



## **CSR Report 2010**

The corporate social responsibility policy and activities of the NYK Group



Bringing value to life.



## **NYK Group mission statement**

## Basic philosophy

Through safe and dependable *monohakobi* (transport), we contribute to the betterment of societies throughout the world as a comprehensive global-logistics enterprise offering ocean, land, and air transportation.

## Management policy

## **Together with our customers**

Through the use of our extensive skill and expertise and by considering each business site to be of utmost importance, we always work to create new value so that our customers will consider us a trusted and reliable partner.

## Together with our shareholders and investors

We aim to enhance our corporate value by being financially responsible and by conducting business activities in an open, honest, and transparent fashion.

## **Together with society**

As a good corporate citizen, we positively take on the tough issues that challenge our society, such as concerns involving the preservation of our natural environment, as we work for the betterment of the world that we inhabit.

## Together with all staff members in the NYK Group

As a global enterprise that has the utmost respect for diversity in the workplace and the spirit of challenge, we emphasize the development of employee talents so that all staff members can take pride in their work and eventually fulfill their dreams.







## **CSR Report 2010 (editorial guidelines)**

This report is one of the ways that the NYK Group proactively communicates information to the public at large, earning the trust of people throughout the world and becoming an indispensable member of society. For FY 2010, we have decided to take advantage of the media characteristics of print and our website by publishing a booklet that emphasizes special features and easier reading and web-based information that emphasizes comprehensiveness and timeliness.

## Scope of report

- Reporting period: April 2009 to March 2010 (In some cases information from April 2010 and beyond is included)
- Coverage: The activities of NYK Line as well as Japan-based and international group companies.
   We have endeavored to profile the principal companies covered for each field of activity.

## **Audience**

This report has been prepared for all parties who have an interest in the activities of the NYK Group, including customers, shareholders, investors, business partners, employees, local communities, NPOs/NGOs, students, certification bodies, researchers, and those responsible for CSR at other companies.

## Reference guidelines

- Environmental Reporting Guidelines (fiscal 2007 edition), Ministry of the Environment
- Sustainable Reporting Guidelines (2006), Global Reporting Initiatives (GRI)

  [See the website for a comparison between the GRI Guidelines and the United Nations (UN) Global Compact]

  Website>>> CSR > CSR Report > Guideline Comparison [United Nations (UN) Global Compact]

## Date of issue

August 2010 [Previous publication: August 2009; Next publication: August 2011 (tentative)]

## Communication tools

## Website

The website contains broader and more comprehensive information, including detailed explanations and data on the initiatives introduced in print media, other initiatives that could not be included in the booklet, and up-to-date information on current CSR initiatives of the NYK Group.

## Website

## http://www.nyk.com/english

CSR top page

CS

## **Related information**

The CSR report covers nonfinancial information primarily of a social and environmental nature, highlighting the corporate social responsibility (CSR) initiatives of the NYK Group. The annual report covers financial information, including an overview of operations and results and a discussion on future strategy.



Annual Report 2010

Documents published by NYK can be found at the following website.

Website>>> Home > Investor Relations > IR Library >

- Fiscal Statements
- Annual Reports
- Notice of the Ordinary General Meeting of Shareholders (including Business Report)
- FACT BOOK

## index

- 2 Mission statement/Editorial guidelines
- 3 Communication tools/Index
- 4 Message from management
  Focusing on safe, environmentfriendly operations to contribute
  to the betterment of society
- 6 CSR in the NYK Group

## Special feature 1

The NYK Group: Diverse people working together to achieve growth

## Special feature 2

NYK Super Eco Ship 2030 charts a course to the future

## 14 Stakeholder dialogue

Biodiversity initiatives encourage changes in society

## 18 Growth

- 19 Corporate profile
- 20 Operational overview

## 22 Stability

- 23 Safety on the sea
- 26 Safety on land and in the air
- **27** Together with society
- 28 Together with our customers
- 30 Together with our shareholders and investors
- 31 Together with all staff members in the NYK Group
- 34 Sound and highly transparent management

## **36** Environment

- **37** Promotion of environmental management
- 38 Initiatives to mitigate environmental load
- **40** Environments on land and in the air
- 41 Other environmental activities
- I Environmental performance data
- III Human resources data (head office)
- IV Human resources data (employees hired through group companies)
- 42 Outside opinion/Response to outside opinion
- 43 Awards and recognitions received from the general public during FY 2009

Appendix Reader comments about the 2009 CSR report

## Focusing on safe, environment-friendly operations to contribute to the betterment of society

## Completing the "Yosoro" project and moving on to new horizons

In April 2008, the NYK Group inaugurated "New Horizon 2010," a new three-year medium-term management plan. We also responded to difficult economic circumstances by launching the "Yosoro"<sup>2</sup> emergency structural reform project in January 2009. This twoyear project targeted bold structural reforms and a fundamental overhaul of both our earnings structure and our management systems with a goal of creating an organization better able to adapt to rapidly changing external environments and poised to grow as the economy recovers.

## **Enhancement of CSR initiatives**

The "Yosoro" project has two major focuses: rigorous elimination of waste to reduce costs and formulation of new growth strategies. The completion of these objectives will pave the way for the group to grow with renewed strength. And the foundation for these initiatives comes from CSR activities that meet the expectations and earn the trust of our stakeholders, chief among them the enhancement and strengthening of our base of operations, the "infrastructure" by which we do business. Internal control structures and rigorous, ongoing compliance programs are essential to the practice of sound and highly transparent management. We therefore viewed with the utmost gravity that an NYK Group company was found to have contravened antitrust law, and we commissioned an Antitrust Law Task Force to conduct educational activities for the entire NYK Group to prevent recurrence.

## Safety and environmental issues are our highest priority

The NYK Group is committed to being a frontrunner in the industry, a leader in tackling safety and environmental issues. As the chair of the Safety and Environmental Management Committee, I will continue to move forward with initiatives to achieve safe, environmentfriendly operations as our highest priority. In fact, the functions of the NYK Cool Earth Project, which began as a special companywide project in April 2008, were given a more permanent status with the April 2010 creation of the company's new Environment Group. Moreover, a long-term vision by which the company will contribute to the halving of global greenhouse gas emissions by 2050 has been articulated, and under this vision we are committed

to making proactive contributions to the achievement of sustainable societies.

## The skills and abilities of the individual

The NYK Group operates a great deal of hardware: ships, airplanes, trucks, and warehouses. That alone, however, fails to adequately differentiate us from the competition. Our customers want us to propose business models that will make substantial improvements in addressing their increasingly diverse logistics needs. Meeting these demands requires more than just marine transport. We must also bring to the table expertise in fields like air transport, onshore transport, and distribution services, as well as the capacity to combine them into optimized transport services. The key to doing this will be human skills and abilities, the development of talented individuals with practical skills grounded in the NYK Group Values of integrity, innovation, and intensity. The NYK Group will continue to work to enhance the skills and abilities of each individual employee, organically integrating the services of group companies so that we continue to be a company on which our customers and society at large can rely.

## Formulation of CSR guidelines for partners and suppliers

There are other issues of increasing importance in addition to safe, environment-friendly operations, including what companies are doing to solve questions of human rights, labor, and corruption in their supply chains. NYK has formulated CSR guidelines for partners and suppliers as a first step to tackling these issues. We will continue to work with partners and suppliers in Japan and other countries, encouraging them to understand and practice the ideas articulated in the guidelines and work with us to address CSR issues in the supply chain.

## **United Nations (UN) Global Compact initiatives**

The NYK Group wants to be a truly global enterprise, and the 10 principles (GC10 principles) on human rights, labor standards, environment, and anti-corruption advocated by the United Nations (UN) Global Compact (GC hereinafter) match the philosophy and orientation of the NYK Group. NYK announced its endorsement and support for the GC in May 2006, and from April 2008 Chairman Koji Miyahara has served as a member of the Global Compact Through safe and dependable *monohakobi*, the NYK Group supports lives throughout the world as a comprehensive global-logistics enterprise offering ocean, land, and air transportation.

Global logistics serve as the "blood vessels" of the economy. As a major player in this field, we are proud of the contributions we make to the enrichment of people's lives and the enhancement of their safety and peace of mind, and we are also deeply aware of the responsibilities that we shoulder.

Message from management

Board Japan (GC-BJ), helping to lead and promote GC activities in Japan. To ensure good faith, the United Nations requires participating organizations to submit reports each year providing detailed descriptions of activities for the achievement of the GC10 principles and results produced. In FY 2007 and again in FY 2009, the GC awarded NYK the "Notable COP" designation for the company's excellent activity reports. The NYK Group provides a



comprehensive global logistics service overseen by the company's approximately 50,000 employees around the world, and by putting the internationally recognized GC10 principles in action as our CSR guidelines, we hope to create workplaces in which our employees can be proud and to contribute to the achievement of sustainable growth for society at large.

This CSR report was created as the activity report of the NYK Group. We look forward to hearing the frank opinions, views, and proposals of our stakeholders and reflecting them in our future business activities.

## 1 monohakobi

The goal of our business activities is to create a comprehensive logistics group that is a world leader in the provision of ocean, land, and air services. We call this *monohakobi*.

## 2 "Yosoro"

"Yosoro"—meaning "steady ahead!"—is a command issued by the captain of a ship. It was chosen as the name of the project to underscore our commitment to overcoming the current difficulties and moving full steam ahead toward the achievement of our goals. (For further details on the "Yosoro" project, see P. 19).

and 5

Yasumi Kudo President Nippon Yusen Kabushiki Kaisha (NYK Line)

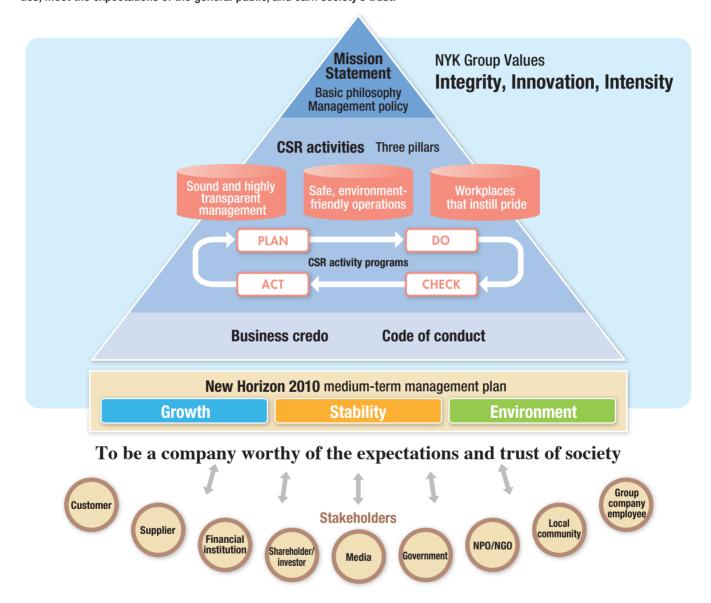


## **CSR** in the NYK Group

At NYK, corporate social responsibility (CSR) is summed up through our basic philosophy of "contributing to the betterment of the society through safe and dependable *monohakobi.*"

From that perspective, it is crucial that we strengthen and enhance our base of operations, the "infrastructure" by which we do business, and particularly areas like safety, environmental protection, and human resources development.

We have articulated three pillars for our CSR: "sound and highly transparent management," "safe, environment-friendly operations," and "workplaces that instill pride." These concepts are meant to help employees contribute to the development of sustainable societies, meet the expectations of the general public, and earn society's trust.



## **CSR** activity program

To flesh out our CSR, 31 units in the headquarters have formulated CSR activity programs, using the PDCA cycle to implement and improve them. Wherever possible, we set numerical targets and try to incorporate into programs the objective of "strengthening CSR management" articulated in the medium-term management plan.

## **Business credo and code of conduct**

The business credo and code of conduct contain guidelines for day-to-day activities that all officers and employees of NYK Line are expected to adhere to in their duties. We designate one month of each year as "comprehensive compliance checkup month," and at this time we conduct a survey to evaluate the degree to which compliance awareness has penetrated the organization.

## **NYK Group Values**

In January 2007, we formulated the NYK Group Values as an articulation of the attitudes required by individuals and organizations as they act on our corporate philosophy. This is something that each and every employee must put into practice in his or her daily duties and must also pass on to subordinates, colleagues, and new employees.

## The "New Horizon 2010" medium-term management plan

The "New Horizon 2010" medium-term management plan was launched in FY 2008 with the three key focuses of "growth," "stability," and "environment." It seeks to "strengthen CSR management" as a foundation from which to support this. In addition to compliance, safe ship operation, and other basic CSR activities required to build a relationship of trust with stakeholders, we also seek to differentiate ourselves with "proactive CSR" that will increase our corporate value. Examples include environmental activities and social contributions, through which we strengthen and enhance our base of operations while also supporting sustainable societies.



## **CSR** organizations and programs

The General Affairs / CSR Headquarters is located in the head office, and the officers are stationed at Japan-based group companies and six overseas regions.1 The CSR Coordination Group coordinates CSR activities among all Japan-based and international group companies as well as implements programs and provides support. Other responsibilities include the publication of the CSR report and CSR Handbook, the distribution of the CSR Newsletter, implementation of CSR training,<sup>2</sup> and response to SRI surveys. The CSR Headquarters also works to ascertain the requirements of stakeholders and to communicate both internally and externally the changes and reforms that are taking place so that we continue to be a corporate group that meets the expectations and earns the trust of society.

International units report on their CSR activities to each other as a means of exchanging information; in FY 2009, we collected more than 660 activity examples.

## 1 Six overseas regions:

East Asia, South Asia, Oceania, Europe, North America, Latin America

## 2 CSR training:

Training and e-learning programs on general CSR issues, compliance, and the Personal Information Protection Law

CSR management chart (as of April 1, 2010)



CSR officers are assigned to 52 leading group companies in Japan. Internationally, CSR coordinators are assigned to six regional headquarters. In addition, individual countries have CSR officers to promote CSR activities that address local concerns and issues. CSR officers and CSR coordinators share information with the headquarters, General Affairs / CSR Headquarters, and other officers as they develop and implement activities.

## **CSR** guidelines for partners and suppliers

As a global logistics business, the NYK Group is a part of its customers' supply chains, working with the support of a large number of stakeholders to provide safe and dependable monohakobi. We have formulated the CSR guidelines described below as a means of identifying and solving issues in the supply chain in areas like legal compliance, fair trade, trustworthiness, safety and security, environment, human rights, labor, and anti-corruption. We work with our partners and suppliers to encourage them to understand and practice these concepts.

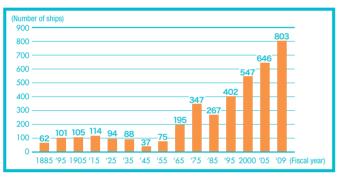
- 1 Legal compliance: Awareness that the company is a member of society and, in the interest of justice and fairness, must adhere to laws and ordinances, and must also respect the praiseworthy cultures and practices of local communities and adhere to the praiseworthy ethics and mores of local societies in all corporate activities.
- 2 Fair trade: Companies must contribute to the betterment of global society engaging in fair, transparent, and free competition and conducting business activities in an appropriate manner in all regions of the world.
- 3 Trustworthiness: Companies must build relationships of mutual trust by engaging in fair, transparent transactions and observing all applicable laws, ordinances, and social codes of conduct.
- A Safety and security: The safety and security of services must be viewed as one of our highest priorities, achieved through ongoing efforts to improve.
- 5 Environment: Companies must endeavor to protect the global environment and prevent environmental destruction and pollution.
- 6 Human rights: Companies must respect the dignity of the individual and must not discriminate on the basis of gender, age, national origin, ethnicity, race, creed, religion, social status, etc.
- Labor: Companies must endeavor to provide safe, sanitary, and healthy working environments. Companies must not engage in inhumane employment practices or forced
- Anti-corruption: Companies must work to prevent corruption in all its forms, on both the receiving and giving sides.

## Special feature 1

# The NYK Group: Diverse people working together to achieve growth

NYK Line marked its 125th anniversary in 2010. Our global operations support and enrich the lives of people around the world through *monohakobi* services. As our operations have grown, the number of people working at the NYK Group has increased and the people themselves have become more diverse. We will continue to contribute to society through safe and certain *monohakobi*, endeavoring to become a company that is truly needed by communities throughout the world.

## Fleet numbers



As Japan approached the high economic growth period in 1955, trade was booming and more efficient ships began to appear. NYK's fleet expanded to keep pace with the development of industry, adding containerships that pack cargo into containers for easier shipping and specialized ships capable of large-volume transportation of specific cargo.



Tokyo Olympics

During the Pacific War, our ships were commandeered by the army and navy to transport supplies. By Japan's defeat in 1945, we had lost 5,312 employees and 185 ships.

World War I begins

World War II begins

,29

Merger with Kinkai Yusen Kaisha Ltd.

Launch of Asama Maru, one of the most famous ships of the

## Major events

Japan's first

**Cabinet formed** 

World War I ends
Panama Canal opens

golden age of cruise ships

Merger with Dai-ni Toyo Kisen Kaisha

Japanese economy's high-growth period

**World War II ends** 

(to 1973)

Asama Maru, NYK's first

Asama Maru, N passenger liner

First Olympics held

Opening of the three major routes (Europe, Seattle, Australia)

Opening of Bombay route

Founding of NYK Line. Merger between Yubin Kisen Mitsubishi Kaisha (Mitsubishi Mail Steamship Company) and Kyodo Unyu Kaisha

## Diversification of business

During the high economic growth period, Japan staked its development on trade and, as Japanese industries gained international competitiveness, NYK emerged as one of the top players in the marine transportation industry.

## **Sales trends**



to adapt to the new environment. This marked one of the first steps down the

**Plaza Accord** 

ં.જુ3

Second oil crisis

.48

Launch of Tovota Maru No. 5. the

company's first car carrier

First oil

.69

crisis

Single European currency (euro) enters circulation

**Terrorist attack on the United States** 

19.

۰ه۹

Startup of LNG

transportation

Рд, Participant in a project for an ultra-deepwater drillship

Establishment of the Monohakobi Technology Institute (MTI)

Appointment as operator for Chikyu, deep-sea drilling vessel ©JAMSTEC

2001 **Establishment of ship-management** company in Singapore

Merger with Showa Line Ltd.

·Oh

**VLCC Diamond Grace** oil spill in Tokyo Bay Launch of Mirai, oceanographic

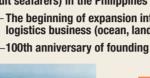
research vessel Merger with Nippon Liner System Co. Ltd.

Establishment of manning company (to

recruit seafarers) in the Philippines

gρ,

The beginning of expansion into global logistics business (ocean, land, and air)



Establishment of Nippon Cargo Airlines Co. Ltd. (NCA)

Startup of LNG transportation

Launch of Hakone Maru II, Japan's first fully containerized vessel

Merger with Mitsubishi Shipping Co. Ltd.

