



## Contents

Editorial Policy .....	1
Corporate Principles of the “K” Line Group; Vision.....	2
Message from the President .....	3

### Special Features

<b>1</b> Celebrating our 90th Anniversary .....	5
<b>2</b> Safety in Navigation and Cargo Operations & Environmental Preservation.....	7

### Financial Report

Outline of “K” Line; Lines of Business.....	9
Medium-Term Management Plan “K” LINE Vision 100 .....	11
Primary Financial Data .....	12
Corporate Governance and Risk Management .....	13

### Social Report

Aiming at Better Relationship with Society.....	17
Relationship with Stakeholders .....	19
Together with Shareholders and Investors.....	21
Working Together with our Customers .....	22
Together with our Business Partners .....	23
Acting as a Responsible Member of Society .....	24
Relationship with Employees .....	27

### Environmental Report

Green Management.....	29
Shipping Operations and their Impact on the Environment ...	31
Working with International Organizations .....	32
Measures Onboard for Environmental Preservation .....	33
Measures at Terminals for Preserving the Environment ....	38
Environmental Protection – Office Initiatives –.....	39
Environmental Targets in FY2008 and Status of our Achievement.....	40
Environmental Management Program for FY2009.....	41

### Data

History of Social and Environmental Activities.....	43
Major Subsidiaries and Affiliates .....	44
“K” Line Implementation Guideline for Charter of Conduct .....	45
Green Accounting; Environmental Management Network .....	47
GRI Content Index .....	48

Independent Observer’s Opinion .....	49
Analysis of Results of Questionnaire Attached to “Social and Environmental Report 2008”.....	50
Glossary.....	51

#### Editorial Policy

This report is intended to convey to stakeholders in a straightforward fashion the initiatives undertaken by the “K” Line Group, based on its corporate principles, in the areas of corporate social responsibility, environmental preservation, and safety in navigation and cargo operations.

#### Period Covered

Fiscal Year 2008 (April 1, 2008 — March 31, 2009)  
Updated information falling outside of the above dates is used for some activities described.  
Also, environmental report data is aggregated in calendar year units.

#### Scope of Report

As a rule, this report includes Kawasaki Kisen Kaisha, Ltd., and its group affiliates.  
Those activities and data for which the scope is limited are noted within the report.

#### Reference Guidelines

Environmental Reporting Guidelines issued by the Ministry of the Environment, Japan.  
GRI\* Sustainability Reporting Guidelines, 3rd revised edition

#### Date of Issue

August 2009  
(The previous report was issued in October 2008; the next report is scheduled for August 2010)

Words marked with an asterisk ( \*) can be found in the glossary on pages 51 and 52.

# Corporate Principles of the “K” Line Group

The basic principles of “K” Line Group as a shipping business organization centering on shipping lie in:

- (a) Diligent efforts for safety in navigation and cargo operations as well as for environmental preservation
- (b) Sincere response to customer needs by making every possible effort; and
- (c) Contributing to the world’s economic growth and stability through continual upgrading of service quality.

## Vision

- 1** To be trusted and supported by customers in all corners of the world while being able to continue to grow globally with sustainability
- 2** To build a business base that will be capable of responding to any and all changes in business circumstances, and to continually pursue and practice innovation for survival in the global market
- 3** To create and provide a workplace where each and every employee can have hopes and aspirations for the future, and can express creativity and display a challenging spirit

## Celebrating 90 Years in Business

*We are making every possible effort to undertake safety in navigation and cargo operations as well as environmental preservation to achieve “Synergy for All and Sustainable Growth” while making timely responses to changes in the business environment.*

### 90 Years Since the Establishment of “K” Line

This year, we marked 90 years since the establishment of “K” Line. Since our establishment, the path has not always been an easy one and we have faced numerous crises, including the Second World War, long-term economic recessions, and drastic appreciation of the yen, but we have weathered them all. Being able to celebrate 90 years in business is thanks not only to the efforts of our board members and employees, but also the support of stakeholders such as shareholders, customers, suppliers, and regional communities, from the company’s foundation to the present, and I would like to take this opportunity to express my sincere gratitude to everyone concerned.

### “K” LINE Vision 100 Medium-Term Management Plan

The “K” Line Group adopted the “K” LINE Vision 100 Medium-Term Management Plan in April of last year with the 100th anniversary of “K” Line’s foundation in mind. Since then, however, the business environment has changed drastically as a result of the financial and economic crises originating in the United States, and consequently we changed course without hesitation, easing up on our pace, substantially curtailing investment and working to comprehensively reduce costs and manage risks. Despite this, we will maintain the “Synergy for All and Sustainable Growth” approach, the main theme of the “K” LINE Vision 100 plan, and continue to take priority action in the following areas: (1) environmental preservation; (2) stable structures for safety in navigation and cargo operations; (3) borderless management by the best and strongest organizations; (4) proper allocation of strategic investment and management resources; and (5) improvement of corporate value and thorough risk management.

### Environmental Preservation

Just as the Corporate Principles presented at the beginning of this report indicate, the “K” Line Group is a shipping business organization centering on shipping, and as such, working to preserve the natural environment is one of our most important social responsibilities. We must implement comprehensive measures for safety in navigation and cargo operations and prevent any oil spillage and release of hazardous substances from marine incidents. Ships are driven by the combustion of fuels, and consequently, emissions of carbon dioxide are unavoidable, but it is important that we take measures to minimize those emissions. One example of such initiatives is the cessation in November 2008 of onboard diesel generator use on ships berthed at the Port of Long Beach in the United States and procuring electric power from the shore, thus eliminating exhaust emissions from the generator. “K” Line was the first company in the industry to take this step at the Port of Long Beach.

### Safety in Navigation and Cargo Operations

Safety in navigation and cargo operations is also an important social responsibility for a shipping business such as “K” Line. We have greatly expanded our fleet in recent years, and the risk of incidents and dangers have likewise increased. Safety in navigation and cargo operations is a core principle for a shipping business, and with the understanding that this directly impacts on environmental preservation and customer satisfaction, the Ship Safety Promotion Committee, which I chair, plays a central role in providing on-site support through a variety of different measures. Fortunately, we have not had any major incidents in the past several years, and we will continue diligent and steady practice of this fundamental principle without becoming overly confident.

### Improving Corporate Value and Thoroughly Implementing Risk Management

“K” Line is working to maximize its corporate value through business investment and increased profit derived from such investment. The company intends to increase its current dividend payout ratio of 20% to 25% in fiscal 2011, and gradually increase it still further to 30% by the middle of the 2010s, in an effort to achieve an appropriate distribution of profits. The business environment has experienced a rapid deterioration recently and current business results are disappointing, but as mentioned previously, we have already positioned ourselves to be able to react quickly to the changing environment. Specifically, we have broadly reined in our investment plan up to 2011, and in December 2008 we established an Economic Crisis Emergency Task Force and also formed the Improvement of Profitability/Cost-reduction Working Group and the Risk-countermeasures Working Group under the Task Force. By the end of March 2009 the Task Force had formulated emergency measures, centered on comprehensive rationalization and cost reduction as well as risk management, to improve our financial standing, and we subsequently promptly implemented such measures. These measures will now be applied to the entire Group. Having overcome a number of crises in the past, we are determined to use that experience to ride out the current rough weather.

### Looking Ahead to our 100th Year

The current challenging business environment is different from the earlier recession brought about by the appreciation of the yen and is affecting almost all companies regardless of nationality and industry. For this reason, we are now presented with a golden opportunity to grow, as those businesses that are able to overcome the current adversity will have the chance to make enormous advances. We will continue to make our best possible efforts to achieve “Synergy for All and Sustainable Growth” with our stakeholders and as such I look forward to your support in this endeavor.

May 2009



President & CEO  
Hiroyuki Maekawa

# Celebrating our 90th Anniversary

– Looking Back to our Past  
and Looking Forward to our Future –



“K” Line was established shortly after the First World War in 1919 with an investment in kind of 11 steamships from Kawasaki Dockyard Co., Ltd. During the period leading up to the Second World War, the Company faced good and bad economic times, but its business expanded. During the war, however, it suffered substantial human and property losses. Following the war, Japan’s merchant shipping was initially placed under the central control of an organization overseen by the General Headquarters of the Allied Powers, but full privatization was implemented in 1950. During this period, the Company resumed regular service in coastal areas of Japan,

and in 1948 successfully raised the “Kiyokawa Maru<sup>\*</sup>,” which was sunk during the war, contributing substantially to the Company’s development. Following the end of a marine transport boom resulting from the closing of the Suez Canal in 1956, merchant shipping experienced an extended slump. In 1963, the Japanese government adopted two laws concerning reorganization of the ocean shipping industry: one regarding increases in government subsidies, the other regarding promotion of restructuring through consolidation. Following many twists and turns, the Company merged with Iino Kisen Kaisha, Ltd. in 1964 to become one of six core shipping companies in Japan.

In the latter half of the 1980s, the Japanese overseas shipping industry experienced a drop in freight following the enactment of a new US maritime law; and with the added impact of yen appreciation following the Plaza Accord and rising fuel prices, three of the six core shipping companies had to receive financial support. Although “K” Line did not receive financial support, its very existence was at risk. In 1987, the Company implemented emergency employment measures, with the result that several hundred sea-based and land-based employees left the company. Later, the entire company worked together to overcome these difficulties, resulting in substantial

improvement in management structure. “K” Line stopped paying dividends in the fiscal year ended March 1984, but resumed payment of dividends in the fiscal year ended March 1998. Since its foundation, “K” Line has maintained a strong sense of independence, and in the process of overcoming numerous crises, a unique “K” Line Spirit has developed. Based on this spirit, which is a reflection of the Company’s independence, creativity and broad-minded attitudes, we are looking ahead to our 100th anniversary.

**1919 to 1945**

**From Establishment to the End of the Second World War**

Following the Company's establishment in 1919, it experienced many difficulties including the Showa Depression started from 1930, but its financial performance was good in the period immediately preceding the Second World War and it owned 36 ships when the war started. During the war, however, the Company suffered extensive harm including the loss of 1,479 seafarers' lives and the loss of 56 ships out of a fleet of 72 that were built and purchased. (Photo: The Company's offices at the time of its establishment)

**1948**

**Raising of the “Kiyokawa Maru”**

The “Kiyokawa Maru,” which was retrofitted as a warship during the war, was subject to bombardment during hostilities in the Seto Inland Sea and flooded. Knowing that the ship would probably not survive, she was deliberately run aground, after which she sank during storm. It was decided to raise the ship as a first step in rebuilding Japan's shipping industry, which lost most of its ships during the war, and after many difficulties, she was successfully refloated. The “Kiyokawa Maru,” one of the best remaining Japanese ocean-going ships, became the first approved ship to travel to North America in 1950.

**1968**

**“K” Line's First Containership “Golden Gate Bridge” Put into Service**

It is said that the greatest technological innovation since the start of regular liner services in the mid-nineteenth century was the containerization. The container system is a door-to-door transport service that integrates ships, railways and trucks. Our containerization started on the California service route and rapidly expanded.

**1970**

**Japan's First Pure Car Carrier “Toyota Maru No. 10” Completed**

It had been the conventional wisdom that in the transport of automobiles, ships that can accommodate both cars and grain were used, loading the ship with cars on the outward journey and with grain on the return journey. We were the first to focus on the future potential of Japan's automobile export industry and built the “Toyota Maru No. 10,” a pure car carrier (PCC) with a capacity of 2,000 vehicles. In 1973, we built the “European Highway,” a PCC with capacity of 4,200 vehicles, the world's largest at the time.

**1983**

**First Japanese LNG Carrier “Bishu Maru” Enters Service**

LNG is natural gas that has been liquefied to reduce its volume for transport. All LNG used in Japan is imported, and without LNG carriers, it would not be possible to supply LNG to Japan. “K” Line became the first Japanese company to own and operate an LNG carrier when it put the “Bishu Maru” into service. Since then, the Company's fleet of LNG carriers has expanded in conjunction with rising demand.

**2007 to 2008**

**“K” Line Enters New Business Fields: Heavy Cargo Ships and Offshore Support Ships**

Looking ahead to our 100th anniversary, we must take advantage of new business opportunities. We entered the heavy cargo ship business in partnership with a German heavy cargo ship company. Heavy cargo ships can be used not only for transporting heavy cargo, but also for performing offshore engineering work for the development of oil and gas fields. We are also entering the offshore support ship business.

## Brief History

- 1919 ● Established as Kawasaki Kisen Kaisha, Ltd.
- 1948 ● The rebuilding of the company fleet began with the refloating of the “Kiyokawa Maru.”
- 1951 ● The Japan/Bangkok liner route was established as the first step toward resumption of service. Other principal liner routes were reopened or established later.
- 1957 ● Work on developing an oil tanker fleet was begun with the building of the “Fujikawa Maru.”
- 1960 ● Work on developing a specialized carrier fleet was begun with the building of the ore carrier “Fukukawa Maru.”
- 1964 ● Merged with Iino Kisen Kaisha to become the core company of the Kawasaki Kisen group, capitalized at 9 billion yen.
- 1968 ● “K” Line's 1st full containership “Golden Gate Bridge” was put into the Japan/California service route.
  - Started the Japan-Far East/Europe liner route with Maersk Line of Denmark.
  - Work on developing a specialized car carrier fleet was begun with the car/bulk carrier “Toyota Maru No. 1.”
- 1970 ● Japan's first PCC (Pure Car Carrier) “Toyota Maru No. 10” was completed.
- 1971 ● International Transportation Service, Inc. was established as the company's overseas container terminal in Long Beach, California.
- 1975 ● The ACE Group established as a consortium for the joint operations of containerships on the Japan-Far East/Europe route.
- 1983 ● Became the ship managing company of Japan's first LNG carrier “Bishu Maru.”
- 1986 ● Left the Japanese 5-line consortium of Japan-Far East/New York route and established a new round-the-world service with two overseas shipping lines.
- 1994 ● Newly-built wide-beam/shallow-draft coal carrier “Corona Ace” put into service.
- 1996 ● Joint ship assignment with Yang Ming Line of Taiwan started on the Japan-Far East/North America and Japan-Far East/Europe routes.
- 1998 ● 5-year management plan New “K” LINE Spirit for 21 (New K-21) adopted.
- 2000 ● New Containership services, Asia/US East coast (via Panama), Asia/Mediterranean and Mediterranean/US East Coast, commenced, which completed our trunk service routes linking west and east.
  - Taiyo Kaiun Kabushiki Kaisha merged with Kobe Nippon Kisen Kaisha, Ltd. Taiyo Nippon Kisen Co., Ltd. was founded. Reformation of our subsidiary companies for ship management and administration completed.
- 2001 ● Established “K” Line Group's Environmental Charter.
  - “K” Line entered a containership alliance with 4 overseas shipping lines.
- 2002 ● Acquisition of ISO 14001\* in recognition of Environmental Management System.
  - Started 3-year management plan named “KV-Plan.”
  - Established “K” Line (Japan) Ltd. for strengthening containership business activities in Japan.
- 2004 ● Launched management plan, “K” LINE Vision 2008.
  - Decided to place new orders for 145,000 m<sup>3</sup> LNG carrier under a time charter agreement. The ship will be our first solely owned and operated LNG carrier.
- 2006 ● Started 5-year management plan called “K” LINE Vision 2008<sup>+</sup>.
- 2007 ● One trillion yen consolidated sales is exceeded by the accounts for the year ended March 2007.
  - A New Joint Venture with SAL for heavy cargo ship business.
  - Established “K” Line Maritime Academy (India).
- 2008 ● “K” Line to become Strategic Investor in FLEX LNG.
  - Started newly-developed 5-year management plan called “K” LINE Vision 100.
- 2009 ● The 90th anniversary of establishment.

# Safety in Navigation and Cargo Operations & Environmental Preservation

– Protecting the Global Environment –



Safety in navigation and cargo operations is essential to environmental preservation. Our foremost priority in ocean transport is safely navigating the waters and transporting cargo.

We have adopted a variety of measures to preserve the environment, such as implementing energy-saving navigation by utilizing optimal speed and appropriate selection of sea routes, and using special energy-saving equipment. However, when it comes to planning the safety of people, ships and cargo, and ensuring environmental preservation, nothing is more important than achieving safety in navigation and cargo operations. We must look into obtaining the necessary data, education and training for analyzing information, and the sharing of such information.

In particular, information concerning weather and sea conditions is indispensable to safe navigation and cargo transport. Below, Capt. Tatsuya Gamou, master of the containership “Clifton Bridge” discusses the weather information system we employ called “BRIDGE.” Above all, establishing strong channels of communication is important in sharing information among the crew. Capt. Gamou gives us some insight on how this communication takes place onboard a ship.

## Safety in Navigation and Cargo Operations through Utilization of IT Tools

Upholding the three pillars of safety in navigation and cargo operations, environmental preservation and economically efficient operations remains the principle duty of “K” Line in operating our ships, and for crews working on the seas, our primary duty is ensuring safe navigation, which helps to maintain environmental preservation and economically efficient operations.

To maintain safety in navigation and cargo operations, it is necessary to ensure appropriate cargo stowage, proper maintenance of ship and equipment, dispatch well-trained and experienced crew who have the requisite knowledge, and maintain teamwork based on mutual trust among the crew. And when setting sail, it is crucial for ocean-going ships to select the best navigation routes, taking into consideration weather and other maritime conditions.

The “Clifton Bridge” has contracted with a weather information company for a weather routing service that looks at predicted weather and sea conditions in the area the ship will be sailing, and recommends navigation routes where a safe speed can be maintained. Furthermore, the ship is also equipped with “BRIDGE” (formerly known as “Orion Pro” pictured top right) software, which displays on a computer meteorological data analysis that is relayed to the ship as needed. By comparing and verifying the latest weather data and the current weather in the waters the ship is navigating, the ship can respond in a timely

manner to changes in weather and sea conditions, allowing greater precision in selection of the most appropriate sea routes. This represents a great technological innovation for times when we must chart a course for the ship based only on limited information, such as weather charts that have been faxed but may not always be clear if radio signals are weak, and in situations including when a decision must be made whether to head east or west to avoid a typhoon. It is a powerful tool to assist us in maintaining safety in navigation, as well as ensuring economically efficient operations.

We are also actively cooperating in research vital to the further improvement of future services and environmental preservation in the international marine transport industry. For example, we are involved in developing new weather analysis equipment, testing weather routing services, and holding onboard training in the Pacific Ocean during the winter for staff from the R&D division of the weather information company to allow them to experience ocean weather and sea conditions first-hand. If this type of research and development can expand the information services currently available to individual ships into comprehensive services that take into account the position, shipping routes and schedules of consort ships (ships heading for the same port terminal), it will then become possible to recommend cost-efficient speeds to minimize waiting time in the water and offer timely information to shore staff in charge of ship operations. Smooth and economical operations for all our ships would save on fuel and lower CO<sub>2</sub> emissions. In our current information society, for shipping companies the manners in which ships utilize the most appropriate information analyzed by specialized organizations and linking that to the three pillars mentioned in the beginning is undoubtedly a consideration of utmost importance.

## Strong Communication

Crew members are often asked, “When you’re off-duty on the ship, what are you doing?” TV broadcasts don’t reach the ships, and Internet surfing, golf, tennis and blind date parties are out of the question. Although you might think that we could fish and swim, in actuality it’s not possible. In the confined space of the ship it’s difficult to do many activities that would be considered normal on land.

The crew can’t make a run to a fast food restaurant when they are hungry,



Crew of the containership “Clifton Bridge”

and even if they want to speak with their family or girlfriend, satellite phones cost 300 yen for one minute! Even when in port, the crew must stand watch over cargo work or be present for inspections, engage in maintenance or carry out other tasks, so there is little time to go ashore.

In response to a request to spice up their bland life onboard, on each voyage across the Pacific Ocean the “Clifton Bridge” holds two barbecue or hot-pot parties and a joint Japan-Philippine-Bangladesh karaoke party, plus a special recreational event on every second voyage. The activities serve to strengthen friendships and relieve stress.

The onboard recreational event held just the other day was a table tennis competition. The 13 participating teams played an exciting round of games to win an admittedly not so expensive prize. Recently, it has become quite normal for a ship to have a crew of different nationalities (the crew of the “Clifton Bridge” has 5 Japanese, 19 Filipino and 2 Bangladeshi members). As the ship’s captain I work with the Marine Human Resources Group to think carefully about how to help the crew build good relationships onboard where there are lots of limitations on what one can and can’t do, and we also think hard about how to increase the crew’s motivation regarding their work.

It is a part of the captain’s duty to skillfully manage the budget for food provisions and welfare costs to make every effort to provide inexpensive but tasty meals, in order to ensure that the crews enjoy onboard life.

Also, a private e-mail system was adopted two years ago to enable the crew to receive and send e-mail any time while at sea. Introducing the system was a huge improvement for the crew who can now freely contact anyone at any time, and it is heartwarming to see them seated in front of the computer composing a love letter!

