



# 2024 PAN OCEAN ESG REPORT

Pan Ocean Co., Ltd., is dedicated to enhancing company and shareholder value through practical and transparent management. Our objective is to become a global leading shipping & logistics company.



# ABOUT THIS REPORT

## About This Report

This report is the third annual sustainability report of Pan Ocean Co., Ltd. ("Pan Ocean"). It is published to transparently disclose the company's sustainable management direction and economic, environmental and social accomplishments to all stakeholders. Pan Ocean will continue to publish annual sustainability reports and use them as a channel to share and communicate details on the company's sustainable management.

## Period and Scope

This report covers activities and performances from January to December 2023. For certain major activities, it also refers to data up to the first half of 2024. Quantitative data was compiled based on data from the past four years (2020-2023) to analyze changes in trends. The reporting scope of this report includes Pan Ocean's domestic headquarters and offices, as well as the activities of its overseas subsidiaries and offices, including its subsidiary POS SM. Any discrepancies in the reporting scope, if present, have been clearly indicated.

## Principles

This report adheres to the GRI (Global Reporting Initiative) Standards 2021, the international benchmark for sustainability reporting. In addition, it incorporates indicators from the ESRS (European Sustainability Reporting Standards), SASB (Sustainability Accounting Standards Board), and TCFD (Task Force on Climate-related Financial Disclosures). Financial performance data has been prepared in accordance with the consolidated financial statements under the Korean International Financial Reporting Standards (K-IFRS).

## Reliability

To ensure reliability and fairness, this report underwent third party verification by an independent external organization, Korea Management Register, in accordance with the AA1000AS international verification standards.

## Considerations for Forecasting Data

This report has been prepared with reference to disclosure practices that ensure comparability and reliability and that are tailored to meeting the information needs of stakeholders. It contains pivotal information pertinent to stakeholders, taking into account both domestic and international regulations, market dynamics and industry structures. However, it is important to note that predictive information, based on estimates or assumptions regarding events, situations, or plans, may be subject to change due to shifts in the business environment, many of which are beyond our control or our ability to predict accurately. In addition, some quantified information in this report is derived from estimations using proxy indicators and methodologies available in the current market, so it may differ from actual measurements obtained using various methodologies.



## Cover Story

This cover story emphasizes our journey towards sustainability and environmental stewardship by showcasing Pan Ocean's vision and commitment as a global leading shipping & logistics company and eco-friendly enterprise.


**PAN OCEAN**

## Contact Information

Business Management Team, Pan Ocean Planning Department

Address Tower 8, 7, Jong-ro 5-gil, Jongno-gu, Seoul, Republic of Korea | Tel 02-316-5160 | E-mail esg@panocean.com



# Contents

PAN OCEAN 2024 ESG REPORT

## 04 Overview

|                        |     |
|------------------------|-----|
| About This Report      | 002 |
| Letter to Stakeholders | 005 |
| Company Overview       | 006 |
| Global Network         | 008 |
| Business Portfolio     | 009 |

## 15 ESG Impact

|                        |     |
|------------------------|-----|
| ESG Management         | 016 |
| ESG Performance        | 017 |
| Stakeholder Engagement | 018 |
| Materiality Assessment | 019 |

## 23 Environmental

|                                       |     |
|---------------------------------------|-----|
| Climate Change Response (TCFD Report) | 024 |
| Environmental Management              | 033 |
| Environmental Impact Reduction        | 040 |

## 43 Social

|                              |     |
|------------------------------|-----|
| Safety and Health Management | 044 |
| Collaborative Management     | 052 |
| Human Rights Management      | 054 |
| Human Resources Management   | 058 |
| Shared Management            | 066 |

## 68 Governance

|                                  |     |
|----------------------------------|-----|
| Transparent Governance Structure | 069 |
| Ethics and Compliance Management | 075 |
| Integrated Risk Management       | 081 |
| Information Security             | 085 |

## 88 Appendix

|  |     |
|--|-----|
| ESG DATA                                       | 089 |
| GRI Index                                      | 105 |
| ESRS Index                                     | 109 |
| SASB Index                                     | 112 |
| TCFD Index                                     | 113 |
| Association Memberships and Award Achievements | 114 |
| GHG Verification Statement                     | 115 |
| Independent Assurance Statement                | 116 |



## Chapter. 1



# OVERVIEW

**002** / About This Report

**005** / Letter to Stakeholders

**006** / Company Overview

**008** / Global Network

**009** / Business Portfolio





## Letter to Stakeholders



### Dear Stakeholders,

As the CEO of Pan Ocean Co., Ltd., I am pleased to present our third ESG report. My name is Ahn Joon Ho, and I would like to express my sincere gratitude for your continued support and encouragement since our inaugural report in 2022.

The year 2023 has presented significant challenges due to persistent global issues such as high interest rates, high inflation and low growth. These challenges were further compounded by geopolitical risks, including the Panama Canal transit restrictions due to weather anomalies, the ongoing Russia-Ukraine war, the Israel-Hamas conflict, and attacks on Red Sea vessels by Yemeni rebels. Despite this challenging business environment, the MEPC (Marine Environment Protection Committee) of the IMO (International Maritime Organization) adopted an enhanced strategy for carbon emissions during its 80th session. This strategy commits the shipping industry to the 2050 Carbon Net-Zero initiative. Furthermore, the EU (European Union) implemented the ETS (Emissions Trading System) in order to address the climate crisis. In addition, the year saw the first rulings on violations of the Serious Accidents Punishment Act, which was implemented in 2022, and the revision of the Corporate Governance Report Guidelines by the Korea Exchange. These developments reflect a growing trend towards more comprehensive and transparent disclosure of non-financial performances by corporations. In this uncertain environment, we did not use the strengthening of laws and regulations as an excuse to alter our established ESG management policies or delay our mid- to long-term plans. Instead, we proactively identified areas for improvement, developed solutions, and refined and specified our long-term plans. This report is intended to share our achievements in 2023 and outline our future plans.

Firstly, we have significantly enhanced our approach to climate change risk management. We conducted a comprehensive analysis of key risks and opportunities, evaluating them across eight categories and forecasting potential financial impacts for each. Our goal is to perform a more in-depth analysis to meet the standards set by the SBTi (Science Based Targets initiative). Since our 2021 commitment to carbon neutrality by 2050 and the subsequent unveiling of a detailed implementation roadmap, we have continued to take practical measures to reduce carbon emissions, resulting in improved reduction performance. In 2023, our greenhouse gas emissions intensity was 5.94 gCO<sub>2</sub>/ton-mile, surpassing our target of 6.11 gCO<sub>2</sub>/ton-mile and increasing the likelihood of achieving our 2030 interim target of 5.59 gCO<sub>2</sub>/ton-mile. Furthermore, we are engaged in research on eco-friendly ship operations, including the adoption of new technologies such as autonomous navigation and AI, both in national projects and private initiatives.

Secondly, as a result of our ongoing efforts to establish a safe working environment for our employees, we obtained the international standard certification for occupational health and safety (ISO 45001) in December 2023. In accordance with our safety and health management policy, we will continue to strengthen our safety and health

management system and increase related investments to ensure that all employees can work in a healthy and safe environment. On top of that, we are extending our ESG management efforts to our supply chain. In 2023, we established the Supplier Code of Conduct, shared it during supplier selection, and conducted diagnostic evaluations through written inquiries with key suppliers urging them to join our ESG management efforts. We will continue to improve the due diligence process for selecting and evaluating suppliers to prevent any ESG-related deficiencies within our supply chain.

Finally, we are committed to enhancing our ethical and compliance management, proactively managing risk, and establishing a more transparent governance structure. In 2022, we implemented the Self-Compliance Program and have operated it since to strengthen all employees' understanding of fair trade. To date, we have maintained zero violations of fair-trade laws, and we will continue to adhere to ethical management practices that exceed legal standards. In 2023, both inside and independent directors achieved a 100% attendance rate at board meetings, which has reinforced responsible management. We have also increased the three-year dividend guideline to enlarge shareholder returns and continue our efforts to improve corporate governance. However, we recognize areas for improvement, such as the lack of a board evaluation system and procedures for improving cash dividends. We will not rest on our current achievements, but will continue our efforts to improve corporate governance.

In our inaugural report, I highlighted that Pan Ocean Co., Ltd., had attained the status of a "good company" based on past standards of "profit generation." However, I also noted that it was still lacking in terms of future standards represented by ESG. Since then, we have consistently strived to become a more exemplary company, and have achieved notable progress in several areas. Nonetheless, we recognize that we still fall short of global standards. All employees, including myself, are keenly aware of these shortcomings. We will continue our steady progress with a long-term perspective. We will not stop our steps toward change, no matter how slow they may seem. We believe that your interest and encouragement will greatly support our journey. On behalf of all our employees, I express my heartfelt gratitude and here conclude my remarks.

Thank you.

June 2024

CEO Ahn Joong Ho



# Company Overview

Since 1966, Pan Ocean has been a leading provider of maritime transportation services worldwide, specializing in bulk carriers, container ships, LNG carriers and more. Our fleet encompasses a range of vessels, from smaller units to advanced gas carriers and VLCCs (very large crude carriers), which have been strategically optimized to meet the diverse needs of our customers. Our subsidiary, POS SM, provides comprehensive ship management solutions, including vessel and crew management, newbuilding supervision, safety solutions and quality management services. With our extensive technical expertise and experience, we lead the ship management industry in ensuring safer and more efficient operations. Pan Ocean is committed to advancing as a global leading shipping & logistics company by leveraging its diversified business portfolio, which includes grain distribution, LNG bunkering and LNG carrier operations.

## Pan Ocean Overview

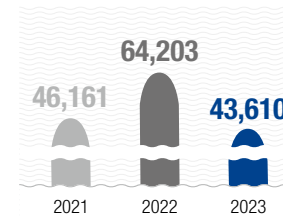
As of December 31, 2023

|                      |  |                      |  |
|----------------------|--|----------------------|--|
| <b>Company</b>       | Pan Ocean Co., Ltd.  | <b>Establishment</b> | May 1966   |
| <b>CEO</b>           | Kim Hong Kuk, Ahn Joong Ho   | <b>Head Office</b>   | Tower 8, 7, Jong-ro 5-gil, Jongno-gu, Seoul, Republic of Korea |
| <b>Employees</b>     | 1,161 employees (Excluding Foreign Crews)                                  | <b>Fleet</b>         | 230 Vessels (Owned 109, Chartered 121)                         |
| <b>Main Business</b> | Maritime logistics (bulk carriers, containers, tankers, LNG), agri-trading |                      |  |

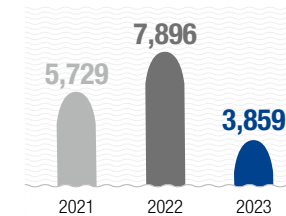
## Financial Results

Consolidated Basis (Unit: KRW 100 million)

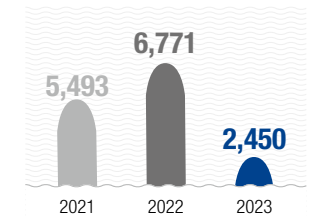
### Sales



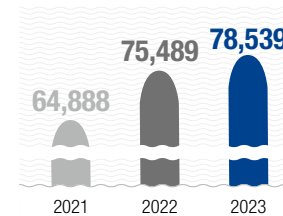
### Operating Profit



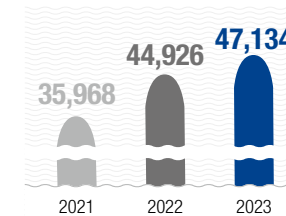
### Net Income



### Total Assets



### Total Equity



### Credit Rating



## ESG Results

As of December 31, 2023


Overall Rating **A**

\*Environment A+, Social A, Governance A


Overall Rating **BB**

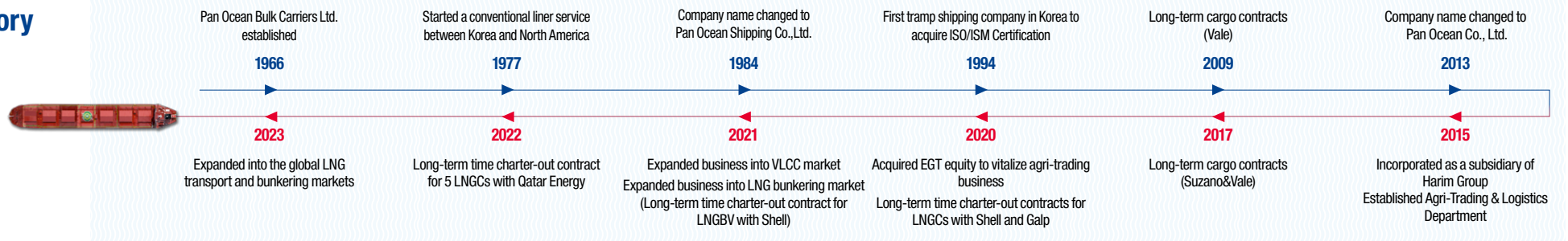
\*Environment A, Social B, Governance A


**BB**

**B**

\*Climate Change

## History





# Company Overview

## Vision and Core Values

01

### A Future Leader

Pioneering minds that drive the industry forward.



02

### A Partner to Customers

We foster growth alongside our valued customers and stakeholders, celebrating collective accomplishments together.



03

### A Global Corporate Citizen that Fulfills Social Responsibility

We value safety more than anything. By complying with environmental laws and regulations, we pursue sustainable management guided by corporate social responsibility.



04

### Corporate Culture that Respects Talents

We train talent with specialized expertise and diversity, creating an environment of opportunities where they can freely unleash their capabilities with fair and reasonable treatment.



## VISION

Global Leading Shipping & Logistics Company

PAN OCEAN

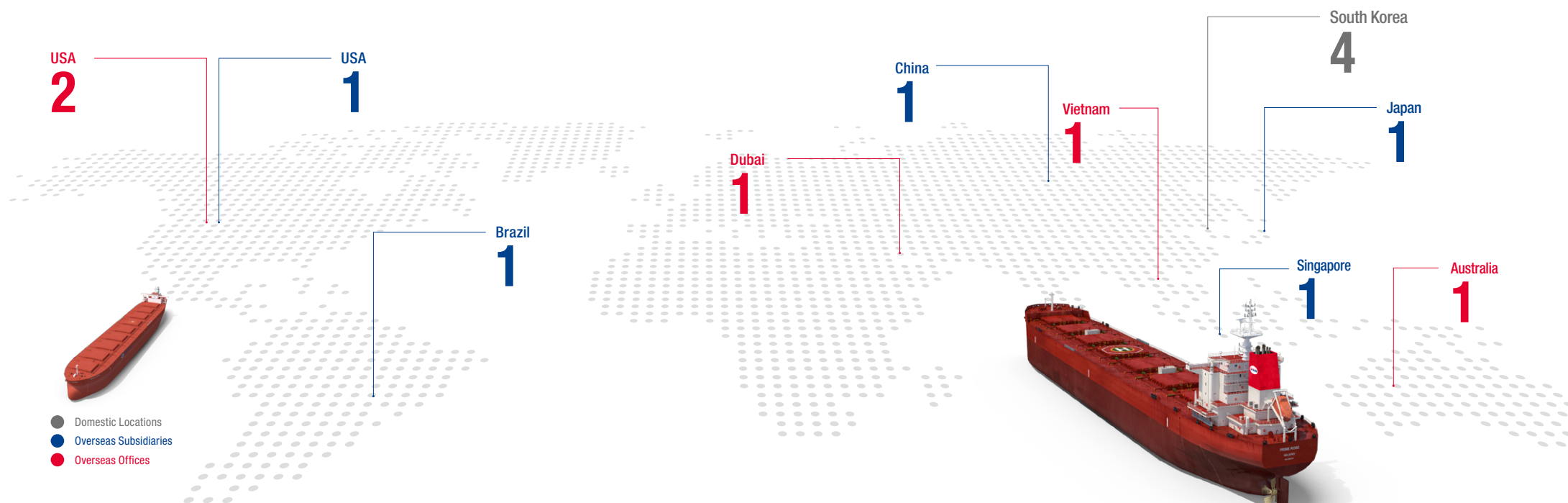
## Mission

Value Creation of Life & Sharing Happiness



# Global Network

Pan Ocean continuously enhances its global bases and network to deliver top-tier maritime transport services with the aim of becoming a leading entity in the global shipping industry. As of the end of 2023, Pan Ocean operated one headquarters and three domestic offices in Korea, five overseas subsidiaries across Asia, the Americas, and five additional overseas offices.



## Global Key Business Network

Headquarters and Domestic Offices

4



Overseas Subsidiaries and Offices

10



## Global Sales Status

As of December 31, 2023

| Region        | Sales (KRW 100 million)* | Sales (USD thousand) |
|---------------|--------------------------|----------------------|
| Asia          | 24,569                   | 1,881,032            |
| Oceania       | 6,061                    | 464,065              |
| Europe        | 713                      | 54,627               |
| North America | 4,223                    | 323,357              |
| South America | 7,138                    | 546,477              |
| Africa        | 905                      | 69,326               |
| Total         | 43,610                   | 3,338,883            |

\* Rounded to the nearest KRW 10 million

\*\* Regional classification allocated based on the country where the port of loading is located

## Global Employee Status

As of December 31, 2023

| Region        | No. of Employees |
|---------------|------------------|
| Asia          | 180              |
| Oceania       | 1                |
| Europe        | -                |
| North America | 11               |
| South America | 3                |
| Africa        | -                |



# Business Portfolio

As one of the world's leading shipping companies, we specialize in dry bulk carriers and offer a wide range of maritime transport services, including container, tanker, heavy lift and LNG vessels. Committed to providing safe and reliable maritime transportation, we are leveraging our expertise and extensive global network to explore new opportunities, including agricultural trade and logistics. Our ambition is to become a global leading shipping & logistics company by securing sustainable growth drivers.

PAN OCEAN

BUSINESS PORTFOLIO

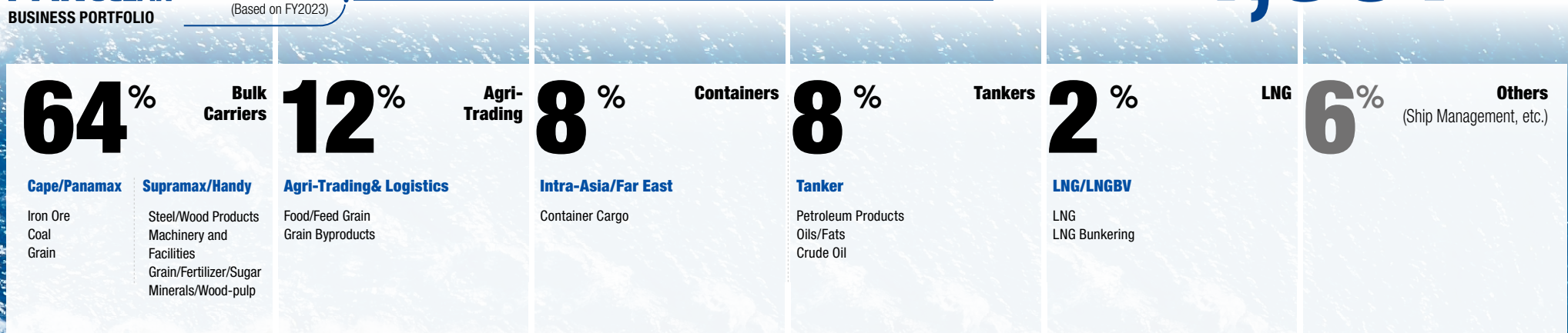
Sales by Business Sector

(Based on FY2023)

Sales KRW

4,361

billion





## Business Portfolio

Providing Specialized Shipping Services

# Bulker Service

## Bulker Service

### Expanding Worldwide Services Using an Excellent Fleet

Based on over 50 years of experience in bulk cargo transportation, Pan Ocean has established trust with major shippers worldwide. With this expertise, we have secured long-term cargo contracts with clients such as POSCO, Hyundai Steel, KEPCO Power Generation Subsidiaries and major overseas steel mills and resource developers. We are also dedicated to strengthening local customer-focused marketing activities and providing differentiated services to attract new clients. At the same time, we are focused on building a strategic portfolio comprising both short- and long-term cargo contracts to ensure a stable foundation for growth.

### Providing Transportation Services for All Types of Dry Bulk Cargo

Our tramper service is specialized in providing tailored transportation solutions optimized for the routes and schedules required by global shippers for various types of dry cargo. Notably, we maintain a strong market presence in grain transportation along routes connecting North America and Australia. Furthermore, we have gained recognition as a leading carrier linking the Pacific and Oceania (Australia/New Zealand) regions for the transportation of coal, ores, fertilizers, timber, alumina, and various other commodities, and are renowned for our operational excellence. In the Atlantic Ocean, we compete with European carriers and are expanding our influence based on high-quality navigation services for the transportation of grains, ores, steel, fertilizers, scrap metal and pulp. The tramper service will focus on driving both qualitative and quantitative growth by securing long-term, cost-effective chartered vessels and additional transportation contracts. The goal is to develop new growth opportunities, such as tapping into the Australian/Southeast Asian mineral market and the Central American grain market.





## Business Portfolio



Expanding Intra-Asia Routes Based on Korea-China-Japan Services

# Container Service

## Container Service

### Providing Efficient Service and Customer Value

Starting with the Korea-Japan container service in 1984, we expanded our reach to Korea-China routes in 1994 and further to Southeast Asia (Vietnam, Thailand, Philippines) in 2005, solidifying our position as a leading intra-Asia carrier. In 2020, we joined the K-Alliance to enhance our competitiveness in the Southeast Asian market by strengthening cooperation with national carriers. We are continuously upgrading our IT system (EasyCon) to provide more efficient services and enhance customer value based on our accumulated experience. At the same time, we are strengthening our internal capabilities and operating our own CRM (customer relationship management) system.

### Enhancing Our Global Network

The container shipping business places a high priority on securing excellent vessels, including green ships, optimizing vessel operations for efficiency, and maintaining a strong focus on schedule adherence. We continually explore new routes to meet diverse customer needs and have improved our global network services through the implementation of a faster and more accurate customer and service management system, further strengthening our position as a leading carrier in the intra-Asia region.



## Business Portfolio

Operating VLCCs and Small- and Medium-Range Tankers

# Tanker Service

## Tanker Service

### Providing a High-Quality Tanker Service Using MR Tankers

Our tanker service provides on-time delivery of crude oils, petroleum products, petrochemicals and palm oils. We operate the largest fleet of MR tankers in the country and have established strong partnerships with global oil majors (such as SHELL, BP, EXXON MOBIL, CHEVRON and TOTAL) and oil traders (such as VITOL, TRAFIGURA and MERCURIA), solidifying our position as South Korea's leading tanker shipping company. Our chemical tankers, primarily serving the Middle East-Asia and Far East-Southeast Asia routes, safely transport key petrochemicals such as benzene, toluene, xylene, base oil and caustic soda.

### Expanding Our Business Foundation

In addition to its existing fleet of MR tankers and chemical tankers, Pan Ocean has enhanced its crude oil transportation capabilities and global competitiveness with the addition of two VLCCs (very large crude carriers) built in 2021. We are expanding our operations to the West Coast of the United States and South America while strengthening our service routes in the Middle East, Asia and Oceania. By building trust with major global oil companies, oil traders, major domestic refiners (S-OIL and SK Energy) and major food companies (Dongseo, Lotte, Nongshim, Ottogi, Samyang Foods and Curexo), we are steadily adding new long-term cargo contracts.





## Business Portfolio

Expanding LNG Business Portfolio

# LNG Business

## LNG

### Diversifying into Global LNG Transportation

Since December 2008, the 153,000 CBM-class LNG carrier LNG KOLT has been deployed in the LNG import business of KOGAS (Korea Gas Corporation). It transports approximately 1,500,000 CBM of LNG annually from major LNG loading ports in the Middle East including Yemen, Qatar and Oman, as well as from Southeast Asia, Russia and Australia to domestic LNG terminals. Recognized for its years of experience in LNG vessel operation and management, Pan Ocean has entered into long-term LNG charter contracts for 174,000 CBM-class vessels with global oil majors such as Shell and Portugal's largest energy company, GALP, starting from 2020. In 2022, Pan Ocean participated in the first LNGC project of Qatar, the world's largest LNG exporter, and added vessels under long-term charter contracts. As a result, by the end of 2025, our gas carrier fleet (including LNG bunkering vessels) is expected to expand to 13 vessels. Along with the ongoing expansion of vessels, our gas carrier business will continue to strengthen strategic partnerships with leading gas energy shippers both domestically and internationally, along with ongoing fleet expansion.

### Venturing into the LNG Bunkering Business

Pan Ocean is strategically advancing beyond its traditional LNG transportation operations to embrace LNG bunkering and transportation in Europe, the United States, Singapore and other regions. The company has inked long-term charter contracts with global oil giant SHELL for two LNG bunkering vessels, signaling its commitment to expansion. Our proactive approach includes ongoing vessel orders and the pursuit of long-term contracts with global energy stakeholders to ensure sustained growth in our LNG bunkering business.





## Business Portfolio

Leaping to the Top: Korea's Premier Grain Trader

# Agri-Trading & Logistics

## Agri-Trading

### Successfully Entering the Agri-Trading Business

Since establishing a dedicated organization for grain trading business, we have successfully entered the market and are selling over 1.5 million tons of corn, soybeans, wheat, PKE and DDGs annually. Despite the relatively short timeframe, we have expanded into new markets beyond Korea, including China, Taiwan and Vietnam. We remain committed to exploring further opportunities in markets such as Malaysia and Indonesia.

### Establishing a Foundation for Stable Growth

Currently over 85% of domestic grain demand is fulfilled from abroad, with up to 97% of wheat, corn and soybean consumption dependent on imports. Considering this situation, Pan Ocean's entry into the grain trading business will serve as a crucial driver of future growth and is closely aligned with the government's grain procurement system for food security. To activate our grain distribution business, we acquired shares in the grain export elevator EGT on the West Coast of the U.S. in September 2020. We will prioritize expanding our worldwide sales routes by utilizing our existing global network, thus establishing a stable foundation for growth and enhancing our influence in the global grain market.





## Chapter. 2



# ESG IMPACT

**016** / ESG Management

**017** / ESG Performance

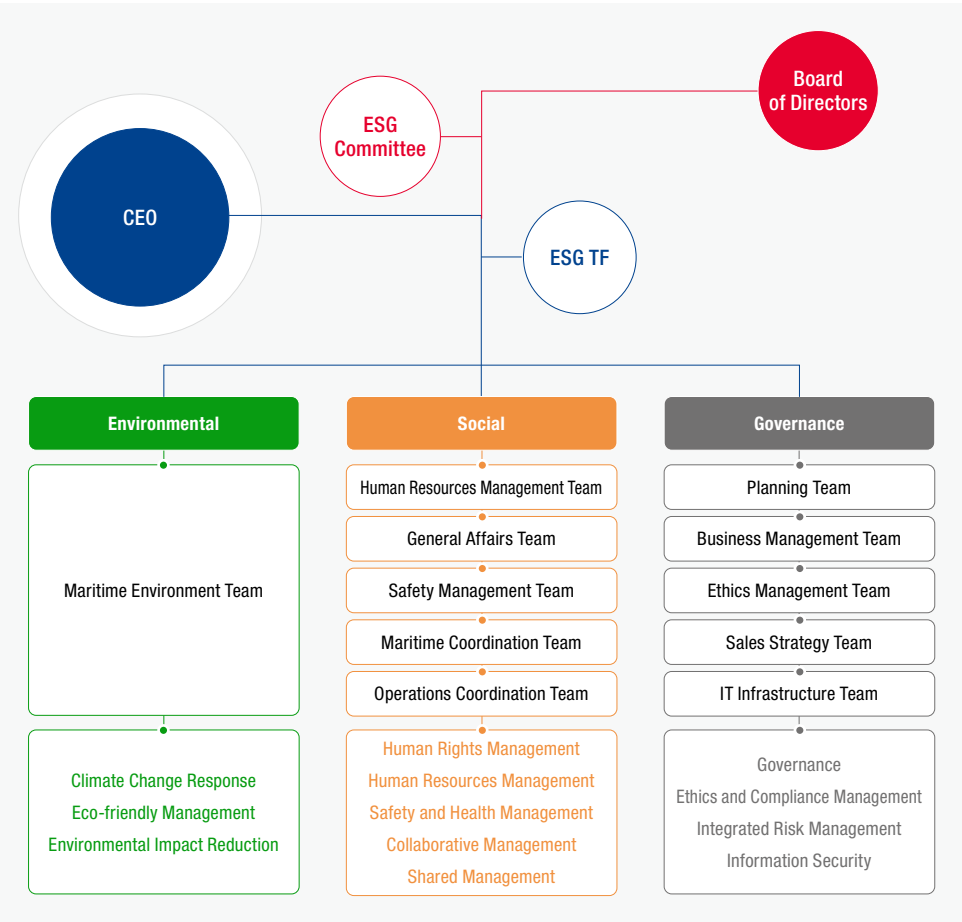
**018** / Stakeholder Engagement

**019** / Materiality Assessment

# ESG Management

Recognizing the critical importance of ESG management, Pan Ocean established the ESG Committee within the board of directors in May 2022 to deliberate on important ESG-related matters at the board level. The ESG TF discusses non-financial performances and plans for areas related to ESG, such as climate change, safety and health, human rights management and fair trade, on an ongoing basis, and the ESG Committee reviews and reports major resolutions to the BOD. In addition, we strive to internalize ESG management by setting targets for each ESG issue and reflecting them in the KPIs (key performance indicators) of each department and employee. The ESG TF, which oversees all ESG management activities, collaborates with relevant departments to establish goals and strategies for comprehensive ESG management. This includes disclosure, evaluation responses and external cooperation.

## ESG Governance



## ESG Roles & Responsibilities

[ESG Committee Operating Regulations Link](#)

Pan Ocean has implemented company-wide ESG management under the supervision of the board of directors and executive management. The ESG Committee formulates and oversees mid- to long-term strategies for overall ESG management, including the response to the climate crisis, employee health and safety management, and ethics & compliance management. The CEO approves execution plans for achieving ESG management objectives and develops detailed strategies. The committee holds regular semi-annual meetings to review and discuss ESG-related agenda items, such as the vision and strategies for environmental management and the establishment of a code of conduct for suppliers.

### Summary of Key ESG Committee Agendas

| Date          | Agenda  | Status   |
|---------------|---|----------|
| June 16, 2023 | Approval of the Environmental Vision and Implementation Strategy  | Approved |
| June 16, 2023 | Approval of the 2022 Environmental Management Results and 2023 Goals  | Approved |
| Aug. 9, 2023  | Approval of Supplier Code of Conduct Development  | Approved |
| Feb. 8, 2024  | Approval of the 2024 Safety and Health Management Plan (Draft)  | Approved |
| June 19, 2024 | Report on the Environmental Management Achievements of 2023 and Approval of the Environmental Management Goals for 2024 | Approved |



## ESG Performance

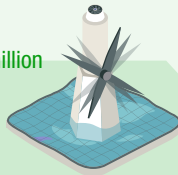
Pan Ocean is committed to achieving sustainable growth by identifying and addressing ESG issues that affect the lives of its employees and stakeholders. The KCGS (Korea Institute of Corporate Governance and Sustainability) recognized these efforts by awarding us an A grade or higher in all ESG categories in the 2023 evaluation. In particular, we have invested approximately KRW 8.1 billion in environmentally friendly facilities, thereby reinforcing our commitment to green management. We successfully reduced the accident rate among maritime employees to 0.4% and established a code of conduct for suppliers and secured commitments from 11 key suppliers. In addition, we achieved 100% compliance in self-compliance surveys and conducted ethics and compliance training for all employees as we strive to internalize ethics and compliance management throughout the company.

### 2023-2024 ESG Highlights

#### Environmental

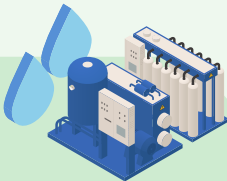
KRW **8,171** million

Investment in  
Eco-Friendly Equipment



**95** %

Installation Rate of  
Ballast Water Treatment  
Systems



**381,367** kg

YoY Reduction in  
NOx (Nitrogen Oxides)  
Emissions



**A+** Grade

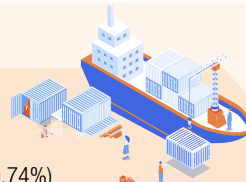
2023 KCGS Rating



#### Social

**0.40** %

Offshore Employee  
Accident Rate  
(Exceeded the Target of 0.74%)



**24** times

No. of activities by the  
Eco-Clean Volunteer  
Group in 2023



**25,020** hours

Safety and Health  
Training hours  
(Onshore, Offshore Employees)



**A** Grade

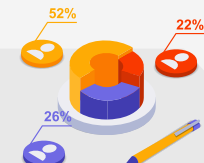
2023 KCGS Rating



#### Governance

**4** agendas

Resolutions Approved by  
the ESG Committee in  
2023



**100** %

Compliance Check  
Execution Rate



**100** %

Pan Ocean Ethics and  
Compliance Training  
Completion Rate



**A** Grade

2023 KCGS Rating



# Stakeholder Engagement

Pan Ocean defines its key stakeholders as employees, customers, suppliers, shareholders and investors, and the local community, all of whom significantly impact its business activities. The company actively gathers feedback from these diverse stakeholders and maintains ongoing, dynamic communication with them. Stakeholders' opinions were actively incorporated during the process of identifying important issues, and Pan Ocean is dedicated to continuously identifying and managing the primary concerns of each stakeholder group to ensure these concerns are effectively integrated into the company's sustainable management strategies.

## Stakeholder Communication Facilitation Process



## Stakeholder Communication Channels

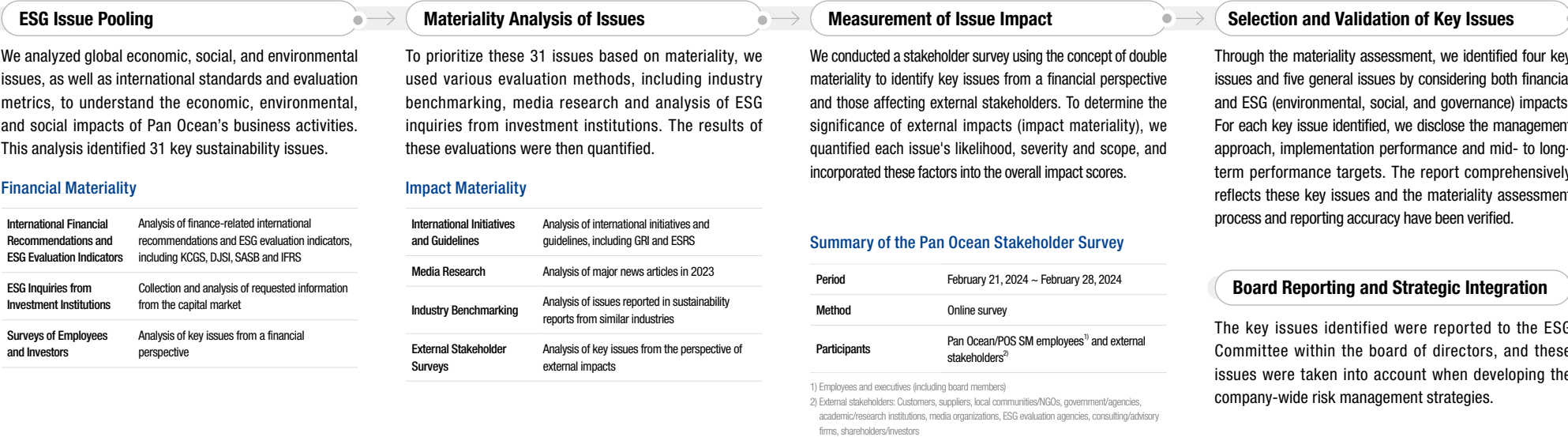
| Group                             | Definition   | Key Channels  | Topics of Interest  | Related Issues   | Value Creation and Distribution   |
|-----------------------------------|--|---|---|--|---|
| <b>Employees</b>                  | Internal stakeholders crucial to Pan Ocean's business activities and performance who also help to fulfill the company's social responsibilities to external stakeholders | <ul style="list-style-type: none"> <li>· Labor Management Council</li> <li>· Grievance handling system</li> <li>· Employee satisfaction survey</li> <li>· Intranet, internal messenger, newsletter</li> </ul> | <ul style="list-style-type: none"> <li>· Acquiring and retaining talent Facilitating professional development and growth</li> <li>· Improving the work environment and organizational culture</li> <li>· Ensuring human rights and promoting diversity</li> </ul>           | <ul style="list-style-type: none"> <li>· Safety and health management</li> <li>· Human resources management</li> <li>· Human rights management</li> <li>· Information security</li> </ul>        | <ul style="list-style-type: none"> <li>· Salary and bonuses: KRW 156.9 billion</li> <li>· Retirement pay: KRW 10.2 billion</li> <li>· Other pay (welfare benefits, etc.): KRW 111.7 billion</li> </ul>  |
| <b>Customers</b>                  | Stakeholders who receive Pan Ocean's services and form the foundation of the company's economic and corporate value creation   | <ul style="list-style-type: none"> <li>· Website</li> <li>· Helpline</li> <li>· Customer satisfaction survey</li> </ul>   | <ul style="list-style-type: none"> <li>· Collecting customer opinions and feedback</li> <li>· Providing high-quality services</li> </ul>  | <ul style="list-style-type: none"> <li>· Quality management</li> </ul>   | <ul style="list-style-type: none"> <li>· Sales revenue: KRW 4,361 billion</li> </ul>  |
| <b>Suppliers</b>                  | Essential cooperative relationships that support Pan Ocean's sustainable growth and play a vital role in the company's business activities                               | <ul style="list-style-type: none"> <li>· Purchase portal site</li> <li>· Helpline</li> </ul>  | <ul style="list-style-type: none"> <li>· Selecting and evaluating companies fairly</li> <li>· Establishing win-win cooperative relationships</li> <li>· Complying with laws and regulations</li> </ul>  | <ul style="list-style-type: none"> <li>· Collaborative management</li> <li>· Information security</li> <li>· Safety and health management</li> <li>· Ethics and compliance management</li> </ul> | <ul style="list-style-type: none"> <li>· Charter fees: KRW 706.8 billion</li> <li>· Port fees: KRW 375.9 billion</li> <li>· Cargo fees: KRW 203 billion</li> <li>· Fuel costs: KRW 1,014 billion</li> <li>· Voyage charter hires: KRW 148.5 billion</li> <li>· Depreciation and amortization: KRW 490.3 billion</li> <li>· Vessel costs: KRW 105.3 billion</li> </ul> |
| <b>Shareholders and Investors</b> | Providers of the financial capital necessary for Pan Ocean to maintain sustainable growth and who are affected by the company's management and profitability             | <ul style="list-style-type: none"> <li>· Shareholders' meeting</li> <li>· IR (Investor Relations)</li> <li>· Domestic and international NDRs (non-deal roadshows) and conferences</li> </ul>                  | <ul style="list-style-type: none"> <li>· Disclosing management performance and financial information</li> <li>· Enhancing shareholder communication</li> <li>· Transparently disclosing governance systems</li> <li>· Promoting ethics and compliance management</li> </ul> | <ul style="list-style-type: none"> <li>· Transparent governance structure</li> <li>· Integrated risk management</li> </ul>   | <ul style="list-style-type: none"> <li>· Dividends: KRW 45.4 billion</li> <li>· Creditors: KRW 117.1 billion</li> </ul>   |
| <b>Local Communities</b>          | Local communities or organizations affected by Pan Ocean's operations and to whom we are accountable for our impact on the community                                     | <ul style="list-style-type: none"> <li>· Seoul Senior Welfare Center</li> <li>· Seoul National Cemetery</li> <li>· Local community contribution programs</li> </ul>   | <ul style="list-style-type: none"> <li>· Stimulating the local economy</li> <li>· Supporting for socially vulnerable groups</li> <li>· Fulfilling environmental responsibilities</li> <li>· Expansion of social infrastructure</li> </ul>                                   | <ul style="list-style-type: none"> <li>· Shared management</li> </ul>  | <ul style="list-style-type: none"> <li>· Donations and social contribution investments: KRW 570 million</li> </ul>  |



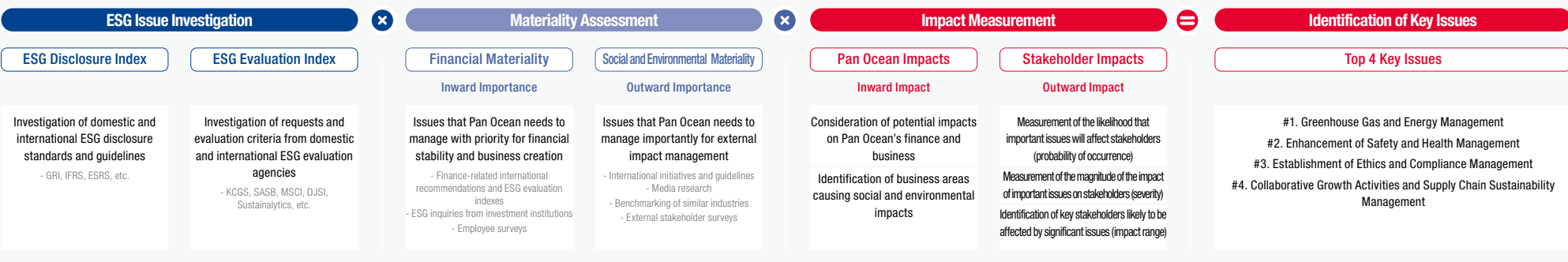
# Materiality Assessment

Based on the materiality assessment results, the following key issues have been identified: greenhouse gas and energy management, enhancement of safety and health management, establishment of ethics and compliance management, and collaborative growth activities and supply chain sustainability management. The first three issues were also top key issues identified in the previous report. Of particular note is the increased interest from stakeholders in greenhouse gas and energy management, which was driven by the increasing carbon regulations in the shipping industry. Furthermore, this year's incorporation of ESG-related inquiries from investment institutions in the materiality assessment identified collaborative growth activities and supply chain sustainability management as a key issue.

## Materiality Assessment Process



## Application Method of Double Materiality



# Materiality Assessment

## Double Materiality Assessment Results

Materiality Assessment Matrix



| No. | Financial Materiality |  | Impact Materiality |  |
|-----|-----------------------|--|--------------------|--|
| 1   | E                     | Greenhouse Gas and Energy Management                           | E                  | Greenhouse Gas and Energy Management                                       |
| 2   | S                     | Enhancement of Safety and Health Management                    | S                  | Collaborative Growth Activities and Supply Chain Sustainability Management |
| 3   | G                     | Establishment of Ethics and Compliance Management              | S                  | Enhancement of Safety and Health Management                                |
| 4   | E                     | Management of Environmental Pollutants (Including Spill Risks) | G                  | Establishment of Ethics and Compliance Management                          |
| 5   | E                     | Climate Change Response  | S                  | Establishment of a Human Rights Management System                          |
| 6   | S                     | Establishment of a Human Rights Management System              | E                  | Climate Change Response  |
| 7   | E                     | Strengthening of Environmental Management Systems              | E                  | Investment in Eco-Friendly Vessels   |
| 8   | S                     | Respect for Diversity and Prohibition of Discrimination        | G                  | Securing of New Growth Drivers   |

Management of Key Issues

|   | Issue  | Stakeholder                             | Inward/Outward |                      | Impact     |          | Page                  |
|---|--|---|----------------|----------------------|------------|----------|-----------------------|
|   |  |   | Financial      | Social-Environmental | Likelihood | Type     |                       |
| E | Greenhouse Gas and Energy Management                                       | Environment, Local Communities          | ●              | ●                    | Actual     | Positive | 24-32, 90             |
| S | Enhancement of Safety and Health Management                                | Suppliers, Customers                    | ●              | ●                    | Actual     | Positive | 44-51, 98, 100        |
| G | Establishment of Ethics and Compliance Management                          | Suppliers, Customers                    | ●              |                      | Actual     | Positive | 75-80, 103-104        |
| S | Collaborative Growth Activities and Supply Chain Sustainability Management | Suppliers, Customers                    |                | ●                    | Actual     | Positive | 52-53, 101            |
| E | Climate Change Response  | Environment, Customers                  | ○              | ○                    | Actual     | Positive | 24-32, 90             |
| S | Establishment of a Human Rights Management System                          | Suppliers, Customers                    | ○              | ○                    | Actual     | Positive | 54-57, 98             |
| E | Management of Environmental Pollutants (Including Spill Risks)             | Environment, Local Communities          | ○              |                      | Actual     | Positive | 40-42, 92-93          |
| E | Investment in Eco-Friendly Vessels   | Environment, Suppliers                  |                | ○                    | Actual     | Positive | 37-39, 93-94          |
| S | Respect for Diversity and Prohibition of Discrimination                    | Suppliers, Local Communities, Customers | ○              |                      | Potential  | Complex  | 58-65, 95-97, 99, 101 |

\* In scoring the results of the materiality assessment, we set thresholds for both financial and social/environmental materiality, and then classify issues as ● High or ○ Low based on the scores.



# Materiality Assessment

## Issue 1 Greenhouse Gas and Energy Management

### Impact on Business

With the increasing impact of climate change, policy regulations are being strengthened. The IMO (International Maritime Organization) is preparing technical (EEDI, EEXI), operational (CII rating), and market-based (carbon trading schemes) measures to achieve greenhouse gas reduction targets. Moreover, in 2017, the European Union implemented regulations to monitor, report and verify greenhouse gas emissions from ships, and in 2023, included the shipping sector in the EU ETS (Emissions Trading System).

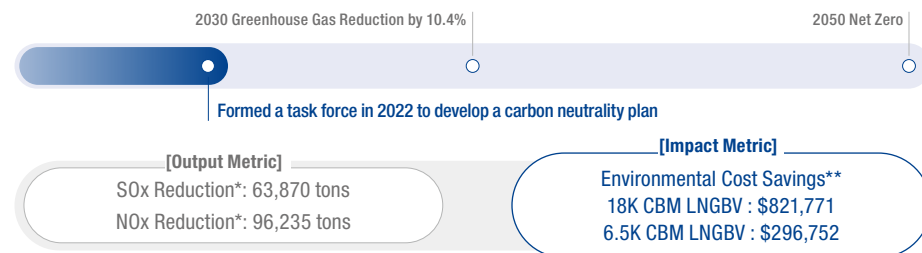
### Impact on External Stakeholders

Pan Ocean aims to mitigate negative environmental impacts through efforts to reduce greenhouse gas emissions and improve energy efficiency, including resource recycling and biodiversity conservation. By establishing eco-friendly logistics infrastructure, we not only enhance our environmental performance but also positively influence customers and local communities within our value chain, thereby contributing to the creation of a better society.

### Goals and Implementation Status

In 2022, to lead the carbon neutrality efforts in the bulk shipping industry, Pan Ocean declared its commitment to 2050 carbon neutrality. Pan Ocean has established and is pursuing the 2030 Carbon Reduction Strategy, a concrete action plan. The company plans to align with the SBTi (Science-Based Targets initiative) by 2024, adhering to the 1.5°C scenario and revising its overall environmental roadmap accordingly.

#### Goal: Establish and Implement a Carbon Neutrality Plan



\* The reduction metrics were calculated by comparing the greenhouse gas emissions from Pan Ocean's existing HFO ships with those from newly introduced LNG ships. For details, please refer to page 37.

\*\* Source: TU Delft, Eco-costs emissions 2022 V1.1

## Issue 2 Enhancement of Safety and Health Management

### Impact on Business

Pan Ocean holds the safety and health of its employees and stakeholders as its top priority. To this end, the company has established the Safety Management Office, a dedicated organization focused on safety and health. By declaring its safety and health objectives and management policies, Pan Ocean has committed to establishing a safety management system, setting safety goals, providing systematic training, proactively preventing accidents, strengthening cooperative frameworks with stakeholders, and ensuring employee communication and participation.