Launch of Kure Maru, the world's first chip carrier

Startup of container service

on major routes (to 1981)

Launch of Tobata Maru II, the company's first coal carrier

Kure Maru, the world's first chip

## **Employee numbers**

Japan North America Europe Latin America 35.000 30.000 25,000 20,000 15,000 10,000 5.000 2000 '03 '04 '05 '06 '07 '08 '09 (Fiscal yea

> First assignment of mixed Japanese and non-Japanese crews to Polar Bear, a car carrier

**Diversification** of employees

is our own safety management system based on international regulations, etc., but holds us to a higher standard. It innts that chartered vessels and all other mbers of the fleet, including ship nies, must adhere to. This system is part of day-to-day efforts to ensure rigorous Chikvu, deep-sea drilling vessel

NYK's logistics businesses and Yusen Air & Sea Service Co. Ltd.

to be integrated (see p. 28)

lopment center for safety, envithe requirements of rapidly expanding and diversifying global operations, and as the organization for administering the human resources services and higher added value for

Beginning of staff exchanges among Logistics Integrator **Group companies** 

Formulation of the NYK Group Values

Establishment of NYK-TDG Maritime Academy

• Acceptance of candidates for Japan's first in-house seafarer training program

First female officer assigned to an NYK ship

2002 Inauguration of Global NYK Week

go,

്റ

al group companies to learn more about K's mission statement, the NYK Group , and the company's business strategy

dents also master the practical knowledge and skills required for





More is expected of logistics companies and they are shouldering greater responsibilities due to changes in global conditions that began in the early 20th century and continue on to this day, changes like productivity gains, increasing demand for goods, and globalization. NYK Line is responding not only with marine transport services but also with enhanced land and air logistics and peripheral services. We seek to enrich people's lives with monohakobi and will continue to focus our operations on the delivery of "value."

## Diversifying services

## **Expansion of offshore business**

Skyrocketing oil prices in recent years have stimulated new development of offshore oil and gas fields, particularly in deep and ultradeep waters. This has brought renewed attention to drilling rigs, production facilities, and other offshore operations. NYK responded by establishing its Offshore Business Group in 2008. Together with our partners, we invested in Petrobras, Brazil's state-run oil company, in June 2009 and are participating in a project for an ultradeepwater drillship. Applying our established expertise, we are expanding our business in the oil and gas supply chain, so that we now participate not only in transport but also upstream sectors like drilling, production and storage, and downstream sectors like receiving terminals.



## **Development of position-keeping technology**

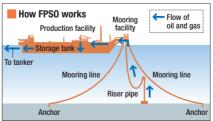
One of the biggest challenges in the drilling of oil and gas fields at extreme depths in excess of 1,500 meters is the positioning of the drilling rig. Our experience operating Chikyu (owned by the Japan Agency for Marine-Earth Science and Technology) has enabled us to accumulate expertise in dynamic positioning of a vessel at a fixed point for several months in an ever-changing sea. This expertise is now being put to work by Etesco Drilling Services LLC, a company that owns a drillship (scheduled for delivery in January 2012) that will be used by Petrobras and in

which NYK invested in June 2009. This drillship is scheduled to drill off the coast of Brazil at a maximum depth of approximately 3,000 meters for a period of up to 20 years.

This drillship is similar to the type of vessel to be used for this project

## **Integrated services from production to transportation**

NYK has accumulated expertise in the handling of delicate substances and in the management of ships through its petroleum, LNG, and LPG transportation services. We are now utilizing this expertise to expand into the upstream and downstream sectors of offshore business, including FPSO1 and FSRU.2 Our participation in the offshore production and storage of hydrocarbon will enable us to expand into related businesses, and the synergy effects with our transportation services will help us to strengthen relationships with customers and partners.



Floating Production Storage and Offloading: Production and storage of crude oil from offshore oil and gas fields by a floating facility for direct offloading to ships 2 FSRU Floating Storage and Regasification Unit: Acceptance of transported LNG at a floating offshore facility near the area where it is to be consumed for regasification prior to transportation to the final destination

16%

Japan

Oceania 1%

North America **2**1%

Number of employees (consolidated)



## Diversifying human resources

NYK Line has weathered numerous challenges since its founding in 1885, be they world wars, or oil crises, or the drastic appreciation of the yen after the Plaza Accord, and in all cases we responded by making fundamental changes in the structure of our business. The growth we have achieved has been possible because of the wide variety of people who work at the company. We take advantage of the human resources in our group to provide quality services that respond to the globalization and diversification of values triggered by the development of the BRICs and other emerging economies.

## Diverse human resources support the NYK Group's business

A place for all, regardless of gender, age, or nationality



Rieko Yamamoto Third Officer

**Teaching cadets of all nationalities the** importance of safe ship operation





When I joined the company in 2007, there were already four female seafarers working on ships. On ship, there are people of all different nationalities, ages, and levels of experience who work together. Gender is just one aspect of your personality; you are able to work without excess attention paid to the fact that you are female. I am thankful every day that the male and female



seafarers who went before me and the people around me were able to create this kind of environment.

Center row. 4th person from the left

In September 2008, I became an instructor on the NYK cadet<sup>3</sup> training ship. My goal is to work from the concept of the NYK Maritime College4 to train cadets of all nationalities in the ideals of integrity, innovation, and intensity so that they become talented seafarers who are able to lead safe ship operations for the NYK fleet. It is my hope that our work will contribute to the growth of the NYK Group.



A trainee who is on ship to master the skills required for certification as an officer or engineer

4 NYK Maritime College

A seafarer training system at NYK to fulfill skill and expertise requirements to achieve safe ship operation (see p. 33)

## **Integrity, Innovation, Intensity—the NYK Group Values**

The NYK Group Values of integrity, innovation, and intensity make up the essential character of those who work at NYK. The purpose of these values is to enhance the human skills and abilities of each employee and thus improve the strength of each company within the group. We engage in a number of activities in regions around the world in our effort to share and fur-

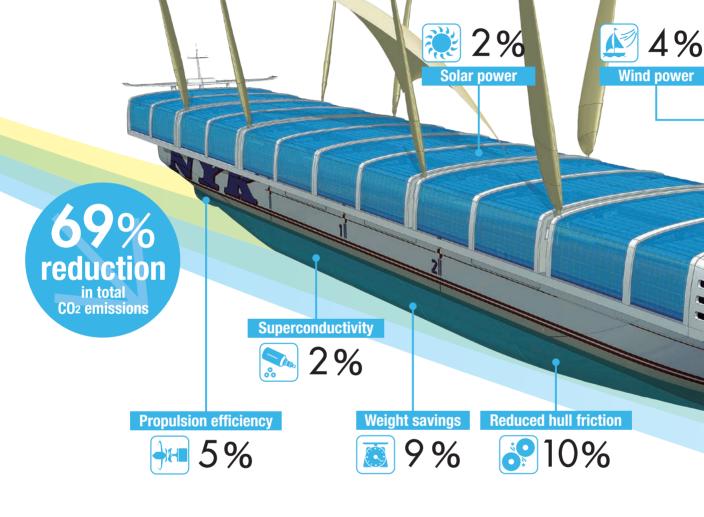
ther develop these values. In November 2009. the NYK Group Values 3 I's World Meeting was held in Tokyo to share experiences of the values being used in daily work activities, giving a range of participants from NYK offices around the world valued face-to-face interaction with one another and counterparts at the head office in Tokyo.



NYK Group Values 3 I's World Meeting

Special feature 2

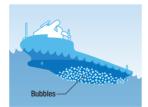
## NYK Super Eco Ship 2030 charts a course to the future





## **Innovative ship bottoms** reduce hull friction

Special coatings are currently applied to the bottoms of cargo ships. The dissolution of the coating helps to prevent the adhesion of barnacles, seaweed, and other marine organisms to the ship bottom, thus reducing hull friction. The future may see the develop-



Air-lubrication system

ment of more innovative coatings that take hints from sharkskin, lotus leaves, or other naturally water-resistant materials to further reduce hull friction. Nor are coatings the only option to reduce the hull friction between the hull and seawater. In collaboration with Mitsubishi Heavy Industries Ltd., NYK has developed an air-lubrication system that blows air over the ship bottom, and this system is now being field-tested on a heavy-load module carrier (special ship used to transport large, heavy objects for factories, plants, etc.) operated by NYK-Hinode Line Ltd.



## **Efficient use of solar energy**

Most solar panels today are black and shaped like boards, but there are new forms under development that are transparent or can be bent like cloth. As technology becomes available in the future, it may be possible to cover containers with flexible, transparent panels that can be wound up when necessary to maximize the

utilization of solar power. Auriga Leader, a car carrier completed in December 2008, has a 40 kW solar panel. In its seven months of operation, it has generated approximately 1.4 times more power at sea than onshore (Tokyo), and we think that even more can be achieved.



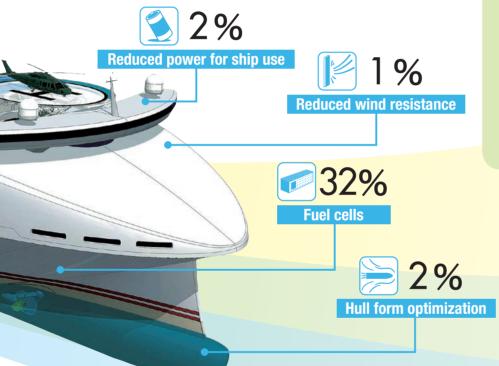
Solar-panel-equipped Auriga Leade

Although shipping is the most eco-friendly mode of transport, economic growth and the resulting expansion of international trade have increased the CO<sub>2</sub> emissions from ships to levels that can no longer be ignored. NYK Line is developing zero-emission ships as part of its efforts to create an international shipping network that is compatible with both the environment and global economic development. NYK Super Eco Ship 2030 is a concept ship devised by examining expected technology trends through 2030, and the ship could result in CO<sub>2</sub> emission reductions of up to approximately 69 percent.

For more information >>> p. 38–39

## NYK Cool Earth Project — Development of NYK Super Eco Ship 2030

The NYK Cool Earth Project was launched in April 2008 in recognition of the increasing importance of environmental issues and has targeted everything from the development of environmental technologies to programs to reduce energy consumption within the office. The project's members and their functions were recently integrated into the company's Environment Group, which was established in April 2010 to better carry out such activities.

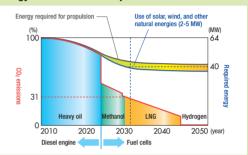


All for Sustainable **Transportation** Katsuhito Yamane

Environment Group Environmental Project Team

NYK's goal is to develop a zero-emission ship by 2050, and we have examined long-term trends for component technologies to arrive at a concept ship to be developed by 2030, the midpoint along that path. This ship serves as a concrete roadmap for technology development and also provides a means to stimulate thought about the future of ports and logistics that we hope will inspire young people to become involved in the research and development of ships or interested in working as sea-

## **Energy-conversion roadmap**



Ships today use fossil fuels to operate, but fuel cells are considered a promising new technology not only to reduce energy consumption but to switch to cleaner energy sources

## 2009 **Good Design** Frontier Design Award

NYK Super Eco Ship 2030 has been praised as a project of deep significance in showing

the world the systems and platforms that are possible.





## **Using two propellers** to improve propulsion

Ships rotate propellers to gain propulsion, but this also generates wasted swirl flow. A number of energy-conservation devices have been created to convert the swirl flow into propulsion. One example is MT-FAST, which changes the angle of the water flow into the propeller to reduce swirl flow and increase propulsion (see p. 39). We are also studying the performance of contra-rotating propellers, which use two propellers rotated at different angles to more efficiently convert swirl flow into propulsion.



## Wind as propulsion

Sails use the lift generated by wind as propulsion. They can also be taken down when the ship is being loaded or when there is no wind. NYK is researching ways to utilize wind by participating in the Wind Challenger Project, an undertaking led by the University of

Tokyo to develop nextgeneration sailboats.



Wind Challenger, a next-generation sailboat

## **Super eco ship development partners**

Development of NYK Super Eco Ship 2030 is led by the Monohakobi Technology Institute, a member of the NYK Group, and moves forward with the cooperation, technology, and expertise of the follo g partners. The group will continue to make progress toward the ent-friendly *monohakobi*.

Monohakobi Technology Institute (MTI)
The Monohakobi Technology Institute is the NYK Group think tank, our experts in transportation and logistics technology charged with using "technology development" and "human resources development" to propose solutions for our customers' monohakobi needs.

## **Elomatic Marine**

Finnish consulting company on ship technology. Has worked with NYK on NYK Group cruise ships, including Crystal Symphony and Crystal Harmony. For this project, was responsible for surveying technology trends and their application to shins

## Garroni Progetti S.r.l.

Italian ship-design company. The lead designer, Mr. Vittorio Garroni, has worked on NYK Group cruise ships, including the Crystal Yacht Club's Lady Crystal. He also designed the Huis ten Bosch resort in Nagasaki.

## **Biodiversity initiatives encourage** changes in society

The 10th Conference of Parties to the Convention on Biological Diversity (COP 10) is scheduled for October 2010, so we invited experts to talk about international regulatory trends, the response of the NYK Group, and the development of new technologies as we explore the relationship between biodiversity and NYK.



Dr. Naoki Adachi Response Ability Inc.



**Koichi Akamine** Corporate Officer Responsible for NYK's Safety and **Environmental Management Group** 



Tamio Kawashima Principal Technical Officer Technical Group, NYK



Yoko Wasaki Corporate Officer Responsible for NYK's Compliance and Risk Management Group, Internal Audit Chamber. Corporate Communication Group, and CSR Coordination Group \* Moderator

\* Interviewed on March 12, 2010

## Loss of biodiversity means large economic losses

Wasaki Our topic today concerns the biodiversity initiatives of the NYK Group. I would like to explore with you what is going on with rulemaking and biodiversity initiatives, primarily in marine transportation. First, however, I would like Dr. Adachi to explain the relationship between business and biodiversity.

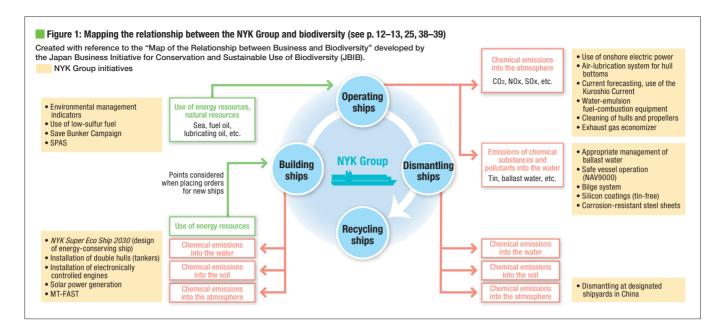
Adachi Those overseeing corporate environmental issues often tell me that they have no point of contact with biodiversity issues because their products are not directly related to living organisms. However, if you look at the entire lifecycle of a product or service. there are resources used along the way in the sourcing of raw materials, production, and distribution, for example. There are also impacts on the soil, the water, and the atmosphere. So you do in fact have many points of contact. We must emphasize that biodiversity is in a crisis situation today, and that our own losses will be extremely large if biodiversity is lost.

COP 10 is scheduled to be held in Aichi in October. The purpose of the Convention on Biological Diversity is to protect the variety of living organisms and living environments so that their benefits and bounties can continue to be used. It is estimated that biodiversity loss may cost around 2-5 trillion dollars every year. This is huge,

corresponding to 3-7 percent of the global economy, and on par with climate change in terms of impact.

When in the not-too-distant future we are no longer able to use oil, living organisms will be an important resource for both energy and materials. The growing global interest in these issues is beginning to be felt in the markets. Faced with the destruction of forests due to logging, the government of the UK passed a law in 2004 prohibiting it from purchasing lumber not produced in sustainable forests. Companies that are not able to provide certifications stand to lose a very large market.

Wasaki NYK has created a map that explores the relationship between business and biodiversity and confirms the impact on biodiversity from the entire lifecycle of building, operating, dismantling, and recycling a ship. We have, for example, created a companywide task force to ensure adherence to international standards regarding the use of low-sulfur fuel (see p. 38) and have begun to take steps to put this in action in advance of regulatory changes. Our fuel-saving activities began in 1977, and they were strengthened and renamed the "Save Bunker Campaign" in 2005 (see p. 38). At the dismantling and recycling stage, more than 90 percent of the weight of a ship can be recycled, so ships are excellent from an environmental standpoint, but dismantling does involve



the outflow of chemical substances into the water, and because of this impact, NYK decommissions ships only at designated yards in China where the proper facilities are available. (See Figure 1 above.)

## **Technical challenges in ballast-water systems**

Akamine The first issue that comes to mind in terms of biodiversity is ballast water (see p. 17 Note 1). Ballast water is water carried within the vessel to stabilize the ship when it is empty. General practice is to take on ballast water at an unloading port and to discharge it at a loading port. This water contains shellfish, plankton, and other marine life as well as bacteria that may experience abnormal reproduction when removed from their natural habitats. The adverse impact on marine ecosystems and fishing has made this a global issue, and the International Maritime Organization (IMO, see p. 38) adopted international regulations in 2004 (see p. 17 Note 2) prohibiting the discharge of water that does not satisfy certain quality standards. The regulations are expected to enter into effect this year or next. Kawashima A number of different manufacturers are developing ballast-water systems that are internationally certified to comply with regulations (see p. 16 Figure 2). To promote development in Japan, the NYK Group is cooperating with group member Monohakobi Technology Institute (MTI) on the design of its own system, a prototype of which entered field testing on a ship in November 2008, bringing it one step closer to commercialization. Group company Nippon Yuka Kogyo Co. Ltd. is also working on a joint development project with a partner company and expects to enter field testing this year. At the NYK Line headquarters, we are now studying the installation of devices on car carriers and containerships. One of the issues is that there is a natural reduction in the capability to take on and discharge ballast water when the water goes through a treatment device. In some circumstances, longer mooring times may be required, which may affect the operating schedule. The installation of large devices on ships also reduces the amount of cargo that can be carried, and if the device consumes large quantities of electric power, there is also energy waste. So there are concerns about whether issues as intractable as these can be addressed with corporate efforts alone.

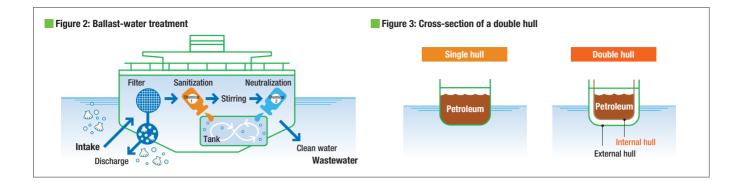
Adachi For example, one alternative may be to install minimal devices on the ship and have a larger intake device available at port so that a pipe could be connected to the ship and water treated that way.

Kawashima I think this is a good idea. It may be better to try to deal with this problem on shore rather than just looking for a solution on ships. Mr. Akamine, as a captain you have had a lot of experience taking on and discharging ballast water. What is your opinion?

