

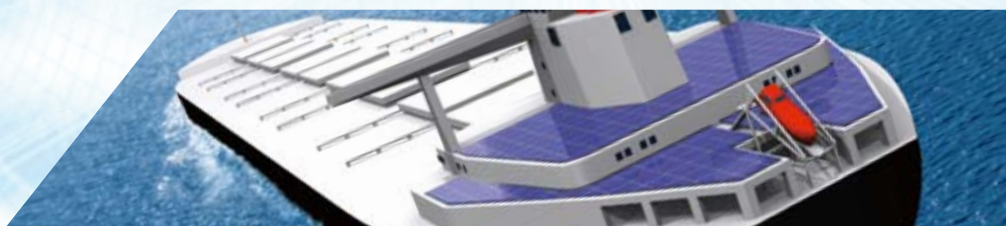
**MOL Group**

# Environmental and Social Report 2010

The 11th edition April 2009–March 2010



**Bluer Oceans & Cleaner Environment**



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## Editorial Policy

- The MOL Group has reported on its Group-wide environmental protection activities every year since October 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 contributions as well as environmental protection.
- The goal of this report is to convey how the MOL Group thinks of and approaches corporate social responsibility (CSR), including safe operation and environmental protection, which are the foundation of our business activities, to all concerned people and parties.
- Reference Guidelines:  
Environmental Report Guidelines 2007 and Environmental Accounting Guidelines 2005 issued by the Japanese Ministry of Environment GRI (Global Reporting Initiative) (GRI Guidelines Version 3.0)  
Please visit our website to view comparison charts with the GRI Guidelines and U.N. Global Compact  
<http://www.mol.co.jp/csr-e/index.html>
- Previous issue: October 2009  
This issue: September 2010  
Next issue: August 2011 (scheduled)

## Scope

### Period

FY2009 (April 1, 2009 to March 31, 2010)

In addition, some activities begun prior to FY2009 and activities during FY2010 (April 1, 2010 to March 31, 2011) are reported with notes.

### Organizations

In principle, all MOL Group companies that do business in Japan and overseas.

\* The MOL Group

Mitsui O.S.K. Lines, Ltd. and consolidated companies (274 consolidated subsidiaries, 1 equity-method non-consolidated subsidiary, and 56 equity-method affiliates).

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

### Data

Financial reports are based on consolidated results unless otherwise noted.

Our environmental performance is divided into the following three categories.

Reported activities are based on No. 3 below, but data are available only for items covered in Nos. 1 & 2.

1. Activities conducted at MOL (including all operated vessels).
2. Activities at MOL and 58 consolidated subsidiaries in Japan, as well as activities conducted at equity-method affiliates—Meimon Taiyo Ferry Co., Ltd. and Nippon Charter Cruise, Ltd.
3. In addition to No. 2, activities conducted by 16 key overseas subsidiaries.



Besides this report, information concerning the MOL Group's CSR activities can be found in the "CSR/Environment" section of our website.

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

MOL CSR

Web Search

MOL also discloses information regarding the Group's businesses and finances in its annual report and an investor guidebook. The latest versions of all reports can be found on our website.

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

# MOL Group Businesses

The MOL Group, with a core business of ocean shipping, engages in the transport of a broad range of commodities that contribute to industrial growth and better lives for people around the world. We run and develop our businesses, taking into consideration environmental and social issues as a player in an industry that is indispensable to the sustainable development of the world economy.

## Bulkships



### Dry Bulkers

Dry bulkers transport massive quantities of raw materials such as iron ore, coal, grain, papermaking raw materials, and so on. The MOL Group, as the world's largest dry bulker 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 for energy transport. Our diverse tanker fleet includes very large crude carriers (VLCCs) that transport crude oil, product tankers that carry refined petrochemical products, chemical tankers for liquefied chemical products, and LPG tankers for transporting liquefied petroleum gas.



### LNG Carriers

Liquefied natural gas (LNG) has drawn considerable attention as a clean energy resource. The MOL Group is a leading LNG marine transport company, having won acclaim for its advanced technologies and expertise.



### Car Carriers

The MOL Group was the first shipping company to launch a pure car carrier (PCC). We are making further advances and employing new environmental technologies, such as vessels with lower wind and water pressure resistance. We have established a solid position among the world's car carrier fleets through not only quality car transport services and fleet size, but also our environmental consciousness.

## Containerships



The containerships business transports electrical products, auto parts, household furniture, food products and other products in containers. MOL operates a diverse fleet of containerships in all regions of the world. In addition to the key east-west routes linking Asia to North America and Asia to Europe, MOL also serves north-south and intra-Asia routes, providing a balanced network that covers the entire globe. Furthermore, with our worldwide network and state-of-the-art IT system, we also provide tailor-made logistics services matching customers' needs.

## Ferry & Domestic Transport Business



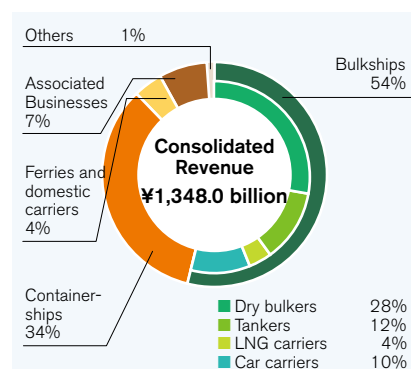
Offering one of Japan's largest ferry and domestic transport service line-ups, MOL actively meets modal shift needs, thereby contributing to CO<sub>2</sub> reduction in the domestic transportation sector.

## Associated Businesses



The MOL Group runs and develops various associated businesses. These include a leasing business for office buildings and condominiums, mainly through consolidated subsidiary Daibiru Corporation, one of Japan's largest tugboat businesses, and a cruise business that operates the *Nippon Maru*. We are also engaged in marine engineering and other businesses.

### FY2009 Consolidated Revenue by Segment

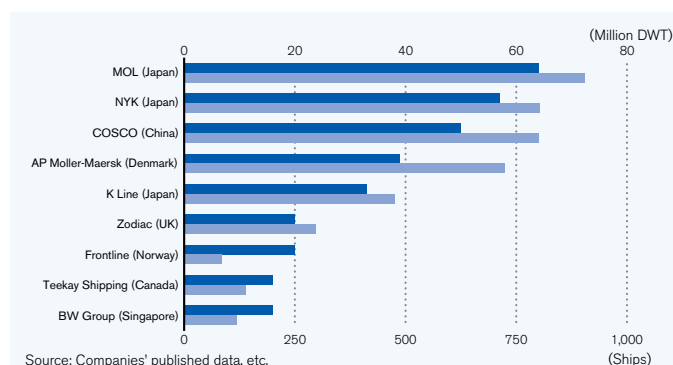


### Fleet (As of March 31, 2010)

Dry bulkers	375
Tankers	195
LNG carriers	76
Car carriers	109
Containerships	101
Ferries and domestic carriers	44
Cruise ships and others	5
<b>Total</b>	<b>905</b>

(Includes spot-chartered ships and those owned by joint ventures)

### World Major Carriers' Fleets (As of April 2010)





# An Excellent and Resilient Organization That Grows Continuously and Synergistically With Society



We have a long-term vision of making the MOL Group an excellent and resilient organization that leads the world shipping industry. As MOL's new president, following my appointment in June 2010, I am determined that we will realize this long-term vision. In doing so, we will establish the MOL Group as the first name out of people's mouths when talking about world shipping and earn the recognition of customers, shareholders and other stakeholders. I also want MOL to remain a group that employees and seafarers are proud to work for.

## Even Stronger Core Competencies —Safe Operation and Corporate Governance

Strengthening our core competencies is imperative for realizing these ambitions. Above all else, our first priority as a marine transport firm is to ensure a safe operating system. Safe operation for a shipping company means the safe and reliable transportation of customer cargo, as well as protecting the seas and oceans where we ply our trade. Under "MOL ADVANCE,"

our midterm management plan from fiscal 2007 to fiscal 2009, we put the highest priority on establishing a safe operating system. Moving forward, by making sure our safe operating system is clearly visible to all we aim to become the shipping company of choice, recognized objectively by customers and other stakeholders for having safe operations. A prime example of a visible part of our safe operation system is the Safety Operation Supporting Center (SOSC). A first-of-a-kind facility in the marine transport industry, this center keeps track of the position and movement of every vessel we operate around the globe, as well as the latest information on weather and marine conditions, on large TV monitors. Under our new three-year midterm management plan, "GEAR UP! MOL," which we launched from fiscal 2010, we have set some clear numerical targets for safe operations. One is to achieve an unblemished record in terms of serious marine incidents, oil pollution, fatal accidents, and cargo damage. We call these the "four zeroes."

A strong financial position is another MOL core competence, and underpinning this is our corporate governance system, which balances both aggressive and protective approaches. After the so-called Lehman Shock, many marine transport companies experienced financial instability. From the perspective of customers, it is difficult to enter into long-term contracts of 10 or 20 years with financially unstable companies. In fiscal 2009, MOL was able to ride out the financial and economic crisis, remaining profitable when many of the world's major shipping companies fell into the red. There were two reasons for this achievement. One is our balanced fleet portfolio which we have built through timely upfront investments. The other was that we minimized losses by setting in motion a fleet downsizing strategy that we had prepared for a crisis. Moving forward, by strengthening business intelligence and upgrading control of total risk, we will ensure that our corporate governance system continues to function effectively and serve us well. This will support our efforts to decisively and accurately develop our businesses to earn the ongoing support of customers and respond to growing transportation demand in line with one of our corporate principles of staying ahead of customers' needs and the demands of the times.

## A Company That Grows With Society

### —Contributing to the Environment and Society

For the marine transport industry, which is trying to keep up with increasing transportation demand associated with global economic growth, particularly in emerging nations, it may seem paradoxical to address global warming and other environmental problems. However, the mission of a marine transport company is to also seek optimal ways of addressing this paradox. In fact, I believe this holds the key to being the shipping company of choice. MOL is strongly committed to addressing environmental issues as one of the world's leading marine transport companies.

In September 2009, we announced the launch of the *Senpaku ISHIN* project—"Senpaku" and "ISHIN" are Japanese words meaning vessel and complete revitalization or reform, respectively. This project makes a clear statement about our environmental stance. We have announced futuristic concepts for car carriers, ferries, and iron ore carriers that have a reduced environmental footprint. The project emphasizes innovativeness and achievability. Up to now, MOL has developed and adopted many innovative environmental technologies that were ahead of their time. The *Senpaku ISHIN* project seeks to realize vessels that emit much lower levels of CO<sub>2</sub> in the near future, in the next five years, for instance, by taking these proven technologies and refining them even further. Development of environmental technologies is booming in the shipbuilding and ship machinery industries today, and I'm convinced that *Senpaku ISHIN* has given further impetus to this trend. We are determined to make steady progress in field-testing core technologies in concept vessels and employing them in actual commercial vessels as we steer shipbuilders and ship machinery manufacturers who supply our vessels in our direction.

In terms of social service activities, we will step up activities to contribute to the achievement of the United Nations' Millennium Development Goals, protect biodiversity and the natural environment, and contribute to communities in which MOL conducts business activities. That's because as a company whose growth hinges on development of the global economy and society and whose business activities place a certain burden on the environment, we feel these activities are important to ensure sustainable growth.

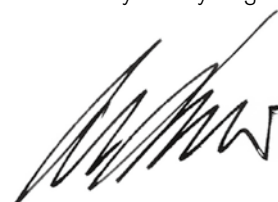
## A Company Employees and Seafarers Are Proud to Work For

It is important to remember that it is people who will actually move MOL in the direction I have outlined above. But do we have the organizations, systems and corporate culture to encourage and motivate employees and seafarers to work in the same direction? The answer to this question will have a major bearing on our corporate value. That's why our latest midterm management plan sets numerical targets with respect to the occupational health and safety of seafarers and work-life balance of land-based employees. We will work toward achieving these targets and at the same time upgrade and strengthen our systems so that employees and seafarers can realize their potential with a greater sense of reward.

One of the themes of the midterm management plan is to accelerate business development in growing markets. Legal compliance in the MOL Group's global network is of course imperative to respond to the increase in our international business activities in line with this theme. But beyond that, we will work vigorously to instill and execute the principles of the United Nations Global Compact to raise awareness of human rights and social ethics.

There is a famous line in a series of novels by U.S. author Raymond Chandler—"If I wasn't hard, I wouldn't be alive. If I couldn't ever be gentle, I wouldn't deserve to be alive." I feel the same way about companies. A company must ensure it is strong and generates profits. Besides that, however, a company has no reason to exist if it doesn't fulfill its social responsibilities and give back to society by creating value. This doesn't mean that companies should do the latter only after first achieving the former. Rather, it clearly means that companies that are aware of their social responsibilities and fulfill them, will grow stronger as a result and become companies of choice.

MOL will work to be a "hard" but "gentle" company. In this way, I believe we can raise our corporate value for customers, shareholders, employees and all other stakeholders and grow consistently and synergistically with society.



Koichi Muto  
President

# “GEAR UP! MOL”

We announced our new three-year midterm management plan “GEAR UP! MOL”  
(FY2010–FY2012) on March 31, 2010.

**Long-term vision:** To make the MOL Group an excellent and resilient organization that leads the world shipping industry

**Main theme:** Challenge to Create New Growth

After the dawn of the present century, our company achieved growth and expansion of scale through two midterm management plans (FY2001–FY2006). In the third midterm plan, MOL ADVANCE (FY2007–FY2009), we re-emphasized ensuring safe operation as the highest priority after learning difficult lessons from several serious marine incidents during 2006, and set the main theme as “growth with enhanced quality.” We set our sights not only on expanding the scale of our business, but also on improving the quality of our service, which aims to be the world’s best operation in terms of safety. Midway through this plan, in 2008, global demand contracted sharply in the wake of the Lehman Shock and the ensuing economic crisis. We promptly scaled back our fleet while maintaining a balanced business portfolio and implementing an emergency cost reduction plan. These measures minimized our losses and positioned us to turn a profit in FY2009 even as the world’s other major ocean shipping companies plunged into the red. And now, we are standing on the starting line to meet the challenge of creating new growth.

In the “GEAR UP! MOL” plan, we set the following three pillars as our primary tasks:

1. Recovery from the economic crisis and acceleration of business development in growing markets
2. Enhancement of safe operation
3. Environmental strategy

## Strategy 1 Recovery From the Economic Crisis and Acceleration of Business Development in Growing Markets

### Tailored responses to customers' needs in an expanding global market

- Enhance business activities globally
- Enhance cost competitiveness
- Restructure the containership business
- Fully utilize the Group's synergized resources

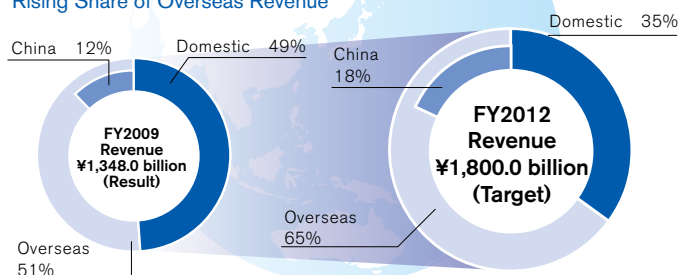
#### Enhancing infrastructure to accomplish strategies

- Adding unique value through business intelligence
- Risk management to ensure our growth
- Ongoing improvement to financial stability to enhance credibility
- Development of employees fully capable of addressing changes

### Enhance Business Activities Globally

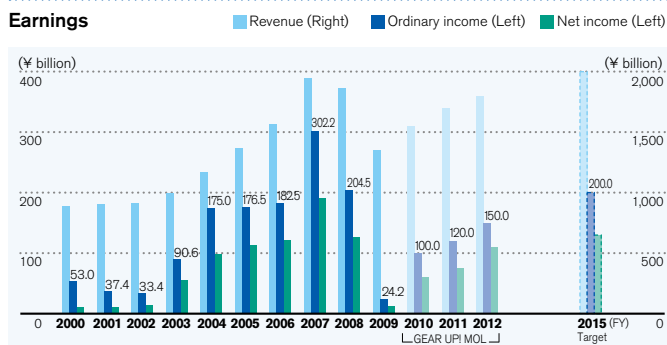
It is clear that emerging countries will account for a steadily rising share of global commerce, so we will shift our axis of business toward global, growing markets, mainly in emerging nations, to increase profits.

#### Rising Share of Overseas Revenue

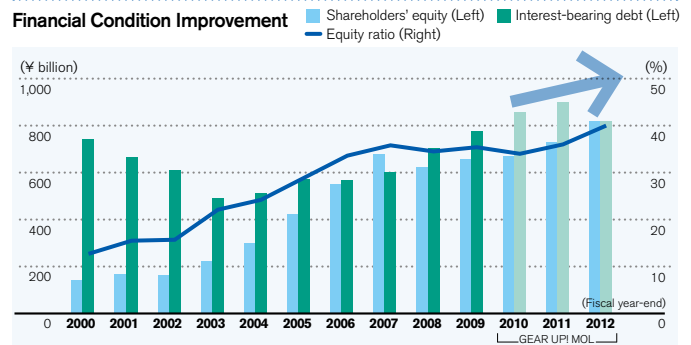


### Key Financial Data

#### Earnings



#### Financial Condition Improvement



\*Shareholders' equity  
To FY2005: Total shareholders' equity in the consolidated balance sheets  
From FY2006: Sum of total owners' equity and accumulated gains (losses) from valuation and translation adjustments in the consolidated balance sheets

## Strategy 2 Enhancing Safe Operation

Safe operation has always been a cornerstone of MOL's strategy. Safety is not only essential to foster business growth; it also helps to earn the public's trust and appreciation. Under "GEAR UP! MOL," we are aiming to improve operating safety to the highest level in the industry.

