

'MOL Sustainability Plan' FY2022 Results



Safety & Value

Provide added value through safe transportation and our social infrastructure business



Initiative Focus	Targets	KPIs	Numerical Targets	FY2022 Results	Main Initiatives for FY2022
Value through Our Core Business	Provide sustainable value through marine transport and social infrastructure business	Ordinary profit	JPY 200.0 billion(FY2027)	JPY 811.5 billion	Steadily implemented each strategy set forth in the Rolling Plan 2022.
		ROE	9-10% (FY2027)	49.8%	
		Net gearing ratio	<1.0 (FY2027)	0.55	
		Transport volume (ton mile)	—	929 billion ton mile	
Safety Levels	Rigorously ensure safe operation and eliminate accidents	Achieve 4 ZEROS -Zero serious marine incidents	0	0	<ul style="list-style-type: none"> Held table top drills simulating serious marine incident, conducted Safety Campaigns, and hosted Safety Conferences. Strengthened accident prevention system by reflecting voyage plans of MOL-operated vessels in SPIRIT (Sustainable Platform with Intellectual Resource and Innovative Technology). Renovated the Safety Operation Supporting Center through workplace reforms. Began trial of enhanced onshore monitoring using FOCUS.
		-Zero serious cargo damage	0	0	
		-Zero oil pollution	0	0	
		-Zero fatal accidents	0	1	
		Lost time injury frequency	≤0.50	0.19	
		Average downtime*1	≤24.00 hours per ship per year	12.50 hours per ship per year	
Downtime frequency rate*2	≤1.00 incident per ship per year	0.32 incident per ship per year			
Creation of New Added Value	Create services that meet social needs	Track record of new services that cater to society's sustainability related needs	—	Right column	<ul style="list-style-type: none"> Started collaboration/joint study for transport of ammonia fuel, mainly with Japanese electric power companies. In the global HR consulting business, concluded contracts for 49 foreign personnel came to Japan from the Philippines and 14 foreign personnel who are residents in Japan. In the blue carbon businesses, Implemented mangrove planting in an area of 166 hectares in Indonesia. Established Katafuri Ltd. (Launched cloud-based ship quality management app service.)
		Number of projects commercialized through the MOL Incubation Bridge (system for employee inspired proposals)	—	1	

*1 Annual incident-related stoppage hours per vessel. *2 Annual number of incidents per vessel resulting in vessel stoppage. *3 Our initiative to enhance safe operation and improve operational efficiency, using various big data gained from our operated vessels.



Environment

Conservation for Marine and global environment



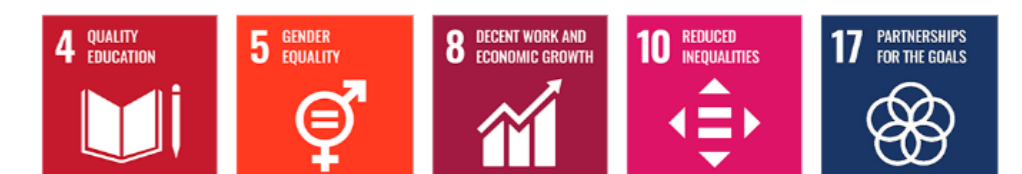
Initiative Focus	Targets	KPIs	Numerical Targets	FY2022 Results	Main Initiatives for FY2022
Climate Change Countermeasures	Achieve net zero GHG emissions for the entire Group by 2050	GHG emissions	net zero(FY2050)	13,330 thousand tons	<ul style="list-style-type: none"> Steadily implemented each strategy set forth in the MOL Group Environmental Vision 2.1. Established the MOL Group Environmental Vision 2.2, with new quantitative milestones for Scope2 reduction and negative emissions. Expanded disclosure information based on TCFD.(Expanded quantitative description of financial impacts, measures for 1.5°C scenario, etc.) Decided to participate in the "GX League Basic Concept" led by Japan's Ministry of Economy, Trade and Industry.
		GHG emission intensity(per ton mile)	approximately 45.0% reduction*1(FY2035) 1.4% per year reduction*2	4.97% reduction*1 1.66% per year reduction*3 (Standard method*4)intensity 10.32 (Reference method*4)intensity 10.81	
		Amount of environmental investment in climate change measures	—	JPY 206.6 billion	
Preservation of Marine Environments/Protection of Biodiversity	Reduce negative impact on the marine environment and biodiversity	Number of vessels equipped with ballast water management systems(cumulative)	—	252	<ul style="list-style-type: none"> Continued to collect information on global biodiversity targets, TNFD, SBTN, etc. Reviewed and restructured processes, including the scope of aggregation of relevant data.
		Progress in establishment of methods for collecting related data	—	Right column	
Prevention of Air Pollution	Reduce air pollutants emitted from vessels	NOx emissions	—	231 thousand tons	<ul style="list-style-type: none"> Promoted specific measures to reduce fuel consumption and shift to alternative fuels. Set quantitative milestones for SOx reduction in the MOL Group Environmental Vision 2.2.
		NOx emission intensity(per ton mile)	—	0.21	
		SOx emissions	—	28 thousand tons	
		SOx emission intensity(per ton mile)	—	0.02	
Environmental Management	Enhance an environmental management system incorporating measures for compliance with environmental regulations	Progress in the enhancement and operation of the environmental management system	—	Right column	<ul style="list-style-type: none"> Established a cross-sectional group-wide organization to study EU-ETS(EU Emissions Trading System), which is scheduled to start from January 2024. Implemented operational improvements to the environmental management system. Maintained ISO 14001 certification with zero nonconformities.