It goes without saying that the crew’s healthy mental state and harmony on the ship contribute to maintaining safe navigation and preventing injury. Onboard, where the crew shares ups and downs together 24 hours a day, mental health management and regard for the workplace and living environment are extremely important, whether a matter is a public one or private.

As a ship’s captain, I strive to create an environment where all crew members will be glad they have joined the ship, while preserving the sound traditions built up by my predecessors. Each day I renew my vow to continue carrying out this never-ending task.



Writer, Capt. Tatsuya Gamou, the master of “Clifton Bridge”

## Initiatives for Safety in Navigation and Cargo Operations

### [Safety Report System]

Safety in navigation and cargo operations is crucial to environmental preservation activities. Of course, the ship is equipped with the necessary facilities, but no matter how many automated or work-saving devices we have, ultimately people run the ship, so it is the individual crew members who make decisions that prevent incidents. Not only might a small mistake endanger the safety of the cargo and crew, but there is also the risk of significantly damaging the environment — something we must always keep in mind when we are carrying out our duties onboard the ship.

Our Company has created a safety report system so that the crew will never forget the importance of safe navigation as they carry out their daily duties. Based on the premise that at times people will engage in unsafe behavior, any error from small mistakes to serious ones are reported to all crew members on all ships, then feedback is relayed to every ship and used to make improvements. The purpose of this system is to think about the environment in which that mistake and particular experience occurred, and consider how the situation can be improved to avoid repeating it. We also consider it important to create an atmosphere in which such mistakes and experiences can be frankly spoken about.



Capt. Takayuki Nakajima  
Safety Report  
Committee Secretariat  
“K” Line Training Center

### [Winter Season Safety and Environmental Protection Campaign]

Every year from December 1 to January 31 of the following year, a Winter Season Safety and Environmental Protection Campaign based on a Marine Safety Administration Group initiative for safety in navigation is held. During this period, the Company president and board members visit the ships and discuss issues with the crew in an effort to improve Company awareness of safety and environmental preservation.



Prized campaign posters made by the ships

# Outline of “K” Line; Lines of Business

“K” Line Group is operating business globally as an integrated marine transporter.

## Outline of “K” Line (as of March 31, 2009)

- Name ..... Kawasaki Kisen Kaisha, Ltd.
- Established ..... April 5, 1919
- Address ..... Hibiya Central Building, 2-9, Nishi-shinbashi 1-chome, Minato-ku, Tokyo 105-8421, Japan
- Paid-in Capital ..... ¥45,869.3 million
- Issued ..... 638,882,298 shares of common stock including common stock for treasury
- Number of Employees ..... Non-consolidated 602 (Male: 491, Female: 111) Consolidated Subsidiaries (Domestic: 2,708/Overseas: 4,396)
- Total Workforce by Region (“K” Line Group) ..... Japan: 36.71%, Asia: 39.91%, North America: 7.70%, Europe: 12.41%, Other: 3.27%
- Offices ..... Head Office (Tokyo), Registered Office (Kobe), Branches (Nagoya and Kansai)
- Overseas Offices ... Beijing, Manila, Mideast, Johannesburg, India
- Overseas Agents  
Korea, Hong Kong, China, Taiwan, Thailand, Philippines, Singapore, Malaysia, Indonesia, Australia, U.K., Germany, France, Netherlands, Belgium, Italy, Finland, Denmark, Norway, Sweden, Spain, Portugal, Turkey, Canada, U.S.A., Mexico, Chile, Peru, Brazil
- Consolidated Subsidiaries ..... 26 in Japan and 285 overseas (Equity Method Affiliates 30)
- Fleet ..... 482 Ships (29.6 million DWT)  
● Containerships (Owned 13/Chartered 85) ● Dry Bulk and Car Carriers (Owned 87/Chartered 172) ● Energy Transportation and Tankers (Owned 35/Chartered 20) ● Heavy Lifter (Owned 13/Chartered 5) ● Others (Owned 26/Chartered 26) ● Total (Owned 174/Chartered 308)
- Member and Qualification  
Nippon Keidanren, The Japanese Shipowners’ Association, Japan Foreign Trade Council, Inc., The Tokyo Chamber of Commerce and Industry, International Chamber of Commerce, Japan Federation of Freight Industries (JFFI), International Association of Ports and Harbors, Japan Ship Technology Research Association, National Maritime Research Institute, Japan Internal Combustion Engine Federation, Box Club, BIMCO, Intertanko, Clean Cargo Working Group

## Lines of Business

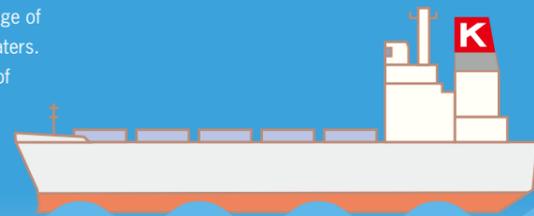


### ■ Containership Services

We operate East/West trunk lines linking Asia/North America, Asia/Europe and Europe/North America through an alliance with prominent shipping companies of China, Taiwan and South Korea and in addition, our global operations include both Intra-Asia and North/South service networks and transporting electronic devices, appliances, furniture, clothing, frozen foods, beverages, hops, consumables, parts, raw materials and anything which can be transferred by container boxes.  
As of March 2009, ships in operation total 98 with 4,321,788 deadweight tons.

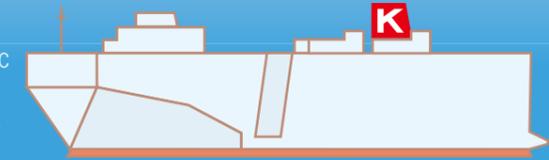
### ■ Dry Bulk Carrier Services

We transport raw materials such as coal, iron ore, grain (wheat, soybean, corn, etc.) and papermaking material by bulk carriers. Lately, we have been making positive business efforts for carriage of cargo in other than Japan trades including Atlantic and Indian waters.  
As of March 2009, ships in operation numbered 166 with total of 17,506,414 deadweight tons.



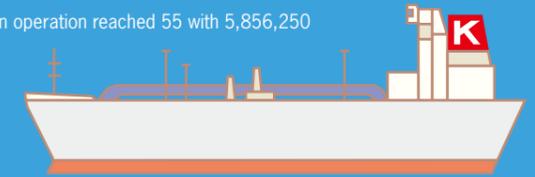
### ■ Car Carrier Services

Since 1970 when we deployed “Toyota Maru No. 10,” Japan’s 1st PCC (Pure Car Carrier), we have been recognized as a pioneer engaged in safe and prompt transportation service of completed cars and trucks.  
As of March 2009, ships in operation numbered 93 with total of 1,282,222 deadweight tons.



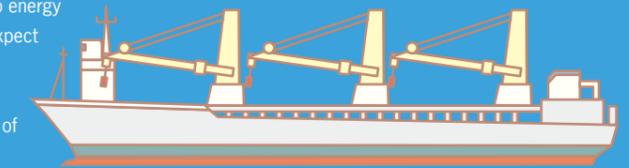
### ■ Energy Transportation and Tanker Services

Our services consist of liquefied gas transportation by both LNG and LPG carriers for not only industrial use but also for consumer use such as natural gas, gasoline, as well as crude oil/oil products transportation by tankers.  
As of March 2009, ships in operation reached 55 with 5,856,250 deadweight tons.



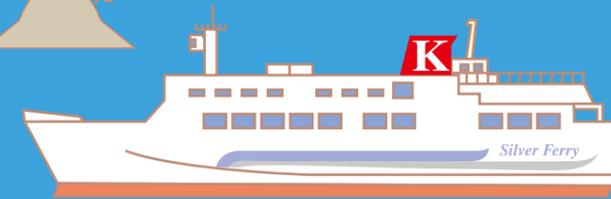
### ■ Heavy Lift Services

We are operating our heavy lift services business jointly with the SAL group, a dedicated heavy lift player in which we made an equity investment. Demand for large-scale cargo transport related to energy and infrastructure development is steady, and therefore we expect this business to be one of the major business sectors for the company.  
As of March 2009, ships in operation numbered 18 with total of 167,413 deadweight tons.



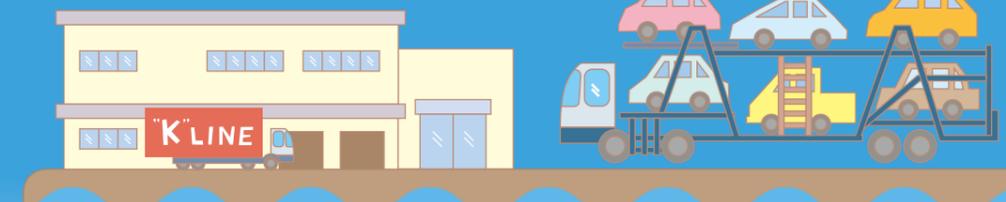
### ■ Short Sea/Coastal Shipping Services

The “K” Line Group Companies, including Kawasaki Kinkai Kisen Kaisha, Ltd., are engaged in domestic shipping utilizing passenger/car ferries, high-speed roll-on/roll-off ships, specialized limestone carriers and general cargo carriers. And we are also providing liner service and tramper service for intra-Asian trade.  
As of March 2009, ships in operation numbered 52 with total of 471,801 deadweight tons.



### ■ Total Logistics Services

We are concentrating our efforts on making certain that our network responds as accurately as possible to the remarkably advanced demands of customers in today’s rapidly developing logistics market. We provide total logistics services, including airfreighting, warehousing, trucking, etc. by consolidating the knowhow and broad experience of all members of the “K” Line Group.



# Medium-Term Management Plan “K” LINE Vision 100

“K” Line Group established the consolidated medium-term management plan “K” LINE Vision 100 covering the period from April 2008 to March 2012 towards the 100th anniversary of “K” Line in 2019, and focusing on five management issues shown as follows:

## “Synergy for All and Sustainable Growth”

The focus of the “K” Line Group is on achieving “synergy for all and sustainable growth.” This means continuing to achieve the “sustainable growth” sought through our past management plans and combining this with “synergy for all” (a mutually beneficial relationship), reflecting the importance of the reciprocal relationship we have with each of our stakeholders, without whom sustainable growth would not be possible.

## Five Management Issues

### 1 Environmental preservation

In addition to “hard” measures such as adoption of energy-saving systems for ship operations, ground cargo handling, ground transport and effective use of exhaust energy, “K” Line works to cut CO<sub>2</sub> emissions to the extent possible and help prevent global warming through “soft” measures such as carrying out transport at appropriate speeds. The company makes the utmost effort to help create a global environment with clean oceans and clean skies for all people and all living things.

### 2 Stable structures for safety in navigation and cargo operations

“K” Line has applied its unique expertise to establishing a global standard for its KL Safety Standard management system. Fulfillment of KL Quality and improvement of the company’s ship inspection system have ensured safe ship operation and better ship quality for all ships in operation. Furthermore, creation of the KL Safety Network has promoted information sharing throughout the Group, as “K” Line works to upgrade its safety management system and improve its ground support systems. Moreover, the company is working to improve its ability to secure and train marine technical personnel through steps such as improving its sourcing system for seafarers, upgrading the “K” Line Maritime Academy, improving its seamen’s training program and providing attractive work environments. “K” Line aims to create an administrative structure for undeviating safe ship operation.

### 3 Borderless management by the best and strongest organizations

As globalization of the “K” Line Group’s business activities accelerates, borderless management that applies the “K” Line standard to business and corporate culture anywhere in

the world is necessary. “K” Line promotes cooperation and personal interaction among Group companies in order to build the Group’s overall strength. At the same time, through improved training of personnel suited for global business and unceasing efforts to improve its work, the company works towards leaps in labor productivity that will support its global competitiveness. Furthermore, through shared vision, clarification of roles, personnel assignments that put the right people in the right places and fair treatment of employees, “K” Line is aiming to create challenging and exciting workplace environments for the Group’s personnel around the world. Through these efforts, the company is building industry-leading competitiveness in terms of cost competitiveness, technical ability and quality of service.

### 4 Proper allocation of strategic investment and management resources

In light of the fact that the global economic and financial crisis is causing major changes in the business environment surrounding “K” Line, the company has undertaken a significant revision of the investment plan, primarily in ships, described in the “K” LINE Vision 100. In more concrete terms, this means steps to shrink investment cash flow to a large degree, including an effective freeze on new investment, putting off already decided items, changes to types of ship holdings and selling of older ships. On the other hand, regarding fields ripe for strategic expansion or opportunities for new participation, “K” Line will allocate appropriate management resources after careful analysis of profitability and risk. With an investment strategy premised on a sound financial structure, the company is working to position itself for the future even as it rides out the current dramatic difficulties.

### 5 Improvement of corporate value and thorough risk management

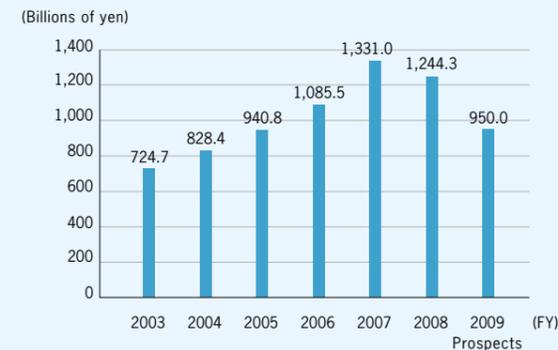
“K” Line aims for sustained growth based on a stable revenue base through business development that emphasizes profitability and capital efficiency. During this process, the company is exposed to potential risks such as predicted markets, exchange rates, personnel, safety and environment, accidents and examines measures to prevent them. It carries out thorough risk management so that when causes of risks appear they can be dealt with swiftly. In addition to ensuring soundness in terms of finances, thorough management of risks that are outside the balance sheet helps to raise management soundness, place the company on the path to sustained growth based on a stable revenue base and improve corporate value.

# Primary Financial Data

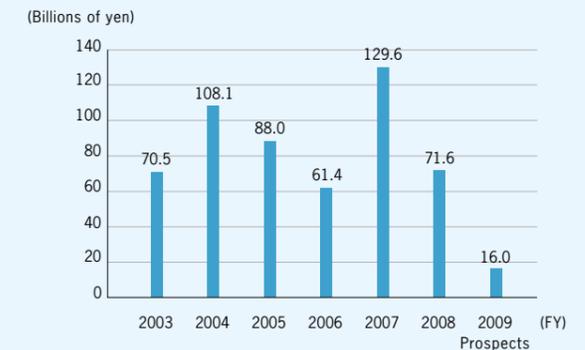
As a result of the failure of some major financial institutions in the United States, strong growth of the global economy reversed itself in September 2008, resulting in an unprecedented financial and economic crisis. Regarding the environment surrounding the ocean transport industry, fuel prices that had been rapidly rising since 2007 began to decline in early autumn 2008. However, the rapid appreciation of the yen, a sudden drop in the dry bulk shipping market, a sharp decline in container and automobile shipping, and other factors resulted in extremely harsh third and fourth quarters.



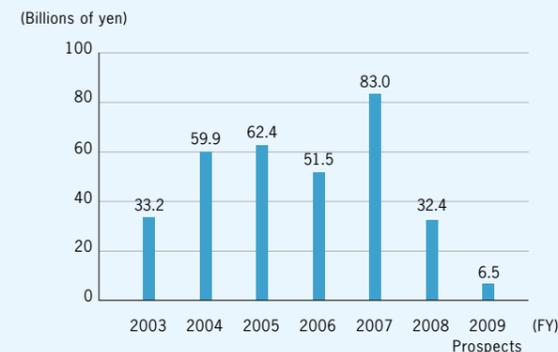
## Operating Revenues



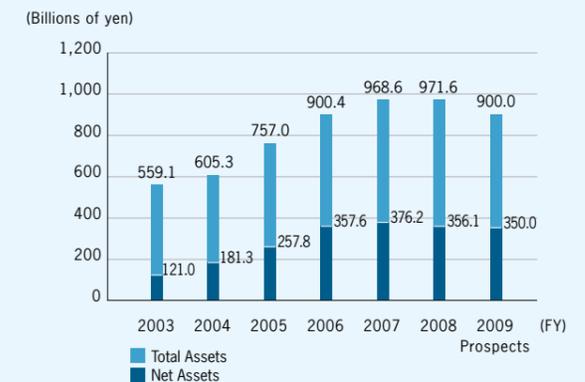
## Operating Income



## Net Income



## Total Assets/Net Assets



Prospects are based on the announcement made in April 2009. Assumptions: EXCHANGE RATE ¥100/US\$, FUEL OIL PRICE US\$300/MT



### Activities for Safety in Navigation and Cargo Operations

Significant issues for a shipping company are to realize and maintain safety in navigation and cargo operations and environmental preservation, and also required to see and review our activities and improve them by making honest efforts day-to-day. Hereunder, we introduce our management system to support safety in navigation and cargo operations among our activities.

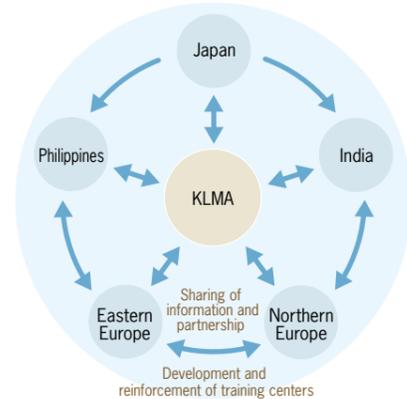
#### “K” Line Maritime Academy (KLMA)

KLMA, aiming to secure and train ship personnel who will be able to support safety in navigation and cargo operations worldwide, is supported by training centers around the world, cadet training programs and education and training programs for carrier path.

#### Maintaining of KL-QUALITY

To realize and maintain safety in navigation and cargo operations, ship’s safety is the most important thing and it must be ensured. “K” Line is providing “KL-QUALITY,” and our ship inspectors visit our operated ships in port to check that ships are complying with KL-QUALITY. The inspectors also have talks with ship crews about the ship’s condition and other issues, which contributes to improve and maintain ship’s quality in good status. The inspectors explain the inspection report and distribute it to ship operators, owners and other parties concerned to share information about the ship. We believe such activities contribute to ship safety and safe cargo operations.

#### Establishment of “K” Line Maritime Academy (KLMA)



- ① We will map out standard curricula of education and training.
- ② We will develop and reinforce the training bases in the Philippines and India, and will proceed to expand a global network involving training bases in Europe under the concept of KLMA.
- ③ We will share information related to employment, education and discipline among the bases and also we will tie up with certain maritime universities and training institutes throughout the world.
- ④ We will equip ships with many private rooms and an embarkation capacity for more crew members, cadets and trainees for the purpose of accelerating the education, and assuring the long-term securing of excellent ship officers. Onboard instructors will embark on those ships as teachers/trainers and be engaged in education/training.
- ⑤ We will strengthen tie-ups with recruiting companies around the world.

#### Ship Operational Data Management System

Operational data for “K” Line ships is accumulated on data servers utilizing the systems described at right. This data is checked and analyzed by navigation and cargo operations supervisors and ship management companies in order to ensure safe and efficient navigation. Both of these systems have been in operation since 2001 and are currently equipped on almost all ships of our fleet, contributing greatly to safety in navigation and cargo operations and energy conservation.

#### Emergency Response Drills

The “K” Line Group strives to avoid marine incidents. We carry out drills in order to ensure that crew and other staff are familiar with emergency response and reporting procedures in the event of a marine incident. We recognize the tremendous importance of these drills and utilize their results in effecting improvements in our emergency response measures. Most recently in February 2009, the “K” Line Group and other relevant parties carried out a large-scale oil spillage emergency response drill with the scenario being the collision of a bulk coal carrier and a smaller ship in the Irago channel, resulting in fuel spillage. The problem areas raised at the evaluation meeting afterwards were used in revising and improving the emergency response manual and system to better enable an immediate response in the event of unforeseen circumstances.

- SPAS (Ship Performance Analyzing System)  
By the Age of Discovery, recording ship position, distance traveled, average speed, weather and hydrographic conditions, etc., at noon every day was already an important task. Tabulating and analyzing this data is crucial in assessing and improving the navigational situation and performance of a ship. SPAS uses a satellite relay to send data to a data server landside for operational performance analysis, etc. Nearly all “K” Line ships are equipped with SPAS to allow us to assess their operating status and surrounding situation.
- K-IMS (KAWASAKI Integrated Maritime Solution)  
K-IMS is comprised of two systems: SPAS and the EP-Monitor (Engine Performance Monitor). In addition to SPAS data, operational data (consumption of fuel and lubricant, machine temperature and pressure, etc.) for engines and other equipment is collected on a server and assessed by navigation and cargo operations supervisors and ship management companies in order to quickly identify irregularities and prevent incidents. This system is installed on ships supervised by the Group’s ship management companies.

#### SHIP INSPECTION AND QUALITY MANAGEMENT

Quality Audit and Supervision team (QAS) Inspector’s main purpose is to check ship quality level and reduce risk basis by adhering to “K” Line Quality Standards. It is common knowledge if a ship encounters various incidents at sea or is detained by PSC\* in ports for different violations from deteriorating structures or machinery not operating properly, it could lead to an accident and cause environmental catastrophe.