- Quantify safety and realize the "four zeroes"
- Enhance capability to perceive danger, thereby breaking the links in any potential error chain
- Invest ¥24.0 billion over three years to enhance safe operation
- Advance IT use for safer operation
- Secure skilled seafarers and keep them well-trained
- Enhance countermeasures against piracy and terrorism



For further details,  
please see page 10

## Strategy 3 Environmental Strategy

By offering transport solutions with a lower environmental burden, the MOL Group is evolving to meet today's demands.

MOL is reinforcing and emphasizing the advantages that marine transport offers, as an environmentally efficient mode of transportation, in various ways, including development of the *Senpaku ISHIN* project. The MOL Group thus contributes to sustained global economic growth by offering transportation services that can respond to customers' needs while protecting the global environment.

### ■ Safe operation is always the top priority

MOL continues to develop its own safe operation support system, as part of ceaseless efforts to implement measures that ensure safe shipping operations, and actively introduces ships with specifications that help to minimize any environmental impact in the unlikely event of an accident, thereby eliminating the pollution of the marine environment caused by shipping accidents.

### ■ Improve efficiency and reduce the environmental impact of ships

The MOL Group is seeking to improve the environmental efficiency of the ships it operates with the aim of reducing emissions of greenhouse gases as well as NO<sub>x</sub> and SO<sub>x</sub>. In this way, the group is trying to satisfy customers' needs for a supply chain with a lower environmental burden.

#### Progress of the *Senpaku ISHIN* Project

- Constantly refining next-generation vessel concepts
- Preparing and implementing a roadmap for introducing the component technologies

#### A commitment to ECO SAILING

- Promoting environmentally efficient operations, including reduced-speed navigation

#### Reduced CO<sub>2</sub> emissions per ton-mile

- The MOL Group aims to cut CO<sub>2</sub> emissions per ton-mile by 10% from fiscal 2009 levels, by fiscal 2015

### ■ Offering low environmental impact solutions as a whole group

The MOL Group is making every effort to offer business services and solutions that reduce the environmental impact, including promoting a modal shift with ferry transport.

### ■ Invest ¥28.0 billion over three years to develop and implement environmental technologies

### ■ Advocate policies and measures aimed at contributing to actual reductions in environmental impact

By encouraging the use and improvement of marine transport as an environmentally efficient mode of transport, it will be possible to both reduce the actual environmental impact and promote sustained economic growth. MOL continues to actively participate in the formulation of environmental policies from this point of view.

### ■ Contribute to conservation of biodiversity and protection of the natural environment

MOL is seeking to cultivate a stronger awareness, among its employees, of the need to protect biodiversity and the natural environment, and is actively promoting activities, technological development and social contributions for this.







World interest is rising in the prevention of global warming and other environmental issues. As a company that conducts business activities on a global basis, global environmental protection is one of the most important themes in our corporate principles alongside safe operation. Here we look at

## ISHIN - I

**Feature 1** While in port, and during loading and unloading: Achieve zero emissions with renewable energy

**Feature 2** While under way: Reduce CO<sub>2</sub> emissions by 50%



### Hybrid Car Carrier that Uses Renewable Energy

The *ISHIN-I* is a car carrier that uses a hybrid system combining an electric propulsion system with a conventional diesel propulsion engine. The electricity used for the electric propulsion is generated with renewable solar energy and stored in rechargeable batteries. The energy required while in port and during loading and unloading is provided by electricity stored from solar panels while at sea.

The *ISHIN-I* also represents an evolutionary step in terms of a vessel with reduced wind resistance. Until now, the design of wind reducing ships has featured a beveled, rounded superstructure at the bow and wind channels along the sides to enhance course stability. With this even more advanced design, the ship's bow and sides are more sculpted and the stern takes on a teardrop look, enabling the vessel to let wind flow smoothly until it passes completely.

#### CO<sub>2</sub> reduction

Steps **1** – **7** reduce emissions by 41%

Steps **1** – **8** reduce emissions by 50%

#### CO<sub>2</sub> reduction technologies

- 1 Use of renewable energy: 3% reduction**  
This vessel is designed to achieve zero emissions while in port and during loading and unloading thanks to solar panels and large-capacity rechargeable batteries (lithium ion) combined with an electric propulsion system.
- 2 Optimization of propulsion efficiency: 17% reduction**  
A contra-rotating propeller drive system and advanced Propeller Boss Cap Fins (PBCFs), under development at MOL, will greatly enhance propulsion efficiency.
- 3 Advanced wind resistance reducing design: 10% reduction**  
The design was developed by MOL, and the hull shape has been further refined, reducing wind pressure from the bow and sides. The shape of the stern also smooths the flow of the wind.
- 4 Reduction of friction drag: 10% reduction**  
This vessel will use a next-generation type of ultra-low friction ship bottom paint. By trapping water on the coated surface, this paint eliminates friction drag caused by minute patterned indentations formed on conventionally painted surfaces.
- 5 Optimum voyage support system: 5% reduction**  
This system relies on the latest marine weather information while monitoring voyage conditions, and searches for the shortest, most fuel-efficient routes while taking into account the differences in various types and hull forms of ships.
- 6 Optimization of engine system: 4% reduction**  
Fuel supply to the engine is electronically controlled, and the vessel will operate with the optimum fuel supply. Thermal energy conventionally lost with exhaust gas will be efficiently recovered for reuse.
- 7 Optimization of hull design: 3% reduction**  
The vessel will feature an improved hull form, in pursuit of further improvements in fuel efficiency.
- 8 Larger hull compatible with new Panama Canal: 15% reduction**  
When needs for larger vessels arise, adoption of twin-shaft propellers will allow greater improvement in propulsion performance and fuel efficiency. This will reduce CO<sub>2</sub> emissions per unit transported by up to 50%, compared to current vessels.





next-generation concept vessels announced between September 2009 and April 2010 under the *Senpaku ISHIN* Project.

MOL is seeking ways to quickly and substantially contribute to the protection of the global environment through innovative initiatives using advanced and

practical technologies to reduce CO<sub>2</sub> emissions from ships.

In this section we look at next-generation concept “ISHIN” vessels in three categories, and the technologies that help make them so environmentally efficient.

## ISHIN - II

- Feature 1** Use of LNG as fuel: By using liquefied natural gas (LNG) as fuel, the vessel has cleaner exhaust gases and greatly reduces CO<sub>2</sub> emissions
- Feature 2** Use of shore power supply system: While in port, and at berth, the ship uses electricity supplied from shore and rechargeable batteries to achieve zero emissions
- Feature 3** Emphasis on comfort: The design minimizes vibration and noise in passenger spaces



## Environment-Friendly Ferry for Future Cargo Shipping and Passenger Transport

Ferries, a relatively environment-friendly mode of transportation, are now playing an important role in the modal shift\*. By making optimal use of the technology that it has developed and introduced, MOL is aiming to create a next-generation ferry with a lower environment impact and higher comfort.

\* Modal shift: An initiative to shift logistics from trucks and airplanes to more environment-friendly modes of transportation, such as vessels and railways, to reduce CO<sub>2</sub> emissions.

**Web** For more information on the *Senpaku ISHIN* project, visit MOL's website:  
<http://www.mol.co.jp/ishin/en/index.html>



### CO<sub>2</sub> reduction

- Steps **2** – **7** reduce emissions by **35%**
- Steps **1** – **7** reduce emissions by **50%**

### CO<sub>2</sub> reduction technologies

- 1 Use of LNG as fuel: 25% reduction**  
 The use of LNG, a clean and efficient fuel, can reduce CO<sub>2</sub> emissions by over 20% per thermal unit, compared with conventional C-grade heavy fuel oil. Emissions of NO<sub>x</sub>, SO<sub>x</sub>, and PM (Particulate Matter) can be reduced by 90%, 98–100%, and 98% respectively.
- 2 Use of shore power supply system: 8% reduction**  
 Electricity will be supplied from an on-shore terminal to achieve zero emissions while in port.
- 3 Use of renewable energy: 2% reduction**  
 Solar battery film will be installed on all cabin windows to reduce light entering the cabins and solar power, a renewable energy source, will supply electricity.
- 4 Optimization of propulsion efficiency: 18% reduction**  
 The new vessel will employ an advanced contra-rotating propeller system and the most advanced Propeller Boss Cap Fins (PBCFs) now being developed by MOL (see page 23). This improves the ship's propulsion efficiency significantly.
- 5 Reduction of friction drag: 7% reduction**  
 Besides the next-generation ultra-low friction ship bottom coating (see page 6), the ship will employ an air layer lubrication system with recirculation. Minute bubbles of air are released from onboard the ship, creating an air layer that covers the ship bottom. This reduces friction drag. Collecting and recirculating the air will save even more energy.
- 6 Efficiency of engine system: 3% reduction**  
 Electronic control will optimize fuel supply to the engine. SO<sub>x</sub> in exhaust gas will be virtually eliminated by using LNG as fuel. This allows for much more efficient retrieval and reuse of thermal energy from the exhaust gas, compared to conventional engines fueled by heavy fuel oil.
- 7 Optimization of hull design: 2% reduction**  
 A drastically improved hull form below the surface will enhance fuel efficiency.
- 8 Emphasis on comfort**  
 The smaller, more efficient main engine will optimize propulsion efficiency, while minimizing noise and vibration. The vessel will also provide passenger-friendly facilities and passenger-focused services such as a simplified IT-based boarding procedure.





The "Wind Challenger Project" aims to establish a business model for wind-driven vessels. The concept is to attach a wing to the propulsion system to reduce the environmental burden further. This vessel would be able to reduce CO<sub>2</sub> emissions by over 50%.

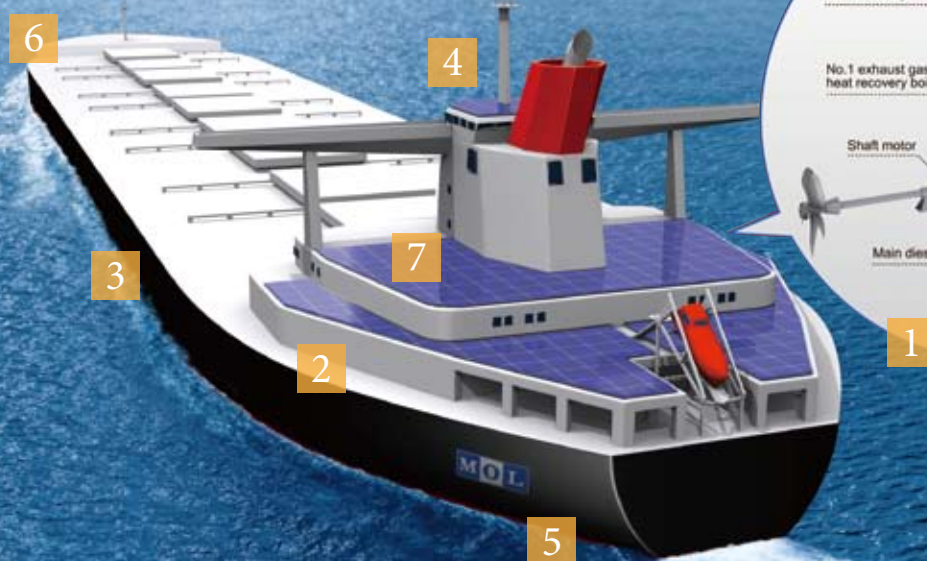
The project is being led by Tokyo University, MOL, shipbuilders, a material maker, Nippon Kaiji Kyokai, and other ocean shipping companies.



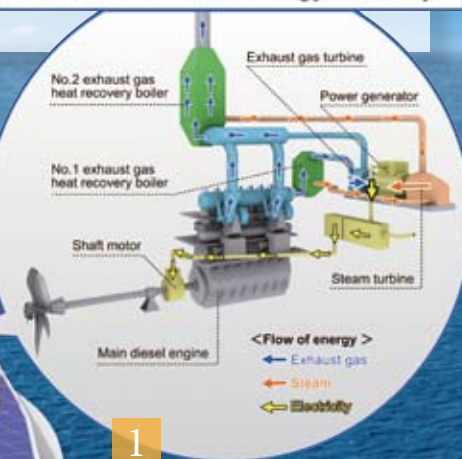
## ISHIN - III

**Feature 1** Waste heat energy recovery to assist propulsion

**Feature 2** Employs technologies to reduce CO<sub>2</sub> emissions even at low speeds, as well as during normal operation



Flow of waste heat energy recovery



## An Environment-Friendly, Large-Scale Iron Ore Carrier for Future Resource Transport

MOL operates the very large iron ore carrier *Brasil Maru* that offers a high level of environmental performance thanks to its pioneering transport concept and innovative technologies. The *ISHIN-III*, which makes full use of the characteristics of that vessel class, is a highly viable concept, and aims to further reduce MOL's environmental burden by maximizing the use of technologies the company has developed and adopted.

The new concept seeks to maximize waste heat energy recovery with more advanced technology. A large amount of heat energy can be recovered from the large main engine's exhaust gas, converted to electricity, and utilized to provide additional propulsion, significantly reducing the vessel's environmental burden. This technology can also be applied to large main engines installed on tankers and containerships.

### CO<sub>2</sub> reduction

Steps 1 – 7 reduce emissions by 30%

### CO<sub>2</sub> reduction technologies

#### 1 Optimization of engine system: 10% reduction

1) Waste heat energy recovery to assist propulsion

The waste heat energy recovered from the main engine's exhaust gas is efficiently used to produce electricity for auxiliary motors on the propeller shaft, providing additional propulsion force.

2) Reduction of CO<sub>2</sub> emissions even during a low-speed voyage, as well as during normal operation

The combination of a turbocharger that operates at high efficiency even at low rpm and an electronically controlled main engine reduces CO<sub>2</sub> emissions even during a low-speed voyage.

#### 2 Use of fuel additive: 1.5% reduction

The TAICRUSH HD fuel additive jointly developed by MOL Technology Research Center and TaihoKohzai Co., Ltd. ensures more effective ignition and combustion of fuel oil.

#### 3 Reduction of friction drag: 10% reduction

This vessel will adopt a next-generation ultra-low friction ship bottom coating, on which smooth micro-patterned indentations form on the painted surface, trapping water and reducing friction drag.

#### 4 Optimum voyage support system: 5% reduction

This system receives the latest marine weather information while monitoring voyage conditions, and searches for the shortest and most fuel-efficient route, in consideration of the vessel's unique characteristics.

#### 5 Optimization of propulsion efficiency: 5% reduction

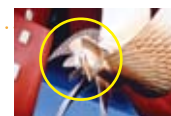
The Propeller Boss Cap Fins (PBCFs) (see page 23), an MOL-developed energy-saving device, have been adopted on more than 1,800 vessels all over the world. The upgraded model and high-efficiency propellers will be installed on the *ISHIN-III* vessels.

#### 6 Optimization of hull design: 2% reduction

A drastically improved hull form below the surface will enhance fuel efficiency.

#### 7 Use of renewable energy: 0.1% reduction

Solar battery panels will be installed on the aft decks. The electricity generated while under way will be used for part of the propulsion force and/or stored in the high-capacity rechargeable batteries. This stored electricity can be used while the vessel is in port or berthed.



# New MOL Technology Research Center

## Efforts to bring the ISHIN Series to fruition

In April 2010, the new MOL Technology Research Center started operations. This center will play a central function in company efforts to develop ways to further improve safe operation of ships and to research new technologies that help protect the environment and reduce costs. This center is deeply involved in the development of various technological features that have been incorporated into the design of new concept vessels—the *ISHIN-I*, *II* and *III*. Below, we discuss some of these breakthroughs.



### Use of renewable energy sources

Background research and testing of the various design features, materials and equipment used on MOL's new ships is coordinated at the MOL Technology Research Center. The company is examining and researching new technologies that derive energy from natural sources, such as solar power, wind power and tidal power, and energy-saving ship equipment and facilities.



### Development of fuel additives

MOL's Technology Research Center collaborated with TaihoKohzai Co., Ltd. to develop "TAICRUSH HD," a fuel additive that helps to improve fuel efficiency. This additive helps to disperse sludge (carbon and sediment) in fuel oil, and thus helps to improve ignition performance and combustion efficiency. The additive is expected to reduce fuel consumption by as much as 1.5%. MOL intends to successively introduce the additive on its fleet of ships, which should allow the company to both restrain fuel costs and reduce CO<sub>2</sub> emissions.



### Use of heat-shielding paint

The MOL Technology Research Center studies and compares the characteristics of various types of heat-shielding paint, in an effort to select coatings that will provide the optimal performance in a seaborne environment. By coating the decks and other surfaces of a vessel with this paint, it is possible to reduce the amount of heat that is absorbed by metal surfaces, and thus reduce energy consumption for air conditioning. Tests conducted on large ferries demonstrate that the paint MOL has selected can reduce the maximum temperature of deck surfaces by more than 20°C, compared with conventional paints, and thus reduce power consumption for air conditioning by 46%. In the future, MOL intends to apply heat-shielding paint to other types of ships such as tankers and car carriers.