### Impact on External Stakeholders

We place significant emphasis on safety and health management in providing logistics infrastructure services. Strengthening internal safety and health management helps protect employee safety and health while boosting productivity. For customers, we ensure a safe logistics environment to guarantee business continuity and build trust while also fostering a culture of safety throughout the industry by promoting safety and health management practices among suppliers.

### Goals and Implementation Status

To advance as a global leading shipping & logistics company that prioritizes safety and health, we have set a goal of maintaining zero serious occupational accidents. The company has developed strategies and action plans to build a systematic framework for managing safety and health goals. In 2023, the major accident rates for both land and sea operations were 0%, with onshore employee accident rates at 0% and offshore employee accident rates at 0.4%. Pan Ocean also conducts risk assessments to further reduce accidents among suppliers. In the first half of 2023, 56 companies were evaluated, and in the second half, 55 companies.

#### Goal: Achieve Zero Serious Occupational Accidents



\* LTIFR: Lost time injury frequency rate (per million hours)

# Materiality Assessment

Issue 3

Establishment of Ethics and Compliance Management

### Impact on Business

Pan Ocean is committed to building trust with stakeholders through ethical management. In line with its anti-corruption policy, the company strictly prohibits any form of direct or indirect political contributions. Violations of the ethical management guidelines are addressed immediately and in accordance with company regulations, and we have a zero-tolerance policy. In addition, compliance with key ethical requirements, such as the prohibition of bribery, solicitation and insider trading, is assessed as part of employee performance reviews, and the results are directly tied to the compensation system.

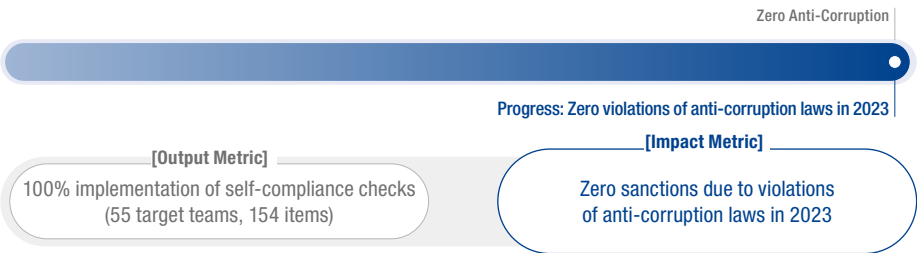
### Impact on External Stakeholders

Pan Ocean actively mitigates compliance risks through robust ethics and compliance management, thereby enhancing its credibility with shareholders and investors and increasing shareholder value. In addition, Pan Ocean is strengthening its reputation by improving the satisfaction of external stakeholders, including customers and suppliers, which has a positive impact on financial performance.

### Goals and Implementation Status

Recognizing the importance of integrity and ethical management for corporate sustainability, Pan Ocean has implemented an AP (Anti-corruption Program). The company conducts regular risk assessments to identify potential corruption risks and develop response strategies, and aims to establish a system that effectively prevents and addresses corruption.

#### Goal: Achieve Zero Ethical Violations (Anti-Corruption)



Issue 4

Collaborative Growth Activities and Supply Chain Sustainability Management

### Impact on Business

Pan Ocean manages supply chain risks and opportunities by integrating sustainability into every stage of supplier selection, operation and evaluation as it strives for mutual growth with its suppliers. The company has established a code of conduct for suppliers that covers safety, human rights, the environment, ethics and management systems, and requires voluntary compliance. Through these signed compliance agreements, we ensure the sustainability of the supply chain.

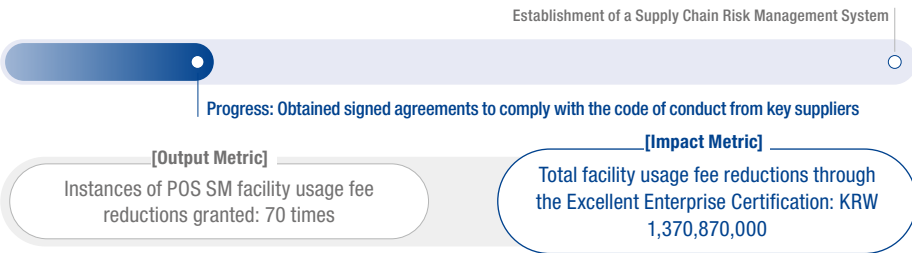
### Impact on External Stakeholders

Pan Ocean collaborates with its numerous suppliers to manage sustainability and mitigate supply chain risks. Through collaborative growth initiatives, Pan Ocean helps to boost the competitiveness of its suppliers, leading to positive outcomes and increased customer satisfaction through efficient supply chain management.

### Goals and Implementation Status

Pan Ocean selects key suppliers based on various factors, including purchase volume and financial criteria, and applies advanced management procedures to these suppliers. In 2023, the company distributed its code of conduct and obtained signed compliance agreements from 51 designated key suppliers. We plan to expand the code of conduct signing process across the entire supply chain to further strengthen sustainability.

#### Goal: Ensure Compliance with the Supply Chain Code of Conduct





## Chapter. 3



# ENVIRONMENTAL

**024**Climate Change Response  
(TCFD Report)**033**Environmental  
Management**040**Environmental Impact  
Reduction

# Climate Change Response

Pan Ocean proactively addresses climate change at the organizational level. We continuously identify and assess risks and opportunities and establish key strategies through climate change governance. Based on this approach, we analyze the impact of climate change on the shipping industry and respond to macro-environmental changes, such as changes in laws and regulations. In addition to risk management, Pan Ocean's climate change initiatives also uncover various opportunities. By proactively developing eco-friendly ship technologies, we are actively responding to evolving market demands.

## Climate Change Governance

### Role of the BOD

Pan Ocean's ESG Committee within the board of directors determines, approves, manages, supervises, evaluates and reviews climate change-related business plans and monitors climate change-related improvement activities. The ESG Committee operates through regular semi-annual meetings and as-needed ad hoc meetings, and reviews the business impacts of climate risks and Pan Ocean's response measures.

### Role of Management

#### CEO

Pan Ocean's CEO, who also serves as the ultimate decision-maker and chairperson of the board, holds overall responsibility for addressing climate change issues. The CEO reviews the environmental management system at least once per year, setting environmental goals, and determining implementation plans. The CEO also oversees the overall climate change response status by managing the budget and evaluating investments necessary for climate change initiatives.

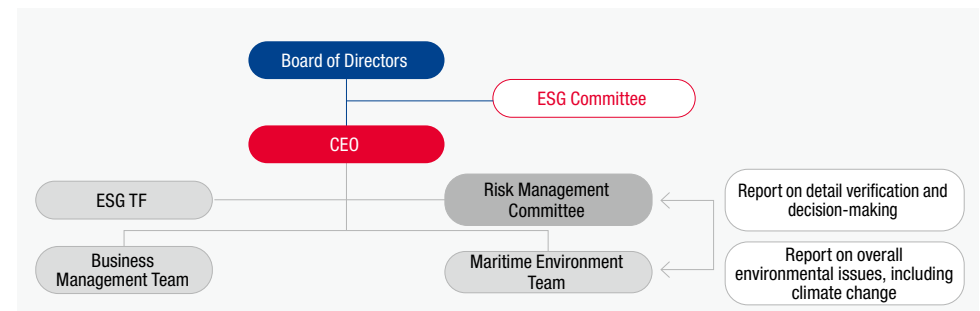
#### Risk Management Committee

Pan Ocean addresses climate change issues following the operational processes of the Risk Management Committee. Under the leadership of the CRO (Chief Risk Officer), the committee meets quarterly to regularly manage issues. In the case of urgent matters, the committee convenes as needed to ensure a prompt and coordinated response to climate change risks.

### Role of the Maritime Environment Team

Pan Ocean manages climate change issues through its dedicated environmental response team, the Maritime Environment Team. This team plans environmental policies and handles regulatory compliance tasks to manage and review environmental risks and opportunities. In addition, they are responsible for managing greenhouse gas inventories for climate change mitigation, introducing new technologies for greenhouse gas and energy savings, and maintaining environmental management systems. They report on climate change-related environmental issues to the Risk Management Committee on a quarterly basis and support management decisions.

#### Climate Change Governance Organizational Chart



#### Climate Change Items Deliberated and Decided on by the ESG Committee

| Date          | Agenda   | Approval Status |
|---------------|--|-----------------|
| June 16, 2023 | Establishment of an environmental vision and strategy      | Approved        |
| June 16, 2023 | 2022 environmental management performance and 2023 targets | Approved        |

#### Compensation System Tied to Climate Change KPIs

| Subjects                              | Incentive   | KPIs   |
|---------------------------------------|---|--|
| CEO                                   | Monetary rewards (Consideration in bonus calculation) | · ESG environmental assessment results   |
| Head of Maritime Technology           | Monetary rewards (Consideration in bonus calculation) | · ESG environmental assessment results   |
| Employees (Maritime Environment Team) | Monetary rewards (Consideration in bonus calculation) | · Compliance with climate change regulations<br>· Implementation of internal training<br>· Greenhouse gas reduction rate |



# Climate Change Response

## Climate Change Strategy

### Climate Change Risk and Opportunity Analysis

Pan Ocean selects climate change-related issues through a materiality assessment, and identifies key risk factors and opportunities for each issue. After establishing response strategies for each issue, we predict the potential financial impact to minimize risk factors and maximize opportunities.

| Type                  | Issue  | Risk Factors  | Opportunity Factors   | Response Strategies  | Potential Financial Impacts   |
|-----------------------|--|---|---|--|---|
| Technology            | <ul style="list-style-type: none"><li>Rapid development of eco-friendly ships and fuels</li></ul>  | <ul style="list-style-type: none"><li>Potential revenue decline for fossil fuel ships due to the expansion of future fuel ships [Medium and Long Term]</li></ul>  | <ul style="list-style-type: none"><li>Strengthen of fleet competitiveness through optimized operational efficiency [Medium and Long Term]</li></ul>   | <ul style="list-style-type: none"><li>Expand investments in LNG transportation and LNG bunkering</li></ul>   | <ul style="list-style-type: none"><li>Anticipated revenue of approximately \$281 million from long-term charter of two LNGBVs</li><li>Expected fuel cost savings due to increased fuel efficiency</li></ul>   |
| Market                | <ul style="list-style-type: none"><li>Increasing demand for eco-friendly fuels</li><li>Increasing stakeholder demand for carbon reductions</li></ul> | <ul style="list-style-type: none"><li>Decrease in fossil fuel transportation due to reduced fossil fuel usage [Medium and Long Term]</li></ul>  | <ul style="list-style-type: none"><li>Increased demand from shippers for high-efficiency ships due to the importance of managing Scope 3 emissions [Medium and Long Term]</li><li>Expansion of business portfolio related to eco-friendly ships and fuels [Medium Term]</li><li>Increased access to capital due to meeting market demands for eco-friendliness through green bond issuance [Short Term]</li></ul> | <ul style="list-style-type: none"><li>Introduce high-efficiency ships and install ESDs</li><li>Invest in LNG ships and research eco-friendly fuel</li><li>Make efforts to achieve top ratings in green bond certifications</li><li>Secure competitiveness through the introduction of eco-friendly shipping services</li></ul> | <ul style="list-style-type: none"><li>Annual energy cost savings of \$57 million due to ESD installation</li><li>Anticipated ship financing support for the transition to eco-friendly ships</li></ul>  |
| Reputation            | <ul style="list-style-type: none"><li>Increased investor and customer concerns and negative feedback</li></ul>                                       | <ul style="list-style-type: none"><li>Potential decrease in external market reputation due to greenhouse gas emissions during ship introduction and disposal [Medium Term]</li></ul>  | <ul style="list-style-type: none"><li>Improved investment conditions when transitioning to eco-friendly, high-efficiency ships [Long Term]</li></ul>  | <ul style="list-style-type: none"><li>Develop skills and acquire expertise to effectively respond to climate change</li><li>Provide stakeholder communication support for eco-friendly activities</li></ul>  | <ul style="list-style-type: none"><li>Revenue loss due to funding constraints if eco-friendly criteria are not met by investors, resulting in reduced customer preference</li></ul>   |
| Legal                 | <ul style="list-style-type: none"><li>Litigation related to climate change issues</li></ul>  | <ul style="list-style-type: none"><li>Business activity restrictions due to climate change-related litigation [Medium Term]</li></ul>   | <ul style="list-style-type: none"><li>Market preemption through proactive responses to climate change regulations [Long Term]</li></ul>   | <ul style="list-style-type: none"><li>Enhance proactive response to regulations and stakeholder engagement activities</li></ul>  | <ul style="list-style-type: none"><li>Increased financial burden due to stakeholder engagement activities</li></ul>   |
| Current Regulations   | <ul style="list-style-type: none"><li>Existing regulations on greenhouse gas emissions from ships (EEDI, EEXI, IMO DCS, EU MRV)</li></ul>            | <ul style="list-style-type: none"><li>Increased capital investment due to the enforcement of the IMO EEDI/EEXI regulations and the Ballast Water Management Convention [Short Term]</li></ul>   | <ul style="list-style-type: none"><li>Cost reduction in regulatory compliance through innovations in greenhouse gas reduction technology [Long Term]</li></ul>  | <ul style="list-style-type: none"><li>Implement EPL and minimize operational delays</li><li>Install BWMSs (ballast water management systems) in all ships</li></ul>  | <ul style="list-style-type: none"><li>Cost of \$3.4 million for EPL work under EEXI regulations and estimated damages of approximately \$5.3 million due to operational delays</li><li>Installation costs of approximately \$5 million for BWMSs by 2024</li></ul>  |
| Future Regulations    | <ul style="list-style-type: none"><li>New regulations on greenhouse gas emissions from ships (CII, EU ETS)</li></ul>                                 | <ul style="list-style-type: none"><li>Cost increase due to carbon taxes and emissions trading under the EU ETS and FuelEU Maritime regulations [Short and Medium Term]</li><li>Rapid depreciation of low-grade ships due to CII regulations, increasing the risk of scrapping [Short Term]</li></ul>                      | <ul style="list-style-type: none"><li>Strengthening of high-efficiency fleet competitiveness in response to low-grade ship regulations (CII) [Medium and Long Term]</li><li>Revenue generation through market trading when reducing carbon emissions [Long Term]</li></ul>  | <ul style="list-style-type: none"><li>Negotiations on EU ETS burdens with long-term, develop EU ETS management systems, and hedging of EUA price volatility</li><li>Introduce high-efficiency ships and install ESDs</li></ul>   | <ul style="list-style-type: none"><li>Emission trading costs under EU ETS (2024: \$2.2 million, 2025: \$3.8 million, 2026 onwards: \$5.5 million)</li><li>Annual energy cost savings of \$57 million due to ESD installation</li><li>Risk of scrapping rather than selling used low-grade ships due to their rapid depreciation</li></ul> |
| Physical (Short Term) | <ul style="list-style-type: none"><li>Extreme weather (heavy rain, typhoons)</li></ul>   | <ul style="list-style-type: none"><li>Increased risk of ship accidents due to the increased frequency of tropical depressions [Short Term]</li></ul>  | <ul style="list-style-type: none"><li>Increased market share through stable product supply compared to competitors [Medium and Long Term]</li></ul>   | <ul style="list-style-type: none"><li>Subscribe to marine and liability insurance</li></ul>  | <ul style="list-style-type: none"><li>Increased costs for ship insurance, ship repair and cargo damage compensation</li></ul>   |
| Physical (Long Term)  | <ul style="list-style-type: none"><li>Global warming causing average temperature and sea level rise</li></ul>  | <ul style="list-style-type: none"><li>Safe operation of crew and cargo due to rising temperatures and sea level caused by global warming [Long Term]</li><li>Impact on ship operating patterns (routes, speed/fuel consumption) due to changes in sea conditions (currents, wave height, sea winds) [Long Term]</li></ul> | <ul style="list-style-type: none"><li>Business expansion opportunities through alternative port searches [Long Term]</li></ul>  | <ul style="list-style-type: none"><li>Develop and operate ship operation and weather monitoring systems</li><li>Search for alternative ports in anticipation of restrictions at main ports</li></ul>   | <ul style="list-style-type: none"><li>System development costs of approximately \$2.8 million</li><li>Increased cooling costs to maintain internal temperatures of ships, containers and buildings</li><li>Increased costs associated with searching for alternative ports</li></ul>  |

# Climate Change Response

## Climate Change Scenario Analysis

### Transition Risk Scenario Analysis

The shipping industry is also participating in the global 2050 carbon neutrality initiative. The IMO (International Maritime Organization) continues to implement greenhouse gas reduction regulations, such as EEXI and CII, to achieve carbon neutrality. In light of these developments, Pan Ocean has analyzed transition risks to proactively comply with these regulations.

### Response to Transition Risks

The EEXI (Energy Efficiency Existing Ship Index) is a regulatory measure that applies to existing international vessels over 400 GT. It calculates the carbon dioxide emissions per ton-mile of cargo transported to ensure that emissions do not exceed established standards. Implemented in 2023, the EEXI targets vessels built before 2013 that were not covered by the EEDI regulations. Pan Ocean has developed its own greenhouse gas calculation system to comply with EEXI requirements. In addition, the company is installing EPL (Engine Power Limitation) devices to increase the energy efficiency of its ships, although this may lead to financial impacts due to the costs of installation and related operational delays.

### Physical Risk Scenario Analysis and Response

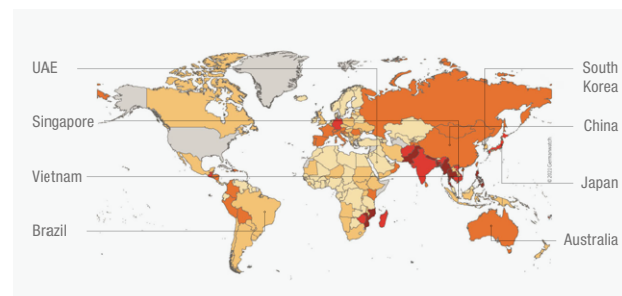
Pan Ocean has conducted an analysis of extreme climate risks associated with global warming based on the RCP 4.5 scenario. This involved assessing the climate risk exposure of Pan Ocean's offices in South Korea, China, Japan, Vietnam, Singapore, Australia, the United Arab Emirates, the USA and Brazil using the 2021 International Climate Risk Index. Given the nature of the shipping industry, we examined the impact on various segments of our operations, including crew members, facilities (ships), revenue, and risks within the production process, assuming a baseline scenario of 1% annual growth. The findings indicated that the financial impact of physical climate change on each segment is manageable, ranging from approximately 0.01~0.03%. Although these results are not considered a significant threat, we plan to conduct continuous assessments to mitigate risks.

### Assessment of Physical Risk Exposure

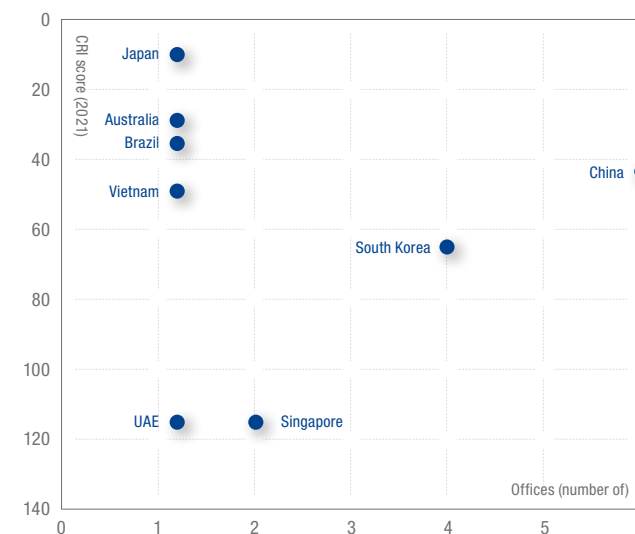
Pan Ocean has assessed the climate risk exposure of its domestic and international business sites using the Global CRI (Climate Risk Index). The CRI, published by the international environmental organization Germanwatch, analyzes and ranks the impacts of severe climate events such as storms, floods and heatwaves. A lower CRI score indicates a higher climate risk. Pan Ocean evaluated the climate risk exposure by linking CRI scores with its business sites in each region.

#### Global Climate Risk Index

| Country     | No. of Offices | CRI SCORE | RANK |
|-------------|----------------|-----------|------|
| Japan       | 1              | 14.50     | 4    |
| Australia   | 1              | 28.00     | 19   |
| Brazil      | 1              | 33.67     | 27   |
| China       | 6              | 42.83     | 32   |
| Vietnam     | 1              | 50.17     | 38   |
| South Korea | 4              | 64.00     | 60   |
| UAE         | 1              | 118.00    | 130  |
| Singapore   | 2              | 118.00    | 130  |



#### Climate Risk Exposure Assessment



\* The lower the score, the higher the climate risk  
 \*\* The darker the color, the higher the climate risk.  
 \*\*\* The more offices there are, the higher the business impact

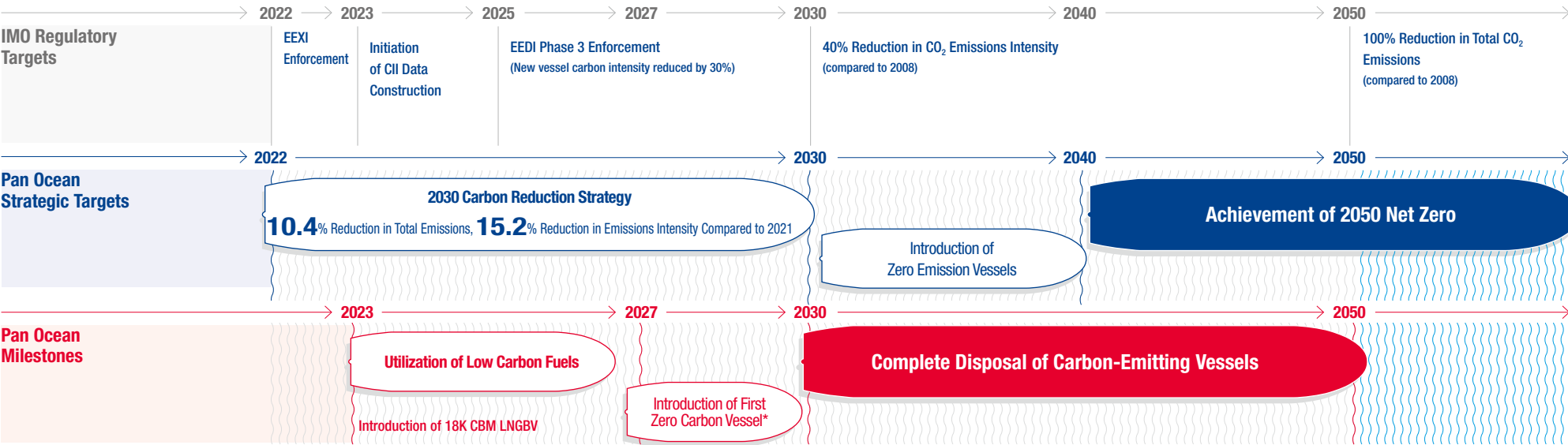


# Climate Change Response

## 2050 Carbon Neutrality

Pan Ocean has positioned itself as a leader in achieving carbon neutrality within the shipping industry, having announced its 2050 Carbon Neutrality initiative in 2022. The company has outlined and is actively implementing its 2030 Carbon Reduction Strategy, which is a detailed plan of action. In 2024, Pan Ocean plans to evaluate joining the SBTi, aligning its efforts with the 1.5°C scenario and adjusting its transition strategy accordingly. By 2030, the company will assess both the effectiveness of its carbon reduction measures and the progress in technology development and infrastructure expansion. These assessments will inform the development of a comprehensive carbon neutrality strategy for all business sectors, leading us to achieve complete carbon neutrality by 2050.

### Road to Decarbonization



\* Zero carbon vessels: Vessels which eliminate carbon emissions completely according to WtW standards, such as methanol/ammonia-powered vessels or vessels with CCUS equipment.

Environmental Targets

Decarbonizing Pan Ocean by 2050

We aim for net zero by 2050 as a key environmental target, and have integrated this commitment within our ESG (environmental, social, and governance) management framework.

Commitments

Leading the Decarbonization of the Bulk Shipping Industry

By leading the charge in decarbonization, we are setting the course for a sustainable future in the industry. We have implemented comprehensive decarbonization policies and are vigorously applying them. Our aim is to progress together with our customers and stakeholders, ensuring they benefit from these initiatives as well.

Strategic Targets

By 2030\_ Implement the 2030 Carbon Reduction Strategy

· Reduce total emissions by 10.4% and emissions intensity by 15.2%, using 2021 as the base year.  
· Pursue external validation from the SBTi (Science Based Targets initiative) to align with the 1.5°C target.

By 2050\_Emission Reduction Targets

· Achieve net zero emissions across all business areas.  
· Provide all customers and stakeholders with comprehensive net zero solutions.

# Climate Change Response

## 2030 Carbon Reduction Strategy

Pan Ocean is actively implementing practical carbon reduction initiatives across Scope 1, 2, and 3. The company also plans to explore further and execute additional reduction activities in the future.

| Scope 1 Qualitative Objective  | Details   |
|--|---|
| Respond to Shipping Regulations  | <div><div>· IMO EEXI Regulation: Complete EPL (Engine Power Limitation) implementation for all regulated vessels (40 ships)</div><div>· IMO CII Regulation: Introduce high-efficiency vessels, optimize operation patterns, etc.</div><div>· Market-based Regulations such as EU ETS and Fuel EU Maritime: Trial and evaluate introducing low-carbon biofuels produced from biomass and consider transitioning to zero-carbon vessels</div></div> |
| Optimize operation patterns for efficiency   | <div><div>· Implement measures for internal combustion engines such as vessel speed reduction and cruising to maximize emission reduction effectiveness</div><div>· Develop a route monitoring system that uses data for long-term efficiency in operation patterns in progress</div></div>   |
| Initiate high-efficiency vessel replacement and ESD equipment introduction (2022-2026) | <div><div>· Dispose of existing low-efficiency vessels (26 ships)</div><div>· Order new vessels with eco specifications for hull design, PBCFs (propeller boss cap fins), etc. (24 ships)</div><div>· Select effective ESD equipment such as RTS, ALS for existing vessels</div></div>  |
| Transition to Zero-Carbon Vessels (2027-2030)  | <div><div>· Dispose of existing carbon-emitting vessels (10 ships)</div><div>· Cease orders for carbon-emitting vessels</div><div>· Introduce zero-carbon vessels (6 ships)</div></div>   |
| Scope 2 Qualitative Objective  | Details   |
| Explore Opportunities in the Korean RE100  | <div><div>· Actively evaluate the possibility of joining a campaign that aims to supply all internal electricity needs from renewable sources</div><div>· Review various approaches for implementation, including the acquisition of RECs (Renewable Energy Certificates) or the consideration of third-party PPAs (Power Purchase Agreements)</div></div>  |
| Scope 3 Qualitative Objective  | Details   |
| Reduce Capital Goods Emissions in Shipping   | <div><div>· Collaborate continuously with shipyards to increase the adoption rate of eco-friendly products during ship construction to reduce carbon emissions</div><div>· Negotiate with manufacturers and management companies to reduce carbon emissions during the manufacturing and transportation processes of ship components</div></div>  |
| Reduce the Fuel Consumption of Chartered Vessels                                       | <div><div>· Make efforts to reduce carbon emissions during the chartering process by selectively chartering high-efficiency vessels</div></div>   |
| Reduce Waste   | <div><div>· Increase recycling rates and minimize waste during the disposal of general ship waste and sludge</div><div>· Continue company-wide campaigns to reduce the use of disposable products by distributing and encouraging the use of personal tumblers (2023 onwards)</div></div>   |



# Climate Change Response

## Activities to Improve Product Efficiency

### EnMS (Energy Management System)

Pan Ocean is enhancing energy-saving efforts for its ships by increasing awareness of energy-related issues. To support this, the company has implemented and is operating an EnMS (Energy Management System) based on the PDCA (plan-do-check-act) cycle. In addition, to continuously reinforce energy responsibility, energy policies have been posted across all vessels.

### ECO Steaming

Pan Ocean optimizes fuel efficiency by maintaining optimal routes and operating at economic speeds (eco steaming) during cargo transportation. To guarantee the most efficient economic speeds for our vessels, we have installed real-time navigation monitoring systems.

### Management of the Vessel Energy Efficiency Index (CII)

In order to manage both the inherent and operational energy efficiency of ships, we have developed a system capable of analyzing and compiling the CII (Carbon Intensity Indicator) for each vessel. This system enables us to simulate expected CII values and rating changes for all Pan Ocean vessels up to 2030. Using this data, we intend to respond flexibly and promptly to the IMO (International Maritime Organization) CII regulations, which took effect in 2023.

### Management of the Energy Efficiency Design Index (EEDI/EECI)

Pan Ocean adheres to the IMO (International Maritime Organization) regulations regarding the EEDI (Energy Efficiency Design Index) for new ships. The company measures the energy efficiency index of vessels constructed after 2013 and documents these indices in each ship's SEEMP (Ship Energy Efficiency Management Plan). In anticipation of the EECI (Energy Efficiency Existing Ship Index) regulations, which took effect in 2023, Pan Ocean developed an in-house system for calculating the EECI for each vessel and aggregating the results. The company commenced a phased implementation of EPL (Engine Power Limitation) procedures in 2023 based on the data presented. This initiative is designed to enhance the energy efficiency of Pan Ocean's existing fleet.

### Use of Fuel Additives

Pan Ocean enhances combustion efficiency and reduces fuel consumption by incorporating fuel additives into the fuel oil utilized on its vessels. These additives help disperse sludge, act as combustion catalysts, prevent filter blockages by disrupting the aggregation of asphaltene components, and reduce sludge formation. This process not only decreases the amount of sludge but also enhances combustion efficiency with finely dispersed fuel oil. Since confirming approximately 3% fuel savings in 2012, we have continued to distribute these additives and pursue additional efficiency improvements.

### Hull Resistance Reduction

To reduce hull frictional resistance, the largest obstacle to vessel operational efficiency, we apply antifouling paints to minimize the impact of hull fouling. We also regularly conduct hull inspection and performance analysis to continuously monitor vessel conditions.



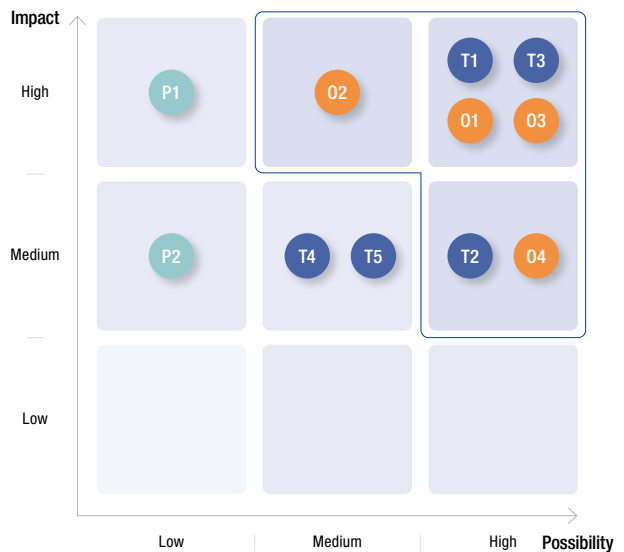
# Climate Change Response

## Climate Change Risk Management

### Climate Change Risk Management Process

To assess and manage the potential financial and strategic impacts of climate change on Pan Ocean, the company has instituted a climate risk response system led by the Maritime Environment Team. The team manages legal risks associated with climate change and conducts institutional-level risk responses through environmental policy planning. They are also responsible for tasks such as managing the greenhouse gas inventory and implementing energy-saving technologies. Furthermore, they facilitate assessments of the significance of climate change impacts to ensure that climate change risk management procedures are implemented throughout the entire organization.

Climate Change Materiality Assessment Matrix



[Possibility X Impact] => Identification of Key Risks/Opportunities

### Materiality Assessment of Climate Change Risk and Opportunity Factors

Pan Ocean conducts biannual significance assessments to measure the likelihood and impact of climate change-related risks and opportunities. The company systematically tracks regulatory, technological, legal, market, reputational and environmental changes and evaluates their potential impacts and likelihood using a severity matrix. Risks and opportunities assessed as 'high' in significance are considered to have a significant impact. The likelihood rating is based on the timing of regulatory enforcement and the level of discussion in the market concerning major issues. The impact rating is determined by the financial implications of each issue and the frequency of reports to the CEO. Issues identified as having a significant impact are managed according to their position in the value chain (operated facility, upstream, downstream) and temporal criteria.

Significant Climate Change Risks/Opportunities

| Risk/ Opportunity | Category            | Issue  | NO | Value Chain                  | Time Frame  |
|-------------------|---------------------|--|----|------------------------------|-------------|
| Transition Risk   | New Regulation      | IMO EEXI Regulations   | T1 | Directly Operated Facilities | Short-term  |
|                   | New Regulation      | IMO CII Rating Regulations   | T2 | Directly Operated Facilities | Short-term  |
|                   | New Regulation      | EU ETS, FuelEU Maritime  | T3 | Directly Operated Facilities | Short-term  |
|                   | Reputation          | Greenhouse gas emissions from ship introduction                              | T4 | Upstream                     | Medium-term |
|                   | Reputation          | Greenhouse gas emissions after ship disposal                                 | T5 | Downstream                   | Medium-term |
| Physical Risk     | Acute               | Rising temperatures and sea levels caused by global warming                  | P1 | Directly Operated Facilities | Short-term  |
|                   | Chronic             | Changes in maritime conditions (currents, waves, etc.) due to global warming | P2 | Directly Operated Facilities | Long-term   |
| Opportunity       | Energy Source       | IMO CII Rating Regulations   | O1 | Directly Operated Facilities | Short-term  |
|                   | Market              | IMO Greenhouse Gas Reduction Strategy  | O2 | Directly Operated Facilities | Medium-term |
|                   | Market              | Significance of managing environmental and climate change issues             | O3 | Directly Operated Facilities | Short-term  |
|                   | Resource Efficiency | Necessity for introducing eco-friendly and high-efficiency ships             | O4 | Directly Operated Facilities | Short-term  |

\* Time Frame : Short-term 0-2 years, Medium-term 3-5 years, Long-term 6+ years



# Climate Change Response

## Climate Change Indicators and Goals

### Detailed 2030 Carbon Reduction Goals

Through its 2030 Carbon Reduction Strategy, Pan Ocean is actively implementing achievable carbon reduction measures across Scopes 1, 2, and 3, and is systematically managing these efforts by setting related goals. Quantitative targets for total emissions have been established only for Scope 1, with specific reduction pathways for Scopes 2 and 3 to be developed in the future. The quantitative target for unit emissions, which represents the amount of greenhouse gases emitted per ton of cargo transported over one mile, is also set only for Scope 1.

#### 2030 Carbon Reduction Goals

| Total Emissions     | Unit                       | 2021 Result<br>(base year) | 2030 Target    | Target Reduction | Target Reduction Rate |
|---------------------|----------------------------|----------------------------|----------------|------------------|-----------------------|
| Scope 1*            | CO <sub>2</sub> e          | 2,745,000 tons             | 2,458,000 tons | 286,000 tons     | 10.4%                 |
| Emissions Intensity | gCO <sub>2</sub> /ton-mile | 6.59                       | 5.59           | 1.00             | 15.2%                 |

\* For Scope 1 targets, emissions from incineration of waste by incinerators and fuel consumption of company vehicles are currently omitted and will be added in the future

| Emission Reduction Measures   | Total Emissions |                | Emissions Intensity |                |
|---|-----------------|----------------|---------------------|----------------|
|   | Reduction       | Reduction Rate | Reduction           | Reduction Rate |
| Optimization of Operating Patterns  | 216,000 tons    | 10.5%          | 0.62                | 9.6%           |
| Replacement with High-Efficiency Fleet and Introduction of ESD Equipment* | (93,000 tons)   | (18.9%)        | 1.26                | 16.7%          |
| Transition to Zero-Carbon Ships**   | 163,000 tons    | 85.5%          | 3.51                | 100%           |

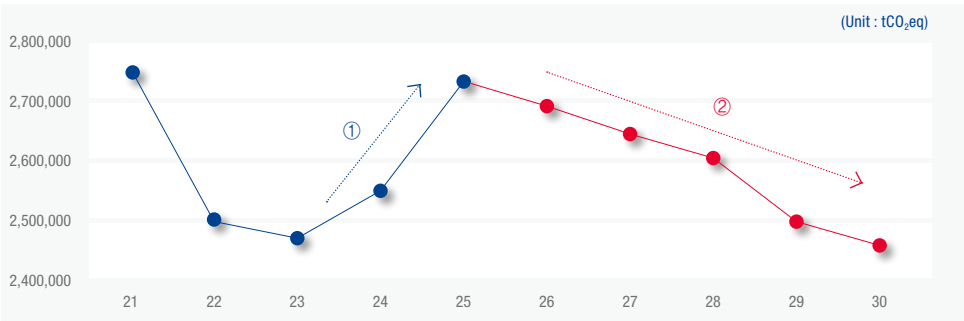
\* Total emissions may increase due to the larger size of the replaced vessels, but emissions intensity is expected to decrease

\*\* Plan to introduce a total of six vessels by 2030, including methanol/ammonia-powered ships or ships equipped with CCUS

### 2030 Annual Expected Carbon Reduction Pathway

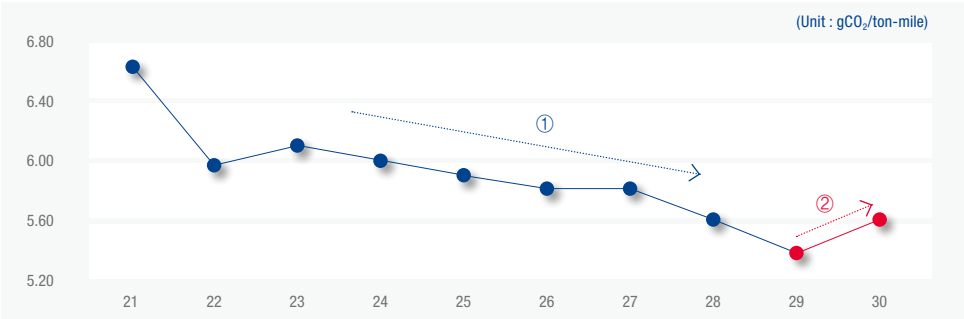
#### Total Emissions Trend

- ① Temporary increase due to fleet expansion with large vessels, including seven 174K CBM LNGCs
- ② Continuous reduction through sale of low-efficiency vessels and acquisition of zero-carbon ships



#### Emissions Intensity Trend

- ① Continuous mitigation from 2021 through optimization of operating patterns, replacement with high-efficiency fleets, and introduction of ESD equipment
- ② Temporary increase in 2030 due to sale of small carbon-emitting vessels such as chemical tankers



# Climate Change Response

## GHG Emissions Management

| Category   | Unit                                      | 2020      | 2021      | 2022      | 2023      |
|--|---|-----------|-----------|-----------|-----------|
| <b>Scope 1*<br/>Mobile Combustion<br/>(Ships + Vehicles)</b> | tCO <sub>2</sub> eq                       | 2,382,970 | 2,757,404 | 2,669,080 | 2,678,713 |
| Vessels**  | tCO <sub>2</sub> eq                       | 2,382,921 | 2,757,356 | 2,669,026 | 2,678,663 |
| Vehicles   | tCO <sub>2</sub> eq                       | 49        | 48        | 54        | 50        |
| <b>Scope 2***<br/>(Power Purchased)</b>                      | tCO <sub>2</sub> eq                       | 569       | 539       | 483       | 580       |
| <b>Scope 1+2</b>   | tCO <sub>2</sub> eq                       | 2,383,539 | 2,884,436 | 3,738,975 | 2,679,293 |
| <b>Scope 3 Subtotal</b>                                      | tCO <sub>2</sub> eq                       | 1,453,048 | 2,884,436 | 3,738,975 | 4,511,253 |
| Purchased goods and services                                 | tCO <sub>2</sub> eq                       | -         | 22,191    | 9,532     | 2,399     |
| Upstream leased assets                                       | tCO <sub>2</sub> eq                       | 1,453,048 | 2,232,155 | 2,219,848 | 1,977,601 |
| Upstream distribution  | tCO <sub>2</sub> eq                       | -         | 629,965   | 1,509,302 | 2,531,001 |
| Business travel  | tCO <sub>2</sub> eq                       | -         | 42        | 188       | 140       |
| Employee commuting   | tCO <sub>2</sub> eq                       | -         | 83        | 105       | 112       |
| <b>Sales</b>   | KRW 100 million                           | 21,029    | 40,692    | 57,004    | 38,115    |
| <b>GHG emissions intensity****</b>                           | tCO <sub>2</sub> eq/<br>(KRW 100 million) | 113.346   | 67.776    | 46.831    | 70.295    |

(Scope 1, 2, 3 estimates include : CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O)

\* Scope 1: Pan Ocean's self-owned fleet, corporate cars

\*\* Total fuel consumption and incinerator usage in vessels. In the case of incinerator usage, the data from 2019-2020 are excluded as aggregation and verification began in 2021

\*\*\* Scope 2: Power consumption by Pan Ocean's domestic operations

\*\*\*\* (Scope 1+2 emissions) / Sales based on Pan Ocean's separate financial statements

## Energy Consumption Management

| Category   | Unit                                    | 2020    | 2021    | 2022    | 2023    |
|--|---|---------|---------|---------|---------|
| <b>Owned fleet fuel consumption (Scope 1)</b>        | TOE                                     | 758,189 | 884,038 | 848,531 | 857,571 |
| HFO (B-C oil)  | TOE                                     | 302,587 | 388,916 | 390,570 | 401,113 |
| LFO (B-C oil)  | TOE                                     | 412,382 | 406,961 | 401,750 | 388,919 |
| DO (B-A oil)   | TOE                                     | 43,220  | 54,518  | 53,870  | 51,425  |
| LNG  | TOE                                     | -       | 33,643  | 2,341   | 16,114  |
| <b>Corporate vehicles fuel consumption (Scope 1)</b> | TOE                                     | 17      | 17      | 19      | 17      |
| Gasoline   | TOE                                     | 16      | 16      | 18      | 15      |
| Diesel   | TOE                                     | 1       | 1       | 1       | 2       |
| <b>Electricity (Scope 2)</b>                         | TOE                                     | 305     | 293     | 240     | 289     |
| <b>Chartered fleet fuel consumption (Scope 3)</b>    | TOE                                     | 463,336 | 711,485 | 707,854 | 630,910 |
| HFO (B-C oil)  | TOE                                     | 15,176  | 42,680  | 81,489  | 67,423  |
| LFO (B-C oil)  | TOE                                     | 423,059 | 622,398 | 549,357 | 505,436 |
| DO (B-A oil)   | TOE                                     | 25,101  | 46,407  | 77,008  | 58,051  |
| <b>Total energy consumption* (Scope 1+2)</b>         | TOE                                     | 758,511 | 884,348 | 848,790 | 857,877 |
| <b>Sales</b>   | KRW 100 million                         | 21,029  | 40,692  | 57,004  | 38,115  |
| <b>Energy intensity (per unit of sales)**</b>        | tCO <sub>2</sub> eq/<br>KRW 100 million | 36.070  | 21.733  | 14.890  | 22.508  |

\* Includes energy consumption by vessels and domestic operations; Scope 3 excluded from total energy consumption and intensity estimation

\*\* (Scope 1+2 energy consumption) / Sales based on Pan Ocean's separate financial statements



# Environmental Management

Pan Ocean is dedicated to promoting eco-friendly management practices with the goal of reducing greenhouse gas emissions to protect the marine environment, conserve biodiversity and prevent air pollution. In addition, we proactively address environmental issues through communication with stakeholders as we strive to protect the natural environment while pursuing sustainable growth.

## Environmental Management System

### Environmental Management Strategy

To provide environmentally responsible shipping services, Pan Ocean sets targets for climate change mitigation, marine environment protection, biodiversity conservation and air pollution prevention. Each year, we conduct environmental risk assessments to establish environmental management goals and detailed action plans.

### Environmental Management Policy

Since the introduction of the Pan Ocean Environmental Management Policy in 2012, the company has consistently enhanced its environmental management framework. To become an eco-friendly company, we set specific annual goals and plans under the guidance of the ESG Committee that align with our environmental management policy. These efforts are designed to create a sustainable environment for future generations and reinforce our commitment to eco-friendly practices. Pan Ocean maintains a comprehensive environmental management policy and adheres to the following principles to ensure its effective implementation.

#### Pan Ocean Environmental Management Policy

1. We are committed to providing sustainable maritime services.

2. We proactively pursue carbon neutrality to lead the industry towards a more sustainable future.

3. We are dedicated to ongoing efforts to protect marine environments and preserve biodiversity.

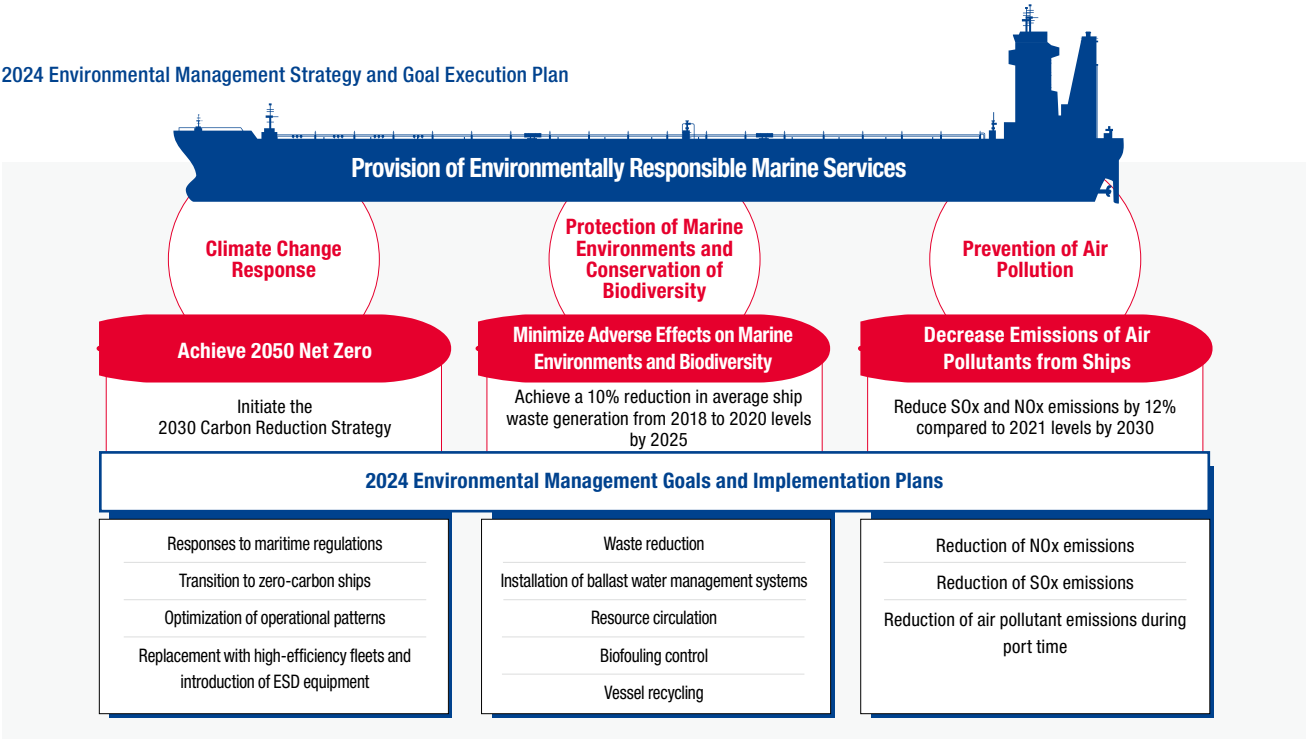
4. We strive to reduce emissions of air pollutants and ensure compliance with all relevant environmental regulations.