*1 compared to 2019 *2 Average rate of reduction from 2019 to 2030 *3 Average rate of reduction from 2019 to 2022 *4 For the Standard method and Reference method, please refer to the Environmental Vision 2.2(p47).



Human & Community

Contributing to the growth and development of people and communities



Initiative Focus	Targets	KPIs	Numerical Targets	FY2022 Results	Main Initiatives for FY2022	
Human Resources Development	Foster personnel who embody MOL CHARTS	Number of activities to instill MOL CHARTS	—	134	<ul style="list-style-type: none"> Regularly held "CHARTS TALK," an internal dialogue meeting to promote Mission/Vision/Values (MVV). Implemented training by career path/level, various cross-industry training, career counseling seminars, etc. Adopted a talent management system targeting executives and employees in managerial positions. Held programs to develop the next generation of executives and global leaders (One MOL Management School, MGMC). Provided various training opportunities that meet seafarer training requirements set by MOL. Continued to operate the Philippine maritime academy "MOL Magsaysay Maritime Academy". The inaugural class is scheduled to graduate in FY2023. Implemented renovation of the Head Office. Decided to introduce a business card management system to group companies. Conducted an engagement survey and held a briefing session on the survey results. Expanded eligibility for shorter working hours for childcare to those raising a child from the first grade of elementary school to the sixth grade or younger, and abolished restrictions on the length of time employees may take such leave. In addition, established a system to limit the number of overtime work to 20 hours. Jointly held an online event called "W Dialogue" with Mazda Motor Corporation to mark International Women's Day. After the event, Female employees in domestic MOL group companies held their own dialogue session. Held Global Human Resources Development Roundtable Meetings at the Head Office and major overseas offices. Considered expanding the rehiring system to make full use of retirees. Implemented individual follow-up for employees working overseas and facing health problems or concerns about their daily lives, based on monthly questionnaires. Held "Working Women's Health Seminar." Shareholders and investors <ul style="list-style-type: none"> Held a total of approximately 200 dialogues with domestic and foreign institutional investors, at which the president & CEO, outside directors, CFO, and General Manager of the Corporate Communications Division served as speakers, and incorporated feedback from these events into the management plan and shareholder return policies. Customers <ul style="list-style-type: none"> Enhanced ability to grasp a wide range of customer needs through the operation of MOL Service Website and the use of company-wide marketing materials, etc. Business partners <ul style="list-style-type: none"> Held a domestic shipowners' meeting and safety operation liaison meeting with chartered shipowners. Conducted surveys and inspection of ship recycling yards in India, Bangladesh, etc. Employees and seafarers <ul style="list-style-type: none"> Implemented engagement surveys, pulse surveys, and employee/executive dialogue sessions. Held a Safety Conference and Family Day in the Philippines. Administrative organs <ul style="list-style-type: none"> Signed memorandum of understanding (MoU) with Oarai-machi, Ibaraki Prefecture, to revitalize regional industries by utilizing overseas personnel. Signed collaboration deal with Nagasaki Prefecture for shipbuilding-related industries and renewable energy projects. Local Communities and NGOs <ul style="list-style-type: none"> Held an NGO roundtable on the main themes of initiatives in Mauritius, etc. 	
		Number of people attending activities to instill MOL CHARTS	—	1,121		
		Cost of Training per employee<Office workers>*1	—	JPY 155,000 per employee		
		Cost of Training per employee<Seafarers>*1	—	JPY 118,000 per employee		
		Average Training days per employee per year<Office workers>*1	—	3 days per employee		
		Average Training days per employee per year<Seafarers>*1	—	10 days per employee		
		Number of employees who completed One MOL Management School	—	9		
		Number of employees who completed the One MOL Global Management College(MGMC)	—	8		
		Secure and develop highly skilled crew members	Number of days of training during leave per seafarer	—		1.9 days per seafarer
		Number of e-learning courses per seafarer	—	19.9 per seafarer		
Work Style Reforms	Improve human resources competitiveness and realize innovation through a corporate culture that enables employees to work with vitality and enthusiasm	% reduced overtime work hours (compared to FY2021)*1	—	-21%		
		% of paid leave taken *1	—	60.7%		
Diversity & Inclusion	Realize a work environment in which a diverse personal can play active roles	% of female employees<Total>*1	—	20.4%		
		% of female directors *1	—	12.5%		
		% of female executive officers *1	—	8.6%		
		% of female employees in managerial positions<Total>*1	≥7.0%(FY2025)	5.9%		
		% of female employees in managerial positions<Office workers>*1	≥10.0%(FY2025)	9.2%		
		% of female employees in managerial positions<Office workers and Team Leader class>*1	≥20.0%(FY2025)	17.5%		
		% of non Japanese officers at overseas subsidiaries*1	—	26.0%		
		Number of employees used rehiring system as retirees *1	—	4		
% of mid career hires *1	—	58.9%				
Health & Productivity Management	Encourage independent minded health promotion by employees	% of employees receiving regular health checks *1	100%	99.9%		
		% of employees receiving stress checks *1	≥90.0%	97.9%		
		% of employees who smoke *1	≤10.0%(FY2025)	12.8%		
Stakeholder Engagement	Enhance dialogue with major stakeholders and reflect their concerns in business management	Results of stakeholder engagement	—	Right column		
		Results of stakeholder engagement	—	Right column		
Advancement of Local Communities	Increase activities that contribute to the development of the local communities where we conduct business activities	Results of corporate citizenship activities	—	Right column		
		Progress of benefiting local communities in Mauritius	—	Right column		