Location: Kawasaki City, Kanagawa Prefecture  
Total site area: 1,825.24 m<sup>2</sup>  
Completed: February 2010

### Information on the MOL Technology Research Center

The center has a laboratory that can contain two 40-foot refrigerated containers, a sound- and vibration-proof test engine room, and various other research facilities.

It employs solar energy and has introduced a natural lighting system, ice storage cooling and heating system\*, high-speed variable air volume (VAV) control system, and numerous other features that help to reduce energy consumption and protect the environment.

\* This technology creates ice during the nighttime, and uses it during the daytime to cool the building, thus reducing peak-hour use of electricity.

Under the new midterm management plan—"GEAR UP! MOL"—the company intends to continue refining next-generation concept ships in line with its environmental strategy, one of its overall strategies, and create a roadmap for implementation of the component technologies used in the *ISHIN* series. The capabilities and facilities of the MOL Technology Research Center will be upgraded in order to support these research efforts.



# Ensuring Safe Operation

MOL has learnt lessons from a string of serious marine incidents in 2006 and an accident in May 2010 involving an iron ore carrier east of the Shangdong Peninsula, China. Under the strong leadership of the Safety Operations Headquarters, we are working across the company on activities designed to prevent serious marine incidents in the future and ensure safe operation.



## I Aiming to Become the World Leader in Safe Operation

Measures to Enhance Safe Operation in the New Midterm Management Plan “GEAR UP! MOL”

As a company providing marine transport services, we believe that ensuring safe operation to prevent marine accidents is not only a foundation of corporate management but also our basic mission to fulfill in our role as a member of society.

Determined not to let the lessons learnt from past serious marine accidents fade with time, in “GEAR UP! MOL,” our new midterm management plan, we aim to become the world leader in safe operation, and call on each and every one of the MOL Group’s employees to renew their commitment to being responsible for safety. The plan also calls on MOL to achieve the “four zeroes”—an unblemished record in terms of serious marine incidents, oil pollution, fatal accidents, and cargo damage. In order to achieve these imperatives, we will invest approximately ¥24.0 billion over the next three years, working as a group to ensure safe operation by steadily and continually improving the quality of our operations.

### (1) Breaking the Chain of Errors

Efforts to improve the quality of seafarers and vessel equipment will be instrumental in breaking the chain of errors that lead from problems to marine accidents. We intend to develop seafarers who are more able to perceive danger by further refining the OJT Instructor System of on-board guidance from technical instructors and continuously improving training programs and systems. Furthermore, by giving feedback to shipbuilders and manufacturers, MOL will work to improve the quality of vessels by promoting fail-safe designs.

### (2) Making Processes for Realizing Safe Operation Visible

To give customers confidence in choosing MOL and to ensure we transport their cargo safely, we will make our processes for realizing safe operation more visible. The Safety Operation Supporting Center (SOSC) is a part of this. Specifically, to measure the safety of the vessels we operate, we will use objective indexes such as achieving the “four zeroes”, LTIF (Lost Time Injury Frequency) and operational stoppage time. We will also obtain outside evaluations.

### (3) Development of IT for Ship Management

We will promote the use of IT at ship management companies and on-board ships. IT facilitates sharing of information concerning safe operation and greater operational efficiency, which should increase safety.

### (4) Enhance Countermeasures Against Piracy and Terrorism

We plan to upgrade ship security and our onshore crisis management capability in response to the danger posed by piracy and terrorism.



President Koichi Muto on a visit to a vessel as part of a safety campaign

Since March 2009, two Japanese navy escorts have been guarding ships in the Gulf of Aden following a spate of piracy incidents. While MOL has been assisted greatly by this, with piracy and terrorism taking place on a wider scale, MOL will strengthen its own countermeasures, doing its utmost to ensure safety. We will also call on the government to step up security efforts.

### (5) Consideration for the Environment

Realizing safe operations should also prevent environmental pollution such as oil spills caused by equipment failures and accidents.

## II

## MOL's Distinctive Measures for Reinforcing Safe Operation

Distinctive measures MOL has taken to reinforce safe operation

### (1) Safety Operation Supporting Center (SOSC)

The Safety Operation Supporting Center (SOSC) monitors ship position and movement on a 24-hour, 365-day basis. It promptly conveys information on abnormal weather conditions, tsunamis, pirate threats and terrorist incidents to relevant parties on ships and on land, thereby supporting decision-making by ship captains to ensure safety. Since its establishment in February 2007 incidents involving adverse weather or emergency entry have been on the steady decline. SOSC will work to strengthen its functions going forward, including system development, in an effort to serve as an information portal supporting the safe operation of MOL ships, which are set to increase in the years to come.



### (2) BRM Drills and OJT Instructor System

In order to maintain safe operation and high-quality transport services, it is necessary to continually provide seafarers with technical guidance and safety education based on MOL quality standards. A variety of drills are conducted to this end at training locations, including bridge resource management (BRM) drills, which are unique to MOL and involve recreating past incidents on a bridge simulator and practicing how to respond.



### (6) Securing and Training Employees

Utilizing the training ship *Spirit of MOL*, we will continuously and rigorously provide basic training and safety education to new cadets to effectively develop skilled seafarers. In addition, continuously raising the technical skills of seafarers should cultivate the sense and ability to break the chain of errors that can cause accidents.

At the same time, the OJT Instructor System was instituted in order to promote on-board on-the-job training (OJT), which is the most effective way to improve the technical skills and abilities of seafarers. Instructors are selected from among veteran ship captains and chief engineers well versed in MOL's safe operation standards. After undergoing specialized instructor training, they are deployed to operating vessels for a certain period of time to provide onsite advice and technical guidance regarding safety in line with the actual conditions on each ship.

### (3) Spirit of MOL

MOL launched the training ship *Spirit of MOL* in July 2007 in response to increased demand for seafarers and to further strengthen basic on-board training for cadets. Cadets first receive intensive safety education and basic training on the ship over a period of around three months. They learn specialist navigation and marine engineering skills and how to conduct themselves as a crew member. Moreover, young people of various nationalities share the experience of training on the same ship, which provides them with an understanding of other cultures and instills pride and a sense of solidarity as MOL seafarers. As of March 2010, 1,300 cadets from 8 countries had graduated from the program.



### (4) Improving Facilities from a Fail-Safe Standpoint

MOL has established the proprietary MOL Safety Standard Specification to supplement safety specifications that conform with international regulations. The standard continues to be reviewed from a fail-safe standpoint, which means that when trouble occurs in one area it can be covered for in another area to prevent a major accident. In addition to establishing MOL standards, feedback on operating conditions related to ship facilities and structures is provided to manufacturers and shipbuilders in an effort to improve quality.



# MOL'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 strengthened those initiatives by setting annual targets. Under our new midterm management plan entitled "GEAR UP! MOL," we will strive to make CSR initiatives even more progressive.

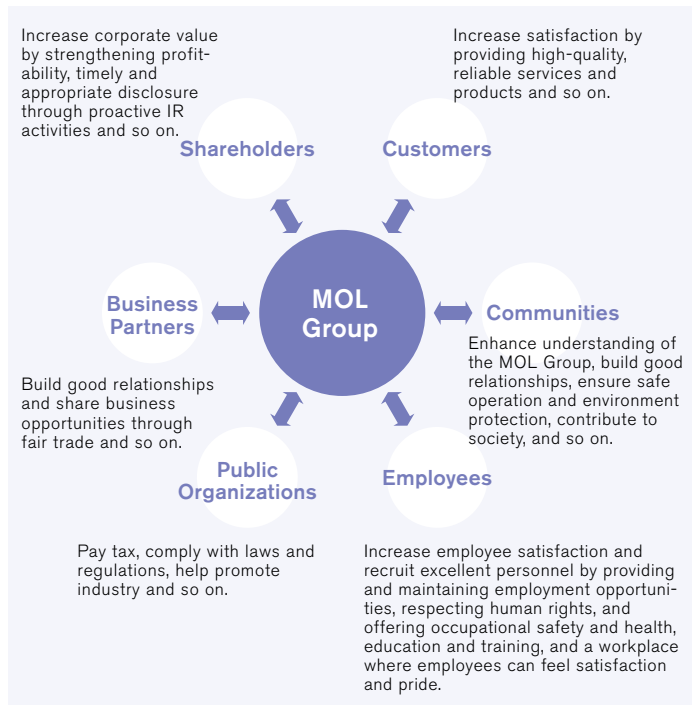
## MOL Group Corporate Principles

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

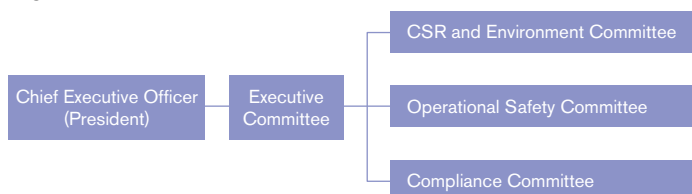
## CSR Initiatives

In our view CSR means conducting business management that adequately takes into account laws and regulations, social norms, safety and environmental issues, human rights and other considerations, and developing together with society in a mutual and sustainable manner while earning the support and trust of stakeholders, including shareholders, customers, business partners, employees and local communities.

### Relationships with MOL Group Stakeholders



### Organizational Framework for CSR Initiatives



In order to fulfill these responsibilities, MOL deliberates on CSR-related policies and measures, primarily through the three committees under the Executive Committee. The CSR and Environment Committee was established in June 2004 by reorganizing the former Environment Committee in order to strengthen initiatives related to CSR overall. The committee, which is chaired by the executive vice president, works to promote CSR throughout the MOL Group by setting and reviewing annual targets for initiatives related to compliance, corporate governance, accountability, risk management, 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.

In fiscal 2009, the committee was convened four times and deliberated on current CSR initiatives, the status of environmental management, initiatives to reduce environmental impact, accommodating environmental laws and regulations, and other matters.

## Participating in the UN Global Compact

MOL has participated in the United Nations Global Compact since March 2005. The Global Compact was first proposed by then UN Secretary-General Kofi Annan in 1999 and formally initiated the following year. Member companies are required to support and practice 10 principles in four areas: human rights, labor, the environment and anti-corruption. Sharing the same values as our Rules of Conduct, which was established as a set of guidelines for executives and employees, MOL's participation in the Global Compact signals internally and publicly our commitment to these principles. The MOL Group, which does business internationally, intends to work to raise awareness of CSR among employees in Japan and abroad by making the Global Compact widely known and ensuring it is rigorously practiced.



The Global Compact emblem



### CSR Activities Policy During the New Midterm Management Plan, "GEAR UP! MOL"

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

In the past, many companies, particularly in Japan, have adopted an approach towards CSR that has focused on measures such as good governance and careful adherence to regulations to protect them from accidents and impropriety. Based on this, they have proceeded to practice CSR that fulfills their responsibilities. Namely, to advance CSR, companies, as members of society, have tried to strike an effective balance in allocating the profits and utilizing the assets they generate, by protecting the environment, contributing to the local community, and paying a reasonable return to stakeholders. These two categories represent the foundation level of CSR. In MOL's case, CSR activities are founded first and foremost on the establishment of good corporate governance and compliance, the creation of Rules of Conduct and measures to eliminate maritime accidents, development of environmental management systems and so on. The company also strives to use its resources effectively to make a contribution to society. In this way, MOL has addressed the immediate tasks of effective CSR.

In the years ahead, MOL will take the next step forward in CSR by instilling an even stronger awareness of and pursuing "CSR activities that benefit both the company and society," while identifying and supplementing any areas where the fundamental level of CSR has been inadequate.

The new midterm management plan, "GEAR UP! MOL," includes a number of CSR-related goals. For example, by enhancing safe operation, the company aims to become the world leader in safe operation and make safety measures visible. In addition, we have adopted a new environmental strategy with the goal of answering the demands of the times by offering transport solutions with a lower environmental burden. These safe operation and environmental protection policies will help persuade customers to select MOL, and thus are a component of the company's efforts to achieve sustainable growth. In that sense, CSR policies are closely related to the company's business strategies. By establishing a CSR policy that is clearly understood and embraced by customers, employees, seafarers, and society as a whole, and also is recognized and evaluated favorably by shareholders and investors, MOL will be the company of choice. This in turn will allow the company to make even greater contributions to society, generating a positive cycle that builds synergy, supports sustainable growth and benefits both the company and society.

One other strategic goal of "GEAR UP! MOL" is to accelerate business development in growing global markets. Therefore, we are striving to ensure that CSR activities and policies are disseminated throughout the MOL Group, and are a feature of operations both in Japan and overseas.

## Current CSR Activities in the MOL Group

### Activities in Fiscal 2009

Fiscal 2009 was the final year of our previous midterm management plan—"MOL ADVANCE"—in which the company adopted the theme of "Growth with enhanced quality," and made ensuring safe operation the top priority. Over the three years covered by that plan, the company did not experience a single serious maritime accident. Fiscal 2009 was also the first year of MOL's *Senpaku ISHIN* project. Since 2009 was also the year of COP15\*, which discussed a framework for nations around the world to address global warming, this was a very appropriate year for MOL to introduce its *Senpaku ISHIN* project, which aims to introduce a new generation of vessels that greatly reduce the impact of shipping on the environment. The timeliness of activities as well as the high rates of CO<sub>2</sub> reductions backed by proven technologies have elevated interest in the environmental benefits that shipping technology can offer. On the other hand, the total CO<sub>2</sub> emissions generated by MOL's shipping operations on a ton-mile basis actually increased by 2% year on year, and by 1% compared with the benchmark year—fiscal 2005. There was a sudden drop in shipping volume following the so-called Lehman Shock, and despite efforts to operate ships at slower navigation speeds, to offset the drop in volume, this was not enough to cut CO<sub>2</sub> emissions on a ton-mile basis.

Many major shipping companies slipped into the red in fiscal 2009, but MOL managed to ride out the storm and still generate a profit. The company did its best to explain the management strategies which made this possible, in easily understood terms, to shareholders and investors. For its efforts, MOL was awarded the "Disclosure Award" by the Tokyo Stock Exchange. MOL also organized a variety of activities such as a "Lights Out Campaign" on no overtime days as the company paid attention to employees' health and welfare.

\* COP15—the UNFCCC's "Conference of the Parties, the Fifteenth Session," held in December 2009

### Activities Planned for Fiscal 2010

In the past, MOL has established CSR targets only for the current fiscal period. In the future, however, the company intends to set single-year targets after laying out midterm objectives. In addition, MOL will lay out the overall strategy (referred to above as CSR Activities Policy) before setting specific targets for each item or program. Concerning CO<sub>2</sub> emissions per ton-mile generated by MOL's shipping operations, the company has set a new goal of reducing it by 10% from fiscal 2009 levels, by fiscal 2015. We have established numerical targets or other easy-to-understand goals for CSR objectives other than environmental ones, as well. By making the CSR effort more visible to stakeholders, MOL hopes to earn their support, and make steady progress towards "CSR activities that benefit both the company and society."

Yoichi Aoki, Chairman of the CSR and Environment Committee Representative Director, Executive Vice President





# Midterm CSR Program Targets and FY2010 Targets

Category	Objectives of Midterm Management Plan (FY2010–12)
<b>Overall Strategy</b>	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
<b>Compliance</b>	Ensure strict compliance worldwide/Group-wide and strengthen systems that support this Strengthen systems for early detection and rectification of non-compliance
<b>Corporate Governance, Risk Management</b>	Effectively administer MOL’s distinctive system of corporate governance Strengthen systems for risk management and business intelligence that support sustainable growth Establish and enhance business continuity planning (BCP) Develop balanced relations with stakeholders
<b>Accountability</b>	Continually practice accurate, timely disclosure for shareholders and investors Promote stakeholder understanding of the new midterm management plan, which is focused on growth, safe operation and the environment Develop the trust of shareholders and investors regarding the sustainability of our business performance Strengthen worldwide/Group-wide responsiveness regarding disclosure in emergencies Establish a reputation as the leading company in the shipping industry among business professionals in Japan and overseas
<b>Safe Operation, Service Quality</b>	Realize world’s best level of safe operation and transport quality
<b>Care for Human Rights, Employees and Seafarers</b>	Raise human rights awareness in Japan and overseas, and ensure human rights are protected Enhance the personnel system to further motivate employees and enable them to demonstrate their abilities Reduce overtime work and develop workplace conditions that instill peace of mind in employees in line with an individual’s stage of life Enhance the employees’ health management system and risk management system Improve occupational safety and health and welfare programs for seafarers Foster our own multinational seafarers and employ them as core seafarers Provide employees and seafarers with a sense of pride and joy from working at the company
<b>Environmental Measures</b>	Evolve into a corporate group that meets today’s demands by offering transport solutions with a lower environmental burden
<b>Social Contribution Activities</b>	Implement principled social contribution activities (tackle social issues around the world) Enhance social contribution activities drawing on the company’s resources Conduct social contribution activities integrated with business activities Expand social contribution activities participated in by employees and seafarers in Japan and overseas



FY2009 achievements and assessments are available on our website.