This is a fairly extreme case. But if we inspectors visit the ship and carry out check and observation and make conversation with crews about the ship’s condition, I believe the inspectors are able to find any evidence or indication of risk and also prevent serious incident. Furthermore, such activities contribute to ship and cargo safety and possibly save a crewman’s life. Inspectors would board those ships in convenient ports, mostly in Japan but also in Korean and Chinese ports as requested. With QAS base in Manila functioning since November 2008, ship inspection in Hong Kong is done by an inspector base in the Philippines.

Some ship crews view our inspection as burdensome to them due to short and busy stay in port, so it is therefore important that we can obtain their understanding for the purpose of our inspection



Ship inspector  
Quality Audit and Supervision Team  
Maritime Cost Administration Group

**Miguel B. Alba, Jr.**

and cooperation for having open meetings. And in the course of inspection, we endeavor to be supportive and friendly as far as possible, so we can get enough understanding of each other and discuss about countermeasures and early detection of troubles including “KAIZEN” improvement proposals. With their cooperation we might uncover and learn things that usually would not be known in a normal inspection process. It is also of virtual importance to maintain balance during inspection and on the report so as not to create conflict between ship crew and owners with our inspector and operators, but it must be concise enough to give our operator a full and complete idea of the ship’s condition.

#### COUNTER-PIRACY MEASURES

Attacks by pirates have occurred in the Straits of Malacca and many other locations worldwide. “K” Line has developed a security plan based on the safety management manual’s response procedures and the ISPS Code\*. Up until recently, pirates have sought mainly to steal valuable goods; however, in recent years pirates off the coast of Somalia in the Gulf of Aden, an important maritime link between Europe and Asia, have increasingly started attacking ships with heavy weapons and hijacking them in order to secure ransoms. As a result, the threat to customer cargo, ship and crew safety has increased. In light of this situation and based on a U.N. Security Council resolution, the Allied Command Europe and the navies of various countries have begun escorting ships and, due to strong pressure from ship owning groups and others in Japan, the Japanese Self Defense Force has also dispatched escort ships to the area. Thus in cases where “K” Line ships must travel through the Gulf of Aden, they are under the protection of the Japanese Self Defense Force and the navies of other countries; in addition, the safety measures listed at right are also implemented. Furthermore, low-speed ships are not sent through the Gulf of Aden or coastal waters off Somalia and are, instead, sent around the Cape of Good Hope.



Marine Safety Team  
Marine Safety Administration Group

**Capt. Yasufumi Nakamura**

#### SAFETY MEASURES EMPLOYED BY “K” LINE SHIPS

- Taking the International Recommended Transit Corridor (IRTC) determined in coordination with various countries’ navies
- Information provision to the United Kingdom Maritime Trade Organization
- Participation in convoy escorts by the Japanese Self Defense Force
- Sailing at full speed when participation in a convoy is not feasible
- Sailing at night with strict light control in frequently attacked areas
- Increasing the number of lookouts
- Firing water down from the deck
- Locking up living quarters and other sections of the ship
- Using blinding lights

# Aiming at Better Relationship with Society

We established a Charter of Conduct: "K" Line Group Companies to help us fulfill our Corporate Principles whose materialization is the objectives of our CSR activities. To this end, we have set targets and, as a company group keeping sustainable growth, are actively making efforts to deepen the relationship based on mutual trust with various stakeholders all over the world, and to come up to their expectations.

## Charter of Conduct: "K" Line Group Companies (Adopted December 2006)

Kawasaki Kisen Kaisha, Ltd. and its group companies (hereinafter "K" Line Group) reemphasize that due respect for human rights and compliance with applicable laws, ordinances, rules are the fundamental foundations for corporate activities and that group companies' growth must be in harmony with society and therefore we herein declare to abide by "Charter of Conduct" spelled out below:

### 1 Human rights

The "K" Line Group will consistently respect human rights and well consider personality, individuality and diversity of its corporate members and improve work safety and conditions to offer them comfort and affluence.

### 2 Compliance

The "K" Line Group promises to comply with applicable laws, ordinances, rules and spirit of the international community and conduct its corporate activities through fair, transparent and free competition.

### 3 Trustworthy company group

The "K" Line Group continues to pay special attention to safety in navigation, achieving customer satisfaction and garnering trust from the community by providing safe and beneficial services.

### 4 Environmental efforts

The "K" Line Group recognizes that global environmental efforts are a key issue for all of humanity and that they are essential both in business activities and existence of the company and therefore we are committed to a voluntary and proactive approach to such issues to protect and preserve the environment.

### 5 Disclosure of corporate information and communication with society

The "K" Line Group will protect personal information, properly manage corporate information and disclose corporate information timely and appropriately, widely promoting bi-directional communication with society including shareholders.

### 6 Contribution to society

The "K" Line Group as a Good Corporate Citizen will make ongoing efforts to contribute to social development and improvement and support employee's voluntary participation in such activities.

### 7 Harmony in the international society

The "K" Line Group will contribute to development of international society in pursuance of its business pertaining to international logistics and related businesses, respecting each country's culture and customs.

### 8 Confront anti-social forces

The "K" Line Group will resolutely confront anti-social forces or organizations which may threaten social order and public safety.

The management of each "K" Line Group Company recognizes that it is their role to realize the spirit of the Charter and to set the pace that is to be followed by every employee in their company as well as by business partners.

In the event of any incidents in breach of this Charter, the management of the respective "K" Line Group member company will demonstrate decisiveness to resolve the problem (s), conduct a thorough investigation to determine the cause and to take preventative measures. Additionally, such management will expeditiously and accurately release information and fulfill their accountability to society.

## FY2008 CSR Highlights and FY2009 Objectives

CSR highlights of the preceding fiscal year and objectives for the current fiscal year are as follows:

Field	Item	FY2008 Highlights	FY2009 Objectives
Corporate Ethics, Compliance	Enact Charter of Conduct of Group Companies and "K" Line implementation Guideline for Charter of Conduct	Put in place at group companies in Japan	To further adopt the Charter by group companies including non-Japanese and provide support
	Enlightenment followed by the change of compliance-relevant norms and guidelines	Enlightenment activities for EU Competition Act including group companies	Enlightenment for Anti-Trust law in Japan, Following up activities for EU Competition Act
	Education and training with regard to CSR, Compliance and Environmental issues	About 360 participants, mainly in different classed training	Continue training including environmental issues Study for introduction of e-learning
Disclosure	Expansion of Social and Environmental Report Consider renewing of website	Added Special Features, Glossary and Independent Observer's Opinion Issued 11,000 copies	Continue expansion
Human Rights, Working Environment	Monitoring situation as to respect for human rights and equal-opportunity policy conducted by group companies	Received individual reports on each hotline Shared information among HR staff at group companies	Continue with initiatives
Environmental Preservation	Enhancement of Environmental Management System Reduce CO <sub>2</sub> by 10% by middle of 2010's	13 group companies certified Navigation with optimal speed Installation of energy-saving equipments	Continue enhancement Continue energy-saving navigation Continue installation of energy-saving equipment
Safety, Quality	Participation in risk management activities such as disasters protection drill	Fire drill in Tokyo office in September 2008	Reconfirmation of evacuation procedures Continue drill
	Continued emergency response drill	Drill against oil leakage from a coal carrier in February 2009	Continue emergency response drill
	Promotion of sharing of training and information through KLMA (Japan, Philippines, India, East Europe, North Europe)	Deepen, standardize and improve the quality of training in each KLMA Introduction of instructor bringing-up scheme	Introduction and infiltration of KLMA career path plan Infiltration and expansion of KLMA Cadet Training Program
	Ensuring quality levels in newly constructed ships exceed international standards	Install latest equipment, build environmentally-friendly ships, apply "K" Line environmental specification	Promotion of "K" Line standard specification and environmental specification Study for prior application of new international rules
Social Contribution	Encouraging environmental programs	Green power generation in U.S.A. Continued participation in Clean Cargo Working Group	Continued participation in Clean Cargo Working Group
	Expansion and enhancement of scholarship and internship programs	Training and retention of marine technical personnel and ship officers Onboard training for students	Continue training
	Promotion and support of environmental preservation activities and aid for disaster victims by group companies Donation to relief and charity funds	Aid for disaster victims (3 cases) Free transportation	Promotion of transportation of relief supplies and aid for disaster victims

### OBJECTIVE AND THE MISSION OF OUR CSR ACTIVITIES

The Corporate Principles of "K" Line Group as a business organization centering on shipping lie in contributing to the enrichment of people's lives worldwide through: Diligent efforts for safety in navigation and cargo operations as well as for environmental preservation; Sincere response to customer needs by making every possible effort; and Continual upgrading of service quality. The objective of our CSR activities is to materialize the Corporate Principles.

We recognize that the concept of CSR is composed of two areas, i.e. "Social Responsibility" and "Social Contribution."

- **Social Responsibility:** Compliance, Respect for social precepts, Fair business activities, Safety in navigation and cargo operations, and Environmental preservation.
- **Social Contribution:** Contribution through our group business activities, and Activities as a "Good Corporate Citizen."

These include many areas such as corporate ethics (corporate



General Manager  
CSR & Compliance Division  
General Affairs Group

**Kiyokazu Arai**

governance\*, compliance\*, etc.) disclosure, human rights, working environment, environmental preservation, safety and quality control, and social contributing activities.

"K" Line has set targets in each area and its related organizations have performed CSR activities. We will promote communications with employees of not only "K" Line itself but our group companies and deepen consciousness of CSR as a whole group.

It is important to think about each job's CSR role whenever we do our daily, even small assignment, and we will make an effort so that each "K" Line group member can act with such a mind.

# Relationship with Stakeholders

*"K" Line Group's activities are global and are being performed in trusted and dependable relationships with many people, i.e. shareholders, customers, business partners, local communities, etc. We are accomplishing social responsibility through our shipping business aiming at better relations with society.*

## Business Partners

We are striving to establish relationships of mutual trust and thereby to promote a harmonious relationship with society as a whole.

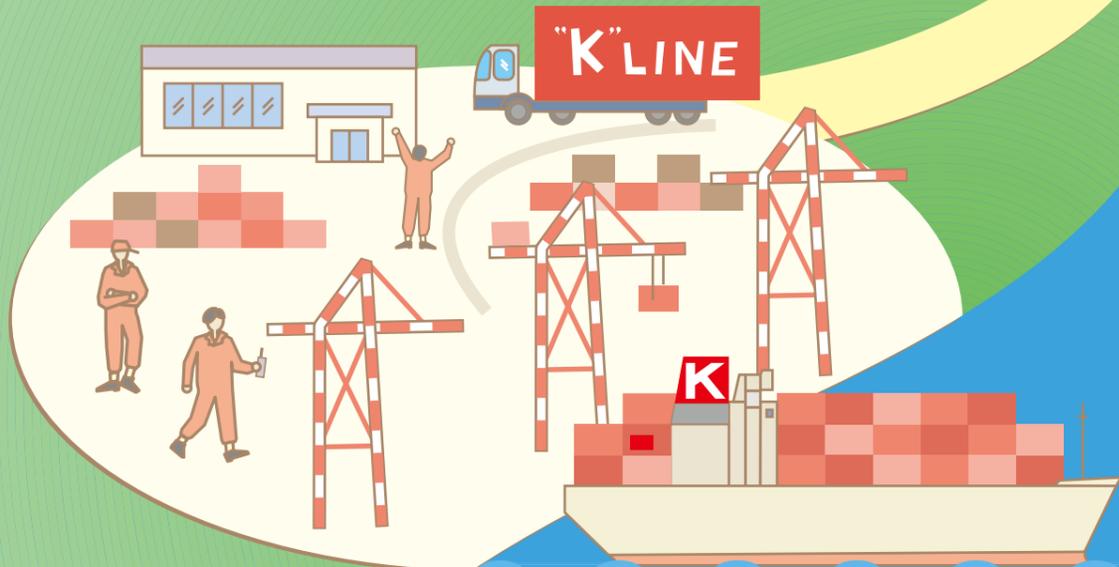
→ p.23



## Customers

We are making every possible effort to meet customers' needs through timely provision of information and safe navigation and cargo operations.

→ p.22



## Shareholders

We are actively making disclosure on our business activities.

→ p.21



## Contributing to Society

We are seeking to achieve mutual benefits with society through numerous small acts.

→ p.24



## Employees

We are enhancing and developing working conditions so that each employee can work with enthusiasm and a sense of security.

→ p.27



## Together with Shareholders and Investors

We are striving to further improve our corporate value by disclosing company information in a timely and appropriate manner, and promoting two-way communication with shareholders and investors.

### The General Shareholders' Meeting

Not only is the General Shareholders' Meeting the company's highest decision-making body, but it also serves as a valuable opportunity for our management team to meet and speak face-to-face with our shareholders. We use the Shareholders' Meeting to listen to our shareholders, answer questions and fully explain our corporate approach.

We do our best to hold an open General Shareholders Meeting by scheduling it on a day that ensures as many shareholders as possible can attend, and by preparing video and narratives so that attendees will have a greater understanding of the meeting's content.

### IR Tools

We send our shareholders an informational booklet detailing current business circumstances every quarter.

The company website includes an IR section that offers a variety of information, including financial data such as "Financial Highlights," and a schedule for announcements of financial results. Investors are also able to ask us questions and send us their opinions through email, and we make every endeavor to respond to inquiries as quickly as possible.



"K" Line's website  
http://www.kline.co.jp



IR section of our website



Booklet for shareholders



Annual Report

### Investor Briefings

Briefings for corporate investors and securities analysts take place every quarter, and explanatory meetings to announce business plans are held as needed. Meetings are recorded and the audio files made available to everyone on the company website. We are also proactive about setting up individual meetings both in Japan and overseas with corporate investors and securities analysts.

We utilize corporate information sessions sponsored by securities firms to explain our business to general investors, and encourage on-site tours to help corporate investors and securities analysts better understand our operations.

In January 2009, we conducted a tour of training simulator for LNG carriers / oil tankers at our "K" Line Training Center.



Guests observe the training simulator

### Recipient of "Nikkei Annual Report Awards"

Our Annual Report 2008 was awarded third prize in the "Nikkei Annual Report Awards" (sponsored by Nikkei Inc.). These awards were created to encourage enhanced content and greater adoption of annual reports. Currently active fund managers and analysts evaluate and review the annual reports submitted for consideration. This year, 106 companies participated, with one selected to receive first prize, two to receive the second prize, and 12 the third prize. "K" Line is committed to continuing to publish an easy-to-understand annual report so that our stakeholders in Japan and overseas can deepen their understanding of our business.

## Working Together with our Customers

We concentrate our efforts on controlling safety in navigation and cargo operations and strengthening security in order to safely transport the cargo with which we are entrusted by our customers until it reaches its destination. In order to achieve timely transport, we also work hard to build systems that meet customer needs and provide a variety of relevant information.

### Security System

We take measures against pirates and suspicious ships in accordance with our Safety Management System manual, and have drawn up a ship security plan based on the ISPS Code\*. Moreover, we have also joined C-TPAT\*, an initiative to which United States Customs is encouraging those involved with U.S. trade to join. Our company works with customers to implement this program in an effort to enhance security.

### Cargo Damage Prevention

We take the utmost care during transport to prevent damaging the cargo with which we are entrusted by our customers. We constantly monitor the cargo loading/unloading process and actively conduct on-site checks to eliminate the cause of cargo damage.



Inspecting whether a vehicle is secured properly on a car carrier

### Information Services

Our container transport service handles cargo from multiple customers on one ship. We provide an email service that simultaneously notifies all customers of information relevant to

the transport of their goods, including ships' schedules, changes in port departures and arrivals, typhoon information and dock strikes.

We also offer online services. For instance, customers can access the company website to view the information noted above, plus see the present location and circumstances of the cargo in transport, as well as make bookings for future cargo loading.

### Electronic Data Interchange (EDI)

Making use of telecommunications lines, EDI is employed to exchange information via computer between companies, not only among Group companies, but also with customers and a growing number of other relevant parties, including port terminals, railway companies and trucking companies. Confirmation of ships' schedules, bookings, cargo manifest submissions, land transport arrangements and B/L instruction remittances (data on which the bill of lading is based) are all electronically handled, enabling quick and accurate exchange of information.

### Supply Chain Management Support System

We have developed the Visibility Management System (VMS) to assist with customer supply chain management via the Internet. We offer this system to our customers to provide a variety of real-time information about logistics that forms the basis of the supply chain, and to help more efficiently manage the customer supply process.

### FY2008 Awards

Our Group has received the awards noted below in recognition of the high quality services we provide our customers.

● "Green Flag" Air Quality Compliance (→p.36)	Long Beach Board of Harbor Commissioners (USA)
● 9th Environment – friendly Logistics Award, Special Award (→p.36)	Japan Federation of Freight Industries (Japan)
● 2007 President's Award for Logistics Excellence (Sea)	Toyota Logistics Services, Inc. subsidiary of Toyota Motor Sales, USA Inc. (USA)
● 2007 President's Award (Sea), Customer Service	
● FY2007 Key Performance Indicator, Best Safety Award	Toyota Motor Thailand Co., Ltd (Thailand)
● 2007 Supplier of the Year	General Motors Corporation (USA)
● 2007 Best Supplier for Service Quality in Mercosur trade	
● Carrier of the Year 2008, Bronze Award	Hellmann Worldwide Logistics (USA)
● 2008 Quest for Quality Award	Logistics Management magazine readers choice (USA)

## Together with our Business Partners

*The support and cooperation of our business partners is essential to our business. We have established and maintain a relationship of mutual trust with our business partners, and will continue to make every effort to build relationships where we can work in a beneficial, harmonious partnership in society.*

### Guideline for Purchases

“K” Line will always transact business based on appropriate purchasing policies outlined below and maintain fair and sound relationship with its business partners.

- ① Make purchasing decisions by providing fair opportunities and through impartial evaluation.
- ② Comply with laws, ordinances and social norms and build mutually trusting and cooperative relationships with business partners.
- ③ Give due consideration to social responsibilities such as respect for human rights and safety, conservation of natural resources and environmental preservation.
- ④ Pursue achievement of best quality with reasonable cost.

When developing business overseas, we also work to make sure that local suppliers understand our company initiatives regarding our corporate social responsibilities (CSR), and when necessary we ask our suppliers to take appropriate measures.

### Strict Adherence to Anti-monopoly and Subcontract Laws

We strictly observe anti-monopoly and subcontract laws, and conduct fair trade in accordance with appropriate procedures. We never use our position as a customer to unduly impose our will on suppliers.

### Green Procurement

One of our environmental goals is to increase the percentage of environmentally friendly products purchased, and we are asking for our suppliers’ cooperation in supplying eco products.

### Newly Constructed Ships Specifications

In an effort to utilize ships that provide ever more safety in navigation and cargo operations and that are environmentally friendly, we are requesting our suppliers’ help to build ships based on our own approved specifications that exceed international standards.

### Improving KL-QUALITY

A high-quality shipping management system is necessary as a cornerstone to support safety in navigation and cargo operations as well as for environmental preservation. We have drawn up KL-QUALITY, quality management guidelines based on our own standards. With the cooperation of our suppliers, we will continue to maintain our high shipping standards and offer outstanding transport service.

#### KL-QUALITY

“K” Line group ensures that the KL-Quality of high standards in safe navigation, cargo operations and maintenance of ship are well-established, properly documented and effectively implemented by business partners. We take pride in the following steps to make sure we are meeting the KL-Quality. KL-Quality accomplishes the stated fleet management policies and objectives which are clearly communicated and understood to all levels of the organization. Moreover, it enables us to recruit well trained shore and shipboard personnel and ensure their competency. And the personnel, who are certified and fully understanding their roles and responsibilities, commit to high standards of fleet management, and are capable of working effectively in a team. Regular internal audit of ships by trained auditors who board and often sail conduct various operations and audits and carry out onboard crew training. Establishment of a risk-preparedness system, which includes regular tests through drills and exercises, ensures an ability to



Quality, Safety, Health and Environment Superintendent  
“K” Line Ship Management Co., LTD.

**Capt. Joven P. Rinon**

react effectively to an incident with appropriate measurement and feedback processes to promote our company procedures to further guarantee safety and environmental excellence. In addition, QAS of “K” Line also monitors ships’ quality through ship inspections by experienced seafarers. Through combined effective and efficient implementation efforts of “K” Line and its partners in ship management, the corporate vision of the company is never too far away to attain.