5. We maintain open lines of communication with our stakeholders to foster understanding and responsiveness to environmental challenges.

### Participation in Environmental Initiatives

To minimize the environmental impact of its operations, Pan Ocean takes part in various initiatives. Specifically, the company participates in VSR (Vessel Speed Reduction) programs at major domestic ports to reduce greenhouse gas and fine dust emissions from ships. In addition, Pan Ocean is involved in the CDP (Carbon Disclosure Project), which transparently shares strategies and performances related to climate change mitigation across the industry.

#### 2024 Environmental Management Strategy and Goal Execution Plan



# Environmental Management

## Environmental Management System

Pan Ocean is dedicated to providing environmentally responsible transportation solutions that are aligned with the highest standards of safety and vessel operation. In order to promote a more systematic approach to environmental management, we obtained ISO 14001 certification in 2010 and have consistently maintained it since. POS SM is also ISO 14001 certified. Pan Ocean manages its overall environmental impact in accordance with the PDCA (plan-do-check-action) cycle. The Maritime Environment Team is wholly committed to ensuring comprehensive environmental management through continuous improvement activities. These activities include the establishment of environmental goal plans, the provision of environmental education, the monitoring of environmental performance, the implementation of corrective actions for non-conformities, and the implementation of management reviews.

### Progress on the 2023 Environmental Targets and Implementation Plans

| Category  | KPI   | 2023 Target  | 2023 Result   |
|---|---|--|---|
| Climate Change Response                             | Scope 1 GHG emissions                                       | 2,481,640 tCO <sub>2</sub> e   | 2,678,713 tCO <sub>2</sub> e                                    |
|   | Emissions intensity (Vessel)                                | 6.11 gCO <sub>2</sub> /ton-mile  | 5.94 gCO <sub>2</sub> /ton-mile                                 |
|   | Energy consumption  | 829,641 TOE  | 857,877 TOE   |
|   | CII system enhancement                                      |  | Development completed   |
|   | EU ETS monitoring system development (Economic feasibility) |  | Development completed   |
|   | GHG inventory management system development                 |  | Development completed   |
| Marine Environment Conservation                     | Replacement with 3 eco-friendly vehicles (Hybrid)           |  | Replacement completed   |
|   | Vessel waste oil (Sludge) generation                        | 10.53 m <sup>3</sup> /vessel   | 14.52 m <sup>3</sup> /vessel                                    |
|   | Vessel waste oil (Bilge) generation                         | 181.92 m <sup>3</sup> /vessel  | 139.59 m <sup>3</sup> /vessel                                   |
|   | Reduction in vessel plastic waste                           | 11.82 m <sup>3</sup> /vessel   | 12.60 m <sup>3</sup> /vessel                                    |
|   | Reduction in vessel refrigerant use                         | 66.06 kg/vessel  | 73.96 kg/vessel   |
|   | Reduction in vessel food waste                              | 2.89 m <sup>3</sup> /vessel  | 3.14 m <sup>3</sup> /vessel                                     |
| Biodiversity Conservation                           | Zero marine pollution incidents                             | 0 cases  | 0 cases   |
|   | BWMS installation   | 7 installations  | 9 installations   |
| Air Pollution Prevention                            | HULL cleaning   | 70 implementations   | 95 implementation   |
|   | NOx emissions   | 68,417,927 kg  | 70,867,753 kg   |
|   | SOx emissions   | 8,042,747 kg   | 8,337,383 kg  |
|   | Installation of an NOx reduction device                     | 1 installation   | 1 installation  |
|   | Fuel oil sample tests                                       | Conduct at every bunkering   | In progress   |
| Supplier Management and Compliance with Initiatives | Evaluate suppliers  | Twice<br>Implement internal environmental management score                         | Implementation and evaluation completed                         |
|   | Eco-friendly social contribution activities                 | Eco-Clean Volunteer Corps: 24 times<br>Cleanup at Seoul National Cemetery: 2 times | · 24 implementations completed<br>· 2 implementations completed |

## Smart Environmental Management System

In response to growing demand for ESG assessments and evaluations from external stakeholders, Pan Ocean has implemented an environmental information system to enhance the reliability and efficiency of environmental data collection. The system collects

and stores key data items related to greenhouse gas and energy management, environmental impact reduction and eco-friendly investment details. In line with the strengthening of ESG best practice standards, we plan to further advance this system by developing improvement plans for any identified shortcomings to ensure timely responses to various demands.

## Environmental Risk Assessment

To predict and analyze the impact of Pan Ocean's business activities on the environment and proactively prevent pollution, we conduct an annual environmental risk assessment that includes climate change. Each environmental risk is evaluated for its likelihood and potential consequences, and an environmental impact severity rating is calculated. Identified risks with significant environmental impacts are actively incorporated into the environmental goals for the following year. The environmental objectives and detailed indicators established through the risk assessment are evaluated annually, and improvement areas are identified through internal and external audits and are reflected in the subsequent year's environmental goals.

### 2024 Environmental Objectives and Detailed Action Plan

| Category  | KPI   | 2024 Target   |
|---|---|---|
| Climate Change Response                             | GHG emissions (Scope 1)                       | 2,549,417 tCO <sub>2</sub> e  |
|   | GHG emissions intensity (Vessels)             | 6.01 gCO <sub>2</sub> /ton-mile   |
|   | Energy consumption                            | 866,324 TOE   |
|   | Painting management system for existing fleet | Development completed within the year   |
|   | TES system enhancement & company-wide opening | Development completed within the year   |
|   | Waste oil (Sludge) generation                 | Average 10.30 m <sup>3</sup> /ship  |
| Marine Environment Conservation                     | Waste oil (Bilge) generation                  | Average 178.05 m <sup>3</sup> /ship   |
|   | Plastic waste reduction                       | Average 11.57 m <sup>3</sup> /ship  |
|   | Refrigerant usage reduction                   | Average 64.66 kg/ship   |
|   | Food waste reduction                          | Average 2.83 m <sup>3</sup> /ship   |
|   | Zero marine pollution accidents               | 0 cases   |
| Biodiversity Conservation                           | BWMS installation                             | 14 installations  |
|   | Hull cleaning implementation                  | 80 implementations  |
| Air Pollution Prevention                            | NOx emissions                                 | 68,960,893 kg   |
|   | SOx Emissions                                 | 8,084,450 kg  |
|   | NOx reduction device (SCR, EGR) installation  | 6 installations   |
|   | Implementation of fuel oil sample testing     | Implemented at every bunkering  |
| Supplier Management and Compliance with Initiatives | Supplier evaluation                           | · 1 Supplier Code of Conduct diagnosis<br>· 2 evaluations and code of conduct guidance sessions bi-annually |
|   | Eco-clean Volunteer Group                     | · Volunteer activities 24 times<br>· Cleanup at National Seoul Cemetery 2 times                             |



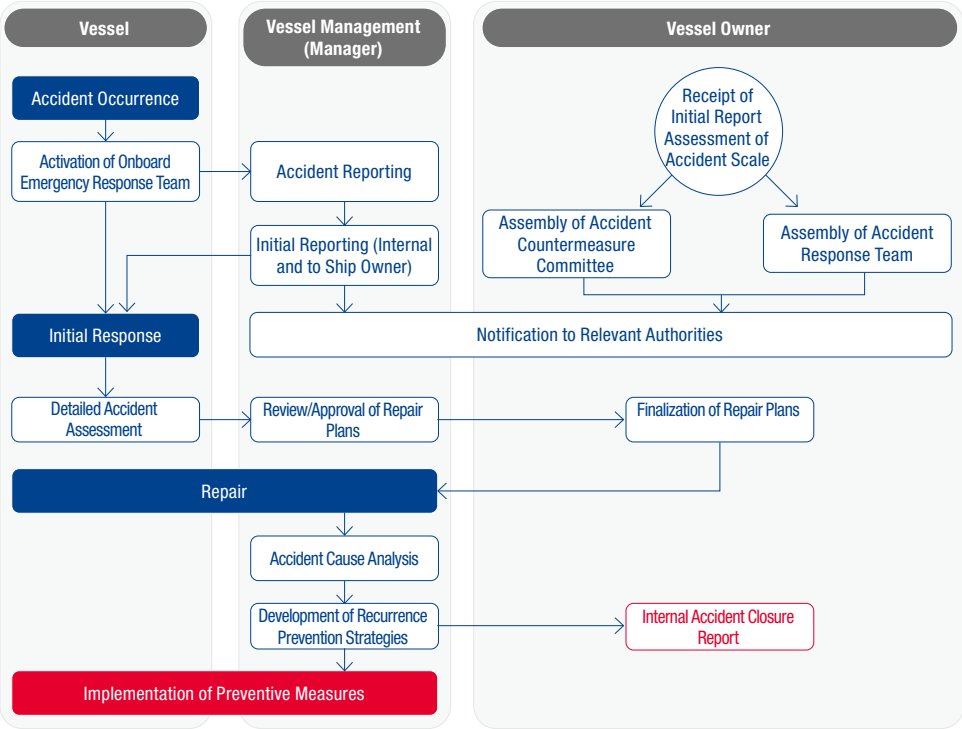
# Environmental Management

## Raising of Environmental Awareness

### Response to Environmental Incidents

When incidents pose a critical risk to marine environmental safety, we classify them as major accidents and respond by forming an emergency response team (Accident Countermeasure Committee). Pan Ocean has established an emergency response process that prioritizes human safety and the prevention of marine environmental pollution. We conduct joint emergency response drills between sea and land at least once a year. These drills involve training both offshore and onshore accident response teams according to simulated maritime accident scenarios and improving the emergency response process. We will continue to hold various emergency response drills based on different maritime accident scenarios to prevent harm to stakeholders and protect the marine environment from pollution.

#### Emergency Response Process for Vessel Accidents



### Environmental Education

Pan Ocean conducts environmental training to internalize environmental awareness among employees, share information on environmental regulations, and prevent environmental accidents. For our offshore employees, we hold regular training sessions on marine pollution prevention and hazardous liquid management. In addition, OJT (on-the-job training) and computer-based training programs are provided both before and during service. For onshore employees, we provide seminars on environmental regulations and offer training opportunities in maritime research fields, such as clean fuels and eco-friendly ships. These initiatives help foster a company-wide consensus on the implementation of environmental management.

#### Status of Environmental Training for Onshore Employees

| Date         | Contents  | Target Audience  | Participants |
|--------------|---|--|--------------|
| Jan. 9, 2023 | Response Plan for VLOC Ship CII   | Dedicated Ship Business Team                                 | 5            |
| Feb. 1, 2023 | Implementation of and Orientation on Speed Reduction Guidelines for the Fleet | Sales/Operations Team Members                                | 11           |
| May 24, 2023 | Development Status of Next-Generation Fuel Engines (Methanol, Ammonia)        | Investment Planning Team, Maritime Administration Department | 11           |
| Aug. 8, 2023 | Seminar on IMO and EU Environmental Regulations                               | All Employees  | 65           |
| Nov. 9, 2023 | EU ETS Orientation  | All Employees  | 49           |

#### Status of Environmental Training for Offshore Employees

| Content                               | Target Audience      | Training Hours per Person | Participants |      |      |
|---------------------------------------|----------------------|---------------------------|--------------|------|------|
|                                       |                      |                           | 2021         | 2022 | 2023 |
| Marine Pollution Prevention Manager   | Engineering officers | 16                        | 27           | 80   | 65   |
| Hazardous Liquid Pollution Prevention | Deck officers        | 16                        | 26           | 22   | 12   |

# Environmental Management

## Environmental Risk Management

### Compliance with Environmental Laws and Regulations

#### Response to IMO DCS, EU MRV Regulations

Pan Ocean has implemented an internal reporting system to ensure compliance with the IMO DCS (Data Collection System) and EU MRV (Monitoring, Reporting and Verification) regulations. This system allows for the annual reporting and certification of fuel oil consumption and greenhouse gas emissions for all vessels.

1) DCS (Data Collection System): A legal requirement to report the fuel oil usage of each vessel.  
2) MRV (Monitoring, Reporting and Verification): Collection of greenhouse gas emissions information for ships calling at EU ports.

#### GHG Inventory Management

Pan Ocean has developed a greenhouse gas inventory system to identify and manage emission sources. This system consolidates real-time greenhouse gas emissions, including those from fuel oil utilized on each vessel. By measuring emissions by individual vessel, vessel type and year, we are continuously exploring ways to reduce total emissions and emissions intensity.

#### Violations of Environmental Regulations

| Category                            | Unit  | 2021 | 2022 | 2023 |
|-------------------------------------|-------|------|------|------|
| No. of Environmental Law Violations | cases | 0    | 0    | 0    |

#### Environmental Laws and Response Strategies

| Regulation                          | Details   | Response Strategy  |
|-------------------------------------|---|--|
| IMO EEXI                            | Energy efficiency regulation based on existing ship specifications            | Completed EPL (Engine Power Limitation) installation for all regulated ships (40 vessels)  |
| IMO CII                             | Calculation and rating of energy efficiency based on existing ship operations | Developed a CII rating monitoring system within the SOM (Sales Operations Management) system   |
| EU ETS                              | Inclusion of the maritime sector in the EU ETS from 2024                      | Negotiated the emissions allowance burden with long-term charterers (\$2.2 million+ in 2024), developed an EU ETS management system, and hedged emissions allowance purchase/price fluctuation risks |
| Ballast Water Management Convention | Obligation to discharge treated ballast water                                 | Install ballast water management systems on all vessels by 2024 (95% installed as of the end of 2023)  |

### Conservation of Biodiversity

#### BWMS Installation

The IMO (International Maritime Organization) has mandated the installation of BWMSs (Ballast Water Management Systems) to prevent ecological disturbances caused by the transfer of microorganisms through ballast water. In a proactive move, Pan Ocean began installing BWMSs on its vessels a year before the regulation took effect. We monitor the sterilization process and results of discharged ballast water in real-time. As of the end of 2023, BWMSs had been installed on a total of 104 vessels, and plans are in place to expand this to all vessels by 2024.

#### Fouling Prevention

To protect marine ecosystems and prevent the transfer of foreign marine species, Pan Ocean ensures that vessel hulls are cleaned, and anti-fouling paint is applied during every docking. While ships are in navigations, we regularly inspect the degree of hull fouling according to set procedures. Moreover, we are making efforts to reduce the negative impact on marine ecosystems caused by alien species by regularly removing hull-attached organisms (hull cleaning) from the ship's surface.

#### Biodiversity Conservation Activities

| Conservation Activities      | 2023 Activities  |
|------------------------------|--|
| BWMS Installation            | · BWMS installation was completed on a total of 104 ships as of the end of December 2023<br>· Plan to complete installation on all vessels by 2024 |
| Hull Cleaning Implementation | In 2023, a total of 95 kg of hull-attached organisms were removed through hull cleaning  |



# Environmental Management

## Expansion of Sustainable Portfolio Diversification

### Increase in Sustainable Investments

#### Investment in Green Equipment

We have identified various eco-friendly facilities through the SEEMP (Ship Energy Efficiency Management Plan) for standard ships and analyzed their effects. Based on these results, the company is actively investing in equipment aimed at reducing hull resistance, improving propulsion efficiency and enhancing engine efficiency. We incorporated hull designs that minimize water resistance and utilized low-friction coatings to achieve fuel efficiency in 15 new vessels. Moreover, we have installed various devices to enhance energy efficiency, such as high-efficiency LED lighting.

Investment Status and Plans for Green Equipment (Unit: KRW million)

| Category                        | 2021   | 2022   | 2023** | 2024 TARGET |
|---------------------------------|--------|--------|--------|-------------|
| BWMS                            | 23,814 | 25,989 | 4,377  | 5,797       |
| SOx Reduction Equipment         | -      | -      | 2,468  | -           |
| AMP                             | 573    | -      | -      | -           |
| Vessel Speed Restriction Device | -      | -      | 1,326  | 214         |
| Others*                         | -      | -      | -      | 769         |
| Total                           | 24,387 | 25,989 | 8,171  | 6,780       |

\* Others: VFD, scrubber damper  
\*\* In 2023, 95% progress in compliance with BWMS regulations and the completion of compliance with SOx Reduction Equipment have led to a decrease in investment amounts.

#### Issuance of Green Bonds

Pan Ocean was the first domestic shipping company to issue a KRW 50 billion green bond. Recognized by Korea Ratings Corporation for directing funds to environmentally friendly projects, Pan Ocean received the highest ESG green bond rating of G1. The funds secured through the bond issuance have been invested in the introduction of LNG bunkering vessels, resulting in a significant reduction of environmental pollutants, and the installation of ballast water treatment systems, contributing to the preservation of biodiversity. Pan Ocean identifies and evaluates investment projects based on the principles of its internal ESG financial management system and plans to continuously pursue ESG projects that will have a positive environmental impact in the future.

#### Introduction of Sustainable Ship Fuel (LNG) Bunkering Vessels

Pan Ocean has introduced two LNG bunkering vessels, New Frontier 1 and New Frontier 2, with capacities of 6,500 CBM and 18,000 CBM, respectively, to expand its environmentally friendly marine fuel transportation business and contribute to the reduction of greenhouse gas emissions. The funds for the acquisition of these vessels were raised through the issuance of green bonds. Comparing the pollutant emissions of the LNG delivery capacity of these vessels to an equivalent amount of HFO (Heavy Fuel Oil) of the same calorific value, Pan Ocean has achieved cost savings of \$1,118,523 in environmental expenses.

Cost Savings in Environmental Expenses for LNG Bunkering Vessels\*

| Category                             | Environmental Pollutant Emissions (tons) |          |         | Environmental Cost Savings (Total, \$) |
|--------------------------------------|--|----------|---------|--|
|                                      | 18K CBM                                  | 6.5K CBM | Total   |  |
| SOx Emissions from LNG Combustion    | 25                                       | 9        | 34      | -                                      |
| SOx Emissions from HFO Combustion    | 46,950                                   | 16,954   | 63,904  | -                                      |
| Annual SOx Emissions Reduction       | 46,925                                   | 16,945   | 63,870  | 582,494                                |
| NOx Emissions from LNG Combustion    | 6,638                                    | 2,397    | 9,035   | -                                      |
| NOx Emissions from HFO Combustion    | 77,341                                   | 27,929   | 105,270 | -                                      |
| Annual NOx Emissions Reduction       | 70,703                                   | 25,532   | 96,235  | 536,029                                |
| Total Emissions Reduction (SOx, NOx) | 117,628                                  | 42,477   | 160,105 | 1,118,523                              |

\* Calculation Basis: TU Delft, Ecocosts Emissions 2022 V1.1

Environmental Management

Purchase of Green Products

Pan Ocean procures and supplies eco-friendly consumables for its vessels. Our current product range includes EAL (Environmentally Acceptable Lubricants) and biodegradable chemicals that meet the standards of the United States Environmental Protection Agency. We intend to gradually expand our range of eco-friendly products in the future.

Eco-Friendly Corporate Rental Vehicles

We have replaced our corporate rental vehicles with eco-friendly alternatives to reduce greenhouse gas emissions. Of our eight corporate rental vehicles, three were replaced with hybrid vehicles, making 37.5% of the vehicles eco-friendly. Pan Ocean will continue to actively enhance energy efficiency at its business sites by expanding the use of eco-friendly vehicles.

Green Product Purchase Record

(Unit: KRW million)

| Category                          | 2021   | 2022   | 2023   |
|-----------------------------------|--------|--------|--------|
| Green Lubricants                  | 264    | 269    | 416    |
| Green Chemicals                   | 36     | 59     | 93     |
| Amount of Green Product Purchases | 300    | 328    | 509    |
| Total Purchases                   | 57,197 | 82,894 | 88,940 |
| % of Green Product Purchases      | 0.5%   | 0.4%   | 0.6%   |

Green Service Revenue

(Unit: KRW million)

| Category              | 2021   | 2022   | 2023   |
|-----------------------|--------|--------|--------|
| Green Service Revenue | 14,305 | 97,106 | 91,375 |

Investment in Green Vessels

Vessel Operation Optimization System

Pan Ocean and POS SM monitor the location, speed, route and fuel consumption of each vessel in real-time through their Fleet Operation e-Center, a dedicated ship operation control center. This facilitates smooth two-way communication between sea and land, which helps to reduce OPEX (operating expenses). Using the data generated, they derive optimal routes, prevent safety accidents and enable immediate initial responses. In 2024, with the aim of expanding autonomous navigation digital solutions, they plan to collaborate with Samsung Heavy Industries to conduct a trial run of the LNG carrier NEW APEX, which is equipped with an AI-based ship management and optimization solution.



Expansion into the LNG Bunkering Business

In light of the increasing uncertainty and volatility of the shipping market and the need to address carbon reduction requirements, Pan Ocean has made a strategic investment in eco-friendly, high-efficiency LNG (liquefied natural gas) bunkering vessels. In July 2023, we introduced the New Frontier 2, a vessel equipped with a dual-fuel engine that uses both MGO (Marine Gas Oil) and LNG. This engine offers enhanced safety and fuel efficiency compared to traditional LNG bunkering vessels, while reducing harmful gas emissions. The New Frontier 2 is a super-large LNG bunkering vessel with the capacity to supply up to approximately 7,500 tons of LNG per trip to large container ships and tankers. Pan Ocean has entered into a long-term contract with Shell for the supply of LNG via STS (ship-to-ship) transfer to LNG-powered vessels in the Gulf of Mexico.

LNG Bunkering Vessel Christening Ceremony





# Environmental Management

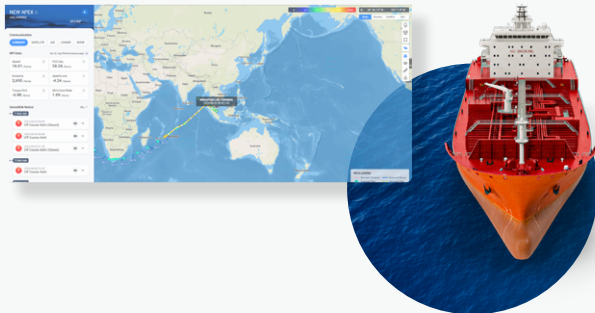


## Research on Autonomous Ships for Eco-Friendly Vessel Operation

### National Program for Autonomous Ship Technology Development

Pan Ocean and POS SM are participating in the Autonomous Ship Technology Development Project overseen by the Ministry of Trade, Industry and Energy and the Ministry of Oceans and Fisheries. In 2020, we signed an MOU with the objective of developing core autonomous ship technologies and establishing a commercialization foundation by 2025. Pan Ocean has committed to providing a demonstration vessel equipped with an autonomous navigation system and supplying operational data. In February 2024, we successfully conducted a trial run with the autonomous navigation system installed on the 1800 TEU container ship POS SINGAPORE. Pan Ocean anticipates that this technology will result in increased fuel efficiency and reduced greenhouse gas emissions. Our objective is to collect and continuously enhance autonomous navigation system data through the official operation of Korea's inaugural autonomous demonstration vessel.

### Energy Control Dashboard



### Demonstration Ship Construction (STEEL CUTTING)



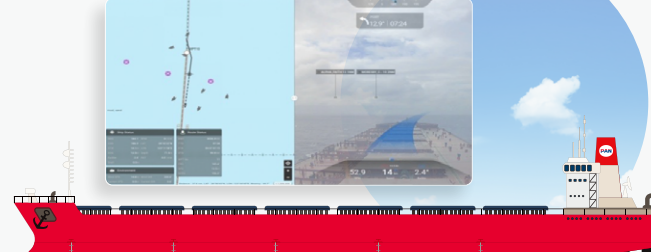
### Joint Research on Autonomous Navigation Systems

In March 2023, Pan Ocean and POS SM initiated a joint research project on autonomous navigation systems with Avikus, HD Hyundai Heavy Industries and the Korean Register. In October 2023, Pan Ocean successfully installed and tested the AI autonomous navigation system HiNas 2.0 on the SEA SHANGHAI, a 325K VLOC. This system autonomously analyzes optimal routes and controls speed. The operational data obtained from this trial has been granted Basic Certification (AiP) by the KR (Korean Register) for the fuel savings evaluation methodology of its autonomous navigation. Multiple trials have demonstrated a reduction in fuel consumption of up to 15% and an anticipated reduction in greenhouse gas emissions of 10%. Pan Ocean is committed to proactively addressing carbon emission regulations through its research into autonomous ships.

### AiP Certification for Fuel Savings Evaluation Methodology



### Operation of an Autonomous Navigation Solution



### Comprehensive Digital Solution Collaboration

In September 2023, Pan Ocean and POS SM signed an MOU with Samsung Heavy Industries for collaboration on the development of a comprehensive digital solution. We decided to equip the 174K CBM LNG carrier New Apex with a digital twin platform for demonstration purposes. This digital solution integrates and optimizes all systems of an operating vessel, enabling real-time data synchronization, AI-driven diagnostics and predictive maintenance. Pan Ocean expects this collaboration on a digital twin solution to reduce OPEX (operating expenses), maximize fuel efficiency and prevent major accidents.

### MOU for Comprehensive Digital Solution Collaboration



# Environmental Impact Reduction

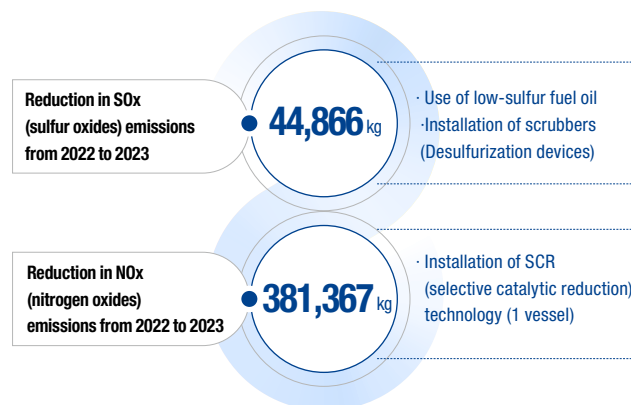
Pan Ocean is committed to minimizing the marine environmental impact of its ship operations by reducing pollutants and waste. We also focus on sustainable shipping through the effective management of ship discharged water and the use of eco-friendly products. We will continue to develop diverse strategies to further mitigate environmental impacts, comply with regulations and lead eco-friendly shipping practices.

## Pollutant Management

### Air Pollutant Management

In accordance with the IMO(International Maritime Organization)'s 2020 SOx (sulfur oxides) regulations, Pan Ocean utilizes LSFO (low-sulfur fuel oil) with a sulfur content of 0.5% or less. Furthermore, some vessels are equipped with scrubbers to ensure compliance with these regulations. In addition, we have committed to reducing NOx (nitrogen oxides) emissions by installing SCR (selective catalytic reduction) systems on new ships. Furthermore, Pan Ocean minimizes unnecessary air pollutant emissions during port stay by equipping vessels with shore power (AMP) systems, which allows them to receive electricity from the shore. To further reduce particulate matter, we participate in the Incheon Port VSR (Vessel Speed Reduction) program. Pan Ocean continues to explore and implement various measures to reduce air pollutant emissions.

#### Reduction in Air Pollutant Emissions (2023)



### Water Resource Management

#### Marine Water Resource Management

Pan Ocean actively participates in international conventions and regulations related to ship discharged water management, such as those established by the IMO. The company conducts real-time monitoring of data on pH, turbidity, PAH and nitrates for wash water discharged from scrubbers, which reduce sulfur oxides in ship exhaust, to ensure compliance with regulations. As for greywater and sewage discharged from ships, we use shipboard sewage treatment systems to sterilize the sewage before discharge or stores and manages it in separate holding tanks.



### Hazardous Chemicals Management

#### Hazardous Chemical Management Process

Pan Ocean manages hazardous chemicals in accordance with the IMDG Code (International Maritime Dangerous Goods Code) and the IBC Code (International Code for the construction and Equipment of ships Carrying Dangerous Chemicals in Bulk). For all hazardous chemicals handled, information such as characteristics, hazards and emergency measures is pre-identified in accordance with the MSDS (Material Safety Data Sheet) requirements of the Industrial Safety and Health Act. All chemicals are thoroughly reviewed to determine whether they fall under shipping restrictions or prohibitions, and are then classified based on their packaging status and quarantined or separated appropriately.

#### Prevention and Management of Hazardous Chemical Accidents

A PPE (Personal Protective Equipment) matrix tailored to the characteristics of hazardous chemicals has been established to ensure that proper safety equipment is worn. Regulations are strictly followed to prevent accidents during the transportation and storage of hazardous chemicals. Daily checks include monitoring cargo temperature, adding stabilizers, checking oxygen concentration inside cargo tanks, and overseeing void spaces. The effectiveness of these hazardous chemical management processes is verified twice a year through internal and external audits.



# Environmental Impact Reduction

## Waste Management

### Waste Management System

To minimize waste generation, Pan Ocean has established a waste management manual that reflects international regulations such as the ISM Code (International Safety Management Code) and MARPOL. Separate manuals have been prepared for general, oily and packaging waste, and the entire process—from waste generation to discharge, transport and treatment—is monitored. Waste disposal companies contracted by Pan Ocean are also required to handle waste in accordance with these manuals.

#### General Waste

For general waste from vessels, the entire waste treatment process—including documentation, collection, separation, storage and disposal—is monitored to ensure proper treatment in compliance with international agreements. We have also established waste disposal targets and review whether these targets are met. To minimize waste discharged to land and water, we encourage the use of onboard incinerators and supply plastic shredders and presses to facilitate waste recycling.

#### Oil Waste

The treatment of oil waste (bilge, oily bilge and sludge) on board is strictly managed. Pan Ocean utilizes an ETS (environment tag system) to track the operation of environmental equipment and the processing of oil waste on its vessels, thereby ensuring adherence to international regulations. In addition, we assess standardized criteria, including environmental standards and relevant port permits, to centrally select oil waste disposal companies for key port calls. This initiative aims to ensure consistent utilization across all vessels.

#### Packaging Material Waste

To reduce packing material waste from goods loaded on board, we encourage businesses to minimize packing materials unless they are necessary to prevent damage. As part of our waste management process, we collaborate with suppliers to ensure that recyclable packing materials are promptly collected or recycled.

### Waste Emissions

(Unit: ton)

| Category                                   | 2021   | 2022   | 2023   |
|--|--------|--------|--------|
| Total generated waste                      | 28,405 | 29,695 | 31,489 |
| General Waste from Vessels (Non-hazardous) | 2,297  | 2,575  | 2,883  |
| Food waste                                 | 348    | 350    | 364    |
| Domestic waste                             | 1,949  | 2,225  | 2,519  |
| Cargo residues                             | -      | -      | -      |
| Others                                     | -      | -      | -      |
| Designated Waste from Vessels (Hazardous)  | 26,108 | 27,118 | 28,604 |
| Waste oil                                  | 23,437 | 25,113 | 26,632 |
| Oily Rags                                  | 922    | 440    | 386    |
| Plastics                                   | 1,306  | 1,452  | 1,462  |
| Ash  | 443    | 113    | 124    |
| Others                                     | -      | -      | -      |
| Office Waste                               | 3.02   | 1.96   | 2.40   |
| Head Office                                | 2.21   | 1.39   | 1.77   |
| Busan Office Sales Team                    | 0.63   | 0.56   | 0.21   |
| Pohang Office                              | 0.05   | -      | 0.42   |
| Dangjin Office                             | 0.13   | -      | -      |
| Gwangyang Office                           | -      | -      | -      |
| Waste Recycling                            | 9,604  | 10,159 | 11,901 |
| General waste (non-hazardous) - Office     | -      | -      | -      |
| Designated waste (hazardous) - Vessel*     | 9,604  | 10,159 | 11,901 |
| % Total Waste Recycled                     | 33.81  | 34.21  | 37.79  |

\* Plastics and sludge from vessels

## Environmental Impact Reduction

### Vessel Recycling

#### Green Recycling Policy

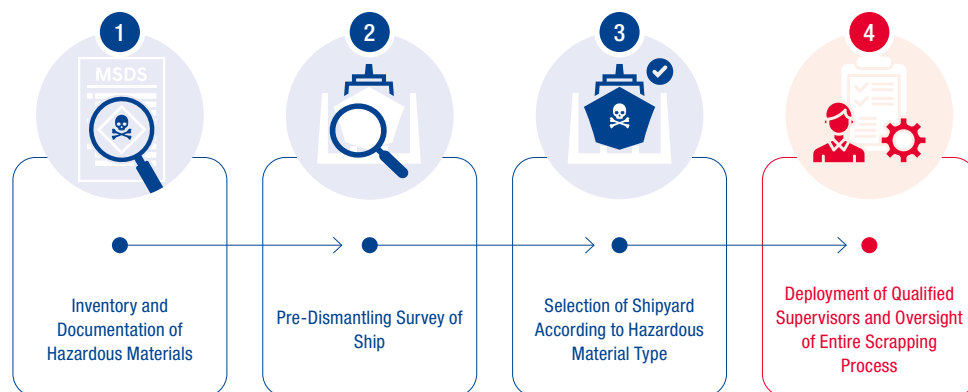
Pan Ocean has established a green recycling policy in accordance with the Ship Recycling Convention,\* which will take effect in 2025, to ensure safe and environmentally sound ship dismantling. By implementing this policy, we aim to minimize land and marine pollution caused by ship recycling (dismantling) and to protect the human rights of workers involved in ship dismantling.

\* Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009

#### Green Recycling Process

Pan Ocean follows systematic ship dismantling procedures to protect the health of workers from hazardous materials on ships destined for recycling and to protect the environment. We conduct three inspections to identify hazardous materials on these vessels and compile an inventory of hazardous materials, including operational waste and stored materials such as fuel oil, lubricants and paint. After the final inspection, we submit a ship recycling plan and select an appropriate shipyard based on each vessel's specific characteristics and inventory.

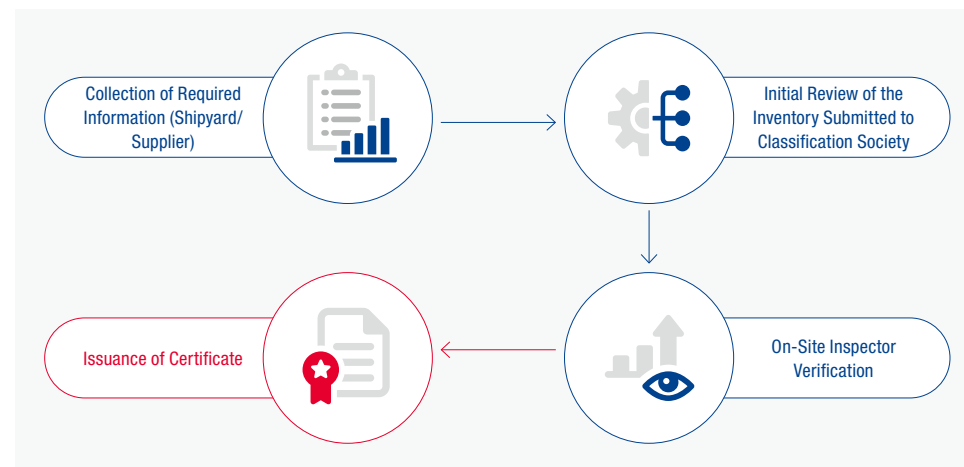
#### Ship Recycling Process



#### Management of Ship Hazardous Materials Inventories

We maintain an inventory of hazardous materials such as asbestos and heavy metals found on each vessel and obtain government certificates, and keep these documents on board. For vessels destined for recycling (dismantling), we compile an additional hazardous materials inventory, which includes operational waste and stored materials such as fuel oil, ballast water and lubricants. Through rigorous management of hazardous material inventories, we strive to prevent safety incidents during ship recycling operations and to prevent the unauthorized disposal of pollutants and hazardous materials.

#### Process for Compiling the Hazardous Materials Inventory



Chapter. 4

# Social

**044** / Safety and Health Management**058** / Human Resources Management**052** / Collaborative Management**066** / Shared Management**054** / Human Rights Management



# Safety and Health Management

Pan Ocean places the utmost importance on the lives and safety of all stakeholders, particularly its employees, who are considered core assets. We drive continuous improvement in safety and health by adhering to principles and standards. Under our safety-first management policy, we have obtained ISO 45001 (occupational health and safety management system) certification and are establishing a robust safety and health management framework in our workplaces. We identify and mitigate hazards and risks to improve the health and working environment for all types of employees. We also set long-term health and safety goals and actively allocate the necessary human and physical resources to achieve our performance targets.

## Safety and Health Governance

### Role of the BOD

Pan Ocean collaborates with POS SM's Safety and Quality Team annually to secure approval for safety and health plans from the board and ESG Committee. The board acts as the highest decision-making body, overseeing the operation of the safety and health system, monitoring progress against objectives, and supervising execution plans and key results. The major safety and health management plan approved by the board in 2024 encompasses performance results for safety and health management activities in 2023, as well as safety and health budgets and objectives for 2024.

### Role of Management

Pan Ocean has appointed its head of safety management as the CSHO (Chief Safety and Health Officer) to establish a decision-making framework for safety and health management. Each year, the goal of maintaining a zero-accident workplace is set as a KPI for the CSHO, supervisors and dedicated teams, ensuring responsible safety and health management.

### Role of the Dedicated Organization

Pan Ocean operates a dedicated safety and health team to support the CSHO's duties. This team is responsible for developing workplace accident prevention plans, drafting and amending safety and health management regulations, and assisting with employee health management. Pan Ocean is committed to ensuring that all employees and contractors can work safely at our sites and return home without incident.

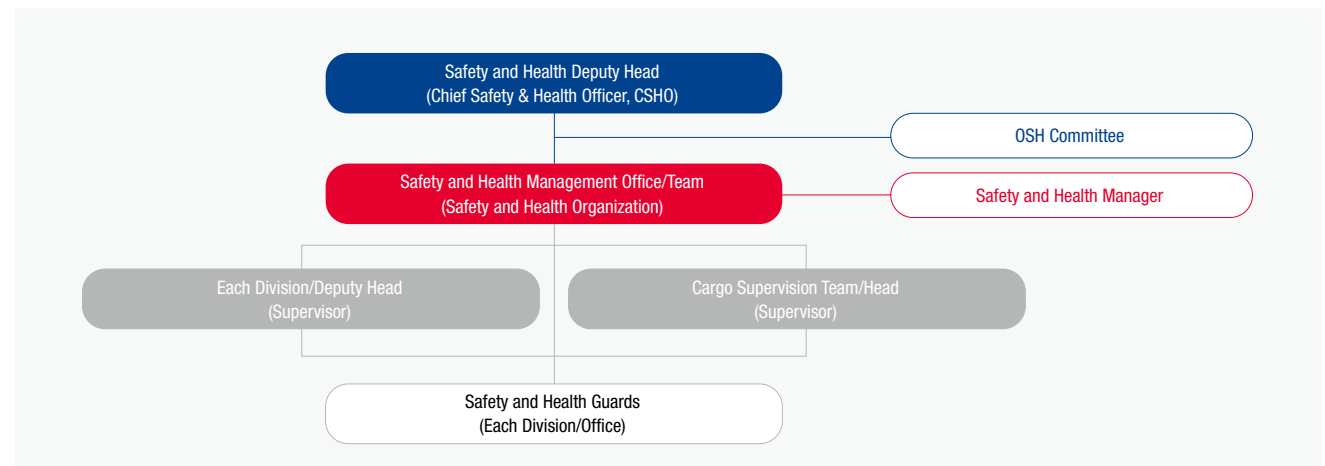
### OSH Committee

The Pan Ocean OSH (Occupational Safety and Health) Committee holds quarterly meetings to oversee safety and health management. Chaired by the CSHO (Chief Safety and Health Officer), the committee includes five employee members and five employer members. The committee's responsibilities include deliberating and making decisions on key safety and health matters, revising safety and health management rules, developing comprehensive safety and health plans, conducting safety and health training for employees, organizing health examinations, investigating serious accidents and implementing recurrence prevention plans. These efforts ensure a strong and effective safety and health framework within the organization.

### Onshore Safety and Quality Meetings

Organized by POS SM's Safety and Quality Team, the onshore safety and quality meetings review and identify issues in onshore safety activities and business procedures. Key agenda items include accident statistics, quarterly safety management system monitoring and amendments to manuals. To enhance communication between onshore and offshore employees, off-duty masters and chief engineers are invited to share their firsthand experiences and promote the exchange of opinions.

### Safety and Health Management Organizational Chart



# Safety and Health Management

## Safety and Health Strategy

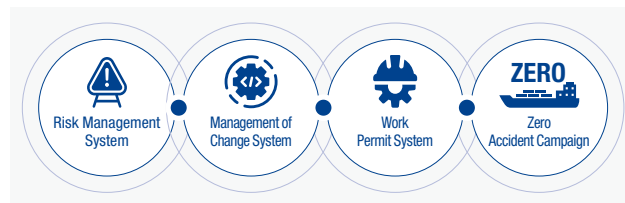
### Onboard Safety and Health Management System

Pan Ocean has developed and distributed a safety and health manual to promote a culture of safety within the onboard working environment. Regular meetings of the Safety and Health Environment Committee are held on board to address related issues. At the headquarters, safety management measures meetings are conducted to discuss onboard safety and health matters and develop measures to prevent the recurrence of accidents and ensure their implementation.

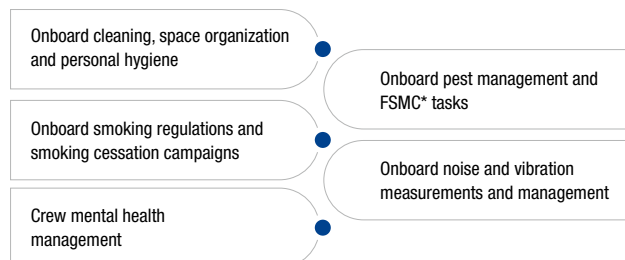
### Stop Work Policy

POS SM maintains a work stoppage policy, which is communicated through safety training for new recruits and quarterly safety sessions during crew embarkation. Monthly discussions on the work stoppage policy are also conducted during onboard SHEQ meetings.

### Onboard Safety Management System



### Onboard Health Management System



\* FSMC: Flighted spongy moth complex

### Establishment of a Safety and Health System

[Safety and Health Policy Link](#)

Pan Ocean achieved ISO 45001 certification in December 2023 as part of its endeavors to develop an advanced safety and health management system aligned with international standards. Our continuous efforts focus on enhancing safety and health by addressing risk factors. We have established foundational policies for maritime safety and crew health and well-being that cover safety and quality, environmental sustainability, health and welfare, social responsibility and cybersecurity. These policies underscore our commitment to prioritizing health and safety and form a comprehensive safety and health management framework. Furthermore, POS SM has established an integrated safety and health system based on adherence to global safety and health management standards and the acquisition of ISO 45001 certification for ship management and safety services.

### ePOS Computer System

POS SM has introduced an ePOS computer system to enable real-time sharing of safety management activities, including risk assessments and near-miss reporting, between onshore and offshore operations. This system ensures concurrent safety management at both the field and company levels, promoting systematic data management through computerization. Key information and guidelines are communicated via the LOC (letter of company), and the follow-up function is used to monitor and ensure compliance with onboard instructions. In addition, the system efficiently handles vessel maintenance history and facilitates requests for onshore support and necessary actions.

### Seafarers Management System

As part of its integrated ship management approach, POS SM employs a seafarers management system to provide efficient support between onshore and onboard operations. This system allows seamless online integration, reducing potential risks associated with physical distance and enabling prompt task management through effective communication. Furthermore, POS SM has developed a comprehensive database for ship equipment and supplies, thereby enhancing information reliability and ensuring smoother operations.



### ISO 45001 Certification: Pan Ocean's Safety Commitment



On December 8, 2023, Pan Ocean obtained the ISO 45001 (occupational health and safety management system) international standard certification. This certification was awarded by the internationally recognized institution KR (Korean Register) in recognition of our efforts to create a safe work environment. These efforts included developing and disseminating safety and health management policies, conducting risk assessments and improvements, operating the Occupational Safety and Health Committee, and fostering a safety and health-oriented organizational culture. Going forward, we will continue to build a robust safety management system, create a safe work environment, and strengthen safety leadership and education to instill a sense of responsibility for safety and health in all employees.

# Safety and Health Management

## Direction of Safety and Health Promotion

### Medium- to Long-Term Safety and Health Management Goals

To become a global leading shipping & logistics company that prioritizes safety and health, we have set our safety and health goal as "ZERO serious occupational accidents." We have also established a safety and health goal management system by devising key initiatives and detailed action plans to attain this objective.

#### 2024 Targets and Medium-Term Goals for Safety and Health

|                                     |   |
|-------------------------------------|---|
| 2024 Target                         | <ul style="list-style-type: none"> <li>Maintain ZERO occurrences of serious accidents.</li> <li>Achieve a 100% resolution rate for safety and health complaints from contracted workers.</li> <li>Maintain a ZERO injury rate for onshore employees.</li> <li>Maintain the previous year's injury rate for offshore employees.</li> </ul>   |
| Medium-Term Safety and Health Goals | <ul style="list-style-type: none"> <li>Achieve ZERO occurrences of serious accidents.</li> <li>Attain a 100% resolution rate for safety and health complaints from contracted workers.</li> <li>Maintain a ZERO injury rate for onshore employees.</li> <li>Reduce the injury rate for offshore employees by 5% annually compared to the average rate from 2017 to 2021.</li> </ul> |

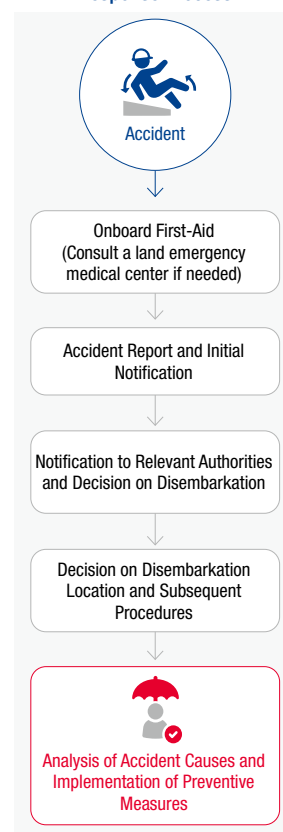
### Safety Regulation Risk and Opportunity Analysis

Pan Ocean conducts annual risk assessments for internal and external issues, as well as compliance evaluations for legal requirements, in accordance with the ISO 45001 requirements. We utilize relevant data as part of our management review materials.

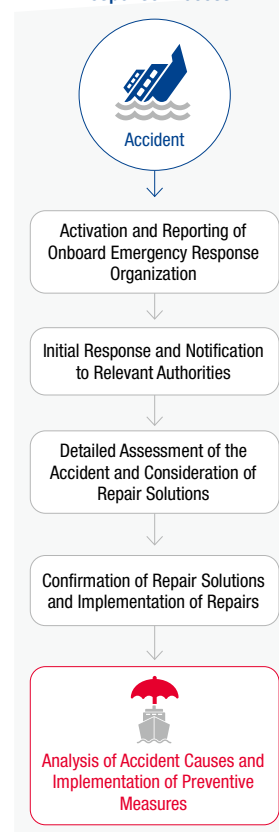
### Expansion of Safety and Health Investment

Pan Ocean has been expanding its investments in occupational health and safety since 2022 to strengthen its safety management system. The company aims to progressively increase the budget allocated for safety and health and utilize it for safety facilities and training expenses.

