IINO LINES TNFD REPORT

February 12, 2026

IINO LINES

Contents

Responding to Nature-Related Issues

Participation in the Task Force on Nature-related Financial Disclosures (TNFD) Forum and registration for TNFD Adopter

We have joined the Taskforce on Nature-related Financial Disclosures (TNFD) Forum and registered as a TNFD Adopter in March 2025.

The TNFD Forum supports the discussions of the TNFD, an international organization established in June 2021 to develop a framework for corporate risk management and disclosure related to nature. The Forum is a stakeholder organization made up of companies, financial institutions, research institutions, and other organizations that have joined to support the development of the framework. In addition to our participation in the TNFD Forum, we have also registered with TNFD Adopter, a group of companies and organizations that have expressed their intention to disclose information in line with TNFD recommendations by FY2025.

In our management policy, we state that "As responsible members of society, we work together with society to contribute to solving various issues," and we are working to resolve social issues through our efforts to conserve biodiversity and the environment. We will actively disclose information about the impact of our group's activities on the natural environment and biodiversity, and we will contribute to the realization of a sustainable society by balancing corporate growth with the protection of biodiversity.

General Requirements

General Requirements

In TNFD disclosures, organizations are required to apply six General Requirements, which serve as a common foundation across all four recommended disclosure pillars—Governance, Strategy, Risk and Impact Management, and Metrics and Targets—to ensure consistency and comparability. Our Group has applied these General Requirements as outlined below.

1. Application of Materiality

Our Group identifies nine social issues as priority topics (“materiality”) based on their significance to stakeholders, as well as their potential impact on society and on our business operations. With respect to the environment, we position “Initiatives for Biodiversity Conservation” as a key issue in addressing ecosystem preservation and pollution prevention. Similarly, in identifying nature-related issues (nature-related dependencies, impacts, risks, and opportunities), we assess our Group’s dependencies and impacts on nature and determine key issues from the perspective of double materiality—namely, the magnitude of risks and opportunities for our Group, stakeholders, and the environment and society.

For details, please refer to Our Materiality: Identification of Key Sustainability Issues.

2. Scope of Disclosure

This disclosure covers the shipping and real estate businesses, including their upstream and downstream value chains. In the sensitive-location analysis, we assessed and evaluated the marine areas navigated by the shipping business and the direct operational sites of the real estate business.

Looking ahead, we plan to develop targets and initiatives informed by the results of the LEAP analysis* conducted this fiscal year, and to further assess risks and opportunities based on scenario analysis.

* LEAP Analysis: An assessment approach comprising four steps—Locate (identify the organization’s interface with nature), Evaluate (determine nature-related dependencies and impacts), Assess (identify nature-related risks and opportunities), and Prepare (define organizational responses, governance structures, and targets).

3. Location of Nature-Rerated Issues

This disclosure presents the results of our Group’s location-based analysis for the marine areas traversed by our vessels and for the locations of our owned real estate assets.

4. Integration with Other Sustainability-Related Disclosures

Although this disclosure focuses specifically on nature-related issues, we are considering integrating climate-related information into future disclosures.

5. Time Horizons Considered

In identifying nature-related risks and opportunities, our Group evaluates impacts across the following time horizons:

Short term: 0–2 years

Medium term: 3–10 years

Long term: 11 years and beyond

6. Engagement with Indigenous Peoples, Local Communities, and Affected Stakeholders in Identifying and Assessing Nature-Related Issues

Effective identification, assessment, and management of nature-related issues require engagement not only with nature itself but also with Indigenous peoples, local communities, and other stakeholders who may be affected. In conducting our business activities, our Group respects the human rights of all relevant stakeholders in accordance with international standards, as outlined in the IINO Group Human Rights Policy and our human rights management processes described in the “Governance” section.

Governance

Governance

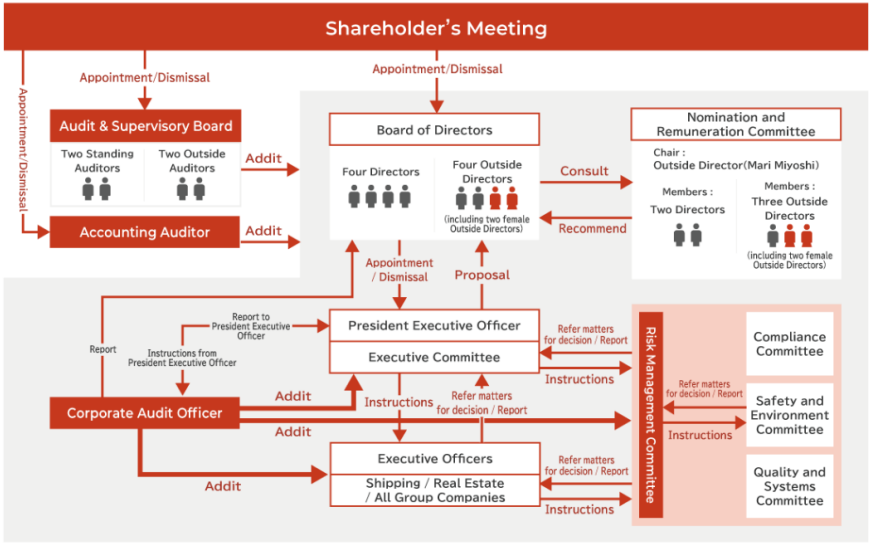
The TNFD disclosure recommendations calls for describing the role of an organization's board of directors in overseeing nature-related issues, the role of management in assessing and managing such challenges, and its engagement with and oversight of stakeholders, including indigenous peoples and local communities, in evaluating and responding to nature-related issues. The IINO Group's governance structure for nature-related issues is as follows:

Roles of the Board of Directors and Management

The IINO Group regards efforts to address environmental issues as a key management challenge. We are examining initiatives and managing their progress across the entire Group. As an organization to discuss environmental issues, we have established the Safety and Environment Committee, which is chaired by the President and Representative Director and whose members include all executive directors and presidents of major group companies. Under the Risk Management Committee, which oversees company-wide risk-management activities, the Safety and Environment Committee is positioned as the committee responsible for formulating and promoting policies related to safety and the environment common to our company and all group companies. Meetings are convened regularly once a month. Moreover, the Safety and Environment Committee evaluates the environmental aspects of the Group's services and activities (including the aspects of biodiversity), with the Risk-Management Committee, Executive Committee, and Board of Directors monitoring and overseeing sustainability-related issues deemed important. The Representative Director also serves as the person responsible for nature-related issues within the Group.

The IINO Group has identified issues such as addressing the environment and human rights and strengthening governance as materialities. It has also set creating social value as a key strategy in our mid-term management plan. All executives in the Group will actively promote ESG management and further strengthen operations that emphasize sustainability.

【governance structure diagram】



Human Rights Policy and Engagement

Because nature-related issues are closely related to indigenous peoples and local communities, the TNFD calls for disclosure of human rights policies, due diligence, grievance mechanisms, engagement, and other factors concerning stakeholders (including the aforementioned people).

As a global enterprise, the IINO Group recognizes that respecting the human rights of all people is our corporate social responsibility, signing the United Nations Global Compact to express our endorsement in September 2022. Moreover, as our highest-level policy on human rights based on our corporate philosophy, the IINO Group Human Rights Policy was formulated at a resolution passed by the Board of Directors on October 27, 2022. The Group will respect the human rights of all stakeholders involved in its business activities and fulfill its responsibility to respect human rights by addressing any direct or indirect adverse impacts on human rights that any of its business activities may cause.

IINO Group Human Rights Policy

The Group will engage in dialogue and discussions with relevant stakeholders regarding responses to any actual or potential adverse impacts on human rights in its business activities. It will continually improve and strengthen its efforts to respect human rights.