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

### FY2010 Targets

1) Raise awareness by continually implementing e-learning programs
2) Hold legal insurance courses at the head office at least once a year
3) Administer legal courses for MOL Group companies in Japan (twice) and overseas
4) Raise awareness of best practices, with a focus on MOL Group companies
5) Begin enhancing a worldwide legal risk management network
6) Communicate Rules of Conduct at new employee training
7) Share specific case studies with related divisions
1) Hold discussions on strategies and long-term vision at board meetings with attendance of outside directors 10 times a year, in principle
2) Review internal management standards, establish new standards, and establish/institute methods for clarifying maximum risk levels
3) Establish position of chief intelligence officer, build an intelligence network, etc.
4) Create BCP for earthquakes and communicable diseases
5) Hold BCP drills
6) Devise measures for strengthening engagement with suppliers and transparency in relationships with them
1) Strive to eliminate corrections to disclosures
2) Hold briefings for investors in the first six months after announcement of the midterm management plan
3) Increase the number of IR events for emerging markets in Asia experiencing rapid growth
4) Conduct effective publicity for initiatives in the midterm management plan
5) Further improve disclosure and transparency related to distinctive ocean shipping portfolio management
6) Conduct IR activities that proactively respond to changing conditions (IFRS, business environment, etc.)
7) Conduct media handling drills during emergencies once in Japan (run by Public Relations Office) and at least twice overseas as a part of marine incident drills
8) Increase exposure in mass media as well as business journals
1) Achieve the "three zeroes" (zero serious marine incidents, zero oil pollution, and zero serious cargo damage)
2) Achieve target operational down time per vessel of 24 hours/year or less
3) Achieve targets for Phase III (started October 2009) of Safe Operation Management Structure through the following measures <ul style="list-style-type: none"> <li>Measures to raise seafarer skill levels to break links in any potential error chain, incl. continuously updating BRM drills* and expanding them overseas</li> <li>Measures to improve ship facilities rooted in the fail-safe concept, based on feedback from vessels in operation</li> <li>Measures to improve ship management to raise safety levels through more advanced IT, well-established PDCA cycles and other initiatives</li> <li>Measures to improve frontline capabilities for safe operation and cargo handling by enhancing SOSOC**, vessel inspections and the Port To Port Boarding Audit Support System</li> </ul>
1) Enhance human rights training embedded in employee training programs and establish a new e-learning course on human rights
2) Conduct a questionnaire for overseas sites on the Global Compact
3) Review the personnel system
4) Reduce overtime work by 10% compared to FY2009
5) Consider mechanisms for incorporating overtime hour management into performance reviews of managers
6) Use of at least 10 days of annual leave (7.6 days used on average in FY2009)
7) Use of all 7 special summer vacation days (5.2 days used on average in FY2009)
8) Institute program for working shorter hours
9) Enhance system for preventing physical/mental health issues
10) Establish procedures manual for dealing with new flu viruses in line with virulence levels and rates of infection
11) Review overseas safety management manual
12) Track Lost Time Injury Frequency (LTIF), including at Group companies
13) Achieve zero fatal worker accidents
14) Achieve on-board Lost Time Injury Frequency (LTIF) of 0.25 or less
15) Prepare for early adoption of the Maritime Labour Convention, which stipulates shorter on-board working hours
16) Install fleet broadband (high-speed Internet access on ships)
17) Enhance scholarship programs, internships and drill facilities (seafarer training sites, the training ship)
18) Fully establish program for recognizing outstanding seafarers
19) Effectively utilize Japanese/English company newsletter and intranet, etc. (and 18))
(See page 20, "Midterm Environmental Targets and FY2010 Targets")
1) Re-develop and expand activities in line with the UN's Millennium Development Goals
2) Increase activities that help protect biodiversity
3) Increase activities that contribute to local communities
4) Establish budgets and criteria for transporting aid supplies and expand on this basis
5) Expand activities in the world's emerging countries
6) Consider taking part in fair trade, etc.
7) Establish new system for social contribution proposals by Group companies
8) Increase participation by employees, seafarers and cadets (training ship)

\* BRM stands for Bridge Resource Management. BRM drills involve recreating past incidents with a simulator and learning how to respond.

\*\* SOSOC stands for Safety Operation Supporting Center.





# Corporate Governance, Compliance and Accountability

MOL has implemented a series of management reforms, established its Rules of Conduct and taken other steps to put in place a corporate governance structure and compliance system that is optimal for realizing the ideas set forth in the MOL Group Corporate Principles. Moreover, by vigorously fulfilling our accountability obligations, we are working to cultivate a sense of trust in MOL's sustainable growth.

## Corporate Governance

### Basic Concept of Corporate Governance

MOL puts emphasis on frameworks for improving the transparency of corporate management from the shareholders' viewpoint and maximizing stakeholders' benefits through optimum allocation of management resources. In the MOL Group Corporate Principles, this concept is stated as "We will strive to maximize corporate value by always being creative, continually pursuing higher operating efficiency, and promoting an open and transparent management style that is guided by the highest ethical and social standards." We have put in place various systems accordingly.

### Clarifying Each Governance Function

The Board of Directors comprises seven internal and three outside (independent) directors (as of July 2010). Outside directors receive reports on important issues every time, providing a framework that allows the supervisory functions of outside directors to work effectively.

Regarding business execution, MOL introduced the executive officer system in 2000. The executive officers speed up management by conducting business execution based on the overriding policies decided by the Board of Directors. The Executive Committee, as the supreme decision-making body at the business execution level, functions as a deliberative body on key matters related to business execution based on the policies decided by the Board of Directors.

The Company has adopted the corporate auditor system, and two of the four auditors are appointed from the outside

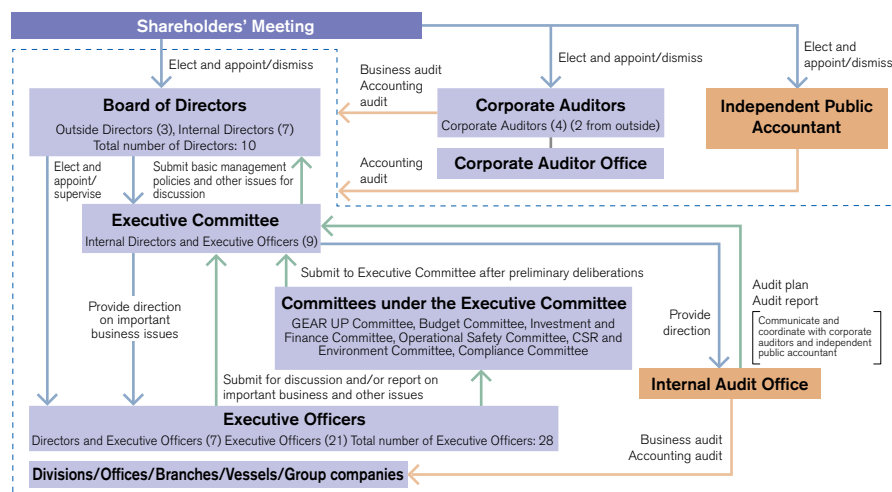
(independent corporate auditors). In May 2006, to increase the independence of the auditors, we established the Corporate Auditor Office as an organization directly controlled by the corporate auditors and Board of Auditors, thus enhancing a system that allows for more practical and efficient corporate auditing.

The Financial Instruments and Exchange Act came into force in fiscal 2008 and required an assessment and report of the internal control system for ensuring the effectiveness of financial reporting. MOL conducted such an assessment led by the Internal Audit Office. As a result, MOL concluded that internal controls over financial reporting at MOL were effective and, in June 2009 and June 2010, submitted an internal control report containing this assessment by management to the Kanto Local Finance Bureau in Japan. Details of these internal control reports were confirmed to be appropriate in the internal control audit report by the external auditors.

### Future Measures

A feature of the Board of Directors is deliberation on corporate strategy and vision. At each meeting, the board focuses on a particular topic such as management strategies and MOL's long-term vision. These discussions provide an opportunity for lively and meaningful debates at board meetings that include the outside directors and corporate auditors. Moving forward, we will work so that our established governance systems, which include these deliberations, function effectively. We also intend to strengthen our risk management and business intelligence systems that support sustainable growth to achieve the goals of our new midterm management plan.

### Corporate Governance Structure (As of July 2010)



### Basic Policies for Compliance

(Compliance Rules Article 3)

- (1) Strive to follow the MOL Corporate Principles and make them a reality.
- (2) Always recognize the public mission and social responsibilities of MOL's business, and maintain the trust of the company's stakeholders.
- (3) Strictly comply with laws, regulations, and so on, and conduct fair and transparent corporate activities in the context of social norms and corporate ethics.
- (4) Never yield to antisocial influence, and never be a party to antisocial acts.

## Compliance

### Approach to Compliance

MOL believes compliance means more than just strictly complying with legislation and internal rules (including voluntary Rules of Conduct); it also covers corporate activities and daily operations based on social norms and corporate ethics. We conduct a number of activities to instill compliance in the group, both in Japan and overseas, and to strengthen the framework that supports this. We run an e-learning program at head office and hold legal insurance courses, as well as run legal affairs seminars for Group companies and ensure people are familiar with best practice. We are also expanding our legal risk management network.

### Organizations Responsible for Compliance

#### Compliance Committee

The Company formed the Compliance Committee as a subordinate organization of the Executive Committee, with the Executive Vice Chairman as chairman. The membership comprises Executive Officers responsible for the Internal Audit Office, the Corporate Planning Division, the Human Resources Division, and the General Affairs Division.

#### Compliance Officers

General managers of divisions, offices, and branches 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 and take necessary corrective actions.

#### Compliance Advisory Service Desk

MOL has a Compliance Advisory Service Desk. The General Manager of the Internal Audit Office, independent from divisions, offices, and branches, is responsible for the desk. The person reporting an issue receives feedback on how the issue was resolved. In addition, those reporting an issue and those who cooperate in the investigation are protected from any retribution or unfair treatment.

## 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 with the president himself taking the initiative and responsibility for investor relations (IR). MOL uses various IR tools such as its annual report and Investor Guidebook to convey details of its business environment and management strategy from a medium- to long-term perspective in a straightforward manner. Furthermore, we are mindful of creating even more opportunities to explain the company. We hold various meetings, including the Annual General Meeting of Shareholders, avoiding the dates most Japanese companies hold their annual meetings, and quarterly results presentations, as well as briefing

sessions for individual investors. IR tools and information related to financial results are prepared in both Japanese and English and posted on our website as part of our commitment to global fair disclosure. In fiscal 2010, in order to deepen understanding of our new midterm management plan, the key themes of which are growth, safe operation and the environment, we will hold discussions and briefing sessions with investors, centered on the first half of the fiscal year. Amid tumultuous change in the operating environment, we are determined to continue conducting vigorous IR activities to cultivate trust in the sustainable growth of our business performance.

### External Recognition

- MOL's IR activities were recognized with the IR Prime Business Award Grand Prix in 2005 by the Japan Investor Relations Association. 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.
- MOL's annual report won the fiscal 2004 best award in the Nikkei Award sponsored by Nikkei Inc. 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.
- MOL was selected as one of the recipients of the Tokyo Stock Exchange (TSE)'s FY2009 Disclosure Award. The TSE recognized the fullness of MOL's disclosure.
- MOL continues to be selected as a component of socially responsible investment indexes such as the Dow Jones Sustainability Indexes, and the FTSE4Good Index.



IR Prime Business Award

The responsibility to provide information is not limited to management and financial issues. When four major marine accidents involving MOL-operated vessels occurred in fiscal 2006, MOL disclosed the situation directly after each incident, providing 25 press releases in total. These accidents were highly regrettable and must not be repeated. MOL believes that it has a responsibility to society to disclose such situations to everyone who is directly and indirectly affected. While working to prevent a reoccurrence of these accidents, we will also maintain a policy of disclosing information quickly, even if it is negative. We hold regular media response drills at bases in Japan and overseas in this regard.

### MOL's Communication Tools



Annual Report



MOL Investor Guidebook



Corporate Profile



Results presentation for investors



# Environmental Management Policy

The MOL Group is well aware of the environmental burden created by its business activities as it meets world demand for shipping and always seeks to offer more environment-friendly services through various environmental protection measures. These measures include developing and adopting environmental technologies, operating vessels with minimum environmental impact, taking various steps to tackle global warming, implementing approaches to preserve the atmosphere and the marine environment, reducing waste, and recycling resources.

## 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 policies that:

### Policy

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

### ISO14001 Certification

Company name	Acquired month	Certifying institution
Mitsui O.S.K. Lines, Ltd.	January 2003	Det Norske Veritas AS (DNV)
Kusakabe Marine 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 Tankship Management Ltd.	September 2006	Det Norske Veritas AS (DNV)
MOL LNG Transport Co., Ltd.	December 2006	Nippon Kaiji Kyokai

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

Company name	Acquired month	Company name	Acquired month
International Container Transport Co., Ltd.	October 2005	Utoc Logistics Corporation	February 2007
The Diamond Ferry Co., Ltd.	November 2005	Kobe Towing Co., Ltd.	March 2007
Meimon Taiyo Ferry Co., Ltd.	December 2005	International Container Terminal Co., Ltd.	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
Kansai Kisen Kaisha	May 2006	Ube Port Service Co., Ltd.	November 2007
Nihon Tug-Boat Co., Ltd.	August 2006	Kitanihon Tug-Boat Co., Ltd.	June 2008
Japan Express Packing & Transport Co., Ltd.	November 2006	MOL Ferry Co., Ltd.	March 2010

### EcoAction 21 (Institute for Global Environmental Strategies)

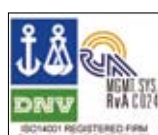
Company name	Acquired month
MOL Techno-Trade, Ltd.	July 2007



## System to Promote Environmental Management

At MOL, under the president who has ultimate decision-making authority, the CSR and Environment Committee, a subcommittee of the Executive Committee, discusses basic policies on environmental issues, and operates two unique environmental management systems—MOL EMS21 and the MOL Group Environmental Target System—as mechanisms to promote business activities in line with the MOL Group Environmental Policy Statement.

### ISO14001 Certification



ISO14001 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

Read Voor Accrediate (RVA) in the Netherlands

## Environmental Management System

### MOL EMS21

MOL EMS21: We introduced our environmental management system—MOL EMS21—in April 2001. In January 2003, we expanded its scope to all our operated vessels (except charter vessels on contracts of one year or less), and acquired internationally recognized ISO14001 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, 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 ISO14001 external certification body, holds an annual audit and a renewal assessment every three years.

### 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 (see page 20), 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 76 companies, including 60 Group companies in Japan and 16 overseas affiliates and subsidiaries (as of March 31, 2010).

## FY2009 Environmental Accounting

### Environment Protection Costs

(Unit: ¥ million)

Category	Items	Investment	Cost
(1) Costs in business areas			
Global environmental protection	Measures to reduce exhaust gas from vessels	1,821	382
	Office related	1	0
Resource cycle	Ship related	0	10
(2) Costs for management activity	Environmental management activities	0	76
(3) Costs for R&D	R&D	0	255
(4) Social activity costs	Social contribution activities	0	0
	Total	1,822	724

### Environmental Protection Effects

Category	Details of effects	Index (g/ton · mile)	FY2009	FY2008	Effects
(1) Effects related to resources invested in business activities	Total energy volume input	Fuel	1.55	1.51	+0.03
(2) Environmental burden of business activities	GHG, etc. emissions	CO <sub>2</sub>	4.715	4.606	+0.109
		NO <sub>x</sub>	0.130	0.127	+0.003
		SO <sub>x</sub>	0.083	0.081	+0.002

### Aggregation Method

#### Reference guidelines

Japan's Ministry of the Environment "Environmental Accounting Guideline (FY2005)"

Cost does not include depreciation and amortization expenses.

#### Tabulation period

FY2009 (April 1, 2009–March 31, 2010)

#### Scope of tabulation

Head Office and operated vessels of Mitsui O.S.K. Lines, Ltd. (non-consolidated)

#### Changes in aggregation method

- FY2008 did not include investments and expenses for meeting laws and regulations. Some of these expenses have been included in FY2009.  
(Amounts included in FY2009: Investments: ¥243 million, expenses: ¥122 million)
- Depreciation and amortization of environmental investments have not been included in costs in FY2009.  
(Amount included in FY2008: ¥205 million)



# Midterm Environmental Targets and FY2010 Targets

MOL has established midterm environment targets (FY2010–12) and FY2010 environmental targets in line with the environmental strategy (see page 5 for details) stated in our new midterm management plan, “GEAR UP! MOL.” We will actively work to achieve the targets in order to evolve into a corporate group that meets today’s demands by offering transport solutions with a lower environmental burden.

