Blue Bond Framework

December 2023

MOL 商船三井

Mitsui O.S.K. Lines

Contents

I. Introduction

1. Company Overview

Mitsui O.S.K. Lines, Ltd. (“MOL”) is a Japanese maritime shipping company headquartered in Minato City, Tokyo. With a fleet of approximately 800 vessels, among the most in the world, for 140 years as a comprehensive ocean shipping enterprise we have been safely and reliably transporting goods and energy of various kinds throughout the world.

The MOL Group consists of MOL and 509 group companies (consolidated subsidiaries; as of March 31, 2023). The business base is made up of five areas: Dry Bulker Business, Energy Business, Product Transport Business, Wellbeing & Lifestyle Business, and Associated Business. Applying the know-how and network built up in marine transport to various social infrastructure businesses and expanding our business areas, we aim to become a company capable of addressing and solving a broader range of social challenges.

2. MOL Group Corporate Mission

Our Group Corporate Mission, Group Vision, and Group Values (MOL CHARTS) have been defined as given below. At a time when awareness of the need for decarbonization and other environmental solutions is rising, along with the expectations of society for our contributions to sustainability as an enterprise, these confirm the meaning of the Group existence, the vision we aim for, and our values, as we seek to expand our business beyond transport to other areas and to reflect the changing values that come with such expansion, and to achieve further growth.

MOL Group Corporate Mission

From the blue oceans, we sustain people's lives and ensure a prosperous future.

MOL Group Vision

We will develop a variety of social infrastructure businesses in addition to traditional shipping businesses, and will meet the evolving social needs including environmental conservation, with innovative technology and services. MOL group aims to be a strong and resilient corporate group that provides new value to all stakeholders and grows globally.

MOL Group Values: MOL CHARTS

Challenge	**Innovate through insight** • Proactively develop business opportunities by staying ahead of the curve. • Make innovation for the further growth of the company.
Honesty	**Do the right thing** • Keep compliance as a Top Priority. • Ensure that actions comply with social norms and the highest ethical standards.
Accountability	**Commit to acting with a sense of ownership** • Tackle tasks with a sense of ownership and in cooperation with stakeholders.
Reliability	**Gain the trust of stakeholders** • See things from the customers' perspective, and deliver service that exceeds their expectations. • Seize the initiative in social issues and take responsibility for your behavior.
Teamwork	**Build a strong team** • Encourage open communication with mutual respect. • Share knowledge, experience, expertise and skills, and foster the next generation.
Safety	**Pursue the world's highest level of safety culture** • Maintain a safety-first attitude and strive to reinforce safety awareness • Return to basics by comprehending workplace safety.

3. MOL Group Management Plan “BLUE ACTION 2035”

In March 2023, we formulated a new Group Management Plan, “BLUE ACTION 2035.” This plan conceives and lays out the next stage and shows the way toward a vision based on long-term strategies, so that we can take a major step to becoming a global social infrastructure company. The name ‘BLUE ACTION 2035’ symbolically indicates our challenge on the way to 2035 (the target year set in the plan), of achieving new growth while expanding our field as a social infrastructure company with its origins in the sea, and valuing the preciousness of the ocean and the global environment.

In carrying out “BLUE ACTION 2035” toward achieving the Group Vision (what we want to be in 2035), we will reform to a business portfolio able to maintain profitability even during a shipping downturn, aiming to increase the asset ratio of stable revenue businesses that are highly resilient to fluctuations in the shipping market to 60 percent. In addition to the three core strategies (portfolio, regional, and environmental strategies), the five core initiatives to Sustainability Issues (Environment, Safety, Human Capital, Digital Transformation [DX], and Governance) have been made a central part of the plan. The management plan has also been designed for consistency with the “MOL Group Environmental Vision 2.2,” our environmental strategy, regarding the introduction of zero-emissions ocean-going vessels and the milestones toward achieving GHG emissions intensity reduction targets.