Strategy

Strategy

Under the “Strategy” pillar of the TNFD disclosure recommendations, organizations are expected to describe their material nature-related issues, measures to address nature-related risks, and priority locations identified through their assessments. In this report, we present the results of the LEAP analyses conducted for our Group’s two core businesses: shipping and real estate.

Shipping Business

Identifying Nature Dependencies and Impacts

To identify material nature-related issues, we assessed our dependencies and impacts on nature across both our direct operations and our upstream and downstream value chains. Each dependency and impact was evaluated for its level of materiality on a five-point scale ranging from “Very High” to “Very Low.” After identifying the relevant sectors within our direct operations and value chain, we used ENCORE, a dependency- and impact-assessment tool operated by UNEP-FI and other organizations, to determine the level of importance. For direct operations, the assessment results were adjusted to better reflect the actual conditions within our Group. Based on this year’s analysis, we reviewed the assessment disclosed last fiscal year. However, no updates were made to the heatmap.

Major Dependencies in the Shipping Business

We summarized the key ecosystem services relevant to the shipping sector in a heatmap. Upstream, shipbuilding relies heavily on nature’s water-purification and flood-mitigation functions during the procurement of raw materials such as metals. In our direct operations, we depend on ecosystem services such as storm mitigation during vessel navigation and berthing, water-flow regulation needed to maintain canal water levels, and marine water-purification functions that protect vessel hulls. Downstream, solid-waste remediation during ship dismantling and rainfall-pattern regulation—which affects water availability at scrap yards—were identified as particularly important ecosystem services.

VC stage	Relevant sectors		Provisioning services	Regulating & maintenance services							Cultural services
			Water supply	Solid waste remediation	Water purification	Water flow regulation	Global climate regulation	Flood mitigation	Storm mitigation	Rainfall pattern regulation	
Upstream	Fuel procurement	Crude oil extraction	M	L	VL	M	H	H	L	-	-
		Crude oil refinement	L	L	H	M	VL	M	M	-	-
		Natural gas extraction	L	L	VL	M	H	H	L	-	-
	Raw material procurement	Metal mining	H	L	VH	H	H	H	M	VH	-
		Steel manufacturing	H	L	M	H	VL	M	M	M	-
	Shipbuilding	Shipbuilding	L	-	-	M	VL	M	M	-	-
		Navigation equipment manufacturing	M	L	M	M	VL	M	M	VL	-
		Engine and turbine manufacturing	M	L	M	M	VL	M	M	VL	-
		Cargo handling equipment manufacturin	M	L	M	M	VL	M	M	VL	-
	Others	Satellite communications business	VL	-	-	L	VL	M	M	VL	-
		Property insurance	VL	-	-	VL	VL	VL	VL	-	-
Direct operations	Ship sailing		L	-	M	M	M	H	H	M	-
	Cargo handling		VL	-	-	VL	VL	VL	L	VL	-
	Upkeeping/maintenance		M	-	-	M	VL	M	M	VL	-
Downstream	Ports	Port services	L	-	-	M	VL	H	M	VL	-
		Port logistics	VL	-	-	VL	VL	VL	L	VL	-
	Shipbreaking	Shipbreaking	L	-	M	L	M	L	L	VH	-
		Shipbreaking (reuse of parts)	M	H	-	L	VL	VL	VL	M	-

Major impacts of shipping Business

The key impacts considered to be significant to the shipping industry were compiled into a heat map. In the upstream segment of the value chain, major issues include adverse effects on surrounding habitats and ecosystems caused by the use of freshwater and marine areas during crude oil extraction, soil and water pollution resulting from exhaust gases, drilling fluids, and accidental oil spills, as well as ecosystem disturbance due to intermittent or continuous noise and light pollution. In addition, during crude oil refining, particularly large impacts were identified as soil and water pollution by hazardous substances such as waste materials, along with waste heat and noise emitted from equipment. In direct operations, it was found that impacts of particularly high importance included GHG emissions from vessel operations, underwater noise, and collisions with large marine mammals, ecosystem disturbance, and the introduction of invasive alien species through ballast water or hull fouling. In the downstream portion of the value chain, disturbances such as noise, light pollution, and offensive odors during dismantling were identified as having particularly large impacts.

VC stage	Relevant sectors		Land/ freshwater/ocean use change			Climate change	Resource use/replenishment		Pollution/pollution removal				Invasive alien species
			Area of land use	Area of freshwater use	Area of seabed use	Emissions of GHG	Water use	Other abiotic resources	Solid Waste	Air pollution (excluding GHG)	Emissions of pollutants to water and soil	Disturbance	Introduction of invasive species
Upstream	Fuel procurement	Crude oil extraction	L	VH	VH	H	L	-	L	H	VH	VH	L
		Crude oil refinement	L	-	-	M	L	-	H	H	VH	VH	-
		Natural gas extraction	L	H	H	H	M	-	M	H	H	H	VL
	Raw material procurement	Metal mining	M	H	H	M	L	H	VH	M	H	H	VL
		Steel manufacturing	L	-	-	H	M	-	M	H	VH	VH	-
	Shipbuilding	Shipbuilding	-	-	-	L	L	-	L	L	H	H	-
		Navigation equipment manufacturing	L	-	-	M	M	-	L	H	M	M	-
		Engine and turbine manufacturing	L	-	-	L	M	-	L	M	M	M	-
		Cargo handling equipment manufacturin	L	-	-	L	M	-	L	M	M	M	-
	Others	Satellite communications business	VL	L	-	L	VL	-	VL	VL	-	M	-
		Property insurance	L	-	-	L	VL	-	VL	VL	L	L	-
Direct operations	Ship sailing		-	-	H	VH	L	-	M	H	H	VH	VH
	Cargo handling		L	VL	VL	M	L	-	L	L	L	VL	H
	Upkeeping/maintenance		L	-	L	L	M	-	L	M	M	M	-
Downstream	Ports	Port services	L	VL	M	M	L	-	L	L	L	VL	-
		Port logistics	L	-	-	M	L	-	L	L	-	-	-
	Shipbreaking	Shipbreaking	L	M	M	M	L	-	M	L	H	VH	L
		Shipbreaking (reuse of parts)	M	-	-	M	M	-	M	M	M	H	H

Identification of nature-related risks and opportunities

Based on the results of the assessment of dependencies and impacts, nature-related risks and opportunities in the shipping industry were inventoried and organized. In addition to the dependency and impact heat map, external factors such as international policy trends were also taken into account in the inventory of risks and opportunities. Furthermore, items related to risks and opportunities were added based on the outcomes of analyses conducted in the current fiscal year.

Risks and Opportunities in the Shipping Business

Currently, important risks relevant to the shipping business include "more frequent and severe extreme weather events," "water shortages in canals owing to changes in rainfall patterns," "expansion of marine protected areas and stricter navigation rules in those areas," and "accidents during operation."

Conversely, "developing and adopting ships with a lower environmental impact" and "implementing slow sailing" could be opportunities to contribute to sustainability. We will present the key risks and opportunities on the following pages.