Category	FY2010–12 Midterm Environmental Targets	FY2010 Environmental Targets
Ensure Safe Operation	<b>Eliminate Pollution of the Marine Environment Caused by Shipping Accidents</b>	
	<ul style="list-style-type: none"> <li>Eliminate shipping accidents involving ocean pollution from oil outflows</li> <li>Actively adopt vessel specifications that minimize environmental damage</li> </ul>	Prevent oil spills caused by oil outflows Use double-hull fuel tanks on new vessels
Improve Efficiency and Reduce the Environmental Impact of Ships and Actively Invest to Develop and Implement Environmental Technologies	<b>Promote <i>Senpaku ISHIN</i> Project</b>	
	<ul style="list-style-type: none"> <li>Constantly refine next-generation vessel concepts</li> </ul>	
	Design <i>ISHIN</i> ships	Commence design of <i>ISHIN-I</i> (next-generation car carrier)
	Run experiments on existing vessels for major elemental <i>ISHIN</i> ship technologies	Promote experimental research on solar power generation and storage (hybrid car carrier) technology Commence research on new type of low-friction paint
	Propose concept vessel to follow <i>ISHIN</i> ships	Promote research on improving Propeller Boss Cap Fins (PBCFs) Actively participate in “Wind Challenger Project” for wind-propelled ships
	<ul style="list-style-type: none"> <li>Prepare and implement a roadmap for introducing the component <i>ISHIN</i> ship technologies</li> </ul>	Begin formulating roadmap for instituting component <i>ISHIN</i> ship technologies Promote development of low-friction paint (next-generation LFC)
	<b>Reinforce functions/activities of the MOL Technology Research Center</b>	
	Develop technologies for reducing emissions of CO <sub>2</sub> , NO <sub>x</sub> , SO <sub>x</sub> and PM (particulate matter)	Apply heat-insulating paint and thermal glass barrier technologies to vessels Install test engines and research technology on reducing NO <sub>x</sub> , SO <sub>x</sub> and PM in exhaust gas
	Develop technology for raising the combustibility of ship fuel	Research and promote technology for improved combustibility of diesel engines with devices that visualize spray and combustion Research technology on improving ignition of low-flammable fuel
	<b>Fully Practice ECO SAILING and Pursue Efficient Operations</b>	
	Promote optimal utilization of reduced navigating speeds	Establish optimal operating methods at reduced navigating speeds and prevent accidents at reduced speeds
	Promote utilization of WNI Ocean Routing (an information service on weather, ocean conditions, optimal routes, etc., provided by Weathernews Inc.)	Utilize WNI Ocean Routing
	Utilize FMS Safety-Bridge System (on-board system that plans optimal routes based on the latest data on weather and ocean conditions)	Promote utilization of FMS Safety-Bridge System—Increase access by 10% over FY2009
	Substantially expand use of fuel additives	Improve convenience of fuel additives and then ramp up use on vessels
	Promote installation of PBCFs and other devices to improve propeller efficiency on MOL vessels	Install PBCFs and other devices to improve propeller efficiency on all newly built MOL vessels
	Promote installation of energy-saving LO lubricators on MOL vessels	Install energy-saving LO lubricators on all newly built MOL vessels
	Promote installation of electronically controlled engines (approx. 20 vessels)	Promote installation of electronically controlled engines (approx. 10 vessels)
	Install onshore power supply systems (approx. 14 vessels)	Install onshore power supply systems (approx. 14 vessels)
	<b>Reduce CO<sub>2</sub> Emissions Per Ton-mile (oceangoing vessels operated by MOL and domestic consolidated subsidiaries)</b>	
	Reduce by 10% by FY2015 compared to FY2009	Reduce by 1% compared to FY2009
	<b>Initiatives for Preventing Atmospheric Pollution</b>	
	<b>Reduce NO<sub>x</sub> and SO<sub>x</sub> emissions per ton-mile (oceangoing vessels operated by MOL and domestic consolidated subsidiaries)</b>	
	Reduce by 10% by FY2015 compared to FY2009	Reduce by 1% compared to FY2009
	Make MOL’s unique technologies for reducing PM (particulate matter) feasible for practical application	Conduct experiments to verify MOL’s unique technologies for reducing PM
	<b>Comply with Environmental Regulations</b>	
	Comply with current regulations and prepare to comply in the future when regulations are tightened and their scope expanded geographically	Prepare to comply with second-generation NO <sub>x</sub> regulations (which includes accommodating their geographic expansion) Prepare to comply with low sulfur fuel oil regulations and prepare to accommodate their geographic expansion Prepare to comply with ship recycling regulations

**Web** Achievement levels and assessments for prior midterm environmental targets (FY2007–09) are available on our website.  
<http://www.mol.co.jp/csr-e/index.html>

Category	FY2010–12 Midterm Environmental Targets	FY2010 Environmental Targets
Offer Low Environmental Impact Solutions as a Whole Group	<b>Further Accommodate Modal Shift</b>	
	▪ Reduce customer CO <sub>2</sub> emissions using Japan's largest ferry network	Reduce customer CO <sub>2</sub> emissions by approx. 600,000 tons annually using Japan's largest ferry network
	▪ Promote environmental advantages of domestic carriers and ferries	Continue 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)	Start research on domestic regulations for <i>ISHIN-II</i>
	<b>Actively Develop Existing Low-Environmental-Impact Solutions</b>	
	▪ Provide tug services with reduced environmental impact due to reduced navigation speeds	Continue operating tugboats at reduced navigation speeds
	▪ Promote PBCFs sales through MOL Techno-Trade, Ltd.	Achieve cumulative PBCF installations of 2,000 units
	<b>Actively Consider New Low-Environmental-Impact Solutions</b>	
	▪ Participate in experiments to demonstrate the "eco tug" concept (tugboats with reduced environmental impact)	Begin considerations on "eco tug" demonstration experiments
	▪ Contribute to recycling through environment-related businesses of Kusakabe Maritime Engineering Co., Ltd.	Continue environment-related businesses of Kusakabe Maritime Engineering Co., Ltd.
	▪ Develop environmental materials for ships	Introduce low-environmental-impact amenities on cruise ships
	▪ Promote reduced environmental impact at existing buildings managed by Daibiru Corporation	Install low-environmental-impact air conditioning systems and lighting in refurbished buildings Promote adoption of rainwater reuse, rooftop gardens, natural ventilation, high thermal barrier/heat-shielding glass
	▪ Popularize use of improved PBCFs through MOL Techno-Trade, Ltd.	Take part in R&D on improved PBCF
Advocate Policies and Measures Aimed at Contributing to Actual Reductions in Environmental Impact	<b>Maintain and Enhance MOL Group Environmental Award Program</b>	
		Increase number of entries for MOL Group Environmental Award
	<b>Take Part in Policymaking and Actively Make Recommendation 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</b>	
Contribute to Conservation of Biodiversity and Protection of the Natural Environment	▪ Measures for greenhouse gases emitted by oceangoing vessels: Work to shape policy in line with IMO's nine basic principles	Contribute debate at the 61st session of the IMO's Marine Environment Protection Committee
	▪ Measures for greenhouse gases emitted by domestic carriers and ferries: Work to shape policy to promote modal shift	Lobby and build consensus on programs for promoting modal shift, eco-ships, etc.
	<b>Raise Awareness of Employees Regarding Biodiversity Protection and Nature Conservation and Promote Activities, Technological Development and Social Contributions to this End</b>	
	▪ Continue existing activities and conduct new activities that contribute to conservation of biodiversity and protection of the natural environment	
	Eliminate pollution of the marine environment caused by shipping accidents	Prevent ocean pollution caused by shipping accidents
	Develop and install ballast water treatment systems	Develop ballast water treatment system
	Expand social contribution activities that help in biodiversity protection and nature conservation	Increase participation in existing activities
	▪ Raise employee awareness of biodiversity protection and nature conservation	Establish e-learning course for all employees Provide information via the intranet
	▪ Continue utilizing renewable energy at domestic sites and consider new installations	Continue utilizing solar power generation at the Tokyo International Container Terminal Begin considering installation of new solar power systems at domestic sites
	▪ Reduce environmental impact associated with domestic business activities	
	Reduce unit energy consumption at domestic business sites by 3% compared to FY2009	Reduce unit energy consumption at domestic business sites by 1% compared to FY2009
	Reduce unit energy consumption by domestic transport modes by 3% compared to FY2009	Reduce unit energy consumption by domestic transport modes by 1% compared to FY2009
	Reduce office paper usage (per employee) by 3% compared to FY2009	Reduce office paper usage (per employee) by 1% compared to FY2009
	Recycle as much as possible and reduce non-recyclable waste	Set targets for recycling and non-recyclable waste reduction
	▪ Comply with domestic environmental regulations	Comply with the Act on the Rational Use of Energy Comply with the Tokyo Environmental Security Ordinance





# Environmental Burden of the MOL Group (FY2009)

The MOL Group conducts a range of business activities on land and at sea, including international shipping. In the course of those activities, we place a burden on the environment mainly associated with fuel consumption. The following is a summary of MOL's and the MOL Group's consumed resources and environmental impact during fiscal 2009.

The MOL Group is working to reduce these environmental impacts.

## Activities at Sea (Vessels)

INPUT			OUTPUT		
<b>MOL</b> (nonconsolidated)	Fuel oil (C oil <sup>*1</sup> )	5,330 thousand tons	CO <sub>2</sub>	16,443 thousand tons	
	Diesel oil (A oil <sup>*2</sup> )	57 thousand tons	NOx	452 thousand tons	
			SOx	290 thousand tons	
INPUT			OUTPUT		
<b>Group companies</b> (domestic shipping) <sup>*3</sup>	Fuel oil (C oil <sup>*1</sup> )	250 thousand tons	CO <sub>2</sub>	822 thousand tons	
	Diesel oil (A oil <sup>*2</sup> )	16 thousand tons	NOx	22 thousand tons	
			SOx	— <sup>*5</sup>	
INPUT			OUTPUT		
<b>Group companies</b> (international shipping) <sup>*4</sup>	Fuel oil (C oil <sup>*1</sup> )	444 thousand tons	CO <sub>2</sub>	1,419 thousand tons	
	Diesel oil (A oil <sup>*2</sup> )	20 thousand tons	NOx	39 thousand tons	
			SOx	— <sup>*5</sup>	

\*1 C oil (Marine fuel oil): Mainly for vessel main engines

\*2 A oil (Marine diesel oil): Mainly for onboard generators

\*3 MOL Ferry Co., Ltd., Ferry Sunflower Limited, Meimon Taiyo Ferry Co., Ltd., MOL Naikou, Ltd., Ube Port Service Co., Ltd., Kitanihon Tug-Boat Co., Ltd., Green Kaiji Kaisha, Ltd., Green Shipping, Ltd., Kobe Towing Co., Ltd., Nihon Tug-Boat Co., Ltd., and MOL Techno-Trade, Ltd. (11 companies in total) (As of March 31, 2010)

\*4 Mitsui O.S.K. Kinkai, Ltd., Tokyo Marine Co., Ltd., Nissan Motor Car Carrier Co., Ltd. and Mitsui O.S.K. Passenger Line, Ltd., and (4 companies in total).

\*5 Data on SOx emissions of Group companies is not available.

\*6. Previously figures for business sites leased by MOL (nonconsolidated) to Group companies were included in Group companies, but from fiscal 2009 these have been included under MOL to comply with the scope for reporting stipulated by the Act on the Rational Use of Energy of Japan for MOL as a business operator. As a result, the following inputs and outputs were added to MOL nonconsolidated for fiscal 2009: Electricity: 6,611 thousand kWh; CO<sub>2</sub>: 2,487t; NOx: 2t.

\*7. All consolidated subsidiaries in Japan, and Meimon Taiyo Ferry Co., Ltd. and Nippon Charter Cruise, Ltd. which are both affiliated companies accounted for by the equity method. However, results exclude some companies whose environmental burden is negligible.

In addition, in accordance with the Act on the Rational Use of Energy, from fiscal 2009 energy use at leased facilities for which lessees have the authority over energy management is excluded.

\*8. Converted to A4 size.

## Activities on Land

INPUT			OUTPUT		
<b>MOL</b> (nonconsolidated) <sup>*6</sup>	Fuel	101 kl	CO <sub>2</sub>	8,021 tons	
	Electricity	19,224 thousand kWh	NOx	6 tons	
	Municipal gas	146,000 m <sup>3</sup>	Waste	121 tons	
	LPG	22 tons			
	Heat	1,831 GJ			
	Water	6,480 m <sup>3</sup>			
<b>Group companies</b> <sup>*7</sup>	Office paper	7,229 thousand sheets <sup>*8</sup>			
INPUT			OUTPUT		
<b>Group companies</b> <sup>*7</sup>	Fuel	6,908 kl	CO <sub>2</sub>	72,661 tons	
	Electricity	82,427 thousand kWh	NOx	24 tons	
	Municipal gas	2,875,000m <sup>3</sup>	Waste	1,995 tons	
	LPG	69 tons			
	Heat	37,325 GJ			
	Water	732,591m <sup>3</sup>			
<b>Group companies</b> <sup>*7</sup>	Office paper	42,715 thousand sheets <sup>*8</sup>			

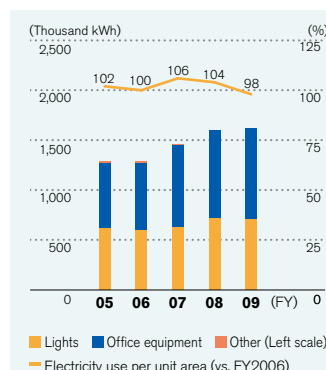
## Measures at Offices



MOL Head Office Building

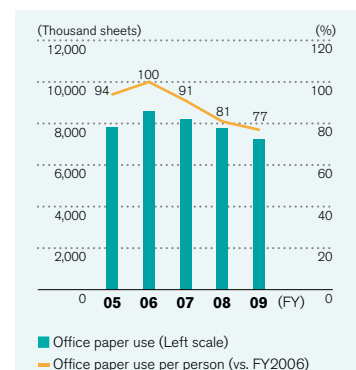
The MOL Group strives to reduce the environmental impact generated by office operations (office paper, electricity, waste) as well as in land and sea transportation activities. In January 2009, we completed refurbishment work on the MOL Head Office Building. The building is now equipped with energy-saving systems such as motion sensors for lighting and sectional adjustment control on air conditioning, etc. and water-saving measures, including water-saving toilets and faucet sensors.

### Electricity Use in Head Office Building



Excluding the 15th floor which is mainly used as a staff cafeteria

### Office Paper Use in Head Office Building



MOL (nonconsolidated) only



# Approaches to Tackling Global Warming and Preventing Air Pollution

Although shipping is a highly efficient mode of transport, vessels burn fossil fuels and inevitably emit carbon dioxide (CO<sub>2</sub>), which is a cause of global warming, as well as nitrogen oxide (NO<sub>x</sub>), sulfur oxide (SO<sub>x</sub>), 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.

## Approaches to Tackling Global Warming

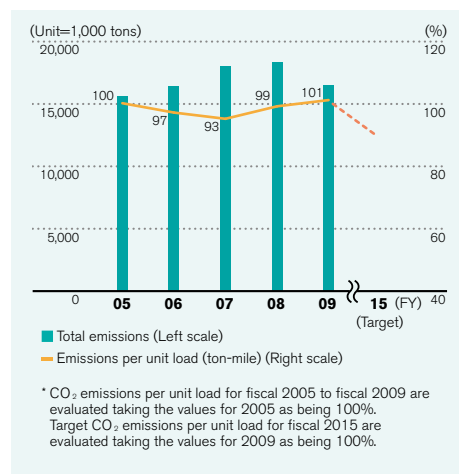
### Approaches of the Ocean Shipping Industry

The international ocean shipping business operates all over the world. Furthermore, because this is a single international market, it makes sense that, in principle, all environment-related measures must apply the same standard to all sea areas and vessels. For this reason, under the Kyoto Protocol, the approach to reduction of GHG emissions from vessels engaged in international shipping is delegated to the International Maritime Organization (IMO). Discussion is heating up around the world in the lead up to the Conference of Parties, the sixteenth session, UNFCCC (COP16), which will determine the framework for combating global warming to succeed the Kyoto Protocol. Through the IMO MOL will continue to contribute to initiatives of industry groups and governments to create a framework that leads to substantial reductions in GHGs from international shipping. Based on the nine fundamental principles of the IMO the framework should be "binding and equally applicable to all flag states in order to avoid evasion" and "based on sustainable environmental development without penalizing global trade and growth," among other conditions.

### MOL's Approaches

The Japanese Shipowners' Association (JSA), of which MOL is a member, is tackling global warming with an industrial target of reducing average CO<sub>2</sub> emissions per unit load (ton of freight) between fiscal 2008 and fiscal 2012 by 15% compared to fiscal 1990, under the framework of the Nippon Keidanren's self-imposed environmental action plan. At the same time, we also worked to a

#### MOL CO<sub>2</sub> Emissions



target of reducing CO<sub>2</sub> emissions per unit load (ton-mile) by 10% in fiscal 2010 compared with fiscal 2005 as our midterm environmental target, but this effort has been hampered by a deterioration in CO<sub>2</sub> emissions per unit load resulting from a decline in shipping in the wake of the Lehman Shock and the ensuing economic crisis, and it will be difficult to achieve this target. However, one of the environmental strategies in our new midterm management plan "GEAR UP! MOL," is to reduce CO<sub>2</sub> emissions per unit load by 10% in fiscal 2015 compared with fiscal 2009 and we have renewed our determination to achieve this target.

