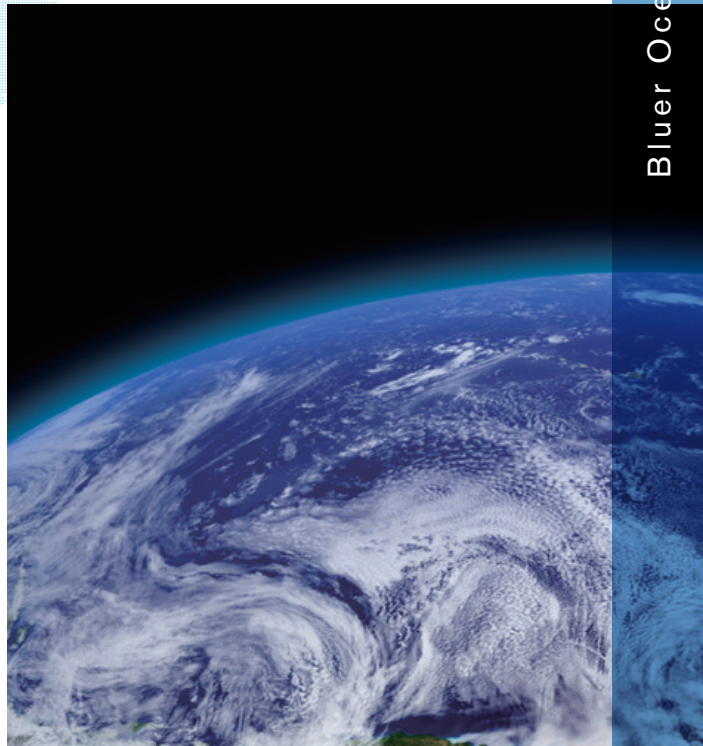
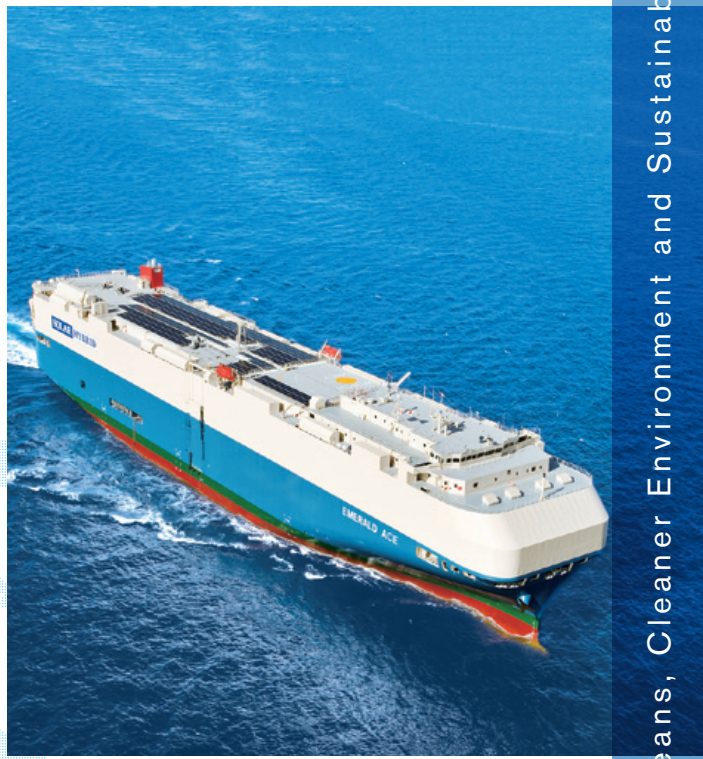


MOL Group

Environmental and Social Report 2013

The 14th edition April 2012–March 2013



Bluer Oceans, Cleaner Environment and Sustainable Future

MOL Group Corporate Principles

1. As a multi-modal transport group, we will actively seize opportunities that contribute to global economic growth and development by meeting and responding to our customers' needs and to this new era.
2. We will strive to maximize corporate value by always being creative, continually pursuing higher operating efficiency, and promoting an open and visible management style that is guided by the highest ethical and social standards.
3. We will promote and protect our environment by maintaining strict, safe operation and navigation standards.

Long-term Vision

To make the MOL Group an excellent and resilient organization that leads the world shipping industry

The MOL Group sees CSR (Corporate Social Responsibility) as being essential for realizing its corporate principles, in other words, for achieving sustainable corporate growth. Accordingly, the Group has always worked hard to refine its corporate governance system, strengthen its compliance framework, ensure safe operation, and reduce its environmental impact.

In 2004, MOL reorganized the Environment Committee into the CSR and Environment Committee to further strengthen CSR activities. At the same time, MOL established the CSR and Environment Office to promote CSR and environmental measures and social contribution activities. In 2005, MOL became the first Japanese shipping company to participate in the United Nations Global Compact, signaling its commitment to 10 principles in 4 areas: human rights, labor, the environment, and anti-corruption. MOL has supported and practiced these 10 principles ever since.

Moving forward, the MOL Group will continue to promote an open, transparent management style that takes into consideration laws and regulations, social norms, corporate ethics, safety, the environment, human rights, and other factors, as it works to maintain the trust and support of all stakeholders.

As a multi-modal transport group centered on one of the world's largest marine transport businesses, the MOL Group aims to become an excellent and resilient organization that leads the world shipping industry, contributing to society and supporting the sustainable development of the world economy. We will achieve this by safely and reliably transporting customers' cargoes with a low environmental impact.

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Our mission is to make people's lives more fulfilling and happier through ocean transport.
The MOL Group will work in step with society to overcome obstacles to this.

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MOL Group Environmental and Social Report 2013 (Editorial Policy)

The MOL Group has reported on its Group-wide environmental protection activities every year since 2000, when we published the first Environmental Report. In 2003, we renamed the publication the Environmental and Social Report to encompass the Group's overall social contribution as well as environmental protection initiatives.

We publish the Environmental and Social Report every year in order to elicit understanding of our approach to CSR and the environment, and our latest initiatives. This is consistent with our aim of becoming an excellent and resilient organization that grows sustainably and harmoniously with society, while earning the trust of all our stakeholders. In our 2013 report, we focus in particular on our approach to becoming the world leader in safe operation, a key mission of ours, and to reducing our environmental impact. The report was designed to clearly convey our approach and how we are working to achieve those goals.

■ Period

FY2012 (April 1, 2012 to March 31, 2013; some activities outside this period are reported with notes.)

■ Scope

In principle, all MOL Group companies that do business in Japan and overseas. (Activities and data that are limited in scope are reported with notes.)

* The MOL Group

Mitsui O.S.K. Lines, Ltd., 349 consolidated subsidiaries, 65 equity-method affiliates and other affiliated companies.

* "The company" in this report refers to Mitsui O.S.K. Lines, Ltd. (MOL).

■ Reference Guidelines

Environmental Report Guidelines 2012, Japanese Ministry of the Environment

Environmental Accounting Guidelines 2005, Japanese Ministry of the Environment

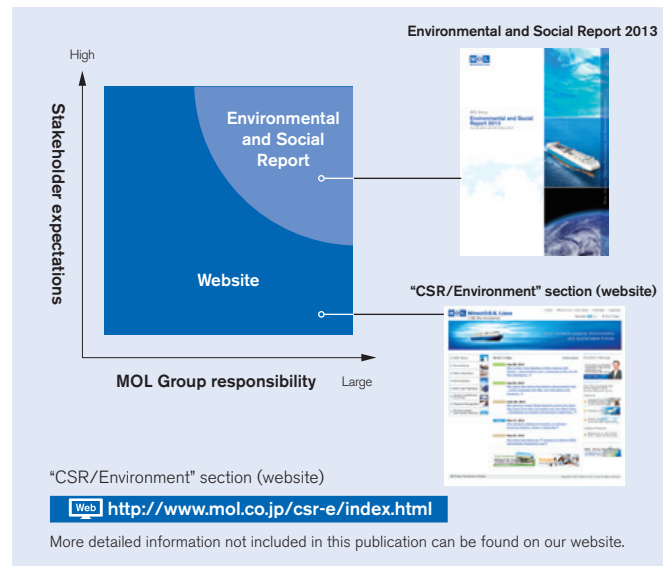
GRI (Global Reporting Initiative) (GRI Guidelines Version 3.1)

Please visit our website under the "CSR/Environment" section to view comparison charts with the GRI Guidelines and UN Global Compact.

■ Issue Date

Issued October 2013 (Previous issue: September 2012; next issue: July 2014 (scheduled))

The MOL Group discloses information concerning CSR and the environment using the following media:



■ Other communication tools

Annual Report*

A detailed explanation of investor relations information such as management strategy, business environment, operating results and financial data. Primarily for shareholders and other investors.

MOL Investor Guidebook*

Easy-to-understand analysis using tables and charts of the MOL Group's management plans, key financial indicators, business activities, market position and operating environment in each business. Primarily for shareholders and other investors.

Corporate Brochure

Easy-to-understand discussion of the company's business activities. Mainly for customers, business partners, local communities, and job-hunting students and professionals, as well as the general public.

Website (<http://www.mol.co.jp/en/index.html>)

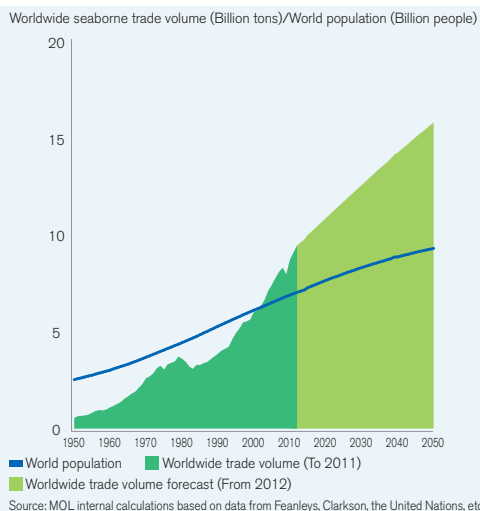
Provides an overview of businesses and the latest information via press releases for all stakeholders. The website also has links to the websites of MOL Group companies.

* The latest versions of all reports can be found on our website.

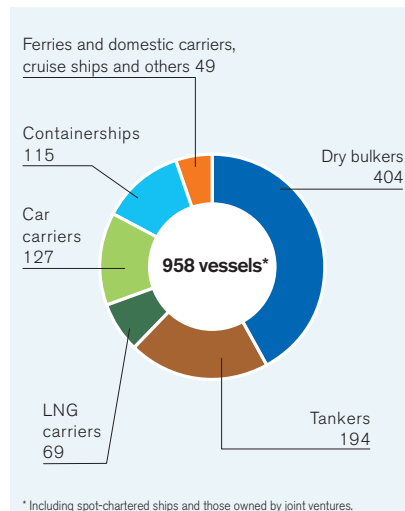
<http://www.mol.co.jp/ir-e/index.html>

Key Indicators

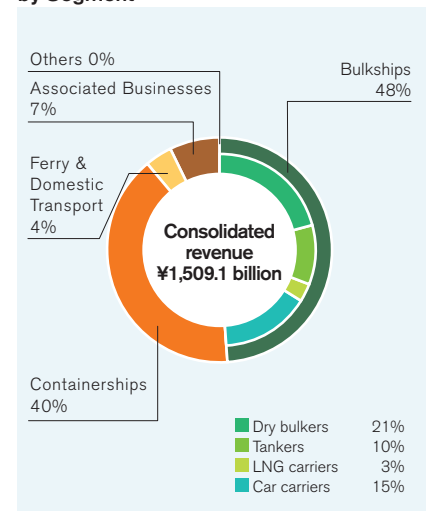
Worldwide Seaborne Trade Volume



Fleet Composition by Number of Vessels (As of March 31, 2013)



Fiscal 2012 Consolidated Revenues by Segment



MOL Group Businesses

The MOL Group, with a core business of shipping, engages in the transport of a broad range of cargoes that contribute to industrial growth and better lives for people around the world, including natural resources, energy, raw materials, and manufactured products. We run and develop our businesses, taking sufficiently into consideration environmental and social issues to meet today's demands as a player in an industry that is indispensable to the sustainable development of the world economy.

Bulkships



Dry Bulk Carriers

Dry bulkers transport massive quantities of raw materials such as iron ore, coal, grain, wood chips (papermaking raw materials), and so on. The MOL Group, as the world's largest operator, links countries around the world through the stable transport of these vital commodities.



Tankers

The MOL Group has one of the world's largest tanker fleets. Our diverse tanker fleet includes very large crude oil carriers (VLCC) for transporting crude oil, product tankers for carrying refined petrochemical products, chemical tankers for liquefied chemical products, and LPG tankers for transporting liquefied petroleum gas. In this way, we support the world's lifelines as an expert in energy transport.



LNG Carriers

Liquefied natural gas (LNG) has drawn considerable attention as a clean energy resource. As one of the leading LNG ocean transport companies, MOL will continue meeting growing global LNG demand with one of the world's largest fleets by rigorously practicing safe operation based on its advanced transportation technologies and expertise.



Car Carriers

The MOL Group was the first shipping company in Japan to launch a pure car carrier (PCC). Since then, as the pioneer of car transportation, the MOL Group has established a solid position among the world's car carrier fleets. We work to provide safe and reliable transport services and actively introduce environmental technologies, aiming to meet the needs of automakers, who are increasingly producing and exporting vehicles around the world.

Containerships



MOL operates the key east-west routes linking Asia to North America and Asia to Europe, as well as north-south and Intra-Asia routes, providing a network that covers the entire globe. The containership business provides transportation services for electrical products, auto parts, household furniture, food products and other products in containers. By integrating our global network and state-of-the-art IT system, we provide detailed logistics services matching customers' needs. Moreover, we have established service indicator targets for on-time arrival performance, environmental impact reduction and safe operation, and periodically disclose the results, as we work to raise customer satisfaction.

Ferry & Domestic Transport Business



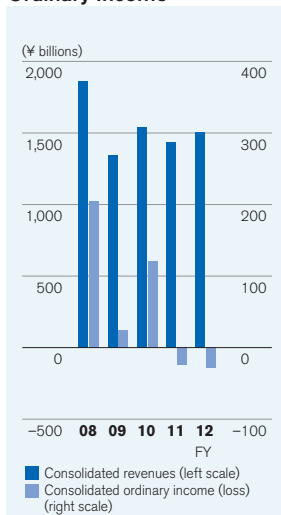
With one of Japan's largest ferry and domestic transport service networks, the MOL Group supports the lives of people and industry in Japan. In addition, by actively responding to needs driven by a modal shift toward the use of means of transport with a low environmental impact, these transportation services are contributing to the reduction of CO₂ emissions in Japan's distribution sector.

Associated Businesses



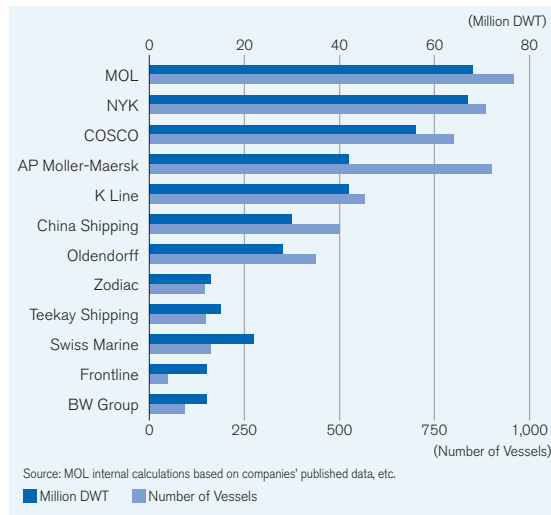
MOL conducts various peripheral businesses that support comprehensive capabilities centered on the shipping business. These include the cruise business, tugboats, land transportation, warehousing, and marine consulting. MOL also conducts travel, marine/civil engineering, building leasing and real estate management, finance, trading, insurance, IT, temporary staffing and other businesses, as well as supporting a national program to build an emergency oil reserve.

Consolidated Revenues and Ordinary Income

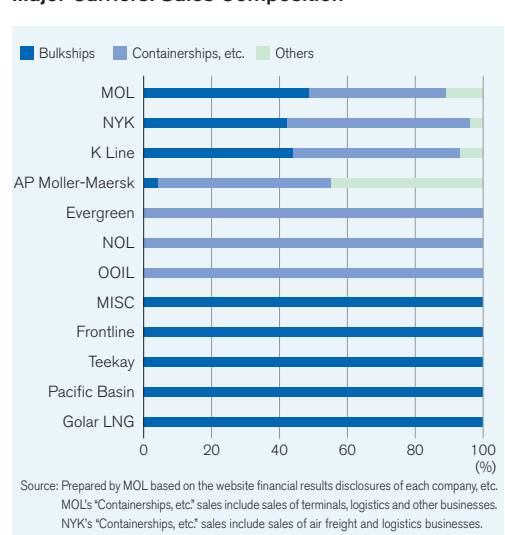


World Major Carriers' Fleets

(As of March 31, 2013)



Major Carriers: Sales Composition



Our mission is to make people's lives more fulfilling and happier through ocean transport.

The MOL Group will work in step with society to overcome obstacles to this.

International ocean shipping, MOL's core business, creates added value by transporting cargoes across oceans. We believe that increasing the value of cargoes through ocean transport is MOL's corporate social responsibility (CSR), and that this contributes to the global economy and society. Our mission is to solve social issues such as tight demand for water, food and resources caused by population growth, and wealth disparities through ocean transport, and thereby bring greater prosperity and happiness to communities both sending and receiving cargoes.

MOL marked its 129th anniversary in 2013. Our international ocean shipping operations have encountered and overcome various historic events and challenges during this time. Today, as in the past, changes in the world economy cause major upheavals that affect our business environment. But our activities in terms of Governance, Society and the Environment have supported the sustainability of MOL.

Corporate Governance

Corporate governance is a social responsibility shared by all companies engaged in economic activity. In September 2012, MOL was investigated by the Fair Trade Commission on suspicion of infringement of the Antimonopoly Act related to the export of complete cars and construction machinery. We acknowledge the seriousness of this incident and are cooperating fully with the commission's investigation. We are making all possible efforts to further enhance our legal compliance and this prompted us to recently revise our antimonopoly law guidelines. Furthermore, seminars have been held on compliance with antitrust and competition laws at the Head Office and Group companies in Japan and overseas, and we have also tested the degree of understanding through E-learning. In these and other ways, we have once again deeply etched compliance awareness into the consciousness of all Group executives and employees. In addition, we have an external compliance advisory service desk, providing a system for not only MOL Group executives and employees but also business partners and other external parties to report to and consult with a lawyer directly.

In 2000, MOL executed far-reaching management reforms. In addition to inviting outside directors, MOL took other steps to create a highly transparent management system, grounded on separation of management and business execution, accountability, risk management and compliance. A feature of MOL's Board of Directors is deliberation on corporate strategy and vision. At each meeting, the board focuses on a particular topic concerning management, and these discussions provide an opportunity for lively debates that include the outside directors and corporate auditors. These discussions are reflected in MOL's management policies, risk management approach, and corporate governance initiatives.

We will continue to reinforce measures in respect of corporate governance so that all Group executives and employees working around the world carry out their duties with a strong awareness of legal compliance and corporate ethics.

Safe Operation (Society and Environment)

MOL aims to become the world leader in safe operation. To this end, we have implemented various "hard" and "soft" measures to achieve the "Four Zeroes"—zero serious marine incidents, zero oil pollution, zero fatal accidents, and zero cargo damage. While chalking up achievements one by one, we have constantly taken new steps to ensure safe operation. In this context, it is extremely unfortunate that I have to report a serious marine incident. On June 17, 2013, the MOL-operated containership *MOL Comfort* broke into two while under way on the Indian Ocean. The aft part of the vessel sank in the open ocean on June 27, and the fore part sank on July 11. Although there was fortunately no loss of life, we apologize deeply for the considerable concern this incident caused customers and other stakeholders.

This incident is not only extremely regrettable, but also came as a shock to us, as a company that has been engaged in international ocean shipping for a long time. We have employed London-based Lloyd's Register as a technical consultant to determine the cause of this marine incident and prevent a reoccurrence, with the cooperation of the dockyards of Mitsubishi Heavy Industries, Ltd. and Nippon Kaiji Kyokai (ClassNK). In the meantime, MOL decided to take extra preventive measures for six sister vessels operated by MOL because it may take some time to identify the cause. These vessels sufficiently fill the safety standard required by ClassNK in compliance with the International Association of Classification Societies (IACS). However, we will conduct further upgrade work to strengthen the hull structure to around twice the safety standard mentioned above, as we are determined to do our best to ensure safe operation.

MOL recognizes that one of its important corporate social responsibilities is to prevent accidents. Another is to disclose information in a timely manner to all stakeholders and to clarify the cause and take preventive steps if an accident does occur.

