154,783			323,608	1,999,527
2024	10,511,048			258,572	1,597,679
2025	9,641,230			237,174	1,465,467

Note 1: The fuel consumption data are from the research data of the Automotive Research & Testing Center.
Note 2: Based on the data of the Ministry of Environment's "Eco Taiwan Green Living Network."



Establishing and optimizing the "Port 168" Kaohsiung Port Traffic Information Website

3.7 Strengthening Port Waste Management

Because it is adjacent to the urban district, the Port of Kaohsiung attaches particular importance to the environmental cleanliness of the port area and the quality of life of the public. Land-based waste in the port area is handled in accordance with the provisions of the Waste Disposal Act and Articles 19 and 20 of the Resource Recycling Act; a total of 1,019.16 t of waste was removed in 2024 and 808.27 t in 2025. Resource sorting, recycling, and statistics are carried out through the "Management Procedures for General Waste Resource Recycling Work," so as to achieve the effects of resource regeneration and reuse and the reduction of port resource consumption and waste generation. Environmental pollution or waste generated by the loading and unloading operations of bulk and general cargo vessels at the wharves is handled in accordance with the "Taiwan International Ports Corporation, Ltd. Management Procedures for the Disposal of Environmental Pollution and Left-behind Waste from Stevedoring Operations."

TIPC carries out cleaning operations in the port waters every day, and, in accordance with Article 38 of The Commercial Port Law, carries out the disposal of daily-life waste from vessels and crew members. A total of 522.29 t of vessel waste and water body waste was received in 2024, and 523.22 t in 2025. In addition, vessels calling at the port are required to entrust legal environmental protection contractors with the collection and transport of waste oil and sewage, so as to reduce the environmental impact caused by vessels berthing in the port area; the volume of waste oil and sewage received was 3,116.20 t in 2024 and 2,230.40 t in 2025.

In order to properly carry out the water-area waste removal operations of the Intercontinental Phase II, which is already in operation, TIPC has purchased a new-type multi-functional cleaning vessel, which was put into operation in mid-2023. In addition to having the capability to sail outside the port, the new-type multi-functional cleaning vessel also has functions such as automatic cleaning, high-pressure water jets, a hydraulic crane arm, and oil-water separation, which will greatly improve the capacity of the Port of Kaohsiung to handle marine waste and oil pollution.

Statistical Table of Waste Disposal and Recycling of the Port of Kaohsiung

Item / Year	2024	2025
Waste Generation Volume (t)	1019.16	808.27
Resource Recycling Volume (t)	92.7	134.65
Resource Recycling Rate (%)	9.09%	16.65%



Daily cleaning of the port water areas



Daily cleaning of the port land areas



Newly purchased Gao 907 new-type multi-functional cleaning vessel


SWL 50 TONS
MAERSK
EVERGREEN
40LT

3.8 Strengthening the Management of Dangerous Goods in the Port Area

In order to implement the management of dangerous goods containers in the port area, TIPC established the "Port Area Dangerous Goods Safety Management Information System" in January 2017, and interfaced it with the information of the Customs container movement warehouse system, so as to implement the storage information and inspection functions for dangerous goods in the port area. In order to further refine the information on the loading, unloading, and storage of dangerous goods in the port area, TIPC established the "Port Area Dangerous Goods Smart Cloud Platform" in December 2019, and presents the storage distribution status on a map, so that the storage information of dangerous goods in the port area can be grasped at all times. In January 2025, in order to continuously strengthen the dangerous goods management mechanism, the dangerous goods information system and the smart cloud platform were integrated, and the "Port Area Dangerous Goods Safety Management Integration Platform" was established, enhancing the query, statistics, and analysis functions required for dangerous goods management.

In order to maintain the safety of the port area, in addition to attaching importance to the disaster prevention concept of disaster prevention and to the response after accidents occur, the Port of Kaohsiung has also established drill and exercise as well as supervision and inspection mechanisms for dangerous goods, so as to implement the safety management of dangerous goods in the port area. Safety and health inspections of the loading and unloading operations at the public petrochemical wharves are carried out every month, and deficiencies found during visits are notified to operators and on-site management units in a timely manner to prevent the occurrence of hazards in wharf operations. In addition, relevant units of TIPC and the Harbor Fire Brigade, in coordination with the Maritime and Port Bureau, the competent authority of the port area, carry out joint inspection and supervision operations for dangerous goods at least twice a year, as well as irregular inspection operations in the port area; the number of joint inspections and supervisions was 2 in both 2024 and 2025. In addition, if a seriously violating operator is found, it will be referred to the competent authority for severe handling. For example, regarding cases referred due to highly dangerous goods remaining in the port area for too long, there were 3 referred cases in 2024 and 3 in 2025.



2025 Safety Supervision of Dangerous Goods Operations of the Petrochemical Storage and Transport Industry in the Kaohsiung Port Area



2025 Safety Supervision of Dangerous Goods Operations of the Petrochemical Storage and Transport Industry in the Kaohsiung Port Area

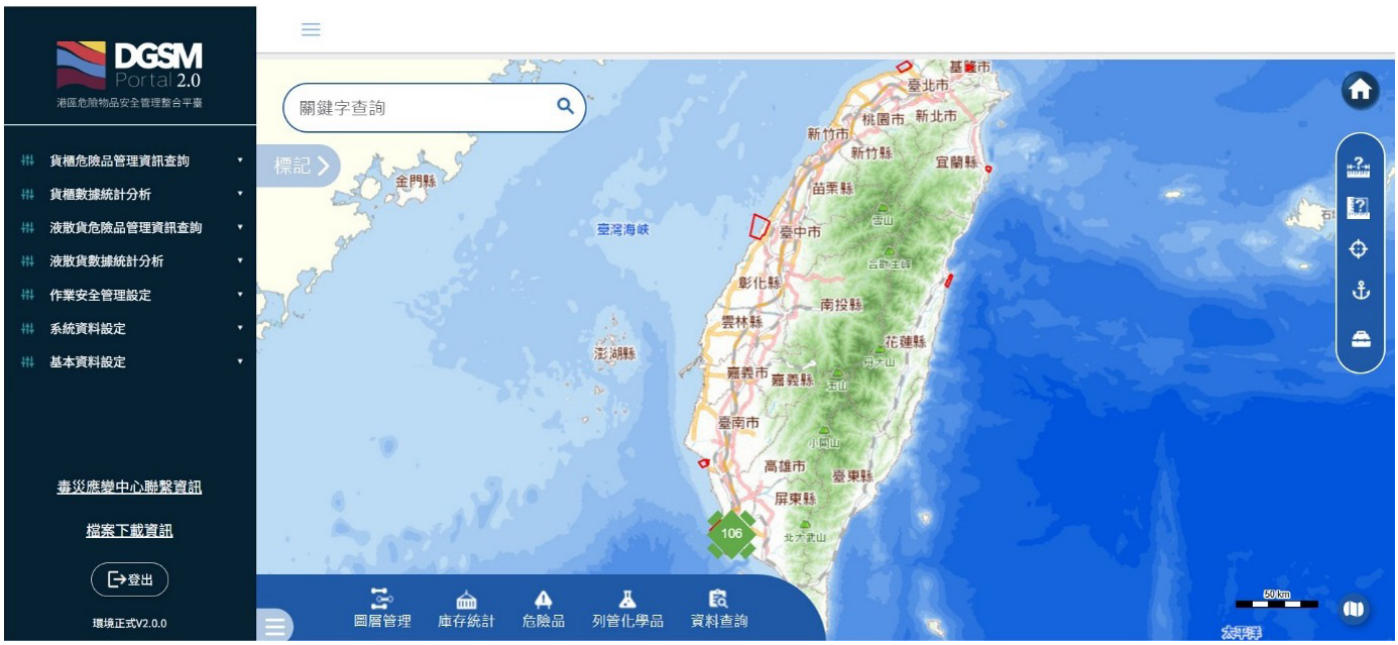


2024 Safety Supervision of Dangerous Goods Operations of the Petrochemical Storage and Transport Industry in the Kaohsiung Port Area



2024 Safety Supervision of Dangerous Goods Operations of the Petrochemical Storage and Transport Industry in the Kaohsiung Port Area

In view of the fact that some petrochemical operators of the Port of Kaohsiung have successively relocated from the Zhongdao Commercial Port Area to the Intercontinental Commercial Port Area for operations, in order to immediately concentrate all efforts on rescue in response to the occurrence of sudden accidents, in the "Joint Inspection and Supervision Operations for Dangerous Goods" carried out by relevant units of TIPC and the Harbor Fire Brigade in coordination with the Maritime and Port Bureau, the competent authority of the port area, as well as in the irregular inspection operations in the port area, operators are all required to, following past practice, base themselves on the joint defense mechanism established in the Zhongdao Commercial Port Area and, in accordance with the on-site conditions of the Intercontinental Commercial Port Area, coordinate and integrate existing technology, equipment, and apparatus for mutual support, so as to minimize the impact of accidental disasters and to prevent accidents from expanding to the point of polluting the environment or endangering human health. The remaining few dangerous goods operators still located in the Zhongdao Commercial Port Area also continue to handle this following past practice.



Integrated establishment of the "Port Area Dangerous Goods Safety Management Integration Platform" in 2025

Dangerous Goods Management and Related Activities of the Kaohsiung Branch in 2024–2025

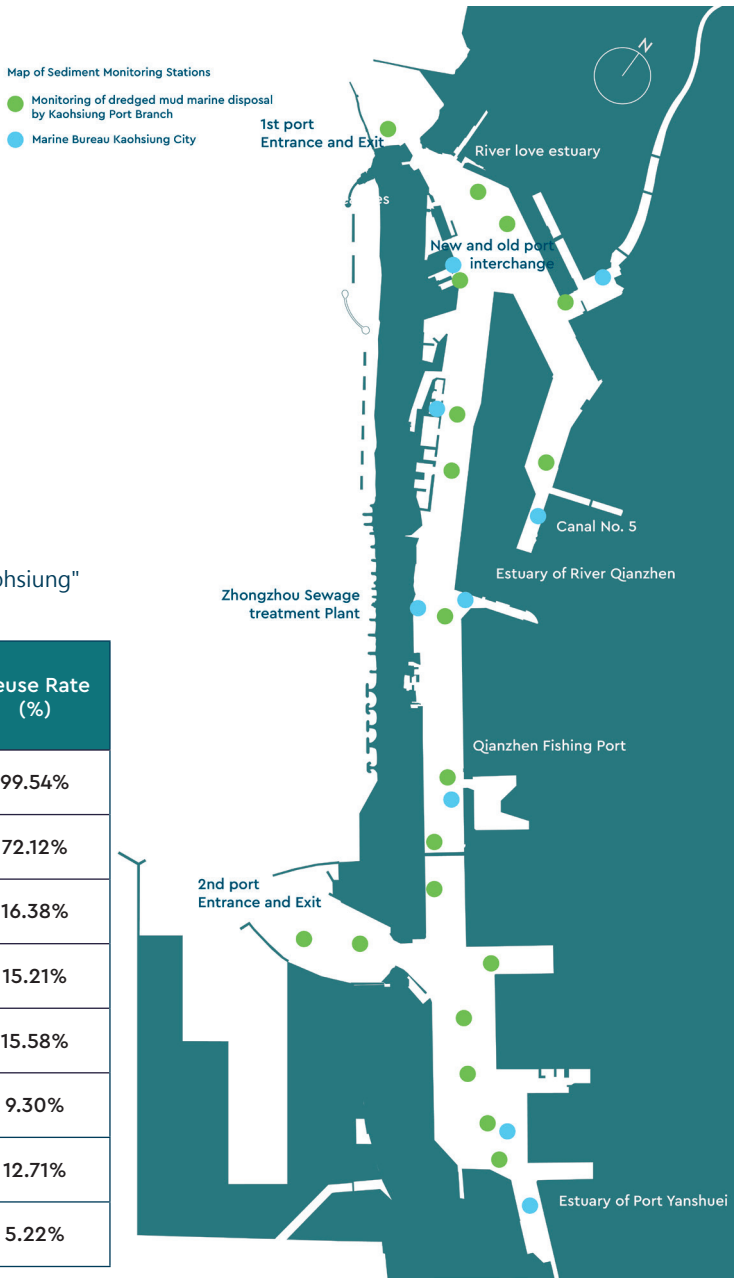
Year	Name (Inspection Visits and Supervision, Meetings, Drills, Advocacy)	Number of Participants
2024	"Safety Supervision of Dangerous Goods Operations of the Petrochemical Storage and Transport Industry in the Kaohsiung and Anping Port Areas" Meeting	24
	Self-organized inspection visits for dangerous goods loading, unloading, and warehouse management (visiting the operations of petrochemical operators in the Kaohsiung port area from 03.13 to 04.29)	10
	Kaohsiung Port 2024 Typhoon Disaster Prevention and Handling Response Tabletop Exercise	26
	The Kaohsiung Branch's 2024 "Natural Disaster Education and Training — A Brief Discussion of the Causes and Applications of Various Types of Weather"	25
2025	"Safety Supervision of Dangerous Goods Operations of the Petrochemical Storage and Transport Industry in the Kaohsiung Port Area" Meeting	24
	Self-organized inspection visits for dangerous goods loading, unloading, and warehouse management (visiting the operations of petrochemical operators in the Kaohsiung port area from 02.24 to 03.26)	10
	Kaohsiung Port 2025 Typhoon Disaster Prevention and Handling Response Tabletop Exercise	26
	The Kaohsiung Branch's 2025 "Natural Disaster Education and Training — Common Natural Weather Disasters in Taiwan and the Interpretation of Their Weather Information"	40

3.9 Monitoring and Reducing Marine Sediment Pollution

In order to effectively manage marine sediment, the Kaohsiung Branch carries out environmental monitoring work every quarter, conducting sediment quality monitoring and bottom water monitoring in the port area, and carrying out the monitoring of 32 substances such as total nitrogen, total phosphorus, total grease, cyanide, and heavy metals. The results show that there is a situation of relatively high heavy metals at the places where rivers and channels flow into the port area, indicating that the pollution mainly comes from upstream discharge.
With regard to the marine dumping area for dredged sludge of the Port of Kaohsiung, the Kaohsiung Branch also conducts long-term impact monitoring of the marine ecology, environment, etc. of the dumping area in accordance with the "Marine Dumping Permit Plan for Dredged Sludge of the Port of Kaohsiung," and submits reports to the Ocean Affairs Council every quarter.



