














Bringing value to life.

Nippon Yusen Kabushiki Kaisha
 NYK Report **2018** Data book




Summary of CSR Activities in Fiscal 2017 and Outline of Next Year’s Targets 1

For fiscal 2017, we have summarized our CSR activities in accordance with the Group’s materiality — i.e., safety, the environment, and human resources — in addition to governance.















| | Initiatives | Fiscal 2017 targets | Achievement/progress of fiscal 2017 | Achievement rate | Fiscal 2018 targets |
|---|--|--|--|---|--|
| <div>Safety</div> <div></div> | Reduction of fleet accidents (Ensuring safety) | 1) Eliminate major accidents 2) Reduce fleet downtime (10 hours / year / vessel) 3) Conduct emergency preparedness and response | 1-1) Conduct NAV9000 audits (shipmanagement companies and ships) → Audited 287 vessels / 30 companies, 956 corrective action requests 1-2) Reviewed the NAV9000 quality standard for safe operation and support to ensure compliance with ISO9001:2015 (completed in August) 1-3) Near Miss 3000 activities (increased companies to be covered) → 44 target companies and 71,160 reports 1-4) Hold various safety promotion meetings and safety seminars → Held SEMC ^{*1} (May), fleet safety promotion meetings (twice in July), a Global SEMC ^{*1} meeting (August), and meetings among the president, captains, and chief engineers (in August and November and March 2018) 1-5) Distribute safety information → total of 49 documents 1-6) Conduct safety campaigns → visited 475 vessels / 856 participants 1-7) Developed method for preventing engine plant accidents by utilizing big data → Shared with relevant parties and conducted external forums (Sea Japan, Japan Bari-Ship, etc.) 2) Continue activities to minimize fleet downtime → (overall) 23.9 hours/vessel (of this 3.5 hours/vessel for engine trouble) 3-1) Conduct emergency response drills and reviews → 7 times 3-2) Conduct media response drill and reviews → conducted drill (December) and employee e-learning (November) |  | 1) Eliminate major accidents 2) Reduce fleet downtime (10 hours / year / vessel) 3) Conduct emergency preparedness and response |
| | Safety activities with vessel owners and customers | 1) Visit vessel owners and conduct seminars for vessel owners 2) Conduct LNG conferences 3) Formulate safety guidelines with customers, shipping companies, and classification societies | 1) Called for cooperation in blackout recovery tests for chartered vessels, held safety seminars, and shared information and exchanged opinions with vessel owners 2) Shared information with relevant outside parties, such as terminals, shipmanagement companies, customers, etc. (June, 14 participants) 3) Formulated safety guidelines for areas not covered by IMO, etc. together with maritime industry members such as customers, shipping companies, and classification societies (participated in committee twice a year) |  | 1) Visit vessel owners and conduct seminars for vessel owners 2) Conduct LNG conferences 3) Formulate safety guidelines with customers, shipping companies, and classification societies |
| | Prevention of accidents, investigation of causes, and gathering information | 1) Review safety standards at our terminals operating in Japan (across all terminals through a safety committee system) 2) Raise the on-site capabilities by cross-patrols conducted between terminals in Japan | 1) Inaugurated a working group comprising the Harbor Group, three terminals operated by NYK, and Asahi Unyu Kaisha Ltd. (prime contractor at Nagoya Port) to review safety standards and create a system to ensure operational safety 2) Conducted mutual safety patrols among terminals in Japan from January 2018 (i.e., patrols at each terminal patrolled other terminals) |  | 1) Adopt and implement an internal audit system. Evaluate whether work is conducted according to safety standards (all terminals scheduled to be audited by 2020) 2) Continue to raise on-site capabilities through mutual safety cross-patrols conducted among terminals in Japan |
| | Ensuring thorough safety management at shipyards and ship equipment manufacturers | Ensure safety management based on safety standards at each company | <ul style="list-style-type: none">Reviewed safety standards at meetings held by a supervisory office (five locations)Conducted monthly safety patrols with shipyards and shared results in monthly reportsRequested investigation of cause and formulation of measures for preventing reoccurrence when an accident occurs |  | Ensure thorough safety management based on safety standards at each company |
| | Preparation for disasters | 1) Update the groupwide business continuity plan (BCP) 2) Conduct disaster drill and BCP training to raise the effectiveness of disaster-prevention plans and business continuity plans | 1) Revised BCP documents in June (established disaster reporting system at our major facilities located in areas other than Southern Tokyo and made a list of important facilities, etc.) 2) Conducted disaster drill (twice) and BCP training (three times) Conducted emergency contact training utilizing IT tools for all employees |  | 1) Update the groupwide business continuity plan (BCP) 2) Implement BCP training and disaster-preparedness drill to increase the effectiveness of disaster prevention plans and business continuity plans |
| <div>The Environment</div> <div></div> | Promotion of environmental activities | 1) Maintain and expand the Group multisite environmental certification 2) Continually improve EMS ^{*2} manual 3) Acquire ISO14001:2015 certification 4) Share information throughout the Group and with concerned parties | 1) Maintain appropriate activities for each region and business sector and expand certification according to customer requirements → 55 companies and 146 sites 2) Formulate 2015 version of EMS manual → formulated on May 31, partially revised on January 25, 2018 3) Lead preparations for examining migration of overseas / domestic multisite → Conducted internal audit of related sites (October to November), external audit of related sites (December to March 2018), and prepared for final migration review on May 18, 2018 4-1) Held Safety & Environmental Management Committee (SEMC ^{*1}) meeting (May) 4-2) Held the Group Environmental Management Conference (November) |  | 1) Maintain the Group multisite environmental certification and enhance governance at sites 2) Continually improve EMS ^{*2} manual 3) Transition to ISO14001:2015 4) Hold Safety & Environmental Management Committee meeting 5) Hold the Group Environmental Management Conference |
| | Formulation of and adherence to shipping industry and the Company standards | Contribute to formulation of international rules for realization of sustainable societies through industry-wide effort | Actively contribute to formulation of international rules → participated in boards (industry group boards and IMO MEPC) |  | Contribute to formulation of international rules for realization of sustainable societies through industrywide effort |
| | Prevention of global warming | 1) Set CO ₂ emission reduction rates using environmental management indices (EMIs) “Establish environmental management benchmark: Improve fuel efficiency by 15% from fiscal 2010 levels by fiscal 2018” 2) Determine total CO ₂ emissions for the Group | 1) Implement fuel-saving initiatives and collect data for calculating environmental management indices (improvement rate, target number of vessels, and main engine average load rate) from vessels → Target number of vessels: 487; improvement rate of 14.3% compared to fiscal 2010 (including overseas group companies); main engine average load rate: 49.2% 2) Use environmental performance data tabulation system (Eco Track) → 244 offices in Japan (47 companies) and 149 offices overseas |  | 1) Establish environmental management benchmark (CO ₂ emission reduction rate): Improve fuel efficiency by 30% from fiscal 2015 levels by fiscal 2030 2) Determine total CO ₂ emissions for the Group |
| | Prevention of air pollution | Reduce NO _x and SO _x emissions | <ul style="list-style-type: none">Cooperate with California Speed Reduction Program → compliance rate at Long Beach: 98% (40 miles)Use shoreside power supply for moored vessels (increased vessels supporting AMP container units) → 41 vessels with AMP container unitsFit NO_x / SO_x emission reduction devices → adopted water emulsion devices for four newly constructed vessels |  | Reduce NO _x and SO _x emissions |
| | Marine environment conservation Adoption of environmentally-friendly technologies, etc. | 1) Advance installation of ballast water management systems 2) Scrap ships in an environment-friendly manner 3) Advance installation of our Total Bilge System | 1) Expand installation → increased by 11 vessels for a total of 82 vessels 2) Adhere to ‘NYK Standards’ on ship recycling → 0 vessels decommissioned 3) Actively install on new ships → complied with standards for all vessels (six) |  | 1) Advance installation of ballast water management systems 2) Scrap ships in an environment-friendly manner 3) Advance installation of our Total Bilge System |
| | Efforts for saving resources, saving energy, reducing waste, and recycling, etc. | Reduce usage of paper, water, and electricity at headquarters office by 0.1% relative to fiscal 2012-2014 | Perform periodic measurements and internal information-sharing to ensure thorough office energy savings → Average rate from fiscal 2012 to 2014 was -20.9% for paper, +1.8% for water, and +2.3% for electricity |  | Reduce the water/paper consumption at the headquarters office and CO ₂ (electricity/steam) emissions by 0.5% compared to fiscal 2017 |