#### Personnel Accident Emergency Response Process



#### Vessel Accident Emergency Response Process

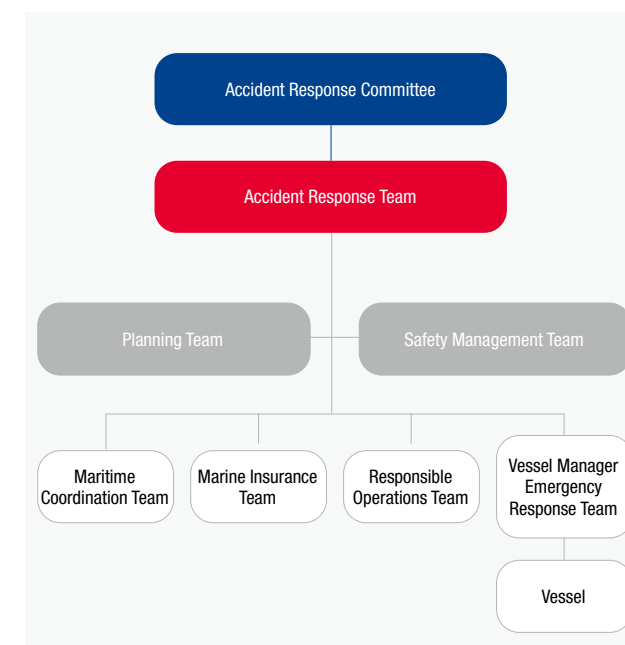


## Emergency Response System

### Emergency Response Structure and Procedure

Pan Ocean has established the Accident Response Committee to act as a control center in the event of a vessel or personnel accident. To ensure a swift response and efficient management of accident records, we maintain a BCP (Business Continuity Plan) manual and a maritime accident response manual. With these manuals, we aim to minimize damage by activating an immediate and effective emergency response in the event of an incident. For medical emergencies and marine casualties, we implement urgent first aid and initial response measures. After resolving the incident, we conduct a detailed post-accident analysis to devise preventive measures to avoid recurrence.

#### Emergency Response Organization





# Safety and Health Management

## Business Continuity Management System (ISO 22301)

At POS SM, we have implemented a business continuity management system to ensure the continuity of operations in the face of unexpected crises, including disasters, emergencies, terrorism and infectious diseases. Our goal is to facilitate the swift recovery of essential functions should there be any risk of business interruption. We have developed mitigation measures in accordance with our business continuity plans that are specifically designed to address significant disruptions affecting both land and maritime operations. In 2023, we established operational targets for both land and maritime activities, and achieved an impeccable performance record. This success was supported by our completion of quarterly joint land and sea drills, as well as annual disaster exercises.



Joint Land and Maritime Training and Annual Disaster Training

## Joint Onshore and Offshore Emergency Response Drills

Under the supervision of Pan Ocean's Safety Management Office, POS SM conducted joint onshore and offshore emergency response drills in February and April of 2023. These joint onshore and offshore emergency response drills were designed to indirectly simulate the emergency response and handling processes of ship and shore accident response teams based on hypothetical maritime accident scenarios, thereby enhancing the emergency response and handling capabilities of both onshore and offshore personnel. We monitored the entire exercise process and comprehensively evaluated all aspects of accident handling, and are considering improvement measures for identified issues. In the future, we plan to actively prepare for emergencies by providing training for various scenarios.

## Infectious Disease Response System

At POS SM, we identify risks in both onshore and offshore environments, then prioritize the most significant ones and establish corresponding business continuity management plans. For example, to address the risk of infectious diseases, categorized as a major onshore disaster, we have developed an infectious disease response system. This system involves analyzing the status, outbreak areas and emerging trends of infectious diseases along with the geographical characteristics of affected regions. It encompasses mitigation measures, specific action plans and response protocols to minimize potential impacts on key processes.

### Overview of Infectious Disease Risk Scenario Analysis

|                                    |   |
|------------------------------------|---|
| Outcome of Infectious Disease Risk | · Rapid transmission of the infectious disease leading to multiple casualties   |
| Impact on Key Processes            | · Personnel management: Operational disruptions possible due to shortages of essential staff and insufficient manpower<br>· Resource management: Potential for closure of office facilities to prevent the spread of the infectious disease |
| RTO* (Recovery Time Objective)     | · 2 days  |

\* RTO(Recovery Time Objective) : The target time for recovering the information system after a disaster occurs

### Mitigation Measures for Infectious Disease Risk

|                     |                        |  |
|---------------------|------------------------|--|
| Mitigation Measures | Prevention/Preparation | <ul style="list-style-type: none"> <li>Enhancing work capacity and developing backup personnel through rotating shifts</li> <li>Identifying critical job positions and conducting cross-training for designated substitutes and backups</li> <li>Identifying activities within the organization that can be outsourced or relocated</li> <li>Implementing IT infrastructure to enable remote work options</li> <li>Leasing business center offices and IT equipment</li> </ul> |
|                     | Response/Recovery      | <ul style="list-style-type: none"> <li>Prioritizing essential tasks for resource reallocation from support functions</li> <li>Assigning frontline employees such as retirees or internal auditors to handle routine tasks</li> </ul>   |
|                     | Responsible Department | · POS SM Business Management Team Control  |



# Safety and Health Management

## Safety and Health Program

Pan Ocean supports health management and psychological well-being programs for onshore and offshore employees to promote health and prevent occupational diseases based on job tasks and timing. We conduct ongoing activities to identify and mitigate risks with the aim of preventing occupational diseases.

### Safety and Health Program for Onshore and Offshore Employees

|                   |  |   |
|-------------------|--|---|
| Onshore Employees | Health Service Room                                  | <ul style="list-style-type: none"> <li>First aid, self-testing kits, health consultations</li> <li>High-risk group management for those with symptoms and those who need attention</li> </ul>     |
|                   | Health Examinations                                  | <ul style="list-style-type: none"> <li>Annual health examinations with results retained for five years</li> </ul>   |
|                   | Brain/Cardiovascular Disease Prevention              | <ul style="list-style-type: none"> <li>Cardiovascular disease risk assessments and provision of smoking cessation and walk-on programs in collaboration with health centers</li> </ul>            |
|                   | CPR & AED Operations and Training                    | <ul style="list-style-type: none"> <li>Monthly self-inspections with results reported to the public health center and provision of emergency training to employees</li> </ul>                     |
|                   | Safety Management Notice Board                       | <ul style="list-style-type: none"> <li>Employees of affiliated companies</li> </ul>   |
|                   | Building Fire and Disaster Response                  | <ul style="list-style-type: none"> <li>Incorporation of building management safety and health policies in safety and health plans and disaster prevention and damage alleviation plans</li> </ul> |
|                   | Stretching Posters and Safety and Health Signs       | <ul style="list-style-type: none"> <li>Encouragement of office stretching for daily health management</li> <li>Signs indicating hazardous areas and substances</li> </ul>                         |
|                   | Security Cameras in Offices and Emergency Staircases | <ul style="list-style-type: none"> <li>Installation of CCTVs in emergency stairwells identified as blind spots for disasters</li> </ul>   |
|                   | Outsourcing and Operation of Counseling Services     | <ul style="list-style-type: none"> <li>Work stress prevention for the mental health of employees</li> </ul>   |
|                   | Mental Health Care                                   | <ul style="list-style-type: none"> <li>Work stress assessments and operation of the Home Fit Program</li> </ul>   |
|                   | Accident Prevention Incentive System                 | <ul style="list-style-type: none"> <li>Rewards for setting and achieving safety accident prevention goals</li> </ul>  |
|                   | Employee Feedback System                             | <ul style="list-style-type: none"> <li>Suppliers: Customer service on the website</li> <li>Employees: Safety management notice board on the intranet</li> </ul>                                   |

|                    |  |   |
|--------------------|--|---|
| Offshore Employees | Maritime Emergency Medical Center  | <ul style="list-style-type: none"> <li>Referral to specialized maritime 119 medical center and remote consultations</li> </ul>  |
|                    | Health Examinations  | <ul style="list-style-type: none"> <li>Annual health examinations</li> </ul>  |
|                    | Counseling Services for the Psychological Well-being of Offshore Employees | <ul style="list-style-type: none"> <li>Counseling for improving onboard organizational culture and mental health</li> </ul>   |
|                    | Resilience Activities  | <ul style="list-style-type: none"> <li>Facilitation of communication and empathy through group activities among crew members for stress management, etc.</li> </ul>         |
|                    | Fitness Facilities in Vessels  | <ul style="list-style-type: none"> <li>Promotion of physical fitness and well-being among offshore employees</li> </ul>   |
|                    | Safety and Health Response for Individual Vessels                          | <ul style="list-style-type: none"> <li>Safety and health policies for offshore employees and vessel managers integrated into safety and health plans and manuals</li> </ul> |
|                    | Supervision and Inspection of Ship Management Personnel                    | <ul style="list-style-type: none"> <li>Inspections conducted at least twice a year</li> </ul>   |
|                    | Provision of PPE   | <ul style="list-style-type: none"> <li>Essential PPE including a safety helmets, safety shoes, work clothes, and winter jackets</li> </ul>                                  |



### Employee Resilience Program

In September 2023, POS SM launched the three-phase Employee Resilience Program aimed at enhancing employee resilience and preventing safety incidents through effective stress management. This program included various initiatives such as team-building activities through group photoshoots, onboard meals to foster communication, and the provision of positive feedback through commendations. We remain committed to supporting employee resilience and stress management, and to fostering a healthy organizational culture through the development of additional effective programs.

# Safety and Health Management

## Increase in Safety and Health Awareness

### Strengthening of Corporate Safety and Health Training

Since 2022, Pan Ocean has implemented regular safety and health training for onshore employees (including supervisors) in accordance with the Industrial Safety and Health Act. In addition, we provide job-specific training for safety and health management officers and managers. For offshore employees, safety management training is included in workshops for masters and chief engineers, as well as in job-specific training for crew members and induction training for new cadets. Furthermore, we offer specialized courses such as the Safety Management Officer Training Program and the ISO 45001 Internal Auditor Course.

#### Implementation Status of Safety and Health Education

| Category                  | Unit    | 2021   | 2022   | 2023   |
|---------------------------|---------|--------|--------|--------|
| <b>Onshore Employees</b>  |         |        |        |        |
| Training Hours            | hours   | -      | 4,694  | 4,616  |
| Training Participants     | persons | -      | 376    | 364    |
| <b>Offshore Employees</b> |         |        |        |        |
| Training Hours            | hours   | 17,110 | 19,772 | 20,404 |
| Training Participants     | persons | 1,339  | 2,227  | 1,899  |

### Publication of POS VIEW


Pan Ocean distributes the quarterly newsletter POS VIEW on board its vessels to share key issues, safety management activities and health and disease-related information. By sharing lists of accident-free vessels, Pan Ocean promotes a culture of shared commitment to achieving a zero-accident environment. We also operate reward programs for outstanding cases selected from near-miss and non-conformity reports. In this way, Pan Ocean emphasizes the importance of safety by sharing important vessel news, risk incident cases and mental health information across the fleet, thereby reinforcing the value of safety as a top priority.

## Safety and Health Risk Management

### Safety and Health Management Policy

#### Compliance with Lockout-Tagout Requirements

All work must be immediately suspended upon the discovery of any condition or behavior that poses a significant risk to people, facilities or the environment. At Pan Ocean, all personnel have the right and obligation to refrain from performing duties and activities that may pose serious risks. We enforce lockout-tagout procedures and empower workers to halt work activities whenever they identify potential risks. This practice underscores our commitment to maintaining a safe working environment for all employees.

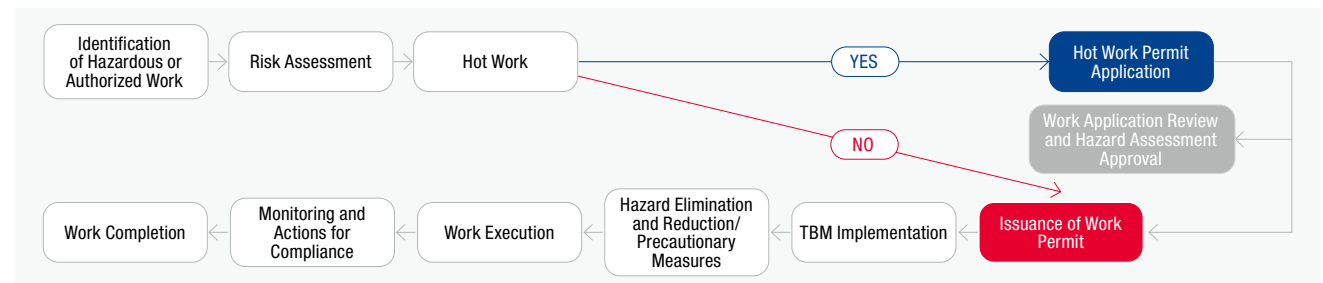


#### Safety Poster Production



We designate high-risk tasks such as confined-space work, hot work, scaffolding and rigging operations, electrical work and equipment handling as critical tasks. To maintain ongoing awareness of key safety points, we display safety posters in designated areas.

#### Operating Process of the Safe Work Permit System





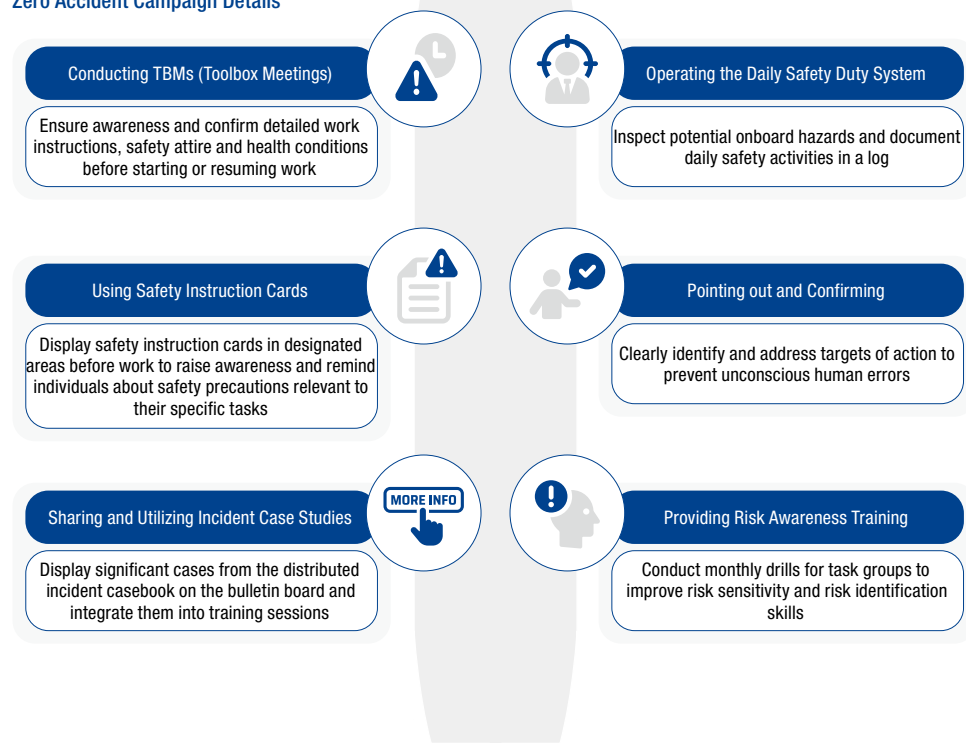
# Safety and Health Management

## Initiatives for Preventing Major Accidents in the Workplace

### Zero Accident Campaign (POS-4P)

Pan Ocean promotes the Zero Accident Campaign (POS-4P) to spread a culture of safety on board and to internalize safety awareness. This initiative was launched in 1992, following the declaration of the company-wide TQC (total quality control) movement, with the aim of achieving zero accidents and zero injuries among vessels and maritime personnel. We reward accident-free vessels every 600 days, and the SUPER FORTE has achieved 4,800 consecutive accident-free days.

#### Zero Accident Campaign Details



## Strengthening of Safety and Health Management among Supplier Companies

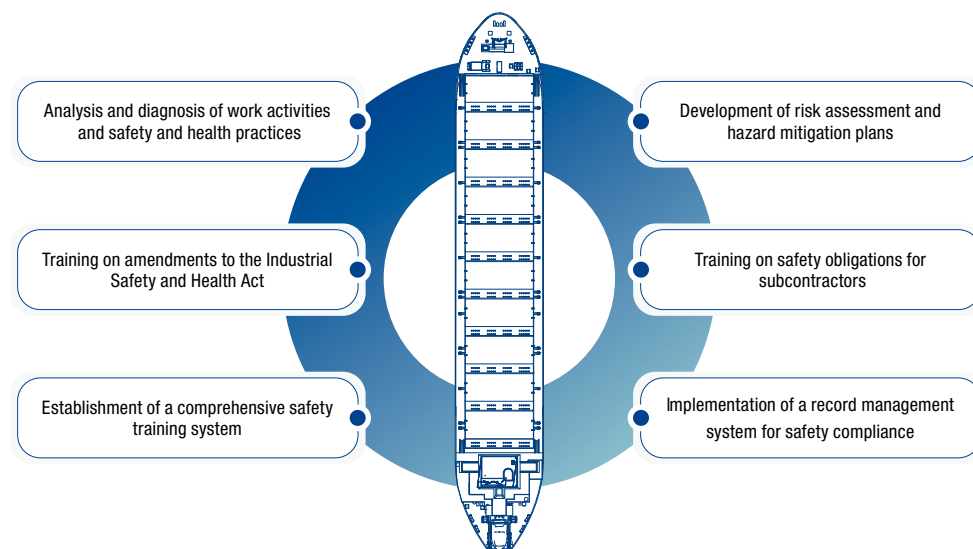
### Risk Assessments for Supplier Companies

Pan Ocean requires a risk assessment report when contracting with a supplier, and requests an updated report if there are any changes during the contract period. If the assessment identifies areas for improvement, corrective actions are required. Pan Ocean's suppliers are required to inform their employees of potential hazards prior to commencing work and to implement safety measures and training to eliminate hazardous factors to prevent occupational accidents.

### Safety and Health Evaluations for Supplier Companies






To prevent industrial accidents, Pan Ocean conducts semi-annual safety and health evaluations of its supplier companies. These evaluations are based on criteria such as safety and health management systems, implementation levels, operational practices and incident rates. Additional points are awarded to companies that demonstrate exemplary safety and health activities. In the first half of 2023, 56 companies were evaluated, and in the second half, 55 companies were assessed. We are committed to continually encouraging our supplier companies to enhance their safety management activities.

#### Management Criteria for Safety and Health Evaluations of Supplier Companies



# Safety and Health Management

## Safety and Health Indicators and Objectives

| KPI   | 2023        |         | Mid-Term Goals |
|---|-------------|---------|----------------|
|   | Performance | Target  | 2026           |
|  ZERO major land or maritime accidents   | 0 cases     | 0 cases | 0 cases        |
|  Onshore employee accident rate of ZERO  | 0 %         | 0 %     | 0 %            |
|  Offshore employee accident rate reduced by 23% compared to the 5-year average (2017-2021) of 0.86% | 0.40 %      | 0.74 %  | 0.67 %         |
|  ZERO major accidents of supplier companies  | 0 cases     | 0 cases | 0 cases        |
|  Safety and health opinion processing rate of 100% for supplier company workers                    | 100 %       | 100 %   | 100 %          |

# Collaborative Management

Pan Ocean is committed to fostering symbiotic relationships and achieving sustainable growth through comprehensive supply chain management. We analyze supplier companies from various perspectives and categorize them as general or key suppliers to optimize supply chain efficiency. In addition, we enforce ethical standards and encourage suppliers to enhance their ESG capabilities through rigorous screening. Pan Ocean plans to strengthen collaborative management by refining risk assessment methods, conducting on-site inspections and implementing improvement measures.

## Supply Chain Management Governance

### Role of the BOD

To foster mutual growth with its 1,150 suppliers, Pan Ocean deliberated on and approved the Supplier Code of Conduct through the ESG Committee in 2023. This code includes safety management, human rights management, environmental management, ethical management and management systems, and comprehensively reflects the essential requirements of ESG. We ask our key suppliers to sign and adhere to this code of conduct. In the future, we aim to expand the scope of signatories to cover a wider range of our supply chain, thereby promoting ESG management both within the company and throughout the supply chain.



## Supply Chain Management Strategy

### Supplier Management System

Pan Ocean categorizes and manages its key suppliers, including shipping agents, tugboat operators, material suppliers and cargo handlers. Key suppliers are defined based on various factors such as purchasing volume, price competitiveness and financial soundness. In particular, POS SM encourages its suppliers to comply with its environmental and ethical management policies and regulations. Specifically, pre-meetings are held prior to any shipboard operations to ensure a thorough understanding of the SHEQ (safety, health, environment and quality) content, with operations commencing only after the confirmation form has been signed.

### Certified Excellent Shipping Company and Shipper

The Ministry of Oceans and Fisheries introduced the Certified Excellent Shipping Company and Shipper scheme to eradicate unfair trade practices between shipping companies and shippers and facilitate shared growth between them by establishing mutually beneficial and cooperative relationships. In recognition for our fair and stable shipping service quality and willingness to pursue shared growth with shippers, we obtained the Excellent Shipping Company certification.

### Certified Company of Excellence in Shipping and Port Industry

POS SM has been recognized for its outstanding ship management capabilities and service excellence by being the first company in South Korea to be selected as a Certified Company of Excellence in Shipping and Port Industry. This certification program, overseen by the Ministry of Oceans and Fisheries, assists potential ship management companies in developing international competitiveness. Through this certification, POS SM has qualified to be prioritized in government support programs for overseas market exploration and overseas business network establishment, as well as seafarer training and welfare programs. In addition, foreign-flagged vessels managed by POS SM are eligible for port facility fee reductions when entering domestic ports.



# Collaborative Management

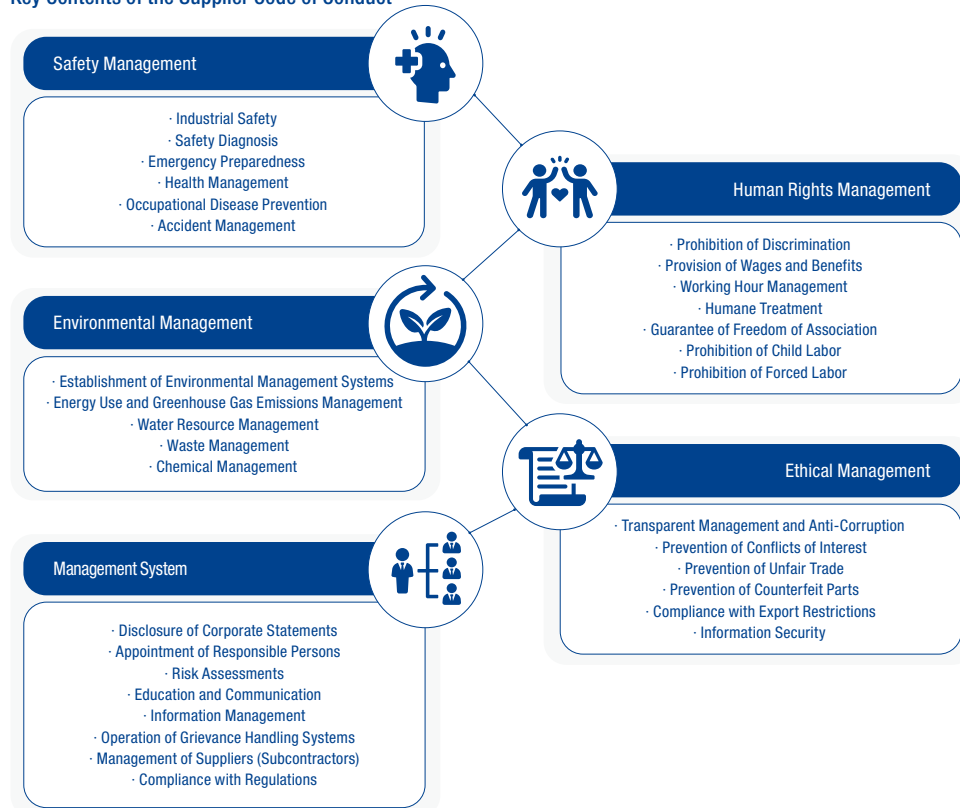
## Supply Chain Risk Management

### Compliance with the Supplier Code of Conduct

Supplier Code of Conduct Link

Pan Ocean has established the Supplier Code of Conduct to guide compliance during contract execution. This code outlines the basic requirements that suppliers must adhere to, thereby ensuring that all suppliers comply with laws and ethical standards related to the environment, human rights, social contributions, ethics and fair trade, health and safety, and quality management. This protects stakeholders and members alike. In addition, we support mutual growth activities to help suppliers implement and comply with ESG management practices tailored to their specific circumstances.

#### Key Contents of the Supplier Code of Conduct



### Selection and Evaluation of Suppliers

Pan Ocean conducts comprehensive assessments in supplier selection and evaluation by considering both quantitative and qualitative factors. To strengthen the sustainability of the supply chain, evaluation criteria include financial stability, such as revenue and credit rating, as well as compliance with health and safety standards and level of implementation. POS SM only allows companies registered in its supplier management system to participate in bidding processes. Companies with existing relationships undergo renewal assessments at least twice a year, with transaction volume adjustments and alerts based on the assessment results. New suppliers are evaluated not only on financial criteria, but also on other factors such as quality, health and safety compliance, ISO environmental certification, health and safety training management, and occupational injury records.

### ESG Risk Assessment of Suppliers

#### Assessment Process

Pan Ocean conducts ESG risk assessments of its supply chain using a written method. By utilizing unique ESG risk assessment indicators and survey formats, we efficiently identify potential ESG risks among suppliers. Moving beyond written procedures, Pan Ocean plans to enhance supplier risk management by conducting on-site inspections and reviewing improvement measures based on assessment outcomes. Ultimately, our goal is to establish a comprehensive monitoring system that includes assessment and improvement procedures to proactively prevent risks.

# Human Rights Management

In June 2023, Pan Ocean established its Human Rights Management Guidelines with the objective of establishing a corporate culture that respects human rights. These guidelines adhere to the principles of global initiatives such as the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, and declarations of the International Labor Organization. The company's goal is to clearly recognize the fundamental principles of human rights and safeguard the rights of all employees and stakeholders. We will continue to refine our human rights assessment and corrective action measures to further reinforcing our commitment to human rights management.

## Human Rights Management Governance

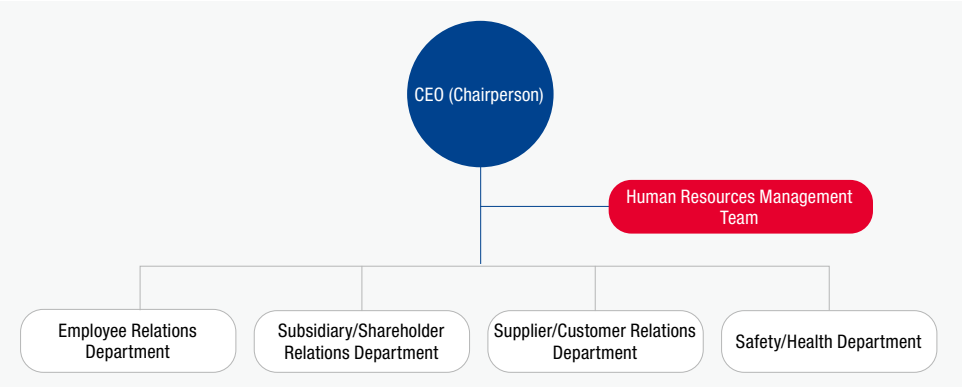
### Role of Management

We operate the Human Rights Management Committee, which includes relevant business departments, the Human Resources Management Team and the CEO. Chaired by the CEO, the committee assesses the suitability of human rights risks identified across departments and the efficacy of implemented mitigation measures. It also ensures the integration of human rights concerns into the company's overall risk management strategy for comprehensive and systematic human rights management.

### Role of the Dedicated Organization

The Human Resources Management Team, which acts as the dedicated human rights management team, is responsible for disseminating and implementing the company's human rights management objectives. It has developed methods and indicators for assessing human rights risks and conducted an evaluation in 2023. The team identifies significant findings from inspections, evaluates necessary improvements and issues reports. Moreover, it engages in various activities to promote the internalization of human rights management, including providing education and reporting on the outcomes of various efforts.

Human Rights Management Committee Organization Chart



## Human Rights Management Strategy

### Human Rights Management Guidelines

[Pan Ocean Human Rights Management Policy Link](#)

In order to build a corporate culture that respects human rights, Pan Ocean established the Human Rights Management Guidelines in June 2023. These guidelines are based on principles from global initiatives such as the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, and declarations of the International Labor Organization. Pan Ocean is committed to clearly understanding the basic principles of human rights and to working to protect the rights of all stakeholders, including employees. We will continue to strengthen our human rights management system by improving human rights assessment methods and remediation measures.

### Respect for Diversity and Non-discrimination

Pan Ocean is committed to ensuring that the values of human rights and respect for diversity are realized in all of its business activities. Given the global nature of our operations, we strive to understand and respect different races, nationalities and cultures. To achieve this, we carefully manage all processes, including recruitment and evaluation, to avoid any form of disadvantage. We are committed to non-discrimination and ensure fair treatment based on merit and performance. These values are clearly stated in Pan Ocean's Code of Ethics and Human Rights Management Guidelines. Our goal is to create a progressive corporate culture through non-discriminatory treatment.

#### Fundamental Principles of Human Rights Management

|  |  |
|--|--|
| 1. Non-discrimination                                  | 6. Guarantee of freedom of association and collective bargaining |
| 2. Compliance with working hours and labor laws        | 7. Guarantee of a safe work environment                          |
| 3. Prohibition of forced labor                         | 8. Protection of environmental rights                            |
| 4. Prohibition of child labor and protection of minors | 9. Protection of the rights of local communities                 |
| 5. Humanitarian treatment                              | 10. Protection of stakeholder rights                             |

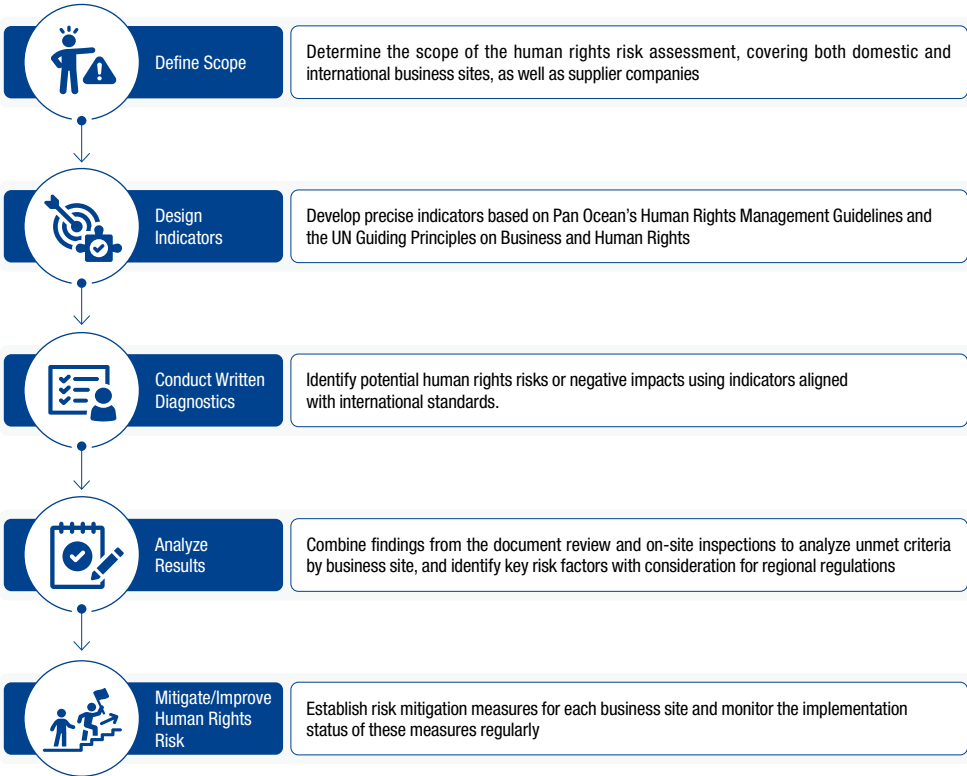
# Human Rights Management

## Human Rights Risk Management

### Human Rights Risk Management Process

Pan Ocean’s evaluation indicators and processes are grounded in the core principles of the company’s Human Rights Management Guidelines. We also incorporate the UN Guiding Principles on Business and Human Rights, as well as the National Human Rights Commission’s Human Rights Management Guidelines and checklist. The Human Rights Management Department supervises this process by conducting annual evaluations to identify potential human rights risks. We also conduct yearly monitoring of human rights risk assessments and the implementation of corrective actions to ensure their effectiveness.

#### Human Rights Risk Assessment Process



### Determination of the Human Rights Risk Assessment Scope

Before conducting written diagnostics and on-site inspections for human rights risks, we thoroughly investigates both internal and external environments. This investigation includes reviewing regional human rights laws and regulations, reports from domestic and international organizations and media, and industry literature, and gathering feedback through interviews with on-site personnel. Through this comprehensive approach, we can predict potential risks to employees, women, children, migrant workers, supplier company employees and local communities.

### Design of Human Rights Risk Assessment Indicators

We employ a multi-step process to design our human rights risk assessment indicators. First, the company references its own human rights charter and international standards to establish assessment criteria. Next, industry initiatives and relevant laws are integrated into the indicator design process. Historical human rights issues and cases are then analyzed to anticipate potential current and future risks. When necessary, we collaborate with third-party experts to refine these indicators. This meticulous process ensures a comprehensive and effective human rights risk assessment, contributing to the protection and respect of human rights in all business activities.

#### Composition of Human Rights Risk Assessment Indicators

| Area  | Assessment Criteria  |
|---|--|
| Establishment of a Human Rights Management System             | Distributing and providing education on the human rights management guidelines |
| Prohibition of Discrimination                                 | Ensuring equal promotions and educational opportunities                        |
| Prohibition of Forced Labor                                   | Inspecting working conditions for foreign workers                              |
| Prohibition of Child Labor                                    | Inspecting working conditions for young workers                                |
| Humane Treatment and Prevention of Harassment                 | Protecting personal information and preventing harassment                      |
| Guarantee of Freedom of Association and Collective Bargaining | Guaranteeing the right to collective bargaining                                |
| Guarantee of Workplace Safety                                 | Conducting regular safety inspections  |
| Protection of Environmental Rights                            | Establishing environmental management systems                                  |
| Protection of the Rights of Local Communities                 | Protecting the property rights of local communities                            |
| Protection of Stakeholders' Rights                            | Respecting the privacy and security of stakeholders                            |



# Human Rights Management

## Written Human Rights Risk Diagnostics

From December 2023 to April 2024, Pan Ocean conducted a self-diagnosis based on its human rights risk assessment indicators and criteria. The diagnosis identified potential human rights risks across various worker groups using 39 indicators to pinpoint specific areas of concern. Where issues are identified, we discuss potential improvements and incorporate them into our practices. We also aim to establish a system for early identification of potential future risks.

### Preliminary Human Rights Risk Assessment Results

| Assessment Area                                   | Assessment Result | Assessment Area   | Assessment Criteria   |
|---|-------------------|---|---|
| Establishment of a Human Rights Management System | No Issues         | Guarantee of Freedom of Association and Collective Bargaining | No Issues   |
| Prohibition of Discrimination                     | No Issues         | Guarantee of Workplace Safety                                 | No Issues   |
| Prohibition of Forced Labor                       | No Issues         | Protection of Environmental Rights                            | No Issues   |
| Prohibition of Child Labor                        | No Issues         | Protection of the Rights of Local Communities                 | Not applicable  |
| Humane Treatment and Prevention of Harassment     | No Issues         | Protection of Stakeholders' Rights                            | Guidance on and inspection of human rights protection obligations needed for subsidiaries and suppliers |

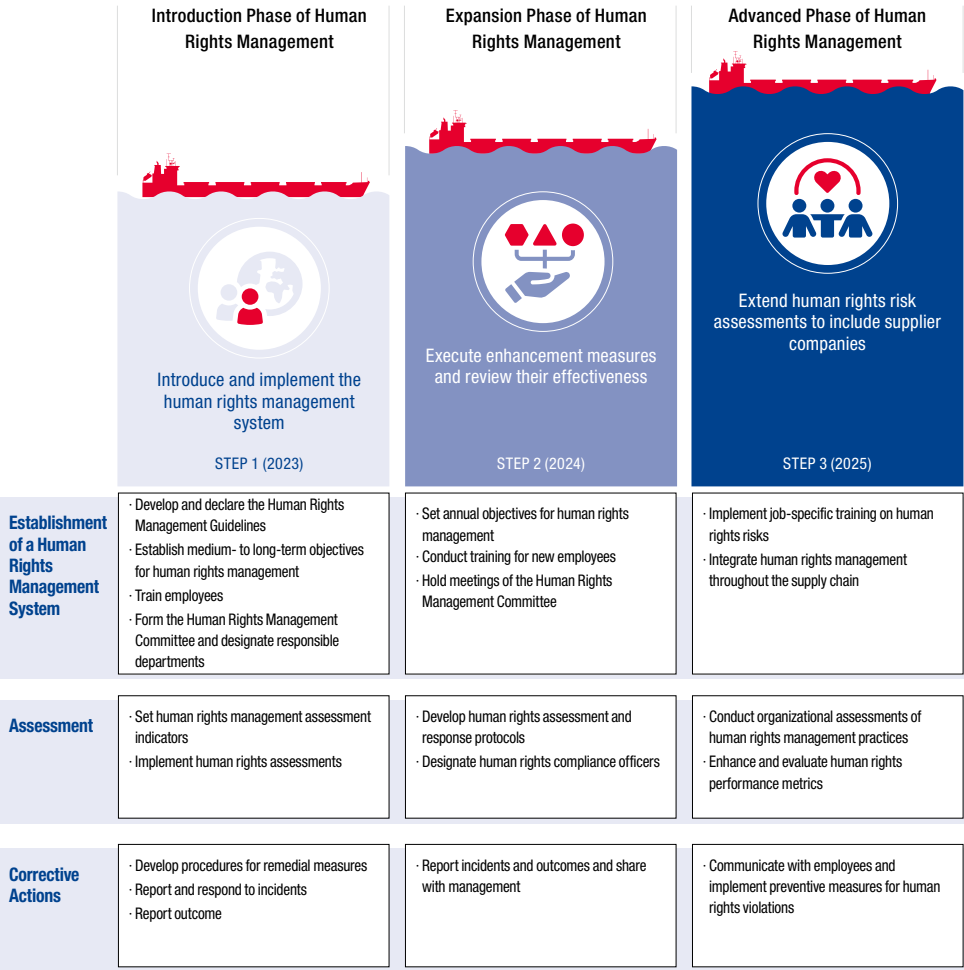
### Potential Vulnerable Groups\*

| Categories   | Identified Vulnerable Groups |          |                |                 |                  |                   |
|--|------------------------------|----------|----------------|-----------------|------------------|-------------------|
|  | Employees                    | Women    | Children       | Migrant Workers | Contract Workers | Local Communities |
| Prohibition of Discrimination and Humane Treatment                             | Low risk                     | Low risk | Not applicable |                 | Potential risk   | Low risk          |
| Prohibition of Forced Labor and Child Labor                                    | Low risk                     | Low risk |                |                 | Low risk         | Low risk          |
| Guarantee of a Safe Working Environment and Protection of Environmental Rights | Low risk                     | Low risk |                |                 | Low risk         | Low risk          |
| Protection of the Rights of Local Communities and Stakeholders                 | Low risk                     | Low risk |                |                 | Potential risk   | Low risk          |

\*Pre-screening conducted based on the 2023 ITUC Global Rights Index

## Human Rights Indicators and Goals

### Medium to Long-term Targets of Human Rights Management





# Human Rights Management

## Human Rights Training Activities

Pan Ocean provides training to foster human rights awareness among its employees and cultivate a culture of respect. This includes training to prevent workplace bullying and sexual harassment, and to improve disability awareness for both onshore and offshore employees. In 2023, the completion rate for these training programs was 100%. In addition to mandatory human rights education, new employees receive separate human rights training during their orientation. Since July 2023, officers have also received specialized training on the labor rights and human rights of seafarers. As of December 2023, a total of 491 individuals had completed this training.

### Training Programs for the Protection of Seafarers' Labor Rights and Human Rights

| No. | Topic   | Curriculum     |
|-----|---|----------------|
| 1   | Understanding the Human Rights of Offshore Employees                                      | Standard       |
| 2   | Understanding the Labor Rights of Offshore Employees                                      | Standard       |
| 3   | Privacy Rights for Offshore Employees on Board  | Basic/Advanced |
| 4   | Indifference (Bystander Effect)   | Standard       |
| 5   | Addressing Discrimination against Foreign Offshore Employees                              | Basic/Advanced |
| 6   | Obligation to Protect the Human Rights of Female Seafarers and Cadets (Safety and Health) | Standard       |
| 7   | Preventing Physical Harassment  | Standard       |
| 8   | Prevention of Bullying and Verbal Abuse   | Standard       |
| 9   | Managing Stress and Preventing Suicide  | Standard       |
| 10  | Enhancing Gender Sensitivity  | Standard       |
| 11  | Coping Mechanisms for Victims (Reporting Procedures)                                      | Basic/Advanced |
| 12  | Managing Human Rights and Providing Remedies on Board                                     | Advanced       |

### Human Rights Training Performance

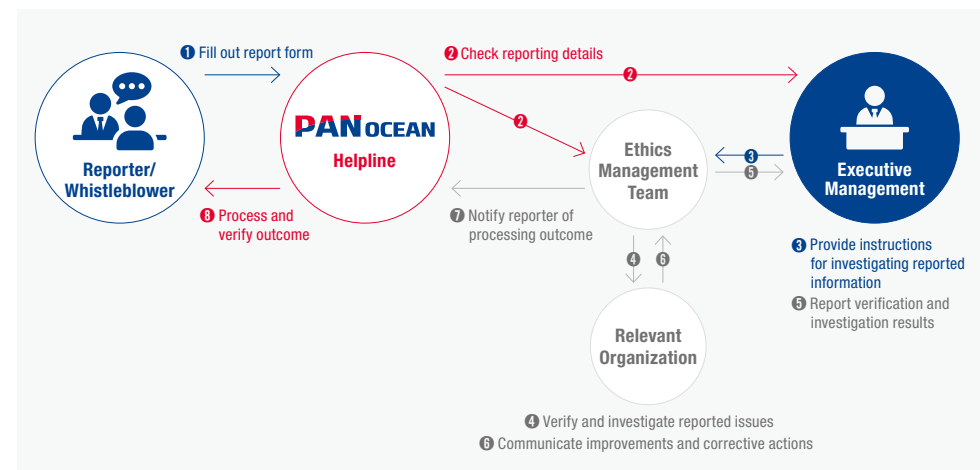
|          |                                    |            |
|----------|------------------------------------|------------|
| Onshore  | Average training time per employee | 1.05 hours |
|          | Training participation rate        | 100 %      |
| Offshore | Average training time per employee | 3 hours    |
|          | Training participation rate        | 100 %      |

## Operation of Human Rights Reporting Channels

[Pan Ocean Help Line Link](#)

[POS SM Help Line Link](#)

We operate a grievance handling system where employers and employees can share their conflicts or concerns and receive feedback. We also have an anonymous whistle-blowing system (Help Line) that is accessible to employees and third parties for filing reports. If an offshore employee experiences infringements of their legitimate rights, such as working condition violations, inadequate medical treatment or overdue wages, they can rely on the onboard grievance handling system (Open Reporting). At least one grievance/complaint handling officer elected by offshore employees as well as an onshore committee consisting of safety managers and offshore personnel officers are designated to address these grievances.



### Performance of Human Rights Reporting Channels

Number of Reports Received Offshore: 5 / Number of Cases Resolved: 5

All reports underwent separate investigations, and disciplinary actions were taken in accordance with company regulations through the Offshore Employee Personnel Committee.

| Categories                           | Unit      | 2021    | 2022    | 2023    |
|--------------------------------------|-----------|---------|---------|---------|
| No. of Human Rights Reports          | cases     | 5       | 6       | 5*      |
| No. of Resolved Human Rights Cases** | cases (%) | 5 (100) | 6 (100) | 5 (100) |

\* Five reports related to discrimination and harassment were received and resolved.

\*\* Cases found not to pertain to human rights issues were excluded from the resolved count.

# Human Resources Management

Pan Ocean prioritizes people as its core value and fosters innovative talent to create new value through unity with its employees. The company will help shape a better future through employee-centered personnel management and organizational development. To achieve this, we promote a healthy organizational culture founded on fairness and respect.

## Talent Management System

### Talent Recruitment

We develop an annual workforce plan and recruitment strategies to efficiently manage the hiring process and have established a detailed recruitment process to attract outstanding talents who align with our values. We promote our opportunities widely by leveraging various channels such as social media, YouTube, and recruitment platforms. In addition, to ensure fairness and transparency, practical interviews are conducted as blind evaluations. For offshore staff, we focus on converting contract-based senior officers to permanent positions with the aim of ensuring long-term operational stability and reliable business operations.



### Performance Management and Evaluation System

#### Onshore Employee Performance Evaluation

In 2023, Pan Ocean worked with external consultants to conduct a comprehensive review of its employee evaluation system with the aim of establishing a fairer and more rational framework. The previous competency/multi-faceted evaluation was restructured into a growth review that assesses actual work methods and collaborative attitudes. The results of these assessments are provided to employees in the form of diagnostic reports, facilitating open communication about the results. The feedback period and grievance procedures remain to ensure ongoing dialog. In 2024, Pan Ocean further refined its performance evaluation by transitioning to a performance review. This new approach evaluates organizational contributions and individual impacts through the Quick Note/Quick Review mechanisms.

#### Offshore Employee Performance Evaluation

The performance evaluation for offshore employee is divided into one evaluation for masters and chief engineers, and another for other crew members. For masters and chief engineers, ship managers conduct competency evaluations (biannually) and performance evaluations (annually). These evaluations assess overall leadership and command abilities, and if any deficiencies are identified, additional training support is provided. For other crew members, evaluations are conducted by two senior officers and are divided into job performance and character assessments. These evaluations comprehensively assess job skills and adaptation to life at sea. The character assessment includes factors that impact overall conduct, such as work attitude, ethics, sobriety and diligence. Evaluation results are thoroughly explained to the employees, and necessary consultation procedures are followed.

#### Employee Performance Evaluation Process

| Category           |                                      | Details   |
|--------------------|--------------------------------------|---|
| Onshore Employees  | Growth Review                        | Diagnosis <ul style="list-style-type: none"><li>General Employees: Conduct peer evaluations and downward evaluations within the same organization and across different organizations</li><li>Team Leader : Conduct peer and downward evaluations, in addition to upward evaluations from team members to assess leadership competencies</li></ul> |
|                    |                                      | Evaluation <ul style="list-style-type: none"><li>Absolute evaluation with grade determination based on and standardized criteria</li></ul>  |
|                    | Performance Review                   | Process Management <ul style="list-style-type: none"><li>Team Members : Regularly record individual work tasks and performance notes (Quick Note)</li><li>Team Leader : Review team members' performance notes and provide ongoing feedback (Quick Review); conduct mandatory mid-year 1:1 interview</li></ul>                                    |
|                    |                                      | Evaluation <ul style="list-style-type: none"><li>Self-review of work followed by absolute evaluation with grade determination based on standardized criteria</li></ul>  |
| Offshore Employees | Master and Chief Engineer Evaluation | <ul style="list-style-type: none"><li>Competency Evaluation: Assess command and leadership abilities; provide additional training if leadership is deemed insufficient</li><li>Performance Evaluation : Evaluate job performance over a specified period to achieve company or individual goals</li></ul>   |
|                    | Evaluation of Other Crew Members     | <ul style="list-style-type: none"><li>Job Performance: Evaluate the competencies required to perform assigned duties based on the crew position</li><li>Character Evaluation: Assess factors affecting overall conduct at sea, including work attitude, ethics, sobriety and diligence</li></ul>  |



# Human Resources Management

## Cultivation of Core Talent

### Maritime Talent Development

#### Provision of Recruitment and Employment Information

We embrace our responsibility and mission to cultivate maritime professionals. As part of this commitment, we participate in annual job fairs at Korea Maritime & Ocean University and Mokpo National Maritime University, where we conduct recruitment presentations. During these events, we provide essential corporate information such as key financial data, business areas, fleet status, details about the recruitment process for entry-level officers and our welfare benefits. These sessions are designed to share information and foster mutual understanding with potential candidates.