Environmental Protection (Environment)

Protecting the global environment is a global challenge that must be overcome to create sustainable societies. One of MOL's answers to solving this social issue is the *Senpaku ISHIN* project, the company's concept for next-generation vessels. The *Emerald Ace* hybrid ecoship, which was delivered in 2012, stands as one of the symbols of applying feasible technologies to reduce the environmental burden. Equipped with a hybrid power supply system that combines solar panels and lithium-ion batteries, this vessel is the world's first to achieve zero emissions while at berth. Furthermore, at the beginning of 2014, MOL is scheduled to take delivery of a large vessel that will employ a highly efficient system for recovering waste heat energy from the main engines, one of the cornerstone technologies of the *Senpaku ISHIN* project.

In the world of international shipping, the 20th century was referred to as the SOLAS era (Safety of Life at Sea), whereas the 21st century is regarded as the MARPOL era (environmental regulations concerning marine pollution). Over the next decade, we will surely see the progressive introduction of international environmental regulations designed to combat global warming, preserve biodiversity, and protect seas and oceans and the atmosphere. MOL will of course steadily respond to these environmental regulations, and at the same time leverage its proprietary environmental technologies and know-how to enhance its competitiveness and grow, as we see this regulatory trend also as a business opportunity.

MOL is actively engaged in developing LNG-fueled vessels that can slash emissions of CO₂ and atmospheric pollutants, causes of global warming. If the much-talked-about shale gas revolution results in the stable supply of LNG, I believe we may very well see the wider adoption of LNG-fueled vessels.

In light of the above, MOL has positioned protection of the environment and responding to environmental regulations as a long-term business strategy.

Social Contribution Activities

We undertake social contribution activities that only a marine transport company with a global network can. In 2013, MOL joined the Somalia Support Project, run by the United Nations Development Programme (UNDP), to help reduce pirate activities in the seas off Somalia through the development of a social infrastructure in the region. By offering the Somali youth viable employment opportunities, the project will provide an alternative to life as a pirate. Furthermore, MOL has constructed a daycare center in Navotas in the Philippines, which was badly affected by severe flooding, providing a facility for the



education and health examination of pre-school children. In these and other ways, we have made social contributions that help the lives of people in regional communities. More than half of MOL's seafarers come from the Philippines, so we believe that contributing to local communities in that country helps us to secure high-quality seafarers. These activities contribute to MOL's safe operation.

MOL has also provided support for recovery and rebuilding from the Great East Japan Earthquake. As one example, Mitsui O.S.K. Passenger Line, Ltd. offered tours to support recovery in Ishinomaki and Onagawa, while MOL Ferry Co., Ltd. gave children in disaster-hit areas the opportunity to tour ferries. Moreover, MOL supports the social contribution activities of NGOs and NPOs active in regions where MOL-operated vessels call into port by providing free transportation services. Examples include cooperating with the ocean transport of mobile library vehicles to South Africa, and transporting ambulances to Cambodia and relief supplies to areas affected by natural disasters.

Together with Society

British author Samuel Smiles (1812–1904) penned the famous phrase "Heaven helps those who help themselves," in his book *Self Help*. These words have been the driving force behind the modernization of Japan from since around the time MOL was founded. MOL believes that no matter how difficult the situation, sincere and tireless efforts to tackle issues one by one will overcome adversity and earn the trust of stakeholders.

The MOL Group intends to utilize the earnings, human resources and know-how it obtains from contributing to the development of society to maintain and expand ocean transport services, a major artery of global economic activity, to grow together with society.

Koichi Muto
President

Forging Ahead to Become the World Leader in Safe Operation

Safe operation is the MOL Group's most important issue to offer safe and reliable transportation services to customers and to protect the marine environment in which we do business. We are currently strengthening various initiatives with the aim of becoming the world leader in safe operation. In this feature section, we explain about the seafarers at the frontline of safety and our onshore systems for supporting vessels as well as the cooperation and understanding we gain from customers, ship management companies and shipowners. We also explain how we are fostering a safety culture both on shore and on board.



Seafarers Support Safe Operation

The stable retention and development of highly skilled seafarers that meet MOL's skill standards is important for realizing safe operation. To this end, MOL creates attractive working environments on board and on shore and offers remuneration and benefits that allow it to widely recruit excellent personnel. At the same time, we run high-level development and training programs to produce outstanding seafarers who are highly motivated and possess the excellent skills and knowledge we require. Seafarers must have the ability to sense danger and surmount it. Judgment, mental and physical toughness and teamwork are the fundamentals of seamanship. We are therefore also revisiting these fundamentals as we step up measures to cultivate seamanship at MOL.

Recruiting and Developing Talented Human Resources from Around the World

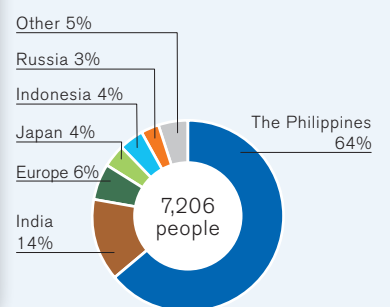
We have established bases for recruiting and developing seafarers around the world. We have also set up a scholarship system and other programs to support aspiring seafarers.

- We introduced a cadet system and provide the necessary onboard training for cadets to earn qualifications. Through this system, we also employ skilled cadets.
- In the Philippines, which supplies more than half of MOL's seafarers, we have introduced an officer candidate program with the approval of the Philippines Commission on Higher Education. Under this program, we train students selected from seven partner maritime colleges.
- For Japanese seafarers, in addition to employing graduates of maritime universities, fisheries universities and maritime polytechnic colleges, we offer a program whereby graduates from ordinary universities can acquire specialist maritime qualifications after joining the company.



Cadet program graduation ceremony (the Philippines)

Composition of Seafarers by Nationality
(As of January 2013, MOL-operated/managed/financed vessels)



Recruiting and Training Seafarers

Practical Training on Vessels (New Cadet Training Program)

In March 2013, we launched "Cadet Actual Deployment for Education with Tutorial ("CADET" Training)," a new training program that takes over the spirit and know-how developed on the *Spirit of MOL*, the company's training ship for educating new cadets on the basics of safe operation. Under this new program, dedicated instructors provide guidance to cadets aboard vessels that are actually in service. As the number of cadets is small, they receive detailed guidance from the instructors. The aim of the program is to pass on the practical navigation and marine engineering skills required by MOL as well as the spirit of dedication toward safety. By interacting with the crew, cadets can form an image of themselves performing the job in the future, and at the same time crew members can mentor cadets with whom they will share responsibility for safe operation in the future.



VOICES from the Forefront

Yury Golovatyuk

Captain

Efficient navigation and operation are the result of excellent team work. The MOL Group's vision to "become the world leader in safe operation" requires high safety standards among all seafarers onboard and support from shore.



Developing Highly Skilled Seafarers Worldwide (MOL Training Centers)

MOL has training centers in eight locations in six countries. These centers provide a variety of training, ranging from classroom lectures on theory to practice using real engines and various simulators.



Training using a bridge simulator (Bridge Resource Management Training)

Passing down Maritime Skills through "MOL Masters"

OJT (On the Job Training) Instructor System

Under MOL's unique system, experienced captains and chief engineers act as instructors aboard ships in service to identify unsafe practices and latent risks, and provide onsite advice and technical guidance. The findings are then shared with all the vessels under MOL's operation to heighten crew members' sensitivity to potential risks and prevent human error. (As of July 2013, a total of 354 vessels had been visited.)



Institution of a Unique Seafarer Education and Training Program

MOL Rank Skill Training and Evaluation Program

MOL has established the "MOL Rank Skill Training and Evaluation Program (MOL Rank STEP)," a training and education program that sets skill and knowledge requirements for every seafarer at the front-line according to his/her position. Every seafarer of the MOL Group must work through this program as a requirement for promotion.

In 2012, the efficacy of this proprietary program was recognized, with both the tanker and LNG carrier divisions receiving certification from Norway's Det Norske Veritas AS (DNV) as conforming to the standards of its Competence Management System (CMS).



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Working as One for Safe Operation

Besides efforts aboard vessels, we are working hard to ensure safe operation on land with the cooperation of the sales and marketing divisions that communicate customers' needs to vessels, and other organizational bodies that make up the Safety Operations Headquarters: in-house ship management companies, supervising organizations that support marine technical matters for each kind of ship, and the Marine Safety Division, which coordinates safe operation-related work. We also work so that customers, shipowners and ship management companies understand our safety policy as we strive to maintain safe operations.

Customers

Safe Operation Meetings

We confirm customers' needs and explain our safe operation at these meetings.

MOL

Safety Operations Headquarters

Sales and Marketing Divisions

Sales and Marketing Divisions

These divisions connect customers and ships. They create stowage plans for cargoes to match customers' needs and plot safe, efficient routes, which are communicated to vessels.



Personnel in charge of operations onshore check ocean weather to plan a ship's navigation route.

Supervising Office

Supervising offices support sales and marketing divisions in terms of marine skills so that they can provide high-quality services that match customer needs. In addition, they manage ship management companies with high safety standards. MOL has established a supervising organization for each type of vessel to ensure smoother coordination with sales and marketing divisions.



Senior supervisors provide guidance to seafarers on ships

In-house Ship Management Companies

These companies maintain and increase safety and quality by adhering to MOL standards, which prescribe standards for safety and quality that are above those required by international rules.

Marine Safety Division

This division coordinates all work related to safe operation.

Safety Operation Supporting Center (SOSC)

Staffed around the clock, 365 days a year by marine technical specialists, including an experienced captain, SOSC provides prompt support for a ship's safe operation from on land.



Safe Operation Meetings

We elicit cooperation by explaining MOL's safe operation.

Chartered vessel owners Third-party ship management companies

- Feed back customer needs
- Provide marine technical support to vessels
- Confirm safety through regular vessel inspections and feed back the results
- Hold seminars and forums



VOICES from the Forefront

Masaru Inoue

General Manager, Safety Operation Supporting Center

We continually confirm and monitor the movement of all operated vessels. By providing safety information, such as information on typhoons and bad weather, navigation warnings, piracy, and terrorism, we prevent accidents caused by weather and ocean conditions. Committed to ensuring that captains on board never feel alone, we respond to requests from vessels as a help desk for captains, providing appropriate information and advice, and coordinating matters on land.



VOICES from the Forefront

Hiroshi Namikoshi

Deputy General Manager/
Chief Engineer (Senior Technical Supervisor)
Technical Team, Business Support Unit,
Tanker Safety Management Office

We attend tankers' discharging operations with safety supervisors supporting frontline activities in various respects. I believe that it is important that there are no hindrances to loading/discharging. We therefore ordinarily confirm whether vessels are in the optimum condition to meet customer needs and carry out repairs and inspections as necessary. When problems do occur, we resolve situations by coordinating between a vessel and shore with the help of the vessel's crew. We always endeavor to ensure smooth loading/discharging operations, drawing on the many years of experience and expertise of marine technical superintendents.



Fostering a Culture of Safety

A safety culture is a corporate culture that puts safety first as a shared value. MOL's goal of becoming the world leader in safe operation will be realized with the collective efforts of all the MOL Group's executives and employees, including seafarers, who are at the frontlines of our operations. We are therefore taking various steps to ensure that organizations and individuals realize that to secure people's lives, cargo, the environment and the vessel always come first and act accordingly.



Safety Conferences

MOL has held Safety Conferences for MOL seafarers at its four main supply locations (the Philippines, India, Croatia and Japan) since 2007 for seafarers to hear management's explanations about strengthening safe operation and to discuss this subject. These conferences introduce the latest information concerning incident prevention and discuss safety initiatives to foster and strengthen a safety culture.



Seafarers take part in a group discussion (India)

Hazard Experience Training Sessions

These sessions simulate dangerous events inherent in work aboard vessels, and are designed to eradicate industrial accidents, a key theme in the context of safe operation. Effective in enhancing people's ability to spot danger, the sessions were introduced in fiscal 2012 for executives and onshore employees and new hires, as well as seafarers.



Hazard experience training session involving something caught in a rotor (the Philippines)

Beach Cleanup at Kashima Nada

MOL Group executives and employees conduct cleanups on the Kashima Nada coast, the scene of a grounding of the MOL-operated Giant Step in 2006. While protecting the environment and contributing to the community, this cleanup prevents the memories and lessons of a past marine incident from fading with time and fosters a safety culture.



Safety Campaigns

A company-wide initiative, Safety Campaigns are held twice a year for about six weeks for all MOL-operated vessels. They entail executives and onshore employees visiting vessels and holding face-to-face information exchanges and discussions concerning incident prevention with frontline seafarers. Views are exchanged on different themes decided each time based on recent incidents and problems. This is intended to raise safety awareness on vessels and on land, and at the same time, the opinions and proposals for improvements are shared internally and among MOL-operated vessels and reflected in measures for reinforcing safe operation, thereby raising the level of safe operation measures.

President Muto and seafarers have expressed a new resolve to enhance safe operation by exchanging opinions.



Operational Safety Workshops

These workshops are held every quarter. They introduce MOL's organizations for supporting safe operation and their roles, as well as recent examples of incidents, the causes and countermeasures. We endeavor to foster a safety culture, and the workshops are therefore designed to make our safe operation processes more visible, and to further raise the safety awareness of each employee.

Fostering a Safety Culture with E-learning

An E-learning program is run once a year using the company's intranet with the goal of promoting greater awareness among all employees of safe operation. This program encourages employees to think about safe operation, by educating them on MOL's safe operation targets and appropriate safe practices. (90% of employees took the program in fiscal 2012.)

Company Intranet Utilization

We post safe operation-related information on our intranet. The website in particular carries indicators showing the safe operation achievement status and is designed to remind executives and employees about safe operation every day.

Intranet information

- Continuous number of days of maintaining "Four Zeros" status
- Number of operational stoppage accidents
- Operational stoppage accident rate, etc.

VOICES Hazard Experience Training Sessions

Ken Ueno

Assistant Manager, Seafarers Group, Marine Safety Division

One of the drills simulates a fall by suspending participants in the air with their safety belts. Many participants showed anguish on their faces at the pain in their internal organs and pelvic bones the instant that they were suspended with safety belts that were not properly fastened. This experience taught seafarers that they would be safe even if they unexpectedly slipped providing they correctly fastened their equipment.



VOICES Operational Safety Workshops

Kazura Koda

Product Tanker Group, Tanker Division

I felt it was a valuable opportunity to think about safe operation from a company-wide perspective, including past problems and safety measures on other types of vessel that I don't normally have any involvement with. The workshops also ask participants to think about how they will use the knowledge gained to operate safely. In this sense, it was a good opportunity to connect our awareness that safe operation is the foundation of MOL with our actual behavior.



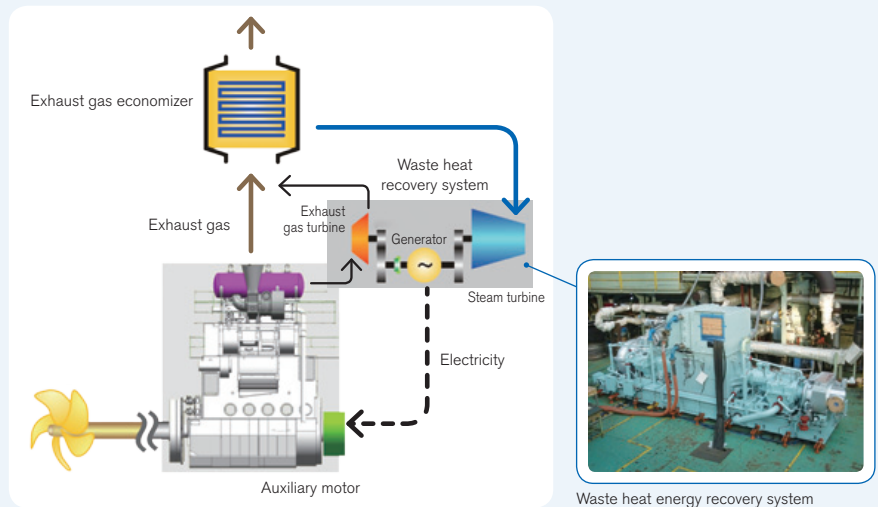
Aiming to Reduce Environmental Impact— Progress with *Senpaku ISHIN*

The *ISHIN* series MOL concept ships incorporate feasible technologies to reduce environmental burden.

Today, four years after announcing this initiative, MOL has employed *ISHIN* component technologies on many vessels. In 2012, MOL took delivery of the *Emerald Ace* hybrid car carrier, an innovative vessel that is equipped with a hybrid power supply system that combines a solar power generation system with lithium-ion batteries. Plans now call for the delivery of a large-scale iron ore carrier equipped with a highly efficient system for recovering waste heat energy from the main engine, one of the cornerstone technologies for the *ISHIN-III* concept vessel. In this section, we review the current progress of *Senpaku ISHIN*.

ISHIN-III Waste Heat Energy Recovery to Assist Propulsion

The very large iron ore carrier slated for delivery in 2014 will be equipped with a high-efficiency system for using waste heat energy from the main engine, one of the main component technologies in the *ISHIN-III*. This high-efficiency waste heat energy recovery system features a generator combining exhaust gas and steam turbines that can generate electricity by effectively recovering exhaust gas energy through the optimal control of both. This electricity will be supplied to auxiliary motors to provide additional propulsion force. The adoption of this technology is expected to reduce fuel consumption by approximately 6% compared with main engine of similar types of vessel, thereby contributing to lower CO₂ emissions.



ISHIN-I The World's First Hybrid Car Carrier, *Emerald Ace*



The *Emerald Ace*, the world's first hybrid car carrier, was delivered in 2012. This vessel achieves zero emissions while at berth by using electricity generated by solar power while at sea with a hybrid power supply system that combines a solar power generation system with lithium-ion batteries. After operating this vessel for one year, MOL has confirmed that it has achieved zero emissions while at berth and that the load on diesel power generators has been reduced by approximately 4.2%. With further refinement and cost reduction, the core technologies in this vessel harbor the potential to be widely used.

ISHIN-II Striving to Develop LNG-fueled Vessels in the Near Future



The development of a specialized engine is one of the key themes for creating LNG-fueled vessels. In April 2013, MOL and Mitsui Engineering & Shipbuilding Co., Ltd. (MES) demonstrated the operation of a gas-injection slow-speed diesel engine*, as part of efforts to make such a vessel a reality in the near future.

* This engine can burn heavy fuel oil, which has been used in ocean-going vessels, and also environmentally-friendly natural gas.

Compared to vessels that use heavy fuel oil, vessels running on LNG will emit substantially less CO₂ (carbon dioxide), NO_x (nitrogen oxide), SO_x (sulfur oxide), and PM (particulate matter). Since beginning to consider environmentally-friendly ferries, MOL has worked on researching LNG-fueled vessels. Amid moves to progressively strengthen international regulations governing vessel exhaust gases, MOL is working in earnest on R&D for vessel types other than ferries.

Details of the component technologies can be found on the *Senpaku ISHIN* section of MOL's website.

<http://www.mol.co.jp/ishin/en/index.html>



New Core Component Technology Development

The Power Assist Sail, New Sailing Rig, R&D

Ships have navigated the seas for centuries by catching the wind in sails. With the development of engines, most ships today no longer use sails. Amid demands to cut CO₂ emissions, however, companies must revisit wind power as a means of propulsion. Together with Nippon Kaiji Kyokai (ClassNK), MES, and AKISHIMA LABORATORIES (MITSUI ZOSEN) Inc., MOL has been developing Power Assist Sail, a new prototype sailing rig that can use the latest modern technologies to fully and effectively capitalize on the power of the wind, which has been used since ancient times. Since June 2013, MOL, in partnership with ClassNK, MES, and AKISHIMA LABORATORIES (MITSUI ZOSEN), has been conducting onshore demonstration tests at the Oita Works of MES.

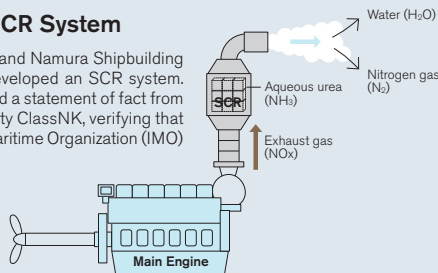


NOx Emission Countermeasures

NOx emissions from ships are being regulated in phases under an IMO treaty. The third tier, which will make regulations even tighter, is scheduled to come into effect in 2016 (there are discussions to extend the starting year to 2021). MOL is acting ahead of these regulations. In 2014, it plans to install and test a NOx selective catalytic reduction (SCR) system in three power generators on MOL-operated iron ore carriers.

