



NYK Group  
ESG Story 2022

# APPENDIX

# The NYK Group ESG Story

## Summary of Initiatives Enhanced in FY2021

### NYK Group ESG management

- S** Launching the Sustainable Growth Task Force

#### Implementing initiatives to create new value

##### Ensuring safe ship operations

- A** Safety Goal: Complete elimination of serious accidents during land, air, and marine transportation
- S** Carrying out initiatives for the social implementation of autonomous ships
- S** **A** Expanding and enhancing systems for safe ship operations

##### Reducing GHG emissions

- A** Placing the NYK Group's CO<sub>2</sub> emissions in the context of sector CO<sub>2</sub> emissions
- S** Actively investing to achieve net zero GHG emissions
- A** Exploring and forming partnerships to achieve decarbonization

##### Taking on ambitious initiatives in the energy field

- S** Offshore wind power
- S** Ammonia supply chain
- S** Hydrogen supply chain
- S** CO<sub>2</sub> transportation business
- S** Increasing participation in international decarbonization initiatives

##### Addressing social issues

- S** MarCoPay
- S** **A** Advancing the NYK Group Sustainability Initiatives

#### Reinforcing human resources and organizations —Linking human resource strategies to management strategies

- S** Conducting a global engagement survey in FY2022

##### Fostering personnel who drive transformation

- A** Examples of innovation from NYK Digital Academy
- A** Diversity of navigation officers and engineers
- A** Welcoming our first NTMA-graduate captain and strengthening job-specific training

##### Building an organization that fully leverages diversity

- A** Aiming for women to account for 30% of managers by 2030

##### Evolving assessment systems and workstyles

- S** Launching the New Workstyle Project
- A** Revamping our human resource system

#### Strengthening the foundations of ESG management

##### Reinforcing governance of the Group and reconfirming compliance with human rights

- S** Designating ESG Navigators
- S** Identifying future tasks in the further advancement of ESG management
  - Stepping up human rights initiatives: establishing a subcommittee
  - Strengthening the KPI management structures of ESG management
  - Reflecting ESG factors in executive compensation

## Implementing initiatives to create new value

### Ensuring safe ship operations

- P.5** Safety Goal: Complete elimination of serious accidents during land, air, and marine transportation
- P.6** Expanding and enhancing systems for safe ship operations
  - SHINRAI—Assessing the risks associated with ships and ship management companies
  - Dualog Drive and SIMS3—Utilizing ship data to avoid dangerous scenarios
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### Reducing GHG emissions

- P.9** Placing the NYK Group's CO<sub>2</sub> emissions in the context of sector CO<sub>2</sub> emissions
- P.10** Exploring and forming partnerships to achieve decarbonization

### Addressing social issues

- P.11** Advancing the NYK Group Sustainability Initiatives

## Reinforcing human resources and organizations

—Linking human resource strategies to management strategies

└ Promoting diversity and inclusion (composition of the NYK Group's workforce)

### Fostering personnel who drive transformation

- P.15** Examples of innovation from NYK Digital Academy
- P.16** Diversity of navigation officers and engineers
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### Building an organization that fully leverages diversity