*1 non-consolidated basis



Innovation

Innovation for development in marine technology



Initiative Focus	Targets	KPIs	Numerical Targets	FY2022 Results	Main Initiatives for FY2022
Groupwide Adoption of Clean Energy	Introduce and increase the use of clean energy alternative fuels for vessels	Number of net zero emissions ocean-going vessels	approximately 110(FY2035)	0 (ordered) 16	<ul style="list-style-type: none"> Acquired AIP(approval in principle) for an ammonia-fueled Capesize bulk carrier. Participated in a hydrogen engine development project under the Green Innovation Fund Project. Finished retrofitting from hydrogen storage alloys to MCH system in Wind Hunter Project Phase 2. Scheduled to conduct sea trials. Scheduled to install methane slip*1 catalyst on LNG-fueled bulk carrier built at Namura Shipbuilding Co., Ltd.. Participated in "MAMII," an environmental initiative aimed at reducing methane emissions. Supported trial use of biodiesel fuel (BDF) on an MOL Group-operated vessel Acquired AIP(approval in principle) for a large-scale liquefied CO2 carrier through NEDO project research and development. Conducted risk assessment and acquired AIP(approval in principle) for a 50,000m3-class liquefied CO2 carrier with Mitsubishi Shipbuilding Co., Ltd.. Examined specifications, etc. for ordering an ammonia bunkering vessel. Participated in the Global Center for Maritime Decarbonization (GCMD)'s Ammonia Bunkering Safety Study with the aim of involvement in drafting of rules related to ammonia bunkering. Started ordering long-delivery equipment for the second vessels equipped with the Wind Challenger. Preparing for installation of Rotor Sail*2 Implemented the DarWIN project to promote improvement of fuel efficiency, in cooperation with Akishima Laboratories (Mitsui Zosen) Inc. and MOL Techno-Trade, Ltd. Implementing proactive improvement measures tailored to specific vessels by combining various measures such as Optimum Trim System, replacement with energy-saving propellers, adoption of other energy-saving technologies and equipment, and optimized maintenance.
		Number of LNG fueled vessels (ocean-going)	approximately 90(FY2030)	(completed ※cumulative) 0	
	Develop technologies that contribute to the spread of clean energy in society	Progress in developing clean energy carriers	—	Right column	
		Number of LNG bunkering vessels	—	(ordered) 1 (completed ※cumulative) 2	
Increasing the Energy Efficiency of Vessels	Use natural energy and establish and promote energy saving technologies that help improve propulsion performance	Number of vessels equipped with the Wind Challenger	—	(ordered) 0 (equipped ※cumulative) 1	
		Progress in introducing and promoting other exiting energy saving technologies	—	—	
		· Number of vessels equipped with upgraded PBCF*3	—	19	
		· Number of vessels equipped with optimal trim system*4 (cumulative)	—	0	
ICT Utilization for Safe, Efficient Operation	Upgrade, expand, and establish platforms using vessel related big data related (the FOCUS Project)	Progress of FOCUS Project	—	Right column	
		Number of vessels equipped with Fleet Transfer*5	—	210	
	Establish technologies for autonomous vessel navigation	Progress in developing technologies for autonomous vessel navigation	—	Right column	
Advancement of Technology Development and DX	Establish an organizational structure that sustain technology innovation	R&D expenditures	—	JPY 1,694 million	
		Amount of DX related investment	—	JPY 1,445 million	
	Establish an organizational structure that promotes the realization DX	Number of DX related personnel	—	0	