Akamine Certainly, it is an interesting idea. But I do not think this is something that can be achieved by a single company acting on its own. Realistically speaking, there should be many constraints on ballast operations. The NYK Group operates about 800 ships per year, which means taking on and discharging about 100 million tons of ballast water. In the past, nobody was aware of the havoc that ballast water could create in the sea. My impression was that protecting the environment was to preserve existing species, and that was really what biodiversity was all about. But our conversation today has brought home once again the fact that this is not a simple issue.

**Kawashima** In addition, we use ultraviolet radiation, ozone, or perhaps chemicals to kill off microorganisms and then use another set of chemicals to neutralize the water before discharge. Development is proceeding on these strategies, but it does raise the question of whether it is enough merely to treat the symptoms.

The best solution would probably be to create ships that could operate without taking on ballast water. As one example, some ship widths are limited to 32.2 meters because that is as large



as will fit through the Panama Canal, but once it is widened, we can build wider ships that would have more stability. Gravel carriers that operate in Japanese domestic waters have ship bottoms that open and close, and it might be worthwhile to use a similar strategy. I hope that young engineers will come up with some innovative ideas.

Adachi Leaving aside the difficult problem of ballast water. I think that initiatives to protect biodiversity cannot be separated from business activities. Rather than going someplace else to protect the environment, I think you have to incorporate this into business activities themselves.

## Finding hardware and software solutions to safe vessel operation in advance of regulatory mandates

Wasaki As a shipping company, our highest priority is safe vessel operation. I would like to talk about how this relates to questions of biodiversity.

Akamine All of us, including top management, understand that safe vessel operation is our highest priority and a decisive factor in the continuity of our business activities. There are two ideas that we must keep in our heads day in and day out as we operate our ships: "delivering the cargo entrusted to us by our customers safely and certainly to its destination" and "protecting the safety of the crew and the ship and preventing environmental destruction from accidents." At NYK, we have a Safety and Environmental Management Committee that reports directly to the president and moves forward on safety initiatives from both the hardware and software perspective, in advance of regulatory mandates.

One of our biggest activities on the hardware side was the recently completed installation of double hulls on very large crude-oil carriers (see Figure 3 above). On the software side, we have the NAV9000 safety management system (see p. 25) that articulates our own safety standards, which are stricter than those mandated in IMO conventions. The standards apply to all NYK Group fleet ships, and we also ask our ship-management companies and the owners of chartered vessels to adhere to them. Every year we inspect more than 300 ships and implement nearly 3,000 improvements. But no matter how great your systems and manuals, safety is ultimately dependent upon the crew, the people working on the frontlines. The NYK Group provides its seafarers with rigorous education and training, and the curriculum is exactly the same whether the crew member is from Japan or from another country.

Kawashima The installation of double hulls involves using a redundant structure for the cargo-tank walls in tankers to prevent oil spills. This will be mandatory under regulations that take effect in 2010, but NYK began to do this well before regulations were adopted, and in February 2009 completed the installation of double hulls on all of its very large crude oil carriers.

Wasaki NYK has a culture of acting immediately when it becomes aware of an issue, and I hope that it will lead the way on biodiversity as well.

## In the forefront of industry and national initiatives

Wasaki Turning to global warming issues, in April 2009 the company published its vision for the ship of the future, called NYK Super Eco Ship 2030 (see p. 12-13). The ship uses renewable energies like fuel cells, wind power, and solar power, but it also makes substantial reductions in hull weight, targeting a 69 percent reduction in CO2 emissions.

Kawashima Global CO<sub>2</sub> emissions in 1990 were approximately 21 billion tons, but by 2007 had grown to roughly 1.4 times that level. Meanwhile, global oceangoing marine transportation was responsible for approximately 850 million tons in 2007, which is the rough equivalent of the CO2 emitted by the entire country of Germany. Projections indicate the potential for this to triple by 2050. Japanese shipping companies operate approximately 13 percent of the world's oceangoing marine transport services. Looking at the growth potential in marine transportation and the numbers of ships operated by Japan, it is clear that our ships require bold, fresh innovation.

On the other hand, the life of a ship is more than 20 years, so even if this vision is achieved by 2030, some of the ships in operation today will still be in the fleet. In other words, it is extremely difficult to reduce the overall CO<sub>2</sub> emissions from marine transport.

Adachi I think there is a lot of potential to accelerate development if the super eco ship is built as an extension of current tech-

However, the global population is growing at a rapid rate, and

experts say that by 2050 we will need to reduce per capita CO2 emissions to 1/10 current levels-in other words, a savings of 90 percent. We may not be able to see the technology to achieve it at the current point in time, but we can calculate backwards to understand what we must accomplish. Accumulating and advancing a particular technology is important, but we must also set challenging targets and draw up technology development roadmaps that will lead us to them, and I think that doing so will provide more motivation and direction to engineers.

Wasaki It will certainly motivate engineers.

Kawashima Right now the IMO has an active debate on reducing NOx and SOx, and this is also based on a calculation back from what must be achieved. Regulations that will substantially reduce NOx from 2016 and SOx from 2020 have already been finalized.

Akamine With respect to CO2, when the largest containerships travel at a speed of approximately 25 knots they burn roughly 240 tons of fuel oil and emit roughly three times that amount in CO2, or 720 tons. If they were to reduce their speed by half, theory says they would burn 38 tons of fuel oil and limit CO2 emissions to 114 tons. We could significantly reduce CO2 emissions just by getting our customers to understand the need to travel slower.

Adachi Customers are concerned about CO2 today, so perhaps the emphasis will change from getting the cargo to its destination as quickly as possible to getting it there with the lowest possible CO<sub>2</sub> emissions.

Akamine For example, if there were a global rule that limited containership speed to 15 knots or lower, just as we have speed limits for cars, we would see a significant drop in CO2 emissions. From this perspective, there is a lot to be said for the use of sails, which take advantage of wind power and do not emit CO2.

Adachi I understand that today's sailing ships use electronic controls to boost performance and efficiency. This is something I have high hopes for. One of the key concepts today is "biomimicry" (see Note 3 on the right). Moving organisms, which are able to travel efficiently, have much to teach us about how we shape our screws

and spherical bows, and these concepts may lead to technologies that reduce CO2. But there is no need for NYK to do all of this on its own. In fact, I think that care for the environment and biodiversity could be a sales point that would improve your competitiveness within the industry if you were to publicize the fact that "a 10 percent reduction in ship speed reduces CO2 emissions by 20 percent" or "we need to reduce the number of days spent in other processes by 10 percent to achieve this." The role that I would like to see NYK playing is that of a leader who pushes forward comprehensive initiatives to be taken by the industry and at the national level.

Kawashima On biodiversity as with so many issues, it seems that your ambition must be to change the world if you want to achieve fundamental improvements.

Akamine It was great to have Dr. Adachi on hand today to give some encouragement to engineers, and I am also encouraged by what I heard.

Wasaki Thank you for your time today.

### 1 Ballast water

There are approximately 50,000 commercial ships operating around the world, and they carry 3-4 billion tons of ballast water each year. Japanese ships carry an estimated 300 million tons per year. Species that are transported beyond their natural habitats often experience abnormal growth because there are no ecological mechanisms to regulate their reproduction and expansion. For instance, abnormal growth of Japanese wakame seaweed has destroyed the ecosystems of ports in northern New Zealand, while the Northern Pacific seastar has created havoc in scallop and oyster farms in Australia.

## 2 International regulation of ballast water

A diplomatic conference at the International Maritime Organization (IMO) in London in February 2004 adopted the International Convention for the Control and Management of Ships' Ballast Water and Sediments. All ships built after 2009 are required to have appropriate facilities for the treatment of ballast water on board. The convention will take effect 12 months after it is ratified by 30 countries accounting for at least 35 percent of the world's total commercial shipping fleet.

## 3 Biomimicry

A new science that researches natural mechanisms and processes and attempts to mimic them as inspiration for the solution of issues confronting human society.



## Growth



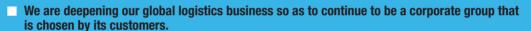








## **Completion of "Yosoro"** project sets stage for further advances



- We are promoting initiatives to expand the transport of natural resources and energy, as well as pursuing new business opportunities
- We are also expanding aggressively into emerging and growth regions like the BRIC countries.

## **Outline of FY 2009 CSR Activity Programs (excerpts)**

| FY 2009 target   | Initiatives and progress  | Future plans   |       |
|--|---|--|-------|
| <ul> <li>Activities to enhance<br/>customer-centric<br/>approach and solution-<br/>designing capabilities</li> </ul> | <ul> <li>Establishment of solution-designing<br/>organizations in each region to support sales<br/>activities. Introduction of programs to develop<br/>human resources capable of grasping customer<br/>needs properly.</li> </ul>  | <ul> <li>Implementation of a customer-focused<br/>global sales strategy for the newly formed<br/>Yusen Logistics.</li> </ul> | p. 28 |
| <ul> <li>Implementation of drastic cost reductions</li> </ul>  | <ul> <li>Fuel-economy campaign</li> <li>⇒ Full-time fuel economy officers are appointed to<br/>monitor fuel consumption for each ship. We have also<br/>introduced a new ship-performance monitoring system<br/>to enable more finely tuned fuel-economy operations.</li> </ul> | <ul> <li>Ongoing fuel-saving activities</li> </ul>   | p. 38 |
| <ul> <li>Improvement of customer satisfaction</li> </ul>   | Rated No. 1 globally and No. 1 in Japan by<br>magazines like Condé Nast Traveler, Travel +<br>Leisure, and Cruise   | Maintenance of quality services  | p. 28 |

## **Corporate profile**

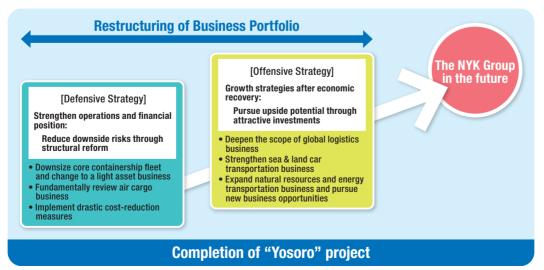
## Results

The global economy entered a downturn in the fall of 2008, and conditions continue to be adverse, but the marshaling of fiscal and monetary policy by countries around the world appears to have put the worst behind us. The business environment for marine transportation is expected to show a modest recovery in the second half of the year. Nonetheless, this consolidated accounting year recorded a decline in revenue of 732.6 billion yen (30.1 percent) compared to the previous consolidated accounting year. A number of factors were at work, including the slump in container cargoes and rates during the first half, the slump in the tanker market, and the slow recovery of automobile transportation. The entire marine transportation business (liner services and bulk shipping services) saw its revenues decline, and non-marine areas (logistics, terminal-related, and air transport services) also recorded lower handling volumes. The cost of sales declined by 533.6 billion yen (26.0 percent) compared to the previous consolidated accounting year and, while we made efforts to reduce marketing expenses, sales, general and administrative expenses, and other costs, the decline in revenue resulted in a 163.0 billion yen decline in operating profits for a 7-point decline in the ratio of operating profits to sales, from 6.0 percent the previous consolidated accounting year to -1.1 percent this year. As a result, ordinary profits declined by 171.2 billion yen from the previous consolidated accounting year. Net income declined by 73.5 billion yen due to the posting of extraordinary profits from the sale of investment securities and fixed assets as well as a decline in extraordinary loss primarily due to declines in impairment losses. NYK responded to these difficult economic environments by initiating an emergency structural reform project to stabilize group management and set the stage for future growth as a company with the social responsibility of enriching lives and supporting economic activities through monohakobi services.

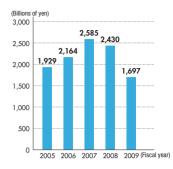
## "Yosoro" project1

To set the stage for future growth, we will engage in both a "defensive strategy" to strengthen our base of operations and finances, and an "offensive strategy" to prepare for the post-recovery market. There are three focuses to the "defensive strategy": downsize the core containership fleet and change to a light asset business, fundamentally review the air cargo business, and implement drastic cost reductions. We will build a management structure that is able to grasp customer needs and adapt to changing markets. The three focuses of the "offensive strategy" are the following: deepen the global logistics business, strengthen the sea and land car transportation business, and expand natural resources and energy transportation and pursue new business opportunities. We will use our strengths in logistics to create one-stop services and enhance peripheral services for finished vehicle transportation. In resources and energy transportation, we are moving into offshore services and strengthening our business ties with China, India, and other emerging economies.

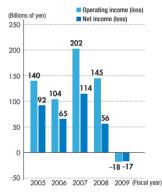
## NYK Group's Target Image



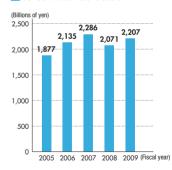
### Consolidated revenues



## Consolidated operating income (loss) and net income (loss)



## Consolidated total assets



## **NYK-Point**

## 1 "Yosoro" project

We responded to the adverse economic conditions brought on by the financial crisis of the fall of 2008 with a two-year emergency structural reform project that began in January 2009. (See Note 1 on p. 5 for the meaning of "Yosoro.")

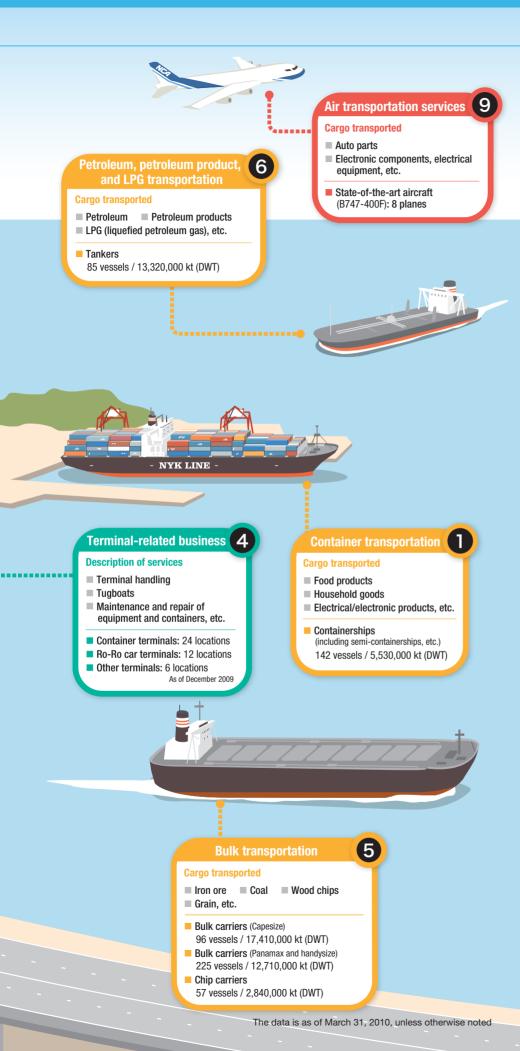
## See feature **Details >>> p. 10**

**Diversifying services** 

## **Operational overview**

The NYK Group is an international marine transportation company with strengths in global logistics services and passenger cruises. Our worldwide network of ocean, land, and air transportation services enriches people's lives. We treat each piece of cargo with care, understanding its importance to the sender and receiver and the role that it plays in building better, more prosperous societies.





## Container transportation

We transport cargo that is vital to people's lives, including food, household products, and electric appliances. We will continue to offer efficient, competitive transportation services.

## 2 Automobile transportation

We transport automobiles to countries around the world. We will continue to improve our capacity in cross-trade transport 1 to meet the needs of automakers' foreign operations, build and operate terminals and land transportation networks in Europe, China and Southeast Asia, and lead the industry in infrastructure enhancements.

### 1 Cross-trade transport

Transportation services in which Japan is neither the origin nor the destination

## **3** Logistics

NYK operates 308 logistics centers in 33 countries around the world. We will use this worldwide network to provide optimal logistics services that meet the increasingly globalized and diversified needs of our customers.

### **4** Terminal-related business

Terminals serve as the relay points in integrated sea and land transportation and we are improving their efficiency so as to better respond to accelerating and increasingly complex logistics needs. We are also working to make them more environmentally friendly by, for example, reducing CO<sub>2</sub> emissions

## **6** Bulk transportation

NYK has decades of experience safely transporting the bulk cargo that is essential to global economic activities, including commodities like iron ore, coal, and wood chips. We are further enhancing our fleet by introducing transportation technologies geared to the specific properties of individual cargo classes.

## **6** Petroleum, petroleum product, and LPG transportation

We have a long track record that gives us a foundation for safe transportation services. Our attitude toward safety and environmental issues is well known. The company was among the first to install double hulls. for example. This stance has earned us long-term shipping contracts with many major domestic and international oil producers. We will continue to engage in safe, stable operations in this segment.

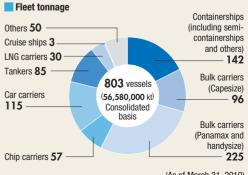
## LNG transportation

LNG is valued around the world as a source of clean energy, and NYK is actively involved in its transportation. We currently participate in LNG transportation projects in France, Nigeria, Russia, and Taiwan.

NYK offers some of the world's finest cruise experiences to passengers in the North American, European, and Japanese markets. We will continue to strengthen our brands, revealing the charm of cruise ships and contributing to the advancement of the cruise culture.

## Air transportation services

Nippon Cargo Airlines Co. Ltd. (NCA) enjoys an excellent safety record thanks to the independent operation and maintenance system that serves its state-of-the-art aircraft. As a specialist in air freight, NCA offers customers the highest quality of international services with an emphasis on on-time transportation.



(As of March 31, 2010)

## **Stability**











## Unflagging pursuit of safety and discharge of social responsib

- We seek to provide quality, customer-oriented services built upon a foundation of safe, certain transportation technology.
- We seek to meet the expectations of all stakeholders so as to foster the sustainable development of the company and society alike.
- We seek to manage our businesses in a stable manner using systems that are highly fair, transparent, and responsive.