^{*1} SEMC: Safety & Environmental Management Committee

^{*2} EMS: Environmental Management System


[Self-evaluation standard] Achieved:  Almost Achieved:  Partially Achieved: 

Summary of CSR Activities in Fiscal 2017 and Outline of Next Year’s Targets 2

| | Initiatives | Fiscal 2017 targets | Achievement/progress of fiscal 2017 | Achievement rate | Fiscal 2018 targets |
|---|--|--|---|---|--|
| <div>The Environment</div> <div></div> | Stimulation of interest in environmental conservation activities | 1) Conduct environmental training 2) Conduct environmental e-learning programs 3) Share information with group employees | 1) Conduct environmental training and workshops → conducted training for new employees and CSR training 2) Create environmental e-learning content and improve the number of participants (participation rate) → participation rate of 96.6% between November and January 2018 3) Report environmental articles in internal newsletter and conduct environmental conservation campaigns → continued to post environmental articles and held environmental <i>senryu</i> competition in Japan, in addition to photo contests (June to September) |  | 1) Conduct environmental training 2) Conduct environmental e-learning programs 3) Conduct in-house environmental publicity activities |
| | Disclosure of environmental information | 1) Issue NYK Report 2) Respond to external survey on the environment 3) Provide up-to-date environmental information through website 4) Disclose CO ₂ emissions information | 1) Review, update, and release content → Japanese version released in July and English version released in August 2) Actively participate in external surveys and present the environmental activities of the Group → 24 surveys 3) Review and update the included items → updated twice (August and January 2018) 4) Update the data for the CO ₂ e-calculator, participate in the <u>CCWG</u> ^{*1} of the U.S. NPO BSR, perform data evaluations for scopes 1, 2, and 3, and obtained data assurance for scopes 1, 2, and 3 |  | 1) Issue NYK Report 2) Respond to external survey on the environment 3) Provide up-to-date environmental information through website 4) Disclose CO ₂ emissions information |
| <div>Human Resources</div> <div></div> | Workstyle reforms | 1) Establish an environment and cultivate a workplace atmosphere that enable diverse human resources to play an active role 2) Reduce working hours and promote a work-life balance by fostering awareness of improving efficiency and productivity 3) Promote measures to improve employee health | 1) Conducted Ikuboss seminars for managers, Ikuboss seminars for directors from 2017, mother/father seminars, interviews before maternity leave and before and after returning to work, and assisted employees with time limitations on how and when they can work 2) Expanded work-at-home trials to managers, implemented go-home-early days for parents and children, proposed defining a premium day for going home early, changed the rules for taking summer and winter vacation, reviewed work styles by changing core work times, etc., and raised employee awareness on improved labor productivity 3) Certified as a White 500 company for excellent health and productivity management two years in a row Arranged for trainers to provide personal advice, held a charity run around Tokyo’s Imperial Palace, and ensured thorough implementation of health checks |  | 1) Establish an environment and cultivate a workplace atmosphere that enable diverse human resources to play an active role 2) Reduce working hours and promote a work-life balance, establish an environment and improve efficiency and productivity via workstyle reforms and IT utilization, etc. 3) Promote measures to improve employee health |
| | Human resources development in Japan and overseas | Implement a variety of training and human resources exchange programs in Japan and overseas based on the <u>HR philosophy</u> ^{*2} to enable the group employees to fully utilize their abilities in a broad range of business areas | <ul style="list-style-type: none">Implemented NYK Business College training for enhancing the total ability of group employees (more than 60 courses)Started operation of the Expert 2017 seafarer cultivation schemeImplemented Global NYK/YLK Week 2017 (October) |  | Implement a variety of training and human resources exchange programs in Japan and overseas based on the <u>HR philosophy</u> ^{*2} to enable Group employees to fully utilize their abilities in a broad range of business areas |
| | Seafarer training | 1) Conduct review of NYK Maritime College (NMC) 2) Educate seafarers and transfer knowledge in LNG projects | 1) Conducted NMC reviews to improve vessel safety and the quality of training according to various needs. Further enhanced the knowledge and navigation skills of group seafarers through education and training at NMC 2) Steadily promoted education of Angolan and Nigerian seafarers through basic education at educational facilities and practical onboard experience to teach everything from the basics of vessel navigation to the operation of LNG vessels |  | 1) Effectively and efficiently implement NMC Continue to conduct training with relevant parties and review the content of training to make NMC more effective 2) Educate seafarers and transfer knowledge of LNG projects |
| <div>Governance</div> <div></div> | Human rights due diligence, Human rights awareness | Recognizing human rights issues as risks: 1) Identify the current degree of risk and latent risks, etc. Work to recognize human rights issues involving the company’s business environment 2) Build company awareness on human rights issues (training, publicity, dealing with harassment, and enhancing measures for early detection) | 1) Participated in the Stakeholder Engagement Program held by CRT Japan to identify major human rights issues in each industry, check our efforts for handling the identified issues, and published these on our website 2) Conducted human rights awareness building during our new employee training and new manager training, shared information during Human Rights Week on the theme of business and human rights and eliminating harassment, and distributed to all new employees “human rights passports” that summarize the Universal Declaration of Human Rights |  | 1) Human rights due diligence/ impact assessment Understand, identify, and check NYK efforts regarding human rights issues via the Global Compact Promotion Committee, in addition to HR surveys and e-learning (CSR) for all Group companies 2) Human rights awareness Conduct human rights training and publicity activities during Human Rights Week |