#### Recruitment of Industry-Academia Scholarship Students

In order to develop and secure excellent maritime officers at an early stage, we operate a scholarship program in cooperation with Korea Maritime & Ocean University and Mokpo National Maritime University. Each year, approximately 15 fourth-year students from these universities are selected and awarded scholarships and certificates, and we also select a significant number of graduates during the annual recruitment of entry-level officers. We provide extensive support for the education and skill development of recruits to help them advance to senior officer positions.

#### Industry-Academia Mentoring Programs

Pan Ocean provides senior students at maritime universities with valuable opportunities to engage in mentor-mentee relationships with alumni. The mentors, drawing on their practical experiences and expertise, offer guidance to the students regarding career paths and help them build a comprehensive understanding of the shipping industry. This initiative aims to foster industry-academia cooperation by creating platforms for knowledge sharing and professional development.

#### Cadetship Program

Pan Ocean annually commissions 40 third-year students, known as cadets, from Korea Maritime & Ocean University and Mokpo National Maritime University to participate in six-month onboard training programs. Our goal is to cultivate talented Korean offshore employees, whom we view as potential future Pan Ocean maritime personnel. We prioritize creating a supportive and safe learning environment for these cadets by providing them with exceptional education and training opportunities. Upon completion of their cadet training, the maritime university students undergo performance evaluations, and the collected data is utilized during the selection process for industry scholarships in the first semester of their fourth year and for new officer recruitment in the second semester. In addition, we maintain ongoing mentorship activities with our onshore staff to ensure continuous support and guidance.

### Job Training

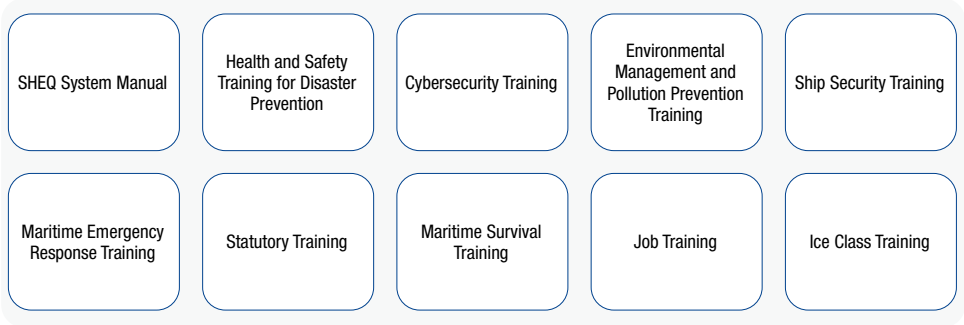
#### Offshore Employee Training

Pan Ocean provides a customized training system optimized to enhance the capabilities of its crew members. To ensure smooth onboard operations, we operate various mandatory training programs for those slated for promotion to master and chief engineer positions, new officer training, and training on the acquisition of new or second-hand vessels. In addition to job-specific training, we conduct safety-related training such as emergency response drills for maritime accidents, survival training, and health and disaster prevention training before and after embarkation. We are committed to improving the quality and efficiency of our training programs by adapting our training system to meet the needs of the field and the evolving internal and external environment.

#### Offshore Employee Training Courses



#### Onboard Education and Training for Maritime Staff



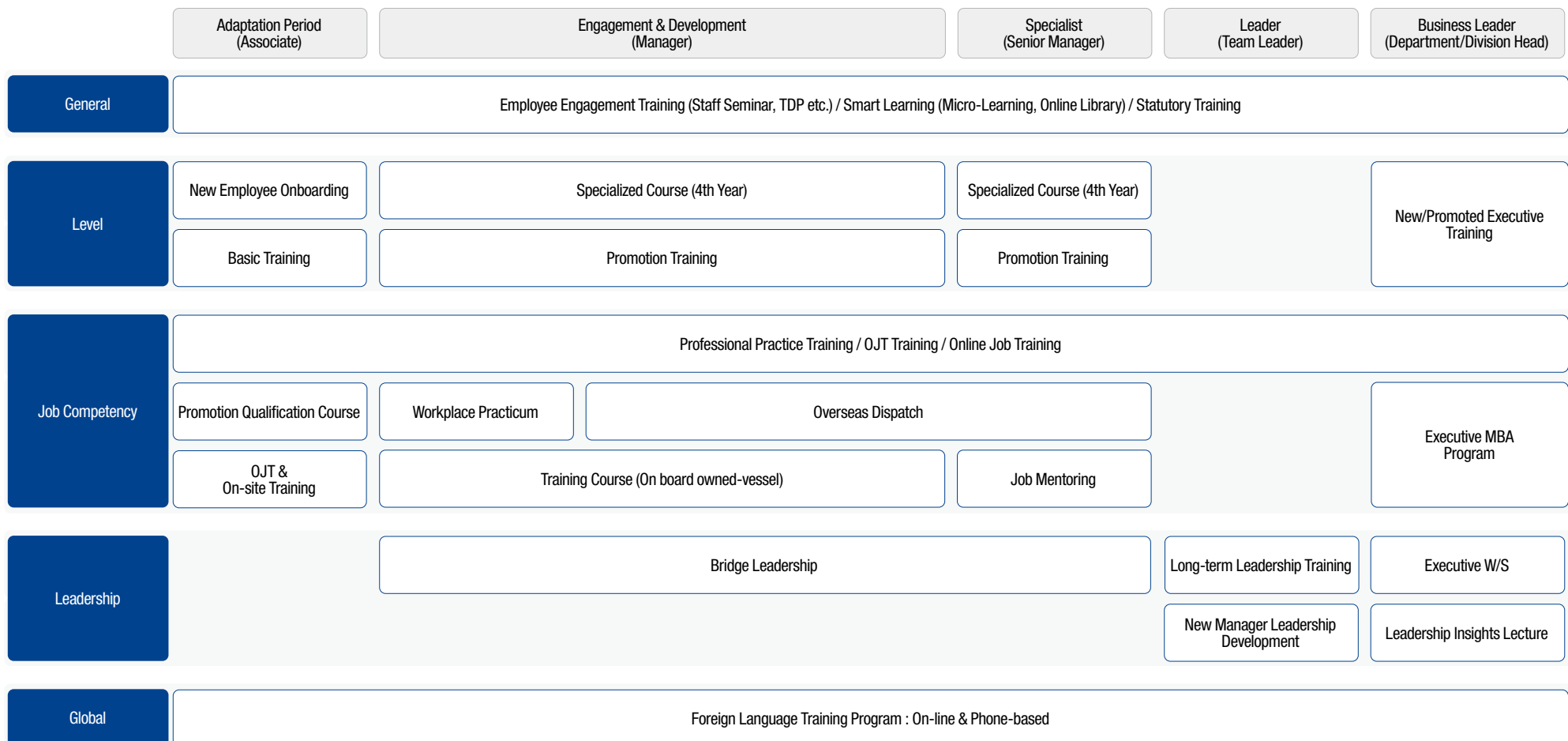


# Human Resources Management

## Onshore Employee Training

We restructured our training system, shifting from a rank and job-based approach to one that focuses on the employee life cycle and job-centered training. This change is aimed at enhancing the commitment and practical skills of employees by emphasizing their roles and responsibilities within the organization, rather than just their job titles. We also offer specialized and differentiated training tailored to the unique characteristics of the maritime industry. Onshore employees gain a deeper understanding of maritime operations and improve their communication skills through on-board training programs.

### Onshore Employee Training System Diagram



# Human Resources Management

## Healthy Organizational Culture

### Online Training

#### Culture of Self-Directed Learning

To enhance accessibility and efficiency in education, Pan Ocean uses an online training platform to facilitate learning. The platform includes both e-learning and smart learning, which focus on longer and shorter content, respectively, to cultivate a culture of ongoing learning. The e-learning system, available to all employees, supports the development of job-specific skills and language proficiency and promotes personal growth. Smart learning helps employees quickly gain insights to adapt to changing trends. It provides concise microlearning content in various areas, including management, economics, industry trends, leadership, communication, humanities, and contemporary topics to encourage self-directed learning during commute times. In addition, we contribute to personal development and employee welfare by maintaining a digital library that provides access to e-books, audiobooks and academic papers.

#### Results of Employee Satisfaction Survey on Online Education

Lecture by ZOOM

**4.20**  
points  
(Out of 5 points)

#### Seagull: Online Training Program for Offshore Employees

In 2021, we introduced Seagull, an online training program for offshore employees. This program makes e-learning accessible via the web and personal mobile devices, greatly enhancing accessibility. Besides workstations, we have also equipped vessels with CBT (computer-based training) materials. These CBT materials are used for fire extinguishing, evacuation drills and onboard safety training. We monitor course completion status and measure the effectiveness of the training through subject-specific tests. This approach ensures that the same high-quality training is provided to all seafarers, regardless of nationality, location or time, thereby increasing the efficiency of seafarer training.

### Strengthening of Organizational Commitment

#### Employee Satisfaction Surveys

We conduct annual satisfaction surveys for both onshore and offshore employees. The results are analyzed to identify areas for improvement and incorporated into the following year's action plans. For onshore employees, we ensure independence by using an external agency for the survey. The survey covers detailed indicators in areas such as corporate vision, organizational efficiency and effectiveness, corporate culture and human resources management. We review the results by specific indicators to develop improvement measures, and each organization is tasked with implementing the action plans. In addition, in-house job satisfaction surveys are conducted twice a year. For offshore employees, we carry out internal satisfaction surveys targeting masters, chief engineers, officers and engineers. The survey items are broken down into various categories, including management, communication, training, operation management and safety and quality management, and these categories are further divided by position, nationality and fleet. This approach helps us identify the factors that most significantly impact the satisfaction of both Korean and international seafarers and derive areas for improvement.

#### Survey Results

| Category          | Unit   | 2021 | 2022 | 2023 |
|-------------------|--------|------|------|------|
| Onshore Employee  | points | 4.16 | 4.02 | 3.95 |
| Offshore Employee | points | 68.7 | 70.2 | 71.8 |
| POS SM            | points | 3.69 | 3.57 | 3.57 |

(Onshore/POS SM: out of 5 points, Offshore: out of 100 points)

#### Mindfulness Training for Seafarers

Considering the extended periods seafarers spend on board, Pan Ocean has implemented the Mindfulness Training program to support their mental well-being. This psychological training is conducted during pre-boarding consultation meetings and workshops with masters and focuses on teaching effective communication skills for managing stress and resolving conflicts among crew members. In a satisfaction survey conducted by the Korea Seafarer's Welfare & Employment Center, 120 out of 140 respondents indicated that they found the program helpful.

#### Key Contents of the Mindfulness Training Program

| Category                | Content and Objectives |  |
|-------------------------|------------------------|--|
| Stress Management       | Wise Onboard Life      | Managing onboard stress, improving adaptability to new environments, and establishing a professional mindset |
|                         | Wise Leadership Life   | Understanding and applying suitable leadership to reduce onboard stress                                      |
| Self-esteem Improvement | Happiness Investment   | Understanding the concept and meaning of happiness, and providing methods to apply it in daily life          |

#### Motivating Employees

Pan Ocean rewards long-term employees (10, 20, and 30 years) with tokens of celebration and encouragement. We also recognize and reward outstanding employees and teams within the organization. Long-term employees receive extra benefits such as additional paid leave and long-term service allowances. When they retire after a certain period, we support them with retirement benefits and paid leave to ensure they get adequate rest. By recognizing retiring employees for their long-term commitment, we hope to enhance their satisfaction and appreciation.



# Human Resources Management

## Mentoring Program

Pan Ocean operates a mentoring program to support the early adaptation of new hires and newly recruited experienced professionals. Each month, we organize themed activities for mentors and mentees to engage in together. At the end of each mentoring cycle, we conduct anonymous satisfaction surveys. The feedback and suggestions gathered from these surveys are incorporated into the planning of the following year's program. In 2023, 11 new employees and recruits participated in the mentoring program. This program fosters communication between senior and junior staff, as well as peers, promoting a positive corporate culture.

### Overview of the Mentoring Program

| Category        | New Hires   | Experienced Professionals  |
|-----------------|---|--|
| Mentees         | Recent graduates (new hires)  | New recruits (experienced professionals)   |
| Mentors         | Manager - Senior manager  | Senior manager - Team Leader   |
| Duration        | 6 months  | 3 months   |
| Type            | Mentee/mentor 1:1 matching  | Mentee/mentor 1:1 (or 2:2) matching  |
|                 | Minimum 2 activities per month + @  |  |
| Orientation     | Opening session (mentoring W/S)   |  |
| Monthly Program | 1 <sup>st</sup> : Mentor/Mentee Ice-breaking<br>2 <sup>nd</sup> : Understanding my mentor's job and position<br>3 <sup>rd</sup> : Meeting with colleagues in other job positions<br>4 <sup>th</sup> : Reverse mentoring (Self Leadership)<br>5 <sup>th</sup> : haring hobbies and experiencing cultural activities<br>6 <sup>th</sup> : Group mentoring (Wrap-up) | 1 <sup>st</sup> : Mentor/Mentee Ice-breaking<br>2 <sup>nd</sup> : Networking with colleagues in other job positions<br>3 <sup>rd</sup> : Group mentoring (Wrap-up) |
| Report          | Monthly activity report by mentee/mentor (free format for mentees)  |  |

\* The above methods and programs are based on 2023 standards and are subject to change annually depending on external conditions.

## Establishment of a Collaborative and Trust-Based Labor Relationship

### Facilitation of Labor-Management Council Meetings

Pan Ocean strives to establish a mutually beneficial labor-management relationship based on mutual trust and cooperation with the aim of achieving shared goals. Since declaring labor-management harmony in 2013, we have made every effort to promote shared growth and maintain a harmonious working environment without labor disputes. In accordance with Article 12 of the Act on the Promotion of Employees' Participation and Cooperation, as well as Chapter 12 of the Pan Ocean Collective Agreement, we hold quarterly Labor-Management Council meetings to negotiate wages, discuss benefits and develop welfare programs.

### Performance of the Labor-Management Council

| Category                         | Onshore         | Offshore       |
|----------------------------------|-----------------|----------------|
| No. of Meetings                  | 4               | 4              |
| Participants (Employer/Employee) | Total 12 people | Total 4 people |

\* Excludes POS SM

### Enhancement of Labor-Management Communication

For offshore employees, we regularly hold management briefings and rank-specific meetings to establish communication channels. We also actively operate training programs for experienced new officers, ratings and rank-specific promotions as communication channels. Even while they are on board, we ensure that the voices of offshore employees are heard through regular captain review reports, a suggestion system for improvements and a reporting system for non-conformance issues. We strive to gather employee feedback and enhance labor-management relations through these various communication channels.



# Human Resources Management

## Work and Life Balance

Pan Ocean is dedicated to enhancing the well-being and welfare of its employees to ensure that they can concentrate on work during business hours and enrich their personal lives outside of work. To boost morale and motivation, Pan Ocean promotes work engagement by offering flexible working hours, financial stability support, personal development opportunities and leisure activities. These diverse welfare programs are designed to help employees engage more in their work and pursue a better quality of life.





### Benefits and Welfare Programs

|  |                                  |   |
|--|----------------------------------|---|
| <b>Customized Working System</b>                   | <b>Selective Working Hours</b>   | In cases where it is difficult to predict periods of high workload, and an increase in work hours is expected at certain times (such as time zone differences in sales or long-term projects), implement core and flexible work hours |
|  | <b>Flexible Working Hours</b>    | In cases where it is possible to predict periods of high workload (such as month-end close tasks or short-term projects), set daily work hours in advance to accommodate the increase or decrease in workload                         |
|  | <b>Flex Time Work</b>            | Employees can adjust their start and end times to avoid peak commuting hours or accommodate special job-related tasks   |
| <b>Living Stability Support</b>                    | <b>Child Tuition Support</b>     | Support for the tuition and educational expenses of children (kindergarten to university)   |
|  | <b>Housing Support</b>           | Loans for stable living and enhanced welfare  |
|  | <b>Communication Fee Support</b> | Monthly support for personal cell phone expenses  |
|  | <b>Meal Support</b>              | Lunch and dinner expenses supported at various restaurants near the office (over 100 options)   |
| <b>Personal Development and Leisure Activities</b> | <b>Recreational Facilities</b>   | Access to resort memberships and hotel discounts for employee vacations   |
|  | <b>Club Activities</b>           | Funding for internal club activities to promote a healthy and enjoyable life (e.g., soccer, baseball, skiing, tennis, cycling, table tennis, concerts)  |
|  | <b>Language Learning</b>         | Tuition fee support when registering classes at private language institutions for personal and professional growth  |
|  | <b>Fitness</b>                   | Partnerships with fitness centers to enhance employee fitness   |
| <b>Maritime Industry Benefits</b>                  | <b>Family Boarding</b>           | Safe travel arrangements for family visits during long voyages  |
|  | <b>Family Visits</b>             | Visits by family members to the ship during port calls will be allowed only upon application for boarding permission  |
|  | <b>Recreation Allowances</b>     | Support vessel with individual and group recreational activities while onboard, such as purchasing books, music, and exercise equipment   |
| <b>Other Welfare Benefits</b>                      | <b>Welfare Cards</b>             | Annual welfare amount (KRW 1~2.5 million) provided at the beginning of the year, to be used with the welfare card   |
|  | <b>Health Examinations</b>       | Comprehensive health check-ups that include additional tests not covered in regular check-ups; coverage for the employee's immediate family   |
|  | <b>Birthday Vouchers</b>         | Gift vouchers worth KRW 50,000 for employee birthdays   |
|  | <b>Family Events</b>             | Support for weddings, funerals and other significant events, including monetary gifts and items   |

# Human Resources Management

## Work and Life Balance

### Work-Family Balance Support System

| Category  | Policy                                       | Key Details   |
|---|--|---|
| <div>Maternity</div> <div></div>         | Reduced Working Hours for Pregnant Employees | Female employees can reduce their working hours by up to two hours per day during the first 12 weeks or after the 36th week of pregnancy, upon request  |
|   | Pre- and Post-Maternity Leave                | A minimum of 90 days of maternity leave is guaranteed (120 days for multiple births)<br>At least 45 days of leave provided after childbirth (60 days for multiple births). The first 60 days of maternity leave, or 75 days for multiple births, are paid leave   |
|   | Miscarriage and Stillbirth Leave             | Available with a medical certificate in accordance with labor laws for employees who have experienced a miscarriage or stillbirth   |
|   | Paternity Leave                              | 10 days of paid leave (to be used within 90 days of childbirth)   |
|   | Infertility Treatment Leave                  | Up to 3 days of leave granted per year upon request (the first day is paid leave)   |
| <div>Childcare</div> <div></div>       | Parental Leave                               | When a pregnant employee wishes to protect her maternity, or when an employee with a child under 8 years old or in the second grade or below of elementary school wishes to take leave for childcare, up to one year of leave is permitted. This leave can be split into two separate periods (note that periods taken for maternity protection are not included). During this leave, the employee can apply for and receive parental leave benefits. If the full leave period is utilized and additional leave is needed for the same child, extra leave of up to one year is permitted, but this can only be taken once |
|   | Reduced Working Hours for Childcare          | Employees with children under the age of 8 or in the second grade or below can request reduced working hours for childcare (between 15 to 35 hours per week) for up to one year   |
|   | Women's Facilities                           | A dedicated rest area within the workplace for female employees   |
| <div>Employee Health</div> <div></div> | Workplace Stress Management                  | Operation of a health promotion program (Home Fit) every Thursday<br>Installation and operation of company lounges equipped with coffee machines, CERAGEM and massage chairs  |
|   | Support for Sports and Health Activities     | Support for various activities, such as cycling, soccer, tennis, table tennis, skiing, baseball, etc.; company fitness center partnerships  |
| <div>Family Care</div> <div></div>     | Family Care Absence                          | Up to 90 days of family care absence per year (with a minimum period of 30 days if taken intermittently)<br>Up to 10 days of family care leave can be taken in increments.  |



# Human Resources Management

## Support for a New Chapter: Life After Retirement

### Rehiring of Retirees

Pan Ocean evaluates the health and work ability of retired seafarers in order to re-employ them as contract employees. For retirees between the ages of 60 and 70, we evaluate their readiness to return to duty, job performance, and health examination results to determine their re-employment and boarding status. From the age of 65, the health examination includes additional tests for cardiovascular disease to ensure a thorough assessment. In 2023, we rehired 148 retired seafarers. By supporting re-employment after retirement, we promote the employment of experienced and skilled elderly individuals and contribute to the creation of jobs for the older workforce.

2023 Reemployment Status of Retired Employee (Unit: person)

| Category       |         | Personnel |
|----------------|---------|-----------|
| Captain        |         | 33        |
| Chief Engineer |         | 45        |
| Ratings        | Deck    | 30        |
|                | Steward | 12        |
|                | Engine  | 28        |
| Total          |         | 148       |

### Retirement Pension System

Pan Ocean operates a retirement pension system for all employees to help them prepare for life after retirement. The system is managed in a DC (defined contribution) format. We provide education about the pension product to participants and support them in leading a stable life after retirement through various means.

Net Defined Benefit Liabilities and Net Defined Benefit Assets (Unit: KRW million as of December 31, 2023)

| Category                                     | 2023     | 2022     |
|--|----------|----------|
| Present Value of Defined Benefit Obligations | 18,115   | 14,722   |
| Fair Value of Plan Assets                    | (19,897) | (18,097) |
| Net Defined Benefit Assets on Balance Sheet  | (1,782)  | (3,375)  |



### Interview with a Reemployed Retiree: Captain Kim In Jo (Age 63)



Having spent my entire career at sea and accumulated extensive experience, I had hoped to continue my seafaring career if my health conditions permitted. While it is common for people to retire from frontline work at the age of 60, Pan Ocean allowed me to extend my seafaring life through reemployment. I am grateful for the opportunity. Most of my friends have already retired, so they are envious that I am still working, and my family is proud of me. To make the most of this opportunity, I am always mindful of any decline in my work skills due to age and strive to work

harder than I did in my younger days. Living and working at sea presents significant challenges. I still remember the feeling of helplessness when it was difficult to provide quick assistance to crew members who fell ill or were injured during ocean voyages. Despite these challenges and the tough voyages, we were able to continue our journeys by working together as a team. The cooperation among the crew ensured that we successfully completed our voyages without any major incidents, which always gave me a great sense of accomplishment. The company's support has also allowed me to continue my seafaring career without much of a burden. Pan Ocean offers special benefits and welfare to retirees to help them successfully start their new chapter in life. For example, even when I am on leave, the company continues to support me with health monitoring. The company's health checkups are an invaluable benefit that provides a detailed insight into my health status. This is an excellent benefit for people returning to work in their later years. I am also grateful for the health assessments available for my immediate family members. In the future, I hope the company will provide additional support for retirement planning. I believe that dedicating time to workshops or meetings with Pan Ocean for lectures and programs related to retirement life will enhance the value of my seafaring career.

# Shared Management

In today's business landscape, companies are increasingly expected to engage in strategic and impactful social contributions that create sustained value for key external stakeholders, especially local communities. As interest in corporate environmental and social responsibility grows, so do expectations for businesses to give back to their communities. Pan Ocean is dedicated to meeting its responsibilities by fostering positive, mutually beneficial relationships with local communities through collaborative management. Our goal is to create lasting positive impacts that benefit both our company and the communities we serve. By working together, we strive to ensure that our social responsibility initiatives generate real value and support the long-term well-being of local communities.

## Blueprint for Social Contribution Initiatives

### Social Contribution Strategy

To achieve its corporate vision of becoming a "global leading shipping & logistics company", Pan Ocean has embraced its mission of "enriching lives and spreading happiness" as its guiding principle for social responsibility. In line with this, we conduct a variety of strategic social contribution activities. In April 2023, we refined our social contribution strategy by assessing our current activities and benchmarking them against other companies. This process led us to identify community co-prosperity as our top priority for 2023. Accordingly, Pan Ocean has detailed specific action items to enhance its social responsibility activities and community contributions. We have chosen volunteer activities and charitable donations as key initiatives and have set concrete goals for each program.

#### Community Co-Prosperity Activities: Achievements and Future Goals

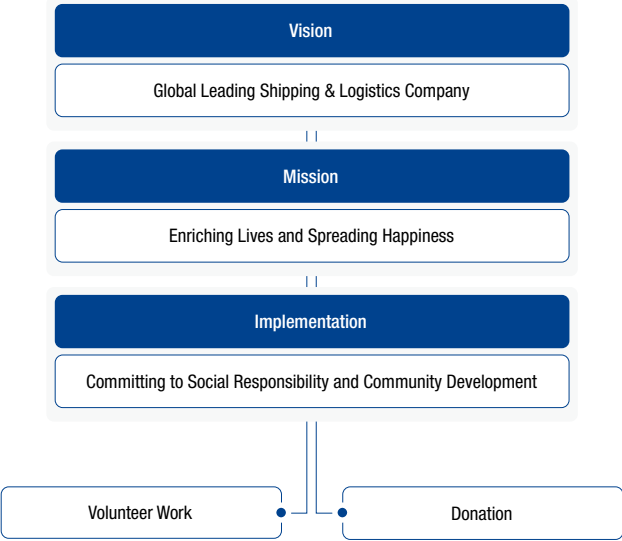
| Program                            | Details  | 2023 Performance | Social Value*    | 2024 Goal      | 2025 Goal              |
|------------------------------------|--|------------------|------------------|----------------|------------------------|
| Eco-Clean Volunteer Corps          | Eco-clean volunteer activities   | 24 times         | KRW 257,456,400  | 24 times       | 24 times               |
|                                    | Employee participation   | 2 times          | KRW 2,102,744    | 3 times        | 4 times or more        |
| Seoul National Cemetery            | Floral tributes and environmental cleanup activities   | 2 times          | KRW 3,905,096    | 2 times        | 2 times or more        |
| Seoul Senior Welfare Center        | Meal support activities  | 2 times          | KRW 7,209,408    | 2 times        | 2 times or more        |
|                                    | Special food ingredient donations  | 2 times          | KRW 12,892,000   | 2 times        | 2 times                |
| Social Contribution Mileage System | Annual volunteer hours per person  | 1 hour           | KRW 901,176      | 2 hours        | 2 hours or more        |
|                                    | Cumulative annual mileage-based donations  |                  | KRW 2.19 million | KRW 10 million | KRW 10 million or more |
| Industry-Academia Scholarships     | Selection of students from Korea Maritime & Ocean University/ Mokpo National Maritime University | 14 students      | KRW 49,000,000   | 20 students    | 20 students            |
| Maritime Security Agency Donations | Donations to navy/coast guard  |                  | KRW 4.94 million | Under review   | Under review           |

\* For volunteer activities, social value is calculated by multiplying the average hourly wage of employees by the total volunteer hours for each activity.

### Promotion of Social Contribution Activities among Employees

To encourage voluntary participation in social contribution activities, Pan Ocean has implemented a social contribution mileage program. Employees are rewarded with mileage points for engaging in social contribution activities such as blood donations, monetary donations, environmental cleanup activities and talent donations. Points can be redeemed for monetary or in-kind incentives based on the accumulated mileage. The objective of this program is to encourage active involvement from all employees in making a positive social impact.

#### Social Contribution Strategy



## Shared Management

### Social Contribution Story

#### Eco-Clean Volunteer Corps

Pan Ocean collaborates with KD Tech, a workplace for individuals with disabilities, to operate the Eco-Clean Volunteer Corps. This group conducts bi-monthly activities such as cleaning parks, tourist sites, and subways, sharing meals with the underprivileged, and tidying the homes of elderly people living alone. Our employees actively participate in these initiatives alongside people with disabilities as we strive to create an inclusive society. In 2023, Pan Ocean expanded its efforts to include cleaning the Anyangcheon walking trails and parks, maintaining recycling bins in Yeongdeungpo District, and preserving cultural heritage by maintaining the interior of Hamnyeongjeon Hall in Deoksugung Palace. These efforts reflect Pan Ocean's ongoing dedication to community well-being.



Environmental Cleanup Activities by the Eco-Clean Volunteer Corps

#### Pan Ocean Day of Practicing Filial Piety

Pan Ocean employees volunteer at the Senior Welfare Center of Seoul, providing meal service and dishwashing assistance. During key times such as Chobok, Chuseok, and Senior Citizens' Day, the company also donates special meals to ensure elderly individuals receive nutritious food. In 2023, during Chobok and Chuseok, 60 Pan Ocean employees visited the Seoul Senior Welfare Center and served 2,000 special meals prepared by the company. Pan Ocean remains committed to supporting local communities through ongoing volunteer and donation activities.



Filial Piety Volunteer Activities on Chuseok

#### Floral Tribute at the Seoul National Cemetery

Pan Ocean honors the patriotism of soldiers and national heroes through a partnership with the Seoul National Cemetery. The company regularly conducts floral tributes and cleanup activities at the cemetery. In 2023, on Memorial Day and Armed Forces Day, approximately 60 employees participated in a tribute at the Memorial Tower, followed by cleaning and floral tributes at the company's adopted gravesites. Pan Ocean's regular maintenance and cleanup visits are aimed at instilling a sense of social responsibility and patriotism in employees.



Volunteer Activities at Gravesites in Preparation for Armed Forces Day



## Chapter. 5



# GOVERNANCE



**069** / Transparent Governance Structure

**075** / Ethics and Compliance Management

**081** / Integrated Risk Management

**085** / Information Security

# Transparent Governance Structure

Pan Ocean operates its board of directors with a commitment to accountability, and emphasizes the principles of responsible governance. In our pursuit of establishing a sound governance framework, we prioritize enhancing the board's independence, expertise and diversity, which are essential for fostering sustainable governance required by a socially responsible corporate entity. To this end, we meticulously select independent directors with verified independence and expertise and conduct a range of comprehensive education initiatives for the board. Furthermore, we strive to uphold shareholder rights and enhance corporate value by fostering a deep understanding of our various stakeholders, including shareholders and customers. we remain steadfast in our dedication to realizing responsible management and are continually striving to uphold a healthy governance system that safeguards stakeholder interests and fuels corporate growth.

## Board of Directors

### Governance Principles

Corporate Governance Charter Link

Our objective is to establish a governance structure that reflects the principles of ethical management and mutual growth. In order to further enhance our governance practices, we enacted a Corporate Governance Charter in February 2022. This charter, designed to ensure the utmost independence, defines the independence of the board of directors and establishes principles for board operations. We strive to maintain diversity and expertise in the governance structure by ensuring that board members do not represent specific common backgrounds or interests. In addition, we publish an annual corporate governance report to enhance transparency and safeguard shareholder rights.

### Director Appointments

All directors at Pan Ocean are appointed through a resolution at the general meeting of shareholders, with independent directors selected from candidates recommended by the Independent Director Recommendation Committee. Candidates recommended by the Independent Director Recommendation Committee undergo deliberation by the board of directors to be finalized as candidates, who are then presented individually to the general meeting of shareholders for appointment as directors. We do not impose restrictions based on gender, nationality, age, etc., especially in terms of conflicts of interest or independence disqualifications for independent director candidates. Independent directors may not hold concurrent positions as directors, executive officers or auditors in two or more other companies.

### Board Composition

To ensure transparency in management and effective oversight of the board, Pan Ocean has a total of seven directors (three inside directors and four independent directors). In particular, to maintain the independence of the board, we structure it so that the number of independent directors exceeds the majority of the total number of directors, as required by Article 542-8, Paragraph 1 of the Commercial Act. Currently, 57% of board members are independent directors.

#### Board Composition Status

(As of June 30, 2024)

| Category             | Name          | Gender | Initial Appointment Date | Tenure                        | Professional Profiles   | Expertise                    |
|----------------------|---------------|--------|--------------------------|-------------------------------|---|------------------------------|
| Inside Director      | Kim Hong Kuk  | Male   | July 18, 2015            | July 18, 2015 – Mar. 28, 2025 | Current) CEO of Harim Co., Ltd. / Graduate School of Business Administration, Jeonbuk National University                               | Business Management          |
| Inside Director      | Ahn Joong Ho  | Male   | Mar. 30, 2020            | Mar. 30, 2020 – Mar. 29, 2026 | Current) CEO, President of Pan Ocean., Ltd. / Global MBA, Korea University  | Shipping/Business Management |
| Inside Director      | Cheon Se Gi   | Male   | July 18, 2015            | July 18, 2015 – Mar. 28, 2025 | Current) Head of the Management Support Team, Harim Holdings Co., Ltd. / Department of Commerce and Trade, WonKwang University          | Finance/Law                  |
| Independent Director | Jeong Hak Soo | Male   | Mar. 30, 2021            | Mar. 30, 2021 – Mar. 29, 2027 | Current) President of the East-Asia Agricultural Association / Master of Agricultural Economics, Texas A&M University                   | Agriculture/Grain            |
| Independent Director | Oh Kwang Soo  | Male   | Mar. 27, 2019            | Mar. 27, 2019 – Mar. 28, 2025 | Current) Managing Partner at DR&AJU LLC. / Doctor of Law, Sungkyunkwan University Law School  | Law                          |
| Independent Director | Koo Ja Eun    | Female | Mar. 29, 2023            | Mar. 29, 2023 – Mar. 29, 2026 | Current) Associate Professor in the Department of Business Administration, University of Suwon / Ph.D. in Taxation, University of Seoul | Accounting/Taxation          |
| Independent Director | Kim Young Mo  | Male   | June 16, 2023            | June 16, 2023 – June 16, 2026 | Former) CEO, President of KDB Capital / MBA, Pennsylvania State University  | Finance                      |



# Transparent Governance Structure

## Committees within the Board

[Board Committee Operating Regulations Link](#)

Pan Ocean's board committees include the Independent Director Recommendation Committee, the Audit Committee, the Internal Transactions Committee, the Remuneration Committee, and the ESG Committee. Each committee maintains independence in accordance with domestic commercial law and internal board regulations and meets the required ratio of independent directors. Furthermore, each committee comprises experts in its respective fields to ensure specialized division of tasks and processes. These committees, established to enhance the expertise and efficiency of board operations, disclose attendance rates and voting results on agenda items through the company's business reports.

### Independent Director Recommendation Committee

To ensure fairness and transparency in the independent director nomination process, Pan Ocean operates the Independent Director Recommendation Committee. This committee, composed entirely of independent directors, is responsible for recommending candidates for independent director positions at the annual general meeting of shareholders. In accordance with Article 542-6, Paragraph 2 of the Commercial Act, should a candidate be duly nominated through the shareholder proposal right, the committee is mandated to include that candidate in the list of recommended independent director nominees.

### Internal Transactions Committee

The Internal Transactions Committee undertakes the prior review of significant related party transactions in accordance with the laws governing monopolies and fair trade. It also deliberates and decides on transactions requiring approval from the board of directors, as mandated by Article 542-9, Paragraph 3 of the Commercial Act. Moreover, it enhances external controls by shareholders and other stakeholders to augment oversight efficiency over unfair support practices. The committee comprises one inside director and four independent directors to ensure fairness and transparency in its proceedings.

### ESG Committee

In 2022, Pan Ocean established the ESG Committee, which serves as a substantive control tower in ESG management and is responsible for deliberating and deciding on ESG policies, plans and key activities. The ESG Committee actively engages in various initiatives aimed at improving Pan Ocean's sustainable management practices, including efforts to enhance transparency within the board of directors, expand shareholder communication, and address ethical issues related to employees.

### Audit Committee

The Audit Committee was instituted for the purpose of ensuring independence in the audit process. Comprised of four independent directors, including the Audit Committee chair, the committee ensures the integrity of independent decision-making within its specialized domain. It incorporates two experts in accounting or finance, and is tasked with verifying the legality of the directors' and management's activities, overseeing the soundness and validity of corporate financial activities, and ensuring the accuracy of financial reporting. Furthermore, it examines matters pertaining to the selection, alteration and dismissal of external auditors, as well as other issues stipulated by laws, the company's articles of incorporation and the operating regulations of the Audit Committee.

### Remuneration Committee

The Remuneration Committee supports the impartiality and transparency of the process for determining the compensation of registered directors. In addition, it fulfills the role of deliberating and deciding on matters related to the compensation limit and compensation structure for registered directors. Comprising solely independent directors, the committee ensures fairness and transparency in remuneration.

### Committee Status

| Category                                      | Composition                     |                                 |                                |                                       |                                      |                                      |                                    | No. of Meetings | No. of Agendas |
|---|---------------------------------|---------------------------------|--------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|------------------------------------|-----------------|----------------|
|   | Kim Hong Kuk<br>Inside Director | Ahn Joong Ho<br>Inside Director | Cheon Se Gi<br>Inside Director | Jeong Hak Soo<br>Independent Director | Oh Kwang Soo<br>Independent Director | Kim Young Mo<br>Independent Director | Koo Ja Eun<br>Independent Director |                 |                |
| Independent Director Recommendation Committee | -                               | -                               | -                              | Member                                | Chairperson                          | Member                               | Member                             | 2               | 2              |
| Audit Committee                               | -                               | -                               | -                              | Member                                | Member                               | Member                               | Chairperson                        | 4               | 18             |
| Internal Transactions Committee               | -                               | Member                          | -                              | Chairperson                           | Member                               | Member                               | Member                             | 4               | 4              |
| Remuneration Committee                        | -                               | -                               | -                              | Member                                | Chairperson                          | Member                               | Member                             | 1               | 3              |
| ESG Committee                                 | -                               | -                               | -                              | Chairperson                           | Member                               | Member                               | Member                             | 2               | 5              |



# Transparent Governance Structure

## Board Independence

Pan Ocean strictly adheres to the legal standards for the independence of its independent directors as required by the South Korean Commercial Act. According to the Commercial Act, individuals serving as directors, executive officers or auditors in Pan Ocean are prohibited from concurrently holding positions in two or more other companies. We have regulations governing the operation of the Independent Director Recommendation Committee to ensure compliance with the independence criteria outlined in the Corporate Governance Charter. In addition, the Independent Director Recommendation Committee, primarily composed of independent directors, recommends candidates who meet the standards and qualifications stipulated by relevant laws and regulations, ensuring they possess both expertise and independence. We are committed to strengthening the functions of the Audit Committee to foster a transparent and equitable corporate governance framework.

## Board Expertise

Our board of directors comprises professionals proficient in key business-related laws, finance, accounting and maritime transportation. They diligently execute decision-making and managerial oversight functions to enhance the company's competitiveness. As of March 2024, the board consisted of seven members, including independent directors with specialized knowledge of Pan Ocean's grain distribution business segment. In particular, Directors Kim Hong Guk and Ahn Joong Ho, along with Independent Director Jeong Hak Soo, possess extensive experience in related industries according to the GICS industry classification system. Their profound insights are expected to contribute to Pan Ocean's sustainable growth.



## Board Diversity

We are dedicated to practicing sustainable management and increasing diversity among board members to incorporate perspectives from various stakeholders, including shareholders and customers. The composition of the board is not restricted by gender, nationality or age, as stipulated in the Corporate Governance Charter and the policies on board independence and diversity. In 2023, Ms. Koo Ja Eun was appointed as a female independent director, further exemplifying this commitment. Ms. Koo Ja Eun is a financial expert with qualifications as a certified public accountant. She possesses extensive experience gained from her tenure at Samil PwC and the Korea Institute of Taxation. Her expertise in accounting and finance have contributed significantly to enhancing Pan Ocean's financial stability.

## Board Training

The company conducts various educational programs to enhance the expertise of independent directors and foster knowledge in risk management. In 2023, education sessions were held covering topics such as understanding ESG and key accounting issues. In addition, regular site visits and seminars are arranged for newly appointed independent directors to provide detailed insights into the company's operations and to elevate the board's understanding.

### Independent Director Training in 2023

| Date          | Training Content   |
|---------------|--|
| Mar. 20, 2023 | Orientation for newly appointed independent directors<br>(Koo Ja Eun, Kim Tae Hwan)  |
| June 13, 2023 | Orientation for newly appointed independent directors<br>(Kim Young Mo)  |
| Aug. 10, 2023 | Internal control over financial reporting, key accounting issues, understanding ESG, role of the Audit Committee (Jeong Hak Soo, Oh Kwang Soo, Kim Young Mo, Koo Ja Eun) |



# Transparent Governance Structure

## Board Operations

In accordance with Article 6 of Pan Ocean's Board Operation Standards, regular board meetings are held at least once every quarter, with additional meetings convened as necessary for urgent matters. The chairperson calls the board meetings; however, if necessary, any director may request the chairperson to convene a meeting. In 2023, a total of 11 board meetings were convened, during which 47 items were deliberated. The attendance rate for both inside and independent directors, as well as the overall board attendance rate, was 100%. Board resolutions are passed with the approval of a majority of the directors present. The minutes of the meetings transparently disclose the attendees, the resolution outcomes, the opinions for and against each item, and the identities of those who voiced their opinions.

### Key Agenda Items for the Board of Directors 2023

| Meetings | Date    | Agenda  | Status   | Approval Rate | Attendance Rate |
|----------|---------|---|----------|---------------|-----------------|
| 1        | Feb. 10 | Approval of the 2023 Business Plan  | Approved | 100%          | 100%            |
|          |         | Approval of the Date, Venue and Agenda for the 57th Annual General Meeting of Shareholders    | Approved | 100%          | 100%            |
|          |         | Approval of the 2022 Financial Statement  | Approved | 100%          | 100%            |
|          |         | Approval of the Cash Dividend   | Approved | 100%          | 100%            |
|          |         | Approval of the 57th Business Report  | Approved | 100%          | 100%            |
|          |         | Approval of Director and Audit Committee Member Appointments                                  | Approved | 100%          | 100%            |
|          |         | Approval of the 2023 Director Compensation Limits   | Approved | 100%          | 100%            |
|          |         | Approval of the CEO Performance Evaluation and Management Incentive Criteria for 2023         | Approved | 100%          | 100%            |
|          |         | Approval of the Executive Compensation Determination for 2023                                 | Approved | 100%          | 100%            |
|          |         | Approval of the Capital Increase for the Singapore Subsidiary                                 | Approved | 100%          | 100%            |
|          |         | Establishment of AP (Anti-corruption Program) Regulations and Appointment of AP Administrator | Approved | 100%          | 100%            |
|          |         | Report on Audit Committee Resolutions   | Reported | -             | 100%            |
|          |         | Report on the Operating Status of the 2022 Internal Accounting Control System                 | Reported | -             | 100%            |
|          |         | Compliance Control Standard Validity Assessment   | Reported | -             | 100%            |
| 2        | Mar. 29 | Self-compliance Program Operation and Audit Results   | Reported | -             | 100%            |
|          |         | Appointment of the CEO and Chairperson of the Board   | Approved | 100%          | 100%            |
|          |         | Appointment of Board Committee Members  | Approved | 100%          | 100%            |
|          |         | Approval of Q2 2023 Intercompany Transactions   | Approved | 100%          | 100%            |
|          |         | Approval for Convening an Extraordinary General Meeting of Shareholders                       | Approved | 100%          | 100%            |
| 3        | May, 9  | Appointment of Directors and Audit Committee Members  | Approved | 100%          | 100%            |
|          |         | Report on Audit Committee Resolutions   | Reported | -             | 100%            |
|          |         | Report on the Q1 2023 Financial Statements  | Reported | -             | 100%            |
|          |         | Report on Shipbuilding Contract Execution   | Reported | -             | 100%            |
|          |         | Report on Used Vessel Acquisition   | Reported | -             | 100%            |
|          |         | Vessel Sale Report  | Reported | -             | 100%            |

## Board Operations in 2023



## Board Attendance Rate in 2023

| Meetings | Date     | Agenda   | Status   | Approval Rate | Attendance Rate |
|----------|----------|--|----------|---------------|-----------------|
| 4        | June, 16 | Appointment of Board Committee Members   | Approved | 100%          | 100%            |
|          |          | Approval for a Joint Cost Increase in the Group Internal Accounting Control System Service | Approved | 100%          | 100%            |
|          |          | Approval of Q3 2023 Intercompany Transactions  | Approved | 100%          | 100%            |
|          |          | Report on ESG Committee Resolutions  | Reported | -             | 100%            |
|          |          | Report on the Corruption Risk Map Development for the Corruption Prevention Program (AP)   | Reported | -             | 100%            |
|          |          | Report on the H1 2023 Activity of the Risk Management Committee                            | Reported | -             | 100%            |
|          |          | Vessel Sale Report   | Reported | -             | 100%            |
| 5        | Aug. 9   | Report on the H1 2023 Financial Statements   | Reported | -             | 100%            |
|          |          | Report on ESG Committee Resolutions  | Reported | -             | 100%            |
| 6        | Aug. 16  | Report on the Signing of a Shipbuilding Contract   | Reported | -             | 100%            |
|          |          | Report on Other Significant Business Operations  | Reported | -             | 100%            |
| 7        | Sept. 20 | Approval of Q4 2023 Intercompany Transactions  | Approved | 100%          | 100%            |
|          |          | Vessel Sale Report   | Reported | -             | 100%            |
| 8        | Oct. 16  | Approval of Long-term Contract Bidding   | Approved | 100%          | 100%            |
|          |          | Financing Approval for Four 174,000 CBM LNG Carriers                                       | Approved | 100%          | 100%            |
|          |          | Shares Disposal Approval   | Approved | 100%          | 100%            |
| 9        | Nov. 9   | Approval of an Increase in the Intercompany Transaction Limit for 2023                     | Approved | 100%          | 100%            |
|          |          | Report on the Q3 2023 Financial Statements   | Reported | -             | 100%            |
|          |          | Vessel Sale Report   | Reported | -             | 100%            |
| 10       | Nov. 20  | Approval of Participation in Bidding for the Acquisition of Shares in Other Entities       | Approved | 100%          | 100%            |
| 11       | Dec. 21  | Approval of 2024 Intercompany Transactions   | Approved | 100%          | 100%            |
|          |          | Report on the H2 2023 Activities of the Risk Management Committee                          | Reported | -             | 100%            |

# Transparent Governance Structure

## Board Evaluation

Pan Ocean conducts evaluations of independent directors during their reappointment process, assessing factors such as meeting attendance, contributions and independence. Based on these evaluations, the Independent Director Recommendation Committee and the board of directors determine whether reappointment is appropriate. Future policies regarding the fairness and specific evaluation methods for assessing independent director activities will be thoroughly discussed and decided upon by the board of directors.

## Board Compensation Disbursement

The company fairly compensates inside and independent directors based on internal criteria considering factors such as job role, rank, tenure, expertise and contribution to the company. Performance bonuses are also determined based on executive performance incentive criteria, with consideration of financial performance metrics such as revenue and operating profit as well as comprehensive consideration of ESG (environmental, social, and governance) KPIs (key performance indicators) related to areas such as the environment, health and safety, risk management and fair trade. Director compensation for both inside and independent directors is managed within established limits, taking into account factors such as job responsibilities and industry standards, and the total amount of director compensation is subject to shareholder approval and transparently disclosed in the annual report. The total compensation limit for 2023 is KRW 5 billion.