## **Outline of FY 2009 CSR Activity Programs (excerpts)**

| FY 2009 target  | Initiatives and progress   | Future plans  |                   |
|---|--|---|-------------------|
| <ul> <li>Ongoing safety<br/>improvements (on ship)</li> </ul>   | <ul> <li>Extension of safety promotion activities to all NYK Group employees (including seafarers)</li> <li>⇒ Regular reviews by the Safety and Environment Promotion Committee (April)</li> <li>⇒ Two seminars, two campaigns, eight training sessions</li> </ul> | <ul> <li>Extension of safety promotion activities to all<br/>NYK Group employees (including seafarers)</li> </ul>   | p. 23–25          |
|   | Safety programs for three Japan terminals     ⇒ Distribution of information on accidents and responses   | <ul> <li>Creation of work-process flow charts to enable<br/>visualization of the locus of human error</li> </ul>  | p. 26             |
| <ul> <li>Prevention of accidents<br/>(terminals and land<br/>transport in Japan and other<br/>countries)</li> </ul> | <ul> <li>Preventative approaches to eradicate accidents</li> <li>→ Local auditing at local subsidiaries (approximately 14 countries per year)</li> <li>→ Global accident eradication campaign (January to March)</li> </ul>  | <ul> <li>Education on self-directed improvements and<br/>enhancement of capacity to make improvements<br/>with horizontal deployment of expertise and<br/>insights around the world in the inspection and<br/>guidance components of on-site audits and also<br/>through the use of improvement sheets</li> </ul> | p. 26             |
|   | Nine human-rights training sessions a year   | <ul> <li>More than 10 human-rights training sessions<br/>held during the year</li> </ul>  |                   |
|   | <ul> <li>Introduction of NYK Vessel Operations Meister program. Testing<br/>has been offered twice, and 75 people have been certified.</li> </ul>  | <ul> <li>Continuation of the Operations Meister training<br/>program</li> </ul>   |                   |
| <ul> <li>Training and motivation of<br/>NYK Group employees</li> </ul>  | <ul> <li>Sponsorship of parenting seminars and read-aloud seminars by<br/>the Work/Life Balance Promotion Committee</li> </ul>   | <ul> <li>Implementation of programs to adapt to the Law<br/>for Measures to Support the Development of the<br/>Next Generation</li> </ul>   | p. 31–33<br>p. 35 |
|   | <ul> <li>Enhancement of group training programs (including antitrust law<br/>training). Total participation was just under 4,000, an increase of<br/>approximately 50 percent year-on-year.</li> </ul>   | <ul> <li>Expansion and enhancement of training menus</li> </ul>   |                   |
| <ul> <li>Better recruiting of talented<br/>seafarers and training of<br/>quality seafarers</li> </ul>               | All training simulators located at the Singapore Training Center   | Further efficiency gains in training programs   | p. 33             |
| <ul> <li>Improvement of corporate<br/>governance</li> </ul>   | Greater involvement by the board of directors  | <ul><li>Ongoing</li></ul>   | p. 34             |
| <ul> <li>Rigorous compliance and confirmations</li> </ul>   | <ul> <li>Implement compliance training in addition to ordinary training and<br/>rank-based training</li> </ul>   | <ul> <li>Updating and revision of training content</li> </ul>   |                   |
|   | <ul> <li>Update and implement the Compliance System Checklist</li> </ul>   | <ul> <li>Providing guidance on improvements and<br/>strengthen organizations around the world by<br/>checking for adherence to NYK Standards and<br/>the Fraud Prevention Initiatives (overseas) and<br/>by conducting surveys on compliance systems</li> </ul>   | p. 35             |
| <ul> <li>Strengthening of risk<br/>management and<br/>information security</li> </ul>                               | <ul> <li>Implement programs that increase employee awareness and<br/>sensitivity to risk</li> </ul>  | Continuing to provide education, training, and associated activities on risk control and risk   |                   |
|   | <ul> <li>Expand security standards to affiliates to improve the overall level<br/>of information security within the group (covers 73 consolidated<br/>companies in Japan)</li> </ul>  | management in group newsletters, electronic<br>bulletin boards, e-learning programs, and other<br>forms   | p. 35             |

## Safety on the sea

## Ongoing improvements

Safe ship operation is the foundation for all of NYK Line's business activities and is our highest priority task in protecting the environment. We will continue to make practical, down-to-earth improvements as we seek to better achieve safe ship operation.



## PLAN Determination of safety and environment activity guidelines and targets

## Safety promotion system

The Safety and Environmental Management Committee chaired by the president reviews activities for the previous year and sets the next year's targets and guidelines. Activity guidelines set by the committee are fleshed out by subcommittees for each type of ship before moving to implementation as safety activities.

## Safety promotion system (as of April 1, 2010)



## Using downtime to measure safety

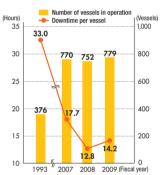
NYK uses the time that ships are stopped due to accidents or problems as a means of measuring the degree to which we have achieved safe ship operation. Our sea and land operations work together to bring us closer to the target of "zero" downtime.

## **Emergency Response Network (ERN)**<sup>1</sup>

We have an Emergency Response Network in six regions around the world to provide a guick response and minimize damage in the event of an accident or problem anywhere at sea.



## Downtime data



## NYK-Point

## 1 ERN

Emergency Response Network Our emergency response network divides the world into six regions so as to be able to respond more quickly and minimize damage in the event of an accident or problem anywhere on the seas



## NYK-Point

### Remember Naka-no-Se Campaign

Conducted every year in July, the month in which an oil spill occurred from the Diamond Grace very large crude oil carrier (VLCC) at Nakano-Se in Tokyo Bay in 1997, to ensure that the spill's lessons are not lost



## 2 Sail on Safety Campaign

Conducted for two months every winter in December and January. focusing primarily on rough wintertime weather

## **UK Maritime Trade Operations**

Established in 2001 as a program conducted by the UK Navy. It coordinates multinational forces in the Indian Ocean and Middle Fast helping to maintain safety and security by, for example, operating a voluntary position reporting system in the Gulf of Aden.

## 4 MSCHOA

Maritime Security Centre - Horn of

Established by the European Union (EU) in 2008 as a part of the European Security and Defence Policy to protect commercial shipping from piracy in Somali waters.

## Other activities are described on the website.

· Safety on the sea

CSR > Safety



## Implement integrated safety activities at the vessel, workplace, and company levels

## Safety campaigns

Each year, we conduct the Remember Naka-no-Se<sup>1</sup> safety campaign in the summer and the Sail on Safety<sup>2</sup> campaign in the winter. During the campaigns, members of the sales, operations, and technology teams visit ships to deepen mutual understanding between ship and onshore staff and to improve safety awareness on the part of everyone involved. Shipowners and ship-management companies are also indispensable partners in achieving safe ship operation, and we hold safety promotion meetings and safety seminars for them. These programs provide an opportunity to share information and improve safety

throughout the NYK Group.



Visiting a vessel during a safety campaign

## **Emergency response exercise**

Regular training is provided to increase employees' ability to respond to accidents. For greater realism, training sessions assume different scenarios for the type of ship and type of problem encountered. In July 2009, we conducted joint accident-response training (containership collision) involving our ships, ship-management companies. the Third Regional Coast Guard Headquarters. We also emphasize reviews after training ses-



Emergency-response exercise

sions are completed, using the opinions and insights obtained to further enhance our accident response systems.

## Antipiracy measures

We have established a Terrorism and Piracy Emergency Response Headquarters to deal with the threat from piracy in the Gulf of Aden and the waters off Somalia. The headquarters collects and disseminates information and has also formulated "Operational Guidelines in Somali Waters" in its efforts to prevent damage from piracy. In particular, we engage in close, ongoing exchanges of information and opinions with institutions such as the Ministry of Land, Infrastructure and Transport and the UKMTO,3 and have sent NYK captains for twomonth stavs at MSCHOA.4 We also consult on conditions and guidelines for voyages to the Gulf of Aden area, where fleet ships are at their highest risk.

## VOICE Creating a Safe Environment by Near Miss Reporting

## For us, prevention is vital to safety.

Over the past few years, we have introduced the concept of NYK's Near Miss 3000 activity to our fleet, and we have realized that this method is a very effective tool for safety.

NYK's unique approach to near miss reporting, such as the DEVIL Hunting or reporting any unsafe acts or unsafe conditions, has greatly motivated our crews to become more aware of their environment. These activities have not only helped our crews become better at preventing accidents but also inculcated a culture of safety within our crews.

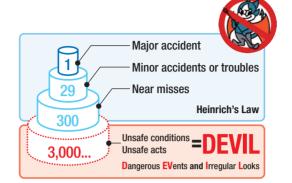
Sandigan Ship Services Inc. highly appreciates NYK's initiative for having such an activity.

Captain Efren B. Riconalla Director / General Manager DPA/CSO/QMR/EMR Sandigan Ship Services Inc.



## Near Miss 3000 activities

Near Miss 3000 activities are inspired by Heinrich's Law<sup>5</sup> and conducted on ships as a program to prevent accidents from occurring. NYK has expanded from the hiyarihatto (near-miss) level to create DEVIL Hunting!6 activities that seek to nip accidents in the bud by identifying and dealing with situations that are precursors to often overlooked problems. The scope of this program was expanded to the entire NYK Group in 2006, and it also covers our partner shipowners and ship-management companies.



## **CHECK** Confirmation of the impact of safety activities

## NAV9000 activities

NYK introduced NAV9000, a rigorous self-imposed safety management system, in 1998 to better discharge its responsibilities to achieve safe ship operation and protect the environment. The system applies to its own ships, chartered vessels,7 shipowners, and ship-management companies, demanding adherence to approximately 600 requirements. Expert employees regularly visit ships and companies to audit compliance. During FY 2009, a total of 319 ships were inspected, and 35 ship-management companies were visited. These activities resulted in 2,946 improvements.



Ship audit

## Investigate causes of problems and develop improvements to meet targets

## Accident information analysis and feedback

We transmit bulletins to the fleet in the event of accidents or problems so that the information is shared by all. We also have safety and ship-specific environmental-management committees that investigate indirect causes and formulate measures to prevent recurrence. When measures are finalized, all fleet ships are asked to implement them. New require-

ments are added to NAV9000 as we learn from accidents and take steps to prevent repeats.



"Casualty Report" and "Safety Bulletin"

## Improvement activities

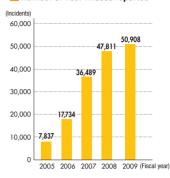
As one of our improvement activities, checklists that summarize what we have learned from engine accidents and problems are distributed to the entire fleet so that we can reduce engine problems and the resulting downtime. Each ship is expected to use the checklists to perform regular inspections, and

inspection practices are confirmed during NAV9000 audits to better prevent accidents from recurring.

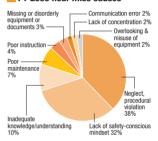


NYK's Checklist of "Engine Essentials

## Number of near misses reported



## FY 2009 near miss causes



## Rreakdown of NAV9000 improvements (requests)

|                | FY 2007 | FY 2008 | FY 2009 |
|----------------|---------|---------|---------|
| Ship audits    | 306     | 308     | 319     |
| Company audits | 32      | 36      | 35      |
| Improvements   | 2,546   | 2,898   | 2,946   |

## 5 Heinrich's Law

A law on work-related accidents that says that behind every major accident there are 29 minor accidents and 300 near misses.

## **NYK-Point**

## 6 DEVIL Hunting!

"DEVIL" is derived from "Dangerous Events and Irregular Looks." The purpose of these activities is to eliminate at the very early stages the precursors and factors to accidents before a major event oc-

## 7 Chartered vessels

Ships leased from shipowners together with their fixtures and crew in a state capable of safe opera-

**Biodiversity initiatives encourage** changes in society

## Safety on land and in the air

## NYK-Point

### 1 NYK Logistics

NYK Logistics is our logistics business brand. We provide various logistics services—such as warehousing, distribution, transportation, ocean forwarding, and origin cargo management—under this brand name. As of the end of March 2010, NYK had 62 such companies around the world

Ocean Forwarding: A service that involves securing space from a shipping company and using it to transport the customer's cargo, as well as providing the customer with customs clearance services for the transported cargo and other ancillary logistics services under individual agreements, such as export/import shipping documentation and the arrangement of needed quarantines or any other inspections

Supply chain management: Synchronization of procurement, production, logistics, and product distribution by the most efficient and economic methods, and optimization of the customer's entire logistics flow



## 2 Global KPIs

KPI: Key Performance Indicator Unified performance metrics for NYK Logistics



## 3 Kaizen sheet

"Kaizen" is a Japanese word that means "continuous improvement." Conditions before and after kaizen are recorded on a standard sheet to facilitate on-site kaizen activities and knowledge management



## 4 Global SCWPC Meeting

Began in Japan in 2004 and expanded to international locations in 2006. This is the third global meeting to be held.

## 5 Nine overseas locations

China, Singapore, Malaysia, Australia, India, United Arab Emirates, Spain, UK, and the United States

## Other activities are described on the website.

Safety on land in the air

Access

CSR > Safety



## Safety initiatives at ports and terminals

At the three terminals operated by NYK in Japan (in Tokyo, Yokohama, and Kobe), every effort is made to ensure that everyone involved understands the emergency-response system should an accident occur. In addition, all three locations use standard, consistent accident-reporting forms. These reports serve as the basis for safety meetings that bring all three terminals together each quarter to analyze and discuss the factors behind and measures to prevent recent accidents. These meetings help to both share and standardize accident responses. We also make visits from time to time to companies in other industries as part of an active effort to exchange safety information.



Checking for damage at the delivery gate

## Safety initiatives in the air transport sector

In its e-learning training and education program, Nippon Cargo Airlines Co. Ltd. introduced its initiative to achieve the goal of "a corporate culture with priority on safety." Courses are attended by all executives and employees (excluding pilots and those overseas); the topic for the first half was "human factors," and for the second half, "safety culture." The company is also in the process of creating and enhancing a risk-management system to eliminate latent risk factors. The impact on human life and society can be enormous when an aircraft is involved in an accident, and this requires that efforts be made day in and day out

to increase the awareness of safe flight operations throughout the company, from the president on down



e-learning screen

## Safety in logistics

Quality audits of a number of NYK Logistics¹ companies globally are performed on a regular basis. We make efforts to improve safety and quality at the working level by detecting and identifying the causes of abnormalities by using standard Global KPIs² and strengthening and enforcing accident prevention policies/quidelines. We conduct a Global Traf-

fic Safety Campaign twice a year aimed at eliminating traffic accidents. Kaizen sheets<sup>3</sup> are collected from each company, and the best practices are provided to all companies to disseminate safety measures and instill a culture of improve-



Safety campaign poster

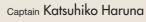
## Comment from participant in Global Safety Cargo Work Promotion Committee (SCWPC) Meeting

## I was able to share an awareness of safety with NYK Group employees from around the world

The Car Carrier Division has a target of "zero accidents and zero cargo damage," and to achieve it we hold a "Global SCWPC Meeting" 4 each year (two days in FY 2009). Our main theme this year was to "create an NYK style," and we enjoyed the participation of a total of 18 people representing NYK port captains, stevedore companies, and terminal services at nine overseas locations, 5 some of which were new ports of call. The meetings began with an explanation of "proposals to share information on and promote the adoption of cargo work standards" and "mechanisms

for preventing accidents caused by environmental and psychological factors." These presentations advocated improvements to work envi-

ronments and helped to raise awareness of safety issues.



Car Carrier Group Marine Quality Control Team

## **Together with society**

## Principles and action guidelines of social contribution activities

NYK is committed to proactively addressing the challenges that confront the world, and through a diverse array of activities, the company is making every effort to enhance corporate values and thus benefit society as a benevolent, sustainable, and socially responsible corporate citizen.

## Activity policies

## ■ Promotion of employee involvement in volunteer activities

To strive to develop a flexible and energetic corporate culture that respects diversity and achieves a high sense of integrity by promoting employee involvement in volunteer activities that expose workers to different values and perspectives.

## 2 "Investment" in our future global society

To contribute to the realization of a better global society by widely investing our versatile management resources in society.

Areas of investment: activities that support the environment and international contributions and that foster the development of future generations

## 3 Promotion of mutual prosperity and harmony with local communities

To work in a positive manner with local communities toward mutual prosperity and harmony.

## Using our resources to provide transportation assistance

Since 2000, the NYK Group has coordinated with the Japanese Organization for International Cooperation in Family Planning (JOICFP) to use monohakobi resources to provide assistance.

Reconditioned bicycles collected and repaired in Japan are shipped by container to developing countries in Asia, Africa, and other parts of the world. As of this writing, the NYK Group had provided free maritime transportation cooperation to deliver 25,164 reconditioned bicycles to 62 countries. The bicycles serve as transportation for birth attendants, community health workers, and doctors. And the bicycles, in some cases, become ambulances to bring pregnant women and other patients to clinics. Local communities often refer to this lifesaving transportation as a "gift from God."

Some of the containers used in the transportation are donated by the NYK Group to become clinics and warehouses in local communities.



Bicycles delivered to Afghanistan

## **Major social contribution activities**

## • Free Transport Assistance

Japanese Organization for International Cooperation in Family Planning (JOICFP): Transportation of reconditioned bicycles and school backpacks

Shanti Volunteer Association (SVA): Production and transportation of picture books

## ② Disaster relief activities

Using our resources to provide transportation assistance and donations; collecting donations from group executives and employees

## **③ NYK Nature Fellowship**

Dispatches university students and NYK Group staff members to overseas maritime environmental research sites

## Open facilities

NYK Maritime Museum, NYK Hikawamaru, Container Terminal (open to tours for elementary and junior high school students)

## Internal initiatives

"Table For Two" boxed lunches for meetings, sales of Fair Trade merchandise, vending machines that make automatic

## **6** Support of Swan Bakery to foster independence of the

Baked goods at company sales events, and boxed lunches for meetings

### Free transportation for NPOs in FY 2009

## **JOICFP**

Overseas Reconditioned Bicycle Donation Program

| -   |        |
|---|--------|
| Delivered to                              | Total  |
| Tanzania and more than 60 other countries | 2,550* |

<sup>\*</sup> Total since FY 2000: 25,164

School Backpack Supplies for Afghan School Children

| Delivered to | Total   |
|--------------|---------|
| Afghanistan  | 11,910* |

<sup>\*</sup> Total since FY 2004: 58,230

## Shanti Volunteer Association

Campaign to Deliver Picture Books

| Delivered to   | Total   |
|--|---------|
| Refugee camps in<br>Cambodia, Laos, Thailand,<br>and Myanmar (Burma) | 21,563* |

<sup>\*</sup> Total since FY 2004: 106.152

## FY 2009 relief contributions

| Disaster  | Amount (Yen) |
|---|--------------|
| September 2009<br>Philippines typhoon             | 939,970      |
| September 2009<br>Samoa earthquake<br>and tsunami | 613,970      |
| September 2009<br>Sumatra earthquake              | 735,966      |
| January 2010<br>Haiti earthquake                  | 2,468,814    |
| February 2010<br>Chile earthquake                 | 1,960,294    |

Total: 6.719.014

Total of matching gifts and group employee contributions. Group companies made separate relief contributions to disasterstricken areas.

## Other activities are described on the website.

- Joint Projects with NPOs/ NGOs
- Community Interaction
- Disaster Aid Activities
- Staff Members Activities

CSR > with Society



## **Together with our customers**

The NYK Group's business is global, encompassing ocean, land, and air.

Our goal is to provide services that are based on customer perspectives, services that meet their expectations and earn their trust.

## Providing customer-oriented services

## Global logistics strategy

The expansion of the global economy has resulted in more advanced and complex logistical requirements. NYK provides comprehensive logistics services, bringing together monohakobi expertise on ocean, land, and air to solve customers' supply chain challenges.