| | Comprehensive compliance inspections | 1) Transmit CCO messages, then institute surveys and other measures (headquarters) 2) Conduct overall inspections (Japanese group companies) | 1) Transmitted a message from the CCO stating that “Dialog and discussion lead to improved awareness of compliance and self-cleansing”, conducted a survey on compliance awareness (1,871 respondents, 96% response rate), and administered an anonymous survey to identify employee opinions and concerns 2) Conducted overall inspections according to the business field and scope of each company (at 38 of 40 Japanese group companies) |  | 1) Transmit CCO messages, then institute surveys and other measures (headquarters) 2) Conduct overall inspections (Japanese group companies) |
| | Antitrust law risk assessment | 1) Implement reviews and antitrust law risk assessments (yearly) 2) Hold meetings of the Executive Committee Overseeing Thorough Antitrust and Anti-bribery Law Compliance | 1) Executed risk assessments and periodic inspections of target departments and group companies 2) Held meetings of the Executive Committee Overseeing Thorough Antitrust and Anti-bribery Law Compliance (September and March 2018) |  | 1) Conduct surveys, interviews, risk evaluations, and periodic inspections after risk assessment regarding antitrust law compliance at group companies in Japan and overseas as well as the various departments at the headquarters 2) Hold meetings of the Executive Committee Overseeing Thorough Antitrust and Anti-bribery Law Compliance |
| | Information system security measures | 1) Improve measures to counter viruses and hacking, etc., with the PDCA cycle and prevent internal information leaks 2) Improve the security awareness of group employees 3) Roll out ISMS-based security standards to group companies 4) Adopt new groupware | 1) Continual implementation 2) Implement e-learning and suspicious e-mail training, and disseminate information through bulletin boards to increase awareness 3) Individually handling group companies 4) Adoption complete at major group companies. Continue activities for adoption at all 100% owned subsidiaries |  | 1) Improve measures to counter viruses and hacking, etc., with the PDCA cycle and prevent internal information leaks 2) Improve the security awareness of group employees 3) Roll out ISMS-based security standards to group companies 4) Adopt new groupware |
| | Dialogue with investors | 1) Actively promote communication from the president and management, such as directors, at biannual small meetings with institutional investors and financial results briefings conducted four times a year, as well as the IR Division contacting investors 2) Visit people in charge of the exercise of voting rights at institutional investors to explain our governance system, etc., and engage in dialogue | 1) Financial results briefings conducted four times a year: Total 651 participants (excluding our directors, corporate officers, and employees) Small meetings with the president (twice in May and December): Total 23 companies participated 2) Visit people in charge of the exercise of voting rights at institutional investors in Japan and overseas (total 17 companies and 48 participants) |  | 1) Actively promote communication from the president and management such as directors at biannual small meetings with institutional investors and financial results briefings conducted four times a year, as well as contacting investors via IR Division 2) Visit people in charge of the exercise of voting rights at institutional investors to explain our governance system, etc., and engage in dialogue |
| | Ensuring thorough SCM (fuel supplier evaluations) | Employees in charge evaluate all suppliers that we deal with and reflect the results in future purchasing activities (Evaluation items include quality, delivery, price, support for trouble, the provision of information, etc.) | Purchasing agreements are being made upon multifaceted evaluations of suppliers in terms of price, service, and performance at the time of agreement and updated every three or six months We will continue to consider new evaluation methods and reflect them in systematic purchasing activities |  | Employees in charge evaluate all suppliers that we deal with and reflect the results in future purchasing activities (Evaluation items include quality, delivery, price, support for trouble, the provision of information, etc.) |

^{*1} CCWG: Clean Cargo Working Group

^{*2} HR philosophy: Continually develop diverse talent at all group companies across global fields

[Self-evaluation standard] Achieved:  Almost Achieved:  Partially Achieved: 

Promotion of Group Environmental Management

The NYK Group's Environmental Management Vision and Three Strategies (Formulated March 2005)

To 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

- Strategy 1 Reducing greenhouse gas emissions
- Strategy 2 Promoting social contribution through activities to conserve the global environment
- Strategy 3 Strengthening group environmental management

Scope of the NYK Group's Environmental Management System

- ① Worldwide transportation of goods by sea on a fleet of owned and chartered ships and feeder vessels, and on land by rail and truck and through the use of warehouse operations
- ② Cruise ship business
- ③ Container terminal business
- ④ Ship-management business
- ⑤ Offshore business
- ⑥ Airfreight business
- ⑦ Ocean & air forwarding and contract logistics business
- ⑧ Other businesses associated with the NYK Group

The NYK Group's Environmental Green Policy

- ① We, the NYK Group, adopt responsible practices with due regard to the environmental impacts of our corporate activities. We set and continually review objectives and targets for achieving our goal to protect our entire global environment and biodiversity.
- ② We seek not only to comply with safety and environmental regulations but also to implement in-house standards to improve our environmental performance and prevent pollution.
- ③ We commit ourselves to the safe operation of all our services via sea, land, and air, as well as operations at sea, terminals and warehouses.
- ④ We seek to reduce environmental loads by efficiently using resources, saving energy, reducing waste, encouraging material recycling, and particularly by minimizing emissions of greenhouse gases, ozone-depleting substances, and toxic matter.
- ⑤ We endeavor to minimize environmental loads and adopt environmentally friendly technologies when ordering and purchasing necessary resources, such as vessels and aircraft, for transportation services and cargo operations.
- ⑥ We endeavor to use education programs to raise environmental awareness among our employees and to ensure that they recognize the essence of this Green Policy by actively addressing environmental concerns.
- ⑦ We make wide-ranging social contributions in close partnership with local communities by disclosing environmental information and supporting environmental conservation initiatives.