- P.18** Aiming for women to account for 30% of managers by 2030

### Evolving assessment systems and workstyles

- P.19** Revamping our human resource system

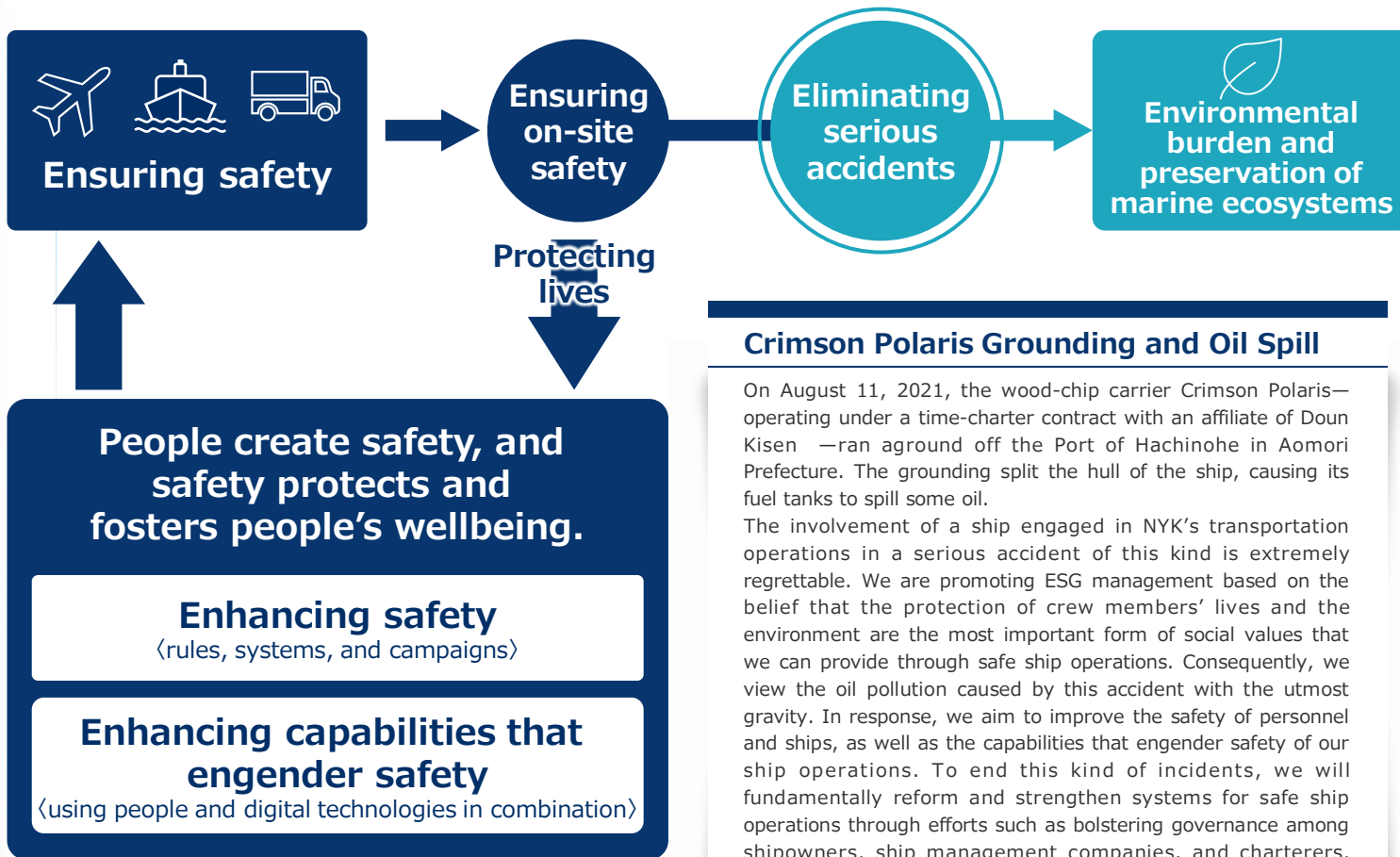
APPENDIX

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# Implementing initiatives to create new value

# Safety Goal: Complete elimination of serious accidents during land, air, and marine transportation

Aiming to eliminate serious accidents during land, air, and marine transportation, in addition to protecting lives and the environment, by ensuring safety in all NYK Group-related operations



## Crimson Polaris Grounding and Oil Spill

On August 11, 2021, the wood-chip carrier Crimson Polaris—operating under a time-charter contract with an affiliate of Doun Kisen —ran aground off the Port of Hachinohe in Aomori Prefecture. The grounding split the hull of the ship, causing its fuel tanks to spill some oil.

The involvement of a ship engaged in NYK’s transportation operations in a serious accident of this kind is extremely regrettable. We are promoting ESG management based on the belief that the protection of crew members’ lives and the environment are the most important form of social values that we can provide through safe ship operations. Consequently, we view the oil pollution caused by this accident with the utmost gravity. In response, we aim to improve the safety of personnel and ships, as well as the capabilities that engender safety of our ship operations. To end this kind of incidents, we will fundamentally reform and strengthen systems for safe ship operations through efforts such as bolstering governance among shipowners, ship management companies, and charterers.