We plan to reorganize the group and integrate the NYK logistics unit and Yusen Air and Sea Service during FY 2010. With a more simple customer interface and comprehensive service offerings, the new "Yusen Logistics" will be even better positioned to meet a broad range of logistical needs.

Monohakobi supports economic activities and enriches lives. Through the global logistics business, the NYK Group seeks to grow together with its customers, local communities, and global society.

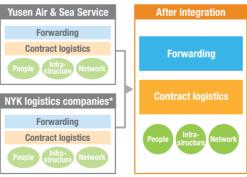
our intentions, and participants received reports of both the findings and new initiatives resulting from them. Our customers gave us frank opinions and held us to demanding standards. We take them seriously and are working to improve.

The outcome of the survey has been better communication with customers and a gradual enhancement of our reputation. We will continue to make efforts to improve customer satisfaction in the future.



Kobe Terminal

## Integration and enhancement of logistics services



\*See p. 26 Note 1

## Customer Satisfaction Survey for Kobe **Terminal**

Container terminals are the linchpins that bring together ocean and land services in international logistics. They are also a point of contact with owners and other customers through the medium of cargo. To better understand what our customers think of our services, we began a customer satisfaction survey of approximately 80 companies in FY 2008. The survey involved direct visits to companies to explain

## Cruise

Our No. 1 priority is for our guests to feel the joy of life through their cruise experiences. We call upon our integrity, innovation, and intensity to create and offer unparalleled cruises at a high level of safety based on our expertise as an ocean transportation company. Our guests enjoy travel to a wide diversity of cities, the beauty of nature, and world heritage at ports of call, as well as a variety of entertainment, refined cuisine, and facilities to promote health, such as spas, on board our ships, all enabled by a delicate coordination of both hardware and software resources. Our product consistently receives high praise from guests all over the world.



Asuka II cruising by Mt. Fuji

## Kobe Terminal Customer Satisfaction Survey results Extremely satisfied, Satisfied Somewhat satisfied, Neutra Somewhat dissatisfied, Dissatisfied, Extremely dissatisfied 80 60 40 2nd time



## Management system for the transport of finished vehicles

Currently, the transport of any finished vehicle from automotive factory to dealership is controlled by a paper label (which contains data such as destination, delivery date, parking location, etc.) affixed to the vehicle's windshield. But if the destination changes during transport, it becomes necessary to update and reprint the paper label. Then the new paper label must be manually replaced on the vehicle, which might entail relocation of the vehicle itself to a new storage location. And if there are several sequential updates to a vehicle, mismatches can arise between the information in the system database and the paper information on the actual vehicle.

The Monohakobi Technology Institute (MTI) has been one of the subcontractors for the "Ubiquitous Tokku" program initiated by the Ministry of Internal Affairs and Communications (MIC) in September 2008, and is moving forward on a three-year plan in cooperation with Mitsubishi Motors Corp. to conduct pilot tests to prove the efficiency of "spatial codes" in international automotive logistics. By using active RFID1 tags with display functions in place of paper labels, companies can now manage individual vehicles and monitor events such as shipping history.

And whenever the system database is updated, a remote reader antenna broadcasts the new information by radio and automatically changes the display on the vehicle tag, significantly reducing the need for paper labels and their attendant man-hours.

Plans for the future include developing mechanisms that allow vehicle tags to auto-input data and communicate more actively with logistics management systems, which enhancement is expected to reduce costs and increase the reliability of automotive transport. MTI continues to focus on customer perspectives as it develops technologies and solutions that solve logistics challenges, thus adding extra value to customers' logistics services.



## 1 REID

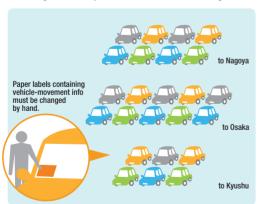
Radio Frequency Identification Automated noncontact recognition technology using radio waves to identify items such as cargo and transportation units

## 2 Active tag

Active electronic tags have a builtin battery and can transmit data over distances of hundreds of meters. The newly developed electronic tag also comes with "display functions" that enable easy remote confirmation and modification of the tagged object's storage location, destination, and other information.

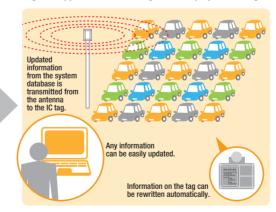
## Application of active tags<sup>2</sup> with display functions for finished vehicles

## [Current: Paper labels with bar-code data]



- ① Reading bar-code data from paper labels takes many man-hours and is time-consuming
- 2 Identification of individual vehicles takes many man-hours and is time-consuming
- 3 Replacing paper labels takes a substantial amount of time and work.
- 4 Using lots of paper labels creates an environmental burden.
- (5) Paper labels cannot be updated during transport.
- 6 Because companies now all use different systems, it costs a lot of time and money for them to share information.

## [After application: Active tags with display functions]



- (1) Eliminating the need to replace labels by hand means a substantial reduction in work processes for inventory, etc.
- 2 Identifying individual vehicles requires fewer man-hours.
- 3 Changes in destination, end customer, and such can be efficiently made during transport.
- 4 Great cost performance comes from using spatial codes for location identification and from sharing that enhanced information among multiple involved parties.

## **Together with our shareholders** and investors

## 2009 IR highlights

| Participating companies     | Participating individuals          |  |  |  |
|-----------------------------|------------------------------------|--|--|--|
| 478<br>(55)*                | 541<br>(63)                        |  |  |  |
| 229<br>(29)                 | 337<br>(52)                        |  |  |  |
| Tours of facilities         |                                    |  |  |  |
| 18                          | 18                                 |  |  |  |
| 9                           | 9                                  |  |  |  |
| IR seminars for individuals |                                    |  |  |  |
| _                           | 884                                |  |  |  |
|                             | companies 478 (55)* 229 (29) es 18 |  |  |  |

<sup>\*</sup> Parentheses indicate participation by the NYK president

Investor Relations

### 2 CFO

Chief Financial Officer

## 3 Roll-on, Roll-off Ship

A ship similar to a ferry that has a ramp way and a vehicle deck so that vehicles can move on and off using their own power. This structure allows direct loading and unloading without the use of cranes.

Socially Responsible Investment An investment practice that combines ordinary financial analysis with an analysis of the company's ethical. social. environmental safety, and other activities to determine investments on the basis of corporate social responsibility

## Other activities are described on the website.

With Investors

**CSR** 



## Approach to IR activities

We understand the importance of building good relationships based on common understandings, and we work to ensure that our shareholders, investors, and all other stakeholders have a better understanding of NYK Line's business and strategy. We endeavor to disclose corporate information in a timely and fair manner and are confident that interactive communication between the company and its stakeholders will translate into better corporate value. At NYK, the president and the entire management team are committed to conscientious, proactive information disclosure. IR1 activities conducted by the CFO2 international in London (NYK advisor) enjoy high regard among European and North American investors because they minimize the impact of time differences. From FY 2009 we have provided English translation for the videos of results briefings, and we have actively sought the participation of individual investors in company briefings.

## Publication of IR information

The "NYK Plus" pamphlet is published twice a year (spring and fall) specifically for personal shareholders and investors to provide them with insights into



Vol. 6 Fall 2009

the breadth of NYK's ocean, land and air business activities and its social contribution initiatives. We hope that this publication improves their familiarity with the company. We are also working to enhance our website and provide up-to-date information, including monthly figures on containership cargo volumes and the bulk carrier and tanker market.

## Tours of facilities

In October 2009, we held an IR tour for institutional investors and analysts in Shanghai, China. The event was attended by nine investment professionals, who visited leading companies in the steel and shipbuilding industries that are supporting the growth and development of the Chinese economy. They were able to have direct exchanges of opinions on current conditions and the outlook for the future with some of the top companies in China, the country that is driving recovery for the global economy. The tour also featured visits to NYK logistics facilities, Ro-Ro ships,3 and container terminals, along with explanations about initiatives taken to improve service, maintain safety, and reduce cost. Participants were able to see firsthand how we are working as a global logistics company to aggressively develop our busi-



Terminal in Shanghai, China



## **Recognition and reputation**

NYK's shares have been selected for inclusion in the SRI4 portfolios of a number of ratings agencies and other institutions.

- Selected for the seventh consecutive year for Dow Jones Sustainability World Index (USA)
- Selected for the eighth consecutive year for FTSE4Good Global Index (UK)
- 3 Awarded a "Silver Class" CSR rating by SAM Group Holding
- 4 Selected for the "Global 100 Most Sustainable Corporations" in the World" for the fourth consecutive year
- 5 Selected for the "World's Most Ethical Companies" for the third consecutive year
- 3 Selected for the sixth consecutive year for the Morningstar Socially Responsible Investment Index (Japan)

Certification logos for the above are found on the back cover.

## **Together with all staff members in the NYK Group**

## **HR** philosophy

## Continually develop diverse talent at all group companies across global fields

The NYK Group operates in a wide range of fields, and its employees come from an extensive and diverse range of countries. Our human resources (HR) philosophy was formulated in 2005 to encourage all employees to maximize their potential.

Our training of the next generation emphasizes the following:

- I Flexibility and liberality (tolerance) to understand different cultures and heterogeneous ways of thinking;
- 2 Leadership to lay out clear visions and goals, and to encourage others to achieve the established goals; and
- A management mindset and skills that encompass people management, specialist knowledge, and the ability to look at things from a broader perspective.

## Creating satisfying workplaces onshore

## Enhancements to training programs

The NYK Business College (NBC)1 is a training program for onshore staff in the NYK Group. Each year, its content is enhanced. During FY 2009, we offered more than 60 types of training, with particular emphasis on CSR-related training (for example, a course on antitrust law). More than 3,800 employees participated in some form of training during the year, more than quadruple levels just five years ago.

We want our new hires to experience social contribution firsthand, and all are required to participate as community development agricultural volunteers on a three-day, two-night program in the Iketani section of Tokamachi, Niigata. Approximately 8,000 employees throughout the group have taken advantage of e-learning opportunities to study topics such as CSR, environmental management, and antitrust law. NBC's theme for FY 2010 is "Strengthening the Total Capacity of NYK Group Staff Members," and offerings continue to be improved, enhanced, and tailored to the qualities and skills required by our stakeholders.

## Global NYK Week

We want to be the kind of company where every employee says, "I am glad I work here." That is why in 2002 we began to hold Global NYK Week for midlevel employees at international group companies. The event features direct conversations with the president, video lectures on company history, and discussion sessions for participants. During the group-work sessions, there are discussions of specific topics

and presentations before the management committee to ensure ample opportunities to exchange opinions. The goal of Global NYK Week is for NYK Group employees around the world to understand the company's philosophy, the NYK Group Values, and the company's business strategy. The FY 2009

event was held in March with 25 participants.



## Respect for human rights

As societies change and human rights issues become more complex and varied, ensuring that employees are aware of human rights is crucial to discharging corporate social responsibility. NYK conducts human rights training as a part of its CSR training and also as one component in the training given each year to new hires, newly appointed team leaders, and employees stationed overseas. In addition to providing a broad overview of human rights issues, training examines problems that could arise at the workplace, such as sexual harassment and power harassment. The focus is on encouraging employee human rights issues to be understood from the perspective of workplaces that are conducive to work.



NYK Business College Training programs for NYK Group emplovees

See feature Details >>> p. 11 **Diversifying human resources** 

Other activities are described on the website.

Working on Land

CSR > With Staff Members





An internal certification for ship operators providing support from the shore. There are four ranks-Silver, Gold, Platinum, and Meisterdepending upon experience and ability. The highest level, Meister, requires that candidates have medium and long-term perspectives that encompass such areas as sales, safety, and environment, and are also up-to-date with international rules. During the program's first year, 75 people were certified.

## NYK-Point

### 2 Work/Life Balance Promotion Committee

This began as a special committee organized in 1968 by labor and management to find wavs to reduce overtime. In 2001, changed its name to the Office-Hours Management Committee and strengthened its initiatives to promote better work/life balance. It was reorganized during FY 2008 as the Work/Life Balance Promotion Committee with the participation of employees at the general manager level as third-party committee members.



## 3 Parenting Seminar

A lecture titled "The Need for Parental Involvement in the Infant and Toddler Years: What Parents Should Do" from a professor at Saitama University, and discussions among participants.

## 4 Navigation officer/engineer

A person with the knowledge and skills required of a crew member. In this context, refers to an offshore employee (navigator, engineer) working onshore.

## Other activities are described on the website.

· Working on Land

CSR > With Staff Members



## Personnel exchanges

As part of its comprehensive logistics strategy, the NYK Group began full-fledged personnel exchanges among group companies in July 2009. The key to growth in the global logistics business is to develop human resources capable of innovating and adding value. We want to create a competitive organization led by people who are versed in the areas of "ocean, land, and air" transportation and able to see beyond their own individual business units and companies. We are also enhancing common group training and training for salespeople to better improve our sales capacity.

## **Energizing organizations and workplaces**

We unrolled a new personnel system in FY 2009 that gives greater focus to human resources development. The new system has a conference-style process for determining absolute evaluations and providing feedback from the supervisor to the employee to accelerate the employee's growth. Also in FY 2009, we unveiled the Operations Meister program<sup>1</sup> to certify ship operators in the group and improve the organizational competitiveness of the group as a whole.

## Promotion of work/life balance

NYK's Work/Life Balance Promotion Committee<sup>2</sup> conducts a number of activities to promote better work/life balance among employees. It conducts interviews with units in which there is chronic overtime, works with employees to develop solutions, and uses "no-overtime workday" announcements to increase awareness of time management. To provide opportunities to think about work/life balance, the committee held a Nursing Care Seminar and Parenting Seminar<sup>3</sup> during 2009.

## Work/life balance programs (excerpt)

- Parental leave Available until the child reaches 26 months of
- Family care leave Up to a total of one year. Can be divided in two if within two years of the leave commencement date.
- Parental and family care flextime and shortened work hours
- 1) Flextime system Offered to employees who are pregnant, caring for children up to the sixth grade, or providing nursing care to family members
- 2) Shortened working hours (up to two hours per day) Available to employees caring for children up to the first grade or providing nursing care to family members.
- Spouse transfer leave Up to two years available if a spouse is reassigned overseas or to a location in Japan more than 130 kilometers away.
- Yusen Childcare (in-house childcare service) Began in April 2002. Staffing above statutory requirements. Laundry facilities and other conveniences provided.

## Countermeasures for new strains of influenza

Just as called for in its existing action plan, the company formed a Headquarters Response Unit as soon as it received information on the outbreak of a new respiratory disease. Group companies in Japan and internationally established their own response units and monitored the situation in their individual countries and companies. This information was collected by the Headquarters Response Unit and the action plan. which was formulated on the assumption of a highly pathological strain of influenza, was reviewed as necessary and implemented with a degree of flexibility.

## **VOICE Comment from certified "Operations Meister"**

## I look forward to communicating my knowledge and experiences to those who come after

At my previous assignment in the Car Carrier Group, management encouraged everyone to be certified as operations officers, so we made careful, painstaking preparations with study groups led by a navigation officer/engineer. 4 This was a good opportunity to bring together the knowledge that I had acquired during the course of ordinary operations work, allowing me to measure my own levels and understand which areas I would need to deepen in order to further improve safety and efficiency. I am currently responsible for the operation and sales and marketing of a type of ship called a "bulk carrier" and am using the knowledge I gained in my previous post as a foundation for studying up on them. I want to actively communicate my knowledge and experiences to the people who come after me, and I want to continue to study and learn, raising my own level as I help raise the level of the entire organization.



## Creating satisfying workplaces on ship

## Recruiting and training non-Japanese seafarers

NYK recruits quality seafarers from around the world to ensure that its ships are operated safely and efficiently. We enjoy close ties with maritime universities in many different countries and recruit talented graduates as cadets5 who are trained on our four cadet-training ships as the officer candidates of the future.

The NYK-TDG Maritime Academy is a four-year institution in the Philippines that opened its doors in June 2007. Since April 2010, the first class of 116 have been working their way through a challenging one-vear onboard training course. The academy is committed to training seafarers with high levels of technical and management skill.

## Conceptual diagram of NYK Maritime College

## **NYK Unified Requirements**

Knowledge and skill requirements for specific positions

NYK Unified Requirements provide the basis for training programs that effectively improve skills

Onboard training Introduction of proprietary STARS educational software

Shore-based training Using simulators to provide more advanced training

DADAS (Dos and Don'ts at Sea Program) Self-diagnostic tools to verify knowledge and skill mastery

## Singapore Training Center

The NYK Maritime College (NMC) is the name of our unique educational system that offers classes by local instructors at training centers and manning centers around the world (11 locations in eight countries) in line with the NYK Unified Requirements that specify the knowledge and skills required for specific positions and ranks. During FY 2009, we closed the NYK Maritime Training Center in Shin-Sugita, while at the Singapore Training Center that is the core facility for the NMC, we installed a number of simulators including ones specializing in VLCC (very large crude oil carrier) cargo work, LNG cargo work, turbine plants, ship operations, engine control. and electronically controlled engines. This state-ofthe-art facility is without precedent anywhere in the world and offers students efficient, comprehensive training.



Ship operations simulator

## Voice Comment from a member of the first class of the offshore training course<sup>6</sup>

## I feel impressed with the weightiness of the responsibility, and also with how rewarding this job can be.

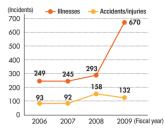
When I joined the company, I knew next to nothing about ships, but in just three years I have been able to join the crew of Lyra Leader, my first ship since April 2009. Unlike the training ship, we must spare no effort to operate safely in accordance with our schedules and the requirements of our cargo and customers. It has been a great opportunity to see the professionalism, enthusiasm, and confidence of my superiors. The opportunity to study electronically controlled engines has been invaluable in my work as an engineer. My superiors are never too busy to give me personalized guidance and friendly advice. I am both aware of my own lack of skill and also of the weightiness of the responsibility I have and how immensely rewarding this work can be. I hope

to continue to gain in experience and skill.

Daisuke Miwa Third engineer

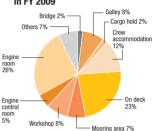


### Reported crew member injuries and illnesses



The number of reported illnesses increased in FY 2009 because of an expansion in the survey coverage and more rigorous reporting requirements.

## Location of crew accidents in FY 2009



NYK collects and analyzes accident and sickness data to monitor the status of its seafarers, verify the effectiveness of its activities, and design further improvements

## 5 Cadet

Officer candidate. A trainee who is on ship to master the skills required for certification as an officer or engineer.

## ✓ NYK-Point

## 6 Offshore training course

In FY 2006, NYK became the first shipping company in Japan to offer in-house training for graduates from ordinary four-year universities and similar institutions. After joining the company, employees can earn their licenses during two to two-and-ahalf years of education and onboard training. They are then able to gain onboard experience as deck officers and engineers as they work toward the positions of captain and chief engineer.