Strategy

Classification			Related dependencies and impacts on nature	Triggers for risks and opportunities	Risks and opportunities	Relevant VC[*1] stages	Impact level[*2]	Likelihood and urgency[*3]	Time horizon[*4]	Related initiatives
Risk	Physical	Acute	[Dependency] Climate regulation, storm mitigation, regulation of precipitation patterns	● Increased frequency and severity of extreme weather events (including high waves and storm surges associated with abnormal weather)	● Decline in revenue due to longer operating times and increased vessel repair and maintenance costs ● Deterioration of corporate image due to damage to, or loss of, cargo	• Vessel operation • Port services and logistics	Medium	High	Short to long term	• Improvement of operational efficiency using AI and utilization of AI-based route optimization systems • Implementation of training for responding to major accidents
					● Reduction in revenue caused by temporary suspension of operations	• Vessel operation	Medium	High	Short to long term	
		Chronic	[Dependency] [Impact] Climate regulation	● Long-term and chronic changes in marine conditions such as winds and ocean currents caused by climate change and other factors	● Decrease in revenue resulting from longer operating times associated with changes in navigation routes	• Vessel operation	Large	Medium	Long term	
		Chronic	[Dependency] Water supply, regulation of water flows, regulation of precipitation patterns	● Water shortages in canals resulting from changes in precipitation patterns	● Lower revenue attributable to increased operating time	• Vessel operation	Large	High	Short term	
	Transition	Policy	[Impact] Land use change (marine areas) pollution or pollution removal (water pollution, air pollution, disturbance), introduction of alien species	● Expansion of marine protected areas and stricter navigation rules in relevant regions ● Expansion of marine protected areas, important marine mammal areas (IMMAs), and particularly sensitive marine areas (PSMAs) ● Expansion of emission control areas (ECAs)	● Decline in revenue due to longer operating times and higher operating costs resulting from speed restrictions within protected areas ● Decline in corporate image in cases where responses are insufficient	• Vessel operation	Large	Medium	Short to long term	• Compliance with the MARPOL Convention and the Ballast Water Management Convention • Construction and delivery of vessels equipped with various dual fuel engines (e.g., LPG, ethane, and methanol) • Accumulation of vessel management expertise through operation of the ammonia carrier GAS INNOVATOR • Investment in AI-based technologies to improve fuel efficiency • Implementation of demonstration tests for biodiesel fuel • Installation of wind-powered rotor sails on coal-dedicated vessels and dual fuel engine equipped VLGCs, along with introduction of route optimization systems • Installation of high-performance water generators on company-managed vessels to reduce plastic use • Introduction of ICP aimed at promoting decarbonization investment
		Policy	[Impact] Land use change (marine areas) pollution or pollution removal (water pollution, air pollution, disturbance), introduction of alien species	● Strengthening of international and national regulations	● Increase in response-related costs ● Higher costs due to installation of new technologies and new equipment or facilities ● Increase in data acquisition costs required for regulatory compliance	• Vessel operation • Vessel dismantling (including recycling)	Large	High	Short to long term	
		Regulatory Market Reputation	[Impact] Climate change, pollution or pollution removal (air pollution)	● Rapid increase in demand for decarbonized fuels (e.g., green hydrogen and green ammonia) ● Requests to ensure sustainability of decarbonized fuels from a nature perspective ● Strengthening of regulations related to sustainable fuels	● Increase in fuel procurement costs ● Costs associated with introducing vessels capable of handling various types of fuel ● Occurrence of fines and penalties	• Vessel operation	Large	Low	Medium to long term	
		Market Reputation	[Impact] Overall	● Growing customer preference for sustainable (more environmentally friendly) shipping	● Reduction in revenue if changes in market preferences cannot be addressed	• Overall	Large	Medium	Short to long term	
		Reputation Liability	[Impact] Land use change (use of marine areas), pollution or pollution removal (water pollution)	● Accidents during operations (e.g., oil spills and destruction of coastal ecosystems due to groundings)	● Decline in corporate image and occurrence of litigation	• Vessel operation	Large	Low	Short to long term	• Implementation of training for responding to major accidents
					● Compensation for damages	• Vessel operation	Large	Low	Short to long term	

*1VC: Value Chain
*2 Impact level: Extreme (continuation of business becomes difficult, permanent loss of trust and brand), High (fundamental review of facilities or services required to continue business, significant loss of trust and brand), Medium (modification or review of facilities or services required to continue business, loss of trust and brand), Low (review of operations or suppliers or minor changes required to continue business, minor impact on trust and brand)
*3 Likelihood or urgency: High, occurs at least once per year; Medium, occurs once every few years; Low, rarely occurs
*4 Time horizon: Short term, 0 to 2 years; Medium term, 3 to 10 years; Long term, 11 years and beyond

Strategy

Category			Related dependencies and impacts on nature	Triggers for risks and opportunities	Risks and opportunities	Relevant VC*2 stages	Time horizon*3	Related initiatives
Opportunity	Business and sustainability*1	Resource efficiency Products and services Sustainable use of natural resources	[Impact] Overall	● Development and adoption of environmentally friendly vessels (e.g., ships fueled by green hydrogen or green ammonia and vessels equipped with underwater noise reduction technologies)	● Improvement of corporate image and investor preference	• Vessel operation	Short to medium term	• Installation of ballast water treatment systems • Construction and delivery of vessels equipped with various dual fuel engines (e.g., LPG, ethane, and methanol) • Accumulation of vessel management expertise through operation of the ammonia carrier GAS INNOVATOR • Investment in AI-based technologies to improve fuel efficiency • Implementation of demonstration tests for biodiesel fuel • Introduction of ICP aimed at promoting decarbonization investment
				● Improvement of fuel efficiency through optimal route selection utilizing ocean currents and similar factors	● Reduction in operating costs	• Vessel operation	Medium to long term	• Installation of wind-powered rotor sails on coal-dedicated vessels and dual fuel engine equipped VLGCs, along with introduction of route optimization systems
	Business	Resource efficiency		● Implementation of slow steaming	● Decrease in operating costs resulting from reduced fuel consumption ● Enhancement of corporate image through reduced collision risk with marine life, lower underwater noise, and reduced air pollution	• Vessel operation	Short to long term	• Implementation of slow steaming
		Market Reputation	[Impact] Overall	● Growing customer preference for more environmentally friendly shipping operators ● Enhancement of reputation and brand value, and acquisition of financing opportunities through business development that reduces negative impacts on nature and creates positive impacts	● Improvement of corporate image and investor preference ● Strengthening of advantages in talent acquisition	• Vessel operation	Short to long term	• Cooperation with GHG concentration observation research conducted by the National Institute for Environmental Studies (installation of observation equipment on company vessels) • Support for the Blue Economy Project That Fosters Rich Seas in Shunan City, Yamaguchi Prefecture (support for creation and expansion of eelgrass and similar initiatives)
					● Increase in revenue ● Contribution to long term reduction of environmental costs such as carbon taxes	• Vessel operation	Short to long term	• Installation of wind-powered rotor sails on coal-dedicated vessels and dual fuel engine equipped VLGCs, along with introduction of route optimization systems
				● Changes in cargo supply and demand locations and changes in the nature of cargo itself	● Increase in revenue through acquisition of new business opportunities	• Vessel operation	Medium to long term	

*1 Business: Refers to Business Performance *2 VC : Value Chain *3 Time horizon: Short term, 0 to 2 years; Medium term, 3 to 10 years; Long term, 11 years and beyond

Areas Requiring Attention in the Shipping Business

TNFD requests the identification and disclosure of priority locations where there are points of interaction with nature in direct operations and upstream and downstream segments of the value chain. Priority locations refer to the combination of areas requiring attention that have points of interaction with nature in regions considered to be ecologically sensitive, and important locations that companies determine to be significant from the perspective of nature-related dependencies and impacts as well as risks and opportunities. In fiscal year 2025, a “locate” analysis was conducted with the objective of identifying areas requiring attention.

To understand the characteristics of areas requiring attention and individual marine areas in the shipping industry, analysis and evaluation of navigation areas were carried out based on position data from vessels directly operated by the company during 2023 to 2024.

In the analysis and evaluation, vessel position data were first aggregated into 50 km × 50 km grids, and various indicators used to assess areas requiring attention were overlaid, followed by scoring on a five-level scale. The aggregated results also take navigation density into account. The scored results were compiled separately for coastal areas (coastlines to continental shelves) and offshore areas, with the aim of separately confirming the characteristics of continental shelf biomes described in the TNFD biome guidance and identifying features of offshore areas that exclude coastal regions where biodiversity importance is particularly high.