President
Constituted on September 1, 2001
Amended on April 1, 2017

Global Environmental Management System

Under the Group's common environmental policy, 88 operating sites around the world and approximately 750 vessels (including chartered vessels^{*1}) have obtained ISO 14001 environmental certification^{*2}. The aggregate revenue of the 37 companies that have obtained this certification account for roughly 80% of the Group's total sales, making the Group's unique global system for certification a powerful business driver. Several Group companies^{*3} in Japan have also received Green Management certification^{*4}.

^{*1} **Chartered vessels** are ships leased from shipowners along with their fixtures and crew in a state capable of safe operation

^{*2} **ISO 14001 environmental certification** is the collective term for the international standard for environmental management systems issued by the International Organization for Standardization

^{*3} **Group companies with Green Management certification** were, as of June 1, 2018, Nippon Container Yuso Co. Ltd., Yusen Koun Co. Ltd., UNI-X Corporation, Asahi Unyu Kaisha Ltd., Kaiyo Kogyo Corporation, Yokohama Kyoritsu Warehouse Co. Ltd., Yusen Logitec Co. Ltd. (Narita Transport Section), and Hokuyo Kaiun Co. Ltd.

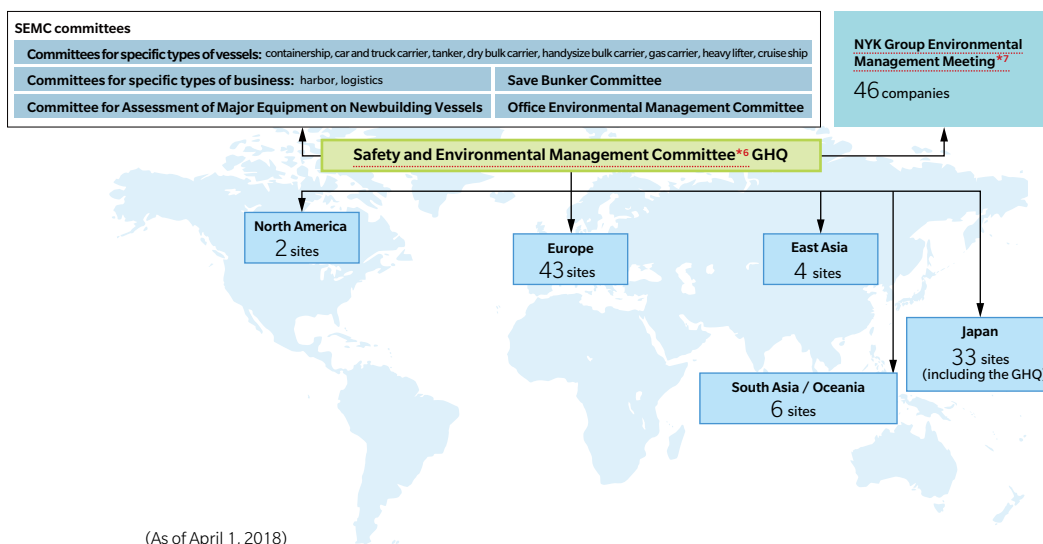
^{*4} **Green Management certification** is awarded by the Foundation for Promoting Personal Mobility and Ecological Transportation to transportation operator companies that carry out initiatives above minimum standards set in its Green Management Promotion Manual, such as promoting ecologically conscious driving and using low-emission vehicles

^{*5} **Multisite system** enables blanket certification for all a company's operating bases

^{*6} **The Safety and Environmental Management Committee (SEMC)** formulates group-wide environmental activity guidelines and conducts annual reviews of environmental management systems, with the president serving as chairman. The committee includes subcommittees that are responsible for specific vessel types, businesses, and projects. The Group's four overseas regions also have similar committees

^{*7} **The NYK Group Environmental Management Meeting** first commenced in 2006 and is held annually to provide a forum for main group companies in Japan to share information about their environmental initiatives, and to give special commendations to companies that have made outstanding efforts

Global Promotion of Environmental Activities and Multisite System^{*5}



Highlights of Fiscal 2017 Environmental Activities

● Activities by the Group ■ Outside awards/selection

April 2017

- Conducted internal environmental training on the theme of the Group's environmental initiatives (held semiannually)
- Started LNG fuel supply/sales business in Belgium
- Planted trees for Earth Day (April 22) in New Jersey, United States

May

- Held Safety and Environmental Management Committee (SEMC) meeting
- Held IBIS TWO joint committee meeting for four types of vessels

June

- Held environmental conservation campaigns for group companies in Japan and overseas (environmental photo and slogan competitions, and environmental *senryu* (short humorous or ironical *haiku*) competition in Japan)
- Participated in outdoor environmental training to celebrate World Environment Day (June 5) in Brazil
- Received grand prize category awards at the 18th Logistics Environment Award (Asahi Unyu Kaisha Ltd., UNI-X Corporation, and Yusen Koun Co. Ltd.)
- Awarded the Best Green Shipping Line for 2016, the fifth consecutive year from France's HAROPA port authorities
- Included in the FTSE4 Good Index for 15th straight year

July

- Supported Kishu Minabe Sea Turtle Research Project (since 2016)
- Received Ship of the Year 2016 award in the large cargo ship category, recognizing NYK Blue Jay's world's first energy-saving technology

August

- Conducted a crisis-response drill based on the scenario of a serious accident
- Participated in the Uchimizu project in Marunouchi, Tokyo reusing rainwater to keep the ground cool
- Performed beach cleaning in Qingdao, China
- Planted trees in Thailand

September

- Decided to deploy a binary cycle power generation system on a newly constructed vessel (expected to reduce vessel CO₂ emissions by 2.3% or more)
- Cleaned forests as part of the Clean Up the World Campaign in Poland
- Included in the Dow Jones Sustainability Indices (DJSI) for 15th year in a row