## See feature

Details >>> p. 11 **Diversifying human resources** 

## Other activities are described on the website.

Working at Sea

CSR > With Staff Members



## **Sound and highly transparent** management

## **NYK-Point**

The committee has the following functions:

- Compliance
- Assurance of the reliability and truthfulness of financial reports
- Assurance of the effectiveness of auditing
- Risk management
- Appropriate group management
- IT oversight and information management
- Effective conduct of corporate business by management team

## Corporate governance philosophy

NYK Line endeavors to meet the expectations of its customers, shareholders, investors, suppliers and partners, local communities, NYK Group employees, and all other stakeholders by improving the transparency and efficiency of its management and maintaining and building appropriate management systems. While endeavoring to increase the effectiveness of the audits conducted by our internal auditors, we have also chosen to establish a Board of Corporate Auditors in the belief that management decisions are most appropriately made by internal directors who are familiar with the company's operations. We also appoint two outside directors to increase the effectiveness of external audits of the company's management, and they participate in all decisions on material matters made by the board of directors. To improve the transparency of management, all NYK directors serve for terms of one year. We have two internal and two outside auditors who attend meetings of the board of directors, peruse documentation regarding material matters, and conduct audits of our finances and operations. In addition, the Auditing Chamber (two full-time staff) provides dedicated support for the auditors.

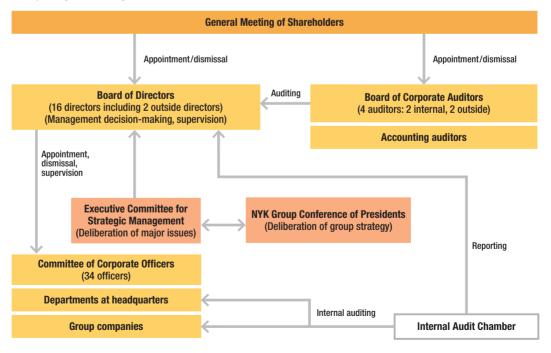
## Internal control

The Internal Control Committee<sup>1</sup> was established to strengthen internal controls and compliance with the Japanese Company Law, Financial Instruments and Exchange Law, and other laws. The board of directors determines basic guidelines on establishing the internal control system to comply with the Japanese Company Law and makes amendments in a timely manner. We will continue to enhance these organizations, internal bylaws, and operational manuals to prevent illegal and improper behavior, and to facilitate appropriate and efficient operations.

## Internal controls over financial reporting

As mandated by the Financial Instruments and Exchange Law, the NYK Group has designed and operated internal controls over financial reporting, and these controls are overseen by the Internal Audit Chamber. During FY 2009, the second year of the internal control report system, we continued to ensure the effectiveness of internal controls while responding appropriately to changes in business activities.

## Corporate governance organization chart (as of April 1, 2010)



## Other activities are described on the website. Governance systems · Internal control and internal audit activities CSR > **Corporate Governance**

## **Enforcement of compliance**

We believe that it is crucial for corporate activities to adhere to all laws and ordinances, corporate ethics, and social norms if companies are to continue to be trusted by the societies they serve. NYK seeks to enforce rigorous compliance on the basis of the NYK Line Business Credo and Code of Conduct. The Compliance Committee, chaired by the president, meets twice a year. We have a "comprehensive compliance checkup month" once a year for the purpose of capturing compliance status, distribute a manual titled "Fraud Prevention Initiatives" to international group companies to prevent incidents, hold an annual compliance meeting among NYK Group companies in Japan as part of activities to educate top management at group companies, and also provide staff with regular compliance training. A helpline (including the Yusen Chat Room<sup>2</sup>) is available in each region according to the condition to provide a means of quickly collecting information that will prevent incidents and foster a corporate culture that values transparency.

## Compliance with antitrust/competition law

In July 2008, NYK established its Antitrust Law Task Force (ALTF) in the headquarters to respond to the rapid expansion and more rigorous application of antitrust/competition law around the world and to learn from regrettable violations of such law among our group companies. The ALTF endeavors to communicate correct information to NYK Group executives/employees so that they do not unwittingly violate antitrust/competition law during their day-to-day duties. The ALTF also serves as a consultation service on antitrust issues. A total of 37 ALTF-led group training sessions have been held in Japan since May 2009. In January 2010, an e-learning program (in Japanese) on the law was launched, and 2,821 executives/employees3 have since participated in the program.

Internationally, NYK has established a regional task force in each of its six regions4 as part of global efforts to ensure that its business activities conform to local circumstances and rules. NYK will continue to use educational activities for the entire NYK Group to improve the awareness and understanding of the law among all NYK Group executives/employees.

## Risk management

The company seeks to improve the administration and operation of its organizations by engaging in comprehensive tabulation and control of the risks to which it is exposed. More specifically, this involves the collection of companywide risk data covering all sales and administrative units, regular reassessments of risk in our operational processes and other aspects of the business, and implementation of appropriate responses. We believe that it is vital for the company to respond to risk at the early stages and therefore require employees to approach their duties with three basic attitudes: 1) Do not ignore known risks, 2) Use all five of your senses, and 3) Understand that new risks emerge every day.5

## Information security programs

Information systems security involves anti-virus programs for our computers as well as network security measures. We have made a continuous effort since FY 2007 to strengthen information security systems at group companies. We also offer e-learning programs on information security as part of security educational activities available to employees at NYK and group companies.

## Formulation of business continuity plan

NYK has prepared business continuity plans for all the major operations in the headquarters and group companies so that, in the event of damage from a disaster or catastrophic event, the company will be able to maintain its important functions uninterrupted wherever possible, or if interrupted, to quickly restore them. The company is gradually strengthening its ability to withstand disaster by creating systems to maintain services during times of emergency, functional continuity for important locations, safety confirmation systems that enable the company to immediately secure required staffing, an emergency remittance system, and other practical measures. NYK also performs regular training and reviews its systems and practices as appropriate. In FY 2009, we relocated the information systems data center to a safer, more robust site in light of the crucial role it plays in business continuity and recovery.

## **NYK-Point**

### 2 Yusen Chat Room

A five-member team, including an outside legal counsel, provides a broad range of consultations and receives reports regarding compliance questions. Currently open to NYK and 59 Japan-based group companies, this service is being expanded to encompass the entire group.

## Compliance training participation

| FY 2009   | Sessions | Participants |
|-----------|----------|--------------|
| Training* | 28       | 852          |

\* Since FY 2002, a total of 273 sessions and 6,109 participants

## Antitrust law training class

| FY 2009    | Sessions | Participants |
|------------|----------|--------------|
| Training   | 37       | 1,113        |
| e-learning | 1        | 2,821        |

3 All figures represent totals for NYK and group companies (training received by 100 percent of headquarters executives/ employees)

## 4 Six regions

East Asia, South Asia, Oceania, Europe, North America, and Latin America

- Risks that could potentially impact the NYK Group's business results, share price, or financial status (Description of "Operational Risks" in NYK Securities
- (1) A major shipping accident (2) Changes in the overall shipping and freight markets (3) Insurance (4) Competitors (5) Fluctuations in currency exchange rates (6) Changes in fuel prices (7) Changes in regional economic conditions affecting global operational developments (8) Impacts of incidents arising during system development or operation (9) Stronger legislation on environmental preservation, safety, and security (10) Air transportation services (11) Relationship with partners and suppliers (12) Port congestion and onshore transportation costs (13) Operational restructuring (14) Mediumterm management plan and emergency structural reform project (15) Investment plans (16) Fluctuations in interest rates (17) Disposal of vessels (18) Valuation losses on investment securities (19) Retirement benefits plan (20) Evaluation of prospects for recovery of deferred tax assets (21) Litigation

## Other activities are described on the website.

- Compliance
- Risk management and emergency response

CSR > **Corporate Governance** 



## Environment











## Building a better global society



- We have taken steps to strengthen environmental programs in all business areas in recognition of the crucial role that rigorous safety plays in environmental protection.
- NYK views environmental issues like global warming and biodiversity to be among its most important challenges and works proactively to pursue solutions.
- We seek to become a corporate group at the forefront of environmental protection through proactive investments in eco-friendly technologies.

## **Outline of FY 2009 CSR Activity Programs (excerpts)**

| FY 2009 target  | Initiatives and progress  | Future plans   |                   |
|---|---|--|-------------------|
| <ul> <li>Strengthening group<br/>environmental<br/>management</li> </ul>                            | <ul> <li>Group environmental activities</li> <li>→ NYK Group Environmental Management Meeting (Japan)</li> </ul>  | <ul> <li>Continuation and expansion of ISO<br/>14001 certification</li> <li>Continuation of Group Environment<br/>Awards</li> </ul>                          | p. 37, 41         |
|   | <ul> <li>Increased environmental awareness on the part of NYK Group employees</li> <li>⇒ Environmental campaign</li> <li>⇒ Environment e-learning opportunities</li> <li>⇒ Participation by 10,926 in the CO₂ Diet Declaration (held twice a year)</li> </ul> | <ul> <li>Continuation of the NYK Group<br/>environmental preservation<br/>campaign</li> </ul>  | p.41              |
| Reduction of greenhouse gas emissions   | <ul> <li>Fleet CO₂ emissions reductions</li> <li>⇒ Save Bunker Explorer activities to reduce fuel consumption</li> <li>⇒ Use of Ecoreport</li> </ul>  | <ul> <li>Promotion of Save Bunker activities</li> <li>Continuation of Ecoreport</li> </ul>   | p. 38             |
|   | <ul> <li>Promotion of environmental-technology development</li> <li>⇒ Cooperation for the development of energy-conserving ships and support for the deployment of new technologies</li> </ul>  |  | p. 12<br>p. 38–40 |
|   | <ul> <li>Monitoring of overall group CO₂ emissions</li> <li>⇒ Expansion of Eco Data Net to 72 companies in Japan; NYKECOM to<br/>114 overseas companies</li> </ul>  | <ul> <li>Continuation and expansion of Eco<br/>Data Net and NYKECOM</li> </ul>   | p. 41             |
|   | <ul> <li>Office energy-saving activities</li> <li>→ Introduction of ESCO services; achieved targeted reduction of 5 percent year-on-year in office CO₂ emissions</li> </ul>   | <ul> <li>Promotion of activities by Office<br/>Environmental Management<br/>Committee</li> </ul>   | p.41              |
| <ul> <li>Promotion of social<br/>contribution to<br/>conserve the global<br/>environment</li> </ul> | <ul> <li>Preservation of biodiversity</li> <li>→ Cooperation for the development of ballast-water management systems</li> </ul>   | Cooperation for the selection<br>and deployment of ballast-water<br>management systems     Promotion of dismantling at<br>environmentally friendly shipyards | p. 15             |

# **Promotion of environmental management**

#### Our Environmental Management Vision and three environmental strategies under "New Horizon 2010"

Contribute to the global environment and the creation of sustainable societies by managing environmental risks and arriving at an optimal balance between environment and economy

- Implement reduction of greenhouse gas emissions
- 2 Promote social contribution through activities that protect the natural environment
- 3 Strengthen environmental management groupwide

#### **NYK Group Green Policy**

- Preserve the marine and global environments by making continual improvements in operations
- 2 Comply with all relevant laws, ordinances, regulations, etc.; formulate and enforce voluntary standards
- 3 Ensure the safety of ocean, land, and air transportation services
- 4 Prevent and suppress global warming and air and marine pollution
- 5 Adopt environment-friendly technologies, etc.
- 6 Conduct employee education programs that increase environmental awareness
- 7 Disclose environmental information; contribute to society through environmental conservation

## ISO 14001 certification, **Green Management certification**

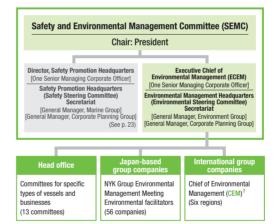
We have established a Safety and Environmental Management Committee in the Tokyo headquarters and developed a global multisite system to coordinate activities around the world. Currently, we have 39 companies, 90 offices, and approximately 700 vessels, including chartered vessels, that have earned certification under ISO 14001. In addition, there are 13 group companies that have earned ISO 14001 certification on their own and six that have earned Green Management certification.1 Each engages in environmental activities suited to its form of business (all numbers as of April 1, 2010).

## Promotion of group environmental management

NYK Line, together with 56 major domestic group companies, promotes group environmental management. The third NYK Group Environmental Management Meeting was held in October 2009 to highlight excellent environmental activities conducted by group companies, present the Group Environment

Awards, and reconfirm the CSR activities and environmental activities of the NYK Group. All group companies engage in a wide range of environmental activities according to their nature and size.

Environmental management organizations (As of April 1, 2010)



In Japan, the NYK Group Environmental Management Meeting has the participation of all 56 major group companies, providing a forum for mutual communication and coordination of efforts. Internationally, we have appointed chiefs of environmental management (CEMs) in six regions (North America, South America, Oceania, East Asia, South Asia, and Europe) to share information with the headquarters and drive

## VOICE Comment from group environmental facilitator

## Collaborating with tenants on environmental activities

Our environmental activities began with the simple task of sorting the paper we used but eventually expanded to activities that encompass all our tenants, and doing this, I believe, requires that you try to make environmental activities more down to earth and closer to home. For instance, toilet paper is one of those things that you cannot do without, but just switching to recycled paper enabled environmental activities to naturally expand throughout the building and gave us

a successful first step as a company toward a more recycling-oriented society. I look forward to continuing to work with our tenants and also with our cleaning and waste-disposal providers on further initiatives to tackle environmental issues 3

Mika Mitsuhashi

Property Management Department Yokohama Building Co. Ltd.

#### 1 Green Management certification

Certification and registration for transportation operators that make voluntary efforts above a certain threshold as described in the Green Management Promotion Manual. Examples include ecodriving and the introduction of lowpollution vehicles. Certification is administered by the Foundation for Promoting Personal Mobility and Ecological Transportation.

#### Six companies certified as practicing Green Management

Tomakomai Kaiun Co. Ltd., Nippon Container Yuso Ltd... Corporation, Kaiyo Kogyo Co. Ltd., Yusen Koun Co. Ltd., and Asahi Unyu Kaisha Ltd.

#### 2 Chief of Environmental Management (CEM)

Regional meetings are held on a regular basis to enable officers to identify their regions' issues and goals and formulate programs for their achievement

## NYK-Point

3 For the second year running, the Yokohama Building, owned and operated by Yokohama Building Co. Ltd., has received a three-star (highest) grade from the city of Yokohama for "excellence in waste sorting." The city has also used it as a case study in waste disposal

management at lectures and seminars for business opera-



Three-star certification

### Other activities are described on the website.

Environmental management

CSR > Environment



# **Initiatives to mitigate environmental load**

#### Environmental management indicator for certain types of vessels

| Types of vessel     | Environmental<br>management<br>indicator<br>(Unit: g CO <sub>2</sub> /ton-km)<br>FY 2006 FY 2009 |         | Reduction<br>rate<br>(compared<br>to<br>FY 2006) |  |  |  |
|---------------------|--|---------|--|--|--|--|
|                     | FY 2006  | FY 2009 | ,  |  |  |  |
| VLCCs               | 3.4  | 3.1     | 8.8%   |  |  |  |
| Car<br>carriers     | 57.0   | 54.2    | 4.9%   |  |  |  |
| Contain-<br>erships | 14.0   | 10.9    | 22.1%  |  |  |  |

A decline in the numbers means an improvement in CO2 emissions per ton kilometer

#### 1 International Maritime Organization (IMO)

UN specialist organization to promote intergovernmental cooperation and formulate treaties and protocols covering technical and legal questions in marine transport and shipbuilding

#### 2 Sulfur oxide (SOx)

Toxic substance that has been identified as one of the causes of air pollution and acid rain

#### 3 Eco speed

Operating ships at lower speeds that reduce engine revolutions while maintaining schedules. This approach conserves fuel and reduces CO2 emissions without impacting delivery times.

#### 4 Nensetsu

Abbreviation of the Japanese expression nempi setsugen, meaning "fuel economy"

#### See dialogue

p. 14-17 Biodiversity initiatives encourage changes in society

Details >>> p. 12-13 NYK Super Eco Ship 2030 charts a course to the future

#### Other activities are described on the website.

Environmental Activities

CSR > Environment



## Environmental management indicators

The operation of a ship results in the emission of CO2, a greenhouse gas. NYK Line uses environmental management indicators to monitor CO2 emissions per unit of transport for its fleet. These indicators are based on the guidelines produced by the IMO,1 with the data required to calculate them collected by the fleet. In our "New Horizon 2010" medium-term management plan, we target a "minimum 10 percent reduction from FY 2006 levels by FY 2013," working for more reduction through the Save Bunker Campaign and other activities.

Environmental management (Based on IMO

auidelines)

**Environmental load** (CO<sub>2</sub> emissions from vessel transportation)

Value added by the business (Mass of cargo in tons × transport distance

## Low-sulfur fuel

The burning of fuel oil that contains sulfur results in the emission of sulfur oxide compounds (SOx).2 The IMO, European Union, and California Air Resources Board require the use of low-sulfur fuel oil to reduce the SOx produced by ships. Low-sulfur fuel oil is different from conventional fuel oil, requiring NYK to modify the equipment on existing ships and the specifications for new ships. We have organized a task force to investigate these issues and spearhead efforts to achieve both safe ship operation and environmental protection.

## ■ Save Bunker Campaign

The NYK Group responded to skyrocketing fuel-oil prices by launching the Save Bunker Campaign in October 2005. This campaign seeks to reduce the fleet's fuel consumption, and also its CO2 emissions. Other initiatives in FY 2009 include better ship-toshore communications, the introduction of eco speeds,3 and the Save Bunker awards for car carriers and containerships. In May, we organized the Save Bunker special task force, whose members were experienced in fuel economy and subsequently assigned to visit operating companies and ships to share information and exchange opinions as part of NYK's Save Bunker Mission. Their work was integral to improving the effectiveness of the Save Bunker Campaign.



Operator training

## OICE Comment from the Save Bunker Mission

## Nensetsu activities evolve as perceptions change and working-level involvement grows

The Save Bunker Mission special task force began its activities in May 2009 with the slogan "brimming with love, stingy with oil." We engaged in frank discussions with people at the working level, seeking to achieve another one ton in nensetsu.4 One of the things that most impressed us was how far we could evolve our nensetsu activities if we focused in on, listened to, and made use of the insights and opinions of the crews, operators, and ship managers who are active on the frontlines of shipping. I think we can achieve another one ton in nensetsu if we are

willing to change our perceptions. The most important thing is to continually ask ourselves if we are really doing our best.

Shigeo Chikamori (left) Chief Engineer Tatsuo Takiguchi (right)

> Fleet Upkeep Group Special Task Force Save Bunker Mission



## MT-FAST energy-conservation device

MT-FAST<sup>5</sup> is a multi-blade device that can be attached to a ship's hull just in front of its propeller to catch the lost energy from the swirl flow generated by propeller rotation, improving propulsion efficiency while also saving energy. The device is currently installed on four ships: one chip carrier and three handy bulkers. Tests conducted in 2008 involving parallel operation of handy bulkers with and without the de-

vice found that it was able to shave approximately percent off fuel consumption. We plan to deploy it on more ships in the fleet going forward.