Dredging operations in the port area (Dredger Gao 506)



Statistics of Dredging and Backfilling over the Years in the "Marine Dumping Permit Application for Dredged Sludge of the Port of Kaohsiung"

Year	Total Dredging Volume (10,000 m³)	Dumping Volume (10,000 m³)	Substitution Volume (10,000 m³)	Reuse Rate (%)
2016	87.405	0.405	87	99.54%
2017	51.3	14.3	37	72.12%
2018	36.93	30.88	6.05	16.38%
2019	32.708	27.733	4.975	15.21%
2020	30.488	25.738	4.75	15.58%
2021	13.447	12.197	1.25	9.30%
2022-2023	47.195	41.195	6	12.71%
2024-2025	31.549	29.899	1.65	5.22%

Unit: 10,000 m³

Project Name	2016		2017		2018		2019		2020		2021		2022		2023		2024		2025	
	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside
Seawall and breakwater works of the Kaohsiung Port Intercontinental Container Terminal Phase II Project, and the north diversion breakwater works of the Taipower Dalin Power Plant Renewal and Reconstruction Project	107.7	0	2.89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shoreline, dredging and filling, and port service ship basin works of the Kaohsiung Port Intercontinental Container Terminal Phase II Project	322.1	0	9.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reclaimed land filling works of the Kaohsiung Port Intercontinental Container Terminal Phase II Project	704.5	2,081.50	1,035.60	288.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S4-S5 wharf revetment and reclaimed land filling works of the Kaohsiung Port Intercontinental Container Terminal Phase II Project	609.9	0	66.3	0	0	0	44.9	0	0	0	0	0	0	0	0	0	0	0	0	0
Backline site expansion of the Fourth Container Terminal of the Port of Kaohsiung: embankment and land reclamation works	0	0	152.6 (註 1)	143.6 (註 2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S1-S3 wharf revetment and reclaimed land filling works of the Kaohsiung Port Seventh Container Terminal Project	0	0	0	0	0	0	0	0	122.07	0	347.86	0	0	0	0	0	0	0	0	0
A6 wharf revetment and reclaimed land filling works of the Port of Kaohsiung	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36.6	0	29.55	0	0	0



Dredger Gao 505 (Trailing Suction Hopper Dredger)



Gao 609 Mud Receiving Vessel

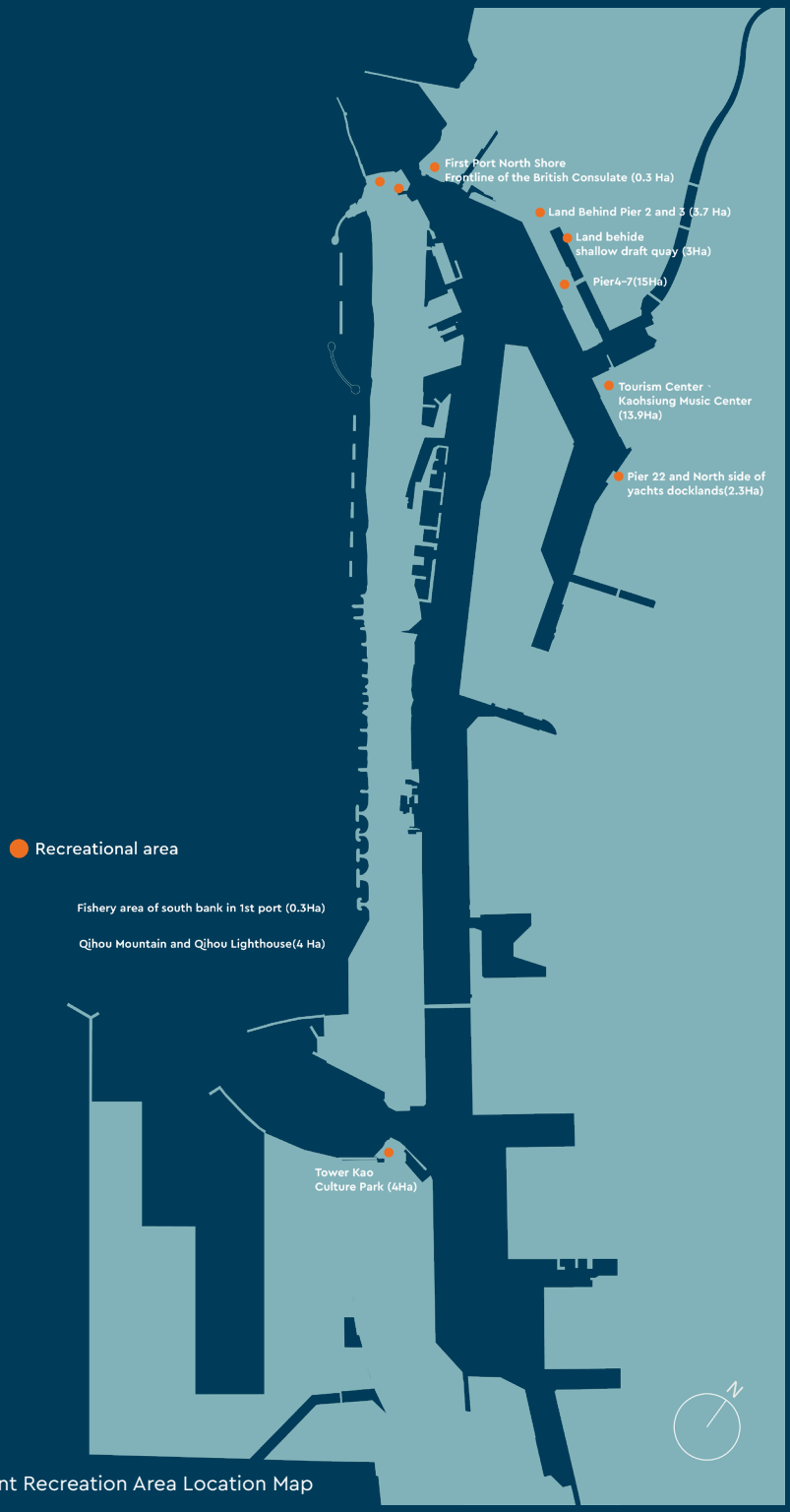
3.10 Strengthening the Relationship with Local Communities

The communities around the Port of Kaohsiung face the impact of the front line of the port and bear relatively high environmental risks. Therefore, the Kaohsiung Branch carries out environmental restoration through maintaining the waterfront spaces and green belt buffer areas of the port, so as to create a harmonious land-water interface. By using green belts to reduce the barrier of the port-city interface, in addition to improving the living quality of nearby residents and reducing the impact of port operations on residents, ecological habitats can also be increased and the biodiversity of the environment around the port area enhanced. The Kaohsiung Branch has also gradually opened the old port area for the public to share, providing the public with recreational space through facilities such as parks and green spaces, event exhibition venues, and bicycle paths. It also holds public-welfare activities or educational seminars from time to time together with local governments, associations, charitable organizations, etc., inviting the public to participate, so as to maintain the public's identification with the port and good interaction with the surrounding communities.



In order to achieve the community prospect of resource sharing and shared prosperity and to benefit the general public, TIPC has opened the former restricted area of the port area as a space for water-area tourism, leisure, and recreation, and has built the Kaohsiung Port Water Garden covering an area of 4,300 ping at Wharves No. 3 to 5 of the Port of Kaohsiung, achieving the effects of energy saving and carbon reduction and environmental sustainability.

The Great Harbor Bridge of the Port of Kaohsiung is located at the Third Ship Basin of the Port of Kaohsiung. It is the longest cross-harbor swing bridge in Asia, was independently designed and built by TIPC, and was officially opened on July 6, 2020. The Great Harbor Bridge is immediately adjacent to the Dayi Pier-2 Station of the Kaohsiung Light Rail. It is an important waterfront piece of the puzzle at the northern end of the Asia New Bay Area, and, combined with the Kaohsiung waterfront light rail, it connects the Pier-2 Art Center and the Kaohsiung Port Warehouse Cluster, shaping the waterfront tourism corridor of the Port of Kaohsiung.



Kaohsiung Port Waterfront Recreation Area Location Map





2024/06/27 The Kaohsiung Branch presented AI to Cijin Elementary School, Kaohsiung



2025/03/05 The Kaohsiung Branch presented AI to Dewu Elementary School, Hualien



2024/05/11 "Happiness, Love, and Sustainability" port affairs family day activity and model employee award ceremony



"2024 Partner Fellowship Activity" — visiting South Shoushan

Strengthening the Relationship with Local Communities (Public-Welfare Activities)

The Kaohsiung Branch fulfills its corporate social responsibility and has long cared for socially disadvantaged groups such as neighborhoods, elderly people living alone, education in remote areas, and low-income households. Through activities such as the "Fushou Alley Station" long-term care courses for the elderly co-organized with Kaohsiung Municipal Cijin Hospital, senior walking activities, presenting Spring Festival couplets for community engagement, and blood donation, it cares for disadvantaged groups through concrete actions.
In 2024, a total of 64 sessions of community engagement and community welfare activities were held; 93 sessions were held in 2025.



2024/2 Art therapy course at the "Fushou Alley Station" long-term care station of Cijin Hospital



2025/2/26 "Senior 13" silver-haired wedding photography public-welfare activity



2025/05/21~23 "Zongzi Sending Warmth" activity presenting Dragon Boat Festival care gifts to elderly people living alone in Cijin District



2024/03/25 "Let's Play Together~" young-and-old co-learning activity



2025/09/11 "Ghost Festival Rice Donation" public-welfare activity


2025/01/16 "The Little Dragon Gathers a Hundred Blessings — A New Year of Great Prospects" Spring Festival couplet public-welfare activity (Hamasen session)

Strengthening the Relationship with Local Communities (Beach Cleaning Activities)

In coordination with the Executive Yuan's "Salute to the Sea" policy, the Kaohsiung Branch co-organizes ocean education activities with various groups, encouraging everyone to know the ocean and to clean the ocean, so as to build citizens' understanding of and concern for the marine environment and to jointly protect the marine environment.
During 2024, a total of 7 "ocean education" activities were held. Among them, in cooperation with the Kindergarten Affiliated to National Sun Yat-sen University, the "Diligent Cleaning, Refreshed Hearts, Marks upon the Sea" beach cleaning activity was held on June 7 at Sizihwan Beach in Kaohsiung. The participants included personnel of the childcare center, young children, university students, and colleagues of TIPC, totaling 95 persons, and 110 kg of "microplastic" waste was picked up from the beach, jointly protecting the marine environment through concrete actions.





2024/06/07 Beach cleaning activity co-organized by the Kaohsiung Branch and the Kindergarten of National Sun Yat-sen University

During 2025, a total of 8 "ocean education" activities were held, calling on more citizens to participate together and to exchange views and encourage one another, so as to maximize the benefits of the Salute to the Sea policy. Among them, on April 22 (Earth Day), the "Let's Go Ocean! Beach Cleaning in Step" activity was held jointly with the Taiwan Ports Association, TIPC Marine Co., Ltd., the National Nature Park Headquarters, National Park Service, MOI, and the Kindergarten Affiliated to National Sun Yat-sen University, and Yang Ming Marine Transport Corporation and YES Logistics Corp. were invited to take part. On the day of the activity, beach cleaning was also carried out simultaneously at Port of Anping, Port of Penghu, and Port of Budai. The results of the beach cleaning amounted to 55.5 kg picked up, with everyone contributing their effort to the marine environment.