(Excerpt from a message issued by NYK’s president on August 25, 2021)

# Expanding and Enhancing Systems for Safe Ship Operations

## SHiNRAI — Assessing the risks associated with ships and ship management companies —

Assessment scores of ships and ship management companies



Trouble data



Port State Control ship inspection data  
(number of detentions and deficiencies)

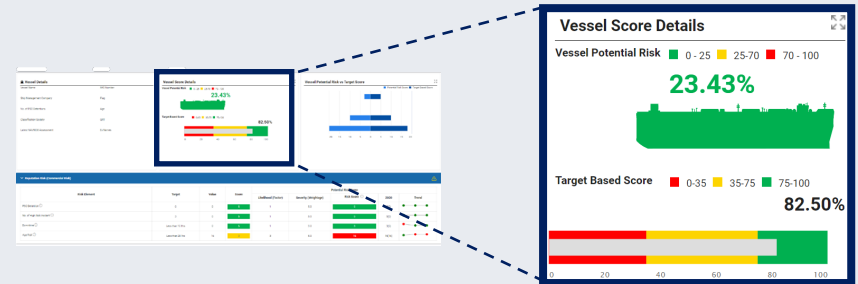


Near-miss reports, sickness injury reports and LTIF\*2



### SHiNRAI Sustainable Hyperintelligent Initiative by NYK for Risk profiling and Assurance Integrated System

Integrating KPIs derived from respective databases and comprehensively assessing the risks associated with ships and ship management companies



#### Offices



- Sharing information to sales divisions
- Providing data to an in-house system for the quantitative assessment of the condition of ships

#### NAV9000 assessors



- Conducting more-effective NAV9000 assessments of ships and ship management companies

\*1 Key indicator Sharing Enhancement and Knowledge Initiative: A database comprising the accidents involving and issues of NYK-related ships (operating, owned, and co-owned ships, in addition to ships managed by Group companies, etc.)

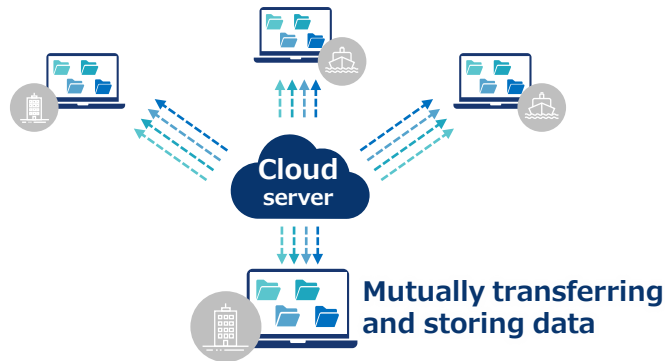
\*2 Lost time injury frequency: The number of work-related accidents per 1 million person-hours

# Expanding and Enhancing Systems for Safe Ship Operations

## Dualog Drive and SIMS 3 — Utilizing ship data to avoid dangerous scenarios —

### Dualog Drive

Providing efficient, stable ship-to-shore communications services regardless of the satellite communications provider

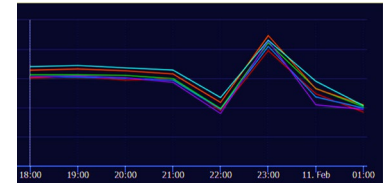


Sharing data on ship operations, fuel efficiency, and sea conditions

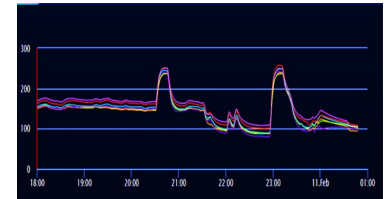
### SIMS 3

Enabling the collection and utilization of highly transparent data in accordance with GHG reduction initiatives and industry standards

**SIMS 2**  
Data at 60-minute intervals

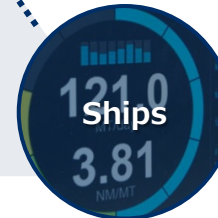


**SIMS 3**  
Data at 1-minute intervals



Enabling detailed, real-time verification when anomalies detected or issues arise

➤ As NYK's ability to analyze data on the safety of ship operations improves, it is becoming possible to implement analysis logic in a more detailed and sophisticated manner. Also, it will help in reducing environmental burden by preventing serious accidents in advance.