## Acting as a Responsible Member of Society

*As we engage in global business, we seek to achieve mutual benefits with society through the steady accumulation of numerous small acts.*

### Disaster Relief

The powerful cyclone that struck Myanmar on May 2 and 3, 2008 and the massive earthquake that occurred in Sichuan, China on the 12th of that same month caused extensive damage over wide areas. In response to these disasters, “K” Line made financial donations to the afflicted regions through the Japanese Red Cross with the thoughtful consideration of every employee. In addition, a major typhoon struck the Philippines on June 20 through 22, 2008, bringing torrential rains that caused landslides. Many seafarers are from Bisaya, the region that suffered the greatest damage, and flooding and rock and mud slides occurred in numerous places on Panay Island, where more than 500 “K” Line group seafarers’ families live. “K” Line and “K” Line group companies investigated local conditions, confirmed the safety of seafarers’ families, and conducted assistance activities, including the procurement and shipment of relief supplies.

### Scholarships for University Students in Thailand

K Line (Thailand) Ltd. provides scholarships to students studying transportation engineering at the Suranaree University of Technology. The scholarship program was established in 2004 to mark the 40th anniversary of the company’s establishment. Scholarships have been provided every year since fiscal 2005, with a total of 34 students having received scholarships to date.

### Scholarship Program in the Philippines

The “K” Line group has established an alliance concerning ship officer training course with Crystal e-College, a private mercantile marine college. A special screening test was administered to prospective high school graduates throughout the Philippines, and 24 students who passed the test were awarded scholarships and admitted to the college in June 2008 to study in the engineering department. “K” Line has also actively assisted in the education of seafarers in the Philippines through independent scholarship programs such as “K” Line Class, a marine technical training program for graduates of the Technological University of the Philippines-Visayas.



Signing ceremony with Crystal e-College

#### ENVIRONMENTAL COLLABORATION

In North America and in Europe a group of environmentally focused shippers and ocean carriers are collaborating together in a common forum called the Clean Cargo Working Group. The common objective of this group is to identify and minimize the environmental footprint of ocean container shipments. In the first phase of work the group collaborated to develop an environmental performance survey, named EPS, which is filled out annually by carriers in order to give shippers a better understanding of carriers environmental efforts. As part of this EPS work, the Clean Cargo Working Group developed and agreed upon a standardized methodology for calculating carbon dioxide (CO<sub>2</sub>) emissions for ocean container shipments on a gram per TEU-km basis. During the second phase, the Clean Cargo Working Group developed an intermodal emissions calculator which allows members to calculate CO<sub>2</sub> emissions for intermodal shipments, whether moving by rail or truck.



Group Vice President  
Marine Technical Division  
“K” Line America, Inc.

**Christian P. von Kanneurff**

During 2008 and early 2009 the working group transitioned into the third phase of work, developing a set of carrier environmental metrics which will begin to score carriers on their environmental initiatives. “K” Line has been a proud member of this working group since 2001 and “K” Line will continue all efforts to reduce its carbon footprint by working with this group as one of many environmental initiatives.

● Aiming at Better Relationship with Society  
● Relationship with Stakeholders  
● Together with Shareholders and Investors  
● Working Together with our Customers  
● Together with our Business Partners  
● Acting as a Responsible Member of Society  
● Relationship with Employees

### “K” Line Supports Survey of Pacific Surface Water

VOS Nippon, a nonprofit organization, installed equipment on ocean-going ships that navigate in Asian seas and between Japan and Australia to measure and collect data on the salinity and temperature of surface waters for provision to research organizations. VOS Nippon has also made the data available on a website for free access by the public. This data shows the status of ocean surface waters, and the accumulated data is expected to contribute to the scientific explanation of the mechanisms of climate change, including global warming. “K” Line is cooperating in the research, having installed the special equipment on the coal carrier “Chubu Maru” in June 2002.



The measuring instrument installed on the “Chubu Maru”

### Tours of Newly Constructed Ships

“K” Line conducts tours of newly constructed ships to create a greater sense of familiarity with ships and marine transport in general. Many local elementary school students and others participate in the tours, which are conducted in cooperation with shipbuilding companies. Participants are guided through the ship’s interior, something that people generally have little opportunity to see, and personnel describe their experiences during ship construction and voyages, to the delight of the participants. “K” Line is committed to continuing these types of activities to increase familiarity with the marine transport industry.



Ship’s crew on the bridge of a new ship describing their experiences to a group touring a newly constructed ship

#### My Tour of the Ship

I went on a tour of a new ship on Sunday, January 25. During the tour, my father, wearing his uniform, explained many things about the ship.

The day before, my father brought home some ship fuel from the company, and we put it into plastic bottles together. We heard that a lot of people would attend the tour, so we prepared 12 bottles.

Ship fuel is thick like honey. We heated it up with hot water to make it a little runnier. It was very smelly.

The next day, we went to the shipyard by train. At first, everyone gathered together and looked at pictures of the ship while the ship workers talked about it. After that, we went on the ship with some female workers from my father’s company. There were ship

staff on the ship, and we saw the equipment for stopping the ship, where they load it with the freight, where they cook the food, and where they eat their meals.

When we went to the bridge, my father and others were there, and they explained various things about the ship. The bottles with the fuel that we prepared the day before were also there. Everyone shook the bottles, and they were surprised at how thick the fuel was.

After that, we went to the bridge wing and looked at the ocean. If the weather is good, you can see Mt. Fuji. But even though it was clear, we couldn’t see it.

We walked all over and saw many things, and I learned that the ship is really big. The tour was a lot of fun.

Sakura Koyama, Fourth Grader



### Seashore Cleanup Activities

“K” Line group employees and their families (a total of 20 people) participated in the Tokyo Bay Cleanup Operation, a seashore cleanup program held in Odaiba, Tokyo in June 2008. This was an excellent opportunity for participants to become more familiar with the ocean and to raise awareness of the environment.



“K” Line employees help cleanup the seashore

### “K” Line Provides Transport for Peace Pack Project

“K” Line provides marine transport services in cooperation with the Peace Pack Project, a program conducted by the Girl Scouts of Japan that provides support to overseas refugees. The peace packs, carefully prepared by Girl Scouts from around the country, are presents (handmade drawstring pouches filled with stationery goods such as pencils and notebooks) for refugee children. Each pack also includes a letter addressed “Dear Friend” and carries the hope that new friends can be made and contributions to world peace can be made. “K” Line cooperates with the delivery of these gifts, which help to create ties of friendship between Girl Scouts in Japan and refugee children around the world.

#### GIFTS TO CHILDREN IN REFUGEE CAMPS

In cooperation with the Office of the United Nations High Commissioner for Refugees, the Peace Pack Project of the Girl Scouts of Japan supplied peace packs to Afghan refugees in Pakistan for 10 years from 1994, and has continued the tradition to Myanmar refugees in Thailand since 2005. Since 2006, “K” Line has transported the peace packs from Tokyo Port to Bangkok Port for us. The most recent shipment included 23,370 peace packs. In March, a Girl Scouts delegation traveled to a refugee camp and distributed the peace packs that had been so carefully transported. The children in the refugee camp were very happy to receive the peace packs prepared by the children in Japan. We would like to thank “K” Line very much for its understanding and cooperation with this project.

Girl Scouts of Japan

● For more information on the Peace Pack Project:  
<http://www.girlscout.or.jp/peace/peacepack.html>



Refugee children, very happy to receive the peace packs  
 Girl Scout representatives traveled to Thailand to distribute the peace packs in person

● Aiming at Better Relationship with Society  
 ● Relationship with Stakeholders  
 ● Together with Shareholders and Investors  
 ● Working Together with our Customers  
 ● Together with our Business Partners  
 ● Acting as a Responsible Member of Society  
 ● Relationship with Employees

## Relationship with Employees

*We make every effort to respect the fundamental human rights of employees, eliminate discrimination and protect privacy.*

*We take measures to enhance programs and develop beneficial work environments so that every employee can work effectively and efficiently.*

*We also hold periodic meetings with group companies to share information and encourage improvements to employee programs.*

### Human Resources Development and Career Support

“K” Line’s education and training system aims to have senior employees pass on the corporate culture to junior employees through education and training programs, and have them embrace challenging aspirations and dreams in the same way as those who have gone before them. The system is also designed to achieve a lively and energetic workplace.

#### Numerous Training Options

Training is designed to help improve the skill levels of all employees and is made up of two main types: on-the-job training, whereby employees acquire relevant knowledge and work methods through carrying out their job responsibilities; and off-the-job training, whereby specific training is given to every level of employee. For newly-hired employees, the training includes programs designed to encourage an awareness of their role as a member of the organization in contributing to the stability and development of the company; as well as programs aimed at developing the employees’ sense of independence and autonomy, communication and critical thinking skills, and other job-specific skills (e.g., legal knowledge, maritime skills, and accounting). Collective training programs are often employed for other levels of employees, such as team leaders and management. Furthermore, “K” Line also provides support for in-house foreign language study, overseas language study, training programs run by overseas Group affiliates, as well as correspondence courses for other aspects of self-development.

#### “K” Line University

Employees from around the world gather several times a year to undergo training that we call the “K” Line University. Today, business communications are generally handled by telephone and email, so this training serves as an important opportunity to deepen shared understanding through face-to-face communication on a variety of topics including the “K” Line group vision and the development of our business in the future. “K” Line University training has been held at the Head Office in Tokyo, as well as at our bases in London, and in Richmond, Virginia in the United States.

#### Onboard Training

One type of training unique to shipping companies is on-ship training for shore-based personnel. 20 employees participated in this training in fiscal year 2008, which provided the opportunity to experience work on a ship actually in operation. Experiencing a work environment different from the office proves highly useful in subsequent work.

### Evaluation System Focusing on Self-Reporting and Personal Development

Self-reporting is a system for employees to report areas that need improvement, aspirations, and areas of dissatisfaction to their supervisors and discuss these issues with the aim of creating a better work environment and developing their own careers. The evaluation system covers both work performance and competency. When evaluating work performance, the degree of attainment of goals is analyzed, the reasons why goals were achieved or not achieved are identified, and solutions for the coming year are proposed. Competency evaluations are based on personal strengths and weaknesses, and the focus is on searching with supervisors for measures to overcome weaknesses. The evaluations are not intended to differentiate employees, but are intended only to promote personal development. In fiscal years 2007 and 2008, evaluations were conducted of all employees.

### Creating Effective and Efficient Work Environments

“K” Line is working to create work environments where employees can work with enthusiasm in all situations.

#### Maternity, Childcare and Nursing Leave Programs

“K” Line understands that childbirth, childcare and nursing care of family members are extremely important matters for our employees, and as such we have established programs to support these activities. Our leave programs exceed the levels required by law, and we have introduced flextime and shortened working hour programs to create work environments that support a proper balance between work and family life. The Company is also promoting greater usage of the childcare leave program by employees.

#### Preventing Harassment

As a part of the protection of employee human rights, “K” Line does not tolerate sexual or power harassment, conduct that can lead to human rights violations. The current system is designed to eliminate harassment problems while taking privacy into consideration to the maximum possible extent. During fiscal 2008 also “K” Line did not have any harassment related problems.

#### Reemployment Program

Pursuant to the Law Concerning the Stabilization of Employment of Older Persons, “K” Line has established a program for the reemployment of people who have reached

mandatory retirement age. “K” Line also works to increase the employment of disabled people.

Employees who worked in certain positions are eligible for reemployment with the same qualifications at the time of retirement for a period of three years after retirement if the wishes of the company and the employee are in agreement.

### Health and Safety Considerations

#### Healthcare

The head office clinic performs exams and health-related consultations as well as mental health consultations. The clinic is equipped with digestive system diagnostic X-ray equipment and performs regular exams of “K” Line and “K” Line group company employees.

The Company has also introduced an Internet-based stress check program as a part of its mental healthcare initiatives to enable employees to check their health status and learn methods of coping with stress.

We prepared and distributed an Occupational Health Manual to combat stiff shoulders and back pain resulting from extended periods of sitting in front of a computer and introduced a program for full-time healthcare personnel to provide massages. In addition, employees receive ophthalmological and dental exams once a year.

#### Protecting Lives in the Event of a Disaster

The Company has developed a disaster response manual, made preparations for a major earthquake or an influenza outbreak, including stockpiling emergency foods and relief supplies, established a system to confirm the safety of employees and their families, and confirmed evacuation routes between offices and employee homes.

We conducted disaster response training in September 2008 to prepare for an earthquake in the Tokyo Metropolitan region and confirmed the procedures that need to be taken from the occurrence of an earthquake to the commencement of employees returning home.

#### Compliance with Labor Laws

“K” Line complies with laws and regulations for the protection of workers and other personnel, including the Labor Standards Act, the Labor Union Act, and the Industrial Safety and Health Act. The Seafarers Law and the Rules for Seafarers Labour Safety and Health are also applicable to ship-based employees. In addition, to protect human rights and establish safe and efficient work environments, we do not allow any child labor or forced labor in violation of the law. We have also adopted a Charter of Conduct for “K” Line group companies and the “K” Line Implementation Guidelines for Charter of Conduct and require group companies to comply with them.

#### Age Distribution of New Employees and Average Length of Employment

Age Distribution of New Employees	FY2007 (persons)	FY2008 (persons)
Under 20	0	0
20-30 years	47	44
31 years and older	6	4
Total	53	48

Average Length of Employment	FY2007	FY2008
Career office employees	167 months (13.9 years)	165 months (13.7 years)
General office employees	241 months (20.1 years)	248 months (20.6 years)
Seafarers	166 months (13.8 years)	180 months (15.0 years)

The Company’s retirement pension program is a defined benefit qualified employee retirement pension plan.

### CREATING ENVIRONMENTS THAT SUPPORT BOTH WORK AND FAMILY LIFE

*I took advantage of the maternity leave and childcare leave systems in 2005. Under the earlier systems, childcare leave was permitted until the end of March of the year in which the child reached one year old, but starting in fiscal 2005, the year that I used the system, childcare leave was extended to two years. Combined with eight weeks of maternity leave, I was able to take leave until my son was about two years and two months old. During infancy, children grow at an amazing rate both physically and emotionally — their mental and emotional growth from one month to the next can be extraordinary. I was extremely grateful for the longer childcare leave. Now, childcare leave until the child is three years old is permitted.*

*In Japan, it is often said that “raising a child means raising a parent too,” and I feel that by raising my son, I have grown as a parent and that I am learning many things every day from*



Group Project Team  
Corporate Planning Group

**Mayumi Henmi**

*my son. There are many difficult aspects of raising a child and working at the same time, not least of all the time and physical constraints, but the understanding and support of many people, including my family, colleagues and supervisor, have encouraged me, and this has helped me achieve a rewarding balance between work and family commitments.*

\*This section pertains to Kawasaki Kisen Kaisha, Ltd. and its employees.

# Green Management

We engage in a wide variety of environmental preservation initiatives; we have set forth our determination to minimize environmental impact in the form of our Environmental Charter; we work at creating an environmental network among group companies; and we actively work with international institutions in our role as one of the world's leading marine transportation companies.

## "K" Line Group's Environmental Charter

We consider that it is an integral management assignment of eternal importance to address the issue of preservation of the earthly environment. We recognize in a proper manner that those exhaust emissions and wastes created by consumption of power sources necessitated directly and indirectly by business activities in the logistics industry can result in an increasingly heavy burden on the limited amount of resources of both our earthly and marine environment. We also recognize the importance of prevention of marine pollution caused by marine accidents. In order to contribute to society in general through our diligent and consistent efforts for preservation of the earthly environment, we, everyone throughout the entire "K" Line Group, hereby commit ourselves that we will personally, fairly and severely observe environment-related treaties/conventions and rules/regulations, and make utmost efforts to eliminate and minimize any adverse environmental impact.

### Directions

#### 1 In carrying out business activities

We will seek for perfection in safety of navigation and cargo operations in order to preemptively prevent the spillage of fuel, cargo oil and/or any other hazardous substances from ships during operation or at the time of any marine accident. We will properly manage exhausts and wastes deriving from both ship and shore operations. We will thereby try to exert our utmost efforts for the recycling of any such items. Through an upgrade in ship operation and work performance, we will encourage maximum conservation of energy and resources.

#### 2 On development and introduction of environmental technology

For the purpose of reduction in exhaust emissions which cause air pollution and global warming to be incurred, we are committed to the study and improvement of ship and shore facilities and fuel oil, and to the development and introduction of the most sophisticated equipment and related technology. We will refrain from using ship hull paints containing substances hazardous to marine life and also from using any ozone-depleting substances.

#### 3 For the purpose of encouragement of environmental preservation

We will implement restructuring of organizations with greater emphasis on studying/educating/training about safe navigation and environmental affairs. We will elevate awareness and understanding of all prevailing environmental issues among each member of the entire "K" Line Group. We will practice information disclosure appropriately in relationship to the environment. The "K" Line Group will support and participate in social activities contributing and dedicated to present and future preservation of our earthly environment.

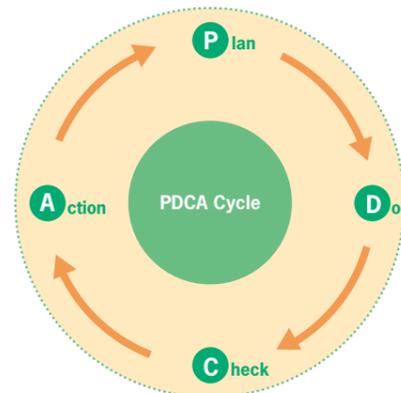
Established in May 2001

## Environmental Management Systems

Environmental preservation activities are one of "K" Line's highest priorities, and to conduct such activities, we constructed an environmental management system compliant with ISO 14001\* and had it certified by the Nippon Kaiji Kyokai, a third-party organization.

Our environmental management system identifies our impact on the environment and requires implementation of the PDCA cycle of setting goals in accordance with plans (Plan), implementing the plans (Do), evaluating the results (Check), and reviewing policies and adopting new measures as necessary (Act). Through the PDCA cycle, we are making continuous

### Basic concept of Environmental Management System



improvements to reduce our environmental impact.

Environment policy is a guideline and a basis for goal-setting of EMS to operate it appropriately.

### Environmental Policy

Along with "K" Line Group's Environmental Charter, we will ensure the following points and try every possible effort to eliminate and minimize any factor impeding solution to environmental issues:

- 1 In the field of sea transportation service activities, we will positively challenge safe ship/cargo operations, prevention of marine/air pollution, promotion of saving resources/energy, reduction of wastes and encourage recycling. In this manner, we will contribute to advance expedited environmental preservation.
- 2 We will always put EMS in order, continuing with improvements and trying to prevent pollution.
- 3 We will comply with laws/regulations or any other necessary requirements related to the environment.
- 4 We will set environmental objectives and targets, which we will supervise and review periodically.
- 5 We will faithfully implement our environmental policy and let all people concerned be aware of it.
- 6 We will document the directions and disclose them upon any request from the outside.

### Scope of Application of the Environmental Management System

The environmental management system is applied to our marine transport services. Organizationally, the system comprises all divisions of "K" Line, "K" Line Ship Management Co., Ltd., Taiyo Nippon Kisen Co., Ltd., Escobal Japan Ltd., "K" Line (Japan) Ltd. and Kawasaki Kinkai Kisen Kaisha, Ltd.

### Third-Party and Internal Audits

"K" Line periodically undergoes audits by a third-party organization and internal audits by an internal audit committee to ensure that its environmental preservation undertakings are in compliance with ISO 14001 standards. We take corrective action with any issues that are identified through these evaluations and audits and continuously work to improve our environmental management system.

### Environmental Sub-Committee

The Environmental Sub-Committee is made up of the executive officer in charge of environmental matters, the environmental management, who is responsible for implementing and maintaining the environmental management system, and people responsible for implementing and maintaining environmental management systems in individual divisions and at group companies. The Sub-Committee meets periodically to make decisions on environmental matters, adopt basic policies and set goals for the entire group, monitor the degree of attainment of goals and evaluate results, and reconfirm and reevaluate goals.

## Environmental Communications

"K" Line conducts environmental training and operates an internal portal to raise understanding of its Environmental Charter, Environmental Policy and environmental management system and to promote environmental thinking in day-to-day activities.

We also participate in environmental exhibits, post information on websites, and include environmental news in company newsletters to raise understanding by the public about our environmental undertakings.

### Messe Nagoya 2008

"K" Line exhibited at the Messe Nagoya 2008 show to explain to stakeholders our measures concerning safety in navigation and cargo operations as well as environmental preservation. The theme of the show, which was held in September 2008, was the environment and energy. Our exhibits explained our Fleet Management System (FMS\*), used models to show energy-conserving ships, and provided information on cold ironing (see p.38).



"K" Line's booth at the Messe Nagoya 2008 show

### Environmental News by "Professor Eco"

The K Line News, our internal newsletter, includes a column entitled "Environmental News" by "Professor Eco." The tone is kept light and the language accessible to assist in raising awareness of environmental issues among the workforce.



The K Line News in the January 2009 issue

# Shipping Operations and their Impact on the Environment

Even without any unfortunate incidents that may result in oil or other spillages, simply operating ships has an impact on the environment. Usage of fuel oil and lubricant oil also depletes the Earth's natural resources. In addition to strictly maintaining safety in navigation and cargo operations, "K" Line strives to make itself aware of the various ways in which its operations impact the environment and to reduce that impact as much as possible.