*1 A portion of the methane in LNG fuel is exhausted into the atmosphere as unburned methane. *2 Rotor Sail is an auxiliary device using wind power.

*3 Propeller Boss Cap Fins. It improves propulsion efficiency by breaking up the hub vortex generated behind the rotating propeller of the vessel.

*4 The optimum trim system quantitatively assesses MOL captains' extensive practical knowledge of vessel running attitudes through tank testing and tests aboard actual ships. This data is translated into graphs that make it easy for seafarers to use the system.

*5 Fleet Transfer is a system that collects vessels' IoT big data in real time and transmits it to shoreside platforms. *6 A predictive diagnostic system to prevent problems and breakdowns in the main engine, based on the information from various sensors monitoring the onboard main engine, etc.

*7 "A person promoting changes in business models, business processes, corporate culture, etc.," "A person who understands business and process issues, is able to envision the ideal state and lead the change"



Governance

Governance and compliance to support businesses



Initiative Focus	Targets	KPIs	Numerical Targets	FY2022 Results	Main Initiatives for FY2022
Management Transparency	Strengthen corporate governance capabilities with a view to enhancing corporate value	Results of effectiveness external evaluations to measure effectiveness of the Board of Directors	—	Right column	<ul style="list-style-type: none"> Refer to the Corporate Governance Report*1 for the results of the evaluation of the effectiveness of the Board of Directors. Held 7 meetings of the Corporate Governance Council to discuss the ideal roles and functions of the Board of Directors and the design of the organization. Established a policy to enhance the skills of directors/auditors and restructure the skills matrix. Established "MOL Group Three Basic Principles of Corporate Governance" and "MOL Group Corporate Governance Policy."
		Enhance the content of corporate governance related disclosure	Progress of deliberation of the Corporate Governance Council	—	
Information Security	Reduce information security risks	Number of serious ICT incidents	—	0	<ul style="list-style-type: none"> Held internal briefings on information security-related regulations. Conducted tabletop drills simulating response to serious ICT incidents. Conducted ICT survey and follow-up with 169 domestic and overseas group companies. Implemented e-learning on information security and conducted targeted fake email attack training. Announced Human Rights Policy, Basic Procurement Policy, and Supplier Procurement Guidelines. Explained the main purpose of value chain management to chartered shipowners. Examined contents of the interviews and dialogues with them. Conducted written surveys and on-site inspections of ship recycling yards. Conducted desk analysis of human rights risks in MOL business activities. Conducted harassment prevention training for managerial positions and general employees, as well as human rights training according to career path/level and for employees in charge of job interviews.
		Participation rate of information security-related e-learning	—	93.9%	
Responsible Procurement / Respect for Human Rights	Identify and reduce risks related to the environment, safety, and human rights throughout supply chains	Progress of initiatives to establish monitoring scheme	—	Right column	
		Number of participants in human rights training	—	299	
		Number of participants in harassment prevention training	—	264	
Fair Trade / Bribery Prevention	Zero compliance violations	Number of compliance *2 violations	0	0	<ul style="list-style-type: none"> Established "MOL Group Anti-Corruption Policy." Conducted training and e-learning on prevention of corruption, antitrust issues, internal controls, etc. Raised awareness of the whistleblower system during Compliance Enhancement Month. In addition, sent a message from the president & CEO to MOL Group employees to keep an incident involving violation of anti-competition laws from fading out of memory. Conducted operational audits of domestic and overseas group companies and audits on sustainability-related themes.
		Number of consultations received by compliance advisory service desk	—	79	
		Participation rate of antitrust-related e-learning	—	95.1%	
		Participation rate of bribery-related e-learning	—	94.8%	

*1 Refer to the Corporate Governance Report (p6) for the results of the evaluation of the effectiveness of the Board of Directors.

*2 Serious violations related to fair trade and bribery.