NOx-reducing SCR System

MOL, Yanmar Co., Ltd., and Namura Shipbuilding Co., Ltd. have jointly developed an SCR system. This system has received a statement of fact from ship classification society ClassNK, verifying that it meets International Maritime Organization (IMO) regulations.



VOICES from the Forefront

Takashi Shioiri

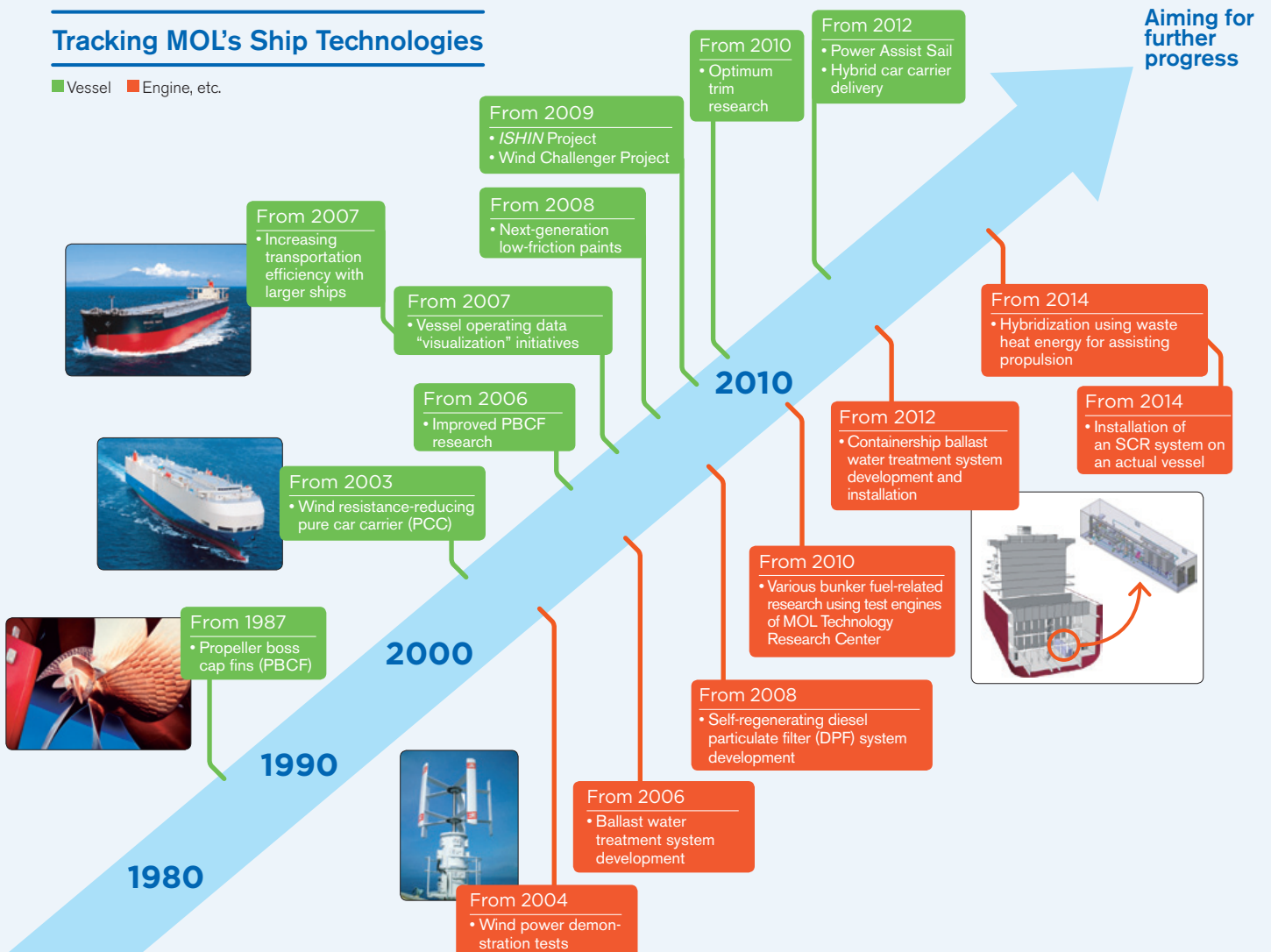
Assistant Manager
Ship Planning and Development Group,
Technical Division



MOL has decided to install NOx SCR systems on its vessels ahead of their mandatory installation under international regulations. MOL believes that regulations are the very minimum requirement vessels must observe. True to this belief, MOL is working as an environmentally advanced company on technologies for reducing environmental impact on its own and together with shipbuilders and manufacturers.

Tracking MOL's Ship Technologies

■ Vessel ■ Engine, etc.



Feature

CSR

Governance

Safety

The Environment

Society

Data

MOL Group's Approach to CSR

MOL's basic approach to corporate social responsibility is expressed in the MOL Group Corporate Principles. To put these principles into practice, the MOL Group meets global transport demand through daily business activities, and has also created a framework for CSR initiatives and is promoting initiatives by setting annual targets. The Group is stepping up its activities in order to pursue CSR for sustainable growth with society.

Objectives of CSR Activities

The MOL Group has various stakeholders around the world since it is developing business on a global scale centered on its core business of shipping. CSR is concerned not only with economic impact, but also conducting business management that adequately takes into account laws and regulations, social norms, safety and environmental issues, human rights and other considerations. We believe we can develop with society sustainably while earning support and trust by contributing to all the Group's stakeholders. ["Relationships with Stakeholders" → P.30](#)

The MOL Group Corporate Principles state that the Group will contribute to the development of society as a multi-modal transport group. Putting these principles into practice is the foundation of the MOL Group's CSR.

By engaging in CSR through business activities, we aim to increase our corporate value as a group as well as to help realize society's sustainable growth by contributing to efforts to solve social issues. One example is combating global warming by reducing environmental impact.

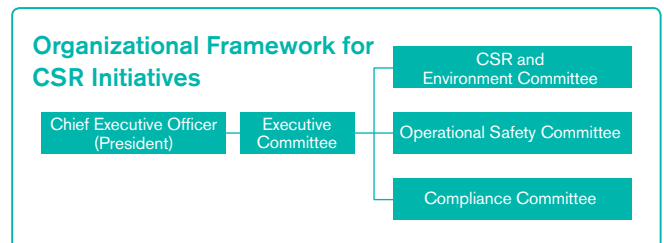
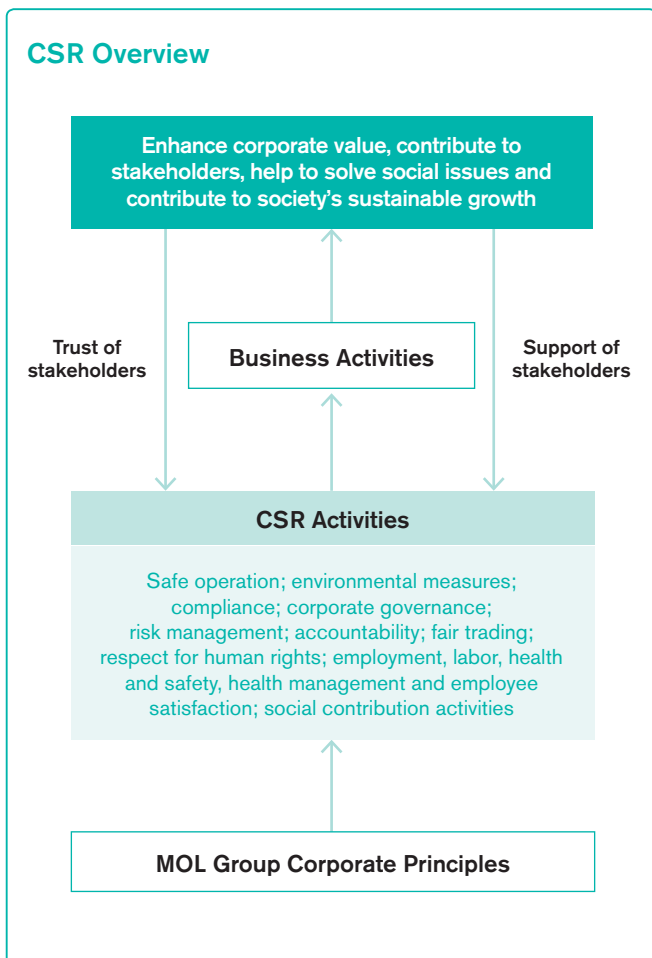
Organizational Framework for CSR Initiatives

In implementing CSR activities, MOL deliberates on CSR-related policies and measures, primarily through the three committees under the Executive Committee. Activities related to CSR of the entire MOL Group are discussed by the CSR and Environment Committee. This committee works to promote CSR throughout the MOL Group by setting and regularly reviewing annual targets for initiatives related to compliance, corporate governance, risk management, accountability, safe operation, human rights, care for employees and seafarers, social contributions and the environment. The CSR and Environment Office in the Corporate Planning Division administers the committee and promotes CSR.

The Operational Safety Committee studies and discusses basic policies and measures for ensuring safe operation of MOL- and MOL Group-operated vessels. ["Measures to Ensure Safe Operations" → P.18-19](#)

Meanwhile, the Compliance Committee discusses the enhancement of the compliance system and actions for dealing with compliance violations, as well as basic policies and measures related to establishing a structure for protecting and managing personal information.

["Compliance and Accountability" → P.17](#)



Participating in the UN Global Compact

CSR activities are broad and, from time to time, the strength and priority of those activities change depending on the operating environment, global circumstances and the region where business is being developed. With business activities spread across the globe, the MOL Group believes that building good relationships with various stakeholders worldwide and contributing to the realization of sustainable growth of society are vital as it seeks to realize the ideas set forth in the MOL Group Corporate Principles. In order to contribute to an international framework for realizing these goals, MOL became the first Japanese shipping company to participate in the United Nations Global Compact in 2005. Since then, MOL has worked to support and practice the 10 principles in 4 areas of the UN Global Compact, which shares the same values as MOL's Rules of Conduct, which were established as a set of guidelines for executives and employees.



10 Principles of the Global Compact

Human Rights	Principle 1:	Businesses should support and respect the protection of internationally proclaimed human rights; and
	Principle 2:	make sure that they are not complicit in human rights abuses.
Labour	Principle 3:	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
	Principle 4:	the elimination of all forms of forced and compulsory labour;
	Principle 5:	the effective abolition of child labour; and
	Principle 6:	the elimination of discrimination in respect of employment and occupation.
Environment	Principle 7:	Businesses should support a precautionary approach to environmental challenges;
	Principle 8:	undertake initiatives to promote greater environmental responsibility; and
	Principle 9:	encourage the development and diffusion of environmentally friendly technologies.
Anti-Corruption	Principle 10:	Businesses should work against corruption in all its forms, including extortion and bribery.

The MOL Group Basic Procurement Policy

As a company that handles part of the supply chain of customers, and in order to fulfill the social responsibility of the MOL Group itself, we formulated the MOL Group Basic Procurement Policy in 2012. This clearly documents our CSR activity policy regarding the Group's procurement activities. To instill this policy in the MOL Group, we work to observe laws and regulations in supply chains and social norms, incorporate consideration for environmental protection in our activities, pursue safety, engage in fair trading and build trust, with the understanding and cooperation of business partners. In this way, we aim to contribute to the realization of sustainable societies together.

"Communication with Business Partners" → P.30

The MOL Group Basic Procurement Policy

The MOL Group procures goods and/or services in accordance with the following basic policy:

1. We comply with applicable laws, regulations and social norms, and pay due consideration to the protection of the environment.
2. We procure goods and/or services, including the delivery or execution of such goods and/or services, that meet high safety standards.
3. We conduct fair trade, and endeavor to establish trusting relationships with contractors.

We work to make sure that our contractors understand our Basic Procurement Policy, with the aim of contributing towards the realization of sustainable societies together.

Together with Business Partners

Vessel procurement is one of the most important, fundamental aspects of the MOL Group's business activities. When building ships, MOL asks shipbuilding contractors to incorporate specifications compliant with the MOL Safety Standard Specifications, which prescribe the company's safety and environmental quality standards. In addition, MOL endeavors to enhance quality by dispatching staff from MOL Group companies to supervise the shipbuilding process, and also collaborates with shipbuilders to develop and introduce eco-friendly ships.

Through these activities, MOL has forged relationships of trust as a partner with shipbuilders. Accordingly, when the incident involving the containership *MOL Comfort* occurred, MOL promptly began investigations to find the cause with the cooperation of the shipbuilders Mitsubishi Heavy Industries, Ltd. and ClassNK. Moreover, the safety of six sister vessels was immediately inspected and extra preventive measures are progressively being implemented.

As of August 2013, we are still investigating the cause of the incident. However, we are determined to find the cause and take steps to prevent a reoccurrence.

Related information → P.04–05, P.18–19

CSR Program Targets and Results

In the period of the former midterm management plan, “GEAR UP! MOL,” we established midterm CSR program targets (FY2010–12) as well as targets for each fiscal year, and worked to achieve them in order to put our CSR Activities Policy into practice.

Objectives of Previous Midterm Management Plan (FY2010–12)

1. Stepping up “CSR that protects MOL” and “CSR that fulfills MOL’s responsibility”
2. Pursuing “CSR activities that benefit both the company and society”
3. Expanding CSR activities worldwide and throughout the MOL Group

Legend: ● Achieved ○ Generally achieved △ Partially achieved ● Did not achieve

	FY2010–12 Issues	FY2012 Main Activities and Results	Evaluation
Compliance*1	Ensure strict compliance world-wide/Group-wide and strengthen systems that support this	Implemented E-learning programs on antimonopoly law and insider trading, and continued conducting legal insurance courses	○
	Strengthen systems for early detection and rectification of non-compliance	Selected and raised awareness of best practices through Group Executive Committee meetings and ran courses on antimonopoly law, etc. Communicated Rules of Conduct at new employee training	○
Corporate Governance, Risk Management	Effectively administer MOL’s distinctive system of corporate governance	Revised and raised awareness of Guidelines on Compliance with Antimonopoly Laws Held discussions on corporate strategy and vision at board meetings with attendance of outside directors and corporate auditors	○
	Strengthen systems for risk management and business intelligence (BI) that support sustainable growth	Executed Business Structural Reforms to restore the competitiveness of free tonnage in the dry bulkers business in order to create a business structure that can survive the shipping market recession. (Posted a record net loss due to expenses resulting from these reforms.) Formulated a single-year management plan for returning to profitability and laying a strong foundation for sustainable growth	○
	Establish and enhance business continuity planning (BCP)	Effectively operated the platform for supporting BI and raised internal awareness of the platform Enhanced back-up system for Head Office functions and confirmed functionality of the system	○
	Develop balanced relations with stakeholders	Continued to provide information for ensuring employee safety using the in-house e-mail magazine and Group company intranet Disseminated the MOL Group Basic Procurement Policy to main suppliers	○
Accountability	Continually practice accurate, timely disclosure for shareholders and investors	Worked to eliminate corrections to disclosures. However, there was 1 correction in a total of 50 disclosure documents	●
	Promote stakeholder understanding of the midterm management plan, which is focused on growth, safe operation and the environment	Explained information in an easy-to-understand manner through the company’s Annual Report and website (enhanced information about the operating status and outlook through explanations by the president and executives in charge of each business division)	○
	Develop the trust of shareholders and investors regarding the sustainability of our business performance	Maintained and expanded ongoing communication with investors. Completely revamped the IR website to improve accessibility and user-friendliness Provided a timely and detailed explanation of the background to the record net loss for fiscal 2012 that resulted from Business Structural Reforms	○
	Strengthen world-wide/Group-wide responsiveness regarding disclosure in emergencies	Continuously held drills on handling the media in emergencies	○
Safe Operation, Service Quality	Establish a reputation as the leading company in the shipping industry among business professionals in Japan and overseas	Increased articles in mass media as well as business journals by 10% from the previous fiscal year	○
	Realize world’s best level of safe operation and transport quality	Achieved the “Four Zeros” (an unblemished record in terms of serious marine incidents, oil pollution, fatal accidents and cargo damage)	○
		Further reduced operational stoppage time per vessel (Result: operational stoppage time per vessel of 19.04 hours/year; target: operational stoppage time per vessel of 24.00 hours/year)	○
Human Rights	Enhance the personnel system to further motivate employees and enable them to demonstrate their abilities	Further reduced operational stoppage accident rate per vessel (Result: operational stoppage accident rate per vessel of 0.66/year; target: operational stoppage accident rate per vessel of 1.00/year)	○
	Reduce overtime work and develop workplace conditions that instill peace of mind in employees in line with each individual’s stage of life	Implemented various measures focused on the “Human Factor” with the aim of “eradicating collisions, groundings, and accidents causing injury or death” as well as “eradicating equipment incidents that lead to a dead ship condition.” Measures taken included holding Safety Conferences, operational safety workshops for office staff, and Safety Campaigns	○
	Enhance the employees’ health management system and risk management system	Continued activities to instill and improve human rights awareness (conducted level-specific training, conveyed information about human rights, and participated in outside seminars)	○
		Conducted employee interviews and used the results of needs analysis to enhance the system such as by introducing a system offering shorter working hours for nursing care	○
Care for Employees and Seafarers	Improve occupational safety and health and welfare programs for seafarers	Reduced overtime work, but did not achieve 10% reduction target	△
	Foster our own multinational seafarers and employ them as core seafarers	Did not achieve annual leave usage target (Annual leave: usage target of at least 10 days, 6.0 days used; special summer vacation days: usage target of 7 days, 5.5 days used)	△
	Provide employees and seafarers with a sense of pride and joy from working at the company	Enhanced support for diverse human resources (implemented various measures to achieve action plan targets for general companies; identified core personnel for nurturing global human resources; supported the job performance of women managers; individually followed up on individual working environment issues of people with disabilities; continued to employ seniors based on the continuous employment system)	○
	Enhance social contribution activities (tackle social issues around the world)	Conducted training on prevention and early detection of health-related problems; strengthened systems to allow seafarers to get proper follow-up; raised awareness of health management; strengthened the health management support system for expatriate staff	○
		Conducted drills for managing risks overseas and continued calculating LTIF ² of Head Office and domestic Group companies	Achieved “Four Zeros,” but did not achieve LTIF target (Target: 0.25 or less; result: 0.38)
Environmental Measures	Evolve into a corporate group that meets today’s demands by offering transport solutions with a lower environmental burden	Enhanced convenience of communication system on ships to improve employees’ health and welfare	○
	Implement principled social contribution activities (tackle social issues around the world)	Enhanced training program on training ship and continued to hold MOL Presidential Award ceremony	○
Social Contribution Activities	Enhance social contribution activities drawing on the company’s resources	Upgraded a company newsletter as a Group newsletter and revamped the company’s website to improve information dissemination	○
	Conduct social contribution activities integrated with business activities	“Environmental Targets and Results” → P22–23	
	Expand social contribution activities participated in by employees and seafarers in Japan and overseas	Implemented activities in line with our social contribution activity principles (transported aid supplies to developing countries and donated containers). Enhanced activities by implementing initiatives leveraging collaboration with Group companies.	○
		Held tours of MOL Group facilities (SOSC ³ and container terminals)	○
Response to the Great East Japan Earthquake		Jointly participated in the Somalia Support Project, run by the United Nations Development Programme	○
		Added volunteer beach cleanup activities at Kashima Nada to our social contribution activities	○
		To fulfill social responsibilities related to restoration and recovery from the Great East Japan Earthquake, we implemented the following initiatives: Offered stable transportation services Continued supporting the recovery and reconstruction process after the earthquake (MOL Ferry Co., Ltd. held a tour of a ferry berthed at Oarai Port for children in disaster-hit areas, etc.) “Social Contribution Activities” → P31	○

New targets have now been established for fiscal 2013 based on relative achievement of targets over the previous three years and after identifying new issues. The MOL Group is striving to grow sustainably with society through achievement of these midterm CSR program targets.