Outline of “BLUE ACTION 2035”

Core KPI targets

	KPI		FY2022 Results	FY2023 Forecast	Phase 1 FY2025	Phase 2 FY2030	Phase 3 FY2035
Financial KPI	Profit before tax (unit: JPY)		819 bil	265 bil	240 bil	340 bil	400 bil
	Net Gearing Ratio*1		1.01	0.92	0.9~1.0		
	ROE		49.8%	10%	9~10%		
Non-Financial KPI	Enviro-nment	GHG emissions intensity reduction rate (Compared to 2019)	▲5.0%	-		-	▲45%
	Safety	4 Zero*2	Unachieved (One fatal accident)	-	Achieve		
	Human Capital	Percentage of female employees in managerial positions (Office workers, non-consolidated)	9.2%	-	15%	[Reset by the end of Phase 1]	
		Percentage of MGKP*3 incumbents (Female/Non-HQ/Under 40s)	4.7%/18.3%/9.5%	-	8%/30%/15%		
	DX	Conversion rate to value creation and safety work (cumulative)	-	-	10%	20%	30%

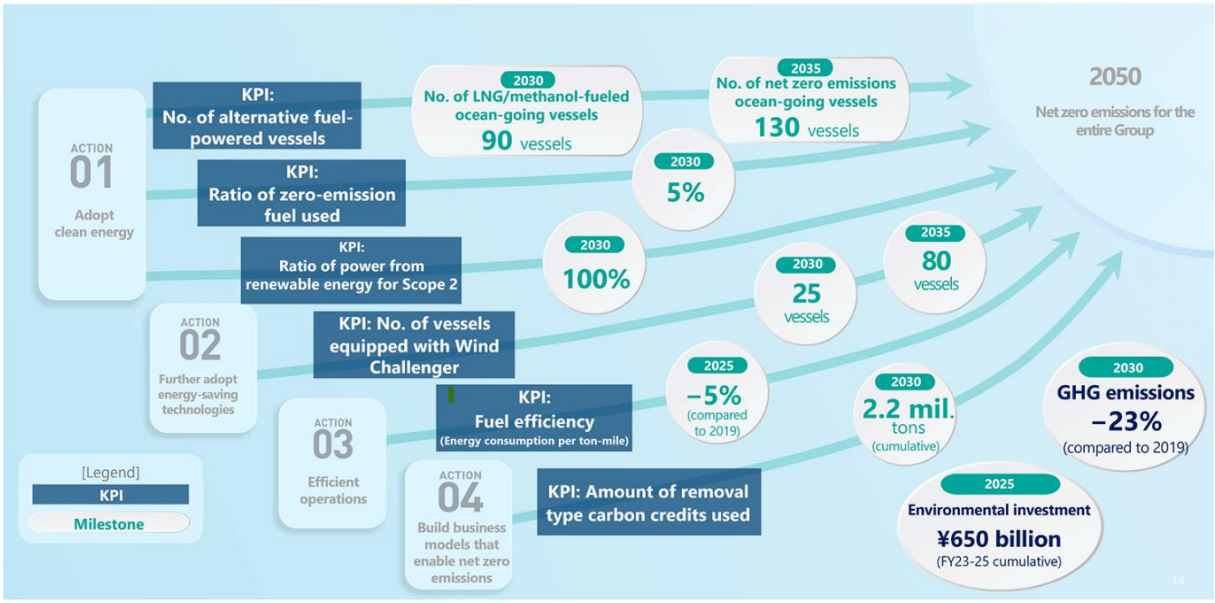
*1 The amount of interest-bearing liabilities is assumed to include off-balance assets (approx. 900 billion yen) such as charter hire liabilities that should be factored-in after IFRS is adopted. This figure is only an estimate under certain assumptions and may differ from the actual one when IFRS is formally applied.
*2 4 Zero = Zero for serious marine incidents, oil pollution, fatal accidents and serious cargo damage.
*3 MOL Group Key Positions, designated as equivalent to General Manager in Head Office, to be appointed and managed centrally across the group.