2025/04/22 Beach cleaning activity co-organized by the Kaohsiung Branch, the Taiwan Ports Association, TIPC Marine Co., Ltd., the National Nature Park Headquarters, National Park Service, MOI, and the Non-profit Kindergarten for Employees' Children of National Sun Yat-sen University

Strengthening the Relationship with Local Communities (Greening and Beautification Work)

In order to maintain the environment, respond to the challenge of global climate change, and move toward the goal of net-zero carbon emissions, the Kaohsiung Branch actively promotes the greening and beautification policy of the port area, reducing carbon emissions and improving environmental quality through plant carbon sinks, and actively responding to the United Nations Sustainable Development Goals (SDGs) through concrete actions, implementing indicators such as SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action), and SDG 15 (Life on Land).

★ Water Garden of the Kaohsiung Port Area — Planting Replenishment Plan

In order to create a sustainable harbor with both ecological value and a city image, the Kaohsiung Branch built the "Kaohsiung Port Water Garden," an important scenic spot where travelers stop and rest between the Penglai Warehouse Cluster and the Pier-2 Dayi Warehouses. The site covers an area of approximately 4,300 ping. It has been more than 6 years since it was completed and opened in 2018, and during this period it has been affected by pests and diseases, typhoon disasters, and the construction of nearby works. Some of the original plant landscape had withered or grown poorly, affecting the overall appearance. In order to maintain the landscape image of the port area, since 2024 the Kaohsiung Branch has promoted the renovation and rehabilitation of the plants in the Water Garden, the waterfront corridor, and the area around the Great Harbor Echo, replacing and replenishing aged and damaged plants and optimizing the landscape design. In 2025, a total of 24,451 plants were planted, covering diverse arrangements of trees, shrubs, and flowers, greatly enhancing the landscape quality and recreational comfort of the port area.





Planting Status of the "Kaohsiung Port Water Garden"

★ "Kaohsiung Port Cruise Terminal" — Landscape Plant Maintenance Work

The "Kaohsiung Port Cruise Terminal" is located within the Asia New Bay Area, and the Kaohsiung Branch endeavors to maintain the environmental beautification of the terminal. The scale of the maintenance work plans carried out in recent years covers approximately 345 trees, 48,518 shrubs (including green walls), and 629 m² of lawn across the entire area. Through professional maintenance management, including fertilization, pest and disease control, support-frame maintenance, and refined pruning, urban carbon sinks are enhanced through plant maintenance, providing passengers and citizens with a high-quality waterfront green space.

★ "Intercontinental and Nanxing Free Trade Zone" — Plant Pruning and Maintenance Work

The port area of the Intercontinental and Nanxing Free Trade Zone is vast, and companies such as Evergreen, Kao Ming, and petrochemical operators are located and operate within it. In order to maintain the greening landscape of the port area, in addition to the existing trees, the Kaohsiung Branch has successively planted 16,500 m² of trees and 782,201 shrubs along the port ring road, adding greenery to the newly developed port area.







Planting Status of the "Intercontinental Port Area"

Strengthening the Relationship with Local Communities (Cultural Activities at the Port History Museum)

In order to strengthen its relationship with the community and to promote the public's closeness to and understanding of the culture of the port area, TIPC makes use of the historically significant venue of the "Port History Museum" and cooperates with various units and groups from time to time to hold diverse arts and cultural exhibitions, so that artistic aesthetics and port history culture complement each other. Combined with the harbor scenery, this attracts more people to enter the Port of Kaohsiung, to experience the beauty of the port area, and at the same time to learn about the Port of Kaohsiung's concept of constructing the port on the basis of environmental sustainability.
On September 26, 2025, the Kaohsiung Branch, together with the Taiwan Ports Association and the Chen Mei Floral Art Research Association, R.O.C., jointly held the "2025 Chen Mei Floral Art National Floral Exhibition," displaying the works of a number of top floral artists. It was an activity that combined artistic aesthetics, parent-child interaction, and public-welfare care, encouraging port affairs families and the general public to participate, so as to enhance artistic cultivation and the aesthetics of living.



Opening ribbon-cutting ceremony of the 2025 Chen Mei Floral Art National Exhibition



Group photo of the guests at the opening ceremony of the 2025 Chen Mei Floral Art National Exhibition

For this activity, young children of the "Kaohsiung Port Workplace Mutual-Aid Childcare Service Center" were specially arranged to participate in the "Little Floral Artists" course, and the teachers and children were also arranged to visit the century-old building of the Port History Museum in person to view the floral art exhibition, so that artistic enlightenment sprouts from an early age. A "Donate Receipts for Public Welfare" area was also set up at the site, and all the receipts collected were transferred to disadvantaged groups under the overall coordination of the Taiwan Ports Association, demonstrating the value of combining art with public welfare.



Young children of the Kaohsiung Port Workplace Mutual-Aid Childcare Center visiting the National Floral Exhibition



The 2025 Chen Mei Floral Art National Exhibition, displaying the works of a number of masters, presents the infinite creativity of flowers interwoven with art

In addition, through the Port History Museum, various rich and diverse activities such as painting exhibitions, calligraphy exhibitions, and exhibitions of works from port sketching competitions are also held, so as to strengthen public participation and community relations.



2024/11/30 "Hsueh Heng-cheng Solo Exhibition: Realm Without Boundaries — Taiwanese Abstract Concepts Wandering Between Color and Form" painting exhibition



2025/03/17 "The Fragrance of Ink · Setting Sail with Integrity" calligraphy competition works exhibition

Environmental Performance Indicators of Kaohsiung Port

Ten majors environmental issues of Kaohsiung Port		Index item	Calculation method	Target value	
1	Climate Change	Greenhouse Gas Management	Greenhouse Gas Emissions Inventory	Greenhouse Gas Emissions (Unit: metric tons CO_{2e}/year)	
		Green Incentive	1. Based on the vessel gross tonnage class and the ESI value bracket 2. Type of machinery and equipment	1. "Environmental Ship Index (ESI) Incentive" (Head Office) 2. "Cargo Handling Equi pment Electrification Incentive" (Head Office, Kaohsiung Branch)	
		Effectiveness of Planting Replenishment at the Water Garden Landscape and Recreation Area	Annual Number of Replenished Plants	Replacement and Replenishment Operations for Dead and Poorly Growing Plants	
		Water Resource Reuse	Recycled Water Volume (t)	Recycled Water Volume 1,000 t	
2	Air Quality	Compliance Rate of Air Quality (、$PM_{2.5}$、SO_2、NO_2)	Proportion of monitored values at air quality monitoring stations within the port area that comply with the "Air Quality Standards"	• Compliance rate of daily average value (less than 75 μg/m^3): 100% • Compliance rate of $PM_{2.5}$ 24-hour value (less than 30 μg/m^3): 60% • Compliance rate of SO_2 maximum hourly average value (less than 0.065 ppm): 100% • Compliance rate of NO_2 maximum hourly average value (less than 0.1 ppm): 100%	
		Number of Air Pollution Inspections	Number of Land-based Inspections	300 inspections per year	

	Indicator presentation (calculation details)	
	2024	2025
	• Category 1 (Scope 1): 1,465.4961 • Category 2 (Scope 2): 8,954.9360 Total Emission Equivalent: 10,420.4321 (Data from voluntary inventory)	• Category 1 (Scope 1): 2,055.7890 • Category 2 (Scope 2): 8,326.8002 Total Emission Equivalent: 10,382.5892 (Data from voluntary inventory)
	1. "Environmental Ship Index (ESI) Incentive" (1) Number of applicant companies: 9 (2) Number of qualified port entries: 1,610 vessel movements 2. "Electrification of Loading and Unloading Machinery Incentive" (1) Number of applicant companies: 2 (2) Number of applied machinery: for the 2 companies respectively — A: 40 gantry/quay cranes B: 2 gantry cranes	1. "Environmental Ship Index (ESI) Incentive" (1) Number of applicant companies: 9 (2) Number of qualified port entries: 833 vessel movements 2. "Electrification of Loading and Unloading Machinery Incentive" (1) Number of applicant companies: 2 (2) Number of applied machinery: for the 2 companies respectively — A: 8 gantry/quay cranes B: 5 gantry cranes
	A total of approximately 24,000 plants were replenished, including shrubs, ground covers, and landscape flowering grasses, effectively enhancing the overall landscape quality and greening effect.	
	1,363.4t	1,179.3t
	• Compliance rate of daily average value: 99% • Compliance rate of $PM_{2.5}$ 24-hour value: 92% • Compliance rate of SO_2 maximum hourly average value: 100% • Compliance rate of NO_2 maximum hourly average value: 100%	• Compliance rate of daily average value: 98% • Compliance rate of $PM_{2.5}$ 24-hour value: 92% • Compliance rate of SO_2 maximum hourly average value: 100% • Compliance rate of NO_2 maximum hourly average value: 100%
	337 inspections	325 inspections

Environmental Performance Indicators of Kaohsiung Port

Ten majors environmental issues of Kaohsiung Port		Index item	Calculation method	Target value	
3	Energy Efficiency/ Energy Transition	Electricity and Fuel Saving Efficiency	Saving rate of electricity consumption and fuel consumption in office premises and operation areas: Indicator calculation formula: (Current year resource consumption – Previous year resource consumption) ÷ Previous year resource consumption × 100%	Calculated by total electricity consumption (kWh) and total fuel consumption (L); consumption not exceeding the previous year	
		Electrification of Official Vehicles	Number of Official Fuel-powered Vehicles Replaced	Implemented in accordance with Article 2, Paragraph 4 of the "Directions for the Purchase and Lease of Official Vehicles by Central Government Agencies and Schools" issued by the Directorate-General of Budget, Accounting and Statistics.	
		Solar Power Generation (Installed through Investment Solicitation)	Electricity emission factor for 2024 announced by the Energy Administration, Ministry of Economic Affairs: approximately 0.474 kg of CO_2 emitted per kWh Electricity emission factor for 2025 announced by the Energy Administration, Ministry of Economic Affairs: approximately 0.467 kg of CO_2 emitted per kWh	Solar power generation Reduction in carbon emissions	
		Solar Power Generation (Self-built)			
4	Vessel Emissions	Management of Vessel Waste Oil and Wastewater	Number of vessel calls actually cleaned and received by commissioned qualified operators ÷ Number of vessel calls of waste oil and wastewater received × 100% Volume of vessel waste and waste oil and wastewater received	• Implementation status of commissioning qualified operators to clean vessel waste oil and wastewater • Compliance rate reached 100%	
		Vessel Exhaust Emissions ◆Proportion of port service vessels using low-pollution fuel and low-pollution fuel consumption of port service vessels	• Number of port service vessels using low-pollution fuel (marine heavy diesel oil or marine light diesel oil) ÷ Total number of port service vessels × 100% • Low-pollution fuel consumption of port service vessels	• Proportion of port service vessels using low-pollution fuel reached 100%	
		• Proportion of port service vessels using shore power • Shore power consumption	Number of port service vessels using shore power (vessels) ÷ Total number of port service vessels (vessels) × 100% Shore power consumption	Proportion of port service vessels using shore power reached 100%	

	Indicator presentation (calculation details)	
	2024	2025
	• Electricity consumption increased by 7.5% • Fuel consumption decreased by 18.57%	• Electricity consumption decreased by 0.19% • Fuel consumption decreased by 30.77%
	3 vehicles	2 vehicles
	Power generation in 2024 was 10,897,071 kWh, reducing carbon emissions by approximately 5,165 t.	Power generation in 2025 was 11,079,647 kWh, reducing carbon emissions by approximately 5,174 t.
	Power generation in 2024 was 2,279,453 kWh, reducing carbon emissions by approximately 1,080 t.	Power generation in 2025 was 3,093,203 kWh, reducing carbon emissions by approximately 1,443 t.
	• Reception rate by qualified operators 100%, 139 vessel calls • Volume of vessel waste oil and wastewater received: 3,116.20 t	• Reception rate by qualified operators 100%, 129 vessel calls • Volume of vessel waste oil and wastewater received: 2,230.40 t
	15 ÷ 15 × 100% = 100% • Proportion of port service vessels using low-pollution fuel reached 100% • Low-pollution fuel of port service vessels: 15 KL Marine light diesel oil consumption: 34.43 KL Marine heavy diesel oil consumption: 394 KL	15 ÷ 15 × 100% = 100% • Proportion of port service vessels using low-pollution fuel reached 100% • Low-pollution fuel of port service vessels: 15 KL Marine light diesel oil consumption: 33.60 Marine heavy diesel oil consumption: 424
	26 ÷ 26 × 100% = 100% 10 vessels belong to this Branch Office and TIPC Marine Corporation, Ltd., and the other 16 vessels belong to lessee operators. • Utilization rate: 100% • Consumption: 902,027 kWh	25 ÷ 25 × 100% = 100% • 10 vessels belong to this Branch Office and TIPC Marine Corporation, Ltd., and the other 15 vessels belong to lessee operators. • Utilization rate: 100% • Consumption: 1,022,184 kWh