	FY2013 Themes	FY2013 Targets
Enhancement of Corporate Governance and Risk Management	Further raise compliance mind-set	Further raise compliance mind-set, which supports corporate governance, and further raise awareness of Guidelines of Compliance. Implement various initiatives to raise awareness of antimonopoly laws and insider trading as major themes
	Strengthen systems for risk management and business intelligence (BI) that support sustainable growth	1) Reflect issues raised in deliberation on corporate strategy and vision with outside directors in corporate governance and risk management initiatives 2) Appropriately allocate and utilize management resources 3) Strengthen response and framework related to global HSE (Health, Safety and Environment) standards 4) Improve BI utilization to respond to external environment changes
	Strengthen BCP (business continuity planning) framework	Continue to raise awareness of BCP among all executives and employees, and confirm operability of satellite offices in case of emergency through drills
Accountability	Further expand information disclosure related to sustainability and business strategy	1) Further enhance communication with shareholders and investors, and other stakeholders 2) Thoroughly disclose information related to the sustainability of MOL's businesses and progress on the single-year management plan 3) Increase stable shareholders by developing and promoting sustainable growth scenarios 4) Further enhance non-financial information, as ESG (Environment, Social and Governance) disclosure
	Earn the trust of stakeholders by disclosing negative information properly	1) Strengthen our ability to be able to properly disclose information by implementing drills on handling the media in emergencies 2) Strengthen our global ability to be able to quickly and properly disclose information, including overseas subsidiaries and Group companies 3) Thoroughly disclose information related to the cause of marine incidents, accident reoccurrence prevention measures and follow-ups
Safe Operation, Service Quality	Become the world leader in safe operation	1) Achieve "Four Zeroes" (an unblemished record in terms of serious marine incidents, oil pollution, fatal accidents, and cargo damage) 2) Further reduce operational stoppage time per vessel (achieve target operational stoppage time per vessel of 24 hours/year or less) 3) Further reduce operational stoppage accident rate per vessel (achieve target operational stoppage accident rate of 1.00 incident per vessel/year or less) 4) Eradicate collisions and groundings 5) Eradicate machinery trouble resulting in a dead ship condition 6) Cultivate safety culture by further improving safety awareness among all Group executives and employees
	Improve service quality	Apply KPIs*4 to containership operations to improve service quality and customer satisfaction
Human Rights	Raise human rights awareness	Raise human rights awareness among all MOL Group executives and employees in Japan and overseas
Care for Employees and Seafarers	Develop human resources	1) Develop human resources who can act independently and create new value in the global marketplace 2) Raise awareness of safe operation and the importance of frontline capabilities among employees
	Promote diversity	1) Employ, utilize and develop diverse human resources 2) Create work environments so that diverse human resources can demonstrate their abilities 3) Continue to support the performance of female employees and their career development 4) Strengthen initiatives to secure and train skilled multinational seafarers 5) Further promote a global personnel system
	Promote work-life balance and enhance employees' health management	1) Execute the third action plan for general companies • Develop workplace environments that enable employees to easily take child-care leave • Encourage employees to take annual leave and reduce overtime work, etc. 2) Implement measures to maintain and promote mental and physical health
	Maintain and raise employees' motivation	Share information and foster a shared mind-set among all Group companies in Japan and overseas through Group newsletters and the intranet
	Improve occupational safety and health and welfare programs for seafarers	1) Eradicate work-related accidents causing injury or death 2) Maintain LTIF of 0.25 or less 3) Rigorously comply with the Maritime Labour Convention (MLC) and build follow-up framework after its enforcement
Environmental Measures	Evolve into a corporate group that meets today's demands by offering transport solutions with a lower environmental burden	*Environmental Targets and Results* → P.22-23
Social Contribution Activities	Implement principled social contribution activities	1) Promote initiatives to help solve social issues faced by local communities and international society 2) Implement social contribution activities that support the MOL Group's sustainability such as the Somalia Support Project 3) Expand social contribution activities participated in by executives, employees and seafarers of Group companies in Japan and overseas 4) Implement measures to promote fair trade 5) Continue to conduct activities to support people affected by the Great East Japan Earthquake

*1 In September 2012, the company was investigated by the Fair Trade Commission on suspicion of infringement of the Antimonopoly Act related to the export of complete cars and construction machinery, etc. We acknowledge the seriousness of this incident and while cooperating fully with the commission's investigation, we are making all possible efforts to further enhance our legal compliance.

*2 Lost Time Injury Frequency (LTIF). Number of work-related accidents per hour per one million people

*3 Safety Operation Supporting Center

*4 Key Performance Indicators

Corporate Governance and Risk Management

MOL has implemented a series of management reforms to put in place a corporate governance structure that is optimal for realizing the ideas set forth in the MOL Group Corporate Principles. Moreover, we work to accurately identify all risks in our business activities, and reduce the frequency and impact of risk events.

Corporate Governance

MOL aims to improve the transparency of corporate management and to maximize stakeholders' profits through the most appropriate allocation of management resources. To this end, MOL adopts a structure whereby the Board of Directors, with the participation of outside directors, checks the appropriateness of management decisions and the status of execution of business operations, and the Board of Directors also oversees the business execution of the president as the chief executive officer.

At the Board of Directors, deliberation on corporate strategy and vision, an initiative unique to MOL, is held around five times a year. It discusses topics such as management strategies and MOL's long-term vision. These discussions provide an opportunity for lively debates that include the outside directors and corporate auditors. At the same time, opinions are reflected in formulation of management strategy and business execution.

For business execution, MOL has a system of executive officers. The resulting delegation of authority and clarification of each governance function has expedited decision-making.

MOL has also adopted the corporate auditor system, and two of the four auditors are appointed from outside. Furthermore, the Internal Audit Office operates independently of the company's divisions and offices and reports directly to the Executive Committee, the company's supreme decision-making body at the business execution level. The corporate auditors and independent public accountants cooperate in performing their respective statutory audits and audit the execution of business operations, including at Group companies.

Risk Management

MOL has established a risk management system focused on risks that could impede the MOL Group's continuous and stable growth. This management system comprises the Executive Committee, which functions as a body to comprehensively manage all risks, and various committees under the Executive Committee, as well as internal rules.

Management Structure for Main Risks

(1) Risks Concerning Maritime Shipping Market Trends

In the maritime transportation field, MOL's principal business, the shipping tonnage supply-demand is influenced by trends in the volume of global seaborne trades and the supply of vessels, and these trends have a significant impact on fluctuations in freight rates and hire rates. Hence, such material issues as investment in ships are brought to the Investment and Finance Committee, which identifies, analyzes and evaluates risks.

(2) Safe Operation of Vessels

The Operational Safety Committee reviews and deliberates issues concerning safe operation based on the rules of the committee in order to secure and thoroughly implement safe operation.

(3) Market Risks

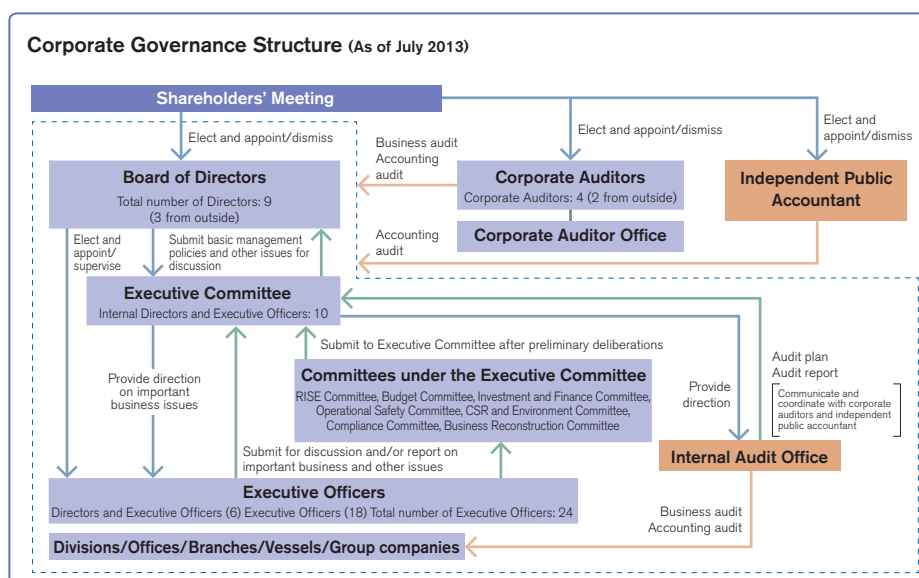
Fluctuation risks including market rates, bunker price, exchange rates, and interest rates are reduced appropriately in accordance with market risk management regulations.

(4) Group Company Operational Management

The MOL Group Corporate Principles serve as the basis for setting regulations at MOL Group companies. In terms of Group company operational management, MOL designates a division, office or executive in charge, and that organizational body or individual receives the necessary reports in a timely manner in accordance with Group Company Management Regulations to properly ascertain the status of management and business risks. Important management matters are executed with the company's permission.

(5) Response to Natural Disasters and Other Risks

MOL has a risk management system designed to stop an earthquake or other disaster or an outbreak of infectious disease from affecting business activities. This includes formulating business continuity plans (BCPs), and running regular drills, including documenting specific procedures.



Compliance and Accountability

Compliance is a fundamental corporate social responsibility. By rigorously ensuring compliance, MOL aims to remain a company trusted by society. Moreover, MOL works to cultivate a sense of trust in its sustainable growth by thoroughly fulfilling its accountability to various stakeholders and engaging in dialogue with them.

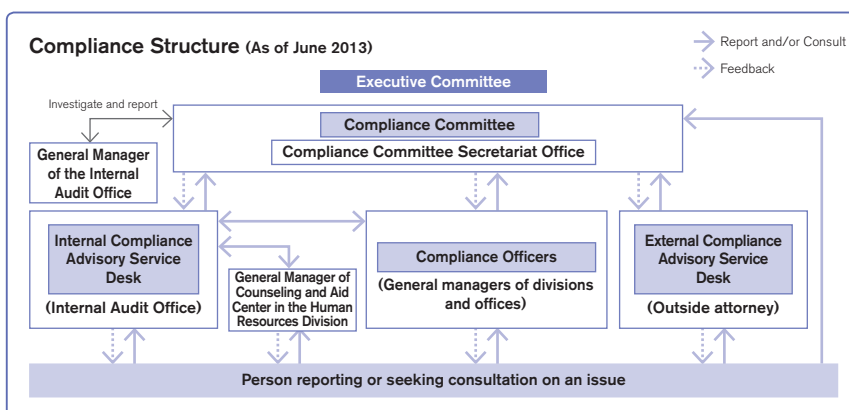
Compliance

MOL believes compliance means not only complying with legislation and internal rules, but also observing voluntarily established internal rules (Rules of Conduct) in carrying out corporate activities, including respecting human rights and refusing to permit discrimination and harassment in accordance with social norms and corporate ethics. (Please refer to [Web](#) for the Statement of Principles for Compliance.)

Since MOL conducts business globally, it aims to instill and entrench a compliance-oriented mind-set not only at Head Office, but also at Group companies in Japan and overseas. To this end, it regularly conducts E-learning and in-house training programs. In fiscal 2012, MOL revised its guidelines on antimonopoly laws in order to further enforce compliance and notified the amendments to Group companies in Japan and overseas.

Compliance Structure

- MOL has a [Compliance Committee](#), which is headed by a corporate officer appointed by the Executive Committee in accordance with MOL's Compliance Policy specifying rules of conduct executives and employees must observe. This committee is responsible for strengthening and refining the compliance structure as well as deciding on disciplinary measures in the case of violations, and measures to prevent a recurrence.
- General managers of divisions and offices are appointed as [Compliance Officers](#). They take a thorough approach to compliance as the person responsible, and are also required to report to the Compliance Committee Secretariat Office in the event of a compliance issue and take necessary corrective actions.
- MOL has two [Compliance Advisory Service Desks](#): an internal one that is independent from divisions, offices, and branches and for which the General Manager of the Internal Audit Office is responsible; and one through an outside attorney. These advisory service desks receive reports and requests for consultation from executives and employees of MOL and MOL Group companies in Japan and overseas, as well as temporary employees, domestic business partners and other outside parties. In addition to giving feedback on action taken to the person reporting an issue, the advisory service desks ensure that those reporting an issue and those who cooperate in the investigation are protected from any retribution or unfair treatment.



Japan Fair Trade Commission Inspection

In September 2012, MOL was investigated by Japan's Fair Trade Commission on suspicion of infringement of the Antimonopoly Act in connection with the export of complete cars and construction machinery, etc. We acknowledge the seriousness of this incident and while cooperating fully with the commission's investigation, we are making all possible efforts to increase our legal compliance.

Accountability

MOL aims to build sound relationships with shareholders and other investors. In this regard, MOL fulfills its accountability for information disclosure based on three key principles of being "timely," "accurate," and "fair." At the same time, MOL works hard to execute highly transparent management. (Please refer to [Web](#) for the Basic Policies on Investor Relations.)

At MOL, the president takes the initiative and responsibility for investor relations (IR) and engages in direct dialogue with investors. In addition, MOL actively discloses information on its website, including management strategy, investment plans, and market data. In fiscal 2012, MOL revamped its website to enhance accessibility to necessary information and received the 2012 Internet IR Commendation Award from Daiwa Investor Relations Co., Ltd. (Daiwa IR).

MOL believes that it has a responsibility to society to provide information. Our basic stance therefore is to quickly disclose information to all stakeholders not only on business initiatives and CSR activities, but also negative information on accidents. Furthermore, we hold regular drills for responding to the media in emergencies and are working to strengthen our ability to be able to quickly and properly disclose information.

MOL will continue working to raise confidence in its business policies and management through close communication with various stakeholders.

"Relationships with Stakeholders" → P.30



A drill on media relations in emergencies was conducted in April 2012.

Measures to Ensure Safe Operations

Please allow MOL to offer its sincere apologies to customers and other parties concerned for the inconvenience and anxiety caused by the marine incident involving the MOL-operated containership *MOL Comfort* in June 2013.

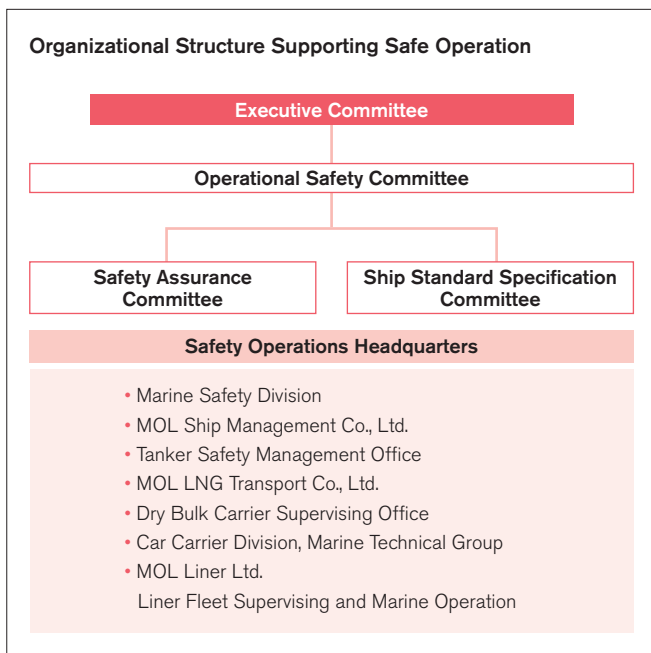
MOL has been aiming to become the world leader in safe operation and has until now implemented various measures for reinforcing safe operation in terms of ship facilities, seafarers, ship management and our safety culture. Rigorously ensuring safe operation is of the utmost importance for MOL. Realizing that this is the starting point for earning the trust and patronage of stakeholders, MOL is working cohesively as a group on safe operation as a primary management imperative.

Safe Operation Management

Safe Operation Management Structure

MOL has an Operational Safety Committee, which is chaired by the president of MOL. Under this committee are the Safety Assurance Committee and the Ship Standard Specification Committee. The Operational Safety Committee discusses and determines basic policies and measures for ensuring safe operation of vessels through rigorous attention to every detail. The Safety Operations Headquarters, which consists of marine technical and ship management divisions, is responsible for implementing specific measures, with progress overseen by the Safety Assurance Committee. The Ship Standard Specification Committee discusses and determines MOL Safety Standards and owned ship maintenance standards from a fail-safe*¹ perspective.

*¹ Equipment and systems are designed to operate safely at all times, even when trouble occurs due to operator error or malfunction.



Emergency Response System

MOL continues to strengthen its systems so that it can provide an accurate response in the unlikely event of an emergency.

Safety Operation Supporting Center (SOSC)

The SOSC is staffed at all times by two marine technical specialists, including an experienced MOL captain, and supports the safe navigation of MOL-operated vessels around the clock 365 days a year. The center monitors the position and movement of more than 900 MOL Group-affiliated vessels, providing assistance from the captain's perspective by supplying information on abnormal weather and tsunamis and on piracy and terrorism incidents to relevant personnel on the ship and land. At the same time as serving as an information portal supporting the safe operation of MOL ships, the center also functions as a help desk for urgent inquiries from ships regarding safe operation. Since its establishment, the center has helped to steadily reduce the number of incidents involving adverse weather or emergency entry. ["Feature 1" → P.06-09](#)

Accident Response Drills

MOL regularly conducts accident response drills that simulate various situations such as an onboard fire or water immersion, or act of piracy or terrorism, so that seafarers can respond swiftly and appropriately in an emergency. Head Office conducts accident response drills twice a year with the cooperation of the Regional Coast Guard Headquarters. The drills involve MOL's president, other corporate officers, representatives of relevant departments and ship management companies, and vessels. Furthermore, MOL Group companies that operate ferries and cruise ships, conduct emergency response drills, including evacuation guidance, on a regular basis, as they put the highest priority on ensuring customer safety in an emergency. In July 2013, MOL Ferry Co., Ltd. held an evacuation drill on board a ferry berthed at Oarai Port. This marked the first time in Japan that ordinary passengers participated in an evacuation drill.



Crew guide passengers to the terminal for evacuation drill



A communication drill

Safe Operation Measures

Efforts to ensure safe operation will never end. True to this statement, MOL continues to implement measures in fiscal 2013.

Making Processes for Realizing Safe Operation Visible

MOL has introduced objective performance indicators for measuring safety levels, and also set the following numerical targets, including the Four Zeroes.



1. Four Zeroes (an unblemished record in terms of serious marine incidents, oil pollution, fatal accidents and heavy cargo damage)
2. LTIF*² (Lost Time Injury Frequency): 0.25 or below
3. Operational stoppage time*³: 24 hours/ship or below
4. Operational stoppage accident rate*⁴: 1.0/ship or below

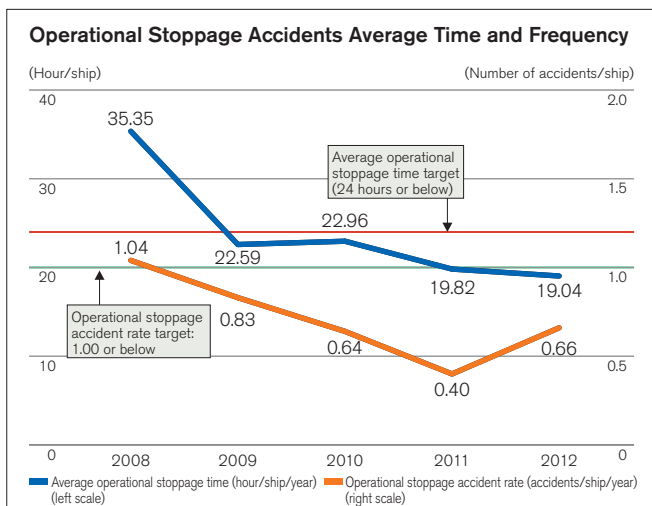
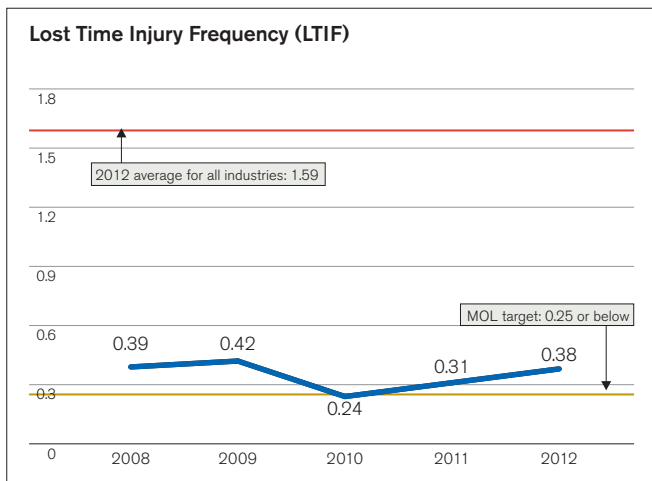
*² Number of work-related accidents per one million hours worked that resulted in time lost from work of one day or more. Average for all industries (2012) was 1.59; for shipping industry, 1.39; for shipbuilding and repair, 0.77. (Source: 2012 Survey on Industrial Accidents issued by the Ministry of Health, Labour and Welfare).

*³ Expresses the amount of ship operational stoppage time due to accidents per ship per year.

*⁴ Expresses the number of accidents that result in ship operational stoppage per ship per year.

In fiscal 2013, MOL will work on three important targets: (1) eradicate work-related crew fatalities and injuries, (2) eradicate collisions and groundings, and (3) eradicate machinery trouble resulting in a dead ship condition (a ship being unable to move under its own power).

"CSR Program Targets and Results" → P.14-15



Breaking the Chain of Errors

We continue to make improvements related to both seafarer training and ship facilities to break the chain of errors in which minor factors combine and ultimately lead to major maritime accidents.