SIMS 3 being introduced to ships  
Aiming to introduce it to approximately 200 ships

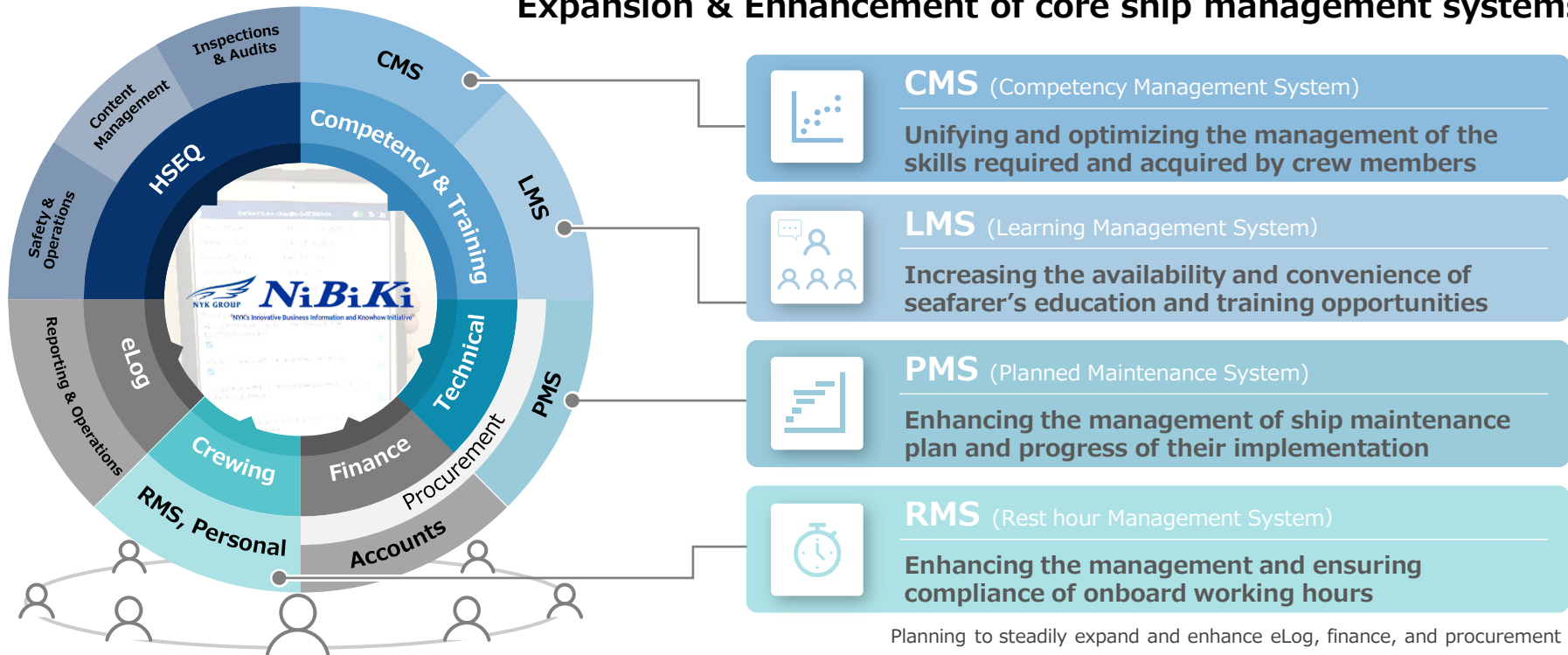


# Expanding and Enhancing Systems for Safe Ship Operations

**NiBiKi** — Reducing workloads through common business platforms —