Environmental Performance Indicators of Kaohsiung Port

Ten majors environmental issues of Kaohsiung Port		Index item	Calculation method	Target value	
4	Vessel Emissions	Vessel Speed Reduction achievement rate	Based on the AIS Vessel Speed Reduction verification system to track the sailing speed reduction status of navigating vessels when approaching within 20 nm f the port	• Statistics of Vessel Speed Reduction for vessels entering and leaving the port Vessel Speed Reduction achievement rate within the International Port area (3–5 nm): 100%	
5	Port Development	Intercontinental Relocation Operation	Relocation progress	• Container operators completed settling in	
				• Bulk and general cargo operators completed settling in	
			Number of operators in trial operation	• Petrochemical operators trial operation	
		Wind Power Industry Development	Number of wind power operators settled in	• Wind power operators completed commissioning	
		Public Waterfront Recreation Space	• Open waterfront recreation space • Wild bird reserve habitat area • Isolation green belt area • Public green space area	• To maintain or increase the waterfront recreation space area	
6	Fugitive Dust / Vehicle Exhaust Emissions (including large vehicles for cargo handling)	Proportion of Enclosed Transport Used for the Handling of Bulk Cargo (Cement, Coal) in the Intercontinental Commercial Port Area	• Annual volume of cement transported by enclosed transport ÷ Total cement volume × 100% • Annual volume of coal transported by enclosed transport ÷ Total coal volume × 100%	• Proportion of enclosed transport used for cement handling: 100% • Proportion of enclosed transport used for coal handling: 100%	
		Vehicle Washing	• Washing volume	Annual total washing volume	
		Promoting transport operators' use of the automatic gate sentry post system	• Proportion of inbound/ outbound port area lanes equipped with automatic gate sentry posts • Number of passing vehicle trips • Carbon reduction	• All newly built lanes are planned to be established as automatic lanes	

	Indicator presentation (calculation details)	
	2024	2025
	• essel Speed Reduction achievement rate: 49.75% • Speed reduction achievement rate for entering/leaving the port within the port area (3–5 nm: nearly 100%	• Vessel Speed Reduction achievement rate: 51.05% • peed reduction achievement rate for entering/leaving the port within the port area (3–5 nm: nearly 100%
	• Number of operators: 1 company • Leased area by operators: 84.3 ha	• Number of operators: 1 company • Leased area by operators: 148.9 ha
	• Number of operators: 3 companies • Leased area by operators: 19.5 ha	• Number of operators: 3 companies • Leased area by operators: 20.3 ha
	Number of operators in trial operation: 5 companies	Number of operators in trial operation: 7 companies
	• Number of operators: 1 company • Leased area by operators: 16.2 ha	• Number of operators: 2 companies • Leased area by operators: 36.1 ha
	• Open waterfront recreation: 46.5 ha • Wild bird reserve area: 10 ha • Isolation green belt area: 4.5 ha • Public green space area: 18.3 ha • Kaohsiung Water Garden green space area: 1.4 ha	• Open waterfront recreation: 46.5 ha • Wild bird reserve area: 10 ha • Isolation green belt area: 4.5 ha • Public green space area: 18.3 ha • Kaohsiung Water Garden green space area: 1.4 ha
	• Volume of cement transported by enclosed transport ÷ Total cement handling volume × 100% = 2,261,570 ÷ 2,261,570 × 100% = 100% • Volume of coal transported by enclosed transport ÷ Total coal handling volume × 100% = 2,172,882 ÷ 2,172,882 × 100% = 100%	• Volume of cement transported by enclosed transport ÷ Total cement handling volume × 100% = 2,480,354 ÷ 2,480,354 × 100% = 100% • Volume of coal transported by enclosed transport ÷ Total coal handling volume × 100% = 2,150,973 ÷ 2,150,973 × 100% = 100%
	• Chung-Tao Commercial Port Area: 11,141 vehicle trips in total • Intercontinental Commercial Port Area: 9,808 vehicle trips in total • Total: 20,949 vehicle trips	• Chung-Tao Commercial Port Area: 9,853 vehicle trips in total • Intercontinental Commercial Port Area: 15,247 vehicle trips in total • Total: 25,100 vehicle trips
	• Proportion of inbound port area lanes equipped with automatic gate sentry posts: 20 ÷ 36 × 100% = 55.5% • Proportion of outbound port area lanes equipped with automatic gate sentry posts: 20 ÷ 36 × 100% = 55.5% • Number of passing vehicle trips: 10,511,048 • Carbon reduction: 1,597.68 t	• Proportion of inbound port area lanes equipped with automatic gate sentry posts: 20 ÷ 36 × 100% = 55.5% • Proportion of outbound port area lanes equipped with automatic gate sentry posts: 20 ÷ 36 × 100% = 55.5% • Number of passing vehicle trips: approximately 9,641,230 • Carbon reduction: approximately 1,465.47 t

Environmental Performance Indicators of Kaohsiung Port

Ten majors environmental issues of Kaohsiung Port		Index item	Calculation method	Target value	
7	Garbage / Port Waste	Resource Recycling Rate in the Port Area (Land Area)	• Classification of land-area recyclables in the port area • Land-area recycling volume in the port area	• Conduct classification, recycling, and statistics of port-area recyclables	
		Port Area Water Body Waste	• Frequency of removal and transport of port-area water body waste • Volume of port-area water body waste removed and transported	• Daily removal operations conducted in the port water area	
8	Dangerous Goods	Conduct supervision of port-area dangerous goods in cooperation with the Maritime and Port Bureau	• Number of supervisions • Number of port-area dangerous goods operators supervised	• Supervised twice per year • Target achievement rate 100%	
		The Branch Office conducts inspection visits of port-area dangerous goods	• Number of inspection visits • Number of port-area dangerous goods operators inspected	• Inspected twice per year • Target achievement rate 100%	
9	Marine Sediment Pollution	Sediment Monitoring	Quarterly average and maximum values of sediment monitoring in the port area	Reference to the following domestic sediment quality upper-limit indicators (unit: mg/kg): Arsenic 33, Mercury 0.87, Copper 157, Lead 161, Chromium 233, Zinc 384, Cadmium 2.49, Nickel 80	
10	Relationship with Local Communities	Community Engagement and Community Welfare Activities	Number of activity sessions held	Number of activity sessions held reaches 12	

	Indicator presentation (calculation details)	
	2024	2025
	• Recycled paper 8.02 t, iron 0.7 t, etc.	• Recycled paper 9.9 t, iron 0.21 t, copper 0.003 t, etc.
	• Removal operations of port-area water body waste conducted daily • Volume of port-area water body waste removed and transported: 522.29 t	• Removal operations of port-area water body waste conducted daily • Volume of port-area water body waste removed and transported: 523.22 t
	• Supervised twice per year • 27 port-area dangerous goods operators	• Supervised twice per year • 27 port-area dangerous goods operators
	• Inspected twice per year • 27 port-area dangerous goods operators	• Inspected twice per year • 27 port-area dangerous goods operators
	• Arsenic average value: 2.1 • Mercury average value: 0.42 • Copper average value: 89 • Lead average value: 29 • Chromium average value: 80 • Zinc average value: 318 • Cadmium average value: 0.18 • Nickel average value: 33	• Arsenic average value: 1.7 • Mercury average value: 0.39 • Copper average value: 79 • Lead average value: 27 • Chromium average value: 70 • Zinc average value: 272 • Cadmium average value: 0.15 • Nickel average value: 27
	• Total 64 sessions	• Total 93 sessions


MAERSK
SINOLINES
SINOTRANS
SITC
HMM
SWL 50 TONS

04

Emergency Response

4.1 Emergency Response

Maintaining the safety of the operational environment of the Kaohsiung port area is one of the primary tasks of the Kaohsiung Branch. The Occupational Safety and Health Department of the Kaohsiung Branch assigns personnel every day to regularly conduct environmental inspections of the land and water areas of the port area; upon discovering suspected pollution conduct, it gives advice, handles it through emergency response, or notifies the public-authority law enforcement units to impose penalties. In 2024 and 2025, the main accidents of the Port of Kaohsiung were mostly small-scale oil spills, garbage, and fire alarms within the port area, followed by vessel breakdowns, listing (not affecting safety), others (fishing boats fishing in a way that hinders navigation safety, etc.), and incidents such as vessel collisions, fires, explosions, oil spills, and chemical spills.

With regard to pollution and disaster incidents in the port area, the Kaohsiung Branch, the Environmental Protection Bureau, Kaohsiung City Government, and the Marine Bureau, Kaohsiung City Government all have petition channels, providing notification and contact for the public, shipping companies, and other relevant units. The Kaohsiung Branch has also established a total of 27 emergency response operating procedures (including plans) for relevant port area disaster incidents, such as vessel and fire and explosion accidents, major oil pollution disasters in the port area, major casualty accidents in the port area, the leakage of announced and controlled toxic chemical substances, diseases, and natural disasters, so as to respond to the crisis handling of disaster incidents.

Statistics of Environmental Inspections and Referrals for Penalty of the Port of Kaohsiung

Item \ Year	2022	2023	2024	2025
Number of Inspections (Sea and Land Areas)	498	407	424	402
Notifications (Sea and Land Areas)	37	8	166	146
Advice for Improvement	631	453	320	263
Inspections of Black Smoke Emissions from Vessels	1397	1650	2276	1671
Environmental and Sanitation Inspections of Ship Repair and Building Yards	18	14	12	22
Pollution Prevention and Control Advocacy	269	247	295	135
Cases Referred to the Maritime and Port Bureau	10	2	1	0
Oil Booms (Vessel Movements)	44	34	18	2
Joint Inspections	1	10	12	12

Source: Kaohsiung Branch, TIPC., Ltd.



2024 Emergency Response Drill for a Self-Propelled Dredger Accident during Marine Dumping of Dredged Sludge of the Port of Kaohsiung

In addition to managing environmental and port area safety issues through petitions and emergency response measures, the Kaohsiung Branch also reduces the number of occurrences of port disaster incidents through occupational safety advocacy, environmental education, and skills training, and conducts joint exercises with port-related units every year. The response drills mainly cover incidents such as marine oil pollution, public protests, flooding of the cross-harbor tunnel, typhoon natural disasters, the International Ship and Port Facility Security (ISPS), and security maintenance and the deterrence of illegal border-crossing fishing boats. The main participating units include the Kaohsiung Branch, the Kaohsiung Harbor Police Corps, NPA, MOI, the Kaohsiung Harbor Fire Brigade, NFA, MOI, Offshore Flotilla 5, Fleet Branch, CGA, OAC, the Southern Navigation Center, Maritime and Port Bureau, MOTC, and the Marine Bureau, Kaohsiung City Government, jointly maintaining the safety and order of the port area through cross-ministerial cooperation.

Number of Accident Occurrences at the Port of Kaohsiung

Accident \ Year	2022	2023	2024	2025
Vessel collisions, fires, explosions, oil spills, chemical spills	27	32	26	20
Vessel breakdowns, listing (not affecting safety)	47	48	85	28
Occupational safety accidents (with casualties)	5	5	5	4
Major warehouse and storage tank fires and explosions	0	0	0	0
(Small-scale) oil spills, garbage, and fire alarms in the port area	101	113	141	105
Others	55	33	48	54

Source: Kaohsiung Branch, TIPC., Ltd.



2024 Tabletop Exercise for Typhoon Prevention Operations and Disaster Response Handling



2025 Tabletop Exercise for Typhoon Prevention Operations and Disaster Response Handling



TIPC participated in the 2025 Large Passenger Ship Disaster Prevention and Rescue Exercise of the Port of Kaohsiung held by the Maritime and Port Bureau



International Ship and Port Facility Security (ISPS) drill at Passenger Wharves No. 17 to 21 of the Port of Kaohsiung

Establishing the "Smart Safety Monitoring System at the Port Entrance of the Port of Kaohsiung"

In order to strengthen the safety monitoring of vessels in the commercial port area and to reduce the harm to port area safety caused by the intrusion of unidentified vessels, it is necessary to establish a smart vessel monitoring system with real-time detection and early warning functions. The system establishment of the "Smart Safety Monitoring System at the Port Entrance of the Port of Kaohsiung" was completed before the end of December 2025.