4. ‘MOL Group Environmental Vision 2.2’

MOL made Environmental Strategy one of the core strategies of our Management Plan, “BLUE ACTION 2035.” We have drawn up the “MOL Group Environmental Vision 2.2” as a new roadmap to achieve net zero greenhouse gas (GHG) emissions by 2050 and promote the sustainable development of people, society, and the Earth. “Environmental Vision 2.2” adds and updates key performance indicators (KPIs) and milestones as important measures of progress on the way to achieving net zero emissions by 2050 by the Group as a whole, thereby raising the effectiveness of initiatives, while clarifying the transition plan by presenting specific GHG reduction pathways. The MOL Group will make concerted efforts to reduce various impacts on the global environment, including climate policy measures and measures to protect natural capital and biodiversity, while earning the trust of a broad range of stakeholders.

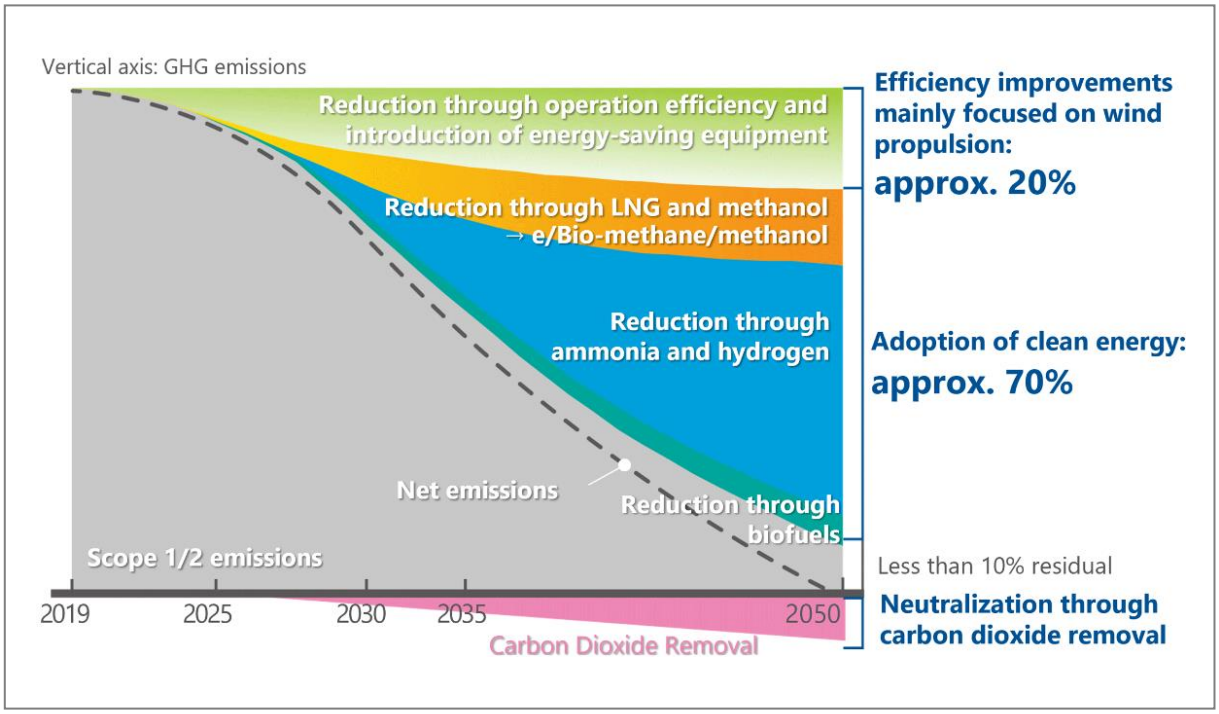
KPI & Milestones

MOL has established quantitative KPIs and milestones to measure progress on actions aimed at achieving net zero emissions by 2050.