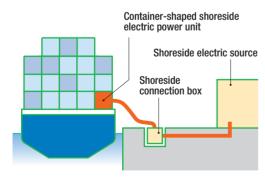


MT-FAST attached just forward of the propelle

## Use of onshore electric power

Emissions of atmospheric pollutants can be significantly reduced by turning off the ship's generator and supplying electric power from onshore when the ship is in port. NYK began this program in November 2007 with the containership NYK Atlas, which was equipped with a connection panel, cable reel, and other fixed power-reception equipment and first received shoreside electricity from the Yusen Terminal in the port of Los Angeles. In June 2009, NYK Athena successfully tested a container-shaped electric-power unit that stores the cable reel in a 40foot container. We are now preparing to deploy this equipment on other ships.

#### How it works



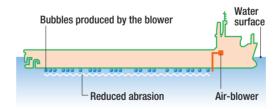
## Electronically controlled engines

Electronically controlled engines installed on vessels electronically control fuel injection and exhaust-valve opening/closing to optimize performance and reduce emissions of nitrogen oxide (NOx).6 Compared with conventional engines, electronically controlled engines have better fuel consumption in the lowload range, making them a promising candidate for the environment-friendly engines of the future. NYK had 33 vessels with electronically controlled engines at the end of March 2010. The company will also be installing electronically controlled engines in newly built vessels.

## Reducing ship-bottom abrasion-resistance

As they move through the water, ships are subject to resistance, most of which is due to abrasion between the seawater and hull (abrasion resistance). The Monohakobi Technology Institute (MTI), the technology-development arm of the NYK Group, and group member NYK-Hinode Line Ltd. have collaborated to install an air-lubrication system on new module vessels<sup>7</sup> completed in 2010. The system has an air-blower at the front of the hull that blows air over the ship bottom. The ship bottom is then covered with bubbles that "lubricate" it against the seawater and resultantly reduce abrasion resistance. This is the first attempt in the world at permanent operation of a blower system and is expected to produce a substantial reduction in CO2 emissions on the order of 10 percent.

### Image of air-lubrication system



## NYK-Point

Named for the two companies involved in its development, the Monohakobi Technology Institute and Tsuneishi Shipbuilding, and its main features: "falcate," "attachable," and "stator,"

#### FY 2009 marine pollution incidents

| Fuel leaks during refueling or voyages | 2 |
|--|---|
| Leaks from hydraulic machines          | 1 |
| Lubricant leaks at berth               | 1 |

The four incidents noted above were appropri-

#### 6 Nitrogen oxide (NOx)

Toxic substance that has been identified as a key element of photochemical smog, which pollutes the air and causes acid rain

#### 7 Module vessels

Heavy lifters used to transport modules for plants and other large structures. These types of ships have shallower drafts and wider ship bottoms than normal, which makes it possible to drive in bubbles against the water pressure using less energy. It is also possible to cover a large area of the ship bottom with bubbles.

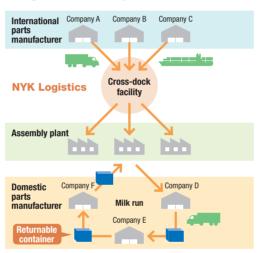


## **Environments on land and in the air**

## Cross-docks and milk runs

NYK Logistics and Yusen Air and Sea Service have installed cross-dock facilities in the transportation routes of major manufacturers. Cross-dock facilities enable the immediate sorting and shipping of mixed cargoes. The companies also offer "milk runs" in which a single truck makes collections and deliveries along a set route, allowing customers to choose appropriate modes of transportation for their business models and contributing to the reduction of environmental load. In January 2009, we installed a distribution center with cross-dock functions in Singapore. We are now in the process of installing cross-dock facilities at other locations around the world.

#### Image of cross-dock facility



### Yusen Terminals activities and awards

Yusen Terminals Inc. (YTI), a wholly owned NYK subsidiary operating container terminals, has received awards from the ports of Los Angeles and Long Beach for the second year running. The 2009 Clean Air Action Plan Air Quality Award was given in recognition of leadership in environmental programs.

YTI has maintained ISO 14001 certification since 2003 and actively tries to reduce environmental load by installing onshore power supply facilities and using electric vehicles for transportation within

terminal. In June 2009. the company installed gantry cranes1 designed to conserve electric power.



Awards ceremony

## Energy-efficient hangar

Nippon Cargo Airlines Co. Ltd. built an energy-efficient hangar and began offering services in June 2009. The installation of skylights and walls of polycarbonate enable maintenance work to be done under natural light during sunny days without the use of artificial lighting. Other energy-conservation initiatives include a natural ventilation system and a rainwater tank for use in aircraft cleaning. The hangar saves approximately 30 percent on CO<sub>2</sub> emissions compared to conventional facilities. There is even a monitor that displays energy impact, enabling managers to more finely control energy conservation.



Inside the energy-efficient hangar

## **Engine cleaning**

Nippon Cargo Airlines Co. Ltd. emphasizes the cleaning of jet engines as a means of reducing aircraft fuel consumption. Jet engines lose combustion efficiency when the compressors that send air into their combustion chambers are dirty. They can be cleaned by using the starter to rotate the engine as the hose sprays the compressor with warm water for several minutes. The recovery of combustion efficiency reduces load on the engine and ultimately cuts down on the frequency of maintenance and parts replacement.



Cleaning the engine

## 1 Gantry cranes

Cranes used to load and unload containers from containerships. They move alongside ships on rails installed in container berths.

## Other activities are described on the website.

Environmental Activities

CSR > Environment



## Other environmental activities

## Environmental-preservation campaign

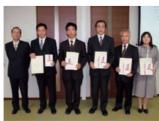
NYK conducts an environmental-preservation campaign called "The Earth Is Our Home" as part of its annual observance of Environment Day<sup>1</sup> on June 5. During FY 2009, the NYK Group conducted a number of activities in Japan and other countries designed to increase awareness of environmental issues. Some highlights include a senryu and slogan contest,2 a photo competition,3 environmental e-learning, and the CO<sub>2</sub> Diet Declaration.<sup>4</sup> Environmental e-learning was offered for the third time in FY 2009 and attracted a total of 2,442 participants for a grand total of 6,360 participants during the three sessions. The CO<sub>2</sub> Diet Declaration is held twice a year (summer and winter) and has made significant inroads in the NYK Group, attracting a total of 10,926 participants.

## Collection of environmental-load data

We collect environmental-load data from group companies around the world to monitor our overall environmental load and encourage environmental initiatives. In Japan, we collect 15 categories of data from 72 companies (265 workplaces); internationally, seven categories from 114 companies. This data helps the organization to "visualize" its environmental load

### Group Environment Awards

The Group Environment Awards is open to 56 group companies in Japan as a means of encouraging the horizontal deployment of innovative environmental activities by group companies. Five companies were recognized in FY 2009: Oita Rinkai Kogyo Co. Ltd., Kinkai Yusen Logistics Co. Ltd., Nippon Cargo Airlines Co. Ltd., Nippon Container Terminals Co. Ltd., and Yokohama Building Co. Ltd. In October 2009, the NYK Environmental Management Meeting highlighted activities to promote better waste sorting, reduce fuel consumption by the fleet, and improve employee awareness. NYK will continue to promote environmental activities at the group level through the Group Environment Awards.



Awards ceremony

## Energy conservation activities in the office

The NYK Group is actively involved in the reduction of CO2 emissions from its offices. The renovations to the headquarters building (Yusen Building) completed in early 2008 installed energy-conservation equipment and also provided the impetus for a number of action plans to involve the entire organization in energy savings. FY 2008 achieved a 10 percent year-on-year reduction; FY 2009 continued with the Energy Conservation Action Plan (see below) and also introduced a new ESCO5 service to achieve a target of a further 5 percent year-on-year savings.6 In February 2010, the headquarters building received an award for excellence at the Business Electricity Usage Rationalization Awards held by the Kanto Area Electricity Usage Rationalization Committee of the Japan Electric Association. The committee cited the building's organizational administration, electric power management, facilities management, efficiency, and other noteworthy matters.

#### [List of energy conservation activities]

- Renovation of facilities in headquarters building Installation of energy-conservation air-conditioning, energy-efficient lighting, and rooftop greenery
- **Energy Conservation Action Plan**

Lighting: Spaced lighting

Lights off during lunch breaks

Elevators: Staggered operation

Air-conditioning:

Review of temperature settings and

hours of operation

Use of blinds

Participation in local environmental events Marunouchi Water Sprinkling Project 2009 Cool Earth Day Lights Down event



Rooftop greenery on the headquarters building

#### 1 Environment Day

Commemorates the United Nations Conference on the Human Environment held in Stockholm on June 5, 1972. Japan's Basic Environment Law designates this day as Environment Day. Its purpose is to increase interest and understanding of conservation and motivate participation in conservation activities.

## **✓** NYK-Point

#### 2 Senryu and slogan contest

Contest for environment senryu poems (Japan) and environment slogans (international) on ecological themes. A total of 394 senryu poems and 406 slogans were submitted.

## **✓** NYK-Point

### 3 Photo competition

A total of approximately 350 entries were received from approximately 80 NYK Group employees.

#### 4 CO<sub>2</sub> Diet Declaration

An energy conservation program promoted by the Ministry of the Environment and Tokyo Electric Power Company to help prevent global warming. A seedling is contributed for every 20 people participating.

#### 5 ESCO

Abbreviation of "Energy Service Company." Proposals to reduce energy consumption and improve operations are rewarded by paving out a part of the cost savings.

6 Total CO2 emissions for the four areas of electric power, gas, gasoline, and steam. For electric power, year-on-year comparisons are made using the standard CO2 emissions coefficient of 0.555kg-CO<sub>2</sub>/kW established by the Ministry of the Environment. Offices are the total for the headquarters, Kyushu branch office, and Sapporo branch office (closed at the end of July 2009).

Details >>> p. 12-13

NYK Super Eco Ship 2030 charts a course to the future

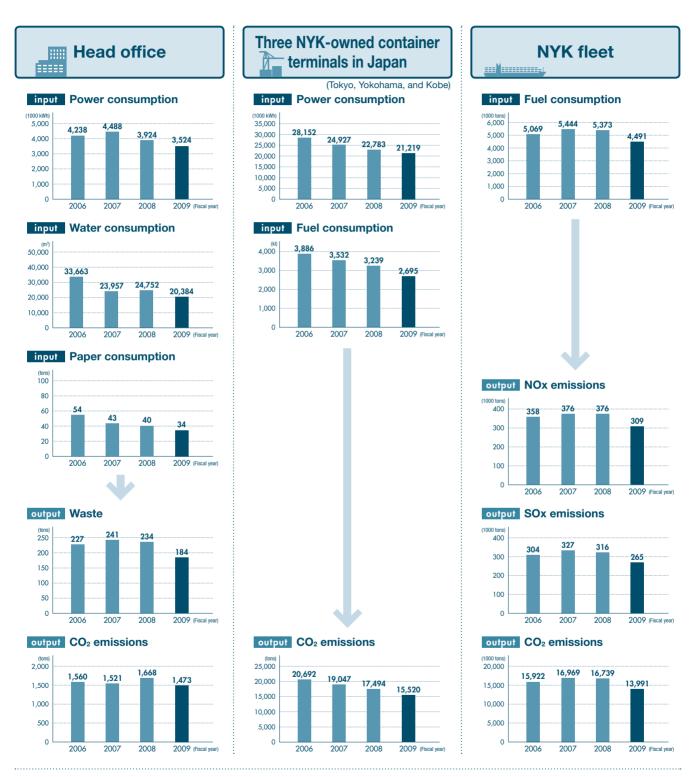
#### Other activities are described on the website.

- Environmental Activities
- Environmental Communication

CSR > Environment



# **Environmental performance data**



Changes in the figures

• Headquarters: In addition to energy-conservation activities, we have also installed ESCO services to improve the operation of building infrastructure and reduce electric power consumption. CO₂ emissions are calculated from electric power consumption using the coefficient of 0.418kg-CO₂/kWh provided by Tokyo Electric Power Co. Ltd. (FY 2008 actuals). Waste volume includes 144 tons recycling, for a recycling rate of 78 percent. • Three NYK-owned container terminals in Japan: CO₂ emissions from electric power are based on coefficients provided by the power suppliers for each terminal; CO₂ emissions from fuel are based on the coefficients found in the Law Concerning the Promotion of the Measures to Cope with Global Warming. CO₂ emissions show a year-on-year decline because of declines in handling volumes (external factor) and initiatives to save energy at terminals (internal factor). • NYK fleet: This data is calculated on the basis of coefficients found in Illino Guidelines and the fuel volume supplied to the fleet of NYK Line (parent company only, subsidiaries not included). CO₂ emissions are declining thanks to reductions in fleet numbers and initiatives to conserve energy.

# **Environmental accounting**

The basic concept behind NYK's environmental accounting is to correctly capture the expenses required for the protection of the environment and repeatedly review our findings so that we can engage in appropriate environmental conservation as a part of our business activities.

### FY 2009 summary

During FY 2009 we emphasized the development of innovative technologies and programs to protect the global environment. This resulted in an increase in the environmental R&D budget. Environmental protection costs are in decline, but effective efforts to reduce fuel consumption (for example, slower cruising speeds) enabled us to achieve environmental protection on par with the previous year. FY 2009 safety activities also produced a significant decline in economic losses from accidents and other problems.

#### Comparison of all costs and resultant savings related to environmental activities (Unit: millions of ven)

|  | FY 2008                       |                         | FY 2009                       |                         |
|--|-------------------------------|-------------------------|-------------------------------|-------------------------|
|  | Environmental protection cost | Year-on-year<br>savings | Environmental protection cost | Year-on-year<br>savings |
| Reduction of accidents through safety promotion activities   | 952                           | 975                     | 982                           | 1,445                   |
| Prevention of global warming and air pollution, conservation of marine environments, conservation of resources, and deployment of environmental technologies | 6,154                         | 11,251                  | 3,272                         | 10,843                  |
| Total  | 7,106                         | 12,226                  | 4,254                         | 12,288                  |

#### NYK's in-house classifications

(Unit: millions of ven)

| Environmental policies  | Objectives  | ltems   | Environmental protection cost |
|---|---|---|-------------------------------|
| 1. Continual improvement                                      | Maintenance of environment management systems   | Construction, operation, certification (including personnel costs)  | 237                           |
| Complying with laws and regulations                           | Restorative work in response to environmental degradation   | Restorative work in response to marine pollution, etc.  | 0                             |
| 3. Ensuring safe operations                                   | Reducing accidents and trouble  | NAV9000 and other safety promotion activities (including personnel costs)   | 744                           |
| Prevention of global warming<br>and air pollution, protecting | Preventing global warming and air use of fuel additives to improve combustion; underwater cleaning; propeller polishing, etc. |   | 537                           |
| ocean environments, saving                                    | Preventing marine pollution   | Adoption of silicon coating of ship bottom plates, etc.   | 48                            |
| natural resources   | Conservation of natural resources   | Environmentally conscious purchases <sup>1</sup>  | 0                             |
|   | Preventing global warming and air pollution   | Adoption of a ship design that reduces wind resistance; installation of propulsion improvement units; installation of electronically controlled engines; and installation of shoreside electric power units | 1,251                         |
| 5. Use of environment-friendly                                | Preventing destruction of the ozone layer   | Ship air-conditioners, refrigerators / freezers,2 etc.  | 84                            |
| technologies  | Preventing marine pollution   | NYK bilge treatment system <sup>3</sup>   | 296                           |
|   | R&D expenses  | Development of air lubrication system and related technologies, experimental installation of ballast water systems on ships, and development of international voyage management system, etc.                | 1,023                         |
| 6. Environment education                                      | Raising environmental awareness and promoting our Green Policy  | Environmental e-learning, environmental protection campaigns, etc.  | 6                             |
| 7. Community activities to promote environmental awareness    | Environmental information disclosures, social contributions, etc.   | Expenses for CSR report, sponsorship of environmental organizations, etc.   | 28                            |
| Total   |   |   | 4,254                         |

## ■ Classification according to the Ministry of the Environment's Environmental Accounting Guidelines (Unit: millions of yen)

| Environmental protection costs   |                   |                     |  |  |  |
|--|-------------------|---------------------|--|--|--|
| Classification   | Investment        | Expenses            |  |  |  |
| (1) Cost within NYK business activities a. Pollution prevention cost b. Global environmental protection cost c. Recycling cost   | 296<br>1,394<br>0 | 48<br>477<br>0      |  |  |  |
| (2) Upstream and downstream cost   | 0                 | 0                   |  |  |  |
| (3) Management activity cost a. Operation and maintenance of environmental management systems b. Environmental information disclosure, environmental advertising c. Environmental education and training d. Expenses for environmental improvement | 0<br>0<br>0<br>0  | 982<br>13<br>6<br>0 |  |  |  |
| (4) R&D cost<br>Environmental-load reduction   | 0                 | 1,023               |  |  |  |
| (5) Social contribution activities cost<br>Social contribution activities  | 0                 | 15                  |  |  |  |
| (6) Environmental damage response cost   | 0                 | 0                   |  |  |  |
| Total  | 1,690             | 2,564               |  |  |  |

## Comparison of all costs and resultant savings related to environmental activi-

\* Reduction in accident rate from safety promotion activities calculated as year-on-year value. Effect compared to FY 1996 (company's base year) was 4.550 million ven.

### NYK's in-house classifications

- 1 The company uses FSC-certified paper, but the price difference is not substantial and is thus recorded as zero
- 2 Shipboard air-conditioning and refrigerator/ freezer units switched from HCFC-22 to R-404a refrigerant, an environment-friendly HFC-based mixed refrigerant
- 3 The result has not been noted because of difficulties in quantification

## Calculation methodology

- 1. The period is from April 1, 2009, to March 31, 2010 (The calculation period for activities to reduce ship fuel consumption is from January 1, 2009, to December 31, 2009.)
- 2. The scope is primarily business activities associated with the headquarters and branch offices, NYK-operated terminals, fleet, and ancillary activities in Japan (Expenses to maintain ISO14001 certifications are included for certified group companies in North America. Europe, South Asia, and East Asia)
- 3. The Ministry of Environment's FY 2005 Environmental Accounting Guidelines were
- 4. Investment amount refers to cost for depreciable environment-related facilities acquired during the term
- 5. Expenses include maintenance and management of facilities for the purpose of environmental protection and associated personnel costs, but do not include depreciation
- 6. Cost calculations do not include costs to comply with legal requirements and the like, and cover only voluntary environmental protection
- 7. Results are noted only to the extent that impact can be quantified

# **Human resources data**

(head office) (As of March 31, 2010)

\* This data is for NYK employees (office workers and seafarers). Seafarers include those who currently work in the office.

\* Figures are for the full year or as at the end of the fiscal year.