In terms of seafarer training, we are reinforcing our OJT Instructor System*⁵ on board ships, and enhancing onshore education and training curriculums and programs such as "hazard experience" training sessions. These measures are geared towards enhancing the ability of seafarers to perceive danger. In addition, we are working to raise safety awareness among seafarers by collecting information from each vessel in operation on examples of incidents and problems as well as close calls*⁶ and by using videos, photos and illustrations to appeal to the visual sense of seafarers. In terms of ship facilities, we are working to equip ships with error-resistant equipment. This involves promoting the fail-safe design concept by providing shipyards and equipment manufacturers with feedback from vessels in operation on areas of non-conformance and areas in need of improvement.

From the standpoint of protecting seafarers, it is the MOL Group's ultimate goal to eradicate work-related fatalities. MOL analyzes the factors and causes behind accidents from various angles and uses the results to make improvements in ship facilities. It also asks employees on shore and on board to discuss examples of serious incidents and problems "as if they are their problem" and to propose preventive measures as part of efforts to prevent accidents.

*⁵ This system involves experienced captains and chief engineers who understand MOL standards of safe operations travelling on board ships to identify unsafe practices and latent risks only discoverable on the ships in service and order immediate improvements.

*⁶ Risky incidents that came very close to causing a more serious accident.

Cooperation for Safe Operation

The MOL Group works together with vessels, shipowners, and ship management companies to ensure the safe operation of all owned and chartered vessels by sharing safety-related information. MOL conducts Safety Operation Meetings and Safety Campaigns involving vessels, shipowners and ship management companies to deepen understanding of its safety standards and to discuss safety improvement. MOL also inspects vessels to check whether its safety standards are understood well and put into effect. If there is a need to make improvements, MOL will take corrective actions, communicating with the vessel, shipowner and ship management company in the process. *Feature 1* → P.06-09

MOL Comfort Marine Incident

On June 17, 2013, MOL Comfort (an 8000-TEU type containership built in 2008) suffered a crack amidship during inclement weather while under way from Singapore to Jeddah, Saudi Arabia, on the Indian Ocean. This made it impossible for the vessel to continue on under its own power. Subsequently, the vessel fractured into two parts and MOL organized to tow the vessel to rescue the cargo and hull. On June 27, however, the aft part of the containership sank. On July 6, a fire broke out on the fore part while being towed and this section later sank on July 11 with firefighting efforts hampered by adverse weather. As of the end of August 2013, no large-volume leakage of fuel oil and other oil due to this incident had been confirmed. All crew members were safely rescued.

Since directly after the incident, MOL has been continuing a thorough investigation to find the cause with the cooperation of a shipbuilder, the classification society and other parties. Because it may take some time to identify the cause of the incident, the company decided to progressively take extra preventive measures for six sister vessels operated by MOL, including strengthening the hull structure.

Environmental Management Policy

The MOL Group seeks to offer more environmentally-friendly services through various environmental protection measures as it meets world demand for shipping. These measures include developing and adopting environmental technologies, operating vessels with minimum environmental impact, and implementing approaches to preserve the atmosphere and the marine environment.

MOL Group Environmental Policy Statement

Philosophy

As one of the world's leading multi-modal transport groups, the MOL Group is committed to protecting the health of our marine/global environment and therefore promotes and supports the following policies.

Policies

1. Protect all aspects of the marine/global environment and foster safe operation;
2. Comply with all environmental legislation and regulations that we are required to by law, and all relevant standards and other requirements that we subscribe to. And, whenever possible, further reduce the burden on the environment by setting and achieving even tougher voluntary standards;
3. Periodically review and revise our environmental protection measures on the basis of our framework for setting and reviewing environmental objectives and targets;
4. Conserve energy and materials through recycling and waste reduction programs;
5. Purchase and use environmentally safe goods and materials;
6. Promote the development and use of environmentally safe technology;
7. Educate and encourage group employees to increase their focus on protection of the environment through enhanced publicity efforts, and communicate our Environmental Policy to group employees;
8. Publish our Environmental Policy Statement and disclose our environmental information on a regular basis;
9. Always strive to ensure that our business activities contribute to and adequately support worthy environmental protection activities

Group Environmental Audits

ISO 14001 Certification

Company name	Acquired date	Certifying institution
Mitsui O.S.K. Lines, Ltd.	January 2003	Det Norske Veritas AS (DNV)
Kusakabe Maritime Engineering Co., Ltd.	May 2004	CI Japan Limited
MOL Logistics (Japan) Co., Ltd.	April 2006	Nippon Kaiji Kentei Quality Assurance Ltd.
Mitsui O.S.K. Kosan Co., Ltd.	July 2006	The British Standards Institution
MOL LNG Transport Co., Ltd.	December 2006	Nippon Kaiji Kyokai
MOL TANKSHIP MANAGEMENT (EUROPE) LTD.	May 2008	DNV
MOL TANKSHIP MANAGEMENT (ASIA) PTE. LTD.	March 2010	DNV
NEW ASIAN SHIPPING COMPANY, LIMITED	November 2011	Nippon Kaiji Kyokai

MOL Group Companies with Green Management Certification (Foundation for Promoting Personal Mobility and Ecological Transportation)

Company name	Acquired date	Company name	Acquired date
International Container Transport Co., Ltd.	October 2005	Kobe Towing Co., Ltd.	March 2007
Meimon Taiyo Ferry Co., Ltd.	December 2005	Utoc Corporation	June 2007
Diamond Line K.K.	February 2006	Green Shipping, Ltd.	July 2007
Green Kaiji Kaisha, Ltd.	March 2006	Shosen Koun Co., Ltd.	October 2007
Ferry Sunflower, Ltd.	May 2006	Ube Port Service Co., Ltd.	November 2007
Nihon Tug-Boat Co., Ltd.	August 2006	MOL Ferry Co., Ltd.	March 2010
Japan Express Packing & Transport Co., Ltd.	November 2006		
Utoc Logistics Corporation	February 2007		

EcoAction 21 (Institute for Global Environmental Strategies)

Company name	Acquired date
MOL Techno-Trade, Ltd.	July 2007

System to Promote Environmental Management

At MOL, under the president, who has the ultimate decision-making authority, the CSR and Environment Committee, a subcommittee of the Executive Committee, formulates the MOL Group's basic policy for environmental management based on an evaluation of environment-related risks and opportunities. It also works to promote business activities in line with the MOL Group Environmental Policy Statement.

The committee operates two unique environmental management systems—MOL EMS21 and the MOL Group Environmental Target System—as it promotes the MOL Group's environmental activities.

Environmental Management System

MOL EMS21

We introduced our environmental management system—MOL EMS21—in 2001. In 2003, we expanded its scope to all of our operated vessels (except charter vessels on contracts of one year or less), and acquired internationally recognized ISO 14001 certification. In the MOL EMS21 system, the director responsible for environmental management (chairman of the CSR and Environment Committee) confirms and assesses how effectively the system functions, based on internal audits held at least once a year. The internal audits are conducted by the CSR and Environment Office in the Corporate Planning Division, targeting all divisions in the Tokyo Head Office, and the Marine Safety Division implements environmental inspections on our vessels. Det Norske Veritas AS (DNV), an ISO 14001 external certification body, holds an annual audit and a renewal assessment every three years.

ISO 14001 Certification

Scope

Ship operation activities at sites and Head Office associated with multi-modal logistics/ocean services (except charter vessels on contracts of one year or less)

Certifying institution

Det Norske Veritas AS (DNV)

Accreditation

Raad voor Accreditatie (RVA) in the Netherlands



ISO 14001 Certification

The MOL Group Environmental Target System

The MOL Group implements the MOL Group Environmental Target System covering main Group companies in Japan and overseas. Regarding the environmental burden due to each company's business activities, every fiscal year, based on general guidelines, each company sets its own environmental targets in line with the midterm environmental targets, and sets out an action plan to achieve those targets. Data from each company regarding its environmental burden (consumption of fuel, electricity, paper, and generated waste), are collected and the Group-wide environmental burden is tabulated. Currently, the program covers 70 companies, including 53 Group companies in Japan and 17 overseas affiliates and subsidiaries (as of March 31, 2013).

MOL Group Environmental Award

We introduced the MOL Group Environmental Award in fiscal 2005 in order to promote environmental management in Group companies. Every year, this award recognizes meritorious activities aimed at developing and introducing environmental technologies and other environmental activities in the Group. Awards are presented at the Group Executive Committee meeting of Group company presidents.

The 7th MOL Group Environmental Award Most Outstanding Performance Award: MOL LNG Transport Co., Ltd. Initiatives to Reduce Fresh Water Usage on LNG Carriers

Since 2012, we have worked to reduce the amount of fresh water used by 15 LNG carriers, and reduced the fuel use accompanying the use of water generators. Compared with 2011, CO₂ emissions were reduced by 2,100 tons.

Note: Much of the fresh water used by vessels is made from seawater, making for an environmentally friendly system. By reducing the amount of fresh water, these 15 LNG vessels (turbine engines) were able to reduce the amount of fuel consumed by water generators. Diesel engine-powered vessels use main engine waste heat to make water and thus do not consume additional fuel for making water.



MOL LNG Transport Co., Ltd. was awarded the Most Outstanding Performance Award.

“GEAR UP! MOL” Environmental Investments (Fiscal 2010 to Fiscal 2012)

	Plan	Actual	FY10	FY11	FY12
Promotion of <i>Senpaku ISHIN</i> Project, etc.	3.1	3.7	0.8	1.4	1.5
Application of existing technologies, promotion of <i>Senpaku ISHIN</i> Project to actual vessels, etc.	9.7	7.7	4.1	1.7	1.9
Improvement of energy efficiency in vessel operation	3.4	1.8	0.6	0.6	0.7
Compliance with environmental regulations	9.2	5.0	1.0	1.5	2.5
Group companies' initiatives	2.2	1.7	1.0	0.5	0.3
Total	27.5	20.0	7.4	5.7	6.8
(Reference) Investments for reducing CO ₂ (brackets)*		8.8	3.5	2.7	2.6

* Investments in areas such as reform work for implementing slow steaming, electronically controlled engines, and PBCFs

CO₂ and Cost Reductions from Environmental Measures

	FY10	FY11	FY12
CO ₂ emissions reductions Unit: tons (vs. previous fiscal year)	837,852	431,737	302,928
Cost reductions Unit: ¥ billions (vs. previous fiscal year)	11.4	7.3	5.3

Under the former "GEAR UP! MOL" midterm management plan, we planned to invest ¥27.5 billion over 3 years to develop and implement environmental technologies. The amount actually invested was approximately ¥20.0 billion, about ¥7.5 billion less than planned. The main reasons for this were as follows:

- Less work for responding to regulations due to postponed enforcement of the treaty on ballast water management
- A decrease in the number of vessels introducing technologies in line with a reduction in the number of planned new vessel deliveries

- CO₂ emission reductions and cost reductions were each calculated based on the fuel consumption reductions achieved by making greater use of slow steaming, installing PBCFs, and using low-friction paint.
- Benefits that could not be easily quantified were not included in totals.

Please refer to [Web](#) for environmental accounting following Japan's Ministry of the Environment's "Environmental Accounting Guideline (FY2005)"

Environmental Targets and Results

The MOL Group's former midterm management plan, "GEAR UP! MOL," set midterm environmental targets for the period from fiscal 2010 through fiscal 2012, as well as targets for each fiscal year, in accordance with the environmental strategy in the plan. New targets have been established for fiscal 2013 to strengthen measures, based on relative achievement of targets over the previous three years. Through achievement of these targets, the MOL Group will protect the marine and global environment.

Legend: ○ Achieved ◯ Generally achieved △ Partially achieved ● Did not achieve (target period/content changes)

	Objectives of Previous Midterm Management Plan (FY2010–12)	Main Activities and Results During FY2010–12	Evaluation
1 Ensure Safe Operation	Eliminate Pollution of the Marine Environment Caused by Shipping Accidents		
	Eliminate shipping accidents that lead to ocean pollution from oil outflows	Implemented various measures to ensure safe operations; however, there was an incident involving an iron ore carrier in the waters to the east of China's Shandong Peninsula (May 2010)	●
	Actively adopt vessel specifications that minimize environmental damage	Continued applying MOL Safety Standard Specifications for equipment and facilities to new vessels	○
2 Improve Efficiency and Reduce the Environmental Impact of Ships and Actively Invest to Develop and Implement Environmental Technologies	Promote <i>Senpaku ISHIN</i> Project		
	Constantly refine next-generation vessel concepts		
	Design <i>ISHIN</i> ships	Created prototype designs for <i>ISHIN</i> ships	○
	Run experiments on existing vessels for major component <i>ISHIN</i> ship technologies	Installed <i>ISHIN</i> component technologies on actual vessels, including a hybrid car carrier incorporating solar power generation and storage technology, a high-efficiency waste heat energy recovery system and low-friction paints	○
	Propose new concept vessel to follow <i>ISHIN</i> ships	Developed new PBCF and promoted the "Wind Challenger Project" for wind-propelled ships. Conducted R&D reflecting internal needs	○
	Prepare and implement a roadmap for introducing the component <i>ISHIN</i> ship technologies	Prepared and implemented a roadmap for introducing the component <i>ISHIN</i> ship technologies	○
	Reinforce functions/activities of the MOL Technology Research Center		
	Develop technologies for reducing emissions of CO ₂ , NO _x , SO _x and PM (particulate matter)	Applied newly developed fuel additive "TAICRUSH HD" and heat-shielding paint	○
	Develop technology for raising the combustibility of ship fuel	Introduced a test engine to conduct research on fuel-injection nozzles and micro-nano bubble technology	○
	Fully Practice ECO SAILING and Pursue Efficient Operations		
	Promote optimal utilization of reduced navigation speeds	Further adopted reduced navigation speeds. Achieved the super-slow-steaming operation of container-ships with main engine output of 10–15% (Reduction ratios for CO ₂ , NO _x and SO _x emissions from container-ships are disclosed on MOL's website "Count on MOL")	○
	Promote utilization of WNI Ocean Routing*1	Utilized WNI Ocean Routing	○
	Utilize FMS Safety-Bridge System**2	96% of MOL vessels and 75% of chartered vessels used the system (as of the end of fiscal 2012)	○
	Substantially expand use of fuel additives	Promoted use of fuel additives	○
	Promote installation of propeller efficiency-improving devices (PBCFs) on MOL vessels	Completed installation on all newly built MOL vessels	○
	Promote installation of energy-saving LO lubricators on MOL vessels	Completed installation on all newly built MOL vessels	○
	Promote installation of electronically-controlled engines (approx. 20 vessels)	Completed installation on container-ships and dry cargo ships (13 vessels)	○
	Install onshore power supply systems (approx. 14 vessels)	Completed installation on 16 container-ships	○
	Reduce CO₂ Emissions per Ton-mile (oceangoing vessels operated by MOL and domestic consolidated subsidiaries)		
	Reduce by 10% by FY2015 compared to FY2009	Reduced by 7.5% compared to FY2009	○
Initiatives for Preventing Atmospheric Pollution			
Reduce NO _x and SO _x emissions per ton-mile (oceangoing vessels operated by MOL and domestic consolidated subsidiaries)			
Reduce by 10% by FY2015 compared to FY2009	NO _x : reduced by 7.5% compared to FY2009; SO _x : reduced by 15.0% compared to FY2009	○	
Make MOL's unique technologies for reducing PM (particulate matter) feasible for practical application	Conducted experiments on actual vessels equipped with the DPF system	○	
Comply with Environmental Regulations			
Comply with current regulations and prepare to comply in the future when regulations are tightened and their scope is expanded geographically	Responded and prepared to comply with Tier-III NO _x regulations, low sulfur fuel oil regulations, ship recycling treaty, SEEMP ³ , and EEDI ⁴	○	
3 Offer Low Environmental Impact Solutions as a Whole Group	Further Accommodate Modal Shift		
	Reduce customer CO ₂ emissions using Japan's largest ferry network	Reduced customer CO ₂ emissions by approx. 600,000 tons annually	○
	Promote the environmental advantages of domestic carriers and ferries	Continued PR via Group company and industry group websites and other channels	○
	Conduct research and develop technologies toward practical viability of <i>ISHIN-II</i> (ferry that uses LNG as fuel)	Conducted research and developed technologies	○
	Actively Develop Existing Low-Environmental-Impact Solutions		
	Provide tugboat services with reduced environmental impact due to reduced navigation speeds	Continued operating tugboats at reduced navigation speeds and promoting efficient allocation	○
	Promote PBCF sales through MOL Techno-Trade, Ltd.	Achieved cumulative PBCF installations of approx. 2,350 units	○
	Reduce environmental impact at logistics centers	Conducted energy-saving operations	○
	Actively Consider New Low-Environmental-Impact Solutions		
	Participate in experiments to demonstrate the "eco tug" concept (tugboats with reduced environmental impact)	Considered	○
	Contribute to recycling through environment-related businesses of Kusakabe Maritime Engineering Co., Ltd.	Continued environment-related businesses of Kusakabe Maritime Engineering Co., Ltd.	○
	Introduce environmental materials for ships	Continued introducing eco-friendly amenities on cruise ships	○
	Promote reduced environmental impact at existing buildings managed by Daibiru Corporation	Completed construction of the Daibiru-Honkan building, an office building designed with an emphasis on energy efficiency. Promoted adoption of rainwater reuse, rooftop gardens, natural ventilation, high thermal barrier/heat-shielding glass	○
	Popularize use of improved PBCFs through MOL Techno-Trade, Ltd.	Took part in R&D on improved PBCFs	○
Maintain and Enhance MOL Group Environmental Award Program			
	Received 25 entries, extended outstanding initiatives internally and to Group companies	○	
4 Advocate Policies and Measures Aimed at Contributing to Actual Reductions in Environmental Impact	Take Part in Policymaking and Actively Make Recommendations so that Environmental Policy Promotes Utilization and Reinforcement of the High Environmental Efficiency of Shipping and Contributes to Environmental Impact Reduction and Sustainable Economic Growth		
	Measures for greenhouse gases emitted by oceangoing vessels, domestic carriers and ferries	Contributed to discussions on GHG emissions regulations and lobbied for promoting a modal shift through industry groups	○
5 Contribute to Conservation of Biodiversity and Protection of the Natural Environment	Raise Awareness of Employees Regarding Biodiversity Protection and Nature Conservation and Promote Activities, Technological Development and Social Contributions to this End		
	Continue existing activities and conduct new activities that contribute to conservation of biodiversity and protection of the natural environment		
	Develop and install ballast water treatment systems	Installed on 11 vessels	○
	Expand social contribution activities that help in biodiversity protection and nature conservation	Conducted plant conservation activities and beach cleanups in Japan and overseas	○
	Raise employee awareness of biodiversity protection and nature conservation	Regularly produced environment-related articles in the company newsletter	○
	Continue utilizing renewable energy at domestic sites and consider new installations	Installed at the MOL Technology Research Center, company housing for employees, and ferry terminals in addition to the Tokyo International Container Terminal	○
	Reduce environmental impact associated with domestic business activities (MOL and domestic Group companies)		
	Reduce unit energy consumption at domestic business sites by 3% compared to FY2009	Reduced by 16.6% in the Group as a whole	○
	Reduce unit energy consumption by domestic transport modes by 3% compared to FY2009	Reduced by 0.6% in the Group as a whole	●
	Reduce office paper usage (per employee) by 3% compared to FY2009	Reduced by 16% at MOL, however, increased 4% in the Group as a whole mainly due to a decrease in the number of employees	●
Recycle as much as possible and reduce non-recyclable waste	Raised awareness. Achieved recycling ratio of 68% at the Head Office	○	
Comply with domestic environmental regulations	Complied with Amended Energy Conservation Act and Tokyo Metropolitan Environmental Security Ordinance	○	

- *1 An information service on weather, ocean conditions, optimal routes, etc., provided by Weathernews Inc.
- *2 On-board system that plans optimal routes based on the latest data on weather and ocean conditions
- *3 Ship Energy Efficiency Management Plan
- *4 Energy Efficiency Design Index
- *5 Energy Efficiency Operational Indicator
- *6 Exhaust Gas Bypass
- *7 Variable Turbine Inlet