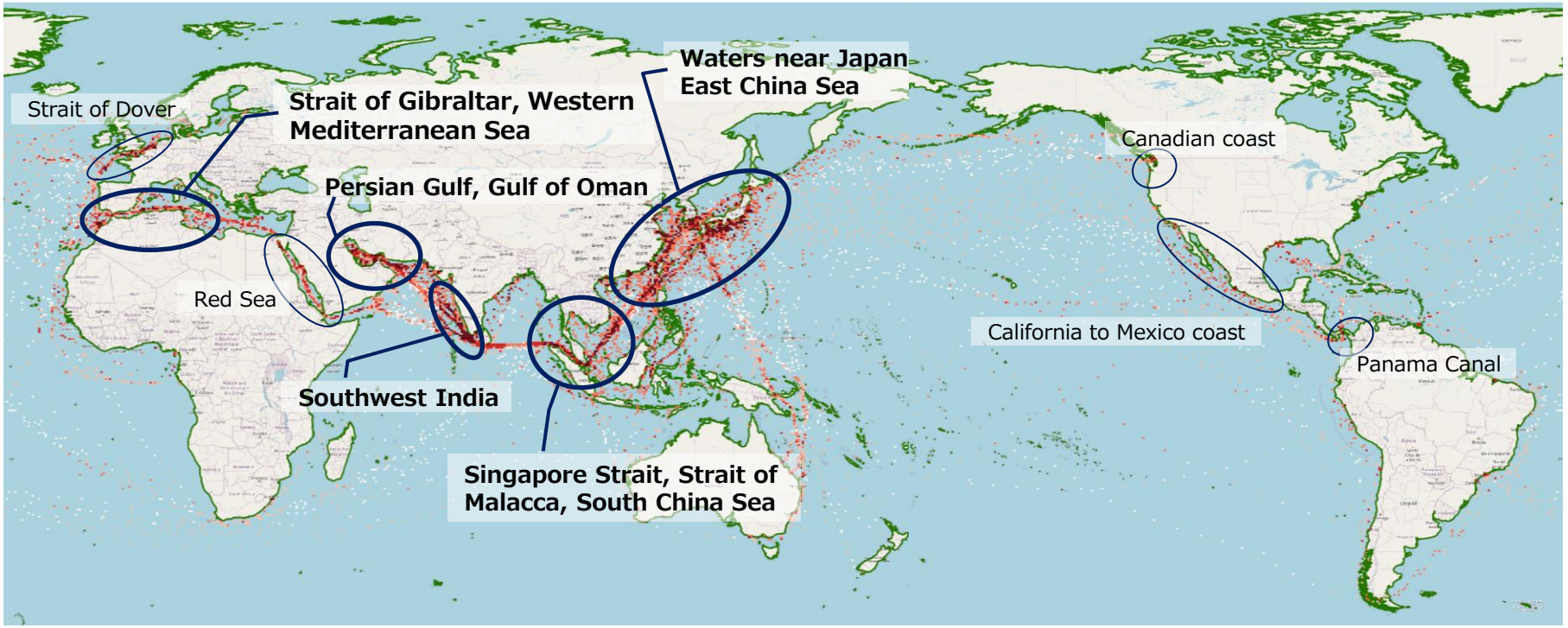
The indicators used in the analysis and evaluation were selected to satisfy the TNFD-recommended perspectives for areas requiring attention, namely biodiversity importance, biodiversity integrity, importance of ecosystem service provision, and physical water-related risks. For details on the analytical methods and indicators used, please refer to P21.

Results of the analysis of areas requiring attention #1: Coastal areas

For coastal areas, among marine areas that received high evaluations under the criteria for areas requiring attention, those with high navigation density were identified as areas requiring attention. There were seven marine areas selected as areas requiring attention: the Persian Gulf, the Gulf of Oman, the Singapore Strait, the East China Sea (Shanghai brackish water area to coastal zone), the area around the Strait of Gibraltar, coastal areas of the South China Sea (Guangzhou and Macao coasts), Japanese coastal areas (including Sagami Bay and Tokyo Bay), and the southern coast of Korea and the coastal area of Incheon City. Coastal areas identified as requiring attention tended to score highly on biodiversity importance, reflecting their proximity to protected areas and habitats of rare species; and fish catch volumes, which serves as an indicator of and importance of ecosystem service provision. It was determined that, in these marine areas, particular care is required during vessel operations with respect to impacts on fisheries and the ecosystems associated with them.

Results of analysis of areas requiring attention #2: Offshore areas

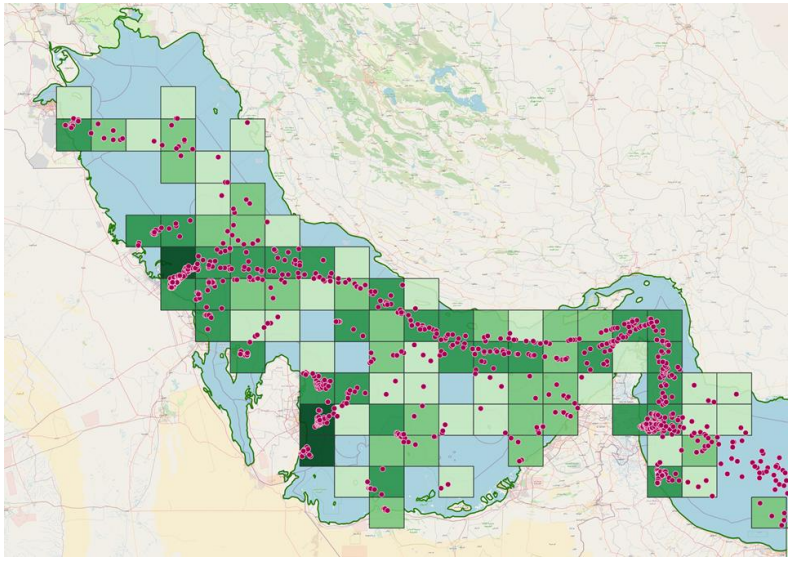
As with coastal areas, for offshore areas, marine areas that scored highly under the criteria for areas requiring attention and also had high navigation density were identified as areas requiring attention. There were six marine areas selected as areas requiring attention: waters near Japan (offshore Pacific areas), offshore waters southwest of India, the Strait of Malacca, offshore areas of the Gulf of Oman, areas around the Strait of Gibraltar and offshore areas of the western Mediterranean, and the southern part of the South China Sea. Overall, there was a tendency for high scores in fish catch volumes, which is an indicator of the importance of ecosystem service provision. It was found that operations in these marine areas require particular consideration of impacts on fisheries. In addition, offshore areas southwest of India exhibited high levels of water pollution, whereas areas around the Strait of Gibraltar and offshore areas of the western Mediterranean were close to the distribution ranges of rare species, indicating that considerations tailored to the characteristics of each marine area are necessary.



Results of Sensitive-Location Analysis (3): Persian Gulf and Gulf of Oman

●Example of Sensitive-Location Evaluation Results

In the Persian Gulf and the Gulf of Oman, the navigational routes of our Group's vessels were found to be in close proximity to strictly protected areas. The region also exhibits a high extinction risk for rare species, and the presence of coral reefs and seagrass beds has been confirmed. These factors indicate that the area is of significant importance for biodiversity. Furthermore, the region supports active fisheries, highlighting its importance from the perspective of ecosystem service provision. As a result, we identified that vessel operations within the Persian Gulf and the Gulf of Oman require particular consideration for the protection of ecosystems and biodiversity.