Pathway to Net Zero Emissions

MOL has clarified our transition plan by presenting specific GHG reduction pathways toward the 2050 net-zero target, and has quantified the contributions of each initiative.



5. Overview of the Blue Bond Framework

The MOL Group, which expresses our Corporate Mission as, “From the blue oceans, we sustain people’s lives and ensure a prosperous future,” states in the Group Vision, “We will develop a variety of social infrastructure businesses in addition to traditional shipping businesses, and will meet the evolving social needs, including environmental conservation, with innovative technologies and services.” Initiatives in pursuit of climate policy measures and sustainability of the oceans are core to raising our corporate value and achieving the Group Vision. In promoting these initiatives, MOL has formulated our own Blue Bond Framework (“the Framework”) and will carry out funds procurement as set forth in the Framework. The four core components of the Framework, based on the principles below, are use of proceeds, process for project evaluation and selection, management of proceeds, and reporting (allocation and impact).

Applicable Principles and Guidelines

- Green Bond Principles 2021: GBP (ICMA)
- Green Bond Guidelines 2022 (Ministry of the Environment)
- A Practitioner’s Guide for Bonds to Finance the Sustainable Blue Economy: SBE Guides (ICMA, IFC, UNEP FI, UNGC and ADB)
- Sustainable Blue Economy Finance Principles: SBEFP (UNEP FI)

II. Blue Bond Framework

1. Use of Proceeds

The proceeds from blue bond issuance will be used to refinance new and existing investment in the eligible projects listed below. Note that refinancing will be limited to projects implemented no longer than 36 months earlier than the time of blue bond issuance.

Eligible Blue Projects

SBE Practitioner's Guide Blue Project Categories	GBP Green Project Categories	Eligible Projects
Marine Renewable Energy	Renewable energy	**Capital investment, R&D, funding, etc. for businesses relating to offshore wind power generation** Including capital investment, R&D, funding, etc. for SOV (Service Operation Vessels)
		Capital investment, R&D, funding, etc. for Ocean Thermal Energy Conversion[1]
Sustainable Marine Transport	Clean transportation	**Capital investment, R&D, etc. for Wind Hunter Project[2]**
	Clean transportation	**Capital investment, R&D, etc. relating to the wind propulsion device portion of ships outfitted with Wind Challenger[3]**
	Energy efficiency	**Capital investment, etc., for initiatives toward more efficient marine vessel operation** Capital investment, etc., for PBCF[4] and propeller introduction and replacement
	Terrestrial and aquatic biodiversity conservation	**Capital investment, etc., for ballast water management system[5] introduction**
	Pollution prevention and control	**Capital investment, etc., for SOx scrubber[6] introduction**

1 Ocean Thermal Energy Conversion

Ocean Thermal Energy Conversion (OTEC) makes use of the temperature differences between the ocean's surface warm water and cold water in deep layers to generate electricity. In sea areas with a depth of 600 meters or more, deep ocean water is pumped up and energy is extracted from the temperature difference with surface water. An advantage of OTEC is that since the ocean's temperature is not quickly affected by the weather, stable electric power generation is possible 24 hours a day and the available electricity amount is readily predictable. A further advantage of OTEC is that even the water from deep in the ocean already used for electric power generation is sufficiently cool, and the water quality is unchanged by the energy extraction process, making it reusable for farming fish or growing crops, for air conditioning, and in many other fields. It is therefore attracting attention as a sustainable power generation system. While research on OTEC is proceeding in Japan and in places like Hawaii, South Korea, and Nauru, it is a power source that has not yet reached the point of commercial implementation. Drawing on the knowledge and expertise we have built up through ocean-related businesses to date, and taking advantage of our supply chain network, we are seeking early commercialization of OTEC power generation in Japan and abroad, through operation of an OTEC trial system in Okinawa, a verification study on the feasibility of OTEC in Mauritius, an OTEC feasibility project on the island of Kumejima, Okinawa, and others.