FY2013 Environmental Targets

1 Ensure Safe Operation	Eliminate Pollution of the Marine Environment Caused by Shipping Accidents
	Prevent accidents, take firm steps to clarify the cause, and develop preventive measures in the event of an accident or trouble Further enhance the MOL Safety Standard Specifications and promote to new vessels
2 Comply with Environmental Regulations	Rigorously Prepare to Comply with International Environmental Regulations before Enforcement
	NOx measures: conduct on-board demonstration of SCR system (NOx-reducing system)
	SOx regulations: prepare to comply with stricter regulations on low sulfur fuel oil, and to accommodate their introduction across an expanded geographical area
	Ship recycling: comply with and enhance the selection criteria for environmentally-friendly scrapping yards and promote preparation of inventory lists SEEMP: promote monitoring of EEOI*5 for all operated vessels Install the ballast water treatment system first on certain vessels and promote preparation for installation
3 Strengthen Competitiveness by Promoting Environmental Technologies	Promote <i>Senpaku ISHIN</i> Project
	Take delivery of a large-scale iron ore carrier equipped with a high-efficiency waste heat energy recovery system
	Test the benefits of a hybrid car carrier incorporating solar power generation and storage technology, and conduct durability testing for equipment
	Consider LNG-fueled vessels
	Evaluate the performance of new low-friction paint
	Promote R&D for improving PBCF efficiency
	Promote the "Wind Challenger Project" for wind-propelled ships
	Test the benefits of technologies for improving the fuel efficiency of main engines at low loads
	Develop the DPF system
	Implement a roadmap for introducing the component <i>ISHIN</i> ship technologies/ continue holding meetings that connect business needs with new developments
	Promote Activities of the MOL Technology Research Center
	Develop technology for raising the combustibility of ship fuel
	Fully Practice ECO SAILING and Pursue Efficient Operations
	Promote further adoption of reduced navigation speeds <ul style="list-style-type: none"> • Implement and promote further adoption of reduced navigation speeds based on safety and maintenance considerations by providing technical support and sharing information internally • Apply tuning technologies for main engines at low loads (EGB*6, VTI*7) (5 vessels in FY2013, total 6 vessels)
	Select optimal routes based on weather and ocean conditions <ul style="list-style-type: none"> • Use the routing service. Monitor the movement of vessels and provide assistance by the Safety Operation Supporting Center (SOSC) • Utilize FMS Safety-Bridge System (maintain the ratio of vessels using the system at 90% or more)
	Adopt optimum trim system (plan to adopt on 20 containerships and 13 car carriers in FY2013, cumulative adoption by 53 vessels)
Install electronically controlled engines (plan to install on 6 vessels in FY2013, cumulative installation on 27 vessels)	
Install onshore power supply systems (2 vessels in FY2013, cumulative installation on 18 vessels)	
Install PBCFs and other equipment to improve propeller efficiency on all newly built MOL vessels	
Install energy-saving LO lubricators on all newly built MOL vessels	
Reduce CO₂ Emissions per Ton-mile (Oceangoing Vessels Operated by MOL and Domestic Consolidated Subsidiaries)	
CO ₂ : reduce by 1% year on year in FY2013 compared to FY2012; reduce by 10% in FY2015 compared to FY2009	
NOx: reduce by 1% year on year in FY2013 compared to FY2012; reduce by 10% in FY2015 compared to FY2009	
SOx: reduce by 1% year on year in FY2013 compared to FY2012	
4 Offer Low Environmental Impact Solutions as a Whole Group	Further Accommodate Modal Shift
	Reduce customer CO ₂ emissions by approx. 600,000 tons annually using Japan's largest ferry network
	Actively Develop Existing and New Low-Environmental-Impact Solutions
	Continue operating tugboats at reduced navigation speeds and consider the "eco tug" concept
	Achieve cumulative PBCF installations of 2,500 units
	Conduct energy-saving operations at the Ohi Logistics Center Continue the beverage can recycling business Introduce low-environmental-impact office buildings
Maintain and Enhance MOL Group Environmental Award Program	
Entrench the MOL Group Environmental Award	
5 Advocate Policies and Measures Aimed at Contributing to Actual Reductions in Environmental Impact	Take Part in Policymaking and Actively Make Recommendations so that Environmental Policy Promotes Utilization and Reinforcement of the High Environmental Efficiency of Shipping and Contributes to Environmental Impact Reduction and Sustainable Economic Growth
6 Contribute to Conservation of Biodiversity and Protection of the Natural Environment	Raise Awareness of Employees Regarding Biodiversity Protection and Nature Conservation and Promote Activities, Technological Development and Social Contributions to this End
	Expand activities that help in biodiversity protection and nature conservation by utilizing internal resources
	Reduce unit energy consumption at offices in Japan over medium to long term: reduce by 1% year on year in FY2013 compared to FY2012
	Reduce unit energy consumption by ferries and domestic carriers over medium to long term: reduce by 1% year on year in FY2013 compared to FY2012
	Recycle as much as possible and reduce waste
	Amended Energy Conservation Act and Tokyo Metropolitan Environmental Security Ordinance: develop and implement specific reduction measures Continue utilizing renewable energy (solar power generation and solar thermal) at offices

Feature

CSR

Governance

Safety

The Environment

Society

Data

MOL Group's Measures to Reduce Environmental Impact

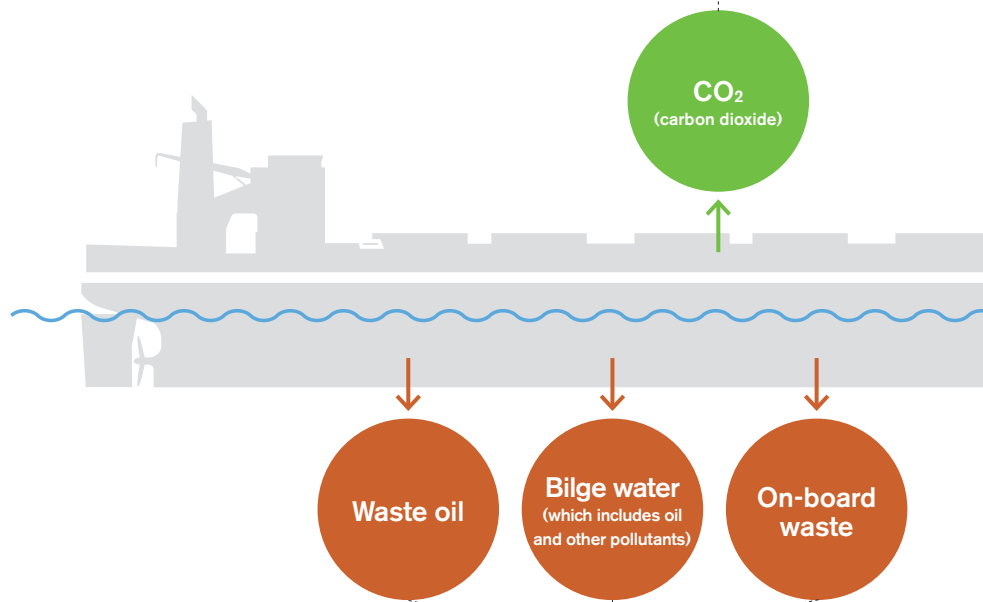
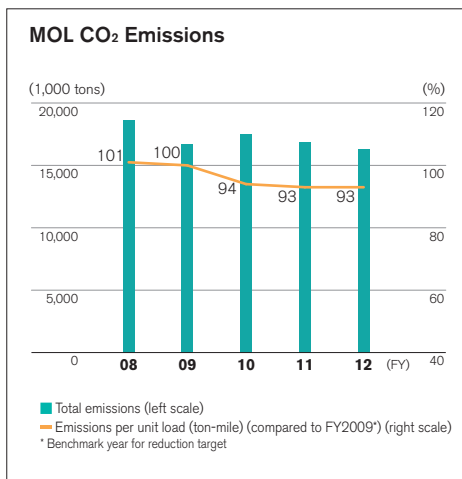
The MOL Group conducts a range of business activities at sea, including international shipping, and on land. Fully aware of the environmental impact of its business activities, the MOL Group works actively and continuously to reduce that impact. [*MOL Group's Environmental Data* ➔ P.34](#)

The international convention MARPOL 73/78, which aims to prevent marine pollution and protect the marine environment, has been adopted and enforced by the International Maritime Organization (IMO). The whole marine transport industry is now working to comply with the various regulations to prevent marine pollution. Together with this, MOL is working as a Group on initiatives such as promoting technologies as well as research and development to reduce its environmental impact. [*Feature 2* ➔ P.10-11](#)

Atmospheric Impact

- CO₂ emissions (global warming)
- NO_x emissions (atmospheric pollution)
- SO_x emissions (atmospheric pollution)

- Fuel consumption reductions (ECO SAILING)
 - Technology development (*Senpaku ISHIN*, Power Assist Sail)
- [*CO₂ Emissions Countermeasures* ➔ P.26](#)



Ocean Impact

- Oil pollution (ocean pollution)
- On-board waste (ocean pollution)
- Ballast water (biodiversity)
- Organisms on vessels (biodiversity)

- Proper treatment
- [*Approaches to Marine Environmental Protection* ➔ P.28](#)

Service Indicators (KPI*) Show Environmental Impact, Transport Quality and Safe Operation

MOL discloses service indicators on its website based on the slogan "Count On MOL" to communicate its service quality using indicators that are of high interest to customers, including environmental impact reduction in containerships. In terms of CO₂ emissions, MOL had achieved a reduction of 25% compared with fiscal 2009 as of March 31, 2013 versus the 2015 reduction target of 10%. Please refer to <http://www.CountOnMOL.com> for details. *KPI: Key Performance Indicator

<Service Indicators>

Transport quality: on-time arrival performance for containerships

Environmental protection: reduction ratio of CO₂, NO_x, and SO_x emissions for containerships

Safe operation: number of long-time operational stoppages per year for three or more consecutive days for containerships

MOL constantly works to improve its KPIs to provide reliable, environmentally friendly services to customers.

Besides these KPIs, MOL releases information about CO₂ emissions and other environmental impacts through the frameworks of environmental groups, namely CCWG (Clean Cargo Working Group) and CSI (Clean Shipping Index). In this way, MOL makes the environmental impact of transporting customers' cargo more visible.

Approaches of the Ocean Shipping Industry to Preventing Air Pollution

■ Reducing CO₂ Emissions

The shipping business operates all over the world, and is therefore not subject to reduction targets under the Kyoto Protocol. Instead, the IMO has been looking at an international framework. As a result of the IMO's deliberations, the following three approaches are being used to reduce CO₂ emissions.

- (1) Technical measures such as promotion of "eco-ship" building (Technical measures)
- (2) Operational measures such as use of "eco-sailing" (Operational measures)
- (3) Economic measures such as use of market mechanisms to achieve reductions including bunker charges and carbon credit trading (Economic measures)

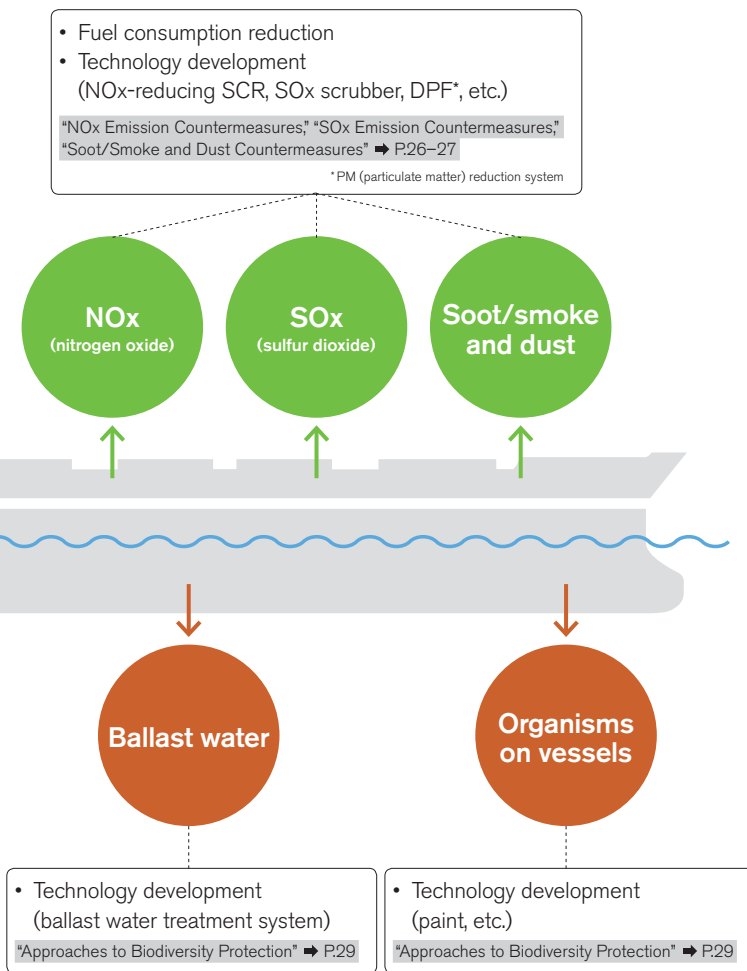
Regarding the technical and operational measures, the IMO has adopted convention revisions, which came into effect on January 1, 2013.

■ Compliance with NOx Reduction Regulations

The IMO has progressively regulated emissions of diesel engines (rated at 130 kW or higher) installed on vessels built on or after January 1, 2000. Under the third phase regulations, which are scheduled to come into effect on January 1, 2016 (*there are discussions to postpone implementation to 2021), companies will be obliged to cut NOx emissions by more than 80% from the Tier 1 emission standards.

■ Compliance with SOx Reduction Regulations

The IMO requires vessels operating in general seas to use bunker oil with a sulfur content of 3.5% or less. In 2020 or 2025 (*a review is scheduled for 2018), the level is expected to be reduced to 0.5% or less. Vessels operating in special Emission Control Areas (the Baltic Sea area, the North Sea area, the North America area extending 200 nautical miles from the coastline, and the United States Caribbean Sea area) are required to limit content to 1.0% or below, with this expected to be reduced further from 2015 to 0.1% or less.

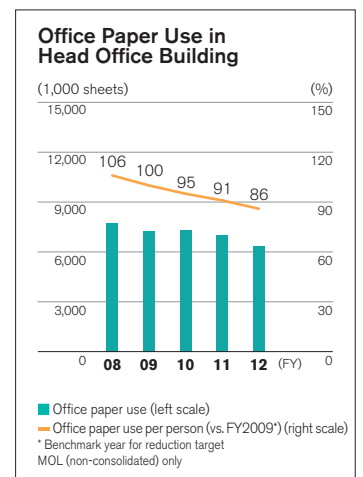
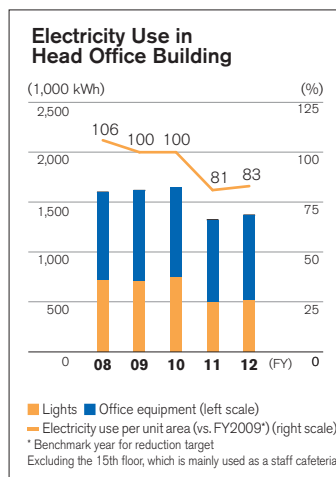


Measures at Offices



MOL Head Office Building

The MOL Group strives to reduce the environmental impact generated by office operations (office paper, electricity, and waste) as well as in sea and land transportation activities. The MOL Head Office Building continues to take steps to save electricity in response to electricity supply shortages in the wake of the Great East Japan Earthquake. These measures include suspending the use of one elevator, raising the air conditioner thermostat setting during summer, pre-cooling rooms as appropriate, shutting blinds, turning lights out at lunchtime, and removing some lighting.



1. Approaches to Tackling Global Warming and Preventing Air Pollution

Shipping is an energy efficient mode of transport. That said, because vessels use oil as fuel they inevitably emit CO₂ (carbon dioxide), which is a cause of global warming, as well as NO_x (nitrogen oxide), SO_x (sulfur oxide), soot and other emissions, which are linked to acid rain and atmospheric pollution. The MOL Group is fully aware of the effects on air quality associated with its business activities and thus proactively works to reduce the impact on an ongoing basis.

CO₂ Emissions Countermeasures

Environmental Technology R&D

MOL researches and develops natural energy, PBCF for improving vessel propulsion power, high-performance antifouling ship bottom paints, fuel additives, heat-shielding paint and other technologies.

"Feature 2" → P.10-11

■ Use of Renewable Energy

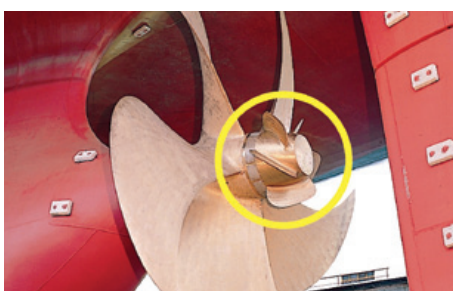
Besides the Power Assist Sail introduced in the environment feature of this report, the company is taking part in the "Wind Challenger Project" led by The University of Tokyo. This project is researching wind-propelled ships, which involves using sails as the main driving power, with a propulsion system in an auxiliary role. In addition to MOL, two other ocean shipping companies, Nippon Kaiji Kyokai, shipbuilders and other parties are participating in the project. Launched in September 2009, the project is now developing large-scale solid sail structures using composite materials, as well as examining particulars for vessel designs to develop, and developing fluid analysis techniques and weather routing methods.



An artist's impression of the "Wind Challenger Project"

■ PBCF (Propeller Boss Cap Fins)

Together with increasing transportation efficiency with larger ships, MOL is researching and developing technologies for improving propulsion efficiency. For instance, PBCF, jointly developed by MOL and other parties, improve propeller efficiency. PBCF produce a 4% to 5% improvement in fuel efficiency at the same speed, along with commensurate reductions in CO₂ emissions. These fins have been widely installed on MOL-operated vessels, as well as other vessels around the world. As of March 31, 2013, PBCF had been introduced to more than 2,350 vessels worldwide, including vessels scheduled to be built. MOL is currently developing new PBCF with AKISHIMA LABORATORIES (MITSUI ZOSEN) INC., which target a further



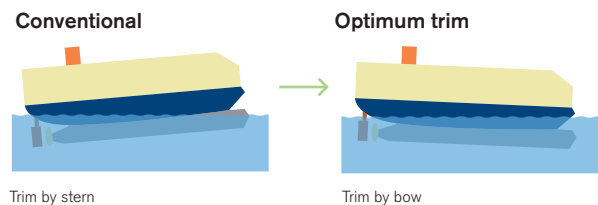
PBCF

improvement in fuel efficiency of another 1 percentage point. We aim to make these new fins commercially available as early as possible.

In addition to PBCF, MOL is conducting further R&D on high-performance antifouling ship bottom paints that improve vessels' fuel efficiency, and wind resistance-reducing vessel designs. Reducing resistance when navigating allows vessels to consume less fuel. MOL is also increasing transportation efficiency by introducing larger ships.

A Commitment to ECO SAILING

ECO SAILING is an approach to saving fuel and reducing environmental impact. Together with R&D on environmental technologies, we are also using operational measures to reduce fuel consumption. Specifically, we 1) decelerate to the most economical navigation speeds, 2) take advantage of weather and sea condition forecasts, 3) take the optimum trim, 4) select optimum routes, 5) reduce vessels' wetted surfaces, 6) optimize operation and maintenance of main engines, auxiliary equipment and other machinery, 7) develop energy efficient ship designs, and 8) equip vessels with Propeller Boss Cap Fins (PBCF).



NO_x Emission Countermeasures

NO_x is generated when nitrogen contained in fuel oil and air binds with oxygen in the air at high temperatures when fuel burns in the engine. NO_x emissions can be reduced to some degree by controlling combustion temperature in the engine.

MOL is promoting the adoption of electronically controlled engines that reduce NO_x, soot, and smoke by more effectively controlling the intake and exhaust valves. We are operating vessels featuring electronically controlled engines, beginning with the containership *MOL Creation*, which was delivered in 2007. By the end of March 2013, 27 vessels equipped with electronically controlled engines had been delivered.

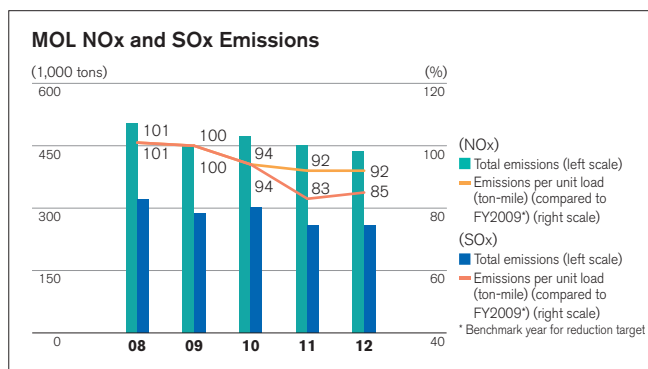
MOL has begun installing and testing a NO_x-reducing SCR system on MOL-operated vessels ahead of the enforcement of international regulations. "Feature 2" → P.10-11

SOx Emission Countermeasures

SOx is generated by burning fuel oil containing sulfur. To reduce the volume of SOx emissions, MOL has set a standard for the sulfur content in the fuel it procures that is stricter than the MARPOL Convention governing sulfur content in fuel oil.