### Specific Approaches

#### 1. Environmental Technologies

MOL is engaged in various research, development and innovation of technologies for ships, including our *Senpaku ISHIN* Project. (see pages 6 to 9)

**Use of renewable energy:** MOL, Mitsubishi Heavy Industries, Ltd., and SANYO Electric Co., Ltd. are jointly promoting R&D on a hybrid car carrier using renewable energy. We will develop a hybrid power supply system by combining solar power generation technology with lithium-ion batteries. The goal is zero emission while the vessel is in port by effective use of renewable energy. Electricity generated by solar panels while the vessel is under way is stored in the lithium-ion batteries. The batteries then supply power while the vessel is in port, allowing the diesel generator to be shut down. MOL will also construct a hybrid car carrier equipped with this system (slated for launching in 2012), and validate and assess its CO<sub>2</sub> reduction effect in actual operation. MOL has already adopted solar power generation systems on the *Euphony Ace*, delivered in November 2005, and on the *Swift Ace*, delivered in May 2008. This R&D project is a step toward realization of MOL's vision for the car carrier of the future, *ISHIN-I*.



*Euphony Ace Car Carrier*

**PBCFs boost vessels' propulsion power propeller:** Propeller Boss Cap Fins (PBCFs), jointly developed by MOL and other parties, improve propeller efficiency. PBCFs produce a 4% to 5% improvement in fuel efficiency at the same speed, along with commensurate reductions in CO<sub>2</sub> emissions. As of March 31, 2010, PBCFs had been introduced to more than 1,800 vessels worldwide, including vessels operated and vessels planned to be built. MOL is currently developing new PBCFs with Akishima Laboratory Inc. (Mitsui Engineering & Shipbuilding Co., Ltd.) which are expected to further



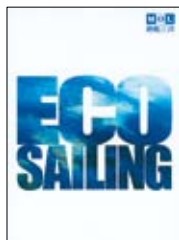
PBCF

improve fuel efficiency by another 1 to 2 percentage points. An additional patent was filed for them in April 2009. We aim to make these new fins commercially available as early as possible.

**R&D on high-performance antifouling ship bottom paints that improve vessels' fuel efficiency:** Ships consume most of their fuel in overcoming the resistance when navigating. Reducing this resistance contributes directly to lower fuel consumption and reduced CO<sub>2</sub> emissions. The drag of seawater over the vessel's wetted surface accounts for 50% to 80% of all resistance, including wind and wave resistance.

MOL has teamed up with Nippon Paint Co., Ltd., and Nippon Paint Marine Coatings Co., Ltd. to develop a super-slick antifouling ship bottom paint with high performance friction reducing properties. The paint will dramatically reduce fuel consumption by reducing seawater drag. This research and development is part of our commitment to realizing *ISHIN-I*, *-II*, and *-III*, and is expected to lower CO<sub>2</sub> emissions by 8% to 12% compared to conventional antifouling paints.

## 2. ECO SAILING Thoroughly Adopted Within MOL



ECO SAILING Pamphlet

To save fuel and reduce environmental impact, we monitor energy flow in our vessels and do our utmost to eliminate energy losses in our operations. We call this approach ECO SAILING. We rigorously apply the principles of ECO SAILING whenever we operate vessels. Specifically, we 1) properly reduce navigation speeds, 2) take advantage of weather and sea condition forecasts, 3) select optimum routes, 4) reduce vessels' wetted surfaces, 5) optimize operation and maintenance of main engines, auxiliary equipment and the other machinery,

### Model for Calculating Reduction in CO<sub>2</sub> Emissions Due to Reduced Navigating Speed



	Vessel speed	Number of vessels adopted	Annual fuel consumption
Before speed reduction	22 knots	9 vessels	420,000 tons
After speed reduction	18 knots	10 vessels	290,000 tons

**CO<sub>2</sub> emissions reduced by 410,000 tons annually**

6) develop energy-efficient ship designs, and 7) equip vessels with Propeller Boss Cap Fins (PBCFs). Navigating at a reduced speed is a particularly effective way of reducing fuel consumption and CO<sub>2</sub> emissions.

## 3. Increasing Transportation Efficiency With Larger Ships

In December 2007, MOL took delivery of the *Brasil Maru* (approx. 320,000 DWT), one of the world's largest iron ore carriers, which operates on a long-term contract for transporting this vital raw material for steel. The *Brasil Maru* reduces CO<sub>2</sub> emissions per ton-mile between Japan and Brazil by nearly 20% compared to conventional ships, thanks to her energy-saving design such as her very large size that gives her excellent propulsion, propellers specially designed to improve propulsion efficiency and so on. As a result of improved transportation efficiency and innovation of environment-friendly technologies in ship building, the *Brasil Maru* was selected as the "Ship of the Year 2007" by the Japan Society of Naval Architects and Ocean Engineers. MOL believes that the introduction of larger vessels and improvement of propulsion are effective measures to fulfill the social responsibility of the shipping industry to meet burgeoning international demand for ocean shipping and, at the same time, to prevent global warming.



Brasil Maru Iron Ore Carrier

## Approaches to Preventing Air Pollution

### NO<sub>x</sub>

NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub>, soot, and smoke by more effectively controlling the intake and exhaust valves. We have launched 19 vessels featuring



MOL Creation Containership



electronically controlled engines beginning with the container-ship *MOL Creation*, which was delivered in June 2007. We plan to finish construction of another 20 vessels equipped with electronically controlled engines (as of May 31, 2010).

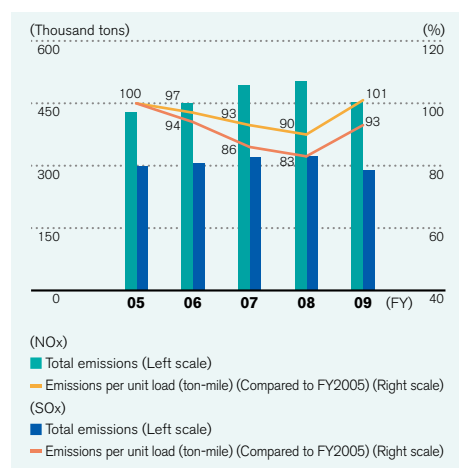
## SOx

SOx is generated by burning fuel oil containing sulfur. In order to reduce the volume of SOx emissions, MOL has set a standard of using bunker oil with a maximum of 3.5% sulfur—well below the current 4.5% for general sea areas in the MARPOL Treaty.

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

FY2005	2.82%
FY2006	2.75%
FY2007	2.62%
FY2008	2.59%
FY2009	2.59%
MARPOL Treaty (general sea areas)	4.50%

### MOL NOx and SOx Emissions



## Reducing Soot/Smoke and Dust

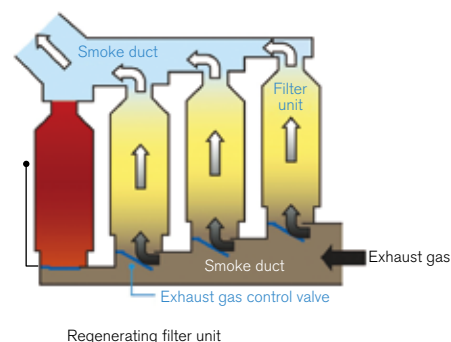
### Effective Use of Wood from Forest Thinning Operations

Exhaust gases emitted by ships contain diesel emitted particulate (DEP), and other particulate matter (PM) such as soot and dust. An MOL Group ship management company, MOL Ship Management Co., Ltd., teamed up with Juon Co., Ltd. to develop a generator exhaust gas purification system that uses the catalytic effects of tree oil extracted from timber harvested during forest thinning operations. The system went into use on the pure car and truck carrier (PCTC) *Euphony Ace* in November 2005 and is also used in five other ships. The exhaust gas purification system is also environment-friendly from the standpoint of forest protection by effectively using forest resources.

### Successful Onboard Field Trials of World's First Marine-Use Maintenance Free DPF

In March 2010, we joined with Akasaka Diesels Limited in developing a diesel particulate filter (DPF) for diesel engines on vessels that use marine heavy fuel oil. The maintenance-free device employs an internal heating system to automatically burn off PM accumulated in the filters, which are made of silicon carbide ceramic fibers, allowing the filters to be used continuously. In a test installation on the main engine of an MOL Group-operated coastal ferry, the *Sunflower Kogane*, the device was shown to remove more than 80% of PM from diesel emissions. This test marked the world's first successful use of a self-regenerating DPF on a large vessel using marine heavy fuel oil. MOL and Akasaka Diesels will further upgrade the DPF to ready the device for use on large-scale ocean-going vessels.

#### Exhaust Gas Purification System



## Using Onshore Power Supplies

Emissions of NOx, SOx, PM and other pollutants can be significantly reduced while at berth by reducing the use of on-board power generators to supply electricity requirements and connecting to an onshore supply instead. In October 2008, we carried out a joint trial with CleanAir Logix, Inc. at our container terminal at the Port of Los Angeles involving the supply of power from an onshore generator powered by LNG to one of our containerships, *MOL Enterprise*. Also, from March 2010 at Osaka Nanko Port we initiated the use of onshore power supply while at berth for *Ferry Fukuoka 2*, a vessel operated by MOL group company Meimon Taiyo Ferry, Co., Ltd. This was part of a response to an initiative by the Japanese Ministry of Land, Infrastructure, Transport and Tourism to control engine idling for vessels.

We will monitor the progress of these two initiatives carefully as we evaluate further use of onshore power supplies in the future.



MOL Enterprise Containership



Ferry Fukuoka 2



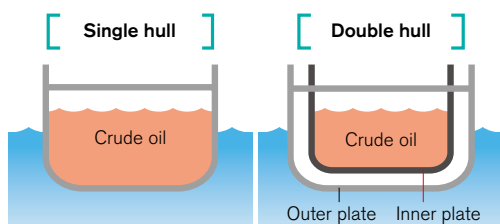
# Approaches to Protecting Biodiversity and the Marine Environment

By rigorously ensuring safe operation, the MOL Group is working to prevent marine pollution caused by marine accidents. At the same time, MOL 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

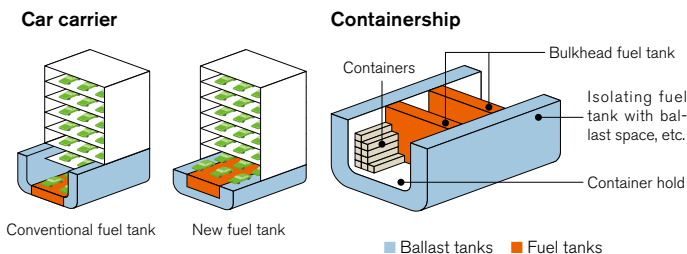
### Double-Hull Tankers

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 burn fuel oils to proceed. 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 bunker oil leaking into the ocean in the event of an accident.



### Onboard Waste Disposal

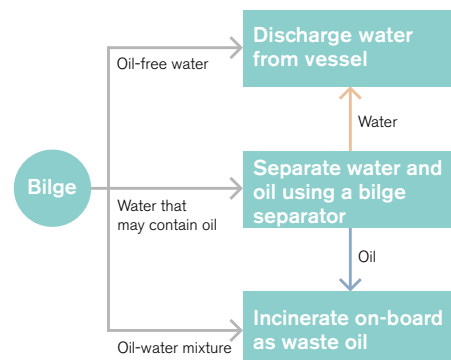
On a vessel, which is also a home for seafarers, the same type of garbage as a household, plus various waste unique to ships, such as loading and packing materials, is generated. On our operated vessels, based on the MARPOL Treaty, we draw up on-board waste management plans requiring separation, collection, 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.

### Proper Processing of Waste Oil

Fuel oil for vessels contains many impurities. Water and other contaminants are extracted by pre-treatment before the fuel is used in main engines, power generators, and boilers. Waste oil, containing water and impurities, from pre-treatment, is heated in a specific tank to remove water, and then incinerated in conformity with environmental regulations.

### Processing Bilge Water

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.



### Caring for the Environment When Scrapping Vessels

Aging vessels must often be scrapped in the interest of safe operation and protection of the marine environment. However, measures for workers' safety and the environment have been insufficient when scrapping ships in some Asian countries. In May 2009, the IMO adopted The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009, with the aim of preventing problems related to the scrapping of vessels. This treaty 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. MOL is working to create such inventory lists ahead of the enforcement of this treaty. At the same time, as in the past, when selling a ship on the assumption that it will be scrapped, we check that the scrapping yard takes environmental measures in conformity with ISO14001 (or the environmental management equivalent), and uses scrapping methods and procedures that are sufficiently safe for the environment and personnel.

## Measures to Protect Biodiversity

The MOL Group is engaged in many activities, technology development efforts and social contributions aimed at supporting biodiversity, protecting the natural environment, and seeking to make employees increasingly aware of these issues. In addition to steps such as ship-related environmental protection activities and recycling materials used in company offices, MOL has also developed in-house communications tools to promote awareness, and aggressively participates in activities that protect the natural environment.

### 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.

### Ballast Water

#### 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



#### In-house Newsletter “Monthly Environment”

The MOL Group publishes a monthly newsletter and distributes it via the intranet site. The newsletter seeks to promote an awareness of biodiversity and the natural environment among MOL employees.



Ballast water is discharged when cargo is loaded. It can have an impact on local ecosystems by introducing foreign marine organisms from another location as well as 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 February 2004. After 2017, all vessels will be required to treat ballast water to reduce the content of marine organisms to a specified level rendering it harmless. We have developed a ballast water purification system and conducted on-board demonstrations in cooperation with manufacturers, researchers, and other concerned parties and continue to work to render ballast water harmless as early as possible. In October 2006, we installed and tested a prototype system on our containership *MOL Express*, confirming that it meets the concentration criteria required by the treaty. Since then we have continued to conduct onboard field trials and plan to obtain the necessary approval for commercial use under Marine Environment Protection Committee resolution 61 (MEPC 61) in October 2010.



Ballast water purification experimental system

### Ship Bottom Paints

Fuel efficiency declines when marine organisms attach to the bottom of a vessel and increase the hull's resistance to traveling through the water. The traditional approach to this problem was to coat ship bottoms with paint containing tributyltin (TBT), which has a high antifouling property. However, after the harmful effect of TBT on ecosystems was widely confirmed, the IMO in October 2001 adopted an international convention on the control of harmful antifouling systems that imposed regulations on the use of ship bottom paints, including TBT paints. MOL began switching to tin-free (TF) paint earlier than this and as a result we completed the switch on all our managed vessels in fiscal 2005.





## Group Companies' Initiatives

As part of the new midterm management plan, "GEAR UP! MOL," the MOL Group has adopted an environmental strategy aimed at offering business services and solutions that reduce the environmental impact, including promoting a modal shift with ferry transport. Below are examples of achievements by individual MOL Group companies to put the strategy into practice.

### The 4th MOL Group Environmental Award

In order to create incentives for group companies to rigorously practice environmental management, we introduced the MOL Group Environmental Award in fiscal 2005. Every year, this award recognizes meritorious activities aimed at developing and introducing environmental technology, and other environmental activities in the group.

#### Most Outstanding Performance Award—Environmentally Friendly Buildings

##### Daibiru Corporation

In 2009, Daibiru completed construction of the Nakanoshima Daibiru Building and the Tosabori Daibiru Building. These buildings incorporate a variety of advanced ecological technologies. For example, they have an "ecological façade," which helps block the sun's heat from entering the building, while retaining views and light. They also incorporate an "automated light adjustment eco-system," which automatically controls brightness at desks, and an efficient air conditioning system that circulates fresh air from the outside.



##### Nakanoshima Daibiru Building

- 35 floors above ground, total floor area: 79,543.04 m<sup>2</sup>
- Earned an "S" rank (highest rank) from the Comprehensive Assessment System for Building Environmental Efficiency for Osaka City (CASBEE Osaka)
- "Governor's Prize" in the third annual Osaka Sustainable Building Awards (February 2010)
- CASBEE Osaka "Building of the Year" for 2009 (March 2010)



##### Tosabori Daibiru Building

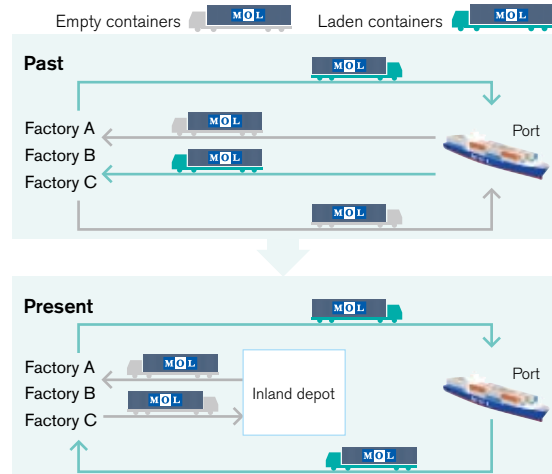
- 17 floors above ground, total floor area: 37,496.96 m<sup>2</sup>
- Earned an "A" rank from CASBEE Osaka

#### Outstanding Performance Award—"Container Round Use" Reducing CO<sub>2</sub> Emissions

##### International Container Transport Co., Ltd.

The company implemented procedures for re-using containers for export rather than returning them empty, after they arrive in Japan with imports. The company uses this service—dubbed "Container Round Use"—as a marketing tool to attract major shipping clients and to develop an inland depot network. Since May 2009, the company has been re-using containers under this system at an annual pace of around 1,800 units, thereby cutting CO<sub>2</sub> emissions by an annual amount of approximately 600 tons.