October

- ULTY, a boiler combustion-control optimization system developed by NYK Trading Corporation, received an award at the 45th Sasaki Prize
- Conducted internal audit for ISO14001 (until January 2018)
- Conducted internal environmental training on the theme of the Group's environmental initiatives (held semiannually)
- Concluded a memorandum of understanding to provide LNG bunkering services to four shuttle tankers operated by Norway-based oil and gas company Equinor (scheduled to start from 2020)
- Started production of solid fuel based on waste material (RPF: Refuse Paper & Plastic Fuel) (Honma Corporation)
- Received a score of A- in the CDP's climate change 2017 program

November

- Held the 11th Group Environmental Management Conference
- Held IBIS TWO joint committee meeting for four types of vessels
- Conducted e-learning on environmental themes (until January 2018)
- Held practical workshops on the theme of SDGs with the support of Fairtrade Label Japan, a nonprofit organization
- Performed beach cleaning in Dalian, China

December

- External audit of ISO14001 performed by LRQA (until May 2018)
- Selected for the Ministry of Land, Infrastructure, Transport and Tourism's "energy-saving" rating scheme for Japan's coastal ships (for *Sakigake* LNG-fueled tugboat and *Hidaka* Ro-Ro cargo ship (Kinkai Yusen Kaisha Ltd.))

January 2018

- Decided to install a wind-power generator at a completed automobile terminal in Belgium (ICO) as part of our efforts to promote the global expansion of green terminals (scheduled to start operation from fiscal 2019) (see pages 53 and 59 of the NYK Report)

February

- Performed beach cleaning in Manzanillo, Mexico

March

- Announced medium- to long-term environmental targets in the new medium-term management plan (see page 25 of the NYK Report)
- Committed the medium- to long-term environmental targets to SBTi (certified in June 2018) (see page 25 of the NYK Report)
- Developed a high-efficiency propeller utilizing actual sea data in collaboration with the Monohakobi Technology Institute and Japan Marine United Corporation (see page 21 of the NYK Report)
- Received MLIT approval of LNG-fueled bulk carrier R&D plan in the ministry's effort to support the introduction of cutting-edge vessels

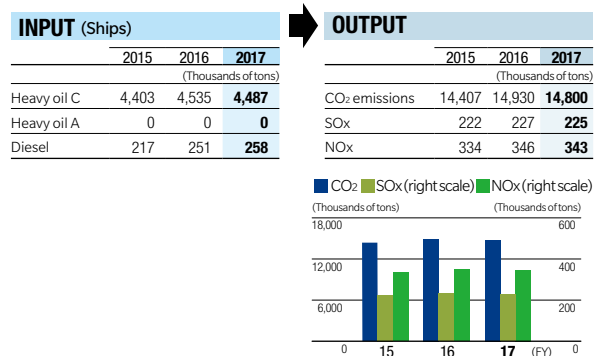
NYK Group GHG Emission Rates for Fiscal 2017

| Item | Emissions rate |
|---|----------------|
| Scope 1 Ships, aircraft, semitrailers, etc. | 94.4% |
| Scope 2 Offices | 0.3% |
| Scope 3 Vessel construction, commuting/business trips | 5.3% |
| Total | 100.0% |

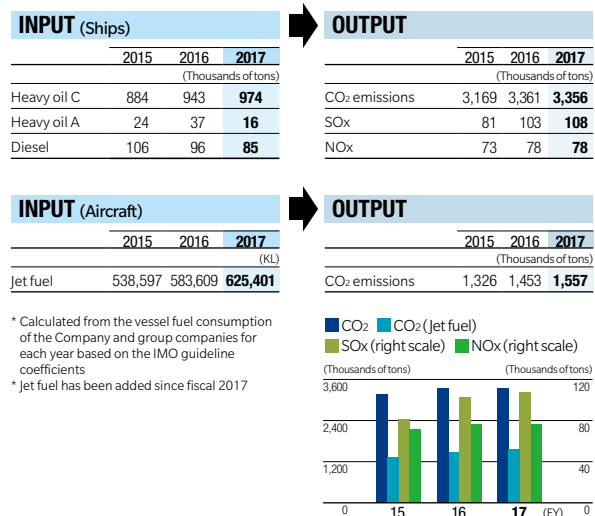
* GHG emission data for Scope 1, 2, and 3 has been verified by a third party organization.
Assurance statement (<https://www.nyk.com/english/csr/envi/manage/disclosure.html>)

Ships/Aircraft

NYK



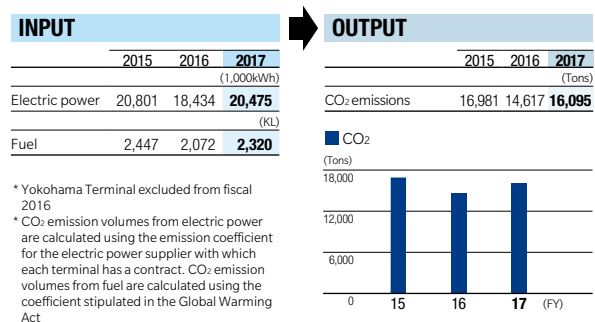
Japan and Overseas group companies



* Calculated from the vessel fuel consumption of the Company and group companies for each year based on the IMO guideline coefficients

* Jet fuel has been added since fiscal 2017

NYK-Operated Container Terminals in Japan

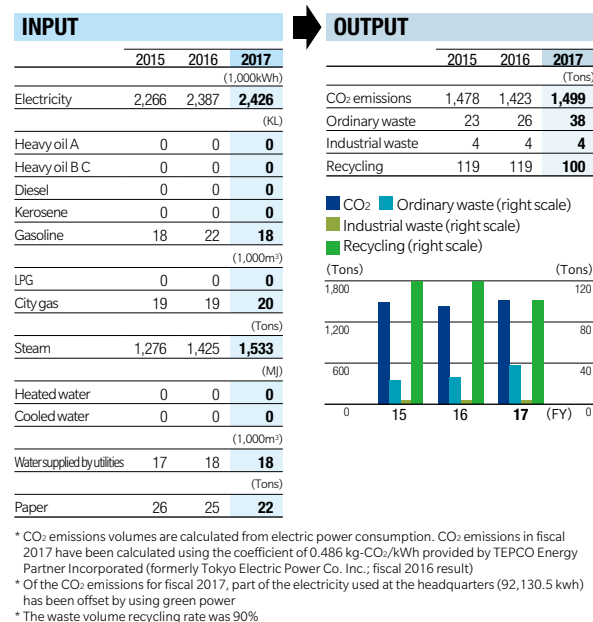


* Yokohama Terminal excluded from fiscal 2016

* CO₂ emission volumes from electric power are calculated using the emission coefficient for the electric power supplier with which each terminal has a contract. CO₂ emission volumes from fuel are calculated using the coefficient stipulated in the Global Warming Act

Offices Input indicates resources and energies we have used.