## Atmosphere

### Atmospheric Pollutants [See p.33-36](#)

Burning fuel results in the emission of CO<sub>2</sub>, SO<sub>x</sub>\*, NO<sub>x</sub>\* and PM\*, which are causes of global warming, acid rain and atmospheric pollution.

### Ozone Layer Depletion [See p.35](#)

CFCs\* used as refrigerants in refrigerated containers and refrigerated chambers onboard ships and halides\* used in fire extinguishing agents deplete the ozone layer which protects the Earth from harmful ultraviolet rays.

## Land, Water

### Industrial Waste [See p.38](#)

Industrial waste and sewage generated at ship terminals adversely affect water quality and soil if not properly treated before they are released into the environment.

### Excessive Noise [See p.34-38](#)

Noise generated by the cargo handling equipment onboard ships and portside is recognized as sometimes being excessively loud.

## Oceans

### Oil and Chemical Spillage [See p.33-35](#)

Collisions and other incidents involving ships can result in spillage of the cargo (crude oil or chemicals) and fuel oil, polluting the oceans.

### Transfer of Ballast Water [See p.32-35](#)

Ballast water\* contains marine life and microorganisms, and releasing the water in a different part of the ocean can affect the local marine ecosystem.

### Generation of Waste Material [See p.34-35](#)

Waste oil, bilge water, sludge and other waste generated from ship operations must be processed appropriately to prevent marine pollution.

# Working with International Organizations

Many different regulations must be adhered to in order to ensure safe navigation of ships and protection of the environment. When international treaties are amended or new treaties formulated, due consideration must be given to compliance with the new regulations. "K" Line works with the Japanese Shipowners' Association (JSA), relevant government agencies and maritime organizations, as well as with the IMO\*, to engage in environmental prevention initiatives.

## United Nations Framework Convention on Climate Change (UNFCCC) and Measures to Curb International Shipping Greenhouse Gas Emissions

Based on UNFCCC, the Kyoto Protocol has established a framework for reducing greenhouse gas emissions by individual nations. However, because ships involved in international shipping cross national borders, and because there is such a wide range of parties concerned, the IMO has been charged with formulating measures to curb greenhouse gas emissions generated by international shipping. Such measures are being considered on the basis of the nine principles listed below. However, agreement has not been reached regarding the second principle, which stipulates that the measures apply equally to all nations that register ships for international waters, because some of the nations concerned are currently not required to reduce emissions under the Kyoto Protocol.

### — Nine principles for GHG emission reduction —

IMO regulatory framework on GHG Emissions from ships should be:

- 1 effective in contributing to the reduction of total global greenhouse gas emissions;
- 2 binding and equally applicable to all flag states in order to avoid evasion;
- 3 cost-effective;
- 4 able to limit — or at least — effectively minimize competitive distortion;
- 5 based on sustainable environmental development without penalizing global trade and growth;
- 6 based on a goal-based approach and not prescribe specific methods;
- 7 supportive of promoting and facilitating technical innovation and R&D in the entire shipping sector;
- 8 accommodating to leading technologies in the field of energy efficiency; and
- 9 practical, transparent, fraud free and easy to administer.

"K" Line actively participates in the framework adopted by the Japanese Ministry of Land, Infrastructure, Transport and Tourism, the JSA, and other relevant parties to reduce greenhouse gases generated from international marine transport.

## International Convention for the Prevention of Pollution from Ships (MARPOL 73/78 Convention)

This convention is a regulation to prevent marine pollution during ship operation and in occurrence of ship incidents,

and concerning atmospheric pollution such as SO<sub>x</sub> and NO<sub>x</sub> in exhaust emissions that came into force in 2005. The SO<sub>x</sub> and NO<sub>x</sub> regulations will be tightened in the future, and it will be necessary to modify or install new equipment in response. Together with equipment manufacturers, we are taking action to comply with the new regulations.

## Ballast Water Management Convention

The transport of ballast water affects ecosystems in various regions, and it is progressively becoming obligatory to prevent any impact from the release of ballast water by installing equipment to eliminate marine life and microorganisms therein, and inspecting ships prior to taking on fresh ballast water. This convention has not yet come into effect and currently has no binding force, but it will apply retroactively when it does come into effect, so we are taking measures in advance.

## Anti-Fouling System (AFS) Convention (2001 International Convention on the Control of Harmful Anti-Fouling Systems on Ships)

Hull exterior paints that contain organic tin compounds such as Tributyltin (TBT)\* used to prevent marine life from attaching to ship hulls have an impact on the marine ecosystem, so their use has been prohibited since this convention came into effect on September 17, 2008.

In advance of this, "K" Line ceased using TBT paints and switched to tin-free paints that do not contain any organic tin compounds, namely environmentally-friendly paints.

## Ship Recycling Convention

The Ship Recycling Convention was adopted in May 2009, and requires that obsolete ships be dismantled in accordance with worker health and safety and environmental considerations, and reused as raw materials.

The convention, which stipulates the following, came into effect after ratification by participating countries:

- (1) Requirement for Ships
- (2) Requirement for Ship Recycling Facilities
- (3) Preparation for Ship Recycling

With respect to the ship requirements, preparation of inventories indicating chemical substances included in ship materials is obligatory. "K" Line has been preparing these inventories in anticipation of the convention coming into effect.

Green Management  
Shipping Operations and their Impact on the Environment  
Working with International Organizations  
Measures Onboard for Environmental Preservation  
Measures at Terminals for Preserving the Environment  
Environmental Protection - Office Initiatives -  
Environmental Targets in FY2008 and Status of our Achievement  
Environmental Management Program for FY2009

# Measures Onboard for Environmental Preservation

Our ships have many kinds of equipment taking into account environmental preservation, and various measures to ensure safety in navigation and cargo operations are installed.

"K" Line promotes environmental activities aggressively, considering safety in navigation and cargo operations with highest priority.

## Atmospheric pollution control measures

### 1 Soot collecting device

A device to remove cinders, i.e. soot, etc., included in exhaust gas with installment of a specific kind of filter inside exhaust-gas pipes of diesel-powered generator.

### 2 VECS (Vapor Emission Control System)

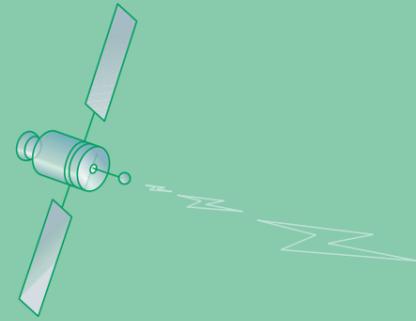
When cargo oil, such as crude oil, is loaded into the tank of a tanker, it emits vapor. VECS is a system to prevent vapor emission into the atmosphere and to collect it and transfer it to a shore facility. The transferred vapor is appropriately collected and treated in the facility, e.g. liquefaction.

### 3 Electronically-controlled engines

A type of engine equipped with electric controlled fuel injection system. On a computerized programming basis, it is possible to control/adjust accurately (a) an injection pattern with timing, pressure and injection volume and also (b) timing of opening/closing of an exhaust valve.

### 4 Turbine generator

This is an electric power generator driven by a steam-powered turbine. The steam, is produced effectively by an exhaust-gas economizer that employs the thermal energy of the exhaust gas from main diesel engine. Thanks to this co-generation system, ship can reduce fuel consumption for the operation of diesel generators and hence CO<sub>2</sub> emissions.



## Ship data transmission system by satellite

### 5 "SPAS" and "K-IMS" as ship operation data management system See p.16

These systems contribute appropriate ship operation by data transmission and accumulation.

## Reduction of Lubrication Oil (LO) consumption rate

### 6 Electric controlled LO injection system

LO is injected into the piston and cylinder wall from outside on large size diesel engines of ships. The electric control LO injection system contributes to reduce LO consumption rate with most appropriate injection timing and its volume.

## Reduction of fuel consumption

### 7 Exhaust-gas economizer

This is a device that generates steam using thermal energy from the exhaust gas of main diesel engines. By operating turbine generators using the steam, ship can reduce the fuel consumption for the operation of the generators, which leads to a reduction in CO<sub>2</sub> emissions.

### 8 Insulation paint

Paint shuts off solar heat transition into ship cabin and contributes electric power reduction for air conditioning unit, i.e. CO<sub>2</sub> emission.

### 9 Appendage for save energy

A bulge and fins installed on ruder (see below picture) convert water stream generated by propeller to propulsion energy and contribute to saving energy.



## Exhaust noise control

### 10 Silencer

Exhaust noise from diesel powered generator is eliminated by silencer installed on exhaust gas piping.

## Waste control

### 18 Waste oil incinerator, Oily water separator See p.35

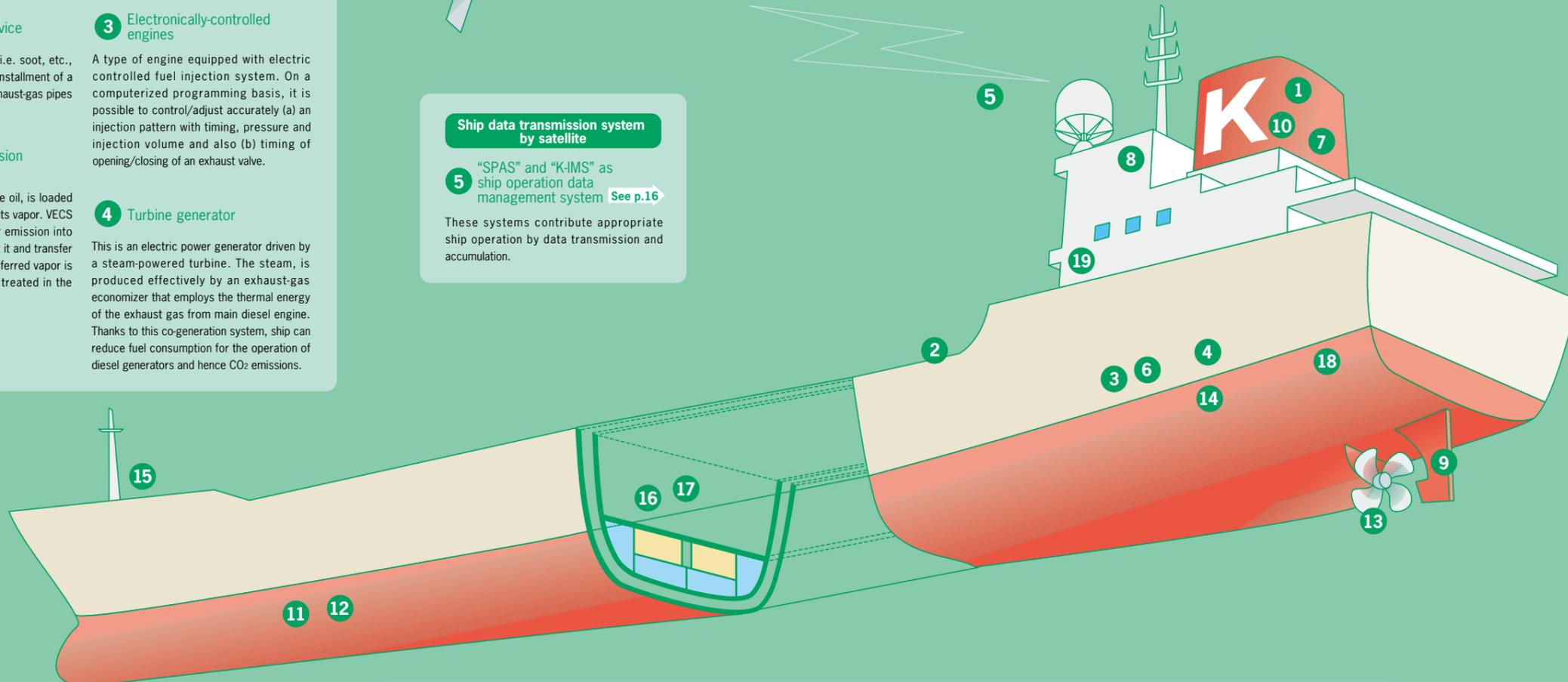


Waste oil incinerator



Oily water separator

### 19 Effective utilization of waste materials See p.35



## Introduction of eco-friendly paint

### 11 Silicon paint

This is a paint that uses silicon-based resin and has character of elasticity and smoothness compared with conventional paints. Since the coefficient of friction of the painted surface is low, marine growth is not easily able to adhere to the surface. And when they do adhere, they can be more easily scraped off. The extent of deterioration with age is smaller, and therefore there are minimal increases in the resistance of the ship's hull. This feature contributes to the reduction of fuel consumption and CO<sub>2</sub> emissions. The paint is also environmentally friendly because it does not dissolve in water as is the case of conventional paints used for ship hulls.

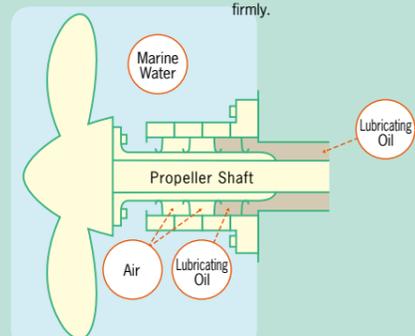
### 12 Tin-free paint See p.32

TBT\* paint was used to paint on hull to prevent adhering of marine life, but it was identified that TBT is harmful to marine life and then new type paint without TBT was developed and has been used on ships. TBT use has been prohibited by AFS convention since 2008.

## Oil spillage control measures

### 13 Air sealing system of stern tube

Stern tube is a part of penetrating propeller shaft and required sealing system to prevent water/oil leakage into ship/sea. Air sealing system has an air chamber being supplied pressurized air and separate oil and water firmly.



### 14 Central Cooling System (CCS)

In a conventional cooling system, lubricating oil is cooled through a heat exchanger by seawater which is discharged into the sea. In the new method-CCS, the lubricating oil is cooled with fresh water through the first stage of heat exchanger, and then, the heated fresh water is cooled with seawater through the second stage of exchanger. In case of oil leakage in the first stage of heat exchanger with something unexpected, the new method-CCS doesn't allow spilling oil into the sea because leaked oil is only mixed with fresh water and circulating at the first stage of heat exchanger.

### 15 Electric driven deck machineries

Conventional deck machineries; such as mooring winch, windlass, rump way, etc. are operated by hydraulic power. Electric driven deck machineries are powered by electric motor and eliminate hydraulic oil leakage.

### 16 Level gauge panel and high level alarm system for fuel oil tank

Continuous monitoring fuel tank level by the level gauge panel combined sounding the level at sight contributes overflow of fuel during bunker operation. And operator acknowledges high level of the tanks; i.e. almost full, by the alarm system.

### 17 Extra piping and tank preventing over flow fuel

These piping and tanks allow receiving over flowing fuel from other tanks and prevent oil spillage into sea.

## Cargo Oil Spillage Prevention Measures

### Double-Hulled\* Ships

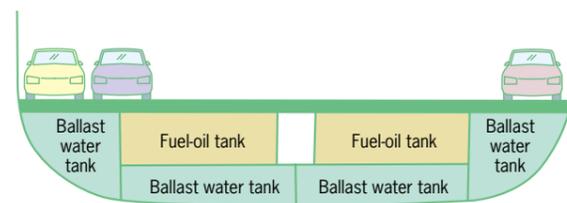
Cargo oil spilled from ships which have had a collision, run aground, etc., is a source of serious marine pollution. In the case of double-hulled tankers, though, should an incident occur and the exterior hull of the ship be breached, however unlikely, a second, interior hull containing the oil tanks prevents their contents from spilling out. As a result of the MARPOL Convention, all tankers built after 1996 are to be double-hulled, and shipping which utilizes a single-hulled tanker will be banned from 2015. Currently, all tankers in our fleet are double-hulled.

## Fuel Oil Spillage Prevention Measures

### Fuel Tanks Protected by Ballast Tank Buffer

Similar to the double-hulling of tankers, fuel tanks are built one layer removed from the outer hull, surrounded by ballast tanks, as a way of lessening the risk of fuel oil leakage in the event a ship has a collision or runs aground.

### Double Hull for Fuel Tanks



## Ballast Water Countermeasures

The Safety Management System (SMS\*) and the Ballast Management Plan are used to ensure that ballast water\* replacement performed on the open sea is carried out safely and appropriately. Also, the installation of onboard ballast water treatment equipment is being examined and discussed with an eye towards compliance with the Ballast Water Management Convention (see p.32) once it goes into effect. In addition, large containerships which require almost no ballast water to ensure their stability and pure car carriers which do not need to replace ballast water thanks to their use of fixed ballast (i.e., cement and other highly dense material is kept in the bottom of the ship to reduce the amount of ballast water) are being introduced.

## Waste Disposal

### Effective Utilization of Waste Materials

Waste materials produced from daily life aboard ships is separated and appropriately disposed of according to regulations. Plastics, bottles and cans are brought ashore and effectively utilized as recyclable resources.

### Waste Oil Incinerators and Oily Water Separators

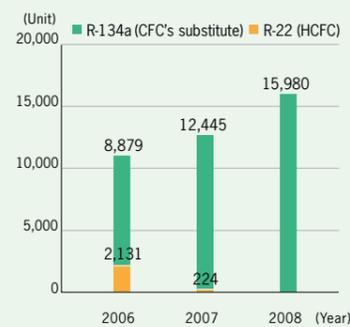
Bilge (oily water) that collects in the engine room, etc., in the bottom of the ship is separated into oil and water using an oily water separator, and the waste oil separated out is then incinerated in an onboard waste oil incinerator. The clean water is released back into the sea after being checked for oil content. Sludge (impurities separated out from fuel and lubricating oil through the use of a purifier) is incinerated in an onboard waste oil incinerator.

## Ozone Layer Preservation Measures

### Ozone Layer Measures

Measures are being implemented to help prevent the destruction of the ozone layer by CFCs\*. All of our reefer containers have switched to using CFC substitute R-134a, which has zero ozone depletion potential, and the air-conditioning and food refrigeration equipment on newly constructed ships employs CFC substitutes such as R-404A. Other ways in which we are working to preserve the ozone layer include rapidly moving away from the use of onboard halon\* fire extinguishing equipment, ensuring the use of CO<sub>2</sub> and high-expansion foam fire extinguishing equipment, and adopting extinguishing agents which have zero ozone depletion potential, such as HFC227ea, for the fire extinguishing equipment in the machine room (computer server installation) at our headquarters.

### Number of owned Reefer Containers



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

### Reduced Navigation Speed

By adjusting navigational speed to better scheduled berthing at port, we have been able to limit the amount of fuel we consume and, hence, the amount of CO<sub>2</sub> we emit. We are also working to reduce CO<sub>2</sub> emissions by greatly reducing navigational speed in certain specified regions.

Ships calling to the Port of Long Beach in the United States drop their speed to 12 knots or less once they are within approximately 20 miles (37 kilometers) of the harbor to reduce the total amount of gas produced from ship operation. We actively take part in this effort and have an extremely high compliance rate each year, proof of which can be seen by our receipt of the Green Flag Award in 2008 (the fourth consecutive year), from the Port of Long Beach.



Green Flag Award conferment ceremony

As an independent initiative by "K" Line, we have our pure car carriers drop their speed to 12 knots or less in Ise Bay and Mikawa Bay in Japan, which in 2008 resulted in 818 fewer tons

### BUILDING ENVIRONMENTALLY-FRIENDLY SHIPS

Ship navigation entails emitting CO<sub>2</sub>, NO<sub>x</sub>\* and other gasses as well as waste water during life at sea. Also oil spillage, however unlikely, can have an immeasurable impact on the environment. In order to minimize these sorts of environmental impacts and risks, care is required not only in how ships are operated but also in how they are designed. With regard to the latter, there is a variety of country-specific and international environmental regulations which must be complied with. As the department in charge of ship construction, we of course make every effort to fulfill these different regulations and do our best to create added value through our designs. For example, we seek to reduce CO<sub>2</sub> emissions by actively incorporating energy-conserving equipment which reuses exhaust gas heat; we install equipment for removing PM\* from exhaust gas; we use air sealing equipment to eliminate oil spillage from stern tube seals; and we strive to stay ahead of new regulations

of CO<sub>2</sub>. For this initiative, "K" Line received a special award at the 9th Environment-friendly Logistics Award, sponsored by the Japan Federation of Freight Industries.

### Project for Ship Performance Evaluation in Actual Sea

There is no quantified evaluation of ship performance variation owing to meteorological and hydrographic conditions; instead ships are assessed as strong or weak in terms of withstanding rough sea, based on our past experiences. Thus a project for measuring and analyzing the various data produced during navigation using special onboard measurement equipment is being carried out under the auspices of the National Maritime Research Institute, Japan. This project includes various shipbuilding and shipping firms, and the "Aegean Highway," one of "K" Line's pure car carriers, has been offered as a test ship.