#### Diagram of "Container Round Use"



#### Excellence Award—Promotion of Ecologically Sustainable Lifestyles

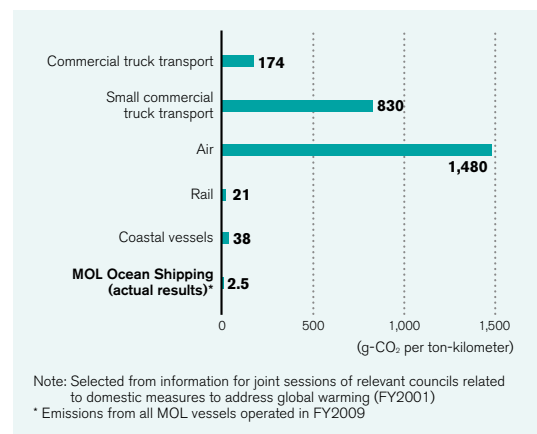
##### MOL Tankship Management Ltd.

MOL Tankship Management has been taking steps to promote an awareness of environmental issues and healthy lifestyles among its employees. Since fiscal 2008, the company has distributed "Individual LOHAS Declaration" cards to employees throughout the company, for setting annual goals such as reducing energy use, recycling, or getting off the train one station early and walking the rest of the way to work, and employees are putting these goals into practice.

#### Modal Shift Promotion

Approximately 20% of Japan's CO<sub>2</sub> emissions are accounted for by the transportation sector. With the aim of reducing these

#### Per-Unit-Load CO<sub>2</sub> Emissions by Means of Transport—Comparison of CO<sub>2</sub> emissions carrying 1-ton cargo for 1 km—



emissions, the Japanese Ministry of Land, Infrastructure, Transport and Tourism and other concerned ministries have set up programs to establish a transportation system with a low environmental burden and have promoted the so-called "modal shift" of using rail transport, shipping and other low-impact modes of transport. The MOL Group is doing its utmost to facilitate this modal shift such as by providing Japan's largest lineup of ferry and domestic shipping services and through *ISHIN-II* (see page 7 for details).

### Use of Onshore Electricity to Power Tugboats and Domestic Carriers

Members of the MOL Group have been installing electric power facilities connected to the local electricity grid, to power tugboats at berth. This not only reduces the workload for crew members due to reduced use of generators, but also reduces emissions of NO<sub>x</sub>, SO<sub>x</sub> and particulate matter. In some ports, the local electricity grid is even used to power domestic carriers while at berth.

### Initiatives to Reduce Environmental Load at Container Terminals

International Container Terminals Co., Ltd.  
Shosen Koun Co., Ltd.

In 2007, MOL and International Container Terminals Co., Ltd. installed one of the largest solar power generation systems in Tokyo at the Tokyo International Container Terminal. The system generates 200 kW of power. Its solar panels are located on the roofs of the gate building, where trailer trucks enter and exit the terminal, as well as the vehicle washing facility. A total of 1,200 solar panels generated about 213,000 kWh of power during fiscal 2009, which covered approximately 40% of the power needs for the control building. International Container Terminals Co., Ltd. and Shosen Koun Co., Ltd. have also introduced hybrid transfer cranes at their terminals. These cranes consume approximately 40% less fuel than conventional ones.



Tokyo International Container Terminal

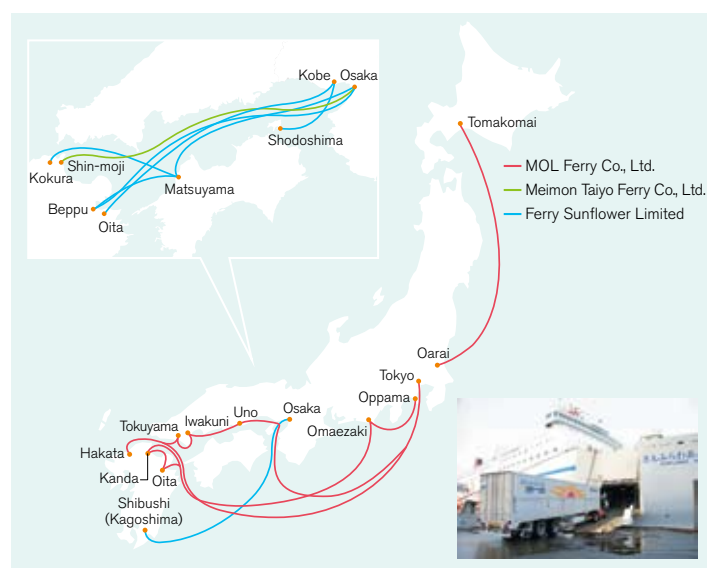
### PBCFs and Other Products With Environmental Benefits

MOL Techno-Trade, Ltd.

In addition to selling products that offer environmental benefits\*, this company places top priority on environmental protection, in activities such as fuel oil supply to ships.

\* Products with environmental benefits  
Examples of products used by the MOL Group which benefit the environment include: Propeller Boss Cap Fins (PBCFs; for more details, see page 23), IZ energy-saving lighting, Adgreencoat and ZEFFLE Infrared Reflective coating that control temperature rises in cabins, "SANWA Aerators," which efficiently dispose of waste water, and "BY-FAR Z," a relatively environment-friendly detergent to disperse oil.

### MOL Group Domestic Ferry Service Network



### Efforts to Reduce the Environmental Impact of Cruise Ships

Mitsui O.S.K. Passenger Line, Ltd. (MOPAS)

The company has made an effort to reduce the environmental impact of its cruise ship—the *Nippon Maru*—not only in navigation, but also in the unique aspects of passenger ships. The company uses eco-friendly toilet paper, lunch boxes, and copy paper, exchanges towels in passenger quarters when requested, takes steps to reduce paper bags and packaging for all items in the gift shop, and seeks to enlist the cooperation of passengers to reduce environmental impact.

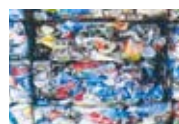


The cruise ship *Nippon Maru*  
(renovated in March 2010)

### Developing a Beverage Container Recycling Business and Promoting a "Recycling-Oriented Society"

Kusakabe Maritime Engineering Co., Ltd.

In 2004, the company established the can recycling plant "Tri-R-Kobe." Using a dry quenching furnace, the plant turns pressed empty beverage cans, collected through recycling activities, into steel and aluminum pellets for reuse as material. By using primarily natural gas, the furnace reduces CO<sub>2</sub> emissions by approximately 60% compared with comparable oil-fired kilns. It also recycles combustible gas generated inside the furnace to ensure complete combustion.



Pressed cans



Commercially recycled aluminum pellets (right) and steel pellets (left)



## Caring for Land-based Employees

The MOL Group is enhancing recruitment activities, training programs and various other systems with the aims of securing and developing employees who can create new value and ensuring the growth of both the MOL Group and individual employees. The Group also endeavors to enhance employee health and develop workplaces that instill peace of mind in employees in line with an individual's stage of life. Under the new midterm management plan, we have set a number of numerical targets, and are working to achieve those during the term of the plan.

### Recruitment and Human Resources Development

Every year, MOL conducts fair recruitment activities with a clear image of the types of people the company is looking for. MOL regards an employee's first 10 years in the company as a cultivation period. 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 jobs in various workplaces. Meanwhile, OFF-JT includes position-specific training, on-board training to gain experience in the frontlines of our business and cross-cultural skills training. We also run Career Development Workshops in support of individual career development, management skill enhancement training for newly appointed managers, MOL Group Management Schools to develop future leaders of the MOL Group, and MOL Group Executive Seminars targeted at executives of Group companies.

#### Required Skills



Training before the first assignment on-board  
 (the training vessel *Fukae Maru*)



On-board training for land-based employees  
 (Containership *MOL Competence*)



POWER PROGRAM training for national staff of overseas subsidiaries at MOL's Head Office

### HR System and Evaluation System

We have adopted a system for personnel management and remuneration that encourages employees to take the initiative in their work and more appropriately reflects responsibility and results. Aiming to ensure a fair and highly transparent evaluation, appraisal is conducted annually and managers also conduct interviews with their subordinates every quarter.

### Consideration for Health Care and Work Environments

In addition to complying with laws and regulations, we have introduced the following systems to promote employee health and enhance working environments so that employees can work energetically, and in good health, both physically and mentally.

#### Health Management

- Implement yearly medical check-ups
- Provide daily medical services in the company clinic
- Implement regular mental health consultations at key worksites in Japan
- Implement online mental health self-evaluation
- Formulate countermeasures against new influenza strains
- Implement measures to reduce overtime work (implement no overtime days, strengthen processes for approval of overtime work)
- Implement medical check-ups and recovery leave for employees spending an extended period of time at worksites
- Implement medical exams before, during and after overseas postings for employees working overseas

#### Care for Working Environments

- Accept various consultations in the Counseling and Aid Center in the Human Resources Division, Head Office
- Implement Casual Days (every Friday, casual everyday between June and September)
- Implement disaster safety confirmation system
- Conduct employee satisfaction surveys



### Instill an Awareness of Human Rights

MOL has established the Human Rights Coordination Center within the Human Resources Division to conduct human rights training aimed at preventing harassment of any kind and deepening awareness of human rights at all levels of training from the time a person joins the company. The company also reports information to employees in order to foster respect for human rights, including announcements concerning Human Rights Week, on the intranet.

### Systems that Support Diverse Human Resources and Work Styles

MOL operates various systems with the aim of utilizing diverse human resources and offering employees a variety of work formats.

- Child-care leave: In addition to morning sickness and maternity leave, MOL also has a child-care leave system for up to 2 years catering for the period before children are accepted at day care. A total of 70 employees have taken child-care leave since the system was introduced in 1992.
- Shorter hours and exclusion from overtime for employees with young children: This system was introduced in fiscal 2010.
- "Refresh" leave: Employees are allocated extra holidays after 15 years and 25 years of continuous service.
- Nursing care leave: Employees may take up to 2 years' nursing care leave.
- Reemployment system for mandatory retirees: MOL has introduced an active senior program in response to a law in Japan enacted to encourage stable employment of workers who have reached the mandatory retirement age.

#### Land-based Employees by Gender and Position

	March 31, 2008		March 31, 2009		March 31, 2010	
	Men	Women	Men	Women	Men	Women
Group leaders and above	231	2	239	2	235	4
Managers	165	12	165	12	165	10
Below manager level	290	185	298	191	290	196
Total	686	199	702	205	690	210
	885		907		900	

#### Number of Employees Taking Maternity Leave (Pre- and Post-Childbirth) and Child-Care Leave

	March 31, 2008	March 31, 2009	March 31, 2010
Maternity leave (pre- and post-childbirth)	7	3	2
Child-care leave	9	11	8
Number of working mothers*	34	29	33

\* Mothers with children under the age of 15

### 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 nation where they work. And we have hired about 3,000 national staff at local subsidiaries all over the world, contributing to the growth of local economies.



MOL (America) Inc. Chicago Office



MOL (Europe) B.V. Rotterdam Office

### Relationships with Labor Unions

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

#### Voices from the Frontline

##### Working Hard Every Day With the Understanding and Cooperation of the Company and My Family

I took child-care leave twice, for a total of 801 days, and returned to work in May 2010. Every day is busy as I juggle my work and family commitments, but with the understanding and cooperation of the company and my family, I am leading a very rewarding life.

I have to deal with the various problems of being a working mother. For example, soon after I returned to work, I got a call from the nursery school saying that my child had taken ill suddenly, and I had to leave work. Thanks to the support of my colleagues, I was able to overcome these challenges.

Within the area of CSR, I am currently working mainly on social contribution activities.

In my work, I feel a great sense of responsibility as a member of the CSR and Environment Office within the broad range of activities we pursue. My aim is to deliver results by using my time efficiently.



**Eiko Kagata**  
CSR and Environment Office,  
Corporate Planning Division  
(Joined MOL in 2002. Senior  
Assistant. Mother of two children)



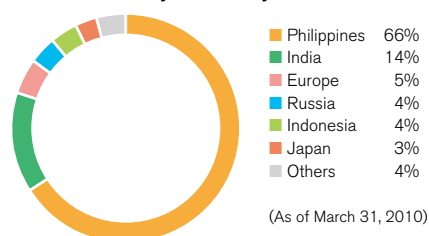
## Caring for Seafarers

A unique characteristic of the MOL Group is that we have seagoing employees of many different nationalities among our workforce. They play a key role in ensuring safe operation and managing ship operations, the very basis of our business.

### MOL's Seafarers

MOL's seafarers crew approximately 300 vessels. The large majority of our seafarers are foreign nationals from more than 20 countries; Japanese seafarers account for only around 3% of our seagoing employees. MOL pays due consideration to this multinational workforce in terms of the working environment on-board and on shore as well as remuneration and benefits. At the same time, we run high-level development and training programs to

#### MOL Seafarers by Nationality



produce outstanding seafarers who are highly motivated and possess excellent skills and knowledge.

### Basic Policies for Recruitment

MOL employs around 20 Japanese seafarers (seagoing employees) in a typical year, and since fiscal 2005 has employed female seafarers. Overseas, meanwhile, we have established bases for recruiting, training and developing seafarers around the world. We have also set up a scholarship system at overseas maritime academies to support aspiring seafarers. In countries lacking the

necessary qualification systems within academy curriculums, we have introduced an internship system so that students can gain the necessary experience for earning qualifications. Promising young seafarers from various countries who have received such support will be employed as personnel who have the potential to be key MOL members for safe operation in the future.



A female Third Officer

### Education and Training for Seafarers

Developing and securing a stable workforce of excellent seafarers who meet MOL's skill standards is a crucial point in maintaining vessels' safe operation. MOL has crew training centers in eight locations in six countries where seafarers undertake education and training programs before taking up a position on a vessel. These centers offer a variety of training based on MOL's unique and uniform curriculum. Each training center provides a variety of training

according to the type of vessel to which a seafarer is assigned, ranging from classroom lectures on theory to actual practice on simulators and real engines. This training enables seafarers to operate the latest on-board equipment and machinery and comply with new laws and regulations. MOL sets its own skill requirements for every seafarer as a technical expert at the front-line according to his/her rank in addition to the standards set by the various international treaties, and the company has established its own education system to enable all MOL seafarers to fulfill these requirements. In addition, experienced captains and chief engineers are appointed as on-board OJT training instructors. These experienced seafarers not only improve seafarer skill by pointing out and giving instruction for correction of unsafe actions, but also foster stronger awareness of safety.



MOL's crew training center in the Philippines

Training on-board the training vessel *Spirit of MOL*

### Voices from the Frontline

#### Thoughts on My Training Voyage

I spent three months aboard an LNG carrier training as a Junior Third Engineer. I worked hard every day, knowing that the safe transportation of the energy resources that society needs supports the lifestyles of many people around the world. My work involved using all five senses to conduct careful checks of the on-board equipment I was assigned, continuously monitoring their status and conducting accurate maintenance in order to prevent any malfunction from occurring. Before performing maintenance work, we all participated in "Kiken Yochi Training" (KYT; danger awareness training), confirming safety before beginning work in order to prevent accidents. I learned through this training voyage that by continuing these tireless efforts, we can ensure safe ship operations. Next time I am aboard a vessel, I will remember the spirit of Safety First, and work to contribute to safe operations.



LNG carrier *Al Zubarah*  
Third Engineer  
**Taketo Otomo**  
(Joined MOL in 2009)

### Roles of MOL Seagoing Employees

MOL's seafarers engage not only in ship operation aboard company-operated vessels but also in land-based vessel and seafarer management positions. In the case of Japanese seafarers, for example, for the first 10 or so years of their careers, they concentrate on serving aboard ships and accumulate competence as future captains and chief engineers. These employees are posted to land-based positions for a certain period of time where they utilize their experience, or they follow their own career paths by serving aboard various types of vessels. Such land-based positions are open broadly to non-Japanese seafarers, too, and seafarers of many different nationalities support the company's safe operations in various locations that are not their home countries. Thus, MOL seafarers are required to serve as all-round players to lead the whole MOL Group.

### Improving Occupational Safety and Welfare

As described in Special Report 2: Ensuring Safe Operation (page 10), one of the four zeroes under our new midterm management plan is to have "zero fatal worker accidents." In fiscal 2009, there were no fatal accidents aboard MOL vessels, and we will strive to maintain that record. With regard to work-related accidents, we have set the ambitious goal of limiting LTIF (Lost Time Injury Frequency) to under 0.25, and are promoting safety training and improvements to the working environment in order to achieve that aim (in fiscal 2009, the Group had an LTIF of 0.415). In the second half of fiscal 2011, the Maritime Labour Convention stipulating shorter hours per day for on-vessel work are scheduled to go into effect. MOL is making preparations to implement these changes ahead of schedule in order to improve working conditions aboard our vessels.

In terms of welfare, in addition to the regularly scheduled health checks, mental health consultations, and gatherings for seafarers and their families around the world that have been in place for some time, MOL is introducing high-speed Internet connections aboard vessels to make it more convenient for seafarers to exchange e-mail with family and friends during voyages.