Compensation History

(As of 2023, Unit: KRW million)

| Category              | Total Compensation | Avg. Amount per Person | Avg. Amount per Person |
|-----------------------|--------------------|------------------------|------------------------|
| CEO                   | 2,474              | 1,237                  | 2                      |
| Inside Directors      | 200                | 200                    | 1                      |
| Independent Directors | 171                | 45                     | 4                      |
| Employees             | 120,800            | 106                    | 1,161                  |

\* Ratio of the CEO's pay to the average employee's pay: 12  
\*\* Excluding foreign crews

## Shareholder

## Shareholder Composition

Pan Ocean ensures the protection of basic shareholder rights in accordance with the Commercial Act and related regulations and stipulates matters related to shareholder rights in internal regulations such as the Corporate Governance Charter to facilitate the smooth exercise of rights. The company strives to promote long-term shareholder value enhancement by consistently managing issues related to fair information disclosure, support for voting participation, and dividend rights for all shareholders.

## Shareholder Meeting Notice

Pan Ocean complies with the Commercial Act by publicly announcing the details of its annual general meeting of shareholders four weeks in advance. These details include the date, time, location, agenda and specifics of director appointments, which are shared through both online and offline channels. We also make efforts to schedule shareholder meetings on days when meetings are not concentrated to enhance shareholder participation.

Shareholder Status

| Shareholder Name           | No. of Shares | % of Shares |
|----------------------------|---------------|-------------|
| HARIM Holdings Co., Ltd.   | 292,533,115   | 54.7        |
| National Pension Service   | 35,795,331    | 6.7         |
| Individuals and others     | 206,241,066   | 38.6        |
| Total No. of Issued Shares | 534,569,512   | 100.0       |

\* No golden shares held by government agencies.

Executive Shareholding Status

| Category                       | No. of Shares Held | Valuation Amount (KRW) | Share Amount/Base Salary (%) |
|--------------------------------|--------------------|------------------------|------------------------------|
| Kim Hong Kuk (Inside Director) | -                  | -                      | -                            |
| Ahn Joong Ho (Inside Director) | 8,120              | 30,328,200             | 9.0                          |

\* Based on the closing price (Common shares: 3,735 won) as of December 28, 2023

## Agenda for the 2023 Annual General Meeting

| The 57 <sup>th</sup> Annual General Meeting of Shareholders for the Fiscal Year 2023 |  | Status               |
|--|--|----------------------|
| Agenda 1   | Approval of the 57 <sup>th</sup> Financial Statements (Including the Appropriation of Retained Earnings) | Approved as proposed |
| Agenda 2   | Appointment of Directors (1 Inside Director, 2 Independent Directors)                                    | Approved as proposed |
| · Agenda 2-1   | Appointment of Inside Director Ahn Joong Ho  | Approved as proposed |
| · Agenda 2-2   | Appointment of Independent Director Koo Jae Eun  | Approved as proposed |
| · Agenda 2-3   | Appointment of Independent Director Kim Tae Hwan   | Approved as proposed |
| Agenda 3   | Appointment of Audit Committee Members (2 Members)   | Approved as proposed |
| · Agenda 3-1   | Appointment of Audit Committee Member Koo Jae Eun  | Approved as proposed |
| · Agenda 3-2   | Appointment of Audit Committee Member Kim Tae Hwan   | Approved as proposed |
| Agenda 4   | Approval of Director Compensation Limit  | Approved as proposed |



# Transparent Governance Structure

## Protection of Shareholder Rights

### Encouragement of Shareholder Participation

We actively encourage shareholder engagement and provide various channels for shareholders to exercise their rights. Since the 2019 general meeting of shareholders, we have implemented an electronic voting system and introduced an electronic proxy voting system to enhance shareholder participation in voting. Furthermore, we notify shareholders of the general meeting and relevant agenda items four weeks in advance to ensure they receive ample information about the meeting date, location and proposed matters well in advance.

#### Status of Support for Minority Shareholders and Systems for the Active of Exercise Shareholder Rights

| Category                          | Details   | Introduction Status |
|-----------------------------------|---|---------------------|
| Cumulative Voting                 | Equal voting rights per share provided when electing two or more directors  | X                   |
| Written Voting System             | Enables shareholders to exercise voting rights through written means when absent  | X                   |
| Proxy Voting Encouragement System | Regulations promoting procedures and methods for proxy voting, ensuring accurate provision of necessary information and disclosure of related documents | 0                   |
| Shareholder Proposal Right        | Shareholders' right to directly propose agenda items at the general meeting   | 0                   |

#### Shareholder Returns for the Past 5 years

| Year | Type            | Dividend | Cash Dividend      |                                  |                | Dividend Payout Ratio |            |
|------|-----------------|----------|--------------------|----------------------------------|----------------|-----------------------|------------|
|      |                 |          | Dividend per Share | Total Dividend (KRW 100 million) | Dividend Yield | Consolidated          | Individual |
| 2023 | Common stock    | -        | KRW 85             | 454.3                            | 2.2%           | 18.5%                 | 19.0%      |
|      | Preferred stock | -        | -                  | -                                | -              |                       |            |
| 2022 | Common stock    | -        | KRW 150            | 801.8                            | 2.5%           | 11.8%                 | 11.9%      |
|      | Preferred stock | -        | -                  | -                                | -              |                       |            |
| 2021 | Common stock    | -        | KRW 100            | 534.5                            | 1.8%           | 9.7%                  | 10.2%      |
|      | Preferred stock | -        | -                  | -                                | -              |                       |            |
| 2020 | Common stock    | -        | KRW 50             | 267.3                            | 1.1%           | 29.5%                 | 29.4%      |
|      | Preferred stock | -        | -                  | -                                | -              |                       |            |
| 2019 | Common stock    | -        | -                  | -                                | -              | -                     | -          |
|      | Preferred stock | -        | -                  | -                                | -              |                       |            |

### Establishment of the Dividend Policy and Guidelines

Pan Ocean has established a dividend policy and publicly disclosed its three-year dividend guidelines. Any decisions or revisions concerning the shareholder return policy, including dividends, will be promptly communicated through timely public disclosures to provide shareholders with detailed information. We are also committed to raising shareholder awareness of our initiatives aimed at enhancing shareholder interests, including the shareholder return policy. Pan Ocean is dedicated to maximizing shareholder returns to the best of its abilities.

#### Dividend Policy and Guidelines

| Category   | Details  |
|--|--|
| Dividend Policy                                      | Pan Ocean will distribute cash dividends to shareholders by allocating financial results in a prudent and equitable manner to ensure the availability of investment resources while preserving the integrity of its financial structure. |
| Dividend Guidelines (2024–2026)                      | Pan Ocean will maintain a range of 15% to 25% of the current net profit (excluding one-time non-operating income) based on K-IFRS Separate Financial Statements.   |
| Regular Review of the Dividend Policy and Guidelines | In order to maintain and enhance shareholder value, Pan Ocean will conduct a review of its dividend policy and guidelines every three years.   |



# Ethics and Compliance Management

Pan Ocean endeavors to fulfill its economic and legal responsibilities to various stakeholders, including customers, shareholders, suppliers, and the local community, by promoting ethics and compliance management and adhering to fair trade practices. To mitigate potential corruption risks, we have operated an internal AP (anti-corruption program) including ethics education and reporting channels. These initiatives ensure that all employees comply with ethical management regulations and self-assess their adherence to such regulations. We are committed to conducting business in a lawful and ethical manner to fulfill our social responsibility and cultivate a transparent and ethical organizational culture.

## Ethics and Compliance Governance

### Role of the BOD

The board of directors at Pan Ocean is the highest decision-making body within the company. It is responsible for deliberating and deciding on critical matters of business operation, including ethics and compliance issues. The board conducts independent and objective assessments of ethical and compliance matters, such as fair trade and compliance, and considers these issues in making significant decisions that impact management strategy. The Ethics Management Office provides the board with regular reports on related activities and performance, enabling them to monitor the status of ethics and compliance risk management. Key deliberations approved by the board in 2023 include the establishment of operating rules for the AP (anti-corruption program), the appointment of an AP manager, the reporting on the creation of a corruption risk map related to the AP, assessment for self-inspection for compliance with laws and regulations.

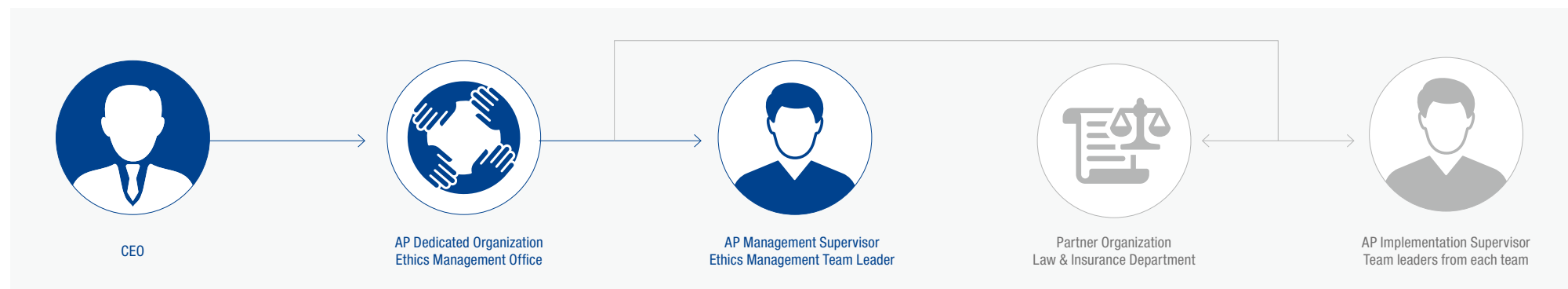
### Role of Management

Under the guidance of the director of ethics management, the management team establishes priorities and implementation plans for company-wide ethics and compliance management and ensures active implementation. The board of directors is presented with issues that are expected to significantly impact the company's mid- to long-term business competitiveness, and reviews reports of major outcomes and activities. In addition, annual improvement tasks for ethics and compliance are set as KPIs (key performance indicators) and performance is managed accordingly. In 2023, the development of the corruption risk map was set as a KPI (key performance indicator) to link it with monetary reward systems such as incentives and salaries.

### Role of the Dedicated Organization

Pan Ocean and its subsidiary POS SM have established dedicated teams, each overseen by the respective CEO. These dedicated teams are responsible for developing and implementing ethical management policies and activities. The ethical management activities primarily include compliance-related education, diagnosis and auditing, and anonymous reporting management. With the implementation of a company-wide monitoring system, we aim to achieve our vision of ethical management and promote a transparent management environment. In addition, the Ethics Management Office regularly evaluates performance and the improvement of ESG management social rating scores is linked to its KPIs.

### Anti-Corruption Program Organizational Chart



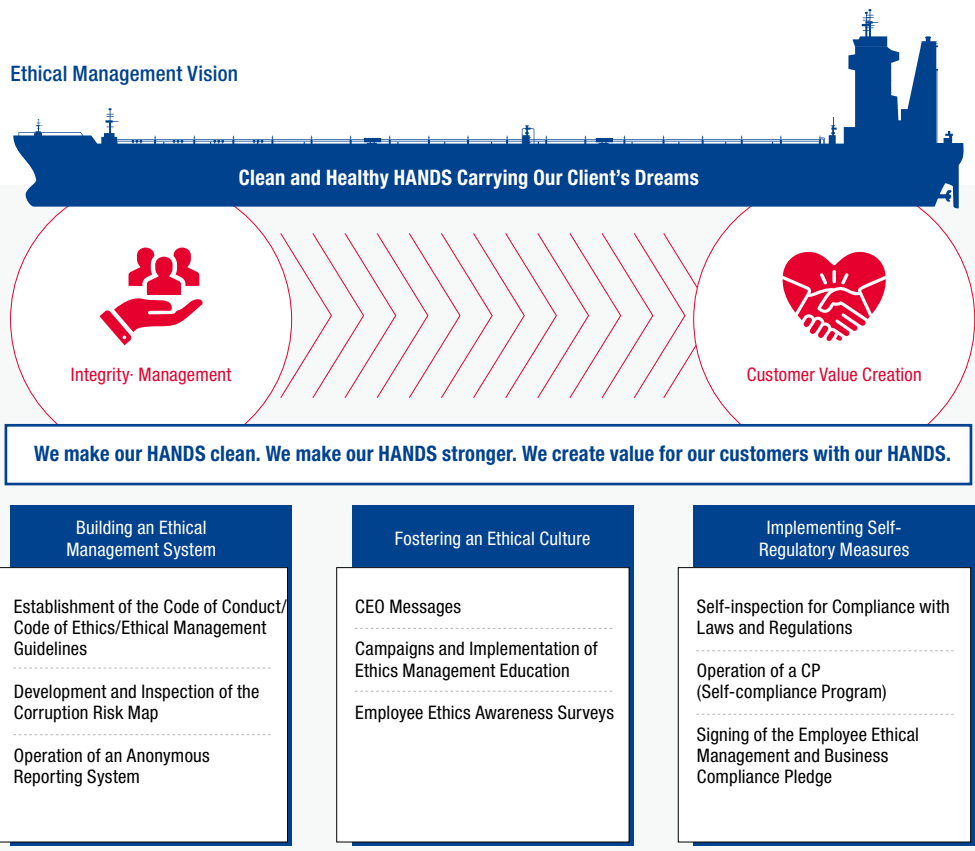
# Ethics and Compliance Management

## Ethics and Compliance Management Strategy

### Ethical Management Framework

Pan Ocean is dedicated to fostering trust with stakeholders through the implementation of ethical management practices. We maintain a zero-tolerance approach to ethical management, and in the event of any breaches of the Ethical Management Guidelines, we take prompt and strict action in accordance with company regulations. Furthermore, ethical violations such as bribery, solicitation and internal transactions are integral factors in our employee performance evaluations. In addition, in alignment with our anti-corruption management policy, all forms of direct or indirect political donations are strictly prohibited.

#### Ethical Management Vision



### Development of Core Ethical Values

[Code of Conduct/ Code of Ethics/ Ethical Management Guidelines Link](#)

Pan Ocean has established several foundational documents, including the Code of Conduct, the Code of Ethics, and the Ethical Management Guidelines, to cultivate an ethical culture within the organization. The Code of Conduct represents the highest standards and guiding principles for ethical management at Pan Ocean, reflecting the company's unwavering commitment to realizing its corporate vision. It lays the groundwork for ethical conduct across the organization. The Code of Ethics provides a comprehensive guide to the principles outlined in the Code of Conduct, offering practical guidance for employees on how to internalize and embody these values in their daily work. Furthermore, the Ethical Management Guidelines have been developed to assist employees in navigating ethical dilemmas that may arise in their professional activities. These principles are not only shared with our team members but also publicly disclosed on our website, demonstrating our dedication to ethical management to external stakeholders.

#### Pan Ocean's Code of Conduct

##### 1. Ethics Regarding Customers

- We prioritize customer satisfaction as the foremost value in management and strive to provide the best service.

##### 2. Ethics Regarding Shareholders and Investors

- We secure trust from shareholders and investors through transparent and responsible management.

##### 3. Ethics Regarding Supplier

- We foster mutual growth and development through transparent and fair business practices with our suppliers.

##### 4. Ethics Regarding Competitors

- We adhere to fair trade practices both domestically and internationally by following fair trade regulations in the industry and market.

##### 5. Ethics Regarding Employees

- We respect individuals as human beings and provide fair opportunities based on abilities and qualifications to instill pride and a sense of fulfillment.

##### 6. Ethics Regarding the Nation and Society

- We respect proper societal values, comply with all national and societal regulations, and our fulfill social responsibilities and obligations.



# Ethics and Compliance Management

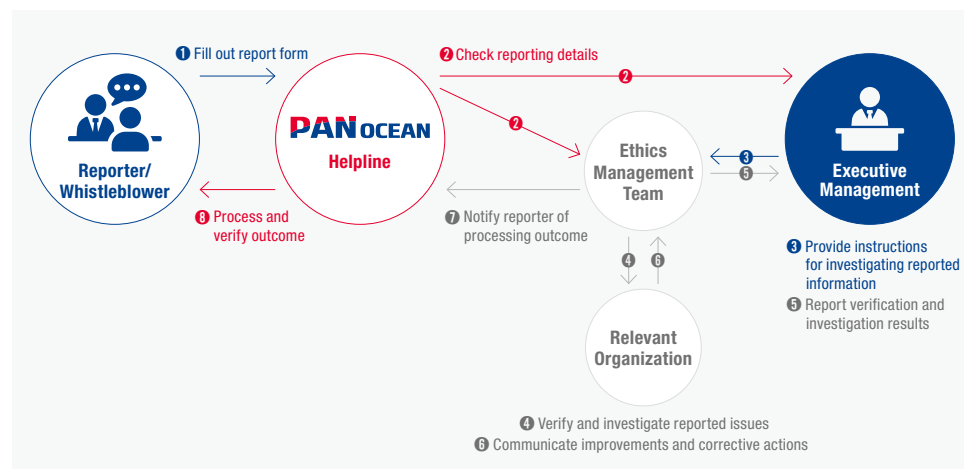
## Self-inspection for Compliance with Laws and Regulations

In accordance with the Commercial Act, Pan Ocean annually reviews and updates checklist items to facilitate team-based self-compliance surveys aimed at mitigating various legal risks associated with business operations. The adequacy of the survey results is confirmed by compliance officers. These officers, selected based on legal qualifications, conduct checks to ensure adherence to compliance control standards and monitor compliance among management and employees, as well as the legality of company activities. They also engage in various compliance support activities. The findings of compliance officers are reported to the board of directors, the highest decision-making body, and are transparently disclosed in the business report.

### Voluntary Compliance Checks Status

| Category      | Unit                              | 2021  | 2022 | 2023 |
|---------------|-----------------------------------|-------|------|------|
| Check Targets | Target Teams                      | teams | 53   | 56   |
|               | Check Items                       | cases | 143  | 153  |
| Check Results | Compliance Implementation Results | %     | 100  | 100  |

### Anonymous Report Handling Process



## Operation of the Reporting and Inquiry System

We have established an anonymous reporting system(Help Line) that enables all stakeholders to freely express their opinions on ethics- and compliance-related issues. Through the helpline, individuals can report and inquiry actions that contravene fundamental ethical values, such as unfair job performance, unjust gains and behaviors detrimental to a sound corporate culture. Our system is easily accessible via our website and ensures strict protection of the reporter's anonymity by being operated through an external third-party service provider.

### Status of Helpline Reports and Actions Taken

(Period: Jan. 1, 2023 – Dec. 31, 2023)

|                             | Category                                | No. of Cases |
|-----------------------------|---|--------------|
| Types of Ethical Violations | Total                                   | 8            |
|                             | Reports of Corruption                   | 1            |
|                             | Complaints (Dissatisfaction, Grievance) | 4            |
|                             | Unfair Trade Practices/Embezzlement     | -            |
|                             | Other Unethical Behaviors               | 3            |
| Actions Taken               | Total                                   | 6            |
|                             | Severe Disciplinary Actions             | 4            |
|                             | Minor Disciplinary Actions              | 2            |

\* Including those from POS SM

# Ethics and Compliance Management

## Ethical Management and Legal Compliance Initiatives

### Ethical Awareness Campaigns for Employees

Pan Ocean conducts annual internal campaigns to promote ethical management practices. These campaigns include activities such as year-end ethical management practices, refusing gifts during national holidays, all aimed at instilling ethical awareness among employees. Since 2022, the company has also conducted online video training sessions, utilizing content from the Anti-Corruption and Civil Rights Commission's Integrity Training Institute, at least three times a year. These sessions focus on the prevention of corruption and other unethical behaviors and target all employees across the organization to foster a positive understanding of ethical and compliance values. In addition, Pan Ocean sends out bi-weekly corruption prevention guidance emails to enhance employee understanding of anti-corruption issues and promote the stable implementation of the ongoing anti-corruption program. POS SM, our major subsidiary, also actively implements equivalent ethical management education to continually enhance employee compliance awareness efforts.

#### Record of Ethics and Compliance Training at Pan Ocean

| Category        | Unit    | 2021 | 2022 | 2023 |
|-----------------|---------|------|------|------|
| No. of Trainees | persons | -    | 382  | 386  |
| Training Hours  | hours   | -    | 312  | 302  |
| Completion Rate | %       | -    | 100  | 100  |

#### Record of Ethics and Compliance Training at POS SM

| Category        | Unit    | 2021  | 2022 | 2023  |
|-----------------|---------|-------|------|-------|
| No. of Trainees | persons | 136   | 141  | 151   |
| Training Hours  | hours   | 1,185 | 523  | 1,575 |
| Completion Rate | %       | 100   | 100  | 100   |

#### Implementation of Pan Ocean Ethical Management Campaigns

| Category                                   | Unit  | 2021 | 2022 | 2023 |
|--|-------|------|------|------|
| Ethical Practices at Year-end and New Year | cases | 1    | 1    | 1    |
| Refusing Gifts on New Year                 | cases | 1    | 1    | 1    |
| Refusing Gifts on Chuseok                  | cases | 1    | 1    | 1    |



### Dissemination of a Compliance Culture

All employees of Pan Ocean pledge to Employee Ethics Management and Business Compliance. This commitment is aimed at disseminating a corporate culture that prioritizes ethical and legally compliant business practices in order to foster a sense of responsibility among all members for achieving responsible management. Pan Ocean actively conducts initiatives to foster a shared understanding of ethical values and cultivate a culture of legal compliance in its workforce. POS SM produces various materials such as ethical management practice guidelines, posters, webtoons and Q&A documents as part of its ongoing Ethical Awareness Campaign. These materials are disseminated online and prominently displayed within our workplace.

#### Signing of the Ethical Management and Legal Compliance Pledge

| Category             | Unit    | 2021 | 2022  | 2023  |
|----------------------|---------|------|-------|-------|
| Target Employees     | persons | 931  | 1,032 | 1,057 |
| Employees Who Signed | hours   | 927  | 1,029 | 1,051 |
| Signing Rate         | %       | 99.6 | 99.7  | 99.4  |

\* Includes POS SM



Ethical Awareness Campaign Posters

# Ethics and Compliance Management

## Ethical and Legal Risk Management

### Corruption Risk Management

#### AP (Anti-corruption Program)

Pan Ocean recognizes the value of maintaining ethical and transparent business practices to enhance corporate sustainability. Consequently, the company has taken proactive measures to implement its AP (anti-corruption program) with the objective of mitigating corruption risks. Regular anti-corruption risk assessments are conducted to identify potential vulnerabilities and formulate corresponding proactive prevention strategies and immediate response protocols. The goal is to establish a system capable of preventing and swiftly addressing corruption issues. In accordance with the guidelines set forth in the Anti-Corruption Compliance Program (K-CP) by the Anti-Corruption and Civil Rights Commission, and the ISO 37001 (anti-bribery management system) Guidebook, we have developed a proprietary corruption risk map. This map is in place across all business operations and provided to all personnel. In 2023, we identified 48 items across five types of corruption risks and confirmed that risk management measures are in place. We intend to continually refine these measures beyond 2024. Furthermore, as part of our ongoing assessment of the effectiveness of our corruption risk management procedures, we conducted a survey of employees. The results of the survey indicated that 92% of respondents expressed positive views of our ethical management policies, and 81% viewed our current corruption risk management practices favorably. For the three risks identified as having a high likelihood of occurrence (discrimination, harassment, and data breaches), we have planned targeted training and regular inspections as a means of addressing them.

#### Corruption Risk Map

| Risk Type  | No. of Potential Corruption Risks | No. of Risk Management Actions |
|--|-----------------------------------|--------------------------------|
| Personal Gain Risk                                 | 16                                | 16                             |
| Risk of Misconduct in Relationships with Suppliers | 11                                | 11                             |
| Risk of Embezzlement                               | 6                                 | 6                              |
| Risk of Undermining Organizational Culture         | 8                                 | 8                              |
| Risk of Performance Evaluation Distortion          | 7                                 | 7                              |
| Total  | 48 cases                          | 48 cases                       |

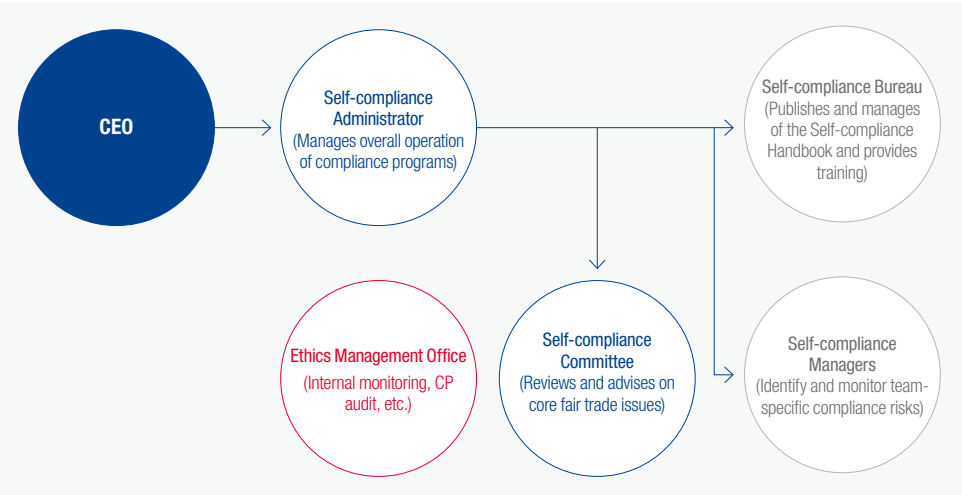
\* Assessment and mitigation measures implemented for a total of 48 corruption risks across 5 categories

### Fair Trade Risk Management

#### CP (Self-compliance Program)

We operate a self-compliance program to cultivate a culture of transparent and equitable transactions, and have set it as an internal control standard. This initiative provides employees with guidelines and standards to adhere to during their duties, thereby fostering independent compliance with fair trade regulations and creating an environment conducive to preventing financial and non-financial risks. The self-compliance administrator is responsible for taking proactive measures to prevent any violations of relevant regulations. In addition, we have distributed the Self-compliance Program Handbook to all employees to integrate the practice of self-compliance into the organization. We will ensure that the manual is consistently updated to reflect changes in laws and new decisions/rulings. Furthermore, we intend to implement a series of ongoing programs to enhance employee understanding of self-compliance, including regular refresher training conducted by self-compliance managers. The performance and plans of our self-compliance program are regularly reported to the board of directors through periodic self-compliance checks. This ensures comprehensive risk management, including pre-transaction risk assessments for new transactions.





#### Compliance Department Organizational Chart





# Ethics and Compliance Management

## Ethical and Legal Indicators and Goals

| Initiatives  | 2023  |   | Mid- to Long-Term Objectives                                    |  |
|--|---|---|---|--|
|  | Performance   | Plan  | 2025  | 2030   |
|  <div>Enhancement of the Ethical Management System</div>                                | Development of the Corruption Risk Map:<br>Identified <b>48</b> Corruption Risk Items | Enhancement of the Corruption Risk Map      | Development of Corruption Risk Maps for Subsidiaries/Affiliates | <b>ISO 37001</b><br>(Anti-Bribery Management System) Certification |
|  <div>Operating of an Anonymous Reporting System (Helpline)</div>                       | Action Rate<br><b>100</b> %   | Action Rate<br><b>100</b> %                 | Action Rate<br><b>100</b> %                                     | Action Rate<br><b>100</b> %  |
|  <div>Increase the Signing Rate of the Compliance Pledge</div>                        | <b>99.4</b> %   | <b>100</b> %                                | <b>100</b> %  | <b>100</b> %   |
|  <div>Strengthening of Self Inspection for Compliance with Laws and Regulations</div> | <b>100</b> %<br>Compliance with Inspections   | <b>100</b> %<br>Compliance with Inspections | <b>100</b> %<br>Compliance with Inspections                     | <b>100</b> %<br>Compliance with Inspections                        |

# Integrated Risk Management

Pan Ocean is dedicated to proactively addressing potential risk factors through the comprehensive management of financial and non-financial risks to ensure operational stability. The board of directors oversees the management of such risks, which are directly linked to critical operational matters, and conducts impact assessments to analyze and diversify risks. Moving forward, we will strengthen our risk management procedures through comprehensive risk assessments and continuous risk management to prevent and promptly respond to both internal and external risks arising from the rapidly changing business environment.

## Corporate Risk Management System

### Risk Management Strategy

Pan Ocean is committed to anticipating market fluctuations and meticulously evaluating financial and non-financial risks in order to minimize any negative impacts. The Risk Management Committee is responsible for formulating and managing response measures to mitigate risks. It reports its activities to the board of directors semi-annually. The company categorizes its risk management areas into six main categories: account risks, financial risks, legal risks, cyber security risks and other risks. These categories are regularly reviewed to ensure that the company is adequately addressing its risks. For risks with significant impact levels, we implement and utilize advanced response processes.

#### Risk Management System

| Risk Type                 | Management Activities  |
|---------------------------|--|
| Market Risk               | <ul style="list-style-type: none"> <li>Conduct open tonnage position assessments and management</li> <li>Monitor and address fluctuations in oil prices</li> <li>Ensure compliance with regulations governing forward freight agreements and fuel oil hedge deals</li> </ul> |
| Account Risk              | <ul style="list-style-type: none"> <li>Enhance data- and system-driven account risk management</li> <li>Mitigate account risks through organized account rating management and information sharing</li> </ul>  |
| Financial Risk            | <ul style="list-style-type: none"> <li>Regularly monitor global economic and financial market trends</li> <li>Effectively monitor and address receivables</li> </ul>   |
| Marine/Environmental Risk | <ul style="list-style-type: none"> <li>Continuously monitor developments surrounding IMO environmental regulations and develop/implement appropriate countermeasures in response</li> </ul>  |
| Legal Risk                | <ul style="list-style-type: none"> <li>Share legal trends/key contractual issues and enhance the response system</li> </ul>  |
| Cyber Security Risk       | <ul style="list-style-type: none"> <li>Monitor cybersecurity risks and review the internal response system accordingly</li> </ul>  |

### Risk Management Process

Pan Ocean has expanded the scope of risk management to ensure sustainable management, and is following recommendations to enhance the board's responsibility for risk management. We have clarified the scope of risk management to include non-financial aspects, and are categorizing risks by type, designating management departments to perform risk management, and improving the risk management system by establishing corporate-wide risk management visions and objectives.



# Integrated Risk Management

## Risk Management Organization

Pan Ocean operates the Risk Management Committee to address various risks inherent in its business operations at the organizational level. The committee is composed of the chairperson, representatives from each department, and a secretary. Depending on the issue, the heads of relevant specialized organizations, such as division heads, department heads and team leaders, may also attend. Quarterly meetings are scheduled, with flexibility for ad-hoc sessions as needed. The committee assesses and evaluates risks across the company's operations and formulates proactive crisis response measures by developing key response strategies and specific action plans in response to identified risks.

## Company-wide Risk Management Responsibility

Pan Ocean's comprehensive risk management system operates under the principle that all stakeholders, from employees to the board of directors and including key management personnel such as the CRO (Chief Risk Officer) and department heads, participate in risk management to proactively address risks across various domains. Company-wide risks are deliberated on under the supervision of the CRO within the Risk Management Committee, and risk activities identified by each business unit are communicated to the CEO through established risk reporting channels.

## Supervision of Company-wide Risk Management

Effective company-wide risk management is overseen through the Risk Management Committee, ensuring clear identification of risks in each area, such as operations and management, and systematic monitoring of the execution status of response measures.

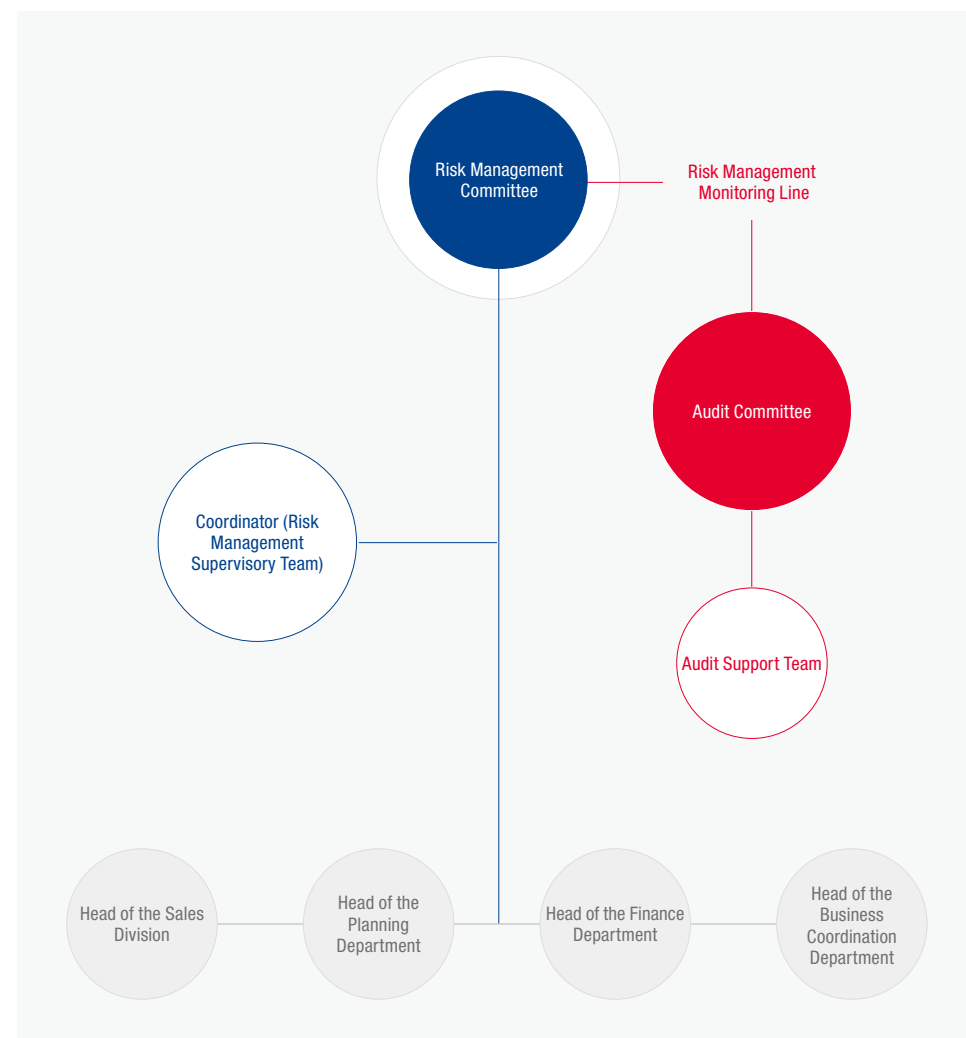
## Organizational Risk Management

In addition to enterprise-wide efforts, Pan Ocean operates a segmented risk management system for each organizational unit. Identified risks undergo examination and assessment through regular risk review meetings, with a focus on proactive responses and reporting. For issues that directly impact overall business operations, the Risk Management Committee takes proactive measures.

## Risk Management Monitoring Activities

Pan Ocean evaluates the efficacy of Risk Management Committee activities through monitoring conducted by the Audit Committee. Independent verification procedures have been established to ensure that risk management and compliance processes operate effectively and align with the company's overarching management strategy. In addition, members of the Audit Committee undergo education to enhance their expertise in ESG risk management, underscoring the company's commitment to environmental, social, and governance considerations.

## Enterprise Risk Management Governance Structure







# Integrated Risk Management

## Risk Management by Type

### Account Risk

Pan Ocean regularly reviews and evaluates its counterparties to monitor risks. When a critical risk is identified, immediate action is taken, such as downgrading a credit rating or terminating a transaction.

#### Account Credit Rating Assessment

New accounts and existing accounts with no transactions in the previous 12 months undergo credit assessments based on internal credit rating criteria. Prior to contracting, these accounts are assigned credit ratings, which serve as the basis for establishing credit limits for each account.

| Category | Unit             | 2021 | 2022 | 2023 |
|----------|------------------|------|------|------|
| Accounts | No. of Companies | 489  | 481  | 452  |

#### Account Credit Rating Adjustment

For accounts with transaction records in the past 12 months, regular semi-annual credit rating assessments are conducted. The process begins with an initial evaluation, followed by assessments by relevant teams and divisions, and concludes with a comprehensive assessment to determine the final credit ratings.

| Category | Unit        | 2021 | 2022 | 2023 |
|----------|-------------|------|------|------|
| Accounts | First Half  | 940  | 957  | 976  |
|          | Second Half | 907  | 972  | 897  |

### Non-Financial Risks

#### Procurement Risk

We are exposed to price fluctuations in fuel oil purchase transactions due to changes in market conditions. To mitigate the impact of these fluctuations on cash flow and the fair value adjustment of related contracts for purchasing fuel oil for our operational vessels, we enter into fuel swaps/options contracts. To effectively hedge against this risk, we align bunker swap contracts with fuel oil purchase contracts.

(As of December 31, 2023, based on the Annual Report, unit: KRW million)

| Category  | Asset/Liability Valuation | Valuation |
|-----------|---------------------------|-----------|
| Asset     | Fuel swaps/options        | 471       |
| Liability | Fuel swaps/options        | 916       |
|           |                           | 477       |
|           |                           | -928      |

#### On/Offshore Risk

We encounter a diverse range of intricate risks that pose potential threats to stable business operation. In response, we have established a risk management system aimed at preventing these risks from causing disruptions and ensuring prompt recovery. To this end, POS SM has obtained ISO 22301 (business continuity management certification) certification, signifying its commitment to effective business continuity practices. The company addresses both onshore and offshore risks by leveraging its BCMS (business continuity management system) as a framework for managing and mitigating potential disruptions.

#### Scope of BCMS Application

| Category | Coverage   |
|----------|--|
| Onshore  | Vessel management for safe cargo transport, employee management services and personnel |
| Offshore | Safe vessel operations, cargo transport activities and personnel                       |

### Financial Risks

#### Foreign Exchange Risk

Pan Ocean primarily operates in USD (United States dollar). The following table illustrates the sensitivity (impact on net assets) of each foreign currency to a 10% fluctuation in the Korean won exchange rate. This 10% sensitivity is internally applied by senior management when reporting foreign exchange risks, as it represents a reasonable fluctuation risk in the eyes of management. The company minimizes foreign exchange exposure by aligning deposit and payment currencies in trade transactions such as exports and imports, as well as in financial transactions such as deposits and borrowings.

(As of December 31, 2023, based on the Annual Report, unit: KRW million)

| Category | 10% increase | 10% decrease |
|----------|--------------|--------------|
| KRW/USD  | -42,435      | 51,866       |

#### Interest Rate Risk

As most of its borrowings are at variable interest rates, Pan Ocean is exposed to interest rate risk from changes in the benchmark interest rate of the US dollar. The impact on pre-tax profit or loss of a 0.5% change in the benchmark interest rate on floating rate borrowings is shown in the table below. We are seeking to minimize the uncertainty and net interest expense caused by interest rate fluctuations by implementing measures such as minimizing external borrowings by expanding internal fund sharing, maintaining an appropriate ratio of fixed to variable rate borrowings, monitoring domestic and international interest rate trends on a weekly/monthly basis, and establishing response strategies to mitigate the risks associated with interest rate fluctuations.

(As of December 31, 2023, based on the Annual Report, unit: KRW million)

| Category  | 0.5%P increase | 0.5%P decrease |
|-----------|----------------|----------------|
| Base rate | -9,862         | 9,862          |

# Integrated Risk Management

## Tax Risk Management



### Tax Strategy

We regard tax risk management as a prerequisite for proactive sustainable management, and we understand its critical role in securing customer benefits, maximizing shareholder value and contributing to national finances through compliance with tax laws. In decision-making processes related to business transactions, mergers and acquisitions, corporate restructuring, international trade and new business ventures, tax risks are thoroughly reviewed based on analyses by the Tax Department and external experts.

### Compliance with Overseas Tax Obligations

Pan Ocean diligently fulfills its obligations as a taxpayer. The company respects the principle of fair taxation by tax authorities and strives to comply with the tax regulations and principles established by local tax authorities in the jurisdictions in which it operates.

## Potential Risk Management

| Category  | Details   | Impact  | Response   |
|---|---|---|--|
| <div>IMO<br/>(International Maritime Organization)<br/>Environmental Regulation Risk</div> <div></div> | <p>The IMO (International Maritime Organization) has adopted the 2023 Greenhouse Gas Reduction Strategy, which strengthens environmental regulations. According this strategy, the shipping industry is required to achieve net-zero greenhouse gas emissions by 2050, with a minimum reduction of 20% by 2030 and 70% by 2040. In addition, regulations on the EEXI (Energy Efficiency Existing Ship Index) and CII (carbon intensity indicator) for existing ships are being enforced. Failure to transition to eco-friendly vessels may make survival in the market difficult.</p> | <p>The expected increase in ship scrapping and the slowdown due to strengthened IMO environmental regulations suggest a significant impact on the shipping industry. Reduced vessel speeds could lead to reduced competitiveness, resulting in various losses, including financial and reputational losses. In addition, the increased scrapping of non-compliant vessels, such as older vessels, may result in financial burdens associated with ordering environmentally friendly vessels. Pan Ocean's core business, bulk carriers, is expected to be more vulnerable to the tightened IMO regulations as it involves numerous long-term shipping contracts, making it difficult to replace vessels in a short period of time.</p> | <p>Pan Ocean is mitigating the risk of IMO environmental regulations by expanding its LNG shipping operations to diversify its portfolio. The introduction of environmentally friendly, highly efficient LNG bunkering vessels equipped with dual-fuel engines that can run on both ship fuel and LNG will increase safety and fuel efficiency while reducing emissions of harmful gases such as NOx and SOx. In addition, a total of five companies, including Pan Ocean and POS SM, have signed a joint research agreement for the verification of fuel and greenhouse gas reductions through autonomous navigation. This will verify the fuel-saving effects of autonomous navigation systems on actual vessels through cooperation among domestic shipbuilders, autonomous navigation specialist companies, shipping companies and classification societies.</p> |
| <div>Cybersecurity Risk</div> <div></div>  | <p>Cybersecurity risk is one of the potential risks identified in the WEF(World Economic Forum)'s Global Risks Report. Due to technological advancements, the market for criminal networks is expanding, and cyber organizational crimes such as hacking and phishing are expected to increase due to their relatively low risk and cost. Cybercrime not only breaches cybersecurity, but also damages corporate reputation and increases risks associated with financial flows and supply chain regulations.</p>   | <p>Pan Ocean prioritizes the security of its vessels and onboard personnel, which are its core value. Vessel navigation equipment is vulnerable to external cyber-attacks, which poses a threat to vessel safety. In addition, if the navigation system is crippled by a cyber attack, delays in transportation schedules could damage customer trust, resulting in economic losses. With the expansion of IT systems in navigation systems, the extent of damage from cyber-attacks is expected to increase, highlighting the need for proactive responses to cyber-attacks.</p>   | <p>Pan Ocean is improving its information security level based on a stable information protection organization centered on the IT system manager. In addition to technical security measures such as firewall construction, we have also implemented administrative security measures such as security policy monitoring. We also provide information security education and have improved our targeted security education programs. We are actively responding to cybersecurity risks on board by installing firewalls on all ships, including cybersecurity plans in each ship's administrative manuals, and including the ship's information security personnel. In addition, to strengthen security incident response capabilities, we conduct regular security incident response training and document security incident response processes through POS SM.</p> |

# Information Security

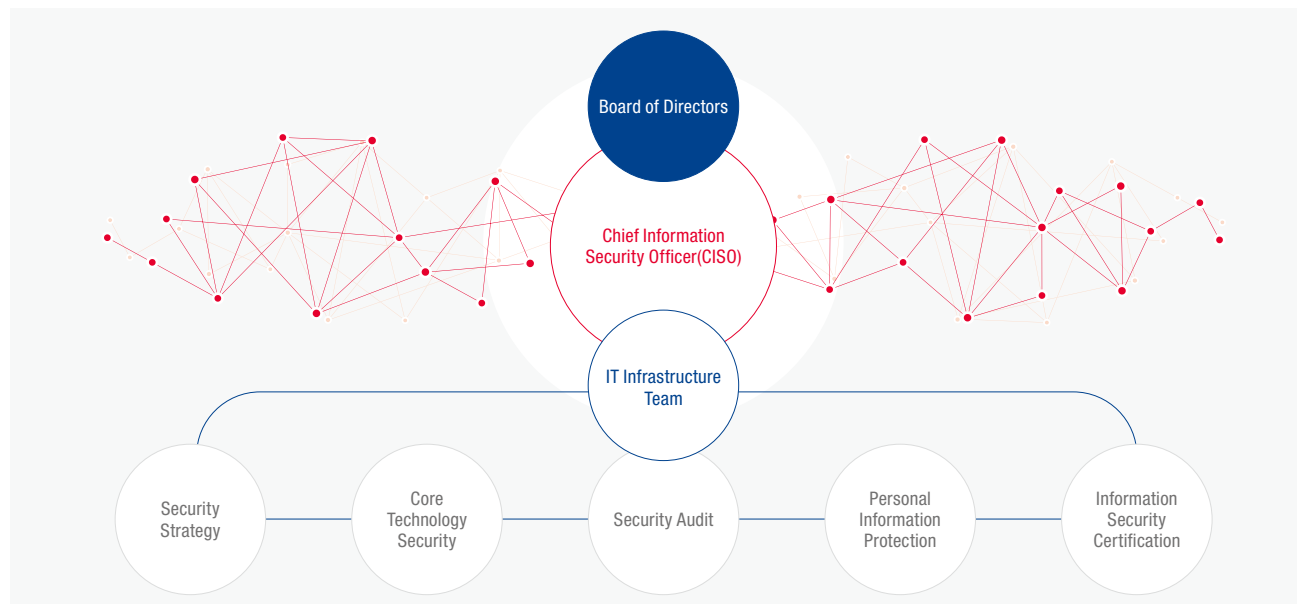
Pan Ocean has implemented safeguarding measures for its core technologies, personnel and information assets. These measures are designed to ensure compliance with relevant regulations. By conducting regular inspections and implementing continuous improvement activities, we aim to prevent, manage and minimize security risks such as information leakage and breaches.

## Information Security Management System

### Information Security Organization

Pan Ocean maintains a secure operational framework by having the information systems manager also serve as the chief information security officer and chief privacy officer. This arrangement enhances our capacity to protect information and manage personal data effectively. Our dedicated IT Infrastructure Team actively addresses both internal and external security threats through activities such as managing security policies, ensuring network security, implementing endpoint security measures and safeguarding personal data. We operate various awareness programs across the company to enhance information security awareness. Recently, we've proactively implemented a range of information security solutions and utilized maintenance services from specialized companies to establish a robust security framework. In addition, we've established medium-to long-term objectives related to information security, personal data protection, and trade secrets, supported by detailed implementation plans.

#### Information Security Management Organization



### Construction of Information Security Infrastructure

#### Technical Security

Pan Ocean employs a variety of technical security solutions to safeguard against external threats such as hacking, malware, and ransomware, as well as to prevent internal network and system breaches. These measures include the implementation of firewalls, web firewalls, document encryption and database access control. Windows security patch updates are performed on both servers and workstations to enhance the overall security system.

#### Administrative Security

We systematically manage and monitor security policies and regulations. This includes the establishment and periodic revision of comprehensive guidelines to ensure continuous improvements. In addition, we conduct regular user security drills, including participation in KISA (Korea Internet & Security Agency) simulation tests, to enhance our employees' ability to respond to cybersecurity breaches and to promote a heightened sense of security awareness.

#### Disclosure of Information Security Status

Since 2022, Pan Ocean has publicly disclosed key updates regarding information security on the Information Security Disclosure Comprehensive Portal. As part of our efforts to enhance information security, we upgraded our web firewall and data loss prevention systems in 2023 and introduced a new integrated security monitoring system. We have also subscribed to a personal information breach indemnity insurance policy.