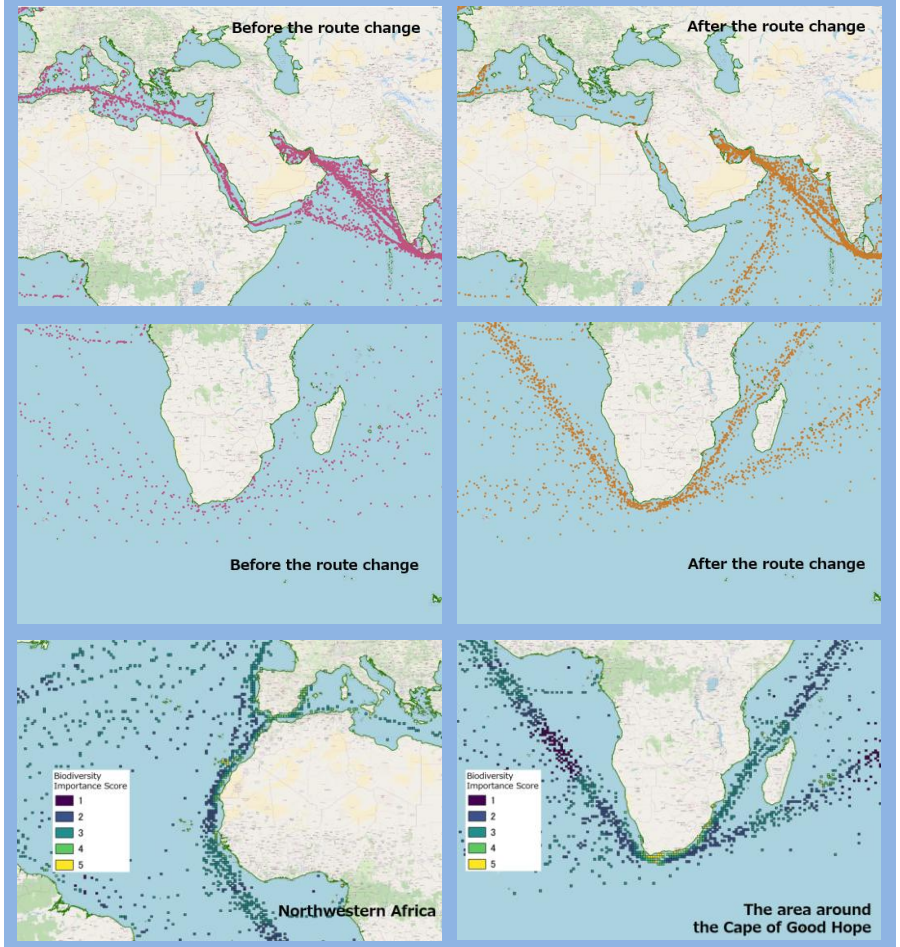
Biodiversity Importance × Navigational Density

- Very Low
- Low
- Medium
- High
- Very High

- Timestamp data

Column: Sensitive-Location Analysis for the Cape of Good Hope Route

Since security conditions in the Red Sea deteriorated in 2023, our Group has, from 2024 onward, shifted from the conventional route via the Suez Canal to a safer operational route around the Cape of Good Hope. For this disclosure, in addition to the conventional route, we also conducted a sensitive-location analysis for the revised route. The results showed that the high-priority marine areas were generally similar to those identified for the conventional route. However, for the Cape of Good Hope route, new sensitive locations were identified off the coast of South Africa and off the northwestern coast of Africa.



Real Estate Business

Identifying Nature Dependencies and Impacts

We conducted our analysis and evaluation using the same process applied to the shipping business (p.21). Based on the results of this year's assessment, we reviewed and partially updated the evaluation disclosed last fiscal year.

Major Dependencies in the Real Estate Business

Most real estate business dependencies are concentrated upstream in the value chain (especially in the production of building materials). The forestry sector, which produces timber, is particularly dependent on biomass, regulating water and soil quality necessary for growth and mitigating landslides and weather disasters. In particular, metal mining and the extraction of stone, sand, and clay depend on the ecosystem's ability to purify water, mitigate flood, and regulate rainfall patterns to provide water. In direct operations, it was found that there is a high level of dependence on visual amenity services, such as landscape value, among cultural services that can also contribute to enhancing real estate attractiveness. In downstream segments of the value chain, regulation of precipitation patterns that mitigate flood damage during dismantling was identified as a particularly important ecosystem service.

VC stage	Relevant sectors		Provisioning services		Regulating & maintenance services											Cultural services
			Water supply	Other supply services	Solid waste remediation	Water purification	Water flow regulation	Global climate regulation	Local climate regulation	Flood mitigation	Rainfall pattern regulation	Soil and sediment retention	Soil quality regulation	Nursery population and habitat maintenance services	Biological control	
Upstream	Building materials	Afforestation and other forestry activities	H	VH	M	VH	M	VH	VH	H	VH	VH	VH	H	H	-
		Manufacturing of building lumber	L	-	M	-	M	VL	L	M	M	L	-	-	VL	-
		Metal mining	H	VL	L	VH	H	H	L	H	VH	M	-	-	-	-
		Steel manufacturing	H	-	L	M	H	VL	L	M	M	L	-	-	-	-
		Non-ferrous metals manufacturing	M	-	L	M	M	VL	L	M	M	L	-	-	-	-
		Collecting stones, sand, and clay	H	L	-	VH	H	H	L	H	VH	H	-	-	-	-
		Concrete production	M	-	M	M	M	VL	L	M	L	L	-	-	-	-
		Manufacturing clay materials for construction (tiles,	M	-	M	M	M	VL	L	M	L	L	-	-	-	-
		Glass manufacturing	M	-	M	M	M	VL	L	M	M	L	-	-	-	-
		Resin manufacturing	M	-	L	M	M	VL	L	M	M	M	-	-	-	-
	Construction	Land acquisition, development, and improvement	L	-	-	M	L	M	L	L	VH	M	-	-	-	-
		Design and construction	M	VL	VL	M	M	M	L	M	VH	H	-	-	-	-
	Electricity/Water/Gas	Wind power generation	VL	-	-	-	M	VH	M	H	-	M	-	-	-	-
		Solar power generation	M	-	-	-	M	VH	M	M	-	M	-	-	-	-
		Hydroelectric power generation	VH	-	L	L	VH	M	L	VH	-	VH	-	-	-	-
		Electricity transmission and distribution	VL	-	L	-	VL	VL	L	M	VL	L	-	-	-	-
		Water supply (water supply and sewerage)	M	VL	VH	VH	M	VL	L	M	VH	M	-	-	VL	-
		Natural gas extraction	L	-	L	VL	M	H	L	H	-	L	-	-	-	-
		Gas supply	VL	-	L	M	VL	VL	L	VL	M	L	-	-	-	-
		Green hydrogen production	M	-	L	M	M	VL	L	M	VL	M	-	-	-	-
	Others	Fire insurance	VL	-	-	-	VL	VL	L	VL	-	VL	-	-	-	-
Direct operations	Building operation and management (including upkeeping/maintenance)		L	-	-	-	VL	VL	L	L	-	M	-	-	-	VH
Downstream	Dismantling	Dismantling	L	-	-	M	L	M	L	L	VH	M	-	-	-	-
		Dismantling (reusing parts)	M	-	H	-	L	VL	-	VL	M	VL	-	-	VL	-

Major Impacts in the Real Estate Business

As with dependencies, most of the impacts in the real estate business are concentrated upstream in the value chain--especially in the production of building materials. Among these, the most substantial impacts land use and pollution from the use of fertilizers and/or pesticides in forestry, waste emissions from metal mining, resource use from the extraction of stone, sand, and clay, emissions of harmful pollutants in the production of building materials, and disruptions to ecosystems from noise and light pollution generated during the manufacturing process. In direct operations, impacts such as land use through real estate and water use for toilets, heating, and cooling are important. Moreover, soil and water pollution involving energy-related activities such as gas supply and green hydrogen production were identified as a major impact. In the operation and management of buildings under direct operations, no particularly large impacts were identified, but the importance of impacts related to land use and water use for toilets, heating and cooling, and green spaces was found to be relatively high. In downstream segments of the value chain, ecosystem disturbances caused by noise, light pollution, and offensive odors during dismantling were identified as having a particularly large impact.