## Utilization of Low Sulfur Fuel Oil

The diesel-powered generators for our containerships berthed at Tacoma Harbor in the U.S. and Vancouver Harbor in Canada make use of low sulfur fuel oil. Also, our ships calling to the Port of Long Beach in California participate in the Clean Air Action Plan (CAAP), an independent initiative of the harbor authority, by using fuel with 0.2% or less sulfur content for their main engines and diesel generators. We also use low sulfur fuel in the North Sea and Baltic Sea, where the MARPOL Convention (see p.32) calls for sulfur content of 1.5% or less. Through this we are able to reduce SO<sub>x</sub>\* emissions, that pollute the atmosphere, from ships.



Engineer  
Machinery Team  
Ship Planning Group

Shunsuke Hirai

which help to lessen the risk of oil spillage incidents by taking such measures as designing buffered fuel tanks. Furthermore, we also watch trends in regulations and investigate equipment which could reduce our environmental impact. For example, ballast water discharge has become a major issue, and we are rapidly developing devices which would filter out marine life. Ship manufacturers are developing this equipment, but we are already in the performance evaluation and installation simulation phase.

Green Management  
Impact on the Environment  
Working with International Organizations  
Measures Onboard for Environmental Preservation  
Measures at Terminals for Preserving the Environment  
Environmental Protection - Office Initiatives -  
Environmental Targets in FY2008 and Status of our Achievement  
Environmental Management Program for FY2009

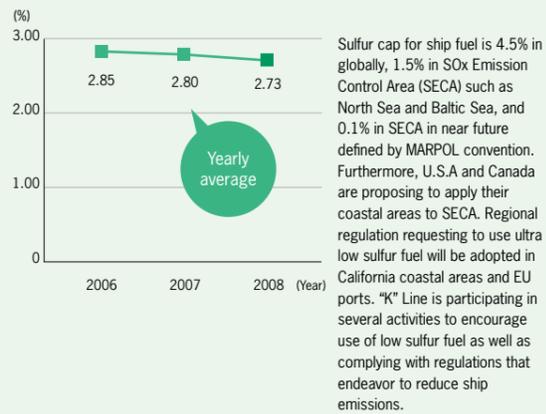
### Variation of Emissions from Ship

Various data by ship report and SPAS (see p.16) is base data to calculate emission volume per ton-kilometer\* and the result of the computation is used for institution of targets to reduce environmental burden and confirmation of the status of attainment of the aim.

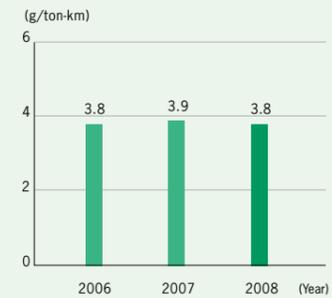
#### Fuel consumption and emissions (2008)

<b>INPUT</b>	Fuel oil	4,392,019 tons
<b>OUTPUT</b>	CO <sub>2</sub>	13,676,747 tons
	SOx*	239,804 tons
	NOx*	409,775 tons

#### Percentage of sulfur in Fuel oil Consumed by Ships



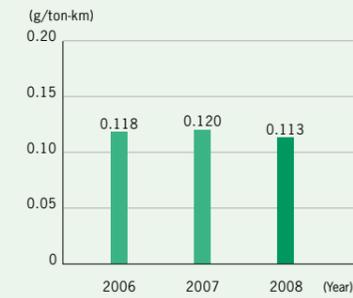
#### CO<sub>2</sub> emission per ton-kilometer (unweighted average of all ship types)



#### SOx emission per ton-kilometer



#### NOx emission per ton-kilometer



#### CO<sub>2</sub> emission per ton-kilometer by ship type (2008)

Ship Type	Emission (g/ton-km)
Container Carrier	7.3
Car Carrier	11.3
Bulker	2.2
Oil Tanker	2.0
Liquefied Gas Tanker	6.1

The numbers in the left table are calculated by SPAS.

There is difference in the number on the table by ship type and by ship size in same category of the type. Furthermore, the number would be affected by trade lane, required speed, port congestion, weather and sea condition, therefore the number should be used for an index of environmental preservation with well understanding of its characteristics.

The index for all ship types should be calculated by weighting based on CO<sub>2</sub> emission of each type of ship and obtain average balance (%) for all ship types.

The index in 2008 is reduced 3.5% comparing with 2007 year and 4.0% comparing with 2006 year.

## Measures at Terminals for Preserving the Environment

*Exhaust gases, noise and wastewater from berthed ships and terminal equipment impact in a variety of ways on the environment. Aware of this, "K" Line is taking the environment into consideration through proper equipment operation and adequate supervision, and reducing environmental impact by installing the latest equipment.*

### COLD IRONING

— SUPPLYING ELECTRIC POWER TO SHIPS FROM THE SHORE —

We began operating onshore electric power supply equipment at the container terminal in the Port of Long Beach in the United States in November 2008 to supply berthed ships with electric power. All necessary electric power for a docked 5,500 TEU containership can be supplied from onshore, which means that exhaust from onboard diesel generators has been completely eliminated. At the Port of Long Beach, ships that shut down their generators are called "cold iron" and the supply of electrical power from the shore is referred to as "Cold Ironing." Supplying electric power to a ship essentially means running a power cable from the ship to the shore and plugging it into a power outlet, but the electric power conditions (voltage and frequency) of the ship and the shore have to match, and various safety equipment such as circuit breakers must be installed to prevent any incidents. To prepare for the start of operation in November 2008, the equipment on five ships and on shore, which had been installed independently, were connected to confirm the flow of power and make sure that the safety equipment was operating properly. The ships' crews, "K" Line marine technical personnel, engineers from the equipment manufacturer and terminal personnel worked through the night to ensure that there was no impact on loading operations.

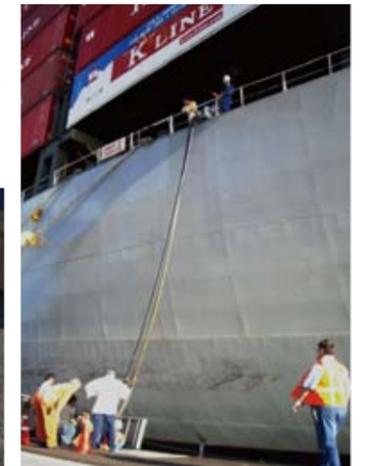
Cold Ironing has already greatly reduced the environmental impact from ships on the area in the vicinity of the terminal, and shutting down the generators has also reduced noise levels.



The containership "Genoa Bridge" during Cold Ironing



A power supply cable junction box installed on the wharf



A power cable is lowered from the ship for connection to the junction box

#### Hybrid Cranes Installed

Daito Corporation began installing environmentally-friendly, energy-saving hybrid transfer cranes at its container terminals in Tokyo and Yokohama in 2007, and by the end of 2008 a total of five cranes had been installed. Daito plans to install an additional two cranes in 2009. The hybrid cranes convert into electricity the energy that is generated when hanging containers are lowered, stores the electric power, and then uses the power in its other operations.



Compared to conventional models, the hybrid cranes consume less fuel and produce less carbon dioxide. In addition, improved engines generate much less noise.

#### Wastewater Testing

Wastewater generated by terminals is another source of environmental impact, so in addition to daily observations, "K" Line periodically collects the water for testing by a laboratory to confirm that there is no harmful effect on the environment and that the water quality meets all local environmental standards at each location.

Green Management  
Shipping Operations and their Impact on the Environment  
Working with International Organizations  
Measures Onboard for Environmental Preservation  
Measures at Terminals for Preserving the Environment  
Environmental Protection - Office Initiatives -  
Environmental Targets in FY2008 and Status of our Achievement  
Environmental Management Program for FY2009

## Environmental Protection – Office Initiatives –

“K” Line Group has set reduced resource consumption and waste generation as its environmental goals and is actively working to reduce its environmental impact. We are also working to reduce CO<sub>2</sub> emissions from our offices.

### Team Minus 6% Project in Japan

Since August 2006, “K” Line has taken part in the Team Minus 6% Project. This initiative was created in response to the coming into effect in February 2005 of the Kyoto Protocol, which seeks to curb global warming. Between 2008 and 2012 it aims to help Japan meet its reduction obligations under the Kyoto Protocol by reducing CO<sub>2</sub> and other greenhouse gas emissions by 6% compared with 1990 levels. In 2008, “K” Line took part in the “One Person, One Day, 1kg of CO<sub>2</sub> Emissions Reduction” campaign for the Team Minus 6% Project.

### Cool Biz, Warm Biz

As part of efforts to reduce energy consumption in Japan, air conditioners have for some time been set at 28°C and heaters at 18°C. In order to make offices more comfortable, however, in 2005 Cool Biz, which forgoes the Japanese custom of wearing neckties and jackets in summer, and Warm Biz, which encourages extra layers of clothing in winter, were proposed and implemented in order to help reduce energy consumption. This means less CO<sub>2</sub> emissions, thereby contributing to efforts to help alleviate global warming. Since 1997 “K” Line has instituted a casual dress policy in summer as part of its efforts to reduce energy consumption.

### Waste Reduction and Recycling

“K” Line does its utmost to reuse waste materials produced by its offices. And when waste materials must be disposed of, consideration is given to how these materials can be recycled and how waste production can be further minimized in the future.

### “K” Line America, Inc. enlarged Green Power Utilization

“K” Line America, Inc. (KAM) has purchased wind power energy which is one of the renewable energy as “Renewable Energy credit (REC)” from Renewable Choice Energy since February 2008, and the energy offsets 60% of consumed office electricity by KAM.

In 2009, KAM’s activity enlarged to purchase the energy equivalent to 80% of office electricity and contributes reduction of Green House Gas emission.

Our commitment is similar to:

- ◆ Planting 6,077 mature trees
- ◆ Not driving 1,506,756 miles annually
- ◆ 123 passenger cars taken off the road for one year

By purchasing renewable energy credits, KAM is committed helping reduce our dependency on fossil fuels, promoting cleaner air, fighting global climate change.



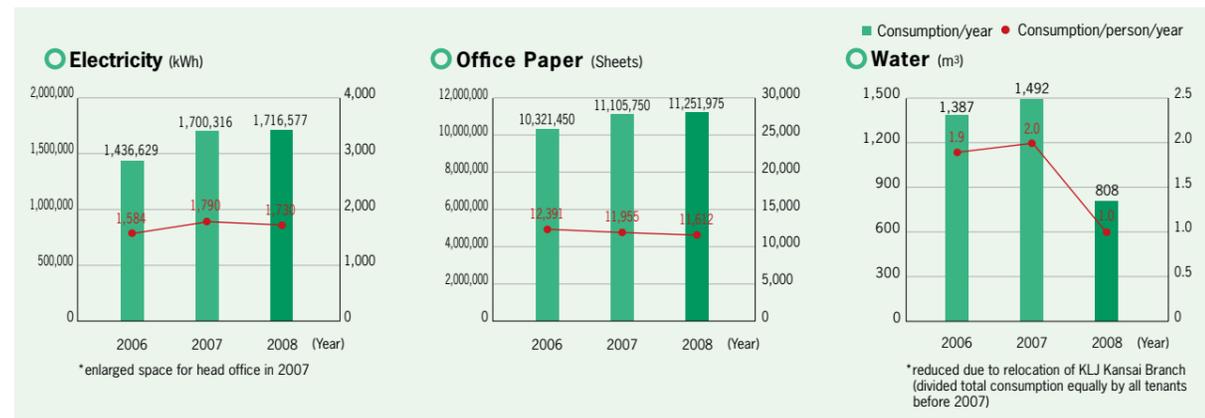
Certificate of Green Power Partner by U.S. Environment Protection Agency



Renewable Energy Certificate

### Promotion of Eco-Products Procurement

An ordering system which gives preference to eco-products has been adopted so that, as much as possible, products procured for “K” Line offices meet the standards set by the Law on Promoting Green Purchasing, are Eco Mark-certified or are otherwise environmentally friendly.



## Environmental Targets in FY2008 and Status of our Achievement

“K” Line Group is making further efforts to reduce our environmental impact with establishment of environmental targets in Fiscal Year 2008 being listed up as follows: We will continue stepping up further efforts to achieve each target.

	Environmental Objectives	Environmental Targets in Fiscal 2008	Evaluation	Results
Business Activities	Prevention of Marine Pollution	No Oil and harmful substances spillage from a ship	★★	Incurred small oil spill incidents
		Ratio of double-hulled* tankers: more than 93%	★★★	100% from Sep. 2008
		Fuel tanks protection by double hull and/or dividing fuel tank into small sections: more than 7 ships out of newly-built ships	★★★	12 ships have done so
		Acquisition of Green Passport (Inventory): more than 7 ships out of newly-built ships	★★★	8 ships have done so
		Ballast water* exchange in the open sea	★★★	Continuance of operation
	Reduction of Wastes	Reduce total volume of waste in the office from the previous year	★	Exceeded last year, regrettably
		Ameliorate discharge waste on shore for recycling as compared with previous year	★★★	
		Ameliorate ratio of green purchases as compared with previous year	★	Down from last year, regrettably
	Reduction in Consumption of Natural Resources	Office Paper usage: 1% reduction from the previous year	★★★	5.6% reduced
		Electric power consumption in the office: 1% reduction from the previous year	★★★	2.1% reduced
Reduction of fuel oil consumption: Reduce from the previous year per ton-mile basis		★★★	3.5% reduced	
Reduction of lubricating oil consumption: Reduce from the previous year per ton-mile basis		★★★	4.7% reduced	
Development and Introduction of Environmental Technology	Prevention of Marine and Atmospheric Pollution	CO <sub>2</sub> emission: Reduce from the previous year	★★★	3.5% reduced
		SOx*emission: Reduce from the previous year	★★★	6.1% reduced
		NOx*emission: Reduce from the previous year	★★★	5.0% reduced
		Sulfur content of fuel oil: Average 2.7%	★★	2.73%
		Introduce fuel additive dosing system: 10 ships out of newly-built ships	★★★	10 ships
	Reduce emissions of atmospheric pollutants and GHG from ships at berth	★★★	Started shore electric supply at Long Beach (by “K” Line) and Yokohama (by Kawasaki Kinkai Kisen)	
	Participation in speed reduction program of the ports of Los Angeles and Long Beach	★★★	High percentage achievement (317/321 in port)	
	Promotion of adoption of silicone paints	★★★	2 newly-built ship and 7 ships in dock	
	Reduce the consumption of CFCs*	★★★	35.5% decrease	
	Zero complaints of excessive noise from ships and terminal equipment	★★★	No complaint	
Environmental Preservation	Social Contributions, Educating Employees of the Group Companies	Continuing marine observation surveys	★★★	Supporting on “Chubu Maru”
		Participating in social activities	★★★	3 cases (Dim-the-Lights campaign, Seashore Cleanup, Donations)
		Participating training in education programs, for office employee and seafarers	★★	262 people participated

- ★★★ Excellent
- ★★ Good
- ★ Unreachable to targets

While the environmental target for oil spillage incidents in 2008 was zero, there was one incident of hydraulic oil spillage from equipment operating on a chartered ship and one incident of fuel spillage during ship bunkering. Both of these incidents were small in nature and were promptly dealt with, thereby minimizing any damage. However, “K” Line will continue to do its best to ensure that no such spillage incidents occur in the future.

● Green Management  
 ● Shipping Operations and their Impact on the Environment  
 ● Working with International Organizations  
 ● Measures Onboard for Environmental Preservation  
 ● Measures at Terminals for Preserving the Environment  
 ● Environmental Protection – Office Initiatives –  
 ● Environmental Targets in FY2008 and Status of our Achievement  
 ● Environmental Management Program for FY2009

# Environmental Management Program for FY2009

“K” Line group has been establishing planned targets for medium-term and each fiscal year to ensure and carry out environmental preservation activities systematically.

	Environmental Charter and Policy	Environmental Objectives	Environmental Targets (Medium-term)	Environmental Targets for 2009
Business Activities	●Prevent marine pollution by safety in navigation of the ships	●Prevent marine pollution	●Accomplishment of 5 consecutive years of no grave accident relevant to marine pollution through perfection in ship navigation and cargo operations	●Reduce incident of leakage from ships to zero, implementation of appropriate practice of SMS*
			●Prevention of leakage and spill from fuel tank	●Prior to rule enforcement, possible measures for protection of compartments of fuel-oil tank are examined and practiced with a target of their application to 15 or more newly-built ships
			●Continual practice of ballast water* exchange in the open sea ●Examination of introduction and development of technology for sterilization of ballast water ●Keep minimum quantity of ballast water onboard	●Practice ballast water exchange in the open sea
			●Achieve 100% of tankers in operation being composed of double hull* by 2010	●Maintain 100% ratio of double-hulled tankers in the fleet
	●Proper management of exhausts, wastes and recycling	●Prevent drainage water pollution ●Properly manage wastes and their reduction ●Prevent environmental pollution	●Proper management of drainage water at offices	●Proper management of drainage water at offices
			●Reduction of wastes at offices	●Reduction of wastes at offices from the previous year
			●Ameliorate use of eco-friendly products ●Encourage separation of waste materials generated onboard and on-shore recycling ●Reduce packaging materials used in deliveries to ships ●Prevent environment pollution in demolishing ships	●Ameliorate to improve the ratio of green purchases from the previous year ●Encourage discharging more wastes on shore for recycling than the previous year ●Request to manufactures and suppliers for reducing extra packing materials
			●Reduce the consumption of natural resources	●Obtaining Inventory: 15 ships or more ●Cooperate in defining IMO Ship Recycling Convention
	●Encourage maximum conservation of energy and resources through an upgrade in ship operation and work performance	●Reduce the consumption of natural resources	●Reduce the volume of paper used in offices by 3% per employee by 2011 as compared with 2006	●Reduction in use of office paper by 1% per employee as compared with the previous year
			●Reduce electric power consumption in offices by 3% per employee by 2011 as compared with 2006	●Reduction in use of electric power per employee to less than previous year
			●Reduction in consumption of tap water at offices	●Reduction in use of tap water per employee to less than previous year
			●Continue reducing fuel and lubricating oil consumption on ships *Reduce by 5% from FY2006 in FY2011 (per ton-mile basis)	●Reduction in use of fuel oil onboard (per ton-mile basis) ●Reduction in use of lubricating oil onboard (per ton-mile basis) ●Introduce Fuel Additive Dozing System, to improve fuel combustion: 15 ships or more
Development & Introduction of Environmental Technology	●Reduction in exhaust emissions which cause atmospheric pollution and global warming to be incurred, commit to the study and improvement of ship and shore facilities and fuel oil, and to the development and introduction of sophisticated equipment and related technologies	●Prevent atmospheric pollution	●Reduce CO <sub>2</sub> emission on ships by 10% by the mid-2010s as compared with 2006 (per ton-mile basis)	●Reduce CO <sub>2</sub> emission (per ton-mile basis)
			●Reduce SO <sub>x</sub> * emission on ships by 10% by the mid-2010s as compared with 2006 (per ton-mile basis)	●Reduce SO <sub>x</sub> emission (per ton-mile basis)
			●Reduce NO <sub>x</sub> * emission on ships by 10% by mid-2010s as compared with 2006 (per ton-mile basis)	●Reduce NO <sub>x</sub> emission (per ton-mile basis)
			●Reduce sulfur in fuel oil of ships to 2.5%	●Reduce sulfur content in fuel oil to 2.6% or less
			●Respond to regional regulations	●Usage of fuel oil to meet regional requirements
			●Participate in voluntary activities	●Voluntarily reduce speed in harbors and coastal areas
			●Reduce atmospheric pollutant and greenhouse gas from berthed ships	●Reduce emissions of black smoke, PM*, CO <sub>2</sub> , SO <sub>x</sub> and NO <sub>x</sub> from berthed ships ●Introduce VECS* (Vapor Emission Control System) on tankers ●Introduce soot collecting devices
			●Promote use of biofuel and clean diesel fuel for cargo operation devices ●Encourage adoption of energy-saving cargo operation devices	●Use biofuel and clean diesel fuel in cargo operation devices at container terminals ●Encourage adoption of energy-saving cargo operation devices
	●Reduction of noise	●Efforts for reduction of noise from ships and terminal equipment	●Research and development of noise emission control devices	
	●Refrain from using ship hull paints containing hazardous substances to marine life ●Refrain from using any ozone-depleting substances	●Prevent marine and atmospheric pollution ●Prevent atmospheric pollution	●Encourage use of environmentally-friendly paints	●Expand the adoption of silicone paints*, encourage adoption of tar-free paints
●Continue efforts to reduce the consumption of CFCs* and Halon* onboard all ships and promote the use of substitutes ●Use next-generation refrigerants			●Reduce ship usage of particular CFCs (R-12) and Halon by 1% from the previous year ●Conduct a feasibility study for using next-generation refrigerants in reefer containers and ship freezers	
Encouragement of Environmental Preservation	●Social contributions ●Educating employees of the Group companies ●Expansion of acquisition of environmental certification	●Continue to conduct marine observation surveys	●Continue to conduct marine observation surveys	
		●Participate in social contributions and other activities ●Conduct training and education programs for employees	●Participate in social contributions and other activities (Participate in relevant activities three or more) ●Conduct training and education programs for employees ●Train and educate seafarers (participation by 100 people or more)	
		●Extension of acquisition of environmental certification to group companies including overseas ●Certify at least 10 companies by 2010	●2 companies or more	