This system is expected to be able to achieve the following functions:

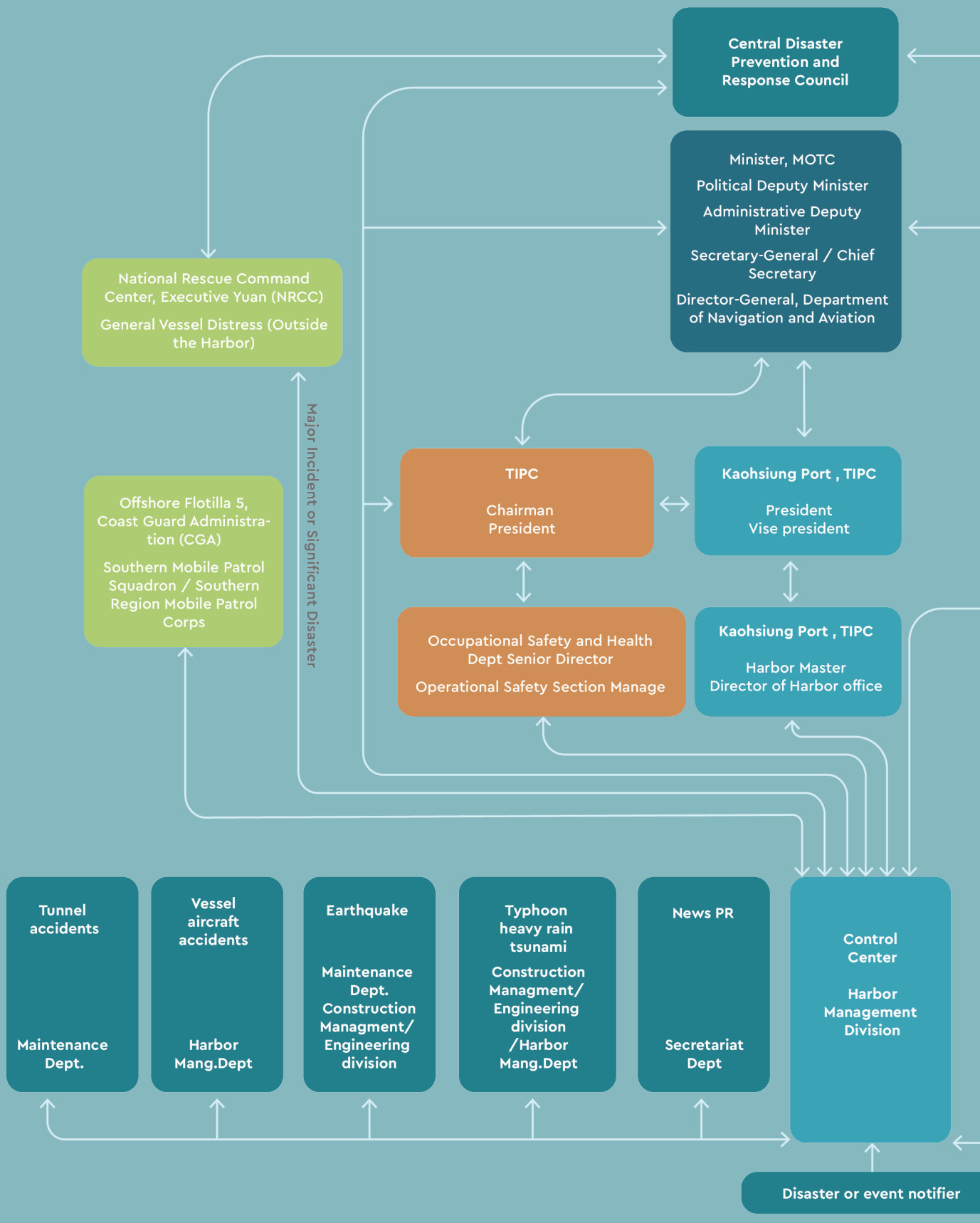
Real-time detection of unidentified vessels: when a vessel enters the main channel inside the port from outside the port entrance, unidentified vessels (with AIS not switched on) can be immediately detected and tracked.
Information such as the latitude and longitude position, ship length, and vessel type can be identified through CCTV images, and screenshots are retained for relevant units to extract and determine the data.
The established warning and notification system is used to provide real-time warnings to the relevant competent units (e.g., the Coast Guard and the harbor police).

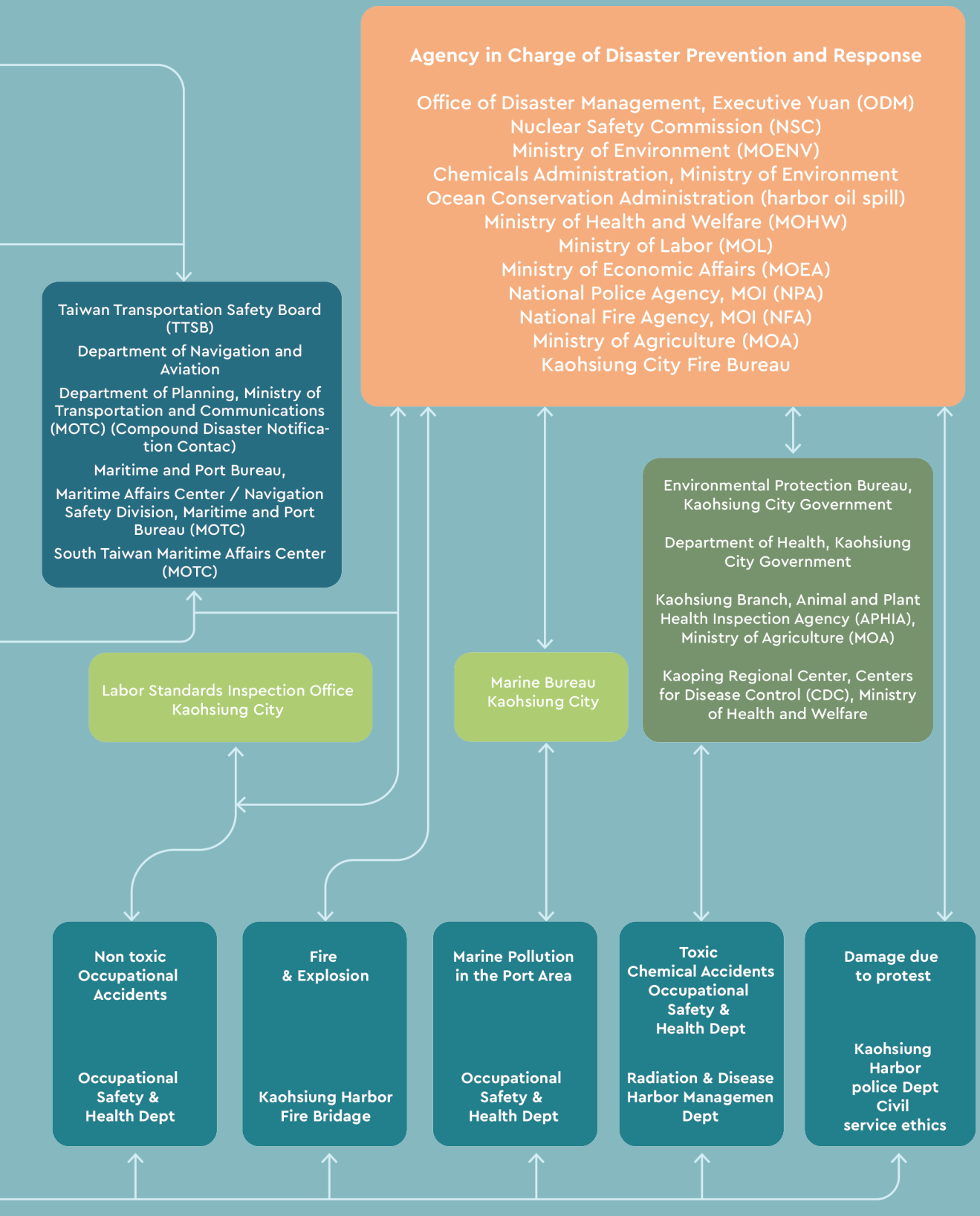
Subsequently, image data will continue to be collected for model training and for the establishment of a vessel historical database.



"Smart Safety Monitoring System at the Port Entrance of the Port of Kaohsiung"

4.2 Port Area Disaster and Accident Notification System of the Kaohsiung Branch





Kaohsiung city Government's



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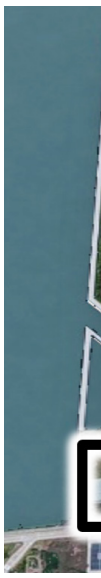


Innovation and Collaboration

5.1 "The 24th Public Construction Golden Quality Award" — "Seawall and Reclamation Works of Wharf A6 of the Port of Kaohsiung" (Awarded in 2025)

Environmental issues involved: Climate change, energy saving and carbon reduction, air quality, port development, fugitive dust, etc.





A. Concern / Motivation

The Seawall and Reclamation Works of Wharf A6 of the Port of Kaohsiung is a key port construction promoted in coordination with the development of the Offshore Wind Energy industry of the ROC. Its main functions are to provide for the manufacturing of underwater foundations, the production of submarine cables, and heavy-lift transportation operations, and to serve as an important hub of the Offshore Wind Energy industry supply chain. The works include the construction of the main wharf and the Stern-to berth, the reclamation of approximately 7.97 ha of new land, and the layout of the related port-area operation space and infrastructure.

B. Solution

To reduce the impact of port works on the environment and enhance sustainability benefits, integrated solutions are proposed from the aspects of environmental management, energy saving and carbon reduction, ecological conservation, and resource recycling. First, in terms of environmental management, a comprehensive monitoring and information disclosure mechanism has been established; water quality, air quality, and noise and vibration monitoring are continuously conducted during construction, and relevant information is disclosed through a public platform, so as to ensure that the impact of the works on the environment is maintained within a controllable range and to enhance the level of communication with and participation of stakeholders.

Second, in terms of energy saving and carbon reduction, carbon emissions are reduced through the optimization of design and construction techniques, including the use of Pozzolanic materials to replace part of the cement in order to reduce the carbon emissions of concrete; the introduction of LED lighting and solar equipment to improve energy efficiency; and the on-site backfilling of dredged earth to avoid the environmental burden caused by ocean dumping and long-distance transportation. In addition, conduits for Alternative Maritime Power are reserved in the works, reserving the basic conditions for future carbon reduction measures for vessels calling at the port.

In terms of ecological conservation, the design concept of "coexistence of engineering and ecology" is adopted; Wave-dissipating caisson ecological chambers are installed in the sea area to provide space for marine organisms to attach and inhabit, creating an effect similar to that of artificial reefs; and environmental changes are grasped through regular water quality monitoring and ecological surveys. On land, planting and greening are carried out, with native and salt-tolerant plants selected and combined with the existing green belt system of the cultural park, so as to enhance habitat diversity and landscape quality.

In terms of resource recycling, a circular economy strategy is introduced; all dredged earth is used for the reclamation of new land, and existing stone materials and wave-dissipating blocks are recovered and reused, achieving the goal of zero ocean dumping; at the same time, a modular precast construction method is adopted to reduce the generation of construction waste. In addition, through the Stern-to berth design and the Immediate-tow and immediate-sink caisson method, interference with the navigation channel and the seabed during construction is reduced, improving construction efficiency and reducing environmental impact.







C. Effect/Benefits

Through the above integrated measures, significant benefits are demonstrated in the environmental, economic, and sustainability aspects. In terms of environmental benefits, through low-carbon design and construction optimization, the works can reduce CO2 emissions by approximately 9,050 t, and, through the installation of ecological chambers and greening works, enhance the habitat quality of marine and terrestrial organisms and reduce the impact of the works on the environment. At the same time, the on-site backfilling of earth and the resource reuse measures effectively reduce waste generation and the risk of marine pollution. In terms of economic benefits, these works construct the key infrastructure required by the Offshore Wind Energy industry, strengthen the role of the port in the renewable energy supply chain, enhance port transportation functions and industrial competitiveness, and create diversified port economic value. In terms of sustainable development benefits, this plan has successfully integrated strategies such as environmental management, energy saving and carbon reduction, ecological conservation, and the circular economy, demonstrating concrete results of the port moving toward green transformation and sustainable development.

Participating units

Kaohsiung Branch, port-area tenantsShipping Operators

Stakeholders

Shipping operators

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5.2 Automatic Gate Sentry Post Control System of the Port of Kaohsiung

Environmental issues involved: Climate change, air quality, reduction of vehicle exhaust emissions, carbon emissions, operational efficiency, etc.

A. Concern / Motivation

As an important cargo hub in the Asia-Pacific region, with the growth of trade volume, the traffic congestion and environmental impact brought about by the flow of vehicles entering and leaving the port area of the Port of Kaohsiung have become a major issue that must be faced in the development process of an Eco Port. The former Port of Kaohsiung began the development and establishment of the Automatic Gate Sentry Post Control System in 2003, together with its continuous upgrading, maintenance, and operation. Today, under the wave of intelligentization, this plan invested a total of NT$91.84 million from 2022 to the end of 2025 to carry out in-depth optimization of 22 inbound and 22 outbound lanes, a total of 44 automated lanes, throughout the Port of Kaohsiung area (including the Port of Anping). The scope of the plan covers front-end sensing equipment, network transmission architecture, and back-end data processing, and is dedicated to constructing an intelligent gate sentry post system capable of automatic identification, rapid release, and low energy consumption. Through the improvement of traffic efficiency, the effect of controlling vehicle pollution is achieved, transforming "reducing vehicle pollution in the port area" from a slogan into concrete management data, and implementing the core indicator of the Port of Kaohsiung for enhancing environmental friendliness.