VC stage	Relevant sectors		Land/ freshwater/ocean use change			Climate change	Resource use/replenishment		Pollution/pollution removal					Invasive alien species
			Area of land use	Area of freshwater use	Area of seabed use	Emissions of GHG	Water use	Other abiotic resources	Solid Waste	Air pollution (excluding GHG)	Soil and water quality pollution	Soil and water nutrient pollution	Disturbance	Introduction of invasive species
Upstream	Building materials	Afforestation and other forestry activities	VH	-	-	-	M	-	L	VH	H	H	H	H
		Manufacturing of building lumber	L	-	-	M	M	-	M	M	M	-	H	-
		Metal mining	M	H	H	M	L	H	VH	M	H	-	H	VL
		Steel manufacturing	L	-	-	H	M	-	M	H	VH	-	VH	-
		Non-ferrous metals manufacturing	L	-	-	M	L	-	M	H	VH	M	VH	-
		Collecting stones, sand, and clay	M	H	H	H	M	VH	L	H	H	-	H	VL
		Concrete production	L	M	-	H	M	-	M	H	VH	M	M	-
		Manufacturing clay materials for construction (tiles,	L	M	-	H	M	-	M	H	VH	M	M	-
		Glass manufacturing	L	-	-	M	M	-	M	M	-	-	M	-
		Resin manufacturing	L	-	-	M	H	-	M	M	VH	-	VH	-
	Construction	Land acquisition, development, and improvement	L	M	M	M	L	-	M	L	H	-	VH	L
		Design and construction	L	M	M	H	L	-	M	L	H	-	VH	L
	Electricity/Water/Gas	Wind power generation	H	-	M	-	L	-	VL	-	VL	-	M	-
		Solar power generation	L	-	-	-	L	-	VL	-	L	-	VL	-
		Hydroelectric power generation	M	H	-	L	L	-	L	-	-	-	H	-
		Electricity transmission and distribution	M	L	L	VL	VL	-	L	VL	L	-	L	-
		Water supply (water supply and sewerage)	H	H	-	M	L	-	L	M	M	-	M	-
		Natural gas extraction	L	H	H	H	M	-	M	H	H	-	H	VL
		Gas supply	M	M	-	H	L	-	L	M	VH	-	M	-
		Green hydrogen production	L	-	-	M	M	-	M	M	VH	-	VH	-
	Others	Fire insurance	L	-	-	L	VL	-	VL	VL	L	-	L	-
Direct operations	Building operation and management (including upkeeping/maintenance))		M	-	-	VL	M	-	M	VL	L	-	L	-
Downstream	Dismantling	Dismantling	L	M	M	M	L	-	M	L	H	-	VH	L
		Dismantling (reusing parts)	M	-	-	M	M	-	M	M	M	-	H	M

Identification of Nature-related Risks and Opportunities

Based on our assessment of dependencies and impacts, we conducted a comprehensive review of nature-related risks and opportunities relevant to the real estate business. In addition to the heat map illustrating dependencies and impacts, this review also incorporates external factors such as international policy developments. Furthermore, reflecting the results of the analysis conducted during the current fiscal year, we have added new items to our list of risks and opportunities.

Risks and Opportunities in the Real Estate Business

Risks in the real estate industry that are considered important include "increased frequency and severity of storms and floods due to climate change," "strengthening regulations and ordinances regarding the withdrawal of water resources such as surface water and groundwater," and "water and soil pollution owing to improper management."

Conversely, potential opportunities can be found in "reducing the environmental impact through more efficient use of construction materials such as water, wood, construction waste, and plastics" and "planning and operating real estate that uses low-impact, low-toxicity, resource-recycling materials.". We will present the key risks and opportunities on the following pages.

Strategy

Category			Related dependencies and impacts on nature	Triggers for risks and opportunities	Risks and opportunities	Relevant VC*1 stages	Impact level*2	Likelihood and urgency*3	Time horizon*4	Related initiatives
Risk	Physical	Acute	[Dependency] Flood and storm mitigation, soil and sediment retention [Impact] Changes in land, freshwater, and marine use, pollution or pollution removal	● Degradation of ecosystem services such as flood and storm mitigation and soil retention due to land modification	● Decline in revenue due to damage to real estate from wind and flood disasters, higher repair and maintenance costs, and increased insurance premiums	• Building operation and management	Large	Low	Medium to long term	• Adoption of insurance that compensates for economic losses caused by water-related disasters
		Acute	[Dependency] Climate regulation, flood mitigation storm mitigation, regulation of precipitation patterns [Impact] Climate change	● Increased frequency and severity of storms and floods associated with climate change			Large	High	Short to long term	
	Transition	Policy	[Impact] Changes in land, freshwater, and marine use	● Introduction and enforcement of land development regulations for nature conservation	● Increased difficulty in new real estate development and planning	• Construction • Building operation and management	Large	Medium	Short to long term	
		Policy	[Dependency] Soil quality regulation, water quality regulation [Impact] Pollution or pollution removal	● Introduction and enforcement of regulations on emissions such as soil contaminants	● Occurrence of response costs such as pollution countermeasures ● Costs associated with introducing equipment to reduce pollution	• Overall	Large	Medium	Short to long term	
		Market	[Impact] Changes in land, freshwater, and marine use	● Growing market demand for on-site and off-site greening and restoration, as well as nearby green urban regeneration	● Decline in revenue if tenants relocate to properties operated by other companies due to insufficient response	• Building operation and management	Large	Medium	Short to long term	• Conclusion of forest creation agreement in Saitama Prefecture and planting of tree species including native species in Iino no Mori • Receipt of evaluations such as the ABINC 1st Special Award and registration as Edo no Midori Registered Green Space
		Market	[Impact] Climate change, resource use or recovery	● Changes in customer preferences toward energy efficient real estate and ZEB	● Decline in revenue resulting from tenant withdrawal from energy inefficient properties if responses are inadequate	• Building operation and management	Large	Medium	Short to long term	• Acquisition of WELL Precertification at the Iino Building and continued DBJ Green Building certification at the Iino Building and the Shiodome Shiba Rikyu Building • Acquisition of LEED Platinum certification at Iino Building • Planting of tree species including native species in Iino no Mori and receipt of evaluations such as the ABINC 1st Special Award and Edo no Midori Registered Green Space
		Technology	[Impact] Climate change, resource use or recovery	● Adoption of energy-efficient materials and equipment	● Costs for introducing and replacing new materials and equipment	• Building operation and management	Large	Low	Short to long term	• Introduction of ICP aimed at promoting decarbonization investment
		Market Reputation	[Impact] Changes in land, freshwater, and marine use, resource use or recovery, pollution or pollution removal	● Potential greenwashing by suppliers or in direct operations ● Unintentional violations of laws and regulations in countries with weak governance at supplier sites or direct operations, such as bribery and corruption, including deforestation and infringement of indigenous and local community rights	● Deterioration of brand image due to greenwashing or violations of laws and regulations ● Increased difficulty in financing due to a decline in investor preference	• Building operation and management	Large	Medium	Short to long term	
		Liability	[Impact] Overall	● Fines and compensation orders related to damage to nature and ecosystems and resulting harm to indigenous peoples and local communities	● Occurrence of compensation costs	• Overall	Large	Low	Short to long term	