### Caring for Families at Home

It is vital to care for seafarers and their families, who must spend considerable time apart. MOL has established consulting offices for seafarers and their families in the Human Resources Division at Head Office as well as in locations overseas, and offers services that are closely tailored to particular countries and regions. For instance, we hold gatherings for seafarers and their families around the world that are attended by Head Office corporate officers. These family gatherings include briefings to explain the current status of the company, question-and answer sessions, consulting, and social meetings. In these and other ways, MOL is working to strengthen the support framework for families at home.



A gathering for seafarers and their families in the Philippines

### Instilling a Sense of Pride and Joy From Working for the MOL Group

MOL operates its own training vessel, the *Spirit of MOL*, which is an important training facility for new seafarer education and for ensuring safe operation. New mariners, regardless of their nationality, who represent the future of the company, learn specialist maritime knowledge and skills through intensive safety and basic training, and by living together with other interns of various nationalities, they develop pride and a sense of belonging as members of the MOL Group.

In addition, seafarers who have demonstrated leadership and made notable achievements in terms of safety or efficiency of vessel operation are recognized each year, and invited along with their families to the Head Office in Tokyo to receive commendation directly from the president of MOL. Each year at the ceremony, the faces of the commended seafarers reflect the pride and joy they feel at doing their utmost to contribute to safe vessel operation. These initiatives for seafarers are reported to all seagoing employees and their families through our English-language newsletter, and serve to strengthen the bonds among the seafarers of the MOL Group.



Award ceremony

### Crew Duties

**Deck Department:** Responsible for vessel navigation, safe cargo transport, loading/discharging operations, and hull maintenance. On vessels which are always underway, three teams of an officer and an able seaman take deck watch (navigation and lookout) around the clock with six four-hour shifts to ensure safe operation.

**Engine Department:** In charge of operating and maintenance of vessel equipment and machinery including the engine. They are responsible for keeping the vessel in the best operational condition. The day in the engine room starts with a work plan meeting at 8:00 a.m., and continues in principle until 5:00 p.m. A rotating engineer is on call in case of engine trouble during the night, when it is in "M zero" (unattended) operation.

**General Affairs Department:** Takes responsibility for preparing meals for the seafarers and purchasing and managing foodstuffs, cleaning, and health and sanitation. Their working hours are from early morning to night because they must prepare breakfast, lunch, and dinner. They take their meals and breaks during slow times.



Engine Department:  
Replacing a cylinder  
cover



Deck Department: Voyage planning





## Social Contribution Activities

MOL has traditionally carried out social contribution activities on a basic policy of conducting activities of an ongoing nature rooted in the business area of ocean shipping. Going forward we intend to continue following this policy while also carefully considering social issues to tackle and actively engaging in initiatives to help solve them.

### Principles of MOL's Social Contribution Activities

MOL will engage in social contribution activities on the basis of the following principles.

- I. Contribute to the United Nations Millennium Development Goals as a company growing in step with the global economy and social development.
- 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.
- III. Contribute to local communities as a good corporate citizen.

### Activities in Fiscal 2009

MOL has conducted social contribution activities in five different areas to date. Our main activities in these areas are introduced here along with the activities of MOL Group companies in Japan and overseas.

#### Transport of Aid Supplies

##### Transporting Mobile Library Buses

In October 2009, MOL helped transport by sea 12 used mobile library vehicles to the Republic of South Africa. This project is coordinated by NPO Sapesi-Japan (South Africa Primary Education Support Initiative-Japan) as part of a program run by the South

African Ministry of Education to raise literacy levels within the country. The used library vehicles will tour the many elementary and middle schools without libraries that dot the nation, lending books to teachers and students.



##### Transporting Aid Supplies for Chilean Earthquake Relief

The earthquake that struck Chile in February 2010 was enormous with a magnitude of 8.8. Major damage was incurred and numerous buildings were destroyed, largely in the provincial capital of Concepcion in central Chile. Acting on the request of the Chilean consul general in Melbourne, MOL transported relief supplies, including hospital beds, collected by the Chilean community in Australia to Chile in four 40-foot containers.



##### Transporting Wheelchairs for People with Disabilities

The Free Wheelchair Mission (FWM) is a non-profit organization in the United States that provides wheelchairs for people with disabilities in developing



countries. MOL has been helping deliver wheelchairs procured in China by FWM since 2006. In 2009, we transported one 40-foot container's worth of wheelchairs.

#### Marine and Global Environment Protection

##### Beach Cleanup

We conduct beach cleanups at two locations on an ongoing basis, Odaiba Seaside Park in Tokyo and Yuigahama Beach in Kamakura.



##### Assisting in Marine and Hydrographic Research

Research involving observation of surface water temperature using expendable bathythermographs (XBTs) seeks to elucidate interactions between the ocean and atmosphere, the role of the ocean in climate change, and the ocean's overall circulation. Research is conducted on the open ocean aboard an MOL tanker, the *Kaminesan* (classified as a Very Large Crude Carrier, or VLCC). The iron ore carrier *Niitaka Maru* also helps in marine weather observation conducted by the Japan Meteorological Agency.

#### Maritime Education

##### Container Terminal Tours

Together with Group companies International Container Terminals Co., Ltd. and Shosen Koun Co., Ltd., MOL gives tours of container terminals—trade gateways for Japan—to junior and senior high school students, as well as adults, out of a desire to teach people the roles played by ocean shipping and port operation. In fiscal 2009, tours of container terminals in Tokyo and Kobe were held a total of 176 times.



## International Cooperation

### Supporting UN World Food Programme and Participating in Related Events

MOL participates in the Japan Association for the UN World Food Programme, an organization that coordinates private-sector support for the program, and provides support for it in the form of donations and the like.

Employees also volunteered and participated in a charity event, "End Hunger: Walk the World," organized by the program and the association to help prevent children around the world from going hungry.



## Monetary Contributions

Regrettably many people around the world suffered due to a natural disaster this past year as well. MOL contributed donations to support regions affected by the following natural disasters.

September	2009	Typhoon that struck Luzon Island in the Philippines
January	2010	Major earthquake in Haiti
February	2010	Major earthquake in Chile
April	2010	Major earthquake in Qinghai Province, China

In areas affected by the typhoon that struck the Philippine island of Luzon, staff of Magsaysay MOL Marine Inc., a seafarer staffing firm in the MOL Group, supplied relief provisions, and the 160 cadets of various nationalities on board the training vessel *Spirit of MOL* participated in a cleanup of elementary schools that had been flooded.



## Initiatives of MOL Group Companies

### Daibiru Corporation

Daibiru Corporation partners with AIESEC, a non-profit organization involved in administering overseas internships, to provide internships to college students from Vietnam.



### M.O. Tourist Co., Ltd.

Volunteer employees participated in planting and thinning trees at JATA Forest sponsored by the Japan Association of Travel Agents.



### Mitsui O.S.K. Lines (Thailand) Co., Ltd.

Celebrating its 40th anniversary in 2008, Mitsui O.S.K. Lines (Thailand) established the CSR Committee to raise employee awareness of social contribution and instill pride in the company. The employee-led committee decided to conduct a tree-planting campaign for mangrove forests. In 2009, the second year of the campaign, 169 people participated and planted a total of 2,000 seedlings.



### Mitsui O.S.K. Lines (India) Pvt. Ltd.

The company visited an orphanage in Mumbai and made donations.



### MOL South Africa (Pty) Ltd.

A Christmas party was held at an orphanage in Cape Town.



# Third-Party Opinion

The Japanese word "*ISHIN*" has very positive historical implications, recalling the efforts of young people, dedicated to their country, devoting their lives to the process of reform. Consequently, the slogan that MOL has adopted for its business strategy—"Senpaku *ISHIN*"—gives one the impression of indomitable determination and resolve.

As you know, Japan's last Prime Minister, Yukio Hatoyama, in his speech to the United Nations, made an international pledge that committed Japan to reducing CO<sub>2</sub> emissions by 25%, from 1990 levels, by 2020. Since then, industry groups have repeatedly protested that "citizens will be the ones to bear the burden of an excessive effort to cut emissions." Without going to the extent of coming up with a slogan like US President Barack Obama's "Green New Deal," environmental measures have demonstrated their potential to lead Japanese industry to even greater international competitiveness. In the 1970s, when Japan adopted some of the strictest automobile emissions standards in the world, it forced Japanese automakers to develop vehicles with low fuel consumption and superior quality. The ultimate impact was to elevate Japanese manufacturers into the top position in the global auto market. During this period, Honda President Soichiro Honda used to tell his employees that this was a great opportunity to gain share in the auto market, and they responded to his encouragement by developing the CVCC engine. More recently, the global economic slump—triggered by the subprime loan crisis in the US—pushed General Motors into bankruptcy; however, by developing a variety of hybrid and other low-fuel consumption vehicles, Japanese automakers were able to survive the crisis. As the Porter Hypothesis states, technology that reduces the impact of products on the environment also creates a great deal of added value, and contributes greatly to a company's international competitiveness.

This sort of "Green Growth" can play an important role in supporting the economic recovery. Looking at the rapid emergence of countries like China, India, Brazil and Russia, it should be apparent that the only way for Japanese industry to ensure its survival is by remaining at the cutting edge of technological advances. Therefore, I believe that the most important challenge that Japan can accept is the need to develop technological advances that help to preserve the environment. Though the fate of plans to create emission control areas (ECA) and place restrictions on ballast water is still not certain, I think that Japan should recognize this as a chance to exercise leadership. The marine transport industry needs to join hands with government and related industrial organizations, and work together to promote an "*ISHIN*" (reform or revitalization) in this area.

I recently saw a special report, in a newspaper, dealing with the marine transport industry. According to this piece, the major shipping companies intend to use their combined experience in vessel operating technology and marine operations to help develop floating production facilities for the exploration and development of deepwater oil fields in Brazil—constructing, operating and renting the facilities. The sea offers a wealth of natural riches that humans can develop, from mineral deposits and energy resources to food resources. We will need to develop these resources



**Toru Sato**

Professor, Graduate School of Frontier Sciences  
The University of Tokyo Department of Ocean  
Technology, Policy and Environment

effectively, to ensure a steady improvement in the quality of life for citizens. The problem is that while Japan has plenty of individuals and groups playing a role in this operation, there is no leader or orchestrator to help cultivate the industries related to marine development, create new businesses and jobs, and lead the way towards a more bountiful way of life for our citizens. It seems to me that private industry needs to take the initiative, involve public-sector organizations, and then work together to promote development. Based on the aforementioned news article, I see great potential for the marine transport industry to enter the field of marine resources development.

Immediately after the Meiji Restoration, Japan's shipping sector itself played a leading role in developing Japanese industry in general. At that time, there was also a fierce level of competition between international corporations. MOL and other shipping companies who have prevailed in the face of this competition have enhanced their presence greatly on a global scale by integrating or spinning off subsidiaries. In 2010, I believe the shipping industry, having emerged from a structural period of stagnation that persisted since the late 1980s, is in a strong position to take on the role of a leader and orchestrator by seeing environmental regulation as an opportunity, and moving into the field of marine resource development.

In 2010, we are also on the threshold of a future that will be difficult and challenging in many ways. I believe that the key to negotiating the vicissitudes of the immediate future will be to focus on several issues: environmental concerns, safety and security, demographic aging, health, and above all, the use of marine resources. However, as countless new businesses are created, developed or destroyed, I think we will see a major change in the industrial structure. It will be a difficult task, but the industries which use the sea as their business foundation will be able to draw upon riches that no other industries can match. Before them is a vast ocean of opportunity, which can be unlocked through environmental technology and marine resource development. The word "*ISHIN*" resonates for those who see the challenges and the opportunities ahead of us, because "*ISHIN*" is the concept that can lead us through the challenges ahead and build a new and more prosperous future. I believe that MOL will play a major part in this process.

## Addressing the Challenge

As Professor Sato points out, Japan has used environmental policies to good effect, in the past, as a way of enhancing the global competitiveness of its industries. By developing technologies ahead of global competitors, Japanese industry has managed to remain competitive, and this remains true today. In the years following the Meiji Restoration ("Meiji Ishin"), the shipping industry was one of the organizers and facilitators which drove Japan's industrial development, and it needs to play a role today by driving advances in environmental technology. As he pointed out, the word "*ISHIN*" has a profound meaning and implications for us to build upon. His expectation for MOL to put the "*ISHIN*" concept into practice further encourages us to address the challenges that our world now faces.

From the beginning of fiscal 2010, MOL embarked on a new midterm management plan which adopts "environmental strategy" and "enhance safe operation" as the top management priorities in our drive to create new growth. MOL recognizes its responsibility to act as a role model and a positive leader in the shipping industry; this will also make MOL the company that customers choose when selecting a shipping service provider. Though it will be a real challenge that requires perseverance, by sticking to our principles and policies, I am confident that MOL can accomplish these objectives.

**Kenji Yokota**  
Managing Executive Officer  
Vice Chairman of the CSR and Environment Committee





# Corporate Profile (As of March 31, 2010)

<b>Name:</b>	Mitsui O.S.K. Lines, Ltd.	<b>Number of Group companies:</b>	332 (The parent company and consolidated subsidiaries)
<b>President:</b>	Koichi Muto (Appointed June 22, 2010)	<b>Group fleet:</b>	905 vessels, 64,337 thousand DWT
<b>Shareholders' equity:</b>	¥659.5 billion	<b>Head Office:</b>	1-1 Toranomon 2-chome, Minato-ku, Tokyo 105-8688, Japan
<b>Number of shares issued:</b>	1,206,286,115	<b>Branches and offices in Japan:</b>	Nagoya, Osaka, Kyushu (Fukuoka), Hiroshima
<b>Number of shareholders:</b>	111,102	<b>URL:</b>	<a href="http://www.mol.co.jp">http://www.mol.co.jp</a>
<b>Share listings:</b>	Tokyo, Osaka, Nagoya and Fukuoka stock exchanges		
<b>Business:</b>	Multi-modal transport mainly by ocean-going vessels		
<b>Number of MOL Group employees:</b>	9,707 (The parent company and consolidated subsidiaries)		

## Consolidated Subsidiaries in Japan (58 companies)\*

### 1. Bulkships (6)

MOL LNG Transport Co., Ltd., Mitsui O.S.K. Kinkai, Ltd., MOL Tankship Management Ltd., Chugoku Shipping Agencies Ltd., Tokyo Marine Co., Ltd., Nissan Motor Car Carrier Co., Ltd.

### 2. Containerships (9)

Utoc Corporation, Utoc Logistics Corporation, Utoc Stevedoring Corporation, Mitsui O.S.K. Lines (Japan), Ltd., MOL Logistics (Japan) Co., Ltd., International Container Terminal Co., Ltd., International Container Transport Co., Ltd., Shosen Koun Co., Ltd., Chiba Utoc Corporation

### 3. Ferry and Domestic Transport (9):

Kansai Kisen Kaisha, MOL Ferry Co., Ltd., The Diamond Ferry Co., Ltd., Diamond Line K.K., MOL Naikou, Ltd., Blue Sea Network Co., Ltd., Blue Highway Express Kyushu Co., Ltd., Blue Highway Service K.K., Ferry Sunflower Limited

### 4. Associated Businesses (23)

Ube Port Service Co., Ltd., MOL Career Support, Ltd., M.O. Tourist Co., Ltd., Daibiru Facility Management Ltd., Kosan Kanri Service West Corporation, Kitanihon Tug-Boat Co., Ltd., Kusakabe Maritime Engineering Co., Ltd., Green Kaiji Kaisha, Ltd., Green Shipping, Ltd., Kobe Towing Co., Ltd., Japan Express Co., Ltd. (Yokohama), Japan Express Co., Ltd. (Kobe), Japan Express Packing & Transport Co., Ltd., MOL Kaiji Co., Ltd., Mitsui O.S.K. Passenger Line, Ltd., Mitsui O.S.K. Kosan Co., Ltd., MOL Techno-Trade, Ltd., Daibiru Corporation, Ikuta & Marine Co., Ltd., Nihon Tug-Boat Co., Ltd., Japan Hydrographic Charts & Publications Co., Ltd., Kosan Kanri Service Co Ltd., Hokuso Kohatsu K.K.

### 5. Others (11)

MOL Adjustment, Ltd., M.O. Cablesip Ltd., M.O. Ship Tech Inc., MOL Ship Management Co., Ltd., MOL Marine Consulting, Ltd., MOL Accounting Co., Ltd., M.O. Engineering Co., Ltd., Orange P.R. Ltd., International Marine Transport Co., Ltd., MOL Information Systems, Ltd., Mitsui Kinkai Kisen Co., Ltd.

\* As of June 30, 2010

## Overseas Network (38 nations)

### Europe

U.K., Germany, Italy, Austria, The Netherlands, Belgium, France, Sweden, Denmark, Finland, Poland

### Asia

China, South Korea, Taiwan, the Philippines, Vietnam, Cambodia, Thailand, Singapore, Malaysia, Indonesia, India, Pakistan, Sri Lanka

### Middle East

Lebanon, U.A.E., Qatar, Oman

### North America

U.S.A.

### Central and South America

Mexico, Panama, Brazil, Chile

### Africa

Ghana, Nigeria, South Africa

### Oceania

Australia, New Zealand

● Local Offices  
● Main Calling Ports

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

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