Investment  
in Information  
Security 2023

KRW **670** million

Ratio of Investment in the  
Information Security Sector  
to Total Investment in the  
IT Sector in 2023

**8.4** %



# Information Security

## Information Security Activities

Pan Ocean conducts regular and ongoing security assessments to verify compliance with security policies and identify areas for improvement. These assessments include reviews of internal management plans, simulation exercises, and self-inspections of the Personal Information Protection Committee's unique information security measures for identification. Regular internal inspections identify security vulnerabilities, thereby increasing the objectivity and reliability of security.

### Information Security Assessment

| Type      | Internal Security Inspection | Simulation Hacking Training | Internal Management Plan Inspection | Self-Inspection of Unique Identification Information |
|-----------|------------------------------|-----------------------------|-------------------------------------|--|
| Target    | Entire System                | All Employees               | Annually                            | Personal Information Processing Systems              |
| Frequency | Ad Hoc                       | Twice or More Annually      | Annually                            | Annually   |

## Information Security Training

Raising cybersecurity awareness among crew members is fundamental to effectively preventing cyber threats. For this reason, Pan Ocean conducts information security training for various groups, including new employees, shore-based staff, new crew members, existing crew members, and security personnel. In 2023, training sessions were held for 387 Pan Ocean employees and 171 POS SM employees. These sessions focused on cybersecurity incident response procedures, reporting protocols, and security system updates.

### Information Security Training Programs

| Category  | Programs                                    | Target                    | No. of Trainings |
|-----------|---|---------------------------|------------------|
| Pan Ocean | Personal Data Protection Training           | All Employees             | Annually         |
|           | IT Environment and Security Training        | New Hires                 | Ad Hoc           |
|           | General/Job-Specific Cybersecurity Training | IT and Security Personnel | Ad Hoc           |
| POS SM    | Regular Training                            | All Employees             | Annually         |
|           | General/Job-Specific Cybersecurity Training | IT and Security Personnel | Annually         |
|           | IT Environment and Security Training        | New Hires                 | Ad Hoc           |
|           | Onboard Cybersecurity Training              | Former Crew Members       | Twice per Year   |
|           |   | New Crew Members          | Ad Hoc           |

## Vessel Security Management

### Onboard Cybersecurity System

Vessels are under constant threat of external cyber-attacks targeting their operational systems. With the widespread adoption of information technologies, such as automation and autonomous vessel operating systems, the potential impact of cyber-attacks on vessels has increased significantly. To mitigate these risks, a number of measures are being implemented to strengthen the cybersecurity of our vessels. All vessels are equipped with firewalls and comprehensive cybersecurity plans are included in vessel management manuals. In addition, shipboard security officers and managers are designated to prevent security breaches.

### Response to Security Breaches

Security breaches are promptly reported to the CISO (Chief Information Security Officer) and the appropriate business unit upon discovery to initiate immediate remediation. Access and time logs and other incident details are collected, stored and used to develop measures to prevent recurrence. For its operational IT system services, POS SM documents disaster preparedness, response and recovery procedures to minimize the impact of disasters, maintain critical functions and quickly resume operations. In the event of a significant outage or disaster declaration affecting IT systems, the disaster recovery team activates backup systems and initiates system recovery immediately to ensure business continuity.

### Security Risk Assessment

Pan Ocean and POS SM conduct security risk assessments to identify vulnerabilities and mitigate potential cyber threats. They participate in biannual security simulation exercises organized by the KISA (Korea Internet & Security Agency), and the training outcomes are analyzed to identify areas for improvement. In 2023, a total of 769 employees from Pan Ocean and POS SM participated in simulation exercises. The results revealed a gradual improvement in employee security awareness due to ongoing cybersecurity training and internal promotional activities. However, it was noted that the non-compliance rate for new hires and oversight of external sites remains high, indicating the need for relevant security education and awareness enhancement. Consequently, both companies are enhancing targeted security education programs to improve overall security awareness among all employees and encourage voluntary adherence to security practices.

# Information Security

## Personal Data Protection

### Personal Data Protection Management System

#### Personal Data Protection Officer

Pan Ocean has appointed a CPO (Chief Privacy Officer) alongside the CISO (Chief Information Security Officer) to ensure a stable personal data protection framework. Dedicated personnel are employed to handle information technology and security tasks internally. These individuals undergo specialized personal data protection training to enhance their skills and stay updated on the latest information security issues.

#### Personal Information Protection

As the risk of personal data breaches increases and the potential scale of damages expands, Pan Ocean is conducting the following personal data protection activities. There are plans to further expand these activities to suit the security environments of both onshore and offshore operations in the future.

- Establishing and reporting privacy protection activities and improvement plans
  - Providing privacy protection training to all employees (mandatory training)
  - Conducting privacy protection training courses for the CPO and relevant staff
  - Participating in the unique identification information safety measure management survey
  - Carrying out activities to ensure the safety of personal information
  - Integrating amendments to privacy laws into systems
  - Implementing a clear personal information retention policy for systems
  - Taking out privacy damage liability insurance

### Personal Data Protection Governance

|                        |   |   |  |
|------------------------|---|---|--|
| Role                   | Manage Personal Information Protection                        | Manage Personal Data Access Requests and Processing | Supervise Video Information Processing Equipment |
| Responsible Department | IT Infrastructure Team  |   |  |
| Authorized Personnel   | IT Infrastructure Team Leader / Safety Management Team Leader |   |  |
| Responsible Department | Information Systems Department                                |   |  |

### Privacy Policy

#### Personal Data Management Policy

In compliance with the Personal Information Protection Act, the Act on Promotion of Information and Communications Network Utilization and Information Protection, and other relevant regulations, Pan Ocean has established a personal information processing policy. Through this policy, Pan Ocean provides information on the purposes and methods of personal data usage, as well as the measures implemented to protect personal information. Any updates or revisions to the personal data handling policy are promptly communicated to data subjects through website announcements or individual notices, ensuring comprehensive disclosure of significant information related to data. In addition to comprehensive guidelines, Pan Ocean has implemented nine specific measures to safeguard personal information, including regular internal audits, personal data encryption and prevention of access record tampering, to ensure secure personal data management, and all these measures are transparently disclosed on the website.

#### Responses to Violations of Personal Data Rights

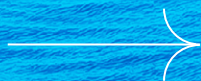
Pan Ocean has designated a personal data protection officer to handle consultations and address complaints and damages related to personal data processing, and their contact information is publicly disclosed on the website. In addition, in cases of personal data rights violations, we provide reporting channels for swift incident resolution to ensure prompt and effective responses.

#### Reporting Channels for Personal Information Protection

|   |   |
|---|---|
| Privacy Call Center   | Supreme Prosecutors' Office                   |
| Website: privacy.kisa.or.kr<br>Tel: 118                           | Website: www.spo.go.kr<br>Tel:1301            |
| Personal Information Dispute Mediation Committee                  | Korean National Police Agency Cyber Bureau    |
| Website: www.kopico.go.kr<br>Tel: 1833-6972                       | Website: cyberbureau.police.go.kr<br>Tel: 182 |
| Department for Processing of Personal Information Access Requests |   |
| Department: IT Infrastructure Team<br>Tel: 02-316-5610            |   |



## Chapter. 6



# Appendix

**089** / ESG DATA

**105** / GRI Index

**109** / ESRS Index

**112** / SASB Index

**113** / TCFD Index

**114** / Association Memberships and  
Award Achievements

**115** / GHG Verification Statement

**116** / Independent Assurance Statement



ESG DATA

Economic

Consolidated Summary Statement of Financial Position

| Financial Information (Consolidated) | Unit        | 2020      | 2021      | 2022      | 2023      |
|--------------------------------------|-------------|-----------|-----------|-----------|-----------|
| Assets                               |             |           |           |           |           |
| Current assets                       | KRW million | 662,523   | 1,358,712 | 1,834,200 | 1,757,323 |
| Non-current assets                   | KRW million | 3,996,804 | 5,130,067 | 5,714,742 | 6,096,623 |
| Total assets                         | KRW million | 4,659,327 | 6,488,779 | 7,548,942 | 7,853,946 |
| Liabilities                          |             |           |           |           |           |
| Current liabilities                  | KRW million | 604,301   | 1,149,410 | 1,226,756 | 1,294,029 |
| Non-current liabilities              | KRW million | 1,248,374 | 1,742,532 | 1,829,582 | 1,846,566 |
| Total liabilities                    | KRW million | 1,852,675 | 2,891,942 | 3,056,338 | 3,140,595 |
| Capital                              |             |           |           |           |           |
| Owner's equity                       | KRW million | 2,806,652 | 3,596,837 | 4,492,604 | 4,713,351 |
| Capital                              | KRW million | 534,570   | 534,570   | 534,570   | 534,570   |
| Capital surplus                      | KRW million | 717,132   | 717,132   | 717,132   | 717,132   |
| Other capital                        | KRW million | 1,226,301 | 1,493,821 | 1,766,202 | 1,823,416 |
| Earned surplus                       | KRW million | 328,649   | 851,314   | 1,474,700 | 1,638,233 |
| Non-controlling equity               | KRW million | -1,807    | 0         | 0         | 0         |
| Total capital                        | KRW million | 2,806,652 | 3,596,837 | 4,492,604 | 4,713,351 |
| Total capital and liabilities        | KRW million | 4,659,327 | 6,488,779 | 7,548,942 | 7,853,946 |

Consolidated Summary Statement of Comprehensive Income

| Financial Information (Consolidated)                   | Unit        | 2020      | 2021      | 2022      | 2023      |
|--|-------------|-----------|-----------|-----------|-----------|
| Consolidated Summary Statement of Comprehensive Income |             |           |           |           |           |
| Sales  | KRW million | 2,497,159 | 4,616,107 | 6,420,312 | 4,360,982 |
| Cost of sales  | KRW million | 2,193,226 | 3,950,376 | 5,520,365 | 3,861,154 |
| Gross profit   | KRW million | 303,933   | 665,731   | 899,947   | 499,828   |
| Selling and administrative expenses                    | KRW million | 78,721    | 92,785    | 110,329   | 113,974   |
| Operating profit                                       | KRW million | 225,212   | 572,946   | 789,618   | 385,854   |
| Financial earnings                                     | KRW million | 17,158    | 30,118    | 97,017    | 83,092    |
| Cost of finances                                       | KRW million | 64,629    | 60,049    | 150,645   | 157,057   |
| Gains or losses using equity method                    | KRW million | 5,377     | 12,639    | 18,510    | -3,479    |
| Other non-operating gains or losses                    | KRW million | -91,162   | -5,296    | -66,533   | -59,921   |
| Net income before corporate tax                        | KRW million | 91,956    | 550,358   | 687,967   | 248,489   |
| Corporate tax  | KRW million | 1,234     | 1,053     | 10,886    | 3,448     |
| Current net income                                     | KRW million | 90,722    | 549,305   | 677,081   | 245,041   |
| Other comprehensive income                             | KRW million | -170,580  | 267,608   | 273,347   | 55,888    |
| Total comprehensive income                             | KRW million | -79,858   | 816,913   | 950,428   | 300,929   |



ESG DATA

Environmental

GHG Emissions

| Category  |                              | Unit                                 | 2020      | 2021      | 2022      | 2023      |
|---|------------------------------|--------------------------------------|-----------|-----------|-----------|-----------|
| Pan Ocean                                       |                              |                                      |           |           |           |           |
| Direct GHG emissions (Scope 1*)                 | Mobile combustion            | tCO <sub>2</sub> eq                  | 2,382,970 | 2,757,404 | 2,669,080 | 2,678,713 |
|   | Vessels**                    | tCO <sub>2</sub> eq                  | 2,382,921 | 2,757,356 | 2,669,026 | 2,678,663 |
|   | Vehicles                     | tCO <sub>2</sub> eq                  | 49        | 48        | 54        | 50        |
| Indirect GHG emissions (Scope 2***)             | Power purchased              | tCO <sub>2</sub> eq                  | 569       | 539       | 483       | 580       |
| Total (Scope 1+2)                               |                              | tCO <sub>2</sub> eq                  | 2,383,539 | 2,757,943 | 2,669,563 | 2,679,293 |
| Other indirect GHG emissions (Scope 3)          | Upstream                     | tCO <sub>2</sub> eq                  | 1,453,048 | 2,884,436 | 3,738,975 | 4,511,253 |
|   | Purchased goods and services | tCO <sub>2</sub> eq                  | -         | 22,191    | 9,532     | 2,399     |
|   | Leased assets                | tCO <sub>2</sub> eq                  | 1,453,048 | 2,232,155 | 2,219,848 | 1,977,601 |
|   | Upstream distribution        | tCO <sub>2</sub> eq                  | -         | 629,965   | 1,509,302 | 2,531,001 |
|   | Business travel              | tCO <sub>2</sub> eq                  | -         | 42        | 188       | 140       |
|   | Employee commuting           | tCO <sub>2</sub> eq                  | -         | 83        | 105       | 112       |
| Sales   |                              | KRW 100 million                      | 21,029    | 40,692    | 57,004    | 38,115    |
| GHG emissions intensity**** (per unit of sales) |                              | tCO <sub>2</sub> eq/ KRW 100 million | 113.346   | 67.776    | 46.831    | 70.295    |

(Scope 1, 2, and 3 emissions included in the calculation: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O)

\* Scope 1 calculation target: Pan Ocean's fleet, corporate vehicles

\*\*\* Total fuel consumption and incinerator usage on ships. Incinerator usage data is excluded for 2020 since it was only collected and verified starting in 2021

\*\*\*\* Scope 2 calculation target: Electricity consumption at Pan Ocean's domestic business sites

\*\*\*\*\* (Scope 1+2 emissions) / Sales based on Pan Ocean's separate financial statements

GHG Emissions

| Category                                      |                   | Unit                                 | 2020  | 2021  | 2022  | 2023  |
|---|-------------------|--------------------------------------|-------|-------|-------|-------|
| POS SM  |                   |                                      |       |       |       |       |
| Direct GHG emissions (Scope 1*)               | Mobile combustion | tCO <sub>2</sub> eq                  | 35    | 26    | 22    | 26    |
|   | Vehicles          | tCO <sub>2</sub> eq                  | 35    | 26    | 22    | 26    |
| Indirect GHG emissions (Scope 2**)            | Power purchased   | tCO <sub>2</sub> eq                  | 117   | 125   | 128   | 125   |
| Total (Scope 1+2)                             |                   | tCO <sub>2</sub> eq                  | 152   | 151   | 150   | 151   |
| Sales   |                   | KRW 100 million                      | 2,016 | 2,339 | 2,656 | 2,589 |
| GHG emissions intensity** (per unit of sales) |                   | tCO <sub>2</sub> eq/ KRW 100 million | 0.075 | 0.064 | 0.056 | 0.058 |

\* Includes energy consumption at domestic business sites but excludes it when calculating total energy consumption and intensity

\*\* (Scope 1+2 energy usage) / Revenue based on POS SM's separate financial statements

ESG DATA

Environmental

Energy Consumption

| Category                                      | Unit                 | 2020    | 2021    | 2022    | 2023    |
|---|----------------------|---------|---------|---------|---------|
| Pan Ocean                                     |                      |         |         |         |         |
| Owned fleet fuel consumption (Scope 1)        | TOE                  | 758,189 | 884,038 | 848,531 | 857,571 |
| HFO (B-C oil)                                 | TOE                  | 302,587 | 388,916 | 390,570 | 401,113 |
| LFO (B-C oil)                                 | TOE                  | 412,382 | 406,961 | 401,750 | 388,919 |
| DO (B-A oil)                                  | TOE                  | 43,220  | 54,518  | 53,870  | 51,425  |
| LNG   | TOE                  | -       | 33,643  | 2,341   | 16,114  |
| Corporate vehicles fuel consumption (Scope 1) | TOE                  | 17      | 17      | 19      | 17      |
| Gasoline                                      | TOE                  | 16      | 16      | 18      | 15      |
| Diesel  | TOE                  | 1       | 1       | 1       | 2       |
| Electricity (Scope 2)                         | TOE                  | 305     | 293     | 240     | 289     |
| Chartered fleet fuel consumption (Scope 3)    | TOE                  | 463,336 | 711,485 | 707,854 | 630,910 |
| HFO (B-C oil)                                 | TOE                  | 15,176  | 42,680  | 81,489  | 67,423  |
| LFO (B-C oil)                                 | TOE                  | 423,059 | 622,398 | 549,357 | 505,436 |
| DO (B-A oil)                                  | TOE                  | 25,101  | 46,407  | 77,008  | 58,051  |
| Total energy consumption* (Scope 1+2)         | TOE                  | 758,511 | 884,348 | 848,790 | 857,877 |
| Sales   | KRW 100 million      | 21,029  | 40,692  | 57,004  | 38,115  |
| Energy intensity (per unit of sales)**        | TOE/ KRW 100 million | 36.070  | 21.733  | 14.890  | 22.508  |

\* Includes energy consumption from ships and domestic business sites; Scope 3 is excluded from total energy consumption and intensity  
\*\* (Scope 1+2 energy consumption) / Sales based on Pan Ocean's separate financial statements

Energy Consumption

| Category                                      | Unit                 | 2020  | 2021  | 2022  | 2023  |
|---|----------------------|-------|-------|-------|-------|
| POS SM  |                      |       |       |       |       |
| Corporate vehicles fuel consumption (Scope 1) | TOE                  | 9     | 7     | 5     | 20    |
| Gasoline                                      | TOE                  | 12    | 9     | 8     | 8     |
| LPG   | TOE                  | -     | -     | -     | 1     |
| Electricity (Scope 2)                         | TOE                  | 58    | 62    | 64    | 62    |
| Total energy consumption* (Scope 1+2)         | TOE                  | 70    | 71    | 71    | 71    |
| Sales   | KRW 100 million      | 2,016 | 2,339 | 2,656 | 2,589 |
| Energy intensity (per unit of sales)**        | TOE/ KRW 100 million | 0.035 | 0.031 | 0.027 | 0.028 |

\* Includes energy consumption from ships and domestic business sites; Scope 3 is excluded from total energy consumption and intensity  
\*\* (Scope 1+2 energy consumption) / Sales based on POS SM's separate financial statements

ESG DATA

Environmental

Waste Generation

| Category                                   |  | Unit | 2020   | 2021   | 2022   | 2023   |
|--|--|------|--------|--------|--------|--------|
| Pan Ocean                                  |  |      |        |        |        |        |
| Total generated waste                      | Total                                  | ton  | 24,987 | 28,405 | 29,695 | 31,489 |
| General waste from vessels (non-hazardous) | Food waste                             | ton  | 325    | 348    | 350    | 364    |
|  | Domestic waste                         | ton  | 1,684  | 1,949  | 2,225  | 2,519  |
|  | Cargo residue                          | ton  | -      | -      | -      | -      |
|  | Other                                  | ton  | -      | -      | -      | -      |
|  | Subtotal                               | ton  | 2,009  | 2,297  | 2,575  | 2,883  |
| Designated waste from vessels (hazardous)  | Waste oils                             | ton  | 20,878 | 23,437 | 25,113 | 26,632 |
|  | Oily Rags                              | ton  | 628    | 922    | 440    | 386    |
|  | Plastics                               | ton  | 1,106  | 1,306  | 1,452  | 1,462  |
|  | Ashes                                  | ton  | 366    | 443    | 113    | 124    |
|  | Other                                  | ton  | -      | -      | -      | -      |
|  | Subtotal                               | ton  | 22,978 | 26,108 | 27,118 | 28,604 |
| Office waste                               | Head Office                            | ton  | -      | 2.21   | 1.39   | 1.77   |
|  | Busan Office Sales Team                | ton  | 0.55   | 0.63   | 0.56   | 0.21   |
|  | Pohang Office                          | ton  | 0.08   | 0.05   | -      | 0.42   |
|  | Dangjin Office**                       | ton  | 0.25   | 0.13   | -      | -      |
|  | Gwangyang Office**                     | ton  | -      | -      | -      | -      |
|  | Subtotal                               | ton  | 0.88   | 3.02   | 1.96   | 2.40   |
| Waste recycling                            | General waste (non-hazardous) - Office | ton  | -      | -      | -      | -      |
|  | Designated waste (hazardous) - Vessel* | ton  | 7,311  | 9,604  | 10,159 | 11,901 |
|  | Subtotal                               | ton  | 7,311  | 9,604  | 10,159 | 11,901 |
| Total waste recycling rate                 |  | %    | 29.3   | 33.8   | 34.2   | 37.8   |

\* Plastics and sludge from vessels

\*\*Dangjin Office and Gwangyang Office have two or fewer employees on site, making waste management difficult; thus, it is marked as 0

Waste Generation

| Category              |             | Unit | 2020 | 2021 | 2022 | 2023 |
|-----------------------|-------------|------|------|------|------|------|
| POS SM                |             |      |      |      |      |      |
| Total generated waste | Total       | ton  | 4.97 | 5.78 | 4.54 | 1.72 |
| Office waste          | Head Office | ton  | 4.97 | 5.78 | 4.54 | 1.72 |
|                       | Subtotal    | ton  | 4.97 | 5.78 | 4.54 | 1.72 |



ESG DATA

Environmental

Air Pollutant Emissions

| Category              | Unit | 2020       | 2021       | 2022       | 2023       |
|-----------------------|------|------------|------------|------------|------------|
| Pan Ocean             |      |            |            |            |            |
| NOx (nitrogen oxides) | kg   | 63,851,643 | 71,729,675 | 71,249,120 | 70,867,753 |
| SOx (sulfur oxides)   | kg   | 7,511,958  | 8,438,785  | 8,382,249  | 8,337,383  |

(Emission factor based on IMO MEPC Cir. 681, 2nd IMO GHG STUDY 2009 (MEPC59 INF.10), 4<sup>th</sup> IMO GHG STUDY 2020)

Water Withdrawal

| Category                            | Unit                            | 2020   | 2021   | 2022   | 2023   |
|-------------------------------------|---------------------------------|--------|--------|--------|--------|
| Pan Ocean*                          |                                 |        |        |        |        |
| Head Office                         | m <sup>3</sup>                  | 7,465  | 6,295  | 5,372  | 8,400  |
| Busan Office Sales Team             | m <sup>3</sup>                  | 292    | 279    | 292    | 307    |
| Gwangyang Office                    | m <sup>3</sup>                  | -      | -      | 39     | 9      |
| Pohang Office                       | m <sup>3</sup>                  | -      | -      | -      | 59     |
| Total                               | m <sup>3</sup>                  | 7,757  | 6,574  | 5,703  | 8,775  |
| Sales                               | KRW 100 million                 | 21,029 | 40,692 | 57,004 | 38,115 |
| Water intensity (per unit of sales) | m <sup>3</sup> /KRW 100 million | 0.37   | 0.16   | 0.10   | 0.23   |
| POS SM**                            |                                 |        |        |        |        |
| Head Office                         | m <sup>3</sup>                  | 2,192  | 2,153  | 2,218  | 2,335  |
| Sales                               | KRW 100 million                 | 2,016  | 2,339  | 2,656  | 2,589  |
| Water intensity (per unit of sales) | m <sup>3</sup> /KRW 100 million | 1.10   | 0.91   | 0.83   | 0.90   |

\* 100% municipal water, no recycled water, excluding intake on ships  
\*\* 100% municipal water, no recycled water, calculated considering rental area

Green Products Purchase Record

| Category                  | Unit        | 2020   | 2021   | 2022   | 2023   |
|---------------------------|-------------|--------|--------|--------|--------|
| Pan Ocean                 |             |        |        |        |        |
| Green lubricants          | KRW million | 172    | 264    | 269    | 416    |
| Green chemical            | KRW million | 29     | 36     | 59     | 93     |
| Green products            | KRW million | 201    | 300    | 328    | 509    |
| Total purchases           | KRW million | 47,112 | 57,197 | 82,894 | 88,940 |
| % Green product purchases | %           | 0.43   | 0.52   | 0.40   | 0.57   |

ESG DATA

Environmental

Green Equipment Investment Status

| Category                        | Unit        | 2020   | 2021   | 2022   | 2023  |
|---------------------------------|-------------|--------|--------|--------|-------|
| Pan Ocean                       |             |        |        |        |       |
| BWMS                            | KRW million | 17,325 | 23,814 | 25,989 | 4,377 |
| SOx reduction equipment         | KRW million | 48,518 | -      | -      | 2,468 |
| AMP                             | KRW million | 569    | 573    | -      | -     |
| Vessel speed restriction device | KRW million | 91     | -      | -      | 1,326 |
| Total                           | KRW million | 66,503 | 24,387 | 25,989 | 8,171 |

Ecological Impact

| Category                     | Unit | 2020 | 2021 | 2022 | 2023 |
|------------------------------|------|------|------|------|------|
| Pan Ocean                    |      |      |      |      |      |
| Ballast water exchange rate  | %    | 48   | 24   | 8    | 5    |
| Ballast water treatment rate | %    | 52   | 76   | 92   | 95   |



## ESG DATA Social

## Employees Status

| Category                |                                | Unit   | 2020  | 2021  | 2022  | 2023  |
|-------------------------|--------------------------------|--------|-------|-------|-------|-------|
| Pan Ocean               |                                |        |       |       |       |       |
| Total No. of employees* | Total                          | person | 1,061 | 1,135 | 1,146 | 1,161 |
|                         | Onshore                        | person | 327   | 352   | 371   | 365   |
|                         | Male                           | person | 246   | 258   | 271   | 264   |
|                         | Female                         | person | 81    | 94    | 100   | 101   |
|                         | Offshore                       | person | 734   | 783   | 775   | 796   |
|                         | Male                           | person | 725   | 771   | 759   | 777   |
| By employment type      | Female                         | person | 9     | 12    | 16    | 19    |
|                         | Onshore                        | person | 327   | 352   | 371   | 365   |
|                         | Regular                        | person | 322   | 341   | 350   | 354   |
|                         | Non-regular                    | person | 5     | 11    | 21    | 11    |
|                         | Offshore                       | person | 734   | 783   | 775   | 796   |
|                         | Regular                        | person | 434   | 480   | 484   | 624   |
| By age                  | Non-regular                    | person | 300   | 303   | 291   | 172   |
|                         | Onshore                        | person | 327   | 352   | 371   | 365   |
|                         | Under 30                       | person | 16    | 34    | 48    | 43    |
|                         | 30 - 49                        | person | 272   | 269   | 274   | 263   |
|                         | 50 or older                    | person | 39    | 49    | 49    | 59    |
|                         | Offshore                       | person | 734   | 783   | 775   | 796   |
| By location             | Under 30                       | person | 248   | 261   | 247   | 236   |
|                         | 30 - 49                        | person | 243   | 267   | 284   | 310   |
|                         | 50 or older                    | person | 243   | 255   | 244   | 250   |
|                         | Onshore                        | person | 327   | 352   | 371   | 365   |
|                         | Domestic                       | person | 323   | 348   | 366   | 360   |
|                         | International                  | person | 4     | 4     | 5     | 5     |
| By position**           | Offshore                       | person | 734   | 783   | 775   | 796   |
|                         | Domestic                       | person | 734   | 783   | 775   | 796   |
|                         | International                  | person | -     | -     | -     | -     |
|                         | Onshore                        | person | 327   | 352   | 371   | 365   |
|                         | Senior manager (male)          | person | 148   | 156   | 166   | 171   |
|                         | Senior manager (female)        | person | 11    | 14    | 12    | 16    |
| By position**           | Manager (male)                 | person | 71    | 73    | 63    | 54    |
|                         | Manager (female)               | person | 32    | 33    | 35    | 35    |
|                         | Junior positions (male)        | person | 27    | 29    | 42    | 39    |
|                         | Junior positions (female)      | person | 38    | 47    | 53    | 50    |
|                         | Offshore                       | person | 734   | 783   | 775   | 796   |
|                         | Master/Chief engineer (male)   | person | 194   | 226   | 217   | 265   |
| By position**           | Master/Chief engineer (female) | person | -     | -     | -     | -     |
|                         | Officers (male)                | person | 395   | 418   | 413   | 388   |
|                         | Officers (female)              | person | 9     | 12    | 16    | 19    |
|                         | Ratings (male)                 | person | 136   | 127   | 129   | 124   |
|                         | Ratings (female)               | person | -     | -     | -     | -     |

\* Based on the business report criteria (excluding registered executives and corporate personnel)

\*\* Based on the revised personnel system criteria for 2023 (senior manager (formerly deputy head, head of division, head of department), manager (formerly section chief and deputy section chief), Junior positions (including administrative support positions))

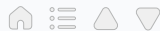
| Category               |                      | Unit   | 2020 | 2021 | 2022 | 2023 |
|------------------------|----------------------|--------|------|------|------|------|
| POS SM                 |                      |        |      |      |      |      |
| Total No. of employees | Total                | person | 132  | 150  | 156  | 174  |
| By employment type     | Regular              | person | 115  | 127  | 130  | 142  |
|                        | Non-regular          | person | 17   | 23   | 26   | 32   |
| By age                 | Under 30             | person | 16   | 21   | 17   | 16   |
|                        | 30 - 49              | person | 105  | 111  | 116  | 127  |
|                        | 50 or older          | person | 11   | 18   | 23   | 31   |
| By location            | Domestic             | person | 131  | 149  | 155  | 173  |
|                        | International        | person | 1    | 1    | 1    | 1    |
| By position*           | Lower-level manager  | person | 16   | 17   | 15   | 18   |
|                        | Male                 | person | 11   | 12   | 11   | 13   |
|                        | Female               | person | 5    | 5    | 4    | 5    |
|                        | Middle level manager | person | 56   | 56   | 59   | 65   |
|                        | Male                 | person | 53   | 52   | 54   | 58   |
|                        | Female               | person | 3    | 4    | 5    | 7    |
|                        | Upper-level manager  | person | 29   | 34   | 32   | 34   |
|                        | Male                 | person | 29   | 34   | 32   | 34   |
|                        | Female               | person | -    | -    | -    | -    |
| By position*           | Others               | person | 31   | 43   | 50   | 57   |

\* Lower-level manager: Assistant manager level

Mid-level manager: Manager and deputy general manager levels

Upper-level manager: General Manager/Director level and Executives

Others: Junior positions and PJT supervisor



# ESG DATA

## Social

### New Recruitment and Turnover

| Category                  |                         | Unit   | 2020 | 2021 | 2022 | 2023 |
|---------------------------|-------------------------|--------|------|------|------|------|
| Pan Ocean                 |                         |        |      |      |      |      |
| New recruitment           | Total                   | person | 206  | 235  | 169  | 101  |
|                           | Onshore                 | person | 19   | 39   | 43   | 13   |
|                           | Male                    | person | 16   | 24   | 29   | 9    |
|                           | Female                  | person | 3    | 15   | 14   | 4    |
|                           | Offshore                | person | 187  | 196  | 126  | 88   |
|                           | Male                    | person | 185  | 189  | 123  | 83   |
|                           | Female                  | person | 2    | 7    | 3    | 5    |
| Turnover*                 | Onshore                 |        |      |      |      |      |
|                           | Total turnover rate     | %      | 3.3  | 3.6  | 5.4  | 5.7  |
|                           | Voluntary turnover rate | %      | 2.5  | 3.1  | 4.9  | 4.2  |
|                           | Offshore                |        |      |      |      |      |
|                           | Total turnover rate     | %      | 10.2 | 8.4  | 9.8  | 5.7  |
| Average length of service | Voluntary turnover rate | %      | 8.9  | 6.8  | 8.6  | 2.9  |
|                           | Total                   | year   | 9.2  | 8.8  | 8.9  | 9.6  |
|                           | Onshore (male)          | year   | 13.2 | 13.1 | 13.2 | 14.0 |
|                           | Onshore (female)        | year   | 12.6 | 11.7 | 11.6 | 12.4 |
|                           | Offshore (male)         | year   | 7.6  | 7.2  | 7.2  | 7.9  |
|                           | Offshore (female)       | year   | 2.3  | 1.8  | 2.3  | 2.5  |

\* Total turnover rate = Total number of departures during the year / Total number of employees at the end of the year  
Voluntary turnover rate = Total number of voluntary departures during the year / Total number of employees at the end of the year  
Total number of employees at the end of the year = Includes executives and registered executives of overseas branches  
Total number of departures = Includes executives, independent director, and contract employees with expired contracts  
Voluntary departures = Excludes executives (except voluntary resignations), independent director, and contract employees with expired contracts

| Category                  |                         | Unit   | 2020 | 2021 | 2022 | 2023 |
|---------------------------|-------------------------|--------|------|------|------|------|
| POS SM                    |                         |        |      |      |      |      |
| New recruitment           | Total                   | person | 36   | 55   | 39   | 53   |
|                           | Male                    | person | 25   | 37   | 32   | 49   |
|                           | Female                  | person | 11   | 18   | 7    | 4    |
| Turnover*                 | Total turnover rate     | %      | 12.1 | 24.0 | 19.9 | 20.7 |
|                           | Voluntary turnover rate | %      | 2.3  | 5.3  | 7.7  | 4.6  |
| Average length of service | Male                    | year   | 9.8  | 9.9  | 9.2  | 8.5  |
|                           | Female                  | year   | 6.8  | 4.5  | 6.5  | 6.8  |

\* The calculation method for total turnover rate and voluntary turnover rate is the same as that of the Pan Ocean headquarters  
Includes executives, project-based contract employees and part-time employees

### Local Workforce at Major Business Sites

| Category  | Unit   | 2020 | 2021 | 2022 | 2023 |
|---|--------|------|------|------|------|
| Pan Ocean   |        |      |      |      |      |
| Locally hired employees                           | person | 150  | 149  | 167  | 146  |
| Senior employees among hired personnel            | person | 23   | 19   | 19   | 20   |
| % of senior members among locally hired employees | %      | 15.3 | 12.8 | 11.4 | 13.7 |

### Retiree Re-employment Status

| Category       | Unit    | 2020   | 2021 | 2022 | 2023 |    |
|----------------|---------|--------|------|------|------|----|
| Pan Ocean      |         |        |      |      |      |    |
| Master         | person  | 20     | 29   | 28   | 33   |    |
| Chief Engineer | person  | 31     | 38   | 50   | 45   |    |
| Ratings        | Deck    | person | 19   | 18   | 23   | 30 |
|                | Steward | person | 12   | 13   | 12   | 12 |
|                | Engine  | person | 18   | 19   | 25   | 28 |
| Total          | person  | 100    | 117  | 138  | 148  |    |



ESG DATA

Social

Comparison of New Employee Wages to Minimum Wage, by Gender

| Category  | Unit | 2020      | 2021      | 2022      | 2023      |
|---|------|-----------|-----------|-----------|-----------|
| Pan Ocean   |      |           |           |           |           |
| New employee, male (onshore)                      | KRW  | 3,630,500 | 3,747,200 | 3,901,200 | 3,927,300 |
| New employee, female (onshore)                    | KRW  | 3,630,500 | 3,747,200 | 3,901,200 | 3,927,300 |
| Minimum wage (onshore)                            | KRW  | 1,941,340 | 1,970,720 | 2,070,160 | 2,174,120 |
| New employee wage as a % of minimum wage (male)   | %    | 187       | 190       | 188       | 181       |
| New employee wage as a % of minimum wage (female) | %    | 187       | 190       | 188       | 181       |
| New employee, male (offshore)                     | KRW  | 4,151,819 | 4,242,113 | 4,506,625 | 4,649,700 |
| New employee, female (offshore)                   | KRW  | 4,151,819 | 4,242,113 | 4,506,625 | 4,649,700 |
| Minimum wage (offshore)                           | KRW  | 1,795,310 | 1,822,480 | 2,010,580 | 2,060,740 |
| New employee wage as a % of minimum wage (male)   | %    | 231       | 233       | 224       | 226       |
| New employee wage as a % of minimum wage (female) | %    | 231       | 233       | 224       | 226       |

(Based on monthly salary)

| Category  | Unit | 2020      | 2021      | 2022      | 2023      |
|---|------|-----------|-----------|-----------|-----------|
| POS SM  |      |           |           |           |           |
| New employee, male                                | KRW  | 3,188,000 | 3,284,000 | 3,416,000 | 3,512,000 |
| New employee, female                              | KRW  | 3,188,000 | 3,284,000 | 3,416,000 | 3,512,000 |
| Minimum wage                                      | KRW  | 1,795,310 | 1,822,480 | 1,914,440 | 2,010,580 |
| New employee wage as a % of minimum wage (male)   | %    | 178       | 180       | 178       | 175       |
| New employee wage as a % of minimum wage (female) | %    | 178       | 180       | 178       | 175       |

(Based on monthly salary)

Education and Training

| Category       |                               | Unit         | 2020        | 2021        | 2022        | 2023          |
|----------------|-------------------------------|--------------|-------------|-------------|-------------|---------------|
| Pan Ocean      |                               |              |             |             |             |               |
| Training hours | Total training time           | hour         | 22,153      | 30,410      | 32,804      | 35,397        |
|                | Onshore                       | hour         | 13,777      | 17,470      | 19,082      | 18,224        |
|                | Offshore                      | hour         | 8,376       | 12,940      | 13,722      | 17,173        |
|                | Avg. training time per person | hours/person | 21          | 27          | 29          | 30            |
| Training costs | Total training cost           | KRW          | 687,364,863 | 866,257,292 | 986,456,029 | 1,299,501,418 |
|                | Onshore*                      | KRW          | 283,162,863 | 342,157,292 | 423,031,029 | 545,196,397   |
|                | Offshore**                    | KRW          | 404,202,000 | 524,100,000 | 563,425,000 | 754,305,021   |
|                | Avg. training cost per person | KRW/person   | 647,846     | 763,222     | 860,782     | 1,119,295     |

\* Total training costs + self-development (Welfare Card)

\*\* For Korean seafarers

| Category       |                                | Unit         | 2020       | 2021       | 2022       | 2023        |
|----------------|--------------------------------|--------------|------------|------------|------------|-------------|
| POS SM         |                                |              |            |            |            |             |
| Training hours | Total training time            | hour         | 4,783      | 8,364      | 9,537      | 13,457      |
|                | Avg. training time per person  | hours/person | 39         | 62         | 73         | 95          |
| Training costs | Total training costs           | KRW          | 36,797,345 | 67,609,518 | 63,356,729 | 112,141,897 |
|                | Avg. training costs per person | KRW/person   | 299,165    | 500,811    | 483,639    | 789,732     |

(Employees total at the end of the year; those on leaves, PJT contract workers, part-timers excluded)



## ESG DATA Social

### Human Rights Training

| Category  | Unit             | 2020   | 2021                                      | 2022  | 2023  |
|---|------------------|--------|---|-------|-------|
| Workplace Disability Awareness Training         | <b>Pan Ocean</b> |        |   |       |       |
|   | Onshore          |        |   |       |       |
|   | No. of trainees  | person | 347                                       | 374   | 394   |
|   | Completed        | person | 347                                       | 374   | 394   |
|   | % completion     | %      | 100.0                                     | 100.0 | 100.0 |
|   | Offshore         |        |   |       |       |
|   | No. of trainees  | person | 734                                       | 783   | 775   |
|   | Completed        | person | 734                                       | 783   | 775   |
|   | % completion     | %      | 100.0                                     | 100.0 | 100.0 |
|   | <b>POS SM</b>    |        |   |       |       |
|   | No. of trainees  | person | 115                                       | 151   | 154   |
|   | Completed        | person | 114                                       | 151   | 154   |
|   | % completion     | %      | 99.1                                      | 100.0 | 100.0 |
| Workplace Sexual Harassment Prevention Training | <b>Pan Ocean</b> |        |   |       |       |
|   | Onshore          |        |   |       |       |
|   | No. of trainees  | person | 347                                       | 374   | 394   |
|   | Completed        | person | 347                                       | 374   | 394   |
|   | % completion     | %      | 100.0                                     | 100.0 | 100.0 |
|   | Offshore         |        |   |       |       |
|   | No. of trainees  | person | 734                                       | 783   | 775   |
|   | Completed        | person | 734                                       | 783   | 775   |
|   | % completion     | %      | 100.0                                     | 100.0 | 100.0 |
|   | <b>POS SM</b>    |        |   |       |       |
|   | No. of trainees  | person | 115                                       | 159   | 168   |
|   | Completed        | person | 115                                       | 159   | 168   |
|   | % completion     | %      | 100.0                                     | 100.0 | 100.0 |
| Workplace Bullying Prevention Training          | <b>Pan Ocean</b> |        |   |       |       |
|   | Onshore          |        |   |       |       |
|   | No. of trainees  | person | Replaced by Posting Educational Materials | 374   | 393   |
|   | Completed        | person |   | 374   | 393   |
|   | % completion     | %      |   | 100.0 | 100.0 |
|   | Offshore         |        |   |       |       |
|   | No. of trainees  | person |   | 734   | 783   |
|   | Completed        | person |   | 734   | 783   |
|   | % completion     | %      |   | 100.0 | 100.0 |
|   | <b>POS SM</b>    |        |   |       |       |
|   | No. of trainees  | person | -   | 142   | 146   |
|   | Completed        | person | -   | 142   | 146   |
|   | % completion     | %      | -   | 100.0 | 100.0 |

| Category                        | Unit   | 2020   | 2021 | 2022 | 2023 |
|---------------------------------|--|--------|------|------|------|
| Separate Human Rights Education | <b>Pan Ocean</b>                                   |        |      |      |      |
|                                 | Seafarers' Labor Rights and Human Rights Training* | person | -    | -    | -    |
|                                 | Seafarers' Mental Health Training (Offshore)       | person | -    | 327  | 303  |

\* Mandatory education submitted to the Port Authority as of July 20, 2023

### Information Security Education

| Category                       | Unit                           | 2020   | 2021 | 2022 | 2023 |
|--------------------------------|--------------------------------|--------|------|------|------|
| <b>Pan Ocean</b>               |                                |        |      |      |      |
| Information Security Education | Education hours for completion | hour   | 347  | 374  | 393  |
|                                | Completed                      | person | 347  | 374  | 393  |
| <b>POS SM</b>                  |                                |        |      |      |      |
| Information Security Education | Education hours for completion | hour   | 345  | 135  | 153  |
|                                | Completed                      | person | 115  | 135  | 153  |

### Industrial Safety and Health Education

| Category   | Unit            | 2020   | 2021  | 2022   | 2023   |
|--|-----------------|--------|-------|--------|--------|
| <b>Pan Ocean</b>   |                 |        |       |        |        |
| Industrial Safety and Health Education                     | Onshore         |        |       |        |        |
|  | Training hours  | hour   | -     | -      | 4,694  |
|  | No. of trainees | person | -     | -      | 376    |
|  | Offshore        |        |       |        |        |
|  | Training hours  | hour   | 9,260 | 17,110 | 19,772 |
|  | No. of trainees | person | 794   | 1,339  | 2,227  |
| <b>POS SM</b>  |                 |        |       |        |        |
| Industrial Safety and Health Education                     | Training hours  | hour   | -     | 1,261  | 2,759  |
|  | No. of trainees | person | -     | 150    | 177    |
| ISO 45001:2018 Transition Internal Auditor Course (Safety) | Training hours  | hours  | 273   | 16     | 56     |
|  | No. of trainees | person | 13    | 1      | 5      |
| Safety Management Representative (DP) Training Course      | Training hours  | hour   | 480   | -      | -      |
|  | No. of trainees | person | 30    | -      | -      |



# ESG DATA

## Social

### Employee Diversity

| Category   | Unit                            | 2020   | 2021  | 2022  | 2023  |
|--|---------------------------------|--------|-------|-------|-------|
| <b>Pan Ocean</b>                                     |                                 |        |       |       |       |
| % of female employees                                | Total                           | %      | 8.5   | 9.3   | 10.1  |
|  | Onshore                         | %      | 24.8  | 26.7  | 27.0  |
|  | Offshore                        | %      | 1.2   | 1.5   | 2.1   |
| Persons with disabilities                            | Total                           | person | 4     | 4     | 32    |
|  | Persons with disabilities hired | person | 4     | 4     | 4     |
|  | KD Tech Co., Ltd.*              | person | -     | -     | 28    |
|  | Persons with disabilities hired | %      | 0.4   | 0.3   | 4.3   |
| Foreigners   | person                          | -      | -     | -     | -     |
| Veterans   | person                          | 6      | 6     | 6     | 6     |
| <b>Board Diversity</b>                               |                                 |        |       |       |       |
| Gender   | Male                            | person | 4     | 4     | 3     |
|  | Female                          | person | -     | -     | 1     |
| Age  | Under 30                        | person | -     | -     | -     |
|  | Above 30 and under 50           | person | -     | -     | -     |
|  | 50 or older                     | person | 4     | 4     | 3     |
| Female base salary and compensation as a % of male** | %                               | 100.0  | 100.0 | 100.0 | 100.0 |
| <b>POS SM</b>  |                                 |        |       |       |       |
| % of female employees                                | Total                           | %      | 21    | 25    | 22*** |
|  | Total                           | person | -     | -     | -     |
| Persons with disabilities                            | Persons with disabilities hired | %      | -     | -     | -     |
|  | Persons with disabilities hired | person | -     | -     | -     |
| Foreigners   | person                          | -      | -     | -     | -     |
| Veterans   | person                          | -      | -     | -     | -     |
| Gender   | Male                            | person | 104   | 112   | 122   |
|  | Female                          | person | 28    | 38    | 34    |
| Age  | Under 30                        | person | 16    | 21    | 17    |
|  | Above 30 and under 50           | person | 105   | 111   | 116   |
|  | 50 or older                     | person | 11    | 18    | 23    |
| Female base salary and compensation as a % of male** | %                               | 100.0  | 100.0 | 100.0 | 100.0 |

\* Standard workplace for people with disabilities. When reflecting the double count of people with severe disabilities, a total of 50 people are recognized (based on the Act on Employment Promotion and Vocational Rehabilitation of Persons with Disabilities)

\*\* Male/Female base salary is the same, with no gender-based differences

\*\*\* Correction of the 2022 female ratio calculation error (23 → 22)

### Parental Leave

| Category  | Unit             | 2020   | 2021 | 2022 | 2023 |
|---|------------------|--------|------|------|------|
| No. of employees that used parental leave                           | <b>Pan Ocean</b> |        |      |      |      |
|   | Onshore male     | person | 1    | 1    | 1    |
|   | Onshore female   | person | 2    | 4    | 5    |
|   | Offshore male    | person | 4    | 6    | 8    |
|   | Offshore female  | person | -    | -    | -    |
|   | <b>POS SM</b>    |        |      |      |      |
|   | Male             | person | -    | 1    | 4*   |
|   | Female           | person | 2    | 2    | 2    |
| No. of employees who returned from parental leave                   | <b>Pan Ocean</b> |        |      |      |      |
|   | Onshore male     | person | -    | -    | 1    |
|   | Onshore female   | person | 3    | 3    | 2    |
|   | Offshore male    | person | 3    | 5    | 6    |
|   | Offshore female  | person | -    | -    | -    |
|   | <b>POS SM</b>    |        |      |      |      |
|   | Male             | person | -    | 1    | 1    |
|   | Female           | person | -    | 2    | 2    |
| % employees returning from parental leave                           | <b>Pan Ocean</b> |        |      |      |      |
|   | Onshore male     | %      | -    | -    | 100  |
|   | Onshore female   | %      | 50   | 100  | 67   |
|   | Offshore male    | %      | 75   | 83   | 80   |
|   | Offshore female  | %      | -    | -    | -    |
|   | <b>POS SM</b>    |        |      |      |      |
|   | Male             | %      | -    | 100  | 100  |
|   | Female           | %      | -    | 50   | 100  |
| No. employees who served for 12 months or more after parental leave | <b>Pan Ocean</b> |        |      |      |      |
|   | Onshore male     | person | -    | -    | -    |
|   | Onshore female   | person | 3    | 3    | 2    |
|   | Offshore male    | person | 2    | 2    | -    |
|   | Offshore female  | person | -    | -    | -    |
|   | <b>POS SM</b>    |        |      |      |      |
|   | Male             | person | -    | -    | 1**  |
|   | Female           | person | -    | 1**  | -    |
| % of employees serving for 12 months or more after parental leave   | <b>Pan Ocean</b> |        |      |      |      |
|   | Onshore male     | %      | -    | -    | -    |
|   | Onshore female   | %      | 100  | 100  | 100  |
|   | Offshore male    | %      | 100  | 83   | 100  |
|   | Offshore female  | %      | -    | -    | -    |
|   | <b>POS SM</b>    |        |      |      |      |
|   | Male             | %      | -    | -    | -    |
|   | Female           | %      | -    | -    | -    |