*1 VC: Value Chain
*2 Impact level: Extreme (continuation of business becomes difficult, permanent loss of trust and brand), High (fundamental review of facilities or services required to continue business, significant loss of trust and brand), Medium (modification or review of facilities or services required to continue business, loss of trust and brand), Low (review of operations or suppliers or minor changes required to continue business, minor impact on trust and brand)
*3 Likelihood or urgency: High, occurs at least once per year; Medium, occurs once every few years; Low, rarely occurs
*4 Time horizon: Short term, 0 to 2 years; Medium term, 3 to 10 years; Long term, 11 years and beyond

Strategy

Category			Related dependencies and impacts on nature	Triggers for risks and opportunities	Risks and opportunities	Relevant VC*2 stages	Time horizon*3	Related initiatives
Opportunity	Business*1	Resource efficiency Capital flow and financing	[Impact] Overall	● Planning and operation of real estate with access to green spaces, energy efficient properties, and ZEB ● Increasing customer preference for the above properties	● Increase in revenue due to growth in tenant numbers ● Enhancement of reputation of owned properties ● Expansion of financing driven by increased investor preference	• Building operation and management	Medium to long term	• Acquisition of WELL Precertification at Iino Building • Continued DBJ Green Building certification at the Iino Building and the Shiodome Shiba Rikyu Building • Acquisition of LEED Platinum certification at Iino Building • Planting of tree species including native species in Iino no Mori and receipt of evaluations such as the ABINC 1st Special Award and Edo no Midori Registered Green Space
		Capital flow and financing	[Impact] Resource use or recovery	● Reduction of environmental burden through efficient use of construction materials such as water, timber, construction waste, and plastics	● Improvement of reputation for the real estate business ● Expansion of financing driven by increased investor preference	• Building operation and management	Medium to long term	
		Products and services	[Impact] Overall	● Planning and operation of real estate using low impact, low toxicity, and circular materials	● Improvement in customer preference and enhancement of brand image	• Building operation and management	Medium to long term	
		Capital flow and financing	[Dependency] Cultural services	● Introduction and expansion of green spaces at owned properties	● Reduction in operating costs through tax incentives	• Building operation and management	Medium to long term	• Acquisition of WELL Precertification at Iino Building • Continued DBJ Green Building certification at the Iino Building and the Shiodome Shiba Rikyu Building • Acquisition of LEED Platinum certification at Iino Building • Planting of tree species including native species in Iino no Mori and receipt of evaluations such as the ABINC 1st Special Award and Edo no Midori Registered Green Space
		Products and services Reputation	[Dependency] Soil and sediment retention, flood mitigation, storm mitigation		● Contribution to reduction of urban flood damage through decreased rainwater runoff, and improvement of reputation within local communities	• Building operation and management	Medium to long term	

*1 Business: Refers to Business Performance *2 VC : Value Chain *3 Time horizon: Short term, 0 to 2 years; Medium term, 3 to 10 years; Long term, 11 years and beyond

Areas Requiring Attention in Real Estate Business

As with the shipping industry, a “locate” analysis was conducted in the real estate industry for the purpose of identifying areas requiring attention.

In the real estate industry, analysis and evaluation were conducted for eight domestic properties owned by the company, using the TNFD recommended perspectives for areas requiring attention. The analysis and evaluation involved overlaying property location information with each indicator, followed by scoring and aggregation for each of the four TNFD recommended criteria for areas requiring attention. For details on the analytical methods and indicators used, please refer to P21.

Results of the Analysis of Areas Requiring Attention

Of the eight domestic properties owned by the company, seven were selected as areas requiring attention based on the results of biodiversity potential evaluation that included the perspectives of biodiversity importance, ecosystem integrity, and importance of ecosystem service provision among the criteria for areas requiring attention. Furthermore, some properties were found to be in proximity to prefecturally designated wildlife protection areas and scenic districts with extensive green spaces, so it is considered important to operate and manage properties with careful consideration of their locational environments.

Risk and Impact Management

Risk and Impact Management

In TNFD disclosures, organizations are required to describe the processes they use to identify, assess, prioritize, and monitor nature-related dependencies, impacts, risks, and opportunities—collectively referred to as “Risk and Impact Management.”

Process for Identifying and Assessing Nature-related Issues

Our Group identifies and evaluates nature-related issues in accordance with the LEAP approach developed by the TNFD. For this disclosure, we focused on the shipping and real estate businesses.

In identifying and assessing nature-related issues, we first conducted a qualitative review of dependencies and impacts on nature across both our direct operations and upstream/downstream value chains. For direct operations, we analyzed the natural interfaces and sensitive areas associated with the marine regions and ports our vessels navigate, as well as the locations of our real estate assets. Nature-related risks and opportunities were then identified by integrating the dependencies, impacts, natural interfaces, and sensitive areas identified to date, together with global developments such as regulatory trends in various countries.

Process for Managing Nature-related Issues

The nature-related issues identified are overseen primarily by the Safety and Environment Committee, chaired by the President and Representative Director and composed of all Executive Officers and the presidents of major Group companies.

In addition, the Sustainability Promotion Department and its cross-functional Environmental Promotion Working Team jointly develop plans and initiatives addressing environmental issues, including nature-related matters, and report regularly to the Safety and Environment Committee.

Integration of Nature-related Risks into Enterprise Risk Management

Nature-related risks identified as material to our business management are reported by the Risk Management Committee—responsible for Group-wide risk policies and oversight—to the Board of Directors. These risks are subsequently incorporated into the Company’s enterprise risk management processes.

【Organizational Structure for Integrating Nature-related Risks into Enterprise-wide Risk Management】

Risk Management Committee

Chairperson: President Executive Officer, Members: Executive Officers
Meeting frequency: 36 times

To manage the following items (1) through (6) and implement risk management effectively and efficiently, conduct preliminary deliberations on important matters to be tabled at Executive Committee meetings, such as those that could have a material impact on the Company’s business performance, and offer suggestions and advice

(1) Matters concerning risk management policies and systems
(2) Matters related to proposals for evaluations and improvements related to risk management activities
(3) Matters concerning evaluations of the discussions conducted by the Quality and Systems Committee, Safety and Environment Committee, and Compliance Committee
(4) Matters concerning the assessment of strategic risks and important investment project risks
(5) Matters concerning the evaluation of the effectiveness of business continuity plans
(6) Other necessary matters that relate to risk management

Refer matters for decision / Report ↑ ↓ **Instructions**

Safety and Environment Committee	Quality and Systems Committee	Compliance Committee
Chairperson: President Executive Officer The Safety and Environment Committee, established under the Safety and Environment Committee Regulations, is responsible for formulating and promoting policies on safety and the environment and implementing and reinforcing preventive and other measures to mitigate risks relating to serious accidents or problems that might affect vessels and buildings.	Chairperson: President Executive Officer The Quality and Systems Committee, established under the Quality and Systems Committee Regulations, is responsible for formulating and promoting policies on systems and administrative procedures and implementing and reinforcing preventive and other measures to mitigate risks relating to system failure.	Chairperson: President Executive Officer The IINO Group Sustainability Policy and the Compliance Regulations form the basis for the compliance system to ensure compliance in the execution of duties by the Group’s officers and employees, including directors and executive officers. Chaired by the President Executive Officer, the Compliance Committee, established under the Compliance Committee Regulations, formulates and promotes compliance policies regarding compliance throughout the Group.

Metrics and Targets

Metrics and Targets

Under the TNFD framework, organizations are required to disclose the metrics and targets they use to assess and manage material nature-related dependencies, impacts, risks, and opportunities.