## **■** Employee demographics

| Long-term employees                      |       |        |       |  |
|--|-------|--------|-------|--|
|  | Male  | Female | Total |  |
| Office worker                            | 736   | 279    | 1,015 |  |
| Seafarer currently working in the office | 239   | 1      | 240   |  |
| Seafarer                                 | 368 9 |        | 377   |  |
| Total                                    | 1,343 | 289    | 1,632 |  |

| Newly hired employees * Includes recent graduates and mid-career hires |                              |  |  |  |  |  |  |
|--|------------------------------|--|--|--|--|--|--|
| Male Female Total  |                              |  |  |  |  |  |  |
| 26   | 10                           | 36   |  |  |  |  |  |
| 29   | 2                            | 31   |  |  |  |  |  |
| 55   | 12                           | 67   |  |  |  |  |  |
|  | t graduates and m Male 26 29 | Male         Female           26         10           29         2 |  |  |  |  |  |

| Definite-term employees |      |        |       |  |  |  |  |
|-------------------------|------|--------|-------|--|--|--|--|
|                         | Male | Female | Total |  |  |  |  |
| Office worker           | 66   | 24     | 90    |  |  |  |  |
| Seafarer                | 6    | 0      | 6     |  |  |  |  |
| Total                   | 72   | 24     | 96    |  |  |  |  |

| Employees under age 30 th | at left the company |
|---------------------------|---------------------|
| Office worker             | Seafarer            |
| 2                         | 1                   |

| Average period of employment in the company * Seafarers include those who currently work in the office (Unit: Yea |                              |      |  |  |  |
|---|------------------------------|------|--|--|--|
| Office worker (male)  | orker Office worker Soafarer |      |  |  |  |
| 17.6  | 19.3                         | 16.3 |  |  |  |

| Members of management and employees in management positions  * Includes two outside directors (a male Excludes seafarers and employees currently seconded to other companies  * Includes two outside directors (a male and a female) in the data from FY 2008 |      |        |      |        |      | rectors (a male<br>ta from FY 2008 |
|---|------|--------|------|--------|------|------------------------------------|
|   | 20   | 07     | 20   | 08     | 20   | 09                                 |
|   | Male | Female | Male | Female | Male | Female                             |
| Directors, Corporate Officers   | 40   | 0      | 37   | 1      | 39   | 2                                  |
| General Managers  | 34   | 1      | 37   | 2      | 38   | 1                                  |
| Managers or higher  | 116  | 17     | 131  | 18     | 126  | 17                                 |
| Total employees   | 444  | 184    | 451  | 194    | 472  | 189                                |

## Occupational accidents

\*There were errors in the figures reported for "occupational accidents" in FY 2007 and FY 2008. We apologize for any confusion and provide corrected figures in this document.

| Number of occupational accidents and lost time caused by the occupational accidents  * Excludes accidents that occurred while commuting to work  2007 2008 2009 |   |   |   |  |  |
|---|---|---|---|--|--|
|   |   |   |   |  |  |
| Seafarer  | 1 | 1 | 2 |  |  |

|               | Lost time caused by occupational accidents * Lost time of one day or longer |      |      |  |  |  |
|---------------|---|------|------|--|--|--|
|               | 2007  | 2008 | 2009 |  |  |  |
| Office worker | 0   | 0    | 0    |  |  |  |
| Seafarer      | 0   | 0    | 0    |  |  |  |

| Number of fatalities |      |      |      |  |  |
|----------------------|------|------|------|--|--|
|                      | 2007 | 2008 | 2009 |  |  |
| Office worker        | 0    | 0    | 0    |  |  |
| Seafarer             | 0    | 0    | 0    |  |  |

## **■** Employee support system

\*There were errors in the figures reported for "number of employees that have utilized the maternity leave program" in FY 2007 and FY 2008 and in "number of employees that have utilized the parental leave program" reported in FY 2007. We apologize for any confusion and provide corrected figures in this document.

| Average amount of paid leave taken * Excludes seafarers and employees currently seconded to other companies 'Includes paid summer holidays (Unit: Day) |      |      |  |  |  |
|--|------|------|--|--|--|
| 2007   | 2009 |      |  |  |  |
| 12.1   | 13.1 | 13.5 |  |  |  |

| Number of employees that have utilized the maternity leave program * Total users, excluding those who have left the company |      |      |      |  |  |
|---|------|------|------|--|--|
|   | 2007 | 2008 | 2009 |  |  |
|   | 5    | 7    | 7    |  |  |

| Number of employees that have utilized the parental leave program * Total users, excluding those who have left the company |        |      |        |      |        |
|--|--------|------|--------|------|--------|
| 2007   |        | 2008 |        | 2009 |        |
| Male   | Female | Male | Female | Male | Female |
| 2  | 14     | 0    | 11     | 0    | 8      |

| Percentage of eligible female employees that have utilized the parental leave program |      |      |  |  |  |
|---|------|------|--|--|--|
| 2007  | 2008 | 2009 |  |  |  |
| 100%  | 100% | 100% |  |  |  |

| for parents * Total users, excluding those who have left the company |               |   |  |   |  |
|--|---------------|---|--|---|--|
| 2007   |               | 2008                                      |  | 2009  |  |
| Female   | Male          | Female                                    | Male   | Female  |  |
| 12   | 1             | 20  | 0  | 15  |  |
|  | rs, excluding | rs, excluding those who 07 20 Female Male | rs, excluding those who have left the control of th | rs, excluding those who have left the company  7 2008 20  Female Male Female Male |  |

| Number of working mothers  * Mothers with children in compulsory education or younger  * Excludes mothers on maternity or parental leave |      |      |  |  |
|--|------|------|--|--|
| 2007   | 2008 | 2009 |  |  |
| 29   | 37   | 35   |  |  |

| care leave program * Total users, excluding those who have left the company |        |      |        |      |        |  |
|---|--------|------|--------|------|--------|--|
| 20  | 07     | 20   | 08     | 20   | 09     |  |
| Male  | Female | Male | Female | Male | Female |  |

Number of employees that have utilized the family-

| Percentage of employees with disabilities<br>(FY 2007 figures as at June 1) |       |       |  |
|---|-------|-------|--|
| 2007  | 2009  |       |  |
| 2.30%   | 2.41% | 2.14% |  |

### Education

| Average number of days participating in training programs (Uni |      |      |      |  |  |
|--|------|------|------|--|--|
| 2007 2008  |      |      | 2009 |  |  |
| Office worker  | 3.9  | 5.7  | 6.3  |  |  |
| Seafarer   | 10.3 | 11.2 | 9.6  |  |  |

| Average expenditure | (Unit: Yen) |         |         |
|---------------------|-------------|---------|---------|
| 2007 2008           |             |         | 2009    |
| Office worker       | 332,773     | 244,630 | 243,571 |
| Seafarer            | 828,600     | 744,826 | 475,830 |

## Long-term study; training abroad (examples)

- MBA program abroad (two years; one person selected every two years)
- Short-term study-abroad program (four weeks; five to ten people selected each year)

# **Human resources data**

(employees hired through group companies)

(As of March 31, 2009)

## ■ Employee demographics (excluding the NYK head office)

| Number of employee                       | s (six months to perm | anent) * Excludes | * Excludes non-Japanese seafarers |  |  |
|--|-----------------------|-------------------|-----------------------------------|--|--|
|  | Male                  | Female            | Total                             |  |  |
| Office worker                            | 21,001                | 10,465            | 31,466                            |  |  |
| Seafarer currently working in the office | 53                    | 0                 | 53                                |  |  |
| Seafarer                                 | 1,162                 | 5                 | 1,167                             |  |  |
| Total                                    | 22,216                | 10,470            | 32,686                            |  |  |

| Number of employees (contracts for less than six months) |      |        |       |  |  |  |
|--|------|--------|-------|--|--|--|
|  | Male | Female | Total |  |  |  |
| Office worker  | 388  | 425    | 813   |  |  |  |

| Newly hired employees   |       |        |       |  |  |
|-------------------------|-------|--------|-------|--|--|
|                         | Male  | Female | Total |  |  |
| Office worker, seafarer | 3,243 | 2,091  | 5,334 |  |  |

| Employees departing over past year (In Japan: hired over past three years; international: hired over past year) |      |       |     |  |  |
|---|------|-------|-----|--|--|
|   | Male | Total |     |  |  |
| Office worker, seafarer   | 275  | 190   | 465 |  |  |

## ■ Occupational accidents (excluding the NYK head office)

| Number of fatalities |      |  |  |  |
|----------------------|------|--|--|--|
|                      | 2008 |  |  |  |
| Office worker        | 10   |  |  |  |

## **■ Employee support system** (excluding the NYK head office)

|      | Number of employees that utilized the parental leave program |        |       |     |  |  |
|------|--|--------|-------|-----|--|--|
| Male |  | Female | Total |     |  |  |
|      | Office worker  | 137    | 265   | 402 |  |  |

<sup>\*</sup> Overseas employees on leave caring for children under one year of age, and employees in Japan who utilized the parental leave program

| Average amount of paid leave taken |     |  |  |  |
|------------------------------------|-----|--|--|--|
| 2008                               |     |  |  |  |
| Office worker                      | 58% |  |  |  |

<sup>\*</sup> Includes leave carried over from previous years

## ■ Regional breakdown of all employees in the NYK Group (including the NYK head office)

| Number of office workers |       |        |            |               |           |                 |               |        |
|--------------------------|-------|--------|------------|---------------|-----------|-----------------|---------------|--------|
| Country                  | Japan | Europe | South Asia | North America | East Asia | <b>O</b> ceania | Latin America | Total  |
| Number of companies      | 84    | 53     | 59         | 15            | 31        | 6               | 11            | 261    |
| Number of office workers | 9,009 | 6,297  | 9,625      | 3,149         | 3,691     | 1,006           | 633           | 33,413 |

<sup>\*</sup> Includes Japanese seafarers assigned to onshore duties and employees seconded from outside the group

| Seafarers                    |     |                             |                               |                                |        |  |  |
|------------------------------|-----|-----------------------------|-------------------------------|--------------------------------|--------|--|--|
|                              | NYK | Japan-based group companies | International group companies | Seafarers of chartered vessels | Total  |  |  |
| 258 vessels under management | 368 | 253                         | 9,467                         | _                              | 10,088 |  |  |
| 521 chartered vessels        | _   | _                           |                               | 11,462                         | 11,462 |  |  |
| All 779 vessels              | 368 | 253                         | 9,467                         | 11,462                         | 21,550 |  |  |

<sup>\*</sup> Excludes seafarers currently working in the office

Total number of NYK Group employees (office workers and seafarers) 54,963

<sup>\*</sup> The data above indicates numbers for Japan-based and international consolidated subsidiaries, equity-method affiliates, and other companies important to operations and meeting certain requirements in terms of number of employees.

## **Outside opinion**

Sachiko Kishimoto **Executive Director** Center for Public Resources Development



I think CSR should not be viewed as a cost to companies but as an investment, as the reform and reorientation of management toward communication with society. The CSR Report 2010 focuses on the basic philosophy of "contributing to the betterment of societies through safe and dependable monohakobi" and the three CSR pillars of "sound and highly transparent management," "safe, environment-friendly operations," and "workplaces that instill pride." In this outside opinion, I would like to discuss areas in which I think NYK has done a remarkable job, and areas in which I think we can expect more from you in the

With respect to "sound and highly transparent management," the "New Horizon 2010" medium-term management plan positions "strengthening CSR management" as the foundation for its basic strategy, and I give you high marks for building a CSR promotion system that includes domestic and foreign group companies, for formulating CSR guidelines for partners and suppliers, and for enhancing the CSR training provided to employees. I think you have done a good job in creating a coherent system. It was therefore unfortunate that a group company was found to have violated the competition law and you have been forced to post reserves against a large fine. I think it is urgent for NYK to reform the awareness and perceptions of its group companies around the world.

Moving on to "environmental activity," I am impressed by the vision of developing a zero-emissions ship by 2050, and the clear "back-casting" approach of developing NYK Super Eco Ship 2030, which will reduce CO2 emissions by approximately 69 percent. In coordination with the business plan, the company is moving actively to conserve energy by reducing voyage speeds, using "missions" to promote fuel economy, and improving ship propellers.

I am also impressed by the clear statement that biodiversity is an important area that is closely related to your business. The stakeholder dialogue contains a discussion of ballast-water treatment, with experts offering a variety of creative ideas. In addition to the initiatives that you take on your own, I look forward to seeing you play a leadership role in industry and national-level programs to improve port facilities and increase environmental awareness on the part of customers.

When it comes to "ensuring safety," I would like to see an even greater effort made on safety as you diversify into offshore production and storage of crude oil and natural gas.

Looking at the goal of "workplaces that instill pride," one of the things that sets NYK apart is that at the frontlines its business is supported by a global workforce. You have your own education and training programs that attempt to move beyond differences of nationality and culture in order to ensure safety, and you also have excellent programs for the training of officer candidates. In the future, I would like to see you expand on these efforts for domestic and international NYK Group employees with safety and human rights programs for the more than 10,000 seafarers stationed on chartered vessels.

Finally, NYK has a long tradition of using its core services to contribute to society by providing transportation cooperation and disaster relief. With China, India, and other emerging economies becoming major players and with poverty as one of the underlying causes of piracy with its threat to operational safety, I think NYK needs to work more closely with NGOs and similar groups on activities that contribute to the development and stability of communities in the countries where you do business.

## Response to outside opinion



Naoya Tazawa Representative Director Senior Managing Corporate Officer Chief Executive of General Affairs / CSR Headquarters

Thank you for your evaluation of our NYK Group and the valuable opinions you have expressed. This report examines the NYK Group and its increasingly diverse workforce, focusing on how we move forward with diversification of nationalities and genders amidst changing economic environments. We are indeed diversifying our business by expanding into new fields, and we continue to view safety and environmental activities as our highest priorities and will continue to exert leadership in our industry.

One of the topics in the dialogue was biodiversity, and we confirmed its relationship to our business. We are grateful for the opinions provided by the experts and look forward to acting on them in the future.

The points that you have brought up will be reflected in our activities going forward as NYK moves closer to its goal of becoming a comprehensive global-logistics enterprise that supports people's lives through safe and dependable monohakobi.

## Awards and recognitions received from the general public during FY 2009

#### **April 2009**

- Crystal Symphony cruise ship awarded the Environmental Buoy Diploma by the Port of Stockholm in Sweden [Crystal **Cruises**1
- The Grand Alliance, a leading integrated consortium to which we belong in container liner shipping, named Best Container Shipping Alliance at the Asian Freight and Supply Chain Awards (AF-SCA)
- Given an award of excellence for the Green Flag vessel speed reduction program from the Long Beach Port Authority in the United States [Yusen Terminalsl

#### June 2009

- Crystal Serenity cruise ship given the environmental Venice Blue Flag Award by the Port of Venice in Italy for the second year in a row [Crystal Cruises]
- Three technology development projects undertaken by the NYK Group selected for subsidies under the Support for Technology Development for Curtailing CO<sub>2</sub> from Marine Vessels program administered by the Ministry of Land, Infrastructure, Transport and Tourism
- Received the Logistics Environmental Grand Prize from the Japan Federation of Freight Industries



■ Given the highest rating in the SMBC **Environmental Friendliness Assessment** Loan program by Sumitomo Mitsui Banking Corp.

### **July 2009**

Awarded the highest rating in the Mexico Super Companies 2009 corporate rankings published by Top Company, a Mexican consulting firm [NYK de Mexico S.A. DE C.V.]

- Named the World's Best Large-Ship Cruise Line in a reader survey conducted by U.S. travel magazine Travel + Leisure for the 14th consecutive year [Crystal Cruises]
- Named the Best Logistics Service Providers (sponsored by Frost & Sullivan) for the third consecutive year [NYK Logistics (Asia)]



#### September 2009

- Yusen Building (head office) rooftop garden received the Director's Award at the Organization for Landscape and Urban Green Technology Development's eighth annual Rooftop and Wall Greenery Technology competition in Japan
- Auriga Leader car carrier, which is equipped with solar panels, named Ship of the Year by European maritime journal Lloyd's List

## October 2009

- Auriga Leader car carrier, which is equipped with solar panels, awarded the Good Design Prize (sponsored by the Japan Industrial Design Promotion Organization). NYK Super Eco Ship 2030 given the Good Design Frontier Design Award (same sponsor).
- Given Best Large-Ship Cruise Line Award for the 16th consecutive year in a reader survey by the U.S. travel magazine Condé Nast Traveler [Crystal Cruises]

## November 2009

Named the Best Health and Safety Achievement in Transport & Logistics by the Institution of Occupational Safety and Health (UK) [NYK Logistics (UK)]

#### December 2009

- NYK's Communications on Progress (COP) recognized as a Notable COP by the United Nations Global Compact Office for the second time (following the first time in FY 2007)
- Four technology development projects by the NYK Group selected for additional subsidies under the Support for Technology Development for Curtailing CO2 from Marine Vessels program administered by the Ministry of Land. Infrastructure, Transport and Tourism

### January 2010

- Crystal Cruises selected as Best in Luxury by the U.S. travel magazine Travel Weekly. Numerous awards also received from travel magazines and travel agencies in other countries [Crystal Cruises].
- Asuka II cruise ship named Cruise Ship of the Year for the 18th consecutive year in a reader survey by specialty magazine Cruise [NYK Cruises]

### February 2010

Crystal Serenity cruise ship named No. 1 and Crystal Symphony named No. 2 in the International Division of Cruise Ship of the Year in a reader survey by the specialty magazine Cruise. Crystal Serenity cruise ship ranked No. 1 and Crystal Symphony No. 2 in the Large Ship category of Best Cruise Ship of the Year in a reader survey by the U.S. travel magazine Condé Nast Traveler [Crystal Cruises].



\* See p. 30 for the SRI portfolios that include NYK Line

Website >>> Home > News Releases> 2009, 2010



Corporate data (As of March 31, 2010)

Name: Nippon Yusen Kabushiki Kaisha (NYK Line)

Head office: 3-2, Marunouchi 2-chome

Chiyoda-ku, Tokyo 100-0005, Japan

Commencement of business: October 1, 1885

Capital: ¥144.3 billion

Number of consolidated companies:

Consolidated subsidiaries: 711 Equity-method affiliates: 74

#### Contact

Yusen Bldg., 3-2, Marunouchi 2-chome Chiyoda-ku, Tokyo 100-0005, Japan CSR Coordination Group

TEL.+81-3-3284-6224 FAX.+81-3-3284-6389

E-mail: csr@jp.nykline.com http://www.nyk.com/english













NYK's shares have been selected for inclusion in the SRI portfolios of a number of ratings agencies and other institutions. See p. 30 for the SRI portfolios that include NYK Line









This CSR report was created using environment-friendly waterless printing that does not produce toxic fluids. We selected soy ink and used FSC-approved paper produced from appropriately managed forests to create this report.