B. Solution

At the technical implementation level, this plan has carried out a key leap from "digitalization" to "artificial intelligence." The Port of Kaohsiung has comprehensively upgraded the traditional optical character recognition (OCR) at gate sentry posts to an AI image recognition core, together with high-resolution front-end cameras, new network transmission equipment, and fiber-optic engineering, substantially improving recognition accuracy and stability in complex environments. At the same time, a dual comparison mechanism of eTag radio frequency identification (RFID) and AI imaging is used to ensure that the accuracy of data comparison for personnel, vehicles, and containers entering and leaving the port can be further improved. In addition, the energy-saving design of the infrastructure is also an important part of the solution. Through the elimination of old-type Photoelectric Beam Sensors and sensing loops, the renewal of fiber-optic transmission and high-brightness LED display boards, and the replacement and upgrading of uninterruptible power systems such as the SMR Inverter UPS in the back-end equipment room and of split-type air conditioners, the energy loss of system maintenance and operation is reduced. At present, the Port of Kaohsiung has completed the establishment of 44 AI automated lanes throughout the port area of the Port of Kaohsiung (including the Port of Anping). In response to the needs of cargo of special specifications, this plan adopts a flexible configuration strategy of "automation as standard, with supporting E-enabled lanes," laying a solid technical foundation for the comprehensive automation of the port in the future.





C. Effect/Benefits

Under the development in the past and the implementation of this project, significant digital transformation benefits and environmental dividends have been demonstrated. In terms of operational efficiency, the average customs clearance time of a single vehicle passage dropped sharply from the original 4 minutes to 10 seconds, maximizing the improvement of the smoothness of traffic flow on the roads around the port area and eliminating the traffic hotspots arising from queuing for inspection. In terms of environmental protection and carbon reduction performance, according to data monitoring, each vehicle passage can reduce diesel consumption by approximately 24.6 g and carbon emissions by approximately 0.152 kg. It is calculated that from 2024 to 2025, the automatic gate sentry posts of the Port of Kaohsiung had a cumulative total of approximately 20,150,000 vehicle passages, estimated to reduce carbon emissions by a total of 3,063.15 t, which has significant benefits for mitigating global climate change and improving the air quality of the port area.

Participating units

Kaohsiung Branch, port-area tenantsShipping Operators

Stakeholders

Shipping operators

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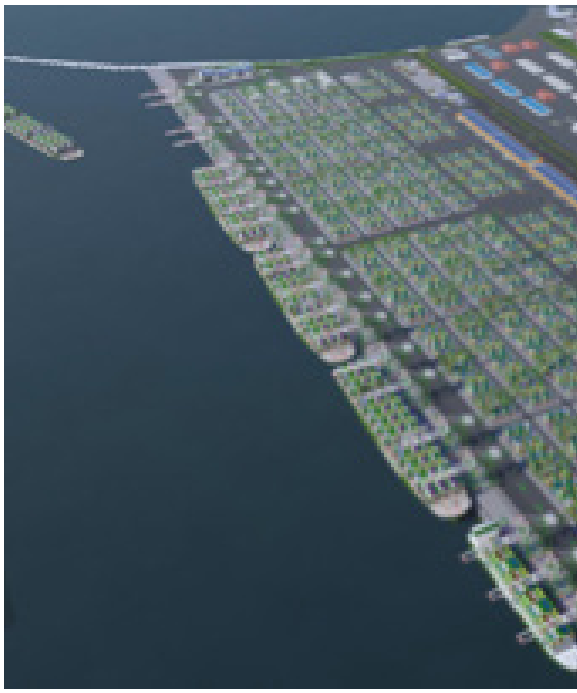


5.3 Commissioning of the Seventh Container Center (Continuous Improvement)

Environmental issues involved: Climate change, air quality, energy efficiency, port development, fugitive dust, etc.

A. Concern / Motivation

A fully automated and digitalized operating model is a necessary transformation for the operation of advanced ports in the future. Therefore, the Kaohsiung Branch and Evergreen Marine Corporation invested NT$40.95 billion to take the lead in the layout, keeping pace with the times and breaking away from traditional thinking, and jointly built the most advanced "highly automated container base" in the ROC in less than 5 years, with a higher-quality and modernized operating environment, making the Seventh Container Center a demonstration base for the industrial upgrading of the Taiwan port group. At the same time, seizing the opportunity of the Seventh Container Center, the reconfiguration and adjustment of the container wharves in the Port of Kaohsiung area continues to be promoted, so as to maximize the benefits of port resources, strengthen its own capabilities, consolidate the container hub status of the Port of Kaohsiung and enhance the competitiveness of the Taiwan port group, and make every effort to add value and create volume for Taiwan's economic development.



B. Solution

The Seventh Container Center of the Port of Kaohsiung has 5 berths of the largest container wharves in the ROC (water depth -18 m, total length 2,415 m), which can accommodate 4 super container vessels of 24,000 TEU berthing simultaneously. It has introduced the concepts of green environment, green design, green energy, intelligent buildings, and automation, and uses equipment such as the ROC's first 25-row remote-controlled (Remote) unmanned bridge cranes, fully automated unmanned gantry cranes, and intelligent customs clearance gates to operate the front and rear lines of the wharves. It has also introduced an independent 5G system, optical fiber, and an Internet of Things (IoT) communication network covering the entire yard, together with Evergreen Marine Corporation's intelligent terminal operating system (TOS) and a real-time electricity consumption monitoring system for the entire area, and other artificial intelligence to coordinate port operations. It is a highly automated and intelligent advanced container center.



Participating units

Kaohsiung Branch, port-area tenantsShipping Operators

Stakeholders

Shipping operators

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C. Effect/Benefits

With an automated and intelligent container center as the goal, the Seventh Container Center of the Port of Kaohsiung is equipped with a total of 24 bridge cranes, of which 19 are the ROC's first batch of remote-controlled unmanned bridge cranes, 60 fully automated unmanned gantry cranes, and 24 intelligent customs clearance entry and exit lanes for container trucks, the largest in scale in Taiwan, and other equipment. It has also introduced an independent 5G system, optical fiber, and an Internet of Things (IoT) communication network covering the entire yard, together with artificial intelligence systems such as the intelligent terminal operating system (EMCTOS) developed by Evergreen Marine Corporation itself, the optical character recognition system (OCR), and a real-time electricity consumption monitoring system for the entire area. At the same time, through intelligent security systems for the entire area, such as strict control by electronic access control, real-time monitoring by more than 600 CCTV units, and the establishment of an electric pulse fence, operational effectiveness is enhanced and the safety of personnel and cargo is ensured, making the Seventh Container Center of the Port of Kaohsiung one of the most advanced container centers in the world.



The Seventh Container Center of the Port of Kaohsiung was jointly built by Taiwan International Ports Corporation, Ltd. (TIPC) and Evergreen Marine Corporation, and is the most important project in Taiwan's shipping industry in recent years. TIPC was responsible for basic works such as the construction of wharf seawalls and the reclamation of new land, while Evergreen Marine invested in the procurement of operating machinery such as bridge cranes, gantry cranes, and laden/empty container stackers, and in the subsequent operation. In response to the development of the international shipping industry and the trend of Larger Sized Vessels, this container center is equipped with 5 berths of container wharves with a water depth of up to 18 m, a quay length of up to 2,415 m, and 16 remote-controlled bridge cranes up to 55.5 m high; after extending their booms, these bridge cranes can handle ultra-large container vessels 25 rows wide, effectively enhancing the quayside operational efficiency for large container vessels.



Pursuing corporate sustainability and implementing a green supply chain are Evergreen Marine's core values. Therefore, the Seventh Container Center of the Port of Kaohsiung has introduced various intelligent technologies and automated operations, and its equipment also conforms to the global green energy trend, including full electrification of vehicles and machinery, the adoption of high-standard environmentally friendly engines for laden/empty container stackers, automated check-in equipment in the container yard, and the development of the "Evergreen Container Link" platform, which integrates the online check-in, operation, and payment systems and connects the information of each link of the container service chain in real time, substantially enhancing operational efficiency, reducing paper printing and the number of vehicle detours, and lowering fuel consumption and exhaust emissions, thereby achieving energy saving and carbon reduction. This makes the Seventh Container Center of the Port of Kaohsiung a benchmark for green wharves in Taiwan, concretely implementing Evergreen Marine's commitment to safeguarding a green earth from the ocean to the land and from hardware to software. In addition, Evergreen Marine Corporation is currently assessing the feasibility of promoting a fully automated container-unlashing vehicle plan at the Seventh Container Center, with the goal of building a fully automated container yard, creating a friendly working environment in the container yard and further reducing the problem of exhaust emissions in the container yard.

5.4 Kaohsiung Port Passenger Terminal (Continuous Improvement)

Environmental issues involved: Climate change, energy efficiency, energy saving and carbon reduction, port development, relations with the local community, etc.

A. Concern / Motivation

To enhance the service quality for cruise passengers and shipping operators, the "Kaohsiung Port Passenger Zone Construction Project" was promoted. The Kaohsiung Branch selected Wharves No. 19 and No. 20 of the Port of Kaohsiung to newly construct a passenger terminal and office building, which is the single building with the largest 3D curved metal curtain wall in the ROC, and whose curved curtain wall volume is also the largest in the ROC. With an architectural form expressing the fluid dynamics of ocean waves, it shapes a new landmark of Kaohsiung's maritime gateway, and forward-lookingly positions the Port of Kaohsiung as a cruise home port for southern Taiwan. It can accommodate the berthing of the world's largest cruise vessels of the 250,000 gross tonnage class, enhance the service quality of cruise passenger transport, improve the existing passenger transport facilities, and provide a convenient and comfortable passenger transport space for passengers coming to the port. At the same time, by attracting crowds, it drives land development around the Port of Kaohsiung and the city, and promotes the development of national and local tourism industries.

B. Solution

The "Kaohsiung Port Passenger Zone Construction Project" invested approximately NT$4.5 billion to give priority to the port passenger terminal works in the area of Wharves No. 19 to No. 20. The overall design concept is an architectural form expressing the fluid dynamics of ocean waves and shaping a new landmark of Kaohsiung's maritime gateway, and it is a green building conforming to energy saving. In addition to providing facilities for waiting for vessels and for passenger entry and exit customs clearance, it also includes service spaces such as offices, catering, commerce, and waterfront recreation, actively deploying the development of the cruise industry. It has also introduced an intelligent application management system, which, with indicators such as intelligent management, intelligent security, energy saving and sustainability, and agile office, combines systems such as intelligent reception and guided tours, intelligent public broadcasting, intelligent access control, intelligent environmental control, intelligent parking lots, intelligent inspection, intelligent energy management, and intelligent conference rooms, to build a modern intelligent building, enhance the quality of passenger services, and attract startup technology industries to move in, driving the prosperity and development of the surrounding area.

C. Effect/Benefits

After commencing operation, international cruise vessels will be actively attracted to berth, with the goal of building a cruise home port, providing passengers with a comfortable space for waiting for vessels. It can accommodate the berthing of large cruise vessels of 250,000 gross tonnage, and is equipped with 22 manual inspection counters, 4 automated inspection and clearance systems (e-Gate), two-way foreign currency exchange machines, and automatic tax refund machines for passengers' use. In addition, a duty-free shop is set up within the customs clearance area, operated by Pier 3 Duty Free Co., Ltd., providing duty-free merchandise sales services to meet the consumption needs of passengers passing through customs. The "Sea Rhythm Art Plaza" on the 3rd floor is an outdoor open space, with installation art on the theme of musical instruments, allowing the public to immerse themselves in the feast of sea rhythms, and providing citizens and passengers with a new attraction for sightseeing, recreation, and dating.

Participating units

Kaohsiung Branch, port-area tenantsShipping Operators

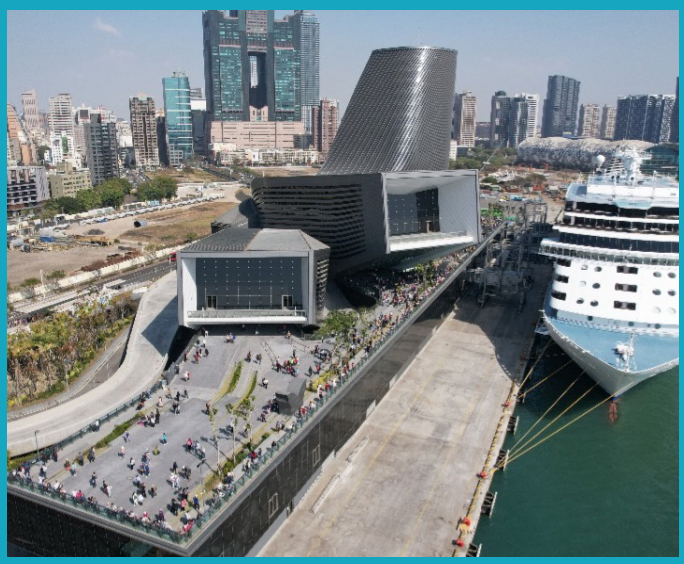
Stakeholders

Shipping operators

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Unit: Construction Management
Contact Person: Supervisor Chen Chun-Hao
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E-mail: T02629@twport.com.tw


3 GOOD HEALTH AND WELL-BEING
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER








自動查驗通關系統
Automated Passport Control

5.5 Participating and Cooperating Organizations

The Kaohsiung Branch actively cooperates with domestic and foreign industry, government, and academic units on environment-related issues. In addition to understanding the trends of foreign environmental development, it also realizes the goal of a green and sustainable port through means such as technical cooperation, joint investment, joint inspection, and lecturing and internships.