\* Correction of 1 duplicate person among those on parental leave in 2022 (extension of parental leave)

\*\* Correction due to an error in the previous year's report regarding the number of employees who returned from parental leave and remained employed for more than 12 months

ESG DATA

Social

Welfare Benefits

(Based on separate financial statements in the business report)

| Category                            | Unit                                | 2020        | 2021   | 2022   | 2023   |
|-------------------------------------|-------------------------------------|-------------|--------|--------|--------|
| Cost of welfare benefits            | Pan Ocean                           |             |        |        |        |
|                                     | Total cost of welfare benefits      | KRW million | 37,538 | 44,502 | 51,016 |
|                                     | Cost of welfare benefits per person | KRW million | 35     | 39     | 45     |
|                                     | POS SM                              |             |        |        |        |
|                                     | Total cost of welfare benefits      | KRW million | 1,323  | 1,695  | 1,938  |
| Cost of welfare benefits per person | Cost of welfare benefits per person | KRW million | 10     | 11     | 12     |
|                                     |                                     |             |        |        | 16     |

Labor Union Membership

(As of January each year)

| Category                  | Unit   | 2020 | 2021 | 2022 | 2023 |
|---------------------------|--------|------|------|------|------|
| Pan Ocean (Onshore)       |        |      |      |      |      |
| No. of employees eligible | person | 243  | 250  | 279  | 273  |
| No. of union members      | person | 203  | 207  | 241  | 219  |
| % membership              | %      | 83.5 | 82.8 | 86.4 | 80.2 |
| Pan Ocean (Offshore)      |        |      |      |      |      |
| No. of employees eligible | person | 766  | 832  | 910  | 871  |
| No. of union members      | person | 513  | 560  | 582  | 539  |
| % membership              | %      | 67   | 67   | 64   | 62   |

Work Loss Injury

| Category  | Unit                            | 2020                                  | 2021      | 2022      | 2023      |
|---|---------------------------------|---------------------------------------|-----------|-----------|-----------|
| Pan Ocean   |                                 |                                       |           |           |           |
| Onshore   | Working hours*                  | hour                                  | 886,824   | 954,624   | 1,006,152 |
|   | Lost time incidents             | case                                  | 1         | -         | -         |
|   | LTIFR (lost time incident rate) | Lost time incidents per million hours | 1.13      | -         | -         |
|   | No. of fatalities               | person                                | -         | -         | -         |
| Offshore  | Working hours**                 | hour                                  | 1,840,872 | 1,963,764 | 1,943,700 |
|   | Lost time incidents             | case                                  | 11        | 8         | 9         |
|   | LTIFR (lost time incident rate) | Lost time incidents per million hours | 5.97      | 4.07      | 4.63      |
|   | No. of fatalities               | person                                | -         | -         | 0         |
| Total LTIFR (lost time injury frequency rate)     |                                 | Lost time incidents per million hours | 4.40      | 2.74      | 3.05      |
| No. of marine accidents and serious accident rate |                                 | case (%)                              | 0 (0)     | 1 (1.4)   | 0 (0)     |
| PSC (port state control)                          | Number of deficiencies          | case                                  | 101       | 231       | 239       |
|   | Number of detentions            | instance                              | 1         | 1         | 4         |

(In the case of multiple employees incurring work loss due to a single work loss injury case, it is counted as one case)

\* Working hours: Number of employees at the end of the year X Monthly standard working hours (226 hours) X 12 months Employees: Based on the year-end business report

\*\* Working hours: Number of employees at the end of the year X Monthly standard working hours (209 hours) X 12 months Employees: Based on the year-end business report (calculated based on domestic employees excluding foreigners)

Employee Satisfaction

| Category                           | Unit  | 2020 | 2021 | 2022 | 2023 |
|------------------------------------|-------|------|------|------|------|
| Pan Ocean                          |       |      |      |      |      |
| Employee satisfaction (onshore)*   | point | 4.23 | 4.16 | 4.02 | 3.95 |
| Employee satisfaction (offshore)** | point | 64.8 | 68.7 | 70.2 | 71.8 |
| POS SM                             |       |      |      |      |      |
| Employee satisfaction              | point | 3.58 | 3.69 | 3.57 | 3.57 |

\*Based on ESI (Employee Satisfaction Index) Survey results (out of 5 points)

\*\* Offshore Employee Internal Customer Satisfaction Survey results (out of 100 points)

Employees Subject to Regular Performance and Career Development Review

| Category   | Unit | 2020 | 2021 | 2022 | 2023 |
|------------|------|------|------|------|------|
| Pan Ocean* | %    | 100  | 100  | 100  | 100  |
| POS SM**   | %    | 79   | 83   | 83   | 76   |

\* Excluded: CEO/inside directors/independent directors, employees with less than 6 months of service in the year, employees hired in the past 6 months, emergency planning officer/labor union, contract workers (subject to separate evaluation)

\*\* Excluded: PJT supervisors, part-timers



ESG DATA

Social

Social Contribution

| Category                              |                  | Unit        | 2020  | 2021  | 2022 | 2023  |
|---------------------------------------|------------------|-------------|-------|-------|------|-------|
| Pan Ocean                             |                  |             |       |       |      |       |
| Social contribution investment amount |                  | KRW million | 0.1   | -     | 42   | 260   |
| Total donation amount                 |                  | KRW million | 1,070 | 1,325 | 214  | 266   |
| Employee fundraising amount           |                  | KRW million | -     | -     | 1.7  | 2.19  |
| Volunteer activities                  | Total volunteers | person      | 20    | -     | 84   | 484   |
|                                       | Total hours      | hour        | 40    | -     | 247  | 1,371 |
|                                       | Hours per person | hour        | 2.0   | -     | 2.9  | 2.8   |
| POS SM                                |                  |             |       |       |      |       |
| Total donation amount                 |                  | KRW million | 1.0   | 2.4   | 2.4  | 2.4   |

Discrimination Cases and Corrective Actions

| Category   | Unit | 2020 | 2021 | 2022 | 2023 |
|--|------|------|------|------|------|
| Pan Ocean  |      |      |      |      |      |
| Discrimination and harassment cases during the reporting period (onshore)*   | case | 0    | 0    | 0    | 0    |
| Discrimination and harassment cases during the reporting period (offshore)** | case | 3    | 5    | 6    | 5    |
| POS SM   |      |      |      |      |      |
| Discrimination and harassment cases during the reporting period              | case | 0    | 0    | 0    | 0    |

(100% treatment rate for reported cases)  
\* Excludes cases among the reported cases concluded to be non-harassment  
\*\* Based on cases formally processed as 'discrimination and harassment' in the open reporting & grievance handling system

Supplier Status

| Category                              |                           | Unit             | 2020    | 2021      | 2022      | 2023      |
|---------------------------------------|---------------------------|------------------|---------|-----------|-----------|-----------|
| Pan Ocean                             |                           |                  |         |           |           |           |
| Operating costs*                      | Total number of suppliers | No. of companies | 612     | 688       | 584       | 641       |
|                                       | Key suppliers             | No. of companies | 3       | 3         | 3         | 3         |
|                                       | General suppliers         | No. of companies | 609     | 685       | 581       | 638       |
| Fuel costs                            | Total number of suppliers | No. of companies | 26      | 20        | 26        | 26        |
|                                       | Key suppliers             | No. of companies | 7       | 8         | 8         | 10        |
|                                       | General suppliers         | No. of companies | 19      | 12        | 18        | 16        |
| Ship expenses                         | Total number of suppliers | No. of companies | 426     | 512       | 494       | 487       |
|                                       | Key suppliers             | No. of companies | 26      | 30        | 35        | 38        |
|                                       | General suppliers         | No. of companies | 400     | 482       | 459       | 449       |
| Total number of suppliers             |                           | No. of companies | 1,064   | 1,220     | 1,104     | 1,154     |
| Total No. of new suppliers            |                           | No. of companies | 1       | 0         | 0         | 68        |
| Total amount purchased from suppliers |                           | KRW million      | 626,797 | 1,045,179 | 1,529,604 | 1,103,088 |

\* Only major service providers related to operating expenses were listed in the 2022 and 2023 reports. However, starting with the 2024 report, all service providers related to operating expenses are included

Client Information Protection

| Category                                  | Unit | 2020 | 2021 | 2022 | 2023 |
|---|------|------|------|------|------|
| Pan Ocean                                 |      |      |      |      |      |
| Complaints of client information breaches | case | 0    | 0    | 0    | 0    |
| No. of client information breaches        | case | 0    | 0    | 0    | 0    |
| POS SM                                    |      |      |      |      |      |
| Complaints of client information breaches | case | 0    | 0    | 0    | 0    |
| No. of client information breaches        | case | 0    | 0    | 0    | 0    |

ESG DATA

Governance

Total Annual Salary

| Category   | Unit        | 2020 | 2021 | 2022  | 2023  |
|--|-------------|------|------|-------|-------|
| Pan Ocean  |             |      |      |       |       |
| Highest earner's annual salary   | KRW million | 536  | 786  | 1,039 | 1,685 |
| Average annual salary of all employees (excluding highest earner)      | KRW million | 87   | 100  | 111   | 106   |
| Highest earner's annual salary rise                                    | %           | -1.1 | 46.6 | 32.2  | 62.2  |
| Average annual salary rise of all employees (excluding highest earner) | %           | 6.1  | 14.9 | 11.0  | -4.5  |
| Total annual salary increase   | %           | 12.1 | 24.4 | 15.1  | -7.5  |
| POS SM   |             |      |      |       |       |
| Highest earner's annual salary   | KRW million | 190  | 213  | 242   | 227   |
| Average annual salary of all employees (excluding highest earner)      | KRW million | 70   | 79   | 83    | 82    |
| Highest earner's annual salary rise                                    | %           | 2.2  | 11.7 | 14.1  | -6.4  |
| Average annual salary rise of all employees (excluding highest earner) | %           | 1.8  | 12.5 | 5.3   | -1.9  |

(Based on the withholding tax report)

Sales by Business Segment

| Category                                | Unit        | 2020      | 2021      | 2022      | 2023      |
|---|-------------|-----------|-----------|-----------|-----------|
| Pan Ocean                               |             |           |           |           |           |
| Bulk carriers                           | KRW million | 1,757,973 | 3,569,191 | 4,823,826 | 3,114,279 |
| Containers                              | KRW million | 246,667   | 353,341   | 509,420   | 365,815   |
| Tankers                                 | KRW million | 142,671   | 140,167   | 305,867   | 342,729   |
| LNG carriers                            | KRW million | 14,698    | 93,618    | 171,762   | 82,869    |
| Agri-trading                            | KRW million | 376,663   | 498,182   | 702,018   | 527,252   |
| Others (ship management, leasing, etc.) | KRW million | 202,489   | 234,897   | 266,969   | 259,823   |

Distribution of Economic Value

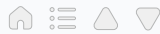
| Category                   | Unit        | 2020    | 2021    | 2022    | 2023    |
|----------------------------|-------------|---------|---------|---------|---------|
| Pan Ocean                  |             |         |         |         |         |
| Employees                  | KRW million | 193,716 | 247,950 | 290,246 | 278,901 |
| Suppliers                  | KRW million | 66,407  | 93,552  | 148,520 | 162,499 |
| Shareholders and investors | KRW million | 1,234   | 1,053   | 10,886  | 3,448   |
| Governments                | KRW million | 1,071   | 1,427   | 317     | 571     |

Board Composition

| Category                     |                       | Unit   | 2020 | 2021 | 2022 | 2023 |
|------------------------------|-----------------------|--------|------|------|------|------|
| Pan Ocean                    |                       |        |      |      |      |      |
| Board                        | Total                 | person | 7    | 7    | 6    | 7    |
|                              | Inside directors      | person | 3    | 3    | 3    | 3    |
|                              | Independent directors | person | 4    | 4    | 3    | 4    |
| Registered female executives |                       | person | -    | -    | -    | 1    |
| CEO-BoD chair separation     |                       | Y/N    | N    | N    | N    | N    |

Board of Directors Operations

| Category  | Unit | 2020 | 2021 | 2022 | 2023 |
|---|------|------|------|------|------|
| Pan Ocean   |      |      |      |      |      |
| Attendance rate of inside directors                     | %    | 83   | 83   | 100  | 100  |
| Attendance rate of independent directors                | %    | 85   | 86   | 93   | 100  |
| Total attendance rate                                   | %    | 85   | 85   | 96   | 100  |
| Number of board meetings held                           | time | 12   | 14   | 12   | 11   |
| Total number of board agenda items                      | case | 44   | 46   | 52   | 47   |
| Number of significant ESG matters reported to the board | time | 0    | 0    | 2    | 2    |



## ESG DATA Governance

### Performance of Government Support Subsidy Benefits

| Category   | Unit        | 2020   | 2021   | 2022  | 2023   |
|--|-------------|--------|--------|-------|--------|
| <b>Pan Ocean</b>                                     |             |        |        |       |        |
| Tax reductions and credits                           | KRW million | 11,964 | 10,847 | 6,520 | 10,881 |
| Subsidies  | KRW million | 6,609  | 6,512  | 7,022 | 0      |
| Investment support, R&D support, other support, etc. | KRW million | 0      | 0      | 0     | 0      |
| Awards   | KRW million | 0      | 0      | 0     | 0      |
| Financial support from export credit agencies        | KRW million | 0      | 0      | 0     | 0      |
| Royalty exemptions                                   | KRW million | 0      | 0      | 0     | 0      |
| Financial incentives                                 | KRW million | 0      | 0      | 0     | 0      |
| Others (guarantees)                                  | KRW million | 0      | 0      | 0     | 0      |
| <b>POS SM</b>  |             |        |        |       |        |
| Tax reductions and credits                           | KRW million | 21     | 73     | 0     | 0      |
| Subsidies  | KRW million | 0      | 0      | 0     | 0      |
| Investment support, R&D support, other support, etc. | KRW million | 0      | 125    | 0     | 0      |
| Awards   | KRW million | 0      | 0      | 0     | 0      |
| Financial support from export credit agencies        | KRW million | 0      | 0      | 0     | 0      |
| Royalty exemptions                                   | KRW million | 0      | 0      | 0     | 0      |
| Financial incentives                                 | KRW million | 0      | 0      | 0     | 0      |
| Others (guarantees)                                  | KRW million | 0      | 0      | 0     | 0      |

### Ethics Violations and Actions Taken

| Category                 |                                 | Unit | 2020 | 2021 | 2022 | 2023 |
|--------------------------|---------------------------------|------|------|------|------|------|
| Pan Ocean                |                                 |      |      |      |      |      |
| No. of ethics violations | Total                           | case | 1    | -    | -    | 1    |
|                          | Unlawfulness/fraud              | case | -    | -    | -    | -    |
|                          | Petition (complaint, grievance) | case | 1    | -    | -    | -    |
|                          | Unfair trade/corruption         | case | -    | -    | -    | -    |
|                          | Other unethical conduct         | case | -    | -    | -    | 1    |
| Status of actions taken  | Total                           | case | 1    | -    | -    | 1    |
|                          | Heavy sanction                  | case | -    | -    | -    | 1    |
|                          | Light sanction                  | case | 1    | -    | -    | -    |

(Based on onshore employees)

| Category                 |                                 | Unit | 2020 | 2021 | 2022 | 2023 |
|--------------------------|---------------------------------|------|------|------|------|------|
| POS SM                   |                                 |      |      |      |      |      |
| No. of ethics violations | Total                           | case | 1    | 2    | 4    | 7    |
|                          | Unlawfulness/fraud              | case | -    | -    | -    | 1    |
|                          | Petition (complaint, grievance) | case | 1    | 2    | 2    | 4    |
|                          | Unfair trade/corruption         | case | -    | -    | -    | -    |
|                          | Other unethical conduct         | case | -    | -    | 2    | 2    |
| Status of actions taken  | Total                           | case | -    | -    | 1    | 5    |
|                          | Heavy sanction                  | case | -    | -    | -    | 3    |
|                          | Light sanction                  | case | -    | -    | 1    | 2    |

(Excluding cases of withdrawal by the reporter and false reports)



## ESG DATA Governance

### Ethics/Compliance Training

| Category         | Unit   | 2020 | 2021  | 2022  | 2023  |
|------------------|--------|------|-------|-------|-------|
| <b>Pan Ocean</b> |        |      |       |       |       |
| Completed        | person | -    | -     | 382   | 386   |
| Training hours   | hour   | -    | -     | 312   | 302   |
| % completion     | %      | -    | -     | 100   | 100   |
| <b>POS SM</b>    |        |      |       |       |       |
| Completed        | person | 109  | 136   | 141   | 151   |
| Training hours   | hour   | 576  | 1,185 | 523   | 1,575 |
| % completion     | %      | 88.6 | 100.0 | 100.0 | 100.0 |

### Signing of the Ethical Management and Compliance Pledge

| Category             | Unit   | 2020 | 2021  | 2022  | 2023  |
|----------------------|--------|------|-------|-------|-------|
| <b>Pan Ocean</b>     |        |      |       |       |       |
| Target employees     | person | 887  | 931   | 1,032 | 1,057 |
| Employees who signed | person | 882  | 927   | 1,029 | 1,051 |
| Signing rate         | %      | 99.4 | 99.6  | 99.7  | 99.4  |
| <b>POS SM</b>        |        |      |       |       |       |
| Target employees     | person | 128  | 151   | 158   | 147   |
| Employees who signed | person | 127  | 151   | 157   | 145   |
| Signing rate         | %      | 99.2 | 100.0 | 99.4  | 98.6  |

### Ethics Management Practice Campaign

| Category                                      | Unit | 2020 | 2021 | 2022 | 2023 |
|---|------|------|------|------|------|
| <b>Pan Ocean</b>                              |      |      |      |      |      |
| Total   | case | 3    | 3    | 3    | 3    |
| Ethical practices at year-end and of New Year | case | 1    | 1    | 1    | 1    |
| Refraining from accepting gifts on New Year   | case | 1    | 1    | 1    | 1    |
| Refraining from accepting gifts on Chuseok    | case | 1    | 1    | 1    | 1    |
| <b>POS SM</b>                                 |      |      |      |      |      |
| Total   | case | 0    | 0    | 2    | 10   |
| Ethical practices at year-end and of New Year | case | 0    | 0    | 0    | 1    |
| Refraining from accepting gifts on New Year   | case | 0    | 0    | 0    | 0    |
| Refraining from accepting gifts on Chuseok    | case | 0    | 0    | 0    | 1    |
| Year-round practice of ethical management     | case | 0    | 0    | 2    | 8    |

### Voluntary Compliance Inspection

| Category         | Unit                              | 2020 | 2021  | 2022  | 2023  |
|------------------|-----------------------------------|------|-------|-------|-------|
| <b>Pan Ocean</b> |                                   |      |       |       |       |
| Checking targets | Target teams                      | team | 49    | 53    | 56    |
|                  | Check items                       | case | 143   | 143   | 153   |
| Checking results | Compliance implementation results | %    | 100.0 | 100.0 | 100.0 |

### Anti-corruption Legal Actions

| Category            | Unit        | 2020 | 2021 | 2022   | 2023 |
|---------------------|-------------|------|------|--------|------|
| <b>Pan Ocean</b>    |             |      |      |        |      |
| Total monetary loss | KRW million | 0    | 0    | 2,850* | 0    |
| <b>POS SM</b>       |             |      |      |        |      |
| Total monetary loss | KRW million | 0    | 0    | 0      | 0    |

\* An administrative lawsuit has been filed regarding the 2022 disposition, and efforts are being made to improve the diligence of reporting to the relevant authorities (Ministry of Oceans and Fisheries) regarding joint activities to prevent recurrence.



GRI Index

Universal Standards

GRI 2: General Disclosures

| Topic  | Index | Details   | Location          | Remarks |
|--|-------|---|-------------------|---------|
| The organization and its reporting practices | 2-1   | Organizational details  | 6-8               |         |
|  | 2-2   | Entities included in the organization's sustainability reporting            | About This Report |         |
|  | 2-3   | Reporting period, frequency and contact point                               | About This Report |         |
|  | 2-4   | Restatements of information   | 99, 101           |         |
|  | 2-5   | External assurance  | 116               |         |
| Activities and workers                       | 2-6   | Activities, value chain and other business relationships                    | 6-14              |         |
|  | 2-7   | Employees   | 95                |         |
|  | 2-8   | Workers who are not employees   | 95                |         |
| Governance                                   | 2-9   | Governance structure and composition  | 69-71, 102        |         |
|  | 2-10  | Nomination and selection of the highest governance body                     | 69-73             |         |
|  | 2-11  | Chair of the highest governance body  | 69-70, 102        |         |
|  | 2-12  | Role of the highest governance body in overseeing the management of impacts | 16, 19, 70        |         |
|  | 2-13  | Delegation of responsibility for managing impacts                           | 16, 19, 70        |         |
|  | 2-14  | Role of the highest governance body in sustainability reporting             | 16, 19, 70, 102   |         |
|  | 2-15  | Conflicts of interest   | 69, 71            |         |
|  | 2-16  | Communication of critical concerns  | 16, 72, 82, 102   |         |
|  | 2-17  | Collective knowledge of the highest governance body                         | 71                |         |
|  |       |   |                   |         |

| Topic                            | Index | Details  | Location                    | Remarks |
|----------------------------------|-------|--|-----------------------------|---------|
| Governance                       | 2-18  | Evaluation of the performance of the highest governance body | 73                          |         |
|                                  | 2-19  | Remuneration policies  | 70, 73                      |         |
|                                  | 2-20  | Process to determine remuneration                            | 73                          |         |
|                                  | 2-21  | Annual total compensation ratio                              | 73, 102                     |         |
|                                  | 2-22  | Statement on sustainable development strategy                | Letter to Stakeholders      |         |
| Strategy, policies and practices | 2-23  | Policy commitments   | 33, 46, 54, 66, 76          |         |
|                                  | 2-24  | Embedding policy commitments                                 | 34, 45-46, 55-57, 66, 76-79 |         |
|                                  | 2-25  | Processes to remediate negative impact                       | 21-22                       |         |
|                                  | 2-26  | Mechanisms for seeking advice and raising concerns           | 57, 77, 101, 103            |         |
|                                  | 2-27  | Compliance with laws and regulations                         | 36, 77, 104                 |         |
|                                  | 2-28  | Membership associations                                      | 114                         |         |
| Governance                       | 2-29  | Stakeholder engagement methods                               | 18                          |         |
|                                  | 2-30  | Collective agreement   | 62, 100                     |         |

GRI 3: Material Topics

| Topic           | Index | Details                              | Location | Remarks |
|-----------------|-------|--------------------------------------|----------|---------|
| Material topics | 3-1   | Process to determine material topics | 19       |         |
|                 | 3-2   | List of material topics              | 19-20    |         |
|                 | 3-3   | Management of material topics        | 19-22    |         |

GRI Index

Material Topics (GRI 200-400)

Climate Change Response

| Topic                | Index | Details   | Location | Remarks          |
|----------------------|-------|---|----------|------------------|
| Material topics      | 3-3   | Management of material topics   | 21       |                  |
| Economic performance | 201-2 | Financial implications and other risks and opportunities due to climate change  | 21, 25   |                  |
| Energy               | 302-1 | Energy consumption within the organization                                      | 32, 91   |                  |
|                      | 302-2 | Energy consumption outside of the organization                                  | -        | Data not tracked |
|                      | 302-3 | Energy intensity  | 32, 91   |                  |
|                      | 302-4 | Reduction of energy consumption   | -        | Data not tracked |
|                      | 302-5 | Reductions in energy requirements of products and services                      | -        | Data not tracked |
| Emissions            | 305-1 | Direct (Scope 1) GHG emissions  | 32, 90   |                  |
|                      | 305-2 | Energy indirect (Scope 2) GHG emissions   | 32, 90   |                  |
|                      | 305-3 | Other indirect (Scope 3) GHG emissions  | 32, 90   |                  |
|                      | 305-4 | GHG emissions intensity   | 32, 90   |                  |
|                      | 305-5 | Reduction of GHG emissions  | -        | Data not tracked |
|                      | 305-6 | Emissions of ozone-depleting substances (ODS)                                   | -        | Data not tracked |
|                      | 305-7 | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions | 93       |                  |

Health and Safety Management

| Topic                          | Index  | Details   | Location  | Remarks                                |
|--------------------------------|--------|---|-----------|--|
| Material topics                | 3-3    | Management of material topics   | 21        |  |
| Occupational health and safety | 403-1  | Occupational health and safety management system  | 45, 47    |  |
|                                | 403-2  | Hazard identification, risk assessment, and incident investigation  | 46-50     |  |
|                                | 403-3  | Occupational health services  | 45-50     |  |
|                                | 403-4  | Worker participation, consultation, and communication on occupational health and safety                       | 44, 48-49 |  |
|                                | 403-5  | Worker training on occupational health and safety   | 47-50, 98 |  |
|                                | 403-6  | Promotion of worker health  | 48        |  |
|                                | 403-7  | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | 44-50     |  |
|                                | 403-8  | Workers covered by an occupational health and safety management system  | 45        |  |
|                                | 403-9  | Work-related injuries   | 51, 100   |  |
|                                | 403-10 | Work-related ill health   | -         | Non-disclosure due to internal reasons |

GRI Index

Material Topics (GRI 200-400)

Collaborative Management

| Topic                             | Index | Details  | Location | Remarks          |
|-----------------------------------|-------|--|----------|------------------|
| Material topics                   | 3-3   | Management of material topics  | 22       |                  |
| Supplier environmental assessment | 308-1 | New suppliers that were screened using environmental criteria        | -        | Data not tracked |
|                                   | 308-2 | Negative environmental impacts in the supply chain and actions taken | 53       |                  |
| Supplier social assessment        | 414-1 | New suppliers that were screened using social criteria               | -        | Data not tracked |
|                                   | 414-2 | Negative social impacts in the supply chain and actions taken        | 53       |                  |

Ethics and Compliance Management

| Topic                     | Index | Details  | Location        | Remarks   |
|---------------------------|-------|--|-----------------|---|
| Material topics           | 3-3   | Management of material topics  | 22              |   |
| Anti-corruption           | 205-1 | Operations assessed for risks related to corruption                              | 79              |   |
|                           | 205-2 | Communication and training about anti-corruption policies and procedures         | 75-79, 103-104  |   |
|                           | 205-3 | Confirmed incidents of corruption and actions taken                              | 77, 80, 103-104 |   |
| Anti-competitive behavior | 206-1 | Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices | 104             | Refer to the annual report (Sanctions and Current Status) |

GRI Index

Non Material Topics (GRI 200-400)

| Topic                     | Index | Details   | Location  | Remarks                                       |
|---------------------------|-------|---|-----------|---|
| Economic performance      | 201-1 | Direct economic value generated and distributed   | 18, 102   |   |
|                           | 201-3 | Defined benefit plan obligations and other retirement plans   | 65        |   |
|                           | 201-4 | Financial assistance received from government   | 103       |   |
| Market presence           | 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage  | 97        |   |
|                           | 202-2 | Proportion of senior management hired from the local community  | 96        |   |
| Indirect economic impacts | 203-1 | Infrastructure investments and services supported   | 67, 100   |   |
| Tax                       | 207-4 | Country-by-country reporting  | 84        | Country-specific Tax Information Not Disclose |
| Materials                 | 301-2 | Recycled input materials used   | 38        |   |
| Water and wastewater      | 303-1 | Interactions with water as a shared resource  | 40        |   |
|                           | 303-3 | Water withdrawal  | 93        |   |
| Biodiversity              | 304-1 | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | 36-37,94  |   |
|                           | 304-2 | Significant impacts of activities, products, and services on biodiversity   | 36-37,94  |   |
|                           | 304-3 | Habitats protected or restored  | 36-37,94  |   |
| Waste                     | 306-1 | Waste generation and significant waste-related impacts  | 41-42     |   |
|                           | 306-2 | Management of significant waste-related impacts   | 41-42, 92 |   |
|                           | 306-3 | Waste generated   | 41, 92    |   |
|                           | 306-4 | Waste diverted from disposal  | 41, 92    |   |

| Topic                           | Index | Details  | Location        | Remarks  |
|---------------------------------|-------|--|-----------------|--|
| Employment                      | 401-1 | New employee hires and employee turnover   | 58-59, 65, 96   |  |
|                                 | 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | 63-65, 99-100   |  |
|                                 | 401-3 | Parental leave   | 64, 99          |  |
| Labor/ Management Relations     | 402-1 | Minimum notice periods regarding operational changes   | -               | Communication through the Labor-Management Council when management changes occur |
| Training and education          | 404-1 | Average hours of training per year per employee  | 97              |  |
|                                 | 404-2 | Programs for upgrading employee skills and transition assistance programs                          | 59-62           |  |
|                                 | 404-3 | Percentage of employees receiving regular performance and career development reviews               | 58, 100         |  |
| Diversity and equal opportunity | 405-1 | Diversity of governance bodies and employees   | 69, 71, 99, 102 |  |
|                                 | 405-2 | Ratio of basic salary and remuneration of women to men   | 99              |  |
| Non-discrimination              | 406-1 | Incidents of discrimination and corrective actions taken   | 77, 101         |  |
| Local communities               | 413-1 | Operations with local community engagement, impact assessments, and development programs           | 66-67, 100      |  |
| Customer privacy                | 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data       | 101             |  |



ESRS Index

We have conducted ESRS mapping only for the issues identified as significant through the double materiality assessment.

ESRS 2. General Disclosures

| Index        | Disclosure Requirement  | Location                       | Remarks |
|--------------|---|--------------------------------|---------|
| ESRS 2 BP-1  | General basis for preparation of sustainability statements  | About This Report              |         |
| ESRS 2 BP-2  | Disclosures in relation to specific circumstances   | 99, 101                        |         |
| ESRS 2 GOV-1 | The role of the administrative, supervisory and management bodies   | 16, 24, 44, 52, 69-73, 75, 102 |         |
| ESRS 2 GOV-2 | Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies | 16, 19, 24                     |         |
| ESRS 2 GOV-3 | Integration of sustainability-related performance in incentive schemes  | 24, 44, 75                     |         |
| ESRS 2 GOV-4 | Statement on due diligence  | 16, 44-49, 52-53, 54-56        |         |
| ESRS 2 SBM-1 | Strategy, business model and value chain  | 6-14                           |         |
| ESRS 2 SBM-2 | Interests and views of stakeholders   | 18                             |         |
| ESRS 2 SBM-3 | Material impacts, risks and opportunities and their interaction with strategy and business model                                    | 21-22                          |         |
| ESRS 2 IRO-1 | Description of the processes to identify and assess material impacts, risks and opportunities                                       | 19                             |         |
| ESRS 2 IRO-2 | Disclosure requirements in ESRS covered by the undertaking's sustainability statement   | 109-111                        |         |

ESRS E1. Climate Change

| Index     | Disclosure Requirement  | Location      | Remarks                      |
|-----------|---|---------------|------------------------------|
| ESRS E1-1 | Transition plan for climate change mitigation   | 27-28, 31, 34 |                              |
| ESRS E1-2 | Policies related to climate change mitigation and adaptation  | 29, 33-35     |                              |
| ESRS E1-3 | Actions and resources in relation to climate change policies  | 30, 37-39     |                              |
| ESRS E1-4 | Targets related to climate change mitigation and adaptation   | 31, 34        |                              |
| ESRS E1-5 | Energy consumption and mix  | 32, 91        | Energy usage report by scope |
| ESRS E1-6 | Gross Scopes 1, 2, 3 and total GHG emissions  | 32, 90        |                              |
| ESRS E1-7 | Carbon reduction in operations and supply chain, and carbon credits obtained from external projects                   | -             | Data not tracked             |
|           | Carbon avoidance from products and services   | -             | Data not tracked             |
| ESRS E1-8 | Internal carbon pricing   | -             | Data not tracked             |
| ESRS E1-9 | Anticipated financial effects from material physical and transition risks and potential climate-related opportunities | 25            |                              |

ESRS Index

ESRS S1. Own Workforce

| Index      | Disclosure Requirement   | Location            | Remarks |
|------------|--|---------------------|---------|
| ESRS S1-1  | Policies related to own workforce  | 54, 76              |         |
| ESRS S1-2  | Processes for engaging with own workers and workers' representatives about impacts   | 45, 57, 62, 77      |         |
| ESRS S1-3  | Processes to remediate negative impacts and channels for own workers to raise concerns   | 45, 57, 62, 77      |         |
| ESRS S1-4  | Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions | 44-50, 55-57, 76-78 |         |
| ESRS S1-6  | Characteristics of the undertaking's employees   | 95-96, 99           |         |
| ESRS S1-7  | Characteristics of non-employee workers in the undertaking's own workforce   | 95-96               |         |
| ESRS S1-8  | Collective bargaining coverage and social dialogue   | 62, 100             |         |
| ESRS S1-9  | Difference in average hourly wages by gender, ratio of women's wages to men's wages  | 97                  |         |
|            | Family care leave (parental and childcare leave) eligibility, users, and retention rate post-leave   | 64, 99              |         |
| ESRS S1-10 | Adequate wages   | 97                  |         |
| ESRS S1-12 | Persons with disabilities  | 99                  |         |
| ESRS S1-13 | The percentage of employees that participated in regular performance and career development review; such information shall be broken down by gender  | 100                 |         |
|            | Average training hours per employee and by gender  | 97                  |         |
| ESRS S1-14 | Health and safety metrics  | 100                 |         |
| ESRS S1-15 | Work-life balance metrics  | 63-64               |         |
| ESRS S1-16 | Compensation metrics (pay gap and total compensation)  | 73                  |         |
| ESRS S1-17 | Number of risks and measures related to negative impacts on employees' labor and human rights  | 56                  |         |
|            | Number of reports, investigations, actions, and recurrence prevention plans related to employees' labor and human rights   | 57                  |         |

ESRS Index

ESRS S2. Workers in the Value Chain

| Index     | Disclosure Requirement   | Location | Remarks |
|-----------|--|----------|---------|
| ESRS S2-1 | Policies related to value chain workers  | 52-54    |         |
| ESRS S2-3 | Channels for value chain workers to raise concerns   | 48, 57   |         |
| ESRS S2-4 | Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities | 50       |         |

ESRS G1.Business Conduct

| Index     | Disclosure Requirement  | Location | Remarks |
|-----------|---|----------|---------|
| ESRS G1-1 | Declaration of ethical management by the highest governance body, responsibilities, and roles in oversight and management                                     | 75       |         |
|           | Requirements of the code of ethics and practice guidelines  | 76       |         |
| ESRS G1-2 | Operation of fair-trade compliance programs, improvement activities for payment systems such as win-win payment systems                                       | 79, 104  |         |
|           | ESG risk assessment and due diligence for suppliers, incorporation of assessment and due diligence results into supplier selection criteria                   | 53       |         |
| ESRS G1-3 | Activities to eradicate and prevent unethical behavior, investigation and internal reporting system   | 77-78    |         |
|           | Activities to eradicate and prevent unfair trade, investigation and internal reporting system   | 77       |         |
| ESRS G1-4 | Number of confirmed incidents of unethical behavior, number of cases investigated by judicial authorities, number of employees subject to disciplinary action | 77, 103  |         |
|           | Number of confirmed incidents unfair trade, number of cases investigated by judicial authorities, number of employees subject to disciplinary action          | 77, 103  |         |

# SASB Index

## Marine Transportation Sustainability Accounting Standard

| Topic                        | Code         | Accounting Metric  | Category     | Unit   | Data   | Location   |
|------------------------------|--------------|--|--------------|--|--|------------|
| Greenhouse gas emissions     | TR-MT-110a.1 | Gross global Scope 1 emissions   | Quantitative | tCO <sub>2</sub> eq                          | 2,678,713 (Scope 1 vessels + vehicles)   | 32, 90     |
|                              | TR-MT-110a.2 | Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets | Qualitative  | N/A  | Reported on p.24-32  | 24-32      |
|                              | TR-MT-110a.3 | (1) Total energy consumed, (2) percentage heavy fuel oil, (3) percentage renewable   | Quantitative | (1) TOE (2) % (3) %                          | (1) 857,877 (Scope 1+2) (2) 47 (401,113 TOE) (3) No renewable energy consumption | 32, 91     |
|                              | TR-MT-110a.4 | Average EEDI (Energy Efficiency Design Index) for new ships  | Quantitative | grams of CO per ton-nautical mile            | Not disclosed  | -          |
| Air quality                  | TR-MT-120a.1 | Air emissions of the following pollutants: (1) NOx (excluding N <sub>2</sub> O), (2) SOx, and (3) particulate matter (PM10)  | Quantitative | (1) metric ton (2) metric ton (3) metric ton | (1) 70,868 (2) 8,337 (3) 5,301   | 34, 37, 93 |
| Ecological impacts           | TR-MT-160a.1 | Shipping duration in marine protected areas or areas of protected conservation status  | Quantitative | number of travel days                        | Not disclosed  | -          |
|                              | TR-MT-160a.2 | Percentage of fleet implementing ballast water (1) exchange and (2) treatment  | Quantitative | %  | (1) 5 (2) 95   | 94         |
|                              | TR-MT-160a.3 | (1) Number and (2) aggregate volume of spills and releases to the environment  | Quantitative | (1) case (2) m <sup>3</sup>                  | Not disclosed  | -          |
| Employee health & safety     | TR-MT-320a.1 | Lost time incident rate (LTIR)   | Quantitative | rate   | Onshore : 0 Offshore : 2.00  | 100        |
| Business ethics              | TR-MT-510a.1 | Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index                                     | Quantitative | call   | 14   | -          |
|                              | TR-MT-510a.2 | Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption   | Quantitative | KRW  | 0  | 104        |
| Accident & safety management | TR-MT-540a.1 | Number of marine casualties(1), percentage (2) classified as very serious  | Quantitative | (1) case (2) % (3) person                    | (1) 1 (2) 1.6 (3) 0  | 100        |
|                              | TR-MT-540a.2 | Number of conditions of class or recommendations   | Quantitative | cases  | 25   | -          |
|                              | TR-MT-540a.3 | PSC (port state control) (1) Number of deficiencies (2) Number of detention  | Quantitative | (1) case (2) instance                        | (1) 284 (2) 2  | 100        |

| Topic          | Code        | Accounting Metric                          | Category     | Unit                 | Data      | Location |
|----------------|-------------|--|--------------|----------------------|-----------|----------|
| Activity index | TR-MT-000.A | Number of shipboard employees              | Quantitative | number               | 796       | 95       |
|                | TR-MT-000.B | Total distance travelled by vessels        | Quantitative | nautical miles (nm)  | 6,950,083 | -        |
|                | TR-MT-000.C | Operating days                             | Quantitative | days                 | 40,225    | -        |
|                | TR-MT-000.D | Deadweight tonnage                         | Quantitative | thousand metric tons | 13,349    | -        |
|                | TR-MT-000.E | Number of vessels in total shipping fleet  | Quantitative | number               | 109       | 6        |
|                | TR-MT-000.F | Number of vessel port calls                | Quantitative | number               | 3,449     | -        |
|                | TR-MT-000.G | Twenty-foot equivalent unit (TEU) capacity | Quantitative | TEU                  | 8,095     | -        |

(Based on owned vessels)



TCFD Index

| Category          |    | TCFD Recommendations   | Location     |
|-------------------|----|--|--------------|
| Governance        | a. | Describe the board's oversight of climate-related risks and opportunities  | 24           |
|                   | b. | Describe management's role in assessing and managing climate-related risks and opportunities   | 24           |
| Strategy          | a. | Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term                               | 25           |
|                   | b. | Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning                        | 25           |
|                   | c. | Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario | 26           |
| Risk management   | a. | Describe the organization's processes for identifying and assessing climate-related risks  | 26, 30       |
|                   | b. | Describe the organization's processes for managing climate-related risks   | 26, 30       |
|                   | c. | Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management     | 30, 33-34    |
| Metrics & targets | a. | Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process    | 28, 31       |
|                   | b. | Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks  | 28           |
|                   | c. | Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets                          | 27-28, 31-32 |

# Association Memberships and Award Achievements

## Membership

| Organization Name  |
|--|
| Seoul Chamber of Commerce and Industry                     |
| Korea Industry Associations Council                        |
| Korea Listed Companies Association                         |
| Korea Enterprises Federation                               |
| Korea Shipowners' Association                              |
| Korea International Trade Association                      |
| Yellow Sea Liner Committee                                 |
| Korea Near-Sea Freight Conference                          |
| Korea AEO Association                                      |
| Korea Ship Managers Association                            |
| Korea Gas Union  |
| Society of International Gas Tanker and Terminal Operators |
| Korea Emergency Planning Officers Council                  |

## Achievements

| Date          | Award   | Awarding Body   |
|---------------|---|---|
| Dec. 7, 2022  | Gold Award at the 2022 AEO Best Practices Sharing Competition   | Korea Customs Service   |
| Dec. 13, 2022 | Good Relationship 2022 award in the Sponsorship Category at the Jongno District Member of Parliament Awards | Seoul Senior Welfare Center                                       |
| Jun. 29, 2023 | One Hundred Million Tonnage Shipping Award  | Ministry of Oceans and Fisheries                                  |
| Oct. 31, 2023 | A rating from the KCGS (Korea Institute of Corporate Governance and Sustainability)                         | KCGS (Korea Institute of Corporate Governance and Sustainability) |
| Nov. 14, 2023 | AA rating for AEO Certification from the Korea Customs Service  | Korea Customs Service   |
| Dec. 6, 2023  | Report of the Year in the Sustainability Report Category at the 2023 Korea Management Awards                | Korea Management Association Consultants Inc.                     |
| Dec. 8, 2023  | ISO 45001 International Standard Certification  | Korean Register of Shipping                                       |

# GHG Verification Statement

## GREENHOUSE GAS EMISSIONS VERIFICATION OPINION PAN OCEAN CO., LTD.



### Introduction

DNV Business Assurance Korea Ltd. (“DNV”) was commissioned by Pan Ocean Co., Ltd. (“Company”) to perform third party verification for the Company’s Greenhouse Gas Inventory (“the inventory”). The Company is responsible for the preparation of the GHG emissions data on the basis set out within the ‘WRI/WBCSD GHG Protocol: A Corporate Accounting and Reporting Standard (2004)’, The Corporate Value Chain (Scope 3) Accounting and Reporting Standard’ and ‘2006 IPCC Guidelines for National Greenhouse Gas Inventories’. Our responsibility in performing this work is to the management of the Company only and in accordance with terms of reference agreed with them. DNV expressly disclaims any liability or responsibility for any decisions, whether investment or otherwise, based upon this verification opinion.

### Objectives and scope of verification

The purpose of this verification is to present an independent verification opinion on the company’s greenhouse gas emissions, and the scope of verification is as follows;

- Organizational Boundary: Pan Ocean Co., Ltd.’s Sites in Korea
- Operational Boundary: Scope 1 (Direct emissions), Scope 2 (Indirect emissions), Scope 3 (Other indirect emissions)
- Reporting period: 2023.01.01 ~2023.12.31

### Verification Approach

The verification has been conducted in accordance with the verification principles and tasks outlined in the ‘ISO 14064-3:2019’, based upon a limited level of assurance. We planned and performed our work so as to obtain all the information and explanations deemed necessary to provide us with sufficient evidence to provide a verification opinion with 5% materiality level, concerning the completeness of the emission inventory as well as the reported emission figures in ton CO2 equivalent. As part of the verification process, we have reviewed as follows;

- Process to generate, aggregate and report the emissions data
- The data and information supporting the report were based on historical in nature. May include partially hypothetical and projected data and information (refer to the inventory for details)

### Conclusions

Based on the process and procedures conducted, there is no evidence that the GHG statement is not materially correct and is not a fair representation of GHG data and information;

- DNV presents an ‘Unmodified’ opinion on Greenhouse Gas Emissions

(Unit: ton CO<sub>2</sub>-eq)

| 2023      | Direct emissions<br>(Scope 1) |         | Indirect<br>emissions(Scope 2) | Other indirect<br>emissions<br>(Scope 3)* | Total<br>Emissions |
|-----------|-------------------------------|---------|--------------------------------|---|--------------------|
|           | Vessel                        | Vehicle | Electricity                    |   |                    |
| Pan Ocean | 2,678,663                     | 50      | 580                            | 4,511,253                                 | 7,190,546          |

※ Greenhouse gas emissions may differ by less than ± 1 tCO2-eq due to rounding to report as an integer.  
\* Other indirect emissions (Scope3) include emissions of ‘Purchased goods & services, Upstream transportation and distribution, Business travel, Employee commuting and Upstream leased assets’

5 June 2024 Seoul, Korea

Jang-Sub Lee  
Country Representative  
DNV Business Assurance Korea



This Verification Opinion is valid as of the date of the issuance. Please note that this Opinion would be revised if any material discrepancy which may impact the Greenhouse Gas Emissions of the company is subsequently brought to our attention.

# Third-party Verification Statement

## To readers of Pan Ocean ESG REPORT 2024

### Introduction

Korea Management Registrar (KMR) was commissioned by Pan Ocean to conduct an independent assurance of its ESG REPORT 2024 (the “Report”). The data and its presentation in the Report is the sole responsibility of the management of Pan Ocean. KMR’s responsibility is to perform an assurance engagement as agreed upon in our agreement with Pan Ocean and issue an assurance statement.

### Scope and Standards

Pan Ocean described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR’s assurance standard SRV1000. We are providing a Type 1, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team. Confirmation that the Report was prepared in accordance with GRI standards 2021 was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.

- GRI Sustainability Reporting Standards 2021
- Universal standards
- Topic specific standards
  - GRI 201 : Economic Performance
  - GRI 205 : Anti-corruption
  - GRI 206 : Anti-competitive Behavior
  - GRI 302 : Energy
  - GRI 305 : Emissions
  - GRI 308 : Supplier Environmental Assessment
  - GRI 403 : Occupational Health and Safety
  - GRI 414 : Supplier Social Assessment

As for the reporting boundary, the engagement excludes the data and information of Pan Ocean’ partners, suppliers and any third parties.

### KMR's Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report’s performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service’s DART and public databases.

### Limitations and Recommendations

KMR’s assurance engagement is based on the assumption that the data and information provided by Pan Ocean to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

### Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with Pan Ocean on the revision of the Report. We reviewed the Report’s final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the work performed, it is our opinion that the Report applied the GRI Standards. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

### Inclusivity

Pan Ocean has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

### Materiality

Pan Ocean has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

### Responsiveness

Pan Ocean prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of Pan Ocean’ actions.

### Impact

Pan Ocean identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

### Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021-2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with Pan Ocean and did not provide any services to Pan Ocean that could compromise the independence of our work.

June 2024 Seoul, Korea

CEO E. J. Hwang









2024 ESG REPORT



Tower 8, 7, Jong-ro 5-gil, Jongno-gu, Seoul, Republic of Korea **Pan Ocean Co., Ltd.**

[www.panocean.com](http://www.panocean.com) Tel 02-316-5114