2 Wind Hunter Project

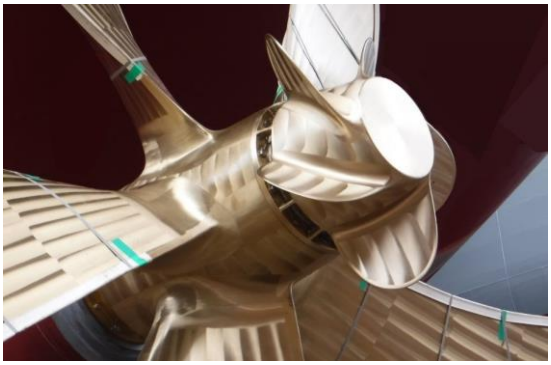
The Wind Hunter Project aims to realize the ultimate zero emissions seagoing vessel, by combining sail technology that uses the energy of ocean winds with technology for making use of stable energy from hydrogen produced from that wind energy. By developing these technologies, we are seeking to advance another step toward realizing a decarbonized society and hydrogen society. We are currently developing the sail technology for making use of maritime wind energy in the Wind Challenger Project described below.3 In the Wind Hunter Project, in addition to this sail technology, when the vessel is being propelled by the wind against the sails, turbines in the water produce electricity, and the electricity is used to produce hydrogen by water electrolysis. When the wind is weak, the ship uses the hydrogen, hydrogen carriers, and fuel cells to augment the propelling power of the ship to ensure stable operation. Also being considered is the use of hydrogen stored in hydrogen carriers to supply hydrogen for use on land. The aim in each case is to achieve zero emissions operation, with no greenhouse gas release whatsoever.

3 Wind Challenger

Wind Challenger is a project making use of wind, which is renewable energy, to propel ships using newly developed sails. Today's large commercial ships are propelled almost entirely by fossil fuels. By installing sails to capture wind as an additional direct propulsion source, the amount of fossil fuel consumption can be reduced without affecting speed. By installing and effectively using sails that have undergone maximum evolution from traditional sails through the latest technology, fuel consumption by large cargo ships will be minimized and GHG emissions reduced. The first such ship, with the wind propulsion system developed jointly by MOL and Oshima Shipbuilding Co., Ltd., set sail in the fall of 2022 and is currently in operation. It is expected to reduce GHG emissions by from 5% to 8%.

4 PBCF

Propeller Boss Cap Fins (PBCF) are special fins to improve propeller efficiency by recovering energy lost due to hub vortexes forming behind the propeller blade. By saving energy, GHG emissions are reduced, contributing to the reduction of environmental burdens. In addition, the fins decrease underwater noise, which is believed to adversely affect marine ecosystems, contributing to environmental protection of marine life by protecting whales and other marine mammals from such noise. The Vancouver Fraser Port Authority in Canada has selected PBCF as an underwater noise reduction technology for vessels as part of their EcoAction Program. This program offers vessel operators discounted rates on harbor fees if they adopt such technology.



5 Ballast Water Management System

A ballast water management system properly treats microorganisms and bacteria in ballast water, which ships take on from the ocean to maintain a stable weight, before it is discharged back into the ocean, thereby reducing the impact on the ecosystem and contributing to conservation of biodiversity. MOL adopted the policy in fiscal 2014 of installing ballast water management systems on ships, before the Ballast Water Management Convention took effect in September 2017. As of fiscal 2021, the systems had been installed on 91 percent of the Group's ships. This is expected to reach 100 percent during fiscal 2023.

6 SOx Scrubber

SOx scrubbers are devices that control the discharge of pollutants by removing the sulfur oxide (SOx) contained in vessel exhaust emissions. Introduction of these devices enables us to meet the regulations set by the International Maritime Organization (IMO) on the concentration of sulfur content in bulker oil.