Within our Group, we quantify both the inputs of natural resources and the outputs of environmental load substances associated with our shipping and real estate operations. This allows us to measure the environmental impact of our business activities in a systematic and quantitative manner. Through the continuous improvement efforts embedded in our environmental management system, we strive to reduce environmental burdens over time. The results of these initiatives are disclosed on our corporate website and in our Integrated Report.

In this report, we present results for the metrics that correspond to the TNFD Global Core Metrics as well as the Shipping Sector Core Metrics, selected from among the indicators currently being measured. Going forward, based on the findings from the LEAP analysis conducted last fiscal year through this fiscal year, we will consider establishing formal metrics and targets.

In addition, our GHG emissions and wastewater volumes are subject to third-party verification by ClassNK (Nippon Kaiji Kyokai), ensuring the reliability and transparency of the data disclosed.

【Metrics and Performance】

Metric number	Driver of nature change	Indicator	Metrics	FY2023 results	FY2024 results
-	Climate change	GHG emissions	*See ISSB's IFRS S2 "Climate-related Disclosures."	**[Shipping business]** Scope 1: 862,635 t-CO2 Scope 2: 0 t-CO2 Scope 3: 144,561 t-CO2 (*combined with the real estate business) **[Real estate business]** Scope 1: 1,228 t-CO2 Scope 2: 5,412 t-CO2 Scope 3: 144,561 t-CO2 (*combined with the shipping business)	Scope 1 : 901,330 t-CO_2 (Shipping business 900,165 t-CO_2, Real estate business and other 1,165 t-CO_2) Scope 2 : 5,588 t-CO_2 (Shipping business 0 t-CO_2, Real estate business and other 5,588 t-CO_2) Scope 3 : 131,733 t-CO_2
C2.1	Pollution/Pollution removal	Wastewater discharged	●Displacement volume (total, freshwater, other) (Concentrations of major pollutants in the wastewater, including water temperature if relevant)	**[Real estate business]** Total wastewater volume: 81,000 m^3 *Water quality complies with the standards outlined in the Water Supply Act and the Act on Ensuring Sanitary Environments in Buildings.	[Real estate business] Total Wastewater Volume : 89,000 m^3
C2.2		Waste generation and disposal	●Weight of waste and hazardous waste generated (by type) (t) ●Amount of waste and hazardous waste classified as follows: - Incinerated waste - Landfill waste - Others ●Amount diverted from landfill - Reuse - Recycling - Other recovery methods	●**Waste** Total: 485 t (general: 365 t, industrial: 120 t) ●**Shipboard household waste** Plastics: 604 m3 Bottles, cans, etc.: 455 m3 Food waste: 174 m3 *The recycling rate for waste is 73%.	●**Waste** Total: 485 t (general: 365 t, industrial: 120 t) Recycling Rate for Waste : 72% ●**Shipboard household waste** Plastics: 494 m^3 Bottles, cans, etc.: 423 m^3 Food waste: 158m^3
C2.4		Non-GHG air pollutants	●Total amount of non-GHG air pollutants by type (t) - PM - NOx - VOCs - SOx - Ammonia	NOx: 24,000t SOx: 11,000 t	NOx : 25,000 t SOx : 11,000 t
C4.0	Invasive alien species and others	Placeholder indicator*1: Measures against unintentional introduction of invasive alien species	● Number of vessels implementing ballast water treatment and their proportion	Ballast water treatment systems installed on all vessels managed by the Group	Same as left

*1 Placeholder indicator: Indicators recommended to be considered and disclosed to the greatest extent possible
*2 Wastewater quality complies with standards stipulated in the Water Supply Act and the Act on Maintenance of Sanitary Environment in Buildings

Appendix

Appendix

Shipping

Method for Identifying Sensitive Areas

Analytical Procedure

We analyzed all properties in accordance with the steps below to identify locations requiring special attention (“sensitive locations”).

Step 1: Plot timestamp data of vessels on a map

Step 2: Aggregate the timestamp data into a 50 km × 50 km grid

Step 3: Count the number of timestamps within each grid to reflect navigational density

Step 4: Overlay the aggregated timestamps with various environmental indicators and score each grid based on the criteria for priority areas

Step 5: Classify and compile the scored results by coastal areas (coastline to continental shelf) and open ocean

Indicators Used to Identify Sensitive Locations

Criteria for areas requiring attention	Perspective	Indicator name
Importance of biodiversity	✓Protected areas ✓Areas recognized as important for biodiversity	① Protected areas (WDPA) ② Key biodiversity areas (KBAs) ③ Ecologically and biologically significant areas (EBSAs) ④ Particularly sensitive sea areas (PSSAs) **⑤ Important marine mammal areas (IMMAs)** ⑥ Distribution of mangroves, corals, and seaweeds
	✓Areas inhabited by rare or endemic species ✓Areas close to habitats of endangered species	Marine STAR indicators
Ecosystem integrity	✓High ecosystem integrity	Pristine marine areas (marine wilderness)
Importance of ecosystem service provision	✓Areas with high importance of ecosystem service provision	Indigenous peoples and local communities
		Fishing catch (commercial /non-commercial)
		Economic value of coral reefs
Physical water-related risks	✓Areas with high physical water-related risks (e.g., areas with declining water quality or high pollution levels)	Clean Water indicators (from Ocean Health Index)
		Plastic distribution in marine ecosystems
Other	✓Areas judged as appropriate for confirmation based on biome guidance, etc.	Exclusive economic zones (EEZs)

Real Estate

Method for Identifying Sensitive Areas

Analytical Procedure

We analyzed all properties in accordance with the steps below to identify locations requiring special attention (“sensitive locations”).

Step 1: Plot the locations of owned properties on a map

Step 2: Apply buffers where necessary depending on the indicator; indicators not requiring buffers were evaluated as points

Step 3: Overlay each indicator with the mapped property data, assign scores on a scale of 1 to 5, and compile the results for each sensitive-location criterion. The highest score per criterion was adopted

Step 4: Identify as sensitive locations all sites scoring 4 or higher

Indicators Used to Identify Sensitive Locations

Analysis Using Global Indicators

Criteria for areas requiring attention	Perspective	Indicator name
Importance of biodiversity	✓Protected areas	Protected areas (WDPA)
	✓Areas recognized as important for biodiversity	Key biodiversity areas (KBAs)
	✓Areas inhabited by rare or endemic species ✓Areas close to habitats of endangered species	STAR-t metric
Ecosystem integrity	✓Areas with high ecosystem integrity	Biodiversity Intactness Index
	✓Areas with decreased integrity	Tree Cover Loss
Importance of ecosystem service provision	✓Areas with high local importance of ecosystem service provision	Indigenous peoples and local communities
Physical water-related risks	✓Areas with high physical water-related risks	Water stress (baseline water stress)
		Biochemical oxygen demand (BOD)
		Flood depth
Other	✓Interconnected ecosystems	Functional biome

Detailed Analysis Using Domestic Indicators

Criteria for areas requiring attention	Perspective	Indicator name
Importance of biodiversity	✓Protected areas	Protected areas (WDPA)
	✓Areas recognized as important for biodiversity	Key biodiversity areas (KBAs)
	✓Areas inhabited by rare or endemic species ✓Areas close to habitats of endangered species	STAR-t metric
Ecosystem integrity	✓Areas with high ecosystem integrity	Biodiversity Intactness Index
	✓Areas with decreased integrity	Development pressure
Importance of ecosystem service provision	✓Areas with high local importance of ecosystem service provision	Scenic areas
Physical water-related risks	✓Areas with high physical water-related risks	Biochemical oxygen demand (BOD)
		Flood depth
Other indicators added for evaluating urban real estate	✓Areas with diverse environments and high biodiversity potential ✓Cross-sectional evaluation of importance of biodiversity, ecosystem integrity, and ecosystem services	Biodiversity potential evaluation
	✓Interconnected ecosystems	Natural environment classification