Average Sulfur Content (%) in Marine Heavy Fuel Oil Used by MOL

FY2005	2.82%
FY2006	2.75%
FY2007	2.62%
FY2008	2.59%
FY2009	2.59%
FY2010	2.58%
FY2011	2.33%
FY2012	2.55%
MARPOL Convention (general sea areas)	3.50%

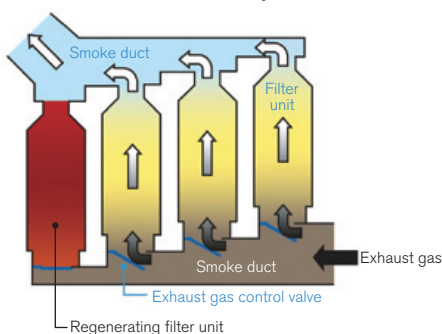


Soot/Smoke and Dust Countermeasures

Maintenance-free DPF

Exhaust gases emitted by ships contain diesel emitted particulate (DEP), and other particulate matter (PM) such as soot and dust. MOL has been developing a diesel particulate filter (DPF) for diesel engines on vessels that use marine heavy fuel oil together with Nippon Kaiji Kyokai (ClassNK) and Akasaka Diesels Limited. In 2010, we conducted a test installation and have begun trial operation of this system on the diesel engine used for power generation on an MOL Group-operated ocean-going vessel. This is the world's first installation of a self-regenerating DPF on an ocean-going vessel.

Exhaust Gas Purification System



This system incorporates a filter made from ceramic fibers. The filter collects particulate matter (PM) when exhaust gas goes through it. It can collect over 80% of PM produced, significantly reducing black smoke emissions.

Using Onshore Power Supplies While at Berth

Emissions of NOx, SOx, soot and smoke, and other pollutants can be significantly reduced while at berth by reducing the use of conventional diesel power generators and receiving electric power supply from onshore instead. A total of 16 MOL-operated containerships and tugboats operated by Group tugboat companies have been installing electric power supply systems connected to the local electricity grid to power ships at berth. In some ports, the shore power supply system is even used to power domestic carriers while at berth.

The *Emerald Ace*, which was delivered in 2012, achieves "zero emissions" by completely shutting off diesel power generators while at berth. ["Feature 2" P.10-11](#)



The containership *MOL Matrix* using an onshore power supply system

Eco Terminal

MOL and MOL Group company Utoc Corporation installed one of the largest solar power generation systems in Tokyo at the Tokyo International Container Terminal. The system generates 200 kW of power. In 2007, 1,200 solar panels were installed on the roofs of the gate building, where trailer trucks enter and exit the terminal, and the vehicle wash building. In fiscal 2012, this system generated approximately 236,000 kWh of power, which covered about 37% of the power needs for the control building. In addition, Utoc Corporation and Shosen Koun Co., Ltd. have also introduced hybrid transfer cranes at their container terminals in Tokyo and Kobe, respectively. These cranes consume approximately 40% less fuel than conventional ones.



Tokyo International Container Terminal

2. Approaches to Marine Environmental and Biodiversity Protection

By rigorously ensuring safe operation, the MOL Group is working to prevent marine pollution caused by marine accidents. At the same time, the Group is taking into consideration biodiversity and actively pushing ahead with measures to protect the seas and oceans, which are not only our place of business, but also the shared heritage of everyone on Earth.

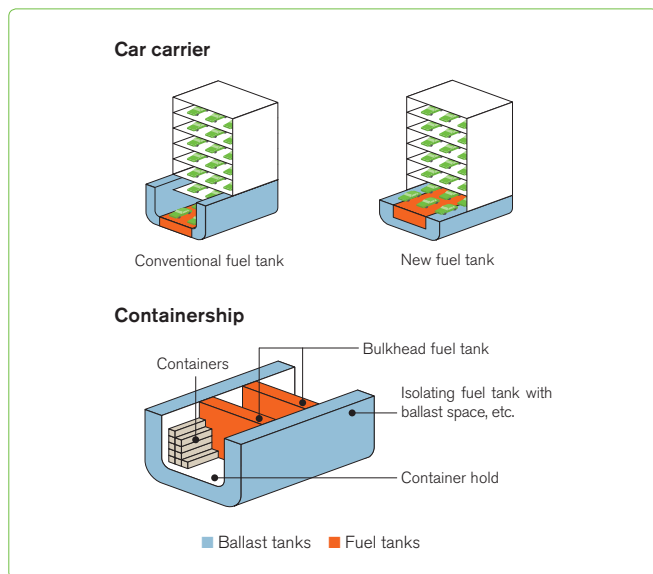
Approaches to Marine Environmental Protection

Double-Hull Tankers

We have adopted double-hull vessels in our tanker fleet in order to prevent spills of crude oil, petroleum products, and chemicals caused by a grounding or collision of vessels.

Double-Hull Fuel Tanks

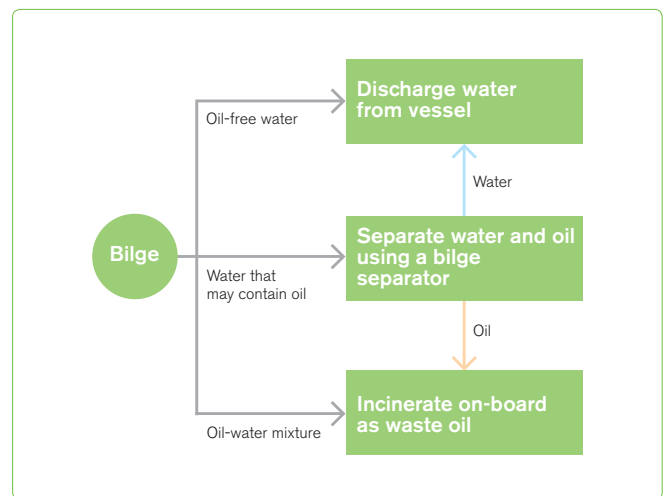
All vessels carry fuel for their voyages. Therefore, in the same way as with tankers, we have pushed the adoption of double-hull fuel tanks in order to reduce the risk of oil leaking into the ocean in the event of an accident.



Processing of On-board Waste, Waste Oil, and Bilge

- On a vessel, which is also a home for seafarers, the same type of garbage as a household, plus various waste unique to ships, such as loading and packing materials, is generated. On our operated vessels, based on the MARPOL Convention, we draw up on-board waste management plans requiring separation, collection, storage and disposal of on-board waste. Waste management officers supervise this process, and work to build thorough awareness of the plan among officers and crew members. Food waste and other biodegradable trash are ground into small particles and disposed of in specified areas of the open sea, and plastic waste is disposed of appropriately on land.
- Fuel oil for vessels contains many impurities. Water and other contaminants are extracted by pre-treatment before the fuel is used in engines and other equipment. Waste oil containing water and impurities from pre-treatment is heated in a special tank to remove water, and then incinerated in conformity with environmental regulations.

- In a vessel's engine room, bilge water (waste water containing oil) is generated by leakage from seawater pipes and equipment and during maintenance work. We have introduced a bilge source separation system that categorizes bilge water in three stages according to the presence of oil, and collects and disposes of it properly.



Approaches to Ship Recycling

Aging vessels must often be scrapped in the interest of safe operation and protection of the marine environment. In May 2009, the IMO adopted the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009, and is proceeding with ratification toward its enforcement, with the aim of preventing problems related to the scrapping of vessels. This convention prohibits and restricts the fitting and use of treaty-specified hazardous materials, and requires vessels to prepare, record and update inventory lists showing the quantity and location of hazardous materials on ships over a ship's lifetime. These lists must be handed over to the recycling facility. The MOL Group has been quick to initiate measures to prepare such lists, and at the same time is working to ensure that the convention is understood, as well as to share information regarding recycling, including the status of recycling yards, so as to facilitate a smooth response to enforcement of the convention.

When selling a ship on the assumption that it will be scrapped, we select the recycling yard after checking various matters such as whether the yard implements environmental measures in conformity with ISO 14001 (or the environmental management equivalent), uses scrapping methods and procedures that are sufficiently safe for the environment and personnel, and takes into consideration human rights. We also check certification and conduct site inspections.

Approaches to Biodiversity Protection

The MOL Group's activities could have an impact on biodiversity in the following ways:

1. Cross-border transportation of alien species via ship ballast water, and organisms attached to vessels and containers
2. Impact on eco-system of antifouling ship bottom paints
3. Impact on eco-system of buildings and structures on coasts
4. Impact on eco-system of paper, stationery, etc., used in offices

MOL works to develop and adopt technologies to minimize the impact of vessels on biodiversity. Furthermore, when constructing buildings on shores or the coast, MOL conducts impact assessments with project partners. Moreover, MOL rigorously conducts green procurement and recycling in offices. To raise the awareness of employees regarding protection of biodiversity and the natural environment, MOL makes use of in-house communications tools and participates in activities that protect the natural environment.

Ballast Water Management

Ballast water is discharged when cargo is loaded. It may have an impact on local ecosystems by introducing foreign marine organisms from another location as well as on the preservation and sustainable use of biodiversity. This potential cross-border transportation of foreign marine organisms in ballast water has been highlighted as an international issue since the late 1980s. As a result, a treaty on ballast water management was adopted by the IMO in 2004, and work is proceeding on ratification ahead of enforcement. We have developed a ballast water purification system and are conducting on-board demonstrations in cooperation with manufacturers and other concerned parties.

Development and Installation of Ballast Water Treatment System for Containerships

In January 2013, MOL announced that the company acquired approval in concept for installation of a packaged container ballast water treatment system that can fit in a vessel's cargo hold. This system was jointly developed with Mitsubishi Heavy Industries, Ltd. (MHI) and marks Japan's first approval of such a system by ClassNK.

The system is packaged in a 40-foot container (about 12 m long) with electrical equipment. Ease of maintenance and accessibility were considered for this containerized design. This design means that installation time is expected to be reduced by an estimated seven days, compared to installing a system in the engine room. MOL and MHI will install an experimental system on the MOL-owned container-ship *MOL Competence*.



The installed packaged container ballast water treatment system

Ballast Water Treatment System Installed on a VLCC

In April 2013, MOL announced completion of work to install a ballast water treatment system on a very large crude oil carrier (VLCC). MOL is the first Japanese shipping company to install such a system on an existing VLCC. In case of an oil tanker, most of the ballast water treatment system is required to be installed in the pump room, which is very narrow and small, and thus requires very high levels of safety and process management.

Organisms on Vessels

Marine organisms attaching to the bottom of vessels due to the fouling of ship bottom paint and crossing borders is also an issue in the industry. The IMO is discussing guidelines to prevent this. MOL is expressing its views on practicality and other aspects through industry groups to contribute to the process of creating international guidelines.

Participation in "Nippon Keidanren's Declaration of Biodiversity" as a Promotion Partner

MOL supports and adheres to the Declaration of Biodiversity by the Japan Business Federation (Nippon Keidanren), and participates as a "Promotion Partner" to clarify this commitment internally and publicly.

Nippon Keidanren's Declaration of Biodiversity (Summary)

1. Appreciate nature's gifts and aim for corporate activities in harmony with the natural environment
2. Act from a global perspective on the biodiversity crisis
3. Act voluntarily and steadily to contribute to biodiversity
4. Promote corporate management for sustainable resource use
5. Create an industry, lifestyle and culture that will learn from biodiversity
6. Collaborate with relevant international and national organizations
7. Spearhead activities to build a society that will nurture biodiversity

Environmental Education

We issue a newsletter called *Monthly Environment* containing the latest news concerning global environmental protection via the MOL Group's intranet site. In addition, we hold meetings for employees to learn about the environment, and also provide E-learning-based environmental education. Furthermore, through beach cleanups and other activities that protect the natural environment, employee awareness is increased. Looking ahead, our aim is to synergistically raise both awareness and knowledge concerning the environment and ensure this is applied in day-to-day activities. From this perspective, we intend to continuously enhance and increase environmental education in the company.

Relationships with Stakeholders

The MOL Group aims to build sound relationships of trust and support through dialogue with stakeholders. It is working to increase corporate value to remain a group trusted and selected by stakeholders by meeting their needs and to grow sustainably with society. ["Communication Tools" → P.02](#)



Communication with Customers

Provision of high-quality services based on safe operation and environmental awareness

We meet and respond to our customers' needs and to this new era, and enhance safety and reliability as we work to improve service quality. We determine customer needs through our daily sales and marketing activities, and regular meetings where we exchange opinions. These activities are the basis for providing safe, environmentally friendly services.

Communication with Shareholders and Investors

Timely, accurate and fair information disclosure, and cultivation of confidence in MOL's sustainable growth

In addition to answering shareholders' and investors' questions, we explain our direction to elicit understanding of MOL's management. Besides disseminating information mainly on our website, we hold the Annual General Meeting of Shareholders, quarterly results presentations and briefing sessions for investors, creating many opportunities to engage in dialogue with shareholders and investors.

Communication with Business Partners

Fulfilling our social responsibility and achieving sustainable growth together with fair trade

Through fair trade with business partners, we establish relationships of trust as a sound partner providing high-quality services to customers. In 2012, we formulated the MOL Group Basic Procurement Policy, with the aim of contributing towards the realization of sustainable societies together with our business partners, while gaining their understanding.

["MOL Group Basic Procurement Policy" → P.13](#)

Communication with Public Organizations

Strengthening governance and compliance

We comply with laws and regulations as a good corporate citizen, and understand and respect our obligations to pay taxes, with the aim of contributing to the smooth operation of national and local governments and to the promotion of the marine industry.

Communication with Employees

Creating a positive work environment where diverse individuals can demonstrate their potential

We work to create workplaces that strike a good work-life balance and where employees can demonstrate their full potential and feel proud of their business. To this end, in addition to establishing and enhancing training programs, occupational health and safety, and health management systems, we engage in regular dialogue with employees.

Communication with Communities, NPOs and NGOs

Contributing to communities

As a group developing business globally, engaging in dialogue with communities, responding to their needs and contributing to them in association with NPOs and NGOs is crucial for developing sustainably together with society. We contribute to communities in various ways by leveraging our resources and global network. Examples include providing support after disasters, transporting relief supplies, supporting NPOs and NGOs, hosting tours of the Group's facilities, and conducting beach cleanups. In addition, we help solve issues facing the international community through initiatives to reduce environment impact.

Social Contribution Activities

As a company that aims to grow sustainably with society, we actively engage across the MOL Group in social contribution activities that only a shipping company with a global network can take on. These activities are guided by the three principles below.

Principles of MOL's Social Contribution Activities

Principle I

Contribute to the United Nations Millennium Development Goals* as a company growing in step with the global economy and social development.

Principle II

Contribute to protecting biodiversity and preserving nature as a company that impacts the environment to an extent and as a company that does business on the ocean, a rich repository of living organisms.

Principle III

Contribute to local communities as a good corporate citizen.

* United Nations Millennium Development Goals

One of the common frameworks that integrates the Millennium Declaration adopted at the United Nations Millennium Summit held in September 2000, and the International Development Goals that were adopted at major international conferences and summits in the 1990s. The Millennium Development Goals consist of specific numerical targets to be achieved by 2015 in eight fields, including "achieve universal primary education" and "reduce child mortality."

Principle I

Somalia Support Project

Frequent incidents of piracy in the Indian Ocean off Somalia pose a serious threat to global shipping. MOL and six other companies* reached an agreement to jointly address the need to stabilize Somalia. They announced plans to provide US\$1 million in funding to the Somalia Support Project, run by the United Nations Development Programme (UNDP).

This industry contribution will support long-term job creation and skill development for the younger generation in Somalia. By creating opportunities for stable employment, the program contributes to safe operation in the seas off Somalia.

* Shell, BP, Maersk, Stena, NYK and "K" Line



Principle II

Beach Cleanups in Kamakura, Odaiba, and Kashima

MOL has been conducting beach cleanups continuously since 2000. In addition to Odaiba Seaside Park in Tokyo and Yuigahama Beach in Kamakura, Kanagawa Prefecture, MOL cleaned up the Kashima Nada beach in Ibaraki Prefecture in fiscal 2012. As executives and employees take part in this activity, it raises their awareness of environmental protection and fosters a safety culture.



Principle III

Daycare Center Opened in the Philippines

In November 2012, MOL opened a daycare center in Navotas in the Philippines. This facility will provide education for pre-school children, health checkups, meals for underprivileged people, and other services. This program was launched based on a proposal from Philippines-based company Magsaysay MOL Marine, Inc., following the collection of "Social Contribution Activity Proposals" from MOL Group companies in fiscal 2010. More than half of MOL's seafarers come from the Philippines, and we believe that this daycare center will deepen ties with the country.



The Cruise Ship *Nippon Maru* Supports the Recovery of Disaster-hit Regions

The MOL Group has provided support for recovery and rebuilding from the Great East Japan Earthquake. As one example, in September 2012 Mitsui O.S.K. Passenger Line, Ltd. offered tours of the *Nippon Maru* to support recovery in the towns of Ishinomaki and Onagawa. We supported



the shopping precincts and residents of these towns as they worked to get back on their feet.

Other Activities in Fiscal 2012

- Soap Collection Project for Uganda
- Transport of mobile library vehicles to South Africa
- Transport of recycled books to South Africa
- Transport of recycled children's shoes to Zambia and donation of containers
- Transport of medical vehicles to Cambodia
- Transport of wheelchairs to Vietnam
- Assistance in marine and hydrographic research
- Tours of Group facilities

The CSR and Environment Committee deliberates and decides on the company's policy on social contribution activities and details (including budget) every year after evaluating activities conducted in the previous fiscal year.

In fiscal 2013, the committee has decided that MOL will focus on activities more closely related to the company's core business, based on the three principles above.

Please visit MOL's website for activity details and information about other activities. <http://www.mol.co.jp/csr-e/society/index.html>

Creating a Positive Working Environment

The MOL Group is enhancing recruitment activities, training programs and various other systems with the aim of ensuring the growth of both the MOL Group and individual employees and seafarers. The Group also endeavors to enhance the health of employees and seafarers, and develop workplaces that instill peace of mind in employees in line with each individual's stage in life. Please read this section together with the human resource data we prepared for fiscal 2012. "Human Resource Data" → P.35

Activities to Nurture Global Human Resources

In recruitment, MOL conducts fair recruitment activities to recruit people who have the qualities the company is looking for.

Regarding human resource development, MOL endeavors to develop "people who have self-reliance and self-responsibility and create new value in the global marketplace," and "marine technical specialists with world-class technical capabilities who can contribute to MOL becoming the world leader in safe operation."

Development of Land-based Staff

MOL regards an employee's first 10 years in the company as a cultivation period for becoming a marine transport professional. Training falls into two broad categories: on-the-job training (OJT) and off-the-job training (OFF-JT). The OJT system develops employees by exposing them to various jobs. Meanwhile, OFF-JT includes position-specific training, overseas training and onboard training to gain experience on the frontlines of our business. In addition, for mid-level and higher-level employees, we run management skill-enhancement training and "MOL Group Management Schools" to develop future leaders of the MOL Group.



Development of Seafarers

MOL regards a seafarer's first 10 years or so in the company as a cultivation period for becoming a marine technical professional. During this period, seafarers mainly serve aboard ships, accumulating competence for future roles as captains and chief engineers. These employees may then either take up positions where they utilize their expertise to support vessel operations and seafarer management and provide technical support for cargo handling, or serve aboard various types of vessels. In this way, seafarers build up experience and expertise as all-around players. (MOL employs and promotes skilled individuals irrespective of nationality as seafarers on its vessels.) "Feature 1" → P.06-07

Occupational Health and Safety Measures

In addition to complying with laws and regulations, we work to create a positive working environment and promote health management so that employees and seafarers can work energetically, and in good health, both physically and mentally.

Systems and Structures for Managing Land-based Employee Health and Enhancing Working Environments

- Appoint a person responsible for promoting health management
- Implement yearly medical check-ups and follow-up
- Implement medical exams before, during and after overseas postings for employees working overseas
- Implement regular mental health consultations at key worksites in Japan
- Implement online mental health self-evaluation
- Conduct mental health seminars for managers, including those at MOL Group companies
- Accept various consultations in the Counseling and Aid Center in the Human Resources Division, in the head office
- Introduce safety confirmation system to confirm safety in a disaster

VOICES from the Forefront

Akihiko Ono

Industrial Physician



I help manage the health of all employees including seafarers, with the aim of creating a highly productive workplace underpinned by healthy employees. Besides providing advice for maintaining good health based on the results of health examinations, I come up with initiatives after analyzing the results of health examinations and train management regarding their obligation to foster a safe and healthy workplace.

Maintaining a Good Work Environment for Seafarers

We try to create working conditions in which our multinational workforce of seafarers can work safely and with peace of mind. We also care for seafarers' families.