● Green Management  
● Shipping Operations and their Impact on the Environment  
● Working with International Organizations  
● Measures Onboard for Environmental Preservation  
● Measures at Terminals for Preserving the Environment  
● Environmental Protection - Office Initiatives -  
● Environmental Targets in FY2008 and Status of our Achievement  
● Environmental Management Program for FY2009

## History of Social and Environmental Activities

### 1998

- **April** The Company declares that the issue of environmental preservation, together with safe ship operations, will be one of the 4 assignments of New K-21

### 2000

- **July** Reviewed New K-21 and targeted environmental preservation as one of the task
- **September** Established Environmental committee

### 2001

- **January** An Environmental Preservation page appears on "K" Line's website
- **April** The Company's first double-hull\* VLCC "KUMANOGAWA" delivered



- **April** "Company Ethical Standard of Kawasaki Kisen Kaisha, Ltd." established
- **May** "K" Line's Group Environmental Charter publicized
- **October** The Environmental Management System (EMS) starts to operate

### 2002

- **February** The Company obtained ISO 14001\* certification
- **August** Our first Environmental Report issued
- **October** "K" Line (Japan) Ltd. joined EMS

### 2003

- **March** Certified as a member of "FTSE\* 4Good Global Index" (Still Continuing)
- **March** The EMS Global Network formed
- **April** Kawasaki Kinkai Kisen Kaisha, Ltd. and Nitto Total Logistics Ltd. (Terminal sector) joined the EMS



- **November** Extension of the scope of application of EMS to chartered ships

### 2004

- **February** Rinko Corporation obtained ISO 14001 certification
- **March** K Line Container Service (Thailand) Ltd. obtained ISO 14001 certification
- **May** Announcement of "K" LINE Vision 2008, a new management plan where we defined our management principles and declared our commitment to contribute in the social and environmental fields

### 2005

- **January** Daito Corporation obtained ISO 14001 certification
- **January** Shinki Corporation obtained Step 2 of Kobe Environmental Management System certification
- **February** "K" Line European Sea Highway Services GmbH (KESS) obtained ISO 14001 certification
- **July** CSR Corner opened on the website
- **August** Seagate Corporation obtained Green Management Certification\*
- **September** "K" Line Air Service, Co., Ltd. (presently "K" Line Logistics, Ltd.) obtained ISO 14001 certification

### 2006

- **January** Establishment of CSR Division
- **January** Hokkai Transportation Co., Ltd. Tomakomai Branch obtained Green Management Certification
- **March** Medium-term management plan "K" LINE Vision 2008\* Promotion of CSR activity declared
- **May** Establishment of the CSR & Environmental Committee
- **October** Nitto Total Logistics Ltd. obtained ISO 14001 certification
- **December** Establishment of Charter of Conduct of Group Companies and "K" Line Implementation Guideline

### 2007

- **March** K Line (Thailand) Ltd. obtained ISO 14001 certification
- **April** Formation of CSR & Compliance Division by merger of the Compliance Office and CSR Division
- **October** Japan Express Transportation Co., Ltd. obtained Green Management Certification

### 2008

- **January** Application of EMS system to Nitto Total Logistics Ltd. (Terminal sector)
- **April** Announcement of medium-term management plan "K" LINE Vision 100 setting forth our commitment to the environment as one of the five top management issues under the major themes of "synergy for all and sustainable growth"
- **July** Establishment of Environment Management Division to enhance environmental activities
- **November** Commenced shore power electricity supply to containerships (so called "Cold Ironing") at ITS terminal in Long Beach, U.S.A.



## Major Subsidiaries and Affiliates

### Domestic

#### Marine Transportation

- Kawasaki Kinkai Kisen Kaisha, Ltd.
- Asahi Kisen Kaisha, Ltd.
- Kobe Pier Co., Ltd.
- \*Badak LNG Transport, Inc.
- \*Shibaura Kaiun Co., Ltd.

#### Shipping Agency

- "K" Line (Japan) Ltd.
- \*Shimizu Kawasaki Transportation Co., Ltd.

#### Ship Management

- "K" Line Ship Management Co., Ltd.
- Taiyo Nippon Kisen Co., Ltd.
- Escobal Japan Ltd.

#### Harbor Transportation/Warehousing

- Daito Corporation
- Nitto Total Logistics Ltd.
- Hokkai Transportation Co., Ltd.
- Seagate Corporation
- Nitto Tugboat Co., Ltd.
- Tokyo Kokusai Koun Kaisha, Ltd.
- \*Rinko Corporation
- \*Kokusai Logistics Co., Ltd.

#### Logistics

- "K" Line Logistics, Ltd.

#### Land Transportation

- Japan Express Transportation Co., Ltd.
- Shinto Rikuun Kaisha, Ltd.
- Maizuru Kousoku Yusou Co., Ltd.

#### Container Repairing

- Intermodal Engineering Co., Ltd.

#### Travel Business

- "K" Line Travel, Ltd.

#### Other Business

- "K" Line Engineering Co., Ltd.
- Shinki Corporation
- "K" Line Systems, Ltd.
- KMDS Co., Ltd.
- Kawaki Kosan Kaisha, Ltd.
- Crown Enterprise Co., Ltd.
- "K" Line Accounting and Finance Co., Ltd.

### Overseas

#### Marine Transportation

- "K" Line Pte Ltd
- "K" Line Bulk Shipping (UK) Limited
- "K" Line European Sea Highway Services GmbH
- "K" Line LNG Shipping (UK) Limited
- \*Northern LNG Transport Co., I Ltd.
- \*Northern LNG Transport Co., II Ltd.
- SAL Schiffahrtskontor Altes Land GmbH & Co. KG

#### Shipping Agency

- "K" Line America, Inc.
- "K" Line (Australia) Pty Limited
- "K" Line (Belgium)
- "K" Line Canada, Ltd.
- K Line (China) Ltd.
- "K" Line (Deutschland) GmbH
- "K" Line (Europe) Limited
- "K" Line (Finland) OY
- "K" Line (France) SAS
- "K" Line (Hong Kong) Limited
- "K" Line (Korea) Ltd.
- "K" Line Maritime (M) Sdn Bhd.
- K Line Mexico SA DE CV
- "K" Line (Nederland) B.V.
- K Line (Norway) AS
- "K" Line (Portugal)-Agentes de Navegação, S.A.
- "K" Line (Scandinavia) Holding A/S
- "K" Line (Singapore) Pte Ltd
- K Line (Sweden) AB
- "K" Line (Taiwan) Ltd.
- K Line (Thailand) Ltd.
- "K" Line (Western Australia) Pty Limited
- PT. "K" Line Indonesia

#### Terminal Operator

- International Transportation Service, Inc.
- The Rail-Bridge Terminals (New Jersey) Corporation
- TransBay Container Terminal, Inc.
- \*Husky Terminal & Stevedoring, Inc.

#### Freight Consolidation

- Century Distribution Systems, Inc.
- Century Distribution Systems (Europe) B.V.
- Century Distribution Systems (Hong Kong) Limited
- Century Distribution Systems (Shenzhen) Limited
- Century Distribution Systems (International) Limited
- Century Distribution Systems (Shipping) Limited

#### Warehousing

- Universal Logistics System, Inc.
- Universal Warehouse Co.
- Universal Warehouse Co. (NW)

#### Logistics

- "K" Line Logistics (Hong Kong) Ltd.
- "K" Line Logistics (U.K.) Ltd.
- "K" Line Logistics (U.S.A.) Inc.
- "K" Line Logistics (Singapore) Pte. Ltd.
- K Line Logistics (Thailand) Ltd.
- K Line Logistics South East Asia Ltd.

#### Land Transportation

- James Kemball Limited
- ULS Express, Inc.

#### Container Repairing

- \*Multimodal Engineering Corporation

#### Financing

- "K" Line New York, Inc.

#### Holding Company

- Kawasaki (Australia) Pty. Ltd.
- "K" Line Holding (Europe) Limited
- "K" Line Heavy Lift (UK) Limited

#### Other Business

- Connaught Freight Forwarders Limited
- Cygnus Insurance Company Limited
- "K" Line TRS S.A.
- Marinus Enterprise, Inc.
- \*PrixCar Service Pty Limited

\*Subsidiaries and Affiliates Accounted for the Equity Method.

# “K” Line Implementation Guideline for Charter of Conduct

Putting into practice the Charter of Conduct as common behavioral norms, individual group companies enacted their behavioral guidelines that should be more substantial and practicable in consideration of laws/regulations/ordinances and norms of the countries where their offices are located and other key factors related to type of business/business scope including relationship with their stakeholders. Following is “K” Line’s Implementation Guideline. Guidelines of group companies may have some slight difference in items and expressions that derive from their business circumstances. Fundamentally, however, there is no actual difference from our Implementation Guideline described hereunder.

## “K” Line Implementation Guideline for Charter of Conduct (\* is for supplementary explanation)

Kawasaki Kisen Kaisha, Ltd. (hereinafter referred to as “K” Line) has set the following items as an implementation guideline in order to put the spirit of “Charter of Conduct: “K” Line Group Companies” into practice.

1. Human rights		2. Compliance	
<b>The “K” Line Group will consistently respect human rights and well consider personality, individuality and diversity of its corporate members and improve work safety and conditions to offer them comfort and affluence.</b>		<b>The “K” Line Group promises to comply with applicable laws, ordinances, rules and spirit of the international community and conduct its corporate activities through fair, transparent and free competition.</b>	
1-1	“K” Line fully recognizes that corporate sustainability is supported by its employees and will honor their rights, personality, individuality and diversity.	2-1	“K” Line promises to comply with applicable laws and ordinances, conventions, rules of the international community and social values such as ethical and moral codes.
1-2	“K” Line will abide by labor laws and regulations. * Relevant laws and regulations of Japan include the Constitution, the Labor Standards Law, Workers’ Safety and Health Law, etc. Respect for the right of organization and the right of collective bargaining and compliance with other labor-related laws are the fundamental premise of this article.	2-2	“K” Line recognizes that anti-trust regulations in each respective country are the basic rule for fair, transparent and free competition, and promises not to enter into any agreement in breach of these nor abuse its dominant position.
1-3	“K” Line does not tolerate child labor or forced labor.	2-3	“K” Line will always transact business based on appropriate purchasing policies outlined below and maintain fair and sound relationships with its business partners. * We respect fair competition and fair trade without taking advantage of any dominant bargaining position in any trade. [Guideline for Purchases] * We will request business partners for mutual compliance. ① Make purchasing decisions by providing fair opportunities and through impartial evaluation. ② Comply with laws, ordinances and social norms and build mutually trusting and cooperative relationships with business partners. ③ Give due consideration to social responsibilities such as respect for human rights and safety, conservation of natural resources and environmental preservation. ④ Pursue achievement of best quality with reasonable cost.
1-4	In order to assist each corporate employee unleash their capabilities and creativity and maximize their potential to achieve self-actualization, “K” Line will improve necessary education, training and other systems to facilitate a balance between career planning and human resource utilization.	2-4	“K” Line will maintain transparent and sound relationships with governments and regulatory authorities.
1-5	“K” Line will conduct objective and unbiased personal evaluation through due process of appraisal and fair and equal treatment of employees. * This is defined in Company’s guideline for performance review.	2-5	“K” Line will neither offer nor receive any excessive entertainment, gifts or other favors beyond commonly accepted business courtesies.
1-6	“K” Line will eliminate any discrimination in employment or compensation based on nationality, gender, religion, social class or other social status.	2-6	“K” Line will seek to protect and fully utilize its intellectual property and respect intellectual property rights of others.
1-7	“K” Line will make every possible effort to prevent harassment at work and promptly and adequately respond as needed. * This includes sexual harassment and power harassment. A system is provided for professional consultation/response.	2-7	“K” Line will lay down strict internal rules and procedures to prevent any insider trading or suspicious activities from occurring and keep every member of the “K” Line Group duly informed and conform to such rules and procedures.
1-8	“K” Line will support the balancing of career and family by putting in place necessary systems such as work schedule flexibility and leave systems. * We are improving our systems supporting measures against declining birthrate and helping nursing care.	2-8	“K” Line will establish an internal reporting system and necessary measures for constantly monitoring compliance status and will respond timely and effectively if any problem arises.
1-9	“K” Line will ensure safety of its corporate employees in the work environment by having sufficient security systems in place.		
1-10	“K” Line will properly manage workplace health conditions, maintain a safe and appropriate work environment and support employees’ efforts to maintain their mental and physical health care.		
1-11	“K” Line will prepare a disaster manual and secure a crisis management system for its corporate employees and their families by reserving emergency supplies and building a safety confirmation system.		

## 3. Trustworthy company group

**The “K” Line Group continues to pay special attention to safety in navigation, achieving customer satisfaction and garnering trust from the community by providing safe and beneficial services.**

3-1	“K” Line recognizes safety in navigation and operations as its immediate top priority and ensures safety and quality of its services centering on international maritime transport.
3-2	“K” Line recognizes that its good relations with customers, business partners, shareholders, local communities and other stakeholders are imperative to its corporate activities, and will provide safe and valuable services.
3-3	“K” Line will give due consideration to harmony with public interest in recognition of the public nature of international maritime transport.
3-4	“K” Line will provide customers with adequate information concerning its services and will respond to inquiries in good faith.
3-5	“K” Line will adequately and strictly manage and protect personal and customer information.

## 4. Environmental efforts

**The “K” Line Group recognizes that global environmental efforts are a key issue for all of humanity and that they are essential both in business activities and existence of the company and therefore we are committed to a voluntary and proactive approach to such issues to protect and preserve the environment.**

4-1	“K” Line will address environmental issues towards preventing global warming while constructing a recycling-oriented economic system.
4-2	In accordance with our group environmental Charter, “K” Line will make efforts to reduce impact on the environment and to contribute to preservation and improvement of the Earth’s environment in our day-to-day business activities.
4-3	“K” Line will endeavor to develop innovative technology and business models that will help solve environmental issues.
4-4	“K” Line will proactively participate in social action programs for environmental preservation.

## 5. Disclosure of corporate information and communication with society

**The “K” Line Group will protect personal information, properly manage corporate information and disclose corporate information timely and appropriately, widely promoting bi-directional communication with society including shareholders.**

5-1	To promote extensive communication with shareholders and investors, “K” Line will disclose all facts and company information timely and appropriately with full respect for securities exchange policies.
5-2	“K” Line will communicate to customers adequate information concerning services it provides.
5-3	“K” Line will adequately protect its confidential information and handle information pertaining to a third party with due diligence.

## 6. Contribution to society

**The “K” Line Group as a Good Corporate Citizen will make ongoing efforts to contribute to social development and improvement and support employees’ voluntary participation in such activities.**

6-1	As a responsible and good corporate citizen, “K” Line will actively engage in social action programs.
6-2	“K” Line will further and proactively contribute to society through collaboration with external groups and various members of the public with beneficial expertise.
6-3	“K” Line will participate in industry and business community-wide social action programs.
6-4	“K” Line will support voluntary social participation of its employees in the form of volunteer work, lectures and writing.
6-5	“K” Line will prepare for possible relief and aid for disasters or marine accidents and extend social contributions by taking advantage of its know-how and technology including transport of necessary resources when needed.
6-6	“K” Line supports welfare activities and scholarly, educational, art and sports as well as other cultural activities.

## 7. Harmony in the international society

**The “K” Line Group will contribute to development of international society in pursuance of its business pertaining to international logistics and related businesses, respecting each country’s culture and customs.**

7-1	Complying with international and local laws and regulations, ethical and moral codes, “K” Line will contribute to the development of each nation by offering know-how, cooperating in human resources development and deepening the friendship with related companies and organizations.
7-2	“K” Line will ask local business partners in each nation to understand the spirit of its “Charter of Conduct” and its CSR approach and to improve their activities as needed.

## 8. Confront anti-social forces

**The “K” Line Group will resolutely confront anti-social forces or organizations which may threaten social order and public safety.**

8-1	In cooperation with industry groups and local companies, “K” Line will endeavor in eliminating anti-social forces.
8-2	“K” Line will collaborate with law enforcement to fight against threats by anti-social forces.
8-3	“K” Line will never transact business with any anti-social forces nor extend amenities of any kind including gifts and entertainment.

The management recognizes that it is their role to realize the spirit of the Charter and to set the pace that is to be followed by every employee in their company as well as by business partners. In the event of any incidents in breach of this Charter, the management will demonstrate decisiveness to resolve the problem(s), conduct a thorough investigation to determine the cause and to take preventative measures. Additionally, the management will expeditiously and accurately release information and fulfill their accountability to society.

## Green Accounting

- Created with referring the guideline issued by ministry of environment in Japan.
- Period covered: January 1, 2008 ~ December 31, 2008
- Summery covered: Constituent Companies under "K" Line Environment Management System.

Total Costs for Preservation of the Environment		Thousands of yen	
Classification	Details of work	Investment amount	Expense amount
1 Costs directly related to shipping and logistics business			
① Costs against pollution	Prevention against atmospheric pollution Costs for treatment of dirty water used for cleaning containers	366,554 -	72,970 191
② Costs for environmental preservation	Prevention against global warming and energy saving Prevention against marine pollution	131,000 305,200	495,018 169,822
③ Costs for recycling resources	Reduction in use of resources Recycling of industrial wastes Treatment of industrial wastes	256,724 - -	93,494 37,357 186,204
2 Upstream and downstream costs	Recycled and eco goods	-	891
3 Costs for administration	Costs for maintaining EMS certificate Issue expenses of relevant reports and promotion	-	64,699 11,046
Total		1,059,478	1,131,691

\*Investment value: expensed machineries installation for each items.

\*Cost value: expensed maintenance and repair cost for the machineries, disposing cost for waste, maintenance cost for environment management system and etc.

\*Cost value includes depreciation. Depreciation and useful time refer to the methodology of financial accounting.

Effects of Environmental Preservation						
Classification of Effects	Index Showing Effects of Environmental Preservation					
	Classification of Index	Figure of Index			Balance	
		FY2008	FY2007			
1 Effects against costs directly related to shipping and logistics business	① Effects from input of resources into shipping and logistics business	Input of Energy	Fuel oil (g/ton-km)	1.21	1.26	-0.05
			Lubricating oil (g/10 <sup>6</sup> ton-km)	13.54	13.80	-0.26
	② Effects related to environmental loads incurred by business activities and wastes	Atmospheric Emissions, etc.	CO <sub>2</sub> (g/ton-km)	3.8	3.9	-0.10
			SO <sub>x</sub> (g/ton-km)	0.066	0.070	-0.004
		Incidence of Waste, etc.	bilge (m <sup>3</sup> /ship-month)	29.3	31.9	-2.6
			sludge (m <sup>3</sup> /ship-month)	13.4	13.5	-0.1
garbage onboard (m <sup>3</sup> /ship-month)	5.3	5.7	-0.4			

Economic Effects of Measures for Environmental Preservation - Substantial Effects -		Thousands of yen
Contents of Effects Amount		Amount
Saving of costs and expenses	Reduction of energy by energy saving measures	149,145
	Energy saving by slow speed navigation off Long Beach	67,129
	Energy saving by slow speed navigation in Ise-wan/Mikawa-wan Bay	14,345
	Energy cost reduction by Cold Ironing	8,744
Total		239,363

## Environmental Management Network

We have a global green network appointing persons in charge of the environment at our major overseas subsidiaries all over the world. Keeping close contact with Head Office in Tokyo, regional persons in charge pay attention to movements of local

environmental laws/rules/regulations and answer inquiries and requests for information from outside.

More and more group companies are obtaining Environmental certification.

### Group Companies Obtaining Environmental Certifications

#### [ ISO 14001★ Certifications ]

- Rinko Corporation
- K Line Container Service (Thailand) Ltd.
- Daito Corporation
- "K" Line European Sea Highway Services GmbH (KESS)
- "K" Line Logistics, Ltd.
- SAL Schiffahrtkontor Altes Land GmbH & Co. KG (SAL)
- Nitto Total Logistics Ltd.
- K Line (Thailand) Ltd.

#### [ Green Management Certification★ ]

- Seagate Corporation
- Hokkai Transportation Co., Ltd. Tomakomai Branch
- Japan Express Transportation Co., Ltd.