NYK Headquarters

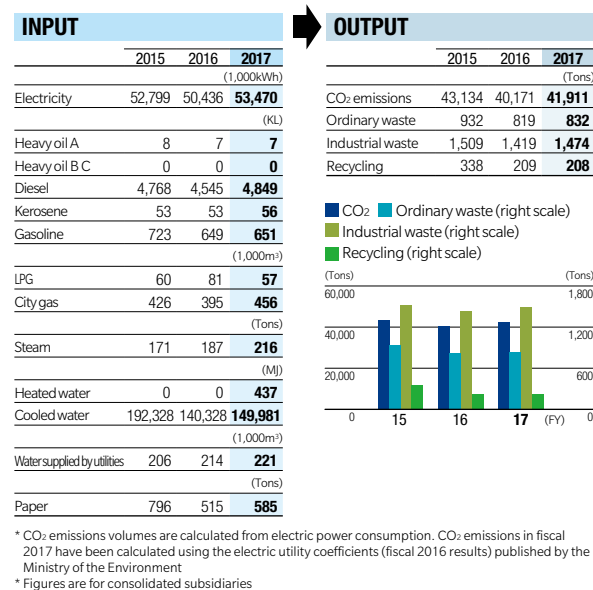


* CO₂ emissions volumes are calculated from electric power consumption. CO₂ emissions in fiscal 2017 have been calculated using the coefficient of 0.486 kg-CO₂/kWh provided by TEPCO Energy Partner Incorporated (formerly Tokyo Electric Power Co. Inc.; fiscal 2016 result)

* Of the CO₂ emissions for fiscal 2017, part of the electricity used at the headquarters (92,130.5 kWh) has been offset by using green power

* The waste volume recycling rate was 90%

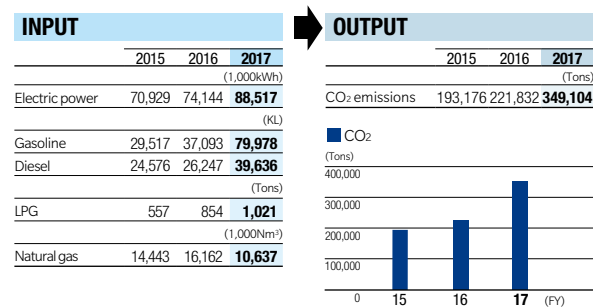
Group companies in Japan



* CO₂ emissions volumes are calculated from electric power consumption. CO₂ emissions in fiscal 2017 have been calculated using the electric utility coefficients (fiscal 2016 results) published by the Ministry of the Environment

* Figures are for consolidated subsidiaries

Overseas group companies



* CO₂ emissions volumes are calculated from electric power consumption. CO₂ emissions have been calculated using Greenhouse Gas (GHG) Protocol coefficients

* Figures are for consolidated subsidiaries

* In fiscal 2017, we expanded the number of reporting overseas group companies from 101 to 199 business sites to improve the accuracy of the data.

Environmental Accounting

The basic concept behind our 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.

Fiscal 2017 Overview

In fiscal 2017, we focused on initiatives for conserving the marine environment and curbing global warming, such as adopting low-friction, antifouling paint for ship hulls, removing surface roughness through bilge blasting, and retrofitting existing vessels with SOx scrubbers. As a result, environmental conservation costs increased. Promotion of fuel consumption reductions also increased the environmental conservation effect compared to the previous year.

Comparison of All Costs and Results Related to Environmental Activities

| | FY2016 | | FY2017 | |
|--|-------------------------------|----------------------|-------------------------------|----------------------|
| | Environmental protection cost | Year-on-year savings | Environmental protection cost | Year-on-year savings |
| (Millions of yen) | | | | |
| Prevention of global warming and air pollution, conservation of marine environments, conservation of resources, and deployment of environmental technologies | 2,309 | 3,068 | 2,911 | 3,400 |

NYK's In-house Classifications

| Environmental policies | Objectives | Items | Environmental protection cost |
|--|---|--|-------------------------------|
| (Millions of yen) | | | |
| 1. Continual improvement | Maintenance of environment management systems | Construction, operation, ISO certification (including personnel costs) | 87 |
| 2. 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) | 197 |
| 4. Prevention of global warming and air pollution, protecting ocean environments, saving natural resources | Preventing global warming and air pollution | Use of fuel additives to improve combustion; activities to reduce ship fuel consumption; propeller polishing, etc. | 650 |
| | Preventing marine pollution | Use of corrosion-resistant steel in VLCC cargo tanks, etc. | 0 |
| | Conservation of natural resources | Environmentally conscious purchases* | 0 |
| 5. Use of environment friendly technologies | Preventing global warming and air pollution | Installation of electronically controlled engines, installation of exhaust gas economizers and other energy-saving devices, low-sulfur fuel measures, etc. | 1,091 |
| | Preventing destruction of the ozone layer | Ship air-conditioners, refrigerators / freezers, etc. | 0 |
| | Preventing marine pollution | Ballast water management systems and the NYK bilge treatment system, etc. | 296 |
| | R&D expenses | Smart fleet operations, Technology to reduce the CO ₂ and NOx emissions of large main engines in vessels | 582 |
| 6. Environment education | Raising environmental awareness and promoting our Green Policy | Environmental e-learning, environmental protection campaigns, etc. | 1 |
| 7. Community activities to promote environmental awareness | Environmental information disclosures, social contributions, etc. | Expenses for NYK Report, sponsorship of environmental organizations, etc. | 7 |
| Total | | | 2,911 |

* The Company uses FSCR-certified paper, but the price difference is not substantial and is thus recorded as zero

Classification According to the Environmental Accounting Guidelines of the Ministry of the Environment