Participating Organizations

Associations

Association of Pacific Ports

The goal of the Association of Pacific Ports is to bring together the port authorities along the Pacific coast to jointly discuss the trends of maritime development in the Pacific and to seek solutions to related problems, and to strengthen the cohesion of the maritime industry through exchanges and fellowship. The Kaohsiung Branch regularly participates in the seminars held every year, and in 2015 served as the host organization of the annual conference, with "Ecology, LOHAS, and Greening the Port of Kaohsiung" as the theme, exchanging innovative technology, knowledge, and professional management experience with the various member countries.

International Association of Ports and Harbors

The International Association of Ports and Harbors is currently the most influential port organization in the world, and is a non-governmental organization that provides consultation to major United Nations agencies (ECOSOC, IMO, UNCTAD, UNEP, ILO, WCO), etc. The IAPH is held biennially in rotation in the three regions of the Americas, Asia-Pacific, and Europe-Africa; the Port of Kaohsiung regularly participates in order to understand the status of global port development and the latest issues.

Operators

Kao Ming Container Terminal Corp.

Kao Ming Container Terminal Corp. is a green terminal that combines smart efficiency with energy saving and environmental protection. With advanced machinery and equipment combined with automated and remote-control operation systems, it provides high-efficiency vessel loading and unloading and container delivery and receipt services, and has introduced a wharf shore power system and a solar photovoltaic power generation system, implementing energy saving and carbon reduction and promoting environmental sustainable development.

Evergreen Marine Corp. (Taiwan) Ltd.

In order to conform to the global trend of environmental sustainable development, Evergreen Marine Corp. (Taiwan) Ltd., in addition to continuing to carry out its fleet renewal plan, has also introduced digital technology equipment such as remote control and automation, so as to improve the efficiency of wharf loading and unloading operations, while at the same time implementing energy saving and carbon reduction and ecological protection, with green shipping as its core implementation goal.

YES Logistics Corp.

In 2013, the Kaohsiung Branch cooperated with YES Logistics to build (KLC, KLC2) solar photovoltaic power generation systems on the warehouse rooftops, with a system power generation capacity of 863 kWp.

Cooperation

Co-management Committee of the Nanxing Free Trade Zone

In order to promote water and electricity use and sewage management within the zone, as well as matters related to environmental impact assessment commitments and environmental management, the Co-management Committee of the Nanxing Free Trade Zone of the Port of Kaohsiung was formed to jointly maintain and manage the extra-high-voltage substation, water use, electricity use, sewage treatment, and environmental protection management work within the zone.

Kaohsiung Port Land Development Co., Ltd.

It promotes cooperation between the Port of Kaohsiung and the City Government, revitalizes and reuses old land, integrates the resources and advantages of the port and the city, and promotes local economic development.

Academic Institutions

National Sun Yat-sen University

It signed a memorandum of cooperation with Taiwan International Ports Corporation, Ltd.; the two parties will cooperate in fields such as talent training, student internships, and management lectures.

Port

APEC — Antwerp/Flanders Port Training Center, Belgium

The Port of Kaohsiung signed a letter of intent for cooperation with the APEC — Antwerp/Flanders Port Training Center of Belgium, which provides courses in various port operation-related fields such as engineering, terminal management, logistics, and dock worker training.

Port of Gdansk Authority, Poland

Through the establishment of a sister port relationship, the expansion of operational business between the Port of Kaohsiung and the Port of Gdansk and the exchange of port management and technology are promoted.

Shanghai International Port (Group) Co., Ltd.

With the goal of jointly improving the port engineering technology level of both parties, it has actively initiated communication and exchanges with the Port of Kaohsiung in aspects such as equipment maintenance, green energy saving and environmental protection, and the application of new technologies.

Government Agencies

Institute of Transportation, MOTC

The Institute of Transportation, MOTC has long acted as a think tank, assisting the Ministry of Transportation and Communications in formulating policy, integrating and coordinating transportation decisions and implementation plans, and establishing a communication bridge among transportation industry, government, academia, and research institutions. The Kaohsiung Branch has cooperated on many projects with the Harbor and Marine Technology Center of the Institute of Transportation, MOTC, on issues such as green port establishment, container operation innovative management, and port operation strategies.

Marine Bureau, Kaohsiung City Government

The Kaohsiung Branch cooperates with the "Marine Joint Protection Team," which was jointly established under the auspices of the Marine Bureau by inviting more than 30 units from the coastal industry, government, academia, and the military of Kaohsiung City, to jointly promote port pollution prevention and control and to share marine environmental monitoring and survey data and information, so as to achieve the goal of marine pollution prevention and control.

Bureau of Cultural Affairs, Kaohsiung City Government

signed a contract with the Bureau of Cultural Affairs, Kaohsiung City Government to provide some warehouses for exhibition use in the arts district, and, in coordination with the Bureau of Cultural Affairs in promoting the development of the cultural and creative industries, the functions of the warehouses around the Pier-2 Art Center are adjusted accordingly.

Ministry of Economic Affairs

The Kaohsiung Branch, together with CPC Corporation, Taiwan and Taiwan Power Company under the Ministry of Economic Affairs, jointly promotes the development of the energy zone of the Intercontinental Phase II of the Port of Kaohsiung, including the development jointly carried out by TIPC and CPC Corporation, Taiwan of the works related to the construction of the liquefied natural gas receiving station (the Seventh Receiving Station), and assists Taipower in optimizing the harbor facilities around the power plant. In addition, the three parties have also carried out exchanges on green energy sustainability, focusing on carbon capture, utilization and storage (CCUS) and research on new energy vessels (such as LNG and hydrogen bunkering infrastructure), so as to jointly build a smart and green port, ensuring the stable operation of the nation's core energy facilities and their carbon reduction transition.

Southern Navigation Center, Maritime and Port Bureau, MOTC

The Southern Navigation Center, Maritime and Port Bureau, MOTC handles the work of port safety, disaster prevention and rescue, and pollution prevention and control for the Port of Kaohsiung, and is responsible for the enforcement of laws and regulations, the collection of evidence of conduct, and penalty work. The Kaohsiung Branch cooperates with the Southern Navigation Center in carrying out joint inspections of the land and water areas of the port area.

Ministry of Environment

The Ministry of Environment is the highest competent authority for environmental protection affairs. The Kaohsiung Branch actively cooperates with the Ministry of Environment to jointly promote the improvement of the environmental quality of the port area, to promote relevant pollution prevention and control measures, and, in coordination with the government, to promote the 2050 net-zero emissions policy, etc., so as to jointly build a green port and move toward sustainable development.

Ocean Affairs Council

The Ocean Affairs Council and the Port of Kaohsiung jointly carry out relevant work on marine environmental protection, biodiversity conservation, and pollution prevention and control. For example, there is cooperation in radar monitoring and the handling of the stray incident of a pygmy killer whale, as well as in aspects of marine pollution.

Environmental Groups

Environmental Protection Bureau, Kaohsiung City Government

The Kaohsiung Branch works hard in cooperation with the Environmental Protection Bureau, Kaohsiung City Government to improve the air quality of the port area, setting up an air quality maintenance area in the port area, advocating and promoting the application by port area operators for the construction machinery self-management label, regularly carrying out smoke emission testing of diesel vehicles in the port area, and carrying out joint inspections of fugitive bulk cargo and the port area environment, etc.

Kaohsiung Wild Bird Society

The Kaohsiung Branch communicates with the Kaohsiung Wild Bird Society, which provides insights into ecological conservation and experience with protection measures within the Nanxing Free Trade Zone — retaining the existing bird habitats, creating a multi-layered and diverse micro-habitat environment, and providing a habitat environment for overwintering and transit migratory birds. In addition, the Wild Bird Society is invited to conduct ecological education seminars on the Nanxing plan for the company's employees and the construction and operation operators of the Nanxing plan.


EVERGREEN
EVER BEFIT
KEELUNG

06



Training and Communication

6.1 Training

In accordance with the content of its environmental policy statement, the Kaohsiung Branch provides appropriate environmental education and training, which, in addition to cultivating the environmental awareness of employees and enhancing the environmental protection knowledge of staff, can also enhance the competitiveness of the Port of Kaohsiung.

In accordance with the Environmental Education Act promulgated in 2011, an environmental education plan is formulated every year, arranging for every internal employee to participate in four hours or more of environmental education. In addition, in order to fulfill its corporate social responsibility and expand the port environmental education function, the Kaohsiung Branch planned to establish the "Port of Kaohsiung Environmental Education Park" in 2024, and it has passed the Ministry of Environment's "Environmental Education Facility or Site" certification. Through the design of curriculum activities on environmental issues, it is provided for the participation of groups such as the general public and agencies and schools. The park was officially unveiled on May 12, 2025, in the hope of raising the public's awareness of and attention to environmental protection, so as to jointly promote the sustainable development goals.

From 2024 to 2025, the Kaohsiung Branch held a total of approximately 37 environmental education and training activities for internal and external personnel, with approximately 1,792 participants. The courses covered aspects such as green ports, ocean education, ecological education, natural disasters, occupational safety, fire safety advocacy, and sustainable development.

2024–2025 Environmental Education Statistics Table

No.	Date	Course / Activity Name	Number of Participants
1	2024/3/12	"A Better Earth, Planting Forests in People's Hearts" tree-planting activity	45
2	2024/3/19	"Occupational Disaster Prevention and Traffic Safety for Wharf Loading and Unloading" advocacy meeting	32
3	2024/3/22、4/12、4/26	Environmental education lesson-plan trial teaching course (general public, junior high school students)	140
4	2024/4/15	"Sharing and Prevention Countermeasures for Fall and Roll-down Occupational Disaster Cases" course	14
5	2024/5/13	Environmental sustainability co-learning workshop on net-zero carbon emissions, resource circulation, and earth solutions	40
6	2024/5/13	"Porta Visits the Green Port" lesson-plan teaching and board game operation teaching	40
7	2024/5/13	Marine protection and port environmental education, volunteer service	40
8	2024/6/19	2024 1st-term self-defense fire-fighting team training	28
9	2024/6/14、8/23	Educational training course on Taiwan's environmental impact assessment system and overview, and environmental impact assessment supervision and inspection	65
10	2024/5/13	Environmental sustainable development co-learning workshop	18
11	2024/5/16	"Port Area Emergency Rescue" course	12
12	2024/9/10	"Natural Disaster Education and Training — A Brief Discussion of the Causes and Applications of Various Types of Weather" seminar course	10
13	2024/9/27	"Circular Green Living and Sustainable Development Series — Green Port, Climate Change, and Ocean Conservation" activity	22
14	2024/6/4	In-service training for operators of mobile cranes with a lifting load of three tonnes or more	10
15	2024/7/9、7/23	"2024 Companions on the Move Fellowship Activity" — visiting South Shoushan and the guided tour of the National Nature Park Visitor Center	126
16	2024/7/15	Scaffolding operation safety advocacy and inspection key points (including heat hazard education, training, and advocacy)	13
17	2024/8/28	Internal lesson-plan teaching and lesson-plan explanation skills training course	10
18	2024/9/6	Port area loading and unloading operation safety and health advocacy course	12
19	2024/7/31	Heat hazard prevention and general safety and health in-service education and training	26
20	2024/10/9	"Shoushan National Nature Park 'A Place for Everything' — Promoting Wildlife Conservation through Animal Protection Plan" activity	14
21	2024/10/11	"Here, It's Really Different!" conservation animal picture book and animation launch event	55
22	2024/10/17	2024 International Port Vessel Navigation Safety Seminar	27
23	2024/10/18	2D GIS asset geographic information system education and training course	15
24	2024/11/18	"Childlike Innocence Without Boundaries, Happy Exchange" urban-rural exchange activity — visiting resilient infrastructure	75
25	2024/12/11、12/20	"Responding to Huangpu — Military Dependents' Village Reading Walk" course — Sustainable Cities and Communities (2 sessions)	60
26	2025/2/7	Yancheng Presbyterian Church harbor after-school tutoring and port exploration public-welfare environmental education activity	90
27	2025/2/13、/5/23、5/28、6/4、6/24、9/8	Environmental education lesson-plan course (Environmental Protection Bureau of Kaohsiung City, CPC steel plant environmental education park, teaching staff of Kaohsiung Municipal Yancheng Elementary School, teachers and students of National Sun Yat-sen University, Kaohsiung Municipal Social Education Hall)	203
28	2025/2/7	Tainan Yuejin Port art reading walk course — Sustainable Cities and Communities	24
29	2025/5/23、5/28、6/4、6/24、9/8	Environmental education lesson-plan course (CPC steel plant, teaching staff of Kaohsiung Municipal Yancheng Elementary School, teachers and students of National Sun Yat-sen University, Kaohsiung Municipal Social Education Hall)	163
30	2025/6/18	2025 1st-term self-defense fire-fighting team training	54
31	2025/7/1	Environmental education volunteer practical training course	4
32	2025/8/21	"Green Field Book Journey" parent-child reading walk course — environmental education	26
33	2025/9/17	"The Little Plankton's Long Journey" ocean education picture book action drama	66
34	2025/9/24	"Little Floral Artists" activity — environmental education	40
35	2025/10/8	Kaohsiung Port Cruise Terminal environment-friendly visit	18
36	2025/10/13	The Kaohsiung Branch's environmental education practical training course	35
37	2025/11/26、12/23	Port of Kaohsiung Water Garden interpretation activity (Down Syndrome Foundation, R.O.C.; Jianshan Elementary School, Hsinchu County)	120
Total			1269