Contribution of Eligible Blue Projects to SDGs

2. Process for Project Evaluation and Selection

2-1. Process for selecting eligible projects

- The MOL organizations involved in the project selection process are the Corporate Planning Division, Environment & Sustainability Strategy Division, the division in charge of the project, and the Finance Division, receiving advice from the Headquarters of Technological & Digital Transformation as needed.
- The selection of projects eligible for funding is made by the MOL Finance Division, taking into account sustainability-related targets on the environmental front, including the latest Environmental Vision, while receiving advice from the Corporate Planning Division, Headquarters of Technological & Digital Transformation, and the division in charge of the project, and following a suitable process in line with “1. Use of Proceeds” above.
- The MOL Environment & Sustainability Strategy Division verifies and confirms the suitability and eligibility of the selected projects in light of the latest environmental vision.
- The CFO gives final approval to selected projects.

2-2. Negative impacts of eligible projects on the environment, and how these are addressed

2-2-1 Assumed risks

- Impact of offshore wind power generation development, Ocean Thermal Energy Conversion development, and ballast water on the marine ecosystem and marine life
- Greenhouse effect from CO_2 emitted by LNG and heavy oil combustion, and air pollution from NOx

2-2-2 Risk mitigation measures

- Regarding offshore wind power generation development and Ocean Thermal Energy Conversion development, ocean surveys and environmental assessments will be carried out aimed at mitigating adverse impacts. By installing ballast water management systems on ships, we are endeavoring to reduce impacts on the ecosystem.
- We have set a goal of net zero GHG emissions by 2050 in ship operation, have drawn up and made public the roadmap for achieving this goal, and are introducing clean alternative fuels and energy-saving technology, while further advancing efforts for more efficient ship operation.
- In addition, we are observing international environmental regulations aimed at combating climate change, air pollution prevention, marine environment conservation, and biodiversity protection, etc., as we seek to minimize negative impacts from our businesses on the marine and global environment.

3. Management of Proceeds

3-1. Use of proceeds and method of bundling funds

- The proceeds from blue bond issuance will all be bundled for allocation to the selected eligible projects.

3-2. Tracking of proceeds

- The Finance Division will manage the status of allocation of proceeds from blue bond issuance to eligible projects, while sharing this status information with the relevant divisions. The Finance Division will further perform regular tracking to ensure that the same amount of funding goes to eligible projects as that procured from blue bond issuance.

3-3. Management of unallocated funds

- If there are unallocated funds, they will be managed as cash or cash equivalents.

4. Reporting

Annual reporting via the MOL website will be made of the contents prescribed below regarding the allocation status of proceeds from blue bond issuance and environmental improvement benefits, to the extent possible within the constraints of confidentiality and what is reasonably feasible, until all the proceeds from blue bond issuance have been allocated to eligible projects.

4-1. Reporting on funds allocation

- Amounts allocated to each eligible project
- If there are unallocated funds, the amounts and plans for allocation

4-2. Impact reporting

Eligible Projects	Impact reporting indicators
Capital investment, R&D, funding, etc. for businesses relating to offshore wind power generation (Including capital investment, R&D, funding, etc. for SOV (Service Operation Vessels))	• Number of offshore wind power generation units introduced and their output • Number of vessels in which SOV, etc. has been introduced and main specifications
Capital investment, R&D, funding, etc. for Ocean Thermal Energy Conversion	• Summary of project
Capital investment, R&D, etc. for Wind Hunter Project	• Summary of project
Capital investment, R&D, etc. relating to the wind propulsion device portion of ships outfitted with Wind Challenger	• Number of ships outfitted with Wind Challenger
Capital investment, etc., for initiatives toward more efficient marine vessel operation (Capital investment, etc., for PBCF and propeller introduction and replacement)	• Number of vessels in which PBCF and propellers have been introduced • Energy saving benefit (%) compared to before project implementation
Capital investment, etc., for ballast water management system introduction	• Number of vessels in which ballast water management systems have been introduced • Volume of ballast water treated (mt/vessel/year)
Capital investment, etc., for SOx scrubber introduction	• Number of vessels in which SOx scrubbers have been introduced • SOx emission reduction (%) compared to before project implementation