Environmental protection cost

| Classification | Investment | Expenses |
|--|------------|----------|
| (Millions of yen) | | |
| (1) Cost within NYK business activities: | | |
| a. Pollution prevention cost | 561 | 60 |
| b. Global environmental protection cost | 441 | 975 |
| c. Recycling cost | 0 | 0 |
| (2) Upstream and downstream cost | 0 | 0 |
| (3) Management activity cost: | | |
| a. Operation and maintenance of environmental management systems | 0 | 284 |
| b. Environmental information disclosure, environmental advertising | 0 | 4 |
| c. Environmental education and training | 0 | 1 |
| d. Expenses for environmental improvement | 0 | 0 |
| (4) R&D cost: | | |
| Environmental-burden reduction | 0 | 582 |
| (5) Social contribution activities cost: | | |
| Social contribution activities | 0 | 3 |
| (6) Environmental damage response cost | 0 | 0 |
| Total | 1,002 | 1,909 |

Calculation methodology:

- The period is from April 1, 2017, to March 31, 2018 (The calculation period for activities to reduce ship fuel consumption is from January 1, 2017, to December 31, 2017.)
- The scope is primarily business activities associated with NYK's headquarters and branch offices, NYK-operated terminals, fleet, and ancillary activities in Japan (Expenses to maintain ISO 14001 certification are included for certified group companies in North America, Europe, South Asia, and East Asia.)
- The Ministry of the Environment's fiscal 2005 Environmental Accounting Guidelines were used
- Investment amount refers to cost for depreciable environment-related facilities acquired during the term
- Expenses include maintenance and management of facilities for the purpose of environmental protection and associated personnel costs, but do not include depreciation
- Cost calculations do not include costs to comply with legal requirements and the like and cover only voluntary environmental protection activities
- Results are noted only to the extent that impact can be quantified

Human Resources Data

NYK Group (Including NYK headquarters)

Number of employees of consolidated companies (long-term employees, employees on contracts for over six months)

Employee Demographics

| | | FY2015 | FY2016 | FY2017 |
|---|---------------------------|---------------|---------------|---------------|
| Total number of employees (a) | | 34,276 | 35,935 | 37,820 |
| By region | Japan | 8,204 | 8,336 | 8,156 |
| | Europe | 5,423 | 5,686 | 7,390 |
| | South Asia | 12,213 | 13,093 | 13,788 |
| | North America | 2,760 | 2,779 | 2,667 |
| | East Asia | 3,876 | 4,103 | 3,975 |
| | Oceania | 385 | 479 | 420 |
| | Central and South America | 1,415 | 1,459 | 1,424 |
| Number of employees promoted to director by region*1 | Japan | | | |
| | Male | 276 | 295 | 283 |
| | Female | 2 | 3 | 6 |
| | Europe | | | |
| | Male | 55 | 62 | 66 |
| | Female | 4 | 5 | 7 |
| | South Asia | | | |
| | Male | 86 | 86 | 92 |
| | Female | 9 | 7 | 12 |
| | North America | | | |
| | Male | 33 | 29 | 30 |
| | Female | 5 | 2 | 1 |
| | East Asia | | | |
| | Male | 39 | 38 | 38 |
| | Female | 3 | 3 | 4 |
| | Oceania | | | |
| | Male | 11 | 9 | 6 |
| | Female | 0 | 2 | 2 |
| | Central and South America | | | |
| | Male | 8 | 6 | 5 |
| | Female | 0 | 2 | 2 |

*1 National staff hired locally. Excludes employees seconded from headquarters and other organizations

Employee Diversity

| | | FY2015 | FY2016 | FY2017 |
|---|--------------------------------|---------------|---------------|---------------|
| Number of non-Japanese seafarers | Total (b) | 21,171 | 19,281 | 19,081 |
| | Vessels under group management | 9,071 | 7,533 | 7,179 |
| | Chartered vessels | 12,100 | 11,748 | 11,902 |
| Ratio of female employees (%) | | 34.9*1 | 34.9 | 35.2 |
| Ratio of female managers (%)*2 | | 21.5 | 21.7 | 23.4 |

*1 An error in the fiscal 2015 values included in the NYK Report 2017 has been corrected

*2 Managers or higher

| | | | FY2015 | FY2016 | FY2017 |
|--|---------------------------|--------|--------|--------|--------|
| Ratio of management by region and gender (%)**1 | Japan | Male | 91.1 | 90.6 | 89.9 |
| | | Female | 8.9 | 9.4 | 10.1 |
| | Europe | Male | 79.7 | 78.6 | 69.5 |
| | | Female | 20.3 | 21.4 | 30.5 |
| | South Asia | Male | 69.9 | 70.3 | 67.6 |
| | | Female | 30.1 | 29.7 | 32.4 |
| | North America | Male | 70.1 | 68.9 | 67.4 |
| | | Female | 29.9 | 31.1 | 32.6 |
| | East Asia | Male | 69.5 | 68.1 | 67.0 |
| | | Female | 30.5 | 31.9 | 33.0 |
| | Oceania | Male | 82.8 | 83.5 | 85.9 |
| | | Female | 17.2 | 16.5 | 14.1 |
| | Central and South America | Male | 75.0 | 78.9 | 79.4 |
| | | Female | 25.0 | 21.1 | 20.6 |
| By gender | Male | | 22,673 | 23,753 | 24,864 |
| | Female | | 11,603 | 12,182 | 12,956 |
| By job type | Office workers*2 | | 33,068 | 34,708 | 36,630 |
| | Seafarers*3 | | 1,208 | 1,227 | 1,190 |
| New hires | Total | | 6,185 | 6,473 | 6,263 |
| | Male | | 4,234 | 4,267 | 4,070 |
| | Female | | 1,951 | 2,206 | 2,193 |

*1 National staff that are managers or higher. Includes employees seconded from headquarters and other organizations

2 Includes navigation officers and engineers at the office, and employees seconded from group companies

*3 Excludes seafarers hired outside Japan

* Navigation officers and engineers either hold a seafaring license or are in the process of acquiring one at a maritime college

Number of Group Employees (including non-Japanese seafarers)

| | FY2015 | FY2016 | FY2017 |
|----------------------|---------------|---------------|---------------|
| Total (a + b) | 55,447 | 55,216 | 56,901 |