2025/05/12 Unveiling ceremony of the Port of Kaohsiung Environmental Education Park (Venue: Kaohsiung Port History Museum)



2025/05/12 Group photo of the unveiling ceremony of the Port of Kaohsiung Environmental Education Park



2024/03/22 Environmental lesson-plan course (Target: general public)



2024/05/28 Environmental education lesson-plan course (Target: employees of the CPC steel plant)



2025/12/23 Port of Kaohsiung Water Garden interpretation activity (Target: Jianshan Elementary School, Hsinchu County)



2025/11/26 Port of Kaohsiung environmental lesson-plan activity (Target: Down Syndrome Foundation, R.O.C.)



2024/03/22 Marine protection and port environmental education



2025/10/13 Environmental education practical training course

6.2 Communication and Advocacy Activities

The Kaohsiung Branch communicates and opens up dialogue with the outside world by holding and participating in activities such as forums, summits, and operator symposiums, hoping to work together to jointly create a new environment for sustainable development.



2025/11/25 "Kaohsiung Port Area Operator Symposium"



2025/04/27 "Smart Port City Happiness and Sustainability Forum and Exhibition Activity"

In order to put its environmental policy into practice, the Kaohsiung Branch has established a complete environmental management system, and, through holding diverse activities such as port affairs family days, second-hand markets, plant adoption, beach cleaning, parent-child reading walks, and picture book action dramas, it advocates the concept of environmental sustainability to the employees and the public in the port area, so as to jointly protect the earth through concrete actions, reduce carbon emissions, and jointly create a sustainable environment.



2024/12/06 The 116th Anniversary of the Construction of the Port of Kaohsiung — "Combination of Strength and Beauty: Inheriting and Relaying to Build a Sustainable Port of Kaohsiung" jogging activity



2024/09/20 "Sustainable Voyage, New Hearts Connected" visit activity for new employees' family members



2025/10/21 "The Little Plankton Goes on a Long Journey" picture book action drama corporate volunteer activity at the Kindergarten Affiliated to Gushan Elementary School



2025/04/27 "Parent-Child Green Time" parent-child second-hand market activity

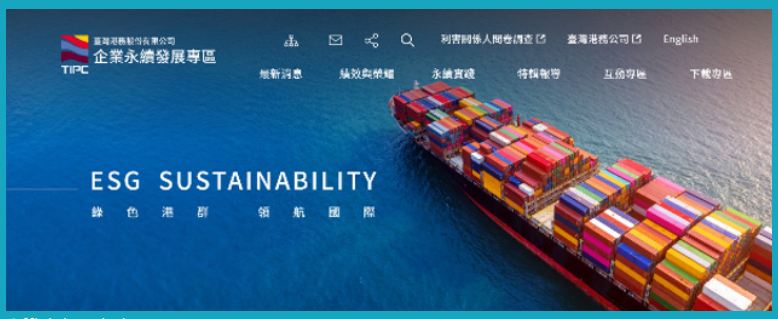
6.3 Communication with Internal and External Stakeholders

By holding a "Port Business Symposium" every six months, the Kaohsiung Branch promptly listens to the opinions and needs of the port's stakeholders, such as shipping companies and stevedoring operators, implements responses to the opinions and carries out tracking and control over them, handles them appropriately, establishes sustainable partnership relationships, and strengthens port facilities and services.

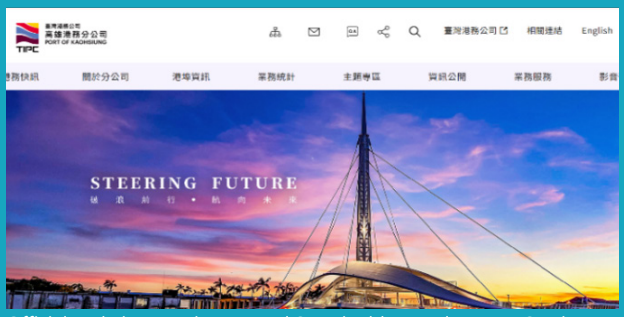
In addition, through its official website, it makes information related to the Port of Kaohsiung public, including the environmental report, promotional materials, various business activities, dynamic information, investment solicitation information, application operations, the people's opinion mailbox, etc.



facebook



Official Website



Official Website – Environmental Sustainable Development Section



Promotional Materials



Environmental Report



07



Green Accounting

7.1 Environmental Investment and Costs

The costs invested by the Kaohsiung Branch in environmental issues can be mainly divided into personnel, environmental maintenance and management, environmental monitoring, publications, and emergency response and communication. Their purpose is to enhance the environmental awareness of employees, environmental maintenance, the improvement of environmental quality, and the capability for emergency response, as well as to enhance the public's understanding of the port.
In total, the costs invested by the Kaohsiung Branch in environmental issues in 2024 and 2025 were NT$148,734 thousand and NT$148,121 thousand respectively.

Environmental Investment and Cost Items of the Kaohsiung Branch

-Personnel: personnel expenses for environment-related staff and environment-related education and training, etc.
-Environmental maintenance and management: greening and beautification of the port area, waste removal, port area dredging, etc.
-Environmental monitoring: air, noise, water quality, sediment, dredging, and other related environmental monitoring and environmental inspection.
-Emergency response: accident handling expenses, materials for port area pollution, and testing and verification fees for dangerous goods, etc.
-Communication and publications: website maintenance, promotional activities, environmental publications, etc.

Costs Invested by the Kaohsiung Branch in Environmental Issues from 2024 to 2025 (Unit: NT$ thousand)

Item \ Year	2022	2023	2024	2025
Personnel	46,788	45,304	34,516	38,021
Environmental Maintenance and Management	29,975	36,925	70,053	85,331
Environmental Monitoring	40,204	40,555	33,123	20,331
Emergency Response	1,569	256,265	8,100	2,381
Communication and Publications	2,590	1,983	2,942	2,057
Total	121,126	381,032	148,734	148,121

7.2 Environmental Assets

In order to develop the Port of Kaohsiung into a transshipment hub of the Asia-Pacific region, an all-round logistics transshipment port, and an environmentally friendly green port, the Kaohsiung Branch has promoted a series of port development plans (special projects and general building and equipment plans), some of which involve environmental issues, such as new buildings moving toward green buildings and enhancing the public's opportunities to get close to the port, wharf reconstruction combined with shore power equipment systems, and the replacement of old vessels and vehicles to increase implementation effectiveness and reduce pollution emissions. In total, the fixed assets invested by the Kaohsiung Branch in environmental issues in 2024 and 2025 were NT$2,774,138 thousand and NT$5,718,090 thousand respectively.

Assets Invested by the Kaohsiung Branch in Environmental Issues in 2024 (Unit: NT$ thousand)

Item Name / Fixed Assets		Land Improvements	Buildings and Structures	Machinery and Equipment	Transportation and Conveyance Equipment	Miscellaneous Equipment	Total
Special Projects	Continuing Projects	1,248,422	211,366	234,794	-	6,227	1,700,809
General Building and Equipment Plans		184,401	457,570	199,945	222,784	8,629	1,073,329
Total		1,432,823	668,936	434,739	222,784	14,856	2,774,138

Assets Invested by the Kaohsiung Branch in Environmental Issues in 2025 (Unit: NT$ thousand)

Item Name / Fixed Assets		Land Improvements	Buildings and Structures	Machinery and Equipment	Transportation and Conveyance Equipment	Miscellaneous Equipment	Total
Special Projects	Continuing Projects	3,147,885	207,662	393,760	-	-	3,749,307
General Building and Equipment Plans		220,834	1,025,041	627,140	80,612	15,156	1,968,783
Total		3,368,719	1,232,703	1,020,900	80,612	15,156	5,718,090

8



Improvement Recommendations

The Kaohsiung Branch continues to promote the environmental management mechanism established through the Green Port Action Plan and the Eco Ports Certification, regularly reviews the port's environmental policy, environmental objectives, and issues of concern, adopts various concrete improvement and refinement measures, puts forward best practice cases, and continuously improves environmental quality, so as to implement the sustainable development goals through concrete actions.

The Kaohsiung Branch strictly abides by international laws and regulations, actively promotes national policies, attaches importance to the needs of the port's stakeholders, and takes the co-prosperity and development of the city and the port as its goal. In order to fulfill its corporate social responsibility, it has deeply rooted the concept of environmental sustainability in the company's business strategy. In recent years, with regard to the main environmental issues, the concrete actions promoted have focused on three key areas — climate adaptation, air quality improvement, and energy transition:

1. Responding to climate change: The net-zero emissions strategy for 2050 is being promoted step by step, greenhouse gas inventory management is being carried out, green port services are being promoted, and green incentives are being provided to encourage shipping operators to jointly reduce carbon. At the same time, the infrastructure of the port area is being strengthened to enhance the adaptive resilience to disasters, so as to achieve the sustainable development of the port.
2. Improving port air quality: In accordance with the "Air Pollution Prevention and Control Program for International Ports," the five major measures of "expanding the use of shore power facilities," "reducing the speed of vessels entering and leaving the port," "vessels using low-sulphur fuel oil," "prevention and control of the loading and unloading operations of fugitive cargo in the port area," and "pollution reduction of operating machinery in the port area" continue to be promoted; and in coordination with the local government, the "Air Quality Maintenance Area of the Port Area" has been set up. In addition, the automatic gate sentry post system continues to be optimized, a smart traffic flow management mechanism has been established, and "Port 168 — Kaohsiung Port Area Traffic Information Website" has been refined and the external road traffic of the port area has been improved, so as to create a low-pollution, high-quality port environment.
3. Improving energy efficiency and planning energy transition:

   (1) The "Smart Energy Management System" has been established and continuously refined to improve energy use efficiency in the port area.

   (2) Energy transition is promoted, including:
   A. Revitalizing the use of the rooftops of port area buildings: solar photovoltaic systems are installed.
   B. Building the green energy system of the Seventh Container Terminal: a solar photovoltaic system is self-built and combined with an energy management system (EMS) and energy storage equipment to strengthen the resilience of the power grid of the Port of Kaohsiung.
   C. Developing the offshore wind energy industry: the back-line warehousing and logistics land of the Kaohsiung Port Intercontinental Container Terminal Phase I Project is adjusted to serve as an area for the manufacturing and assembly of offshore wind energy equipment, provided for the use of offshore wind energy operators.

   (3) Planning the operating regulations for green fuel bunkering at the Port of Kaohsiung: in order to comply with the EU carbon reduction regulations and to meet the demand of shipping operators for alternative marine fuel bunkering, green marine fuel (including biofuel oil, LNG, methanol, etc.) bunkering services have been actively planned, and the "Directions for the Management of Biofuel Bunkering Operations at the Port of Kaohsiung" were announced in June 2025.

In the future, the Kaohsiung Branch will continue to cooperate with all sectors to jointly promote important policies such as energy transition. For example, CPC Corporation, Taiwan has already carried out the "Intercontinental Liquefied Natural Gas (LNG) Receiving Station Investment Plan" at the Intercontinental Phase II of the Port of Kaohsiung. In addition, the layout of the offshore wind energy industry chain is being actively promoted; through the integration of the land of Area A6 of the Intercontinental Phase I Container Terminal, 2 heavy-lift wharves with a load of 30 t have been built, laying the foundation for the Port of Kaohsiung to become the core base of the offshore wind energy localization supply chain, so that the port not only supports economic development but can also provide green services. The Kaohsiung Branch hopes that, through the deepening of the smart and sustainable port, and with "strengthening port and shipping, promoting tourism, smart management, and achieving sustainability" as its core, it will work hand in hand with stakeholders to jointly achieve the sustainable development goals.

If you have any inquiries regarding this report, please contact us.

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