- MOL is running safety training programs and ceaselessly improving working environments with the aim of eradicating work-related accidents (fatalities and lost time injuries). On August 20, 2013, the Maritime Labor Convention (MLC) 2006 imposing strict requirements to manage onboard work came into force. Having made preparations at an early stage, MOL is complying smoothly with this convention, as it works to maintain good working environments for seafarers.

"Hazard Experience Training Sessions" → P.09

- MOL conducts regular health checks and mental health consultations for seafarers. At the same time, MOL cares for seafarers and their families, who must spend considerable time apart, and works to improve living conditions aboard vessels. (Initiatives include promotion of onboard internet access and Family Gatherings).



This Family Gathering in the Philippines was attended by more than 4,000 seafarers and their families.

Diversity and Work-Life Balance Initiatives

MOL operates various systems with the aim of utilizing diverse human resources and offering employees a variety of working styles, so that employees are much more motivated and can concentrate on work.

Child-care and Nursing Care Support Systems

	System	Application Period and Details
Childbirth	Pre- and Post-Childbirth Leave	8 weeks of leave before and after childbirth (Of those weeks, 6 weeks are paid)
Child-care	Child-care Leave Short-time Shift	Until a child becomes 2 years old 1 hour shorter work day
Nursing care	Nursing care Leave Short-time shift Special working arrangements	Up to 2 years leave 1 hour shorter work day Flexible working hours

Continuous Employment System

This is a re-employment system for workers who have reached mandatory retirement age. Retirees who apply are re-employed after retirement.

Promotion of Female Employee Performance

MOL is enhancing systems such as child-care support to help female employees participate more fully. We are also enhancing support for career development. Female managers also run "Women's Initiatives" such as holding seminars to increase motivation, and creating networks for women managers, including those at Group companies.

Employment of People with Disabilities

The employment ratio for people with disabilities was 1.89% as of March 31, 2013. We will work to raise this to more than 2% in line with legislative amendments.

"Refresh" Leave

Employees are allocated extra holidays after 15 years and 25 years of continuous service.

Meeting the Needs of Expatriate Staff and Locally-hired Employees

The company appoints a person to support various aspects of the lives of expatriate employees and their families, including medical care, children's education, and safety in the nations where they work. And we have hired about 3,600 national staff at local subsidiaries all over the world, contributing to the growth of local economies.



People of various nationalities work at MOL's local subsidiaries around the world.

Human Rights Education

MOL aims to be an organization that respects human rights and is rich in diversity. To this end, MOL sees human rights education as a core and important activity. While there are many issues surrounding the subject of human rights, MOL aims to foster a workplace environment where all corporate officers and employees share an understanding of the need for mutual respect and can carry out their work with a positive frame of mind. These efforts are designed to eliminate human rights breaches or discrimination caused by mistaken beliefs founded on baseless biases or delusions.

Basic Stance

MOL works to raise and entrench human rights awareness throughout the whole Group by ensuring awareness of the principles of important international human rights regulations such as the International Covenants on Human Rights. As one effort, MOL is participating in the UN Global Compact and is supporting and practicing universal principles regarding human rights and labor. Furthermore, MOL's Rules of Conduct state that the company will respect human rights and will not engage in discrimination and harassment.

Educational Activities

- Every year, MOL conducts training based on various human rights themes by position, including new employees. In addition, the company disseminates information about human rights to MOL and the MOL Group to increase employee familiarity with the subject.
- MOL reflects insights obtained from activities as an active member of a human rights awareness group in internal training. We also collect "Human Rights Enlightenment Slogans" from MOL and MOL Group employees and their families and give internal awards to the best entries to stimulate awareness of treating people with respect.

Relationships with Labor Unions

Land-based employees belong to the Mitsui O.S.K. Lines Labor Union, and seafarers employed by MOL are members of the All Japan Seamen's Union. Both unions enjoy good and sound relations with MOL management.

VOICES from the Forefront

Yoshitaka Yamazu

Assistant Manager, Human Resources Planning Group and Global Human Resources, Human Resources Division

From April I took one month's child-care leave, taking over from my wife who returned to work after her child-care leave period was up. My boss was very supportive about me taking the leave. The skills I developed having to care for a baby are helping a lot as my wife and I balance work and child-care responsibilities. I recommend male employees consider taking child-care leave because you can take it in various ways and periods. For example, you can choose to take leave after your wife returns to work or straight after she leaves hospital.



MOL Group's Environmental Data

Energy Consumption

	Unit	FY2011	FY2012
Fuel oil (C oil)	thousand tons	6,063	5,885
MOL vessels	thousand tons	5,291	5,118
Group company vessels	thousand tons	772	767
Diesel oil (A oil)	thousand tons	112	114
MOL vessels	thousand tons	71	72
Group company vessels	thousand tons	41	42
Electricity	thousand kWh	96,609	94,027
Municipal gas	thousand m ³	1,598	1,530
Energy consumption	thousand GJ	269,049	261,293

C oil and A oil: Mainly used as fuel for vessels
 Energy consumption: The energy equivalent of heat originated from C oil, A oil, electricity, municipal gas and other energy consumed

Greenhouse Gas Emissions

	Unit	FY2011	FY2012
Scope 1: CO ₂ emissions	thousand tons	19,435	18,876
MOL vessels	thousand tons	16,866	16,322
Group company vessels	thousand tons	2,529	2,516
Scope 2: CO ₂ emissions	thousand tons	52	52
Scope 3: CO ₂ emissions	thousand tons	–	10,900

Scope 1: CO₂ emissions originating mainly from A oil and C oil used as fuel in vessels
 Scope 2: CO₂ emissions originating mainly from electricity consumption
 Scope 3: Estimated value of CO₂ emissions originating mainly from A oil and C oil used as fuel in vessels MOL has chartered out to other companies; calculated from fiscal 2012

NOx and SOx Emissions

	Unit	FY2011	FY2012
NOx emissions	thousand tons	519	504
SOx emissions	thousand tons	309	284

Waste and Other Resources

	Unit	FY2011	FY2012
Waste	tons	296,220	247,390
Recycled	tons	295,301	246,490
Non-recycled	tons	919	900
Recycling rate (MOL Head Office Building)	%	69	68
Water	tons	683,241	686,964
Tap water	tons	683,241	686,964
River water	tons	–	–
Seawater	tons	–	–
Office paper	thousand sheets	66,414	78,364

Waste: Mainly vessels sold to be scrapped; recycled at scrapping yards

Water: The volume of water used in offices. Most of the water used in vessels is made from seawater and recycled

(Office paper increased due to an increase in the number of offices subject to data collation)

ECO SAILING and Energy Conservation Initiatives

	Unit	FY2011	FY2012
Ocean-going vessels			
CO ₂ emissions per unit load (ton-mile)	FY2009=100	93.3	92.5
MOL	FY2009=100	93.3	92.7
Domestic coastal vessels			
Unit energy consumption	FY2009=100	99.3	99.4
Onshore offices			
Unit energy consumption (MOL, Daibiru, Shosen Koun)	FY2009=100	87.2	81.7
Solar power generation	thousand kWh	222	255
Operated vessel environmental measures (MOL)			
Electronically controlled engines	vessels (cumulative)	26	27
New type of low-friction paint	vessels	19	24
PBCF and other devices to improve propeller efficiency	vessels	29	30
Optimum trim system	vessels (cumulative)	20	20
Vessels using solar power generation	vessels (cumulative)	2	3
Onshore power supply system (containerships)	vessels (cumulative)	13	16

(Ocean-going vessels improved energy conservation due to ECO SAILING, such as reduced navigation speeds)

A Commitment to ECO SAILING → P.26

(Onshore offices achieved a substantial decrease in energy consumption compared to fiscal 2009 due to rigorous steps to save power)

Initiatives to Reduce Environmental Impact → P.22–29

Data scope

*MOL Group consolidated subsidiaries in Japan and overseas. Excludes some small offices

*Noted areas such as "(MOL)" are limited to that scope

Human Resource Data

(As of March 31, 2013)

Employees		FY2010		FY2011		FY2012	
Number of employees*		Land	Sea	Land	Sea	Land	Sea
	Male	481	287	489	277	469	283
	Female	163	5	169	5	168	6
	Total	644	292	658	282	637	289
Number of employees by position*	Group leaders and above	221	114	212	121	210	122
	Male	215	114	206	121	203	122
	Female	6	0	6	0	7	0
	Managers	195	102	191	98	184	106
	Male	187	102	183	98	174	106
	Female	8	0	8	0	10	0
	Below manager level	477	261	481	266	474	262
	Male	282	254	282	258	280	254
	Female	195	7	199	8	194	8
	Total	893	477	884	485	868	490
Ratio of females in managerial positions* (%)		3.4	0	3.5	0	4.3	0
New hires	Male	20	23	18	20	19	21
	Female	5	0	7	2	7	1
	Total	25	23	25	22	26	22
Ratio of employees with disabilities (%)		1.6		1.8		1.9	
Average years of continuous service*		15.7	11.6	15.8	11.6	15.5	11.7
Job turnover rate within three years of continuous service* (%)		0.8	4.0	0.0	2.9	0.0	0.0

* Excludes loaned employees, contract employees and part-timers, etc.

Employee Support Systems		FY2010		FY2011		FY2012	
Number of annual leave days taken** (including summer vacation)	Days	12.4		12.1		11.5	
	Percentage (%)	45.9		44.8		43.3	
Child-care leave system	Number of users (males shown in brackets)	7 (0)		7 (0)		2 (0)	
	Usage rate (%)	100		100		100	
Maternity leave (pre- and post-childbirth)	Number of employees	4		5		2	
	Ratio (%)	100		100		100	
Working mothers*	Number	33		38		42	
Paternity leave usage** <small>Usage data disclosed since fiscal 2012</small>	Number of takers					26	
	Ratio (%)					70	
Nursing care leave system*	Number of users	0		0		0	
Re-employment system for mandatory retirees*	Number of employees	2		0		2	

* Excludes loaned employees, contract employees and part-timers, etc.

** Excludes personnel working onboard, loaned employees, contract employees and part-timers, etc.

Industrial Accidents (land)		FY2010		FY2011		FY2012	
Industrial accidents (excludes commuting accidents)	Number	0		0		2	
Industrial accident leave	Number of days	0		0		1	

*Measures to Ensure Safe Operations" → P.18-19

MOL Group Employees

Number of Employees	FY2010		FY2011		FY2012	
Bulkships	1,273	(142)	1,249	(134)	1,277	(129)
Containerships	4,446	(492)	4,533	(501)	4,484	(385)
Ferry & Domestic Transport	1,008	(125)	937	(96)	919	(112)
Associated Businesses	1,977	(1,436)	1,984	(1,479)	2,103	(1,504)
Others	436	(66)	427	(68)	384	(67)
Company-wide (common)	298	(70)	301	(77)	298	(74)
Total	9,438	(2,331)	9,431	(2,355)	9,465	(2,271)

(1) The number of employees includes the entire labor force, and the approximate average number of temporary employees is indicated in parentheses.

(2) The employees indicated as Company-wide (common) belong to administrative departments, which cannot be classified in any specific segment.

Third-Party Opinion



Eiichiro Adachi

Counselor
The Japan Research Institute, Limited (JRI)

Career Summary:
Currently heads the ESG Research Center at JRI, after working in its Management Consulting Department and Technology Research Department. Primarily involved in industry research and corporate assessments from the standpoint of CSR.

The growing impact of environmental and social factors on corporate management in the shipping industry has garnered attention in recent years. Industry analysis has focused largely on market risk, but going forward more stringent environmental regulations are expected to be a new cost factor. The extent of the impact of climate change and regional disputes on the safety of vessel operations also appears to be increasing. It is even possible that changes in global energy supply and demand will lead to major changes in both facility needs (ships) and service needs (operations) related to the question of what to transport.

At the same time, a path is also being cleared for companies to develop a competitive advantage from environmental and social factors. If a company can gain an advantage over other companies in its ability to transport safely, transport with minimal environmental impact, and accommodate new types of cargo, and so forth, there is an increasing likelihood that it will translate into higher corporate value.

I reviewed the report on this premise. First, in the Top Message section, it is evident that safe operation and environmental protection are clearly recognized as important issues. And in the two features as well, the initiatives of the MOL Group are explained in detail, which helped deepen my understanding of them.

With regard to safe operation, the report would have been better if the following had been integrated: 1) the report's recognition of current conditions and issues and its discussion of them, 2) the fact that initiatives are organized both from a facilities standpoint and an operations standpoint, and 3) the effort given to integrate these with information

on a broad range of risk measures, including the Somalia Support Project. With respect to environmental protection, I wanted to know about: 1) the acknowledgement of environmental regulations and the real risks associated with climate change, 2) the focus on increased environmental awareness among cargo owners and environmental protection as business opportunities, and 3) the MOL Group's assessment of its own relative achievements. Globally, there has been movement toward actively placing the opening of an Arctic Sea route in the context of environmental protection, and I would like to have learned the thinking of the MOL Group on this issue as well.

In terms of specifics, there was focus on the fact that momentum exists even in the shipping industry to recognize the impact that operations exert down the entire value chain. I give high marks for the report's disclosure of greenhouse gas emissions in Scope 3, which includes emissions from charter ships, initiatives related to vessel procurement, and resource consumption, including ships sold on the presumption that they will be scrapped.

I also think there was substantial improvement in the disclosure of human resources data compared to the previous fiscal year. To take it a step further, I think in general that a dynamic workplace with talented and engaged people is the foundation for excellence in safe operations and environmental protection. I hope to see integrated disclosure going forward.

This year's report was issued during the process of identifying the cause of a maritime accident that occurred in June 2013 involving the containership *MOL Comfort*. I have much respect for the fact that the latest details have been constantly posted on MOL's website and that the decision was made to implement extra preventive measures for sister vessels. It is expected to take some time for the cause of the accident to be identified, but I hope that measures to prevent reoccurrence will be considered from all angles. I would ask that MOL include in the next issue a candid and open report on the accident that includes how it has instilled a crisis mentality in the company, how it has sparked debate, and how initiatives have evolved.

Addressing the Challenge

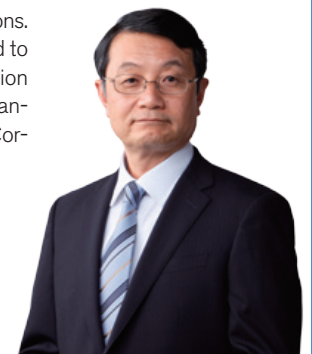
Thank you for your invaluable feedback on our Environmental and Social Report. This year's report was organized to improve both the quality and quantity of information disclosed in order to meet the expectations of stakeholders. We appreciate your positive assessment of our recognition of the importance of safe operation and environmental protection, our corresponding initiatives in these areas, and the improvements we have made to environmental data in Scope 3 and other areas, and human resource data. In next year's report, as you have suggested, we intend to enhance initiatives not only in safe operation and environmental protection, but also with respect to further cultivating a dynamic workplace with motivated and talented people, integrate individual measures, and convey them in a way that makes their interconnection more easily understood. Regarding the marine accident involving *MOL Comfort*, we respect the importance of constant disclosure of the latest information on our website and have decided to implement extra preventive measures for sister vessels. We intend to continue to disclose information on the reoccurrence

prevention measures you have indicated and other subsequent initiatives to enable us to earn the trust of all customers, business partners, shareholders and investors, local communities and other stakeholders that have been affected by the incident.

As you have pointed out, in the shipping industry environmental and social factors are having an increasingly large impact on company operations. Given these developments, we intend to continue actively disclosing information and promoting highly transparent management rooted in the MOL Group Corporate Principles.

Junichiro Ikeda

Director, Senior Managing Executive Officer
Chairman of CSR and Environment Committee



External Recognition

General CSR Activities-Related (Including Socially Responsible Investment (SRI) Indexes)

Selection as a Component in Dow Jones Sustainability Indices

Since 2003, MOL has been included in the Dow Jones Sustainability Index (DJSI) Asia Pacific. This designation is reserved for companies meeting international criteria for social responsibility in areas such as environmental protection, human rights, corporate governance, and relationships with stakeholders. The component companies are also expected to demonstrate sustainable business practices. >> **A**



Selection as a Component in FTSE4Good Index

FTSE is a global index company owned by the London Stock Exchange. Since 2003, FTSE has included MOL in one of its major indices, the FTSE4Good Global Index, which is a socially responsible investment index. >> **B**



Morningstar Socially Responsible Investment Index (MS-SRI)

MOL has been included in the MS-SRI since 2003 for its superior social responsibility. The MS-SRI is composed of stocks that have been selected by Morningstar Japan K.K.. >> **C**



Global 100 Most Sustainable Corporations in the World

In 2011, MOL was included among the "Global 100 Most Sustainable Corporations in the World," a listing announced each year by Canadian publishing company Corporate Knights Inc.

SMBC Sustainability Assessment Loan

In 2013, MOL was the first company to receive a Sumitomo Mitsui Banking Corporation (SMBC) Sustainability Assessment Loan. MOL earned a high rating for timely and accurate disclosure of ESG issues and for its initiatives on sustainability. >> **D**



IR Related

Japan Investor Relations Association

MOL's IR activities were recognized with the IR Prime Business Award Grand Prix in 2005. We were once again recognized with the IR Prime Business Award in 2008 after being ineligible for the award for two years as a past winner under the award regulations.

Nikkei Award Sponsored by Nikkei Inc.

MOL's Annual Report won the fiscal 2004 best award. This was followed by excellence awards in fiscal 2005 and fiscal 2006. We have also won prizes in this annual competition on five other occasions.

Recognition from the Tokyo Stock Exchange (TSE)

MOL was selected as one of the recipients of the TSE's FY2009 Disclosure Award. The TSE recognized the fullness of MOL's disclosure.

Internet IR Commendation Award

MOL received the 2012 Internet IR Commendation Award from Daiwa Investor Relations Co., Ltd. (Daiwa IR). >> **E**



Safe Operation (Including Recognition of Seafarer Training Program)

Certification from DNV for LNG Carrier Seafarer Training Program

MOL's LNG Carrier Standard Training Course, which is run in Japan and overseas, acquired certification in 2007 from Det Norske Veritas AS (DNV) for compliance with the LNG carrier crew ability standards advocated by SIGTTO*. >> **F**

* Society of International Gas Tanker & Terminal Operators Ltd.

Certification from DNV for Seafarer Education and Training Management Program

MOL obtained certification in 2012 in its tanker and LNG carrier operations for its independent seafarer education and training program by DNV. The program received certification for compliance with the Competence Management System (CMS), recognizing its effectiveness. >> **G**



Environment Related

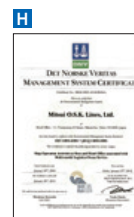
ISO 14001 Certification

In 2003, MOL acquired ISO 14001 certification, an international standard for environmental management.

Scope: Ship operation activities at sites and Head Office associated with multi-modal logistics/ocean services (except charter vessels on contracts of one year or less) >> **H**

DBJ Environmental Ratings

In 2011, MOL became the first company in the ocean shipping industry to acquire the "DBJ Environmental Ratings" from the Development Bank of Japan Inc. (DBJ). MOL received the highest rating from DBJ, which cited MOL's "particularly forward-looking approaches to environmental consciousness." >> **I**



Carbon Disclosure Leadership Index Commendation

In 2012, MOL was commended by CDP, an international not-for-profit organization, as a leader in the disclosure of greenhouse gas emissions and strategies for climate change, based on high scores in the CDP's analysis of its approaches to information disclosure.

SMBC Environmental Assessment Loan

In 2012, MOL acquired the top rating for a Sumitomo Mitsui Banking Corporation (SMBC) Environmental Assessment Loan, earning recognition as a company whose corporate management reflects deep concern for the environment. (In 2009, MOL acquired a high rating.) >> **J**





Mitsui O.S.K. Lines

<http://www.mol.co.jp>

Corporate Profile (As of March 31, 2013)

Name:	Mitsui O.S.K. Lines, Ltd.
President:	Koichi Muto
Shareholders' equity:	¥535.4 billion
Number of shares issued:	1,206,286,115
Number of shareholders:	120,874
Share listings:	Tokyo, Osaka and Nagoya stock exchanges
Business:	Multi-modal transport mainly by ocean-going vessels
Number of MOL Group employees:	9,465 (The parent company and consolidated subsidiaries)
Number of Group companies:	414 (The parent company and consolidated subsidiaries)
Group fleet:	913 vessels, 63,640 thousand DWT
Consolidated subsidiaries in Japan:	60
Overseas network:	41 nations and regions
Head Office:	1-1, Toranomom 2-chome, Minato-ku, Tokyo 105-8688, Japan
Branches and offices in Japan:	Nagoya, Kansai, Hiroshima, Kyushu

[For inquiries]

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