#### [ Step 2 of Kobe Environmental Management System ]

- Shinki Corporation

## GRI Content Index

Section	Performance Indicators	Pages
1. Strategy and Analysis	1.1 Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy	34
	1.2 Description of key impacts, risks, and opportunities	13-14, 31
2. Organizational Profile	2.1 Name of the organization	9
	2.2 Primary brands, products, and/or services	9-10
	2.3 Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	9-10, 44
	2.4 Location of organization's headquarters	9
	2.5 Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	9-10
	2.6 Nature of ownership and legal form	9
	2.7 Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	9-10
	2.8 Scale of the reporting organization, including: Number of employees; Net sales (for private sector organizations) or net revenues (for public sector organizations); Total capitalization broken down in terms of debt and equity (for private sector organizations); and Quantity of products or services provided	9, 12
	2.9 Significant changes during the reporting period regarding size, structure, or ownership including: The location of, or changes in operations, including facility openings, closings, and expansions; and Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations)	9-10
	2.10 Awards received in the reporting period	21-22, 36
3. Report Parameters	[Report Profile]	
	3.1 Reporting period (e.g., fiscal/calendar year) for information provided	1
	3.2 Date of most recent previous report (if any)	1
	3.3 Reporting cycle (annual, biennial, etc.)	1
	3.4 Contact point for questions regarding the report or its contents	Back Cover
	[Report Scope and Boundary]	
	3.5 Process for defining report content, including: Determining materiality; Prioritizing topics within the report; and Identifying stakeholders the organization expects to use the report	1, 19-20
	3.6 Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	1
	3.7 State any specific limitations on the scope or boundary of the report	1
	3.9 Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report	1, 12, 47
3.10 Explanation of the effect of any re-statements of information provided in earlier report, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods)	1	
3.11 Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	1, 37	
[GRI Content Index]		
3.12 Table identifying the location of the Standard Disclosures in the report	48	
[Assurance]		
3.13 Policy and current practice with regard to seeking external assurance for the report, if not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance providers(s)	49	
4. Governance, Commitments, and Engagement	[Governance]	
	4.1 Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	13-14
	4.2 Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement)	13
	4.3 For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	13
	4.4 Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	21, 27-28
	4.8 Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	2, 3-4, 12, 17-18, 23, 29, 41-42, 45-46
	4.9 Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	13, 27-28, 32, 45-46
	4.10 Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	13
	[Commitments to External Initiatives]	
	4.11 Explanation of whether and how the precautionary approach or principle is addressed by the organization	13-16
	4.12 Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	2, 3-4, 17, 29, 45-46
	4.13 Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: Has positions in governance bodies; Participates in projects or committees; Provides substantive funding beyond routine membership dues; or Views membership as strategic	9
[Stakeholder Engagement]		
4.14 List of stakeholder groups engaged by the organization	19-20	
4.15 Basis for identification and selection of stakeholders with whom to engage	17, 19-20, 45-46	
4.16 Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	19-20, 21-28	
4.17 Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	19-20, 21-28	

Section	Performance Indicators	Pages	
5. Economic Performance Indicators	[Economic Performance]		
	EC1 Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	12, 47	
	EC3 Coverage of the organization's defined benefit plan obligations	28	
	[Market Presence]		
EC6 Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	23, 45-46		
[Indirect Economic Impacts]			
EC8 Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in kind, or pro bono engagement	9-10, 19-20		
6. Environmental Performance Indicators	[Materials]		
	EN1 Materials used by weight or volume	37, 39	
	[Energy]		
	EN3 Direct energy consumption by primary energy source	37	
	EN4 Indirect energy consumption by primary source	39	
	EN5 Energy saved due to conservation and efficiency improvements	36-37, 39-40, 47	
	EN6 Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	35-39	
	EN7 Initiatives to reduce indirect energy consumption and reductions achieved	39	
	[Water]		
	EN8 Total water withdrawal by source	39	
	[Biodiversity]		
	EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	32, 35	
EN14 Strategies, current actions, and future plans for managing impacts on biodiversity	32, 35, 41-42		
[Emissions, Effluents, and Waste]			
EN16 Total direct and indirect greenhouse gas emissions by weight	37		
EN17 Other relevant indirect greenhouse gas emissions by weight	37		
EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved	36-40		
EN19 Emissions of ozone-depleting substances by weight	35		
EN20 NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions by type and weight	37		
[Products and Services]			
EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	33-42, 47		
[Overall]			
EN30 Total environmental protection expenditures and investments by type	47		
7. Labor Practices and Decent Work Performance Indicators	[Employment]		
	LA1 Total workforce by employment type, employment contract, and region	9	
	[Occupational Health and Safety]		
	LA8 Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	27-28	
	LA9 Health and safety topics covered in formal agreements with trade unions	28, 45-46	
	[Training and Education]		
	LA11 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	27	
	LA12 Percentage of employees receiving regular performance and career development reviews	27	
	8. Human Rights Performance Indicators	[Non-Discrimination]	
		HR4 Total number of incidents of discrimination and actions taken	27
		[Freedom of Association and Collective Bargaining]	
		HR5 Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	28, 45-46
[Child Labor]			
HR6 Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	28, 45-46		
[Forced and Compulsory Labor]			
HR7 Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor	28, 45-46		
[Security Practices]			
HR8 Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	27, 45-46		
9. Society Performance Indicators	[Corruption]		
	S03 Percentage of employees trained in organization's anti-corruption policies and procedures	14	
	[Public Policy]		
S05 Public policy positions and participation in public policy development and lobbying	32		
10. Products Responsibility Performance Indicators	[Customer Health and Safety]		
	PR2 Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	32	
[Marketing Communications]			
PR6 Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	45-46		

## Independent Observer's Opinion

A featured topic in this year's report, along with environmental preservation, is the safety of navigation and cargo operations. This is a topic of extreme interest to me, as someone involved in university research of the conditions necessary for safe navigation and cargo operations. As Capt. Gamou pointed out, "To maintain safety in navigation and cargo operations, it is necessary to ensure appropriate cargo stowage, proper maintenance of ship and equipment, dispatch well-trained and experienced crew who have the requisite knowledge, and maintain teamwork." Meanwhile, Capt. Nakajima of the Training Center states in a column to the feature entitled "Initiatives for Safety in Navigation and Cargo Operations" that because "ultimately people run the ship, so it is the individual crew members who make decisions that prevent incidents."

The conditions necessary for safe navigation and cargo operations, as I have continued to point out, depend on acquiring the skills needed for the navigation environment; and I have the highest respect for the opinions of those two captains. The high degree of knowledge and responsibility displayed by the marine technical personnel of "K" Line in carrying out ship operations — despite the general trend towards downplaying the importance of the skills of such personnel from the perspective of labor-saving efforts and cost-cutting — indicates how safe the "K" Line ships are. The pride of the onboard marine technical personnel, and the understanding of the importance of their skills by the head office technical personnel who support the onboard personnel, are key factors in maintaining the safety of "K" Line ships. The safety report system, which is implemented as one aspect of this approach, is truly a reflection of "K" Line's safety-oriented stance.

As is frequently mentioned in this report, the most important issue with regard to environmental preservation is the maintenance of incident-free, safe navigation and cargo operations. If even one incident of a ship running aground or a collision occurs, the many environmental preservation measures and the long years of environmental and safety measures by tens of ships will be reduced to nothing, as can be seen in the environmental devastation wrought by the Exxon Valdez and other marine casualties. Maintaining safe navigation and cargo operations is an absolute necessity for environmental preservation.

Honorary Professor  
Graduate School of  
Marine Science and Technology  
Tokyo University of  
Marine Science and Technology

**Hiroaki Kobayashi**



Accomplishing safe navigation and cargo operations requires securing highly skilled marine technical personnel. It is well known that "K" Line conducts a variety of skill training programs to raise the skills of its technical personnel. The frequent implementation of various training programs — such as basic technical training on core ship operational skills or training on technical management regarding joint operations by bridge teams under the sort of difficult marine traffic conditions where incidents frequently occur — contributes substantially to the maintenance of safe navigation.

This sort of effective training is conducted not only for Japanese marine technical personnel, but also for foreign marine technical personnel, which also contributes in a significant way to the safe navigation of "K" Line ships.

Major marine incidents result in environmental damage and undermine confidence in the shipping company involved. The responsibility of ameliorating environmental damage falls not only on the shipping company but also on shippers. Dramatic environmental devastation is the obvious effect of a marine incident, but it is also necessary to consider the impact an incident can have in destroying the very foundations of a shipping company's business.

"K" Line's current efforts to achieve safe navigation and cargo operations are based on sound ideas, and it can be seen that they deliver reliable results. Investment in safety may not seem exciting, but it always pays off in the end.

The shipping business is currently facing an extremely challenging business environment, and I would like to express my deep respect for the "K" Line management team, which is striving to achieve safe navigation and cargo operations despite this adverse situation.



Representative Director  
Senior Managing Executive Officer

**Toshinori Morita**

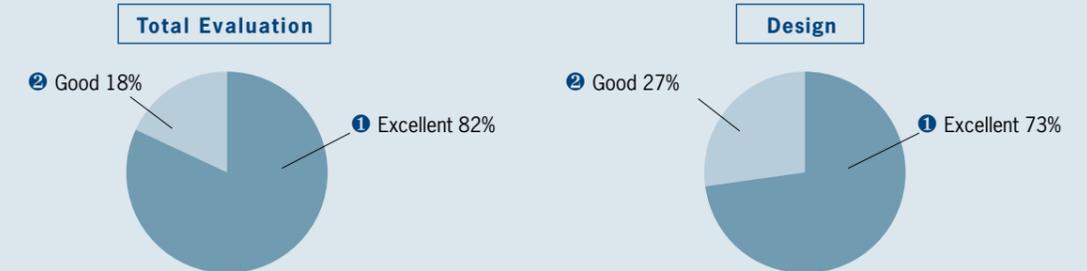
### REPLY TO THE INDEPENDENT OBSERVER'S OPINION

I would like to thank Professor Kobayashi for his valuable opinions. Marine incidents are of course a threat to the safety of people and cargo, but as Professor Kobayashi points out, they may also lead to major environmental damage and could be a factor in throwing "K" Line's own business into turmoil. The first and second items in our medium-term management plan involve "environmental preservation" and "stable structures for safety in navigation and cargo operations." Statements from the president and other executives always include references to environmental preservation, as well as safe navigation and cargo operations and safety management; and we have reaffirmed the importance for our personnel, whether on ship or shore, to maintain a high level of knowledge and skills, and to raise that level even further through teamwork. As a responsible member of society, "K" Line is committed to continuing its environmental and safety initiatives.

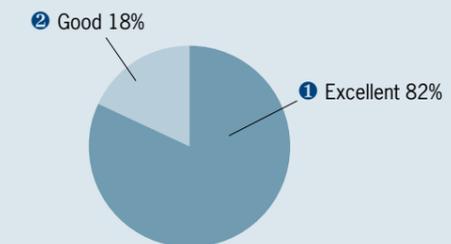
## Analysis of Results of Questionnaire Attached to "Social and Environmental Report 2008"

Regarding the subject matter, we are very grateful for the large number of answers you provided. We will do our best to improve our report on the basis of your answers and opinions.

**Q1** How do you rank the contents of the Report?



**Q2** What do you think about the "K" Line Group's environmental preservation activities?



#### Items that were interesting

- 1 ● Special Feature 3  
"K" LINE Culture and Spirit
- 2 ● Corporate Principles of the "K" Line Group  
● 2007 Review  
● Environmental Management Program for Fiscal 2008  
● Environmental Conservation Activities
- 3 ● Impact on the Environment
- 4 ● Special Feature 1  
Aiming to maintain and enhance security, safety and reliability  
● Relationship with Stakeholders  
● Green Management

#### Items needing more enhancement

- 1 ● Impact on the Environment
- 2 ● Special Feature 3  
"K" LINE Culture and Spirit  
● Relationship with Stakeholders

#### Significant Opinions and Comments

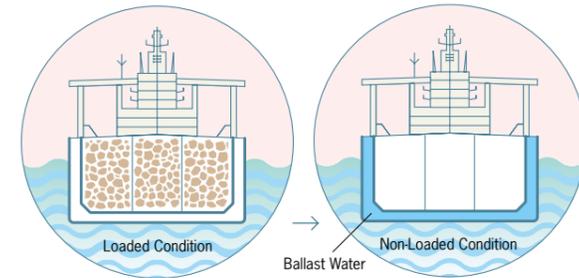
- I would like to see more information concerning the environmental measures being taken on ships presented in a concrete and easy-to-understand manner.
- I would like you to make additional efforts to have your activities reported in the mass media.
- As a shareholder, I was very pleased to receive this wonderful report, which has opened my eyes to the company's growth.
- The report should also include information on problems that have occurred.
- The Company should take additional risk management measures including measures to deal with maritime piracy.
- I read this report as a part of my job search. I liked the soft touch to the illustration concerning the relationship with stakeholders, and I got the impression that the Company takes the earth into consideration in its business activities.

# Glossary

## B

### ★ Ballast Water

Seawater loaded into ship's tanks to maintain ship's stability and hull's strength when cargo is not loaded or when weight of cargo onboard is light.



## C

### ★ CFC (Chlorofluorocarbon)

CFCs have a wide array of applications, including as refrigerants in refrigerators, freezers and air conditioners; as spray propellant; and as cleaning agents in the manufacture of semiconductors, etc. However, some CFCs are known to damage the ozone layer, and those containing chlorine (which is strongly connected with ozone depletion) are specified and regulated according to an international treaty. Production of the specified CFC R-12, which is used in ship refrigeration equipment and air conditioners, was ceased by the end of 1995 and its use banned in 2003. Also, certain CFCs that do not contain chlorine but which have an effect on the ozone layer have also been designated; hence, production regulations for the designated CFC R-22 used on ships were put in place in 2001, with production due to cease by 2020. CFC substitutes, such as R-134a and R-404A, are used in place of specified and designated CFCs as they do not damage the ozone layer.

### ★ Compliance

It is used as the terminology that means to comply with a wide range of rules: including social norms and corporate ethics as well as laws/regulations/ordinances.

### ★ Corporate Governance

It means the corporate functions of building a framework for internal controls and protecting against any unfair practices. In Kabushiki Kaisha, a type of Business Corporation in Japan, the same functions can be more specifically analyzed and pointed out as follows: (1) Shareholders are able to check and control management from running away on their own and (2) it (Kabushiki Kaisha) has a system or institution that assuredly is able to check and stop illegalities on an organizational scale and (3) all the directors and employees are led in a common direction under the leadership of management to accomplish corporate principles. (3) is regarded as internal controls whereas the whole part ranging from (1) to (3) is categorized as corporate governance. Lately, the meaning has come to be utilized positively and significantly as a vehicle for compliance.

### ★ C-TPAT (Customs Trade Partnership Against Terrorism)

It is a partnership program created by the U.S. Customs. The program requires organizations engaged in U.S. trade to take part in the campaign: shipping lines, stevedores, inland carriers, manufacturers, cargo owners and warehousing companies, etc. It is a voluntary program jointly conducted by Customs and industries for protection of terrorism and assurance of security.

## D

### ★ Double Hull

The double-hulled system is aimed at shielding cargo/fuel tanks and preventing cargo/fuel oil from spilling to the outside even when holes are made in the outer plates as a result of grounding or collision.

## F

### ★ FMS

This is an abbreviation of Weathernews Inc.'s land-based "Fleet Management System" which determines such information as ships' positions and movement, meteorological and hydrographic conditions, etc. "K" Line has adopted this system as part of its safety in navigation and cargo operations initiatives. Currently it allows us to see data for 300 ships, helping to enhance safety by assessing their situation from land and relaying important information to them, such as the appearance of typhoons.

### ★ FTSE

FTSE is a joint company of Financial Times and Stock Exchange of the U.K. The company has offices in the major advanced countries, including Japan, and provides indexes for investors. The FTSE4Good Global Index is a social responsibility investment (SRI) index provided by FTSE.

## G

### ★ Green Management Certification

Recognized and issued by a Japanese government agency certifying environmentally friendly management, similar to ISO 14001.

### ★ GRI (Global Reporting Initiative)

GRI is an international organization founded in 1997. Its purpose is mapping out and familiarizing the guidelines for environmental reports that are globally applicable and sustainable. The guidelines require that we attach importance to the three elements of "environmental aspects," "economic aspects" and "social aspects" as a triple bottom line.

## H

### ★ Halon

It is one of the fluorocarbons and widely used as a fire-extinguishing agent, which turns out to be more harmful in depleting the ozone layer than CFC. The developed nations have totally abolished its production.

## I

### ★ IMO (International Maritime Organization)

The International Maritime Organization (IMO) is a specialized agency of the United Nations based in London. The purposes of the organization, which are set out in Article 1 of the IMO Convention, are to provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships.

### ★ ISM Code (International Safety Management Code)

It is regulated in SOLAS Convention, Article No. 9 (management of safe ship operation). The Code facilitates enforcement of a comprehensive safety management for ships and their management companies. It attaches importance to ensuring safety of ships.

### ★ ISO (International Organization for Standardization)

ISO engages in defining standards for products and services in quality. ISO 9001 is a standard of production of quality-related systems to aim at quality management and guarantee. It maps out the ISO 14000 series that can be the standards related to the Environmental Management System focusing on management Administration System. Among the series, ISO 14001 defines requirements in the Environmental Management System.

### ★ ISPS Code (International code for the security of ships and of ports facilities)

The ISPS Code is a global treaty intended for ship operators and port authorities to ensure port security by preventing acts of terrorism and similar activities. It came into force on July 1, 2004. Under the code, ships are required to acquire an International Ship Security Certificate, obtain a certification of the security plan and appoint a qualified employee in charge of ship security.

## K

### ★ Kiyokawa Maru

A high-speed cargo carrier put into service in 1937 plying North American shipping routes. On her maiden voyage she proved herself the fastest ship operating between Yokohama and San Francisco. Her sister ships are the Kamikawa Maru, Kimikawa Maru and the Kunikawa Maru. In 1941 she was pressed into service and modified as a specially-built seaplane carrier, serving in various military campaigns; in July 1945, just before the war's end, she was hit by aircraft fire in the Seto Inland Sea and flooded; however, because she was deliberately run aground, she avoided being sunk. A fierce storm in November of the same year, though, caused her to capsize and sink. "K" Line lost many ships during the war, and in order to rebuild its fleet, in 1948 it set about raising the Kiyokawa Maru, which it succeeded in doing after much hardship. Once repairs were completed in 1950, she was put back into service again plying North American shipping routes and played a significant role not only in the revival of "K" Line but in Japanese shipping as a whole. The three sister ships of the Kiyokawa Maru were also all modified as specially-built seaplane carriers; however, they were all sunk in the war.

## N

### ★ NOx (Nitrogen Oxides)

When fuel oil burns in an engine, nitrogen contained-fuel oil and the air react with oxygen to form nitrogen oxides at high temperature. It is emitted together with exhausted gas, which makes a chemical reaction in contact with moisture in the air and sunlight and causes acid rains and atmospheric pollution.

## P

### ★ PM (Particulate Matter)

Generally, PM collectively means small particles. In ships, ash dust is included in exhaust gas from diesel engines and boilers and is focused as a pollutant. PM whose size is 10 microns or smaller floats in the air and is thus treated as an airborne pollutant.

### ★ PSC (Port State Control)

Inspection carried out on ships in port to ensure the safety and legal compliance of the ship and to ensure its environmental soundness to prevent any danger to other ships, people or the marine environment. PSC is carried out by the Coast Guard or other authorities.

If any problem is discovered during inspection, action is taken and, depending on the severity of the problem, this can range from a repair work advisory to being barred from port.

## S

### ★ SMS (Safety Management System)

The SMS is one of the requirements of the ISM Code. The system is built and documented so that a shipping company's employees and ship crew can effectively implement the policy of safe operation and environmental preservation documented by the company.

### ★ SOLAS (Safety of Life at Sea)

It is an international convention concluded as a result of the Titanic (a passenger ship with British flag and 46,328 gross tons) accident to secure safety of ships.

### ★ SOx (Sulfur Oxides)

When sulfur burns in a diesel engine, SOx is generated and incurs acid rain and atmospheric pollution.

## T

### ★ TBT

Abbreviation of Tributyltin, an organic compound containing tin which used to be widely used in paint applied to the bottom of ships to prevent shellfish and other marine life from attaching to the hull. However, bio-assessments have shown that the buildup of organic tin in shellfish affects the ecosystem; thus, organic tin-substitute paints, etc., are being used. The use of paint containing organic tin has been banned by treaty.

### ★ Ton-kilometer

The unit representing shipping one ton of cargo one kilometer is represented as "ton-kilometer." For example, "CO<sub>2</sub> output is 100 grams per ton-kilometer" would be shown as "100g/ton-kilometer."

**CSR & Compliance Division, General Affairs Group**

Phone: (+81) 3-3595-5152

E-mail: [kljtyocsrkd@jp.kline.com](mailto:kljtyocsrkd@jp.kline.com)

**Environment Management Division**

Phone: (+81) 3-3595-5667

E-mail: [kljtyoemd@jp.kline.com](mailto:kljtyoemd@jp.kline.com)

**KAWASAKI KISEN KAISHA, LTD.**

Hibiya Central Building,

2-9, Nishi-shinbashi 1-chome, Minato-ku,

Tokyo 105-8421, Japan

URL: <http://www.kline.co.jp>