NYK Headquarters

Employees Demographics

| | | | FY2015 | FY2016 | FY2017 |
|---|---|--------------|--------------|--------------|--------------|
| Total number of employees | | | 1,674 | 1,697 | 1,710 |
| By gender | | Male | 1,356 | 1,374 | 1,388 |
| | | Female | 318 | 323 | 322 |
| Long-term employees | Office workers (Excludes navigation officers and engineers at the office) | Male | 751 | 756 | 763 |
| | | Female | 267 | 268 | 268 |
| | Seafarers currently working at the office (navigation officers and engineers at the office) | Male | 255 | 261 | 272 |
| | | Female | 5 | 6 | 7 |
| | Seafarers | Male | 296 | 298 | 294 |
| | | Female | 9 | 11 | 11 |
| Fixed-term employees | Office workers | Male | 48 | 51 | 51 |
| | | Female | 37 | 38 | 36 |
| | Seafarers | Male | 6 | 8 | 8 |
| | | Female | 0 | 0 | 0 |
| Long-term employees and fixed term employees | Office workers (Excludes navigation officers and engineers at the office) | | 1,103 | 1,113 | 1,118 |
| | Seafarers currently working at the office (navigation officers and engineers at the office) | | 260 | 267 | 279 |
| | Seafarers | | 311 | 317 | 313 |
| Average age (years old) | Office workers (Excludes navigation officers and engineers at the office) | | 41.1 | 40.8 | 40.8 |
| | Seafarers (Includes navigation officers and engineers at the office) | | 38.2 | 37.9 | 38.1 |
| Age range*1 | Office workers (Excludes navigation officers and engineers at the office) | Under 30 | 195 | 212 | 217 |
| | | 30-49 | 567 | 555 | 537 |
| | | 50 and older | 256 | 257 | 277 |
| | Seafarers (Includes navigation officers and engineers at the office) | Under 30 | 146 | 147 | 147 |
| | | 30-49 | 349 | 363 | 357 |
| | | 50 and older | 70 | 66 | 80 |
| New hires*2 | Total | | 66 | 77 | 65 |
| | Office workers (Excludes navigation officers and engineers at the office) | Male | 33 | 38 | 33 |
| | | Female | 8 | 8 | 5 |
| | Seafarers (Includes navigation officers and engineers at the office) | Male | 24 | 28 | 25 |
| | | Female | 1 | 3 | 2 |
| | | | 0.9 | 1.6 | 0.1 |
| Rate of turnover within 3 years after hire (%) | Office workers (Excludes navigation officers and engineers at the office) | | 3.1 | 2.6 | 4.8 |
| Ratio of retirement for personal reasons (%) | Seafarers (Includes navigation officers and engineers at the office) | | 0.9 | 0.8 | 1.1 |
| Turnover rate at NYK (%) | | | 4.0 | 3.8 | 3.1 |

*1 Excludes fixed-term employees

*2 Includes new graduates and mid-career hires

| Employee Diversity | | FY2015 | FY2016 | FY2017 |
|--|--|--------|--------|--------|
| Ratio of female employees (%) | Office workers (Includes navigation officers and engineers at the office) | 21.3 | 21.2 | 21.0 |
| | Seafarers | 3.0 | 3.6 | 3.6 |
| Ratio of female managers*1 (%) | Office workers (Includes navigation officers and engineers at the office) | 15.2 | 15.1 | 16.0 |
| | Seafarers | 0.0 | 0.0 | 0.0 |
| Employment ratio of people with disabilities (%) | | 2.5 | 2.5 | 2.4 |

*1 Office workers include employees at manager or higher. Seafarers include captains and chief engineers. The calculation method has been changed for both types (female managers divided by the total number of managers)

| Occupational Health and Safety | | FY2015 | FY2016 | FY2017 |
|--|---|--------|--------|--------|
| Number of occupational accidents*1 | Total | 7 | 4 | 7 |
| | Office workers (Includes navigation officers and engineers at the office) | 4 | 2 | 1 |
| | Seafarers | 3 | 2 | 6 |
| Number of work-related deaths | Total | 0 | 0 | 0 |
| | Office workers (Includes navigation officers and engineers at the office) | 0 | 0 | 0 |
| | Seafarers | 0 | 1 | 0 |
| Number of lost days caused by occupational accidents | Total | 242 | 77 | 42 |
| | Office workers (Includes navigation officers and engineers at the office) | 182 | 0 | 0 |
| | Seafarers | 60 | 77 | 42 |

*1 Excludes commuting accidents

| Employee Support System | | FY2015 | FY2016 | FY2017 |
|--|--------|---|--------|--------|
| Average number of days of paid leave taken*1 | | 14.1 | 16.8 | 17.0 |
| Number of employees who took maternity leave*2 | | 9 | 16 | 16 |
| Number of employees who used parental leave program*2 | Total | 24 | 35 | 40 |
| | Male | 6 | 15 | 16 |
| | Female | 18 | 20 | 24 |
| Ratio of employees who returned to work after taking parental leave (%) | | 90.0 (Number of employees who left the Company: 1) | 100.0 | 100.0 |
| Retention rate of employees who used parental leave program (%) | | 100.0 | 100.0 | 100.0 |
| Number of employees who used shortened working hours program*2 | Total | 22 | 16 | 14 |
| | Male | 0 | 0 | 0 |
| | Female | 22 | 16 | 14 |
| Number of working mothers*3 | | 51 | 52 | 54 |
| Number of employees who used family-care leave program*2 | Total | 1 | 1 | 0 |
| | Male | 1 | 1 | 0 |
| | Female | 0 | 0 | 0 |
| Ratio of employees who returned to work after taking family-care leave (%) | | NA | NA | 100.0 |
| Retention rate of employees who used family-care leave program (%) | | NA | NA | 100.0 |

*1 Excludes seafarers and employees currently seconded to other companies / Includes paid summer holidays

*2 Total number of users, excluding those who left the Company

*3 Mothers with children in compulsory education or younger / Excludes mothers on maternity or parental leave

| Education | | FY2015 | FY2016 | FY2017 |
|--|--|---------|---------|---------|
| Average number of days participating in training programs | Company average | - | 13.5 | 11.7 |
| | Office workers*1 (Includes navigation officers and engineers at the office) | 6.8 | 6.6 | 5.8 |
| | Seafarers | 34.4 | 39.5 | 34.6 |
| Average expenditure on education and training programs (yen) | Company average | - | 298,470 | 267,037 |
| | Office workers*2 (Includes navigation officers and engineers at the office) | 181,410 | 184,962 | 144,940 |
| | Seafarers | 614,410 | 719,175 | 743,068 |

*1 Excludes workers trained outside the Company

*2 Programs for office workers trained inside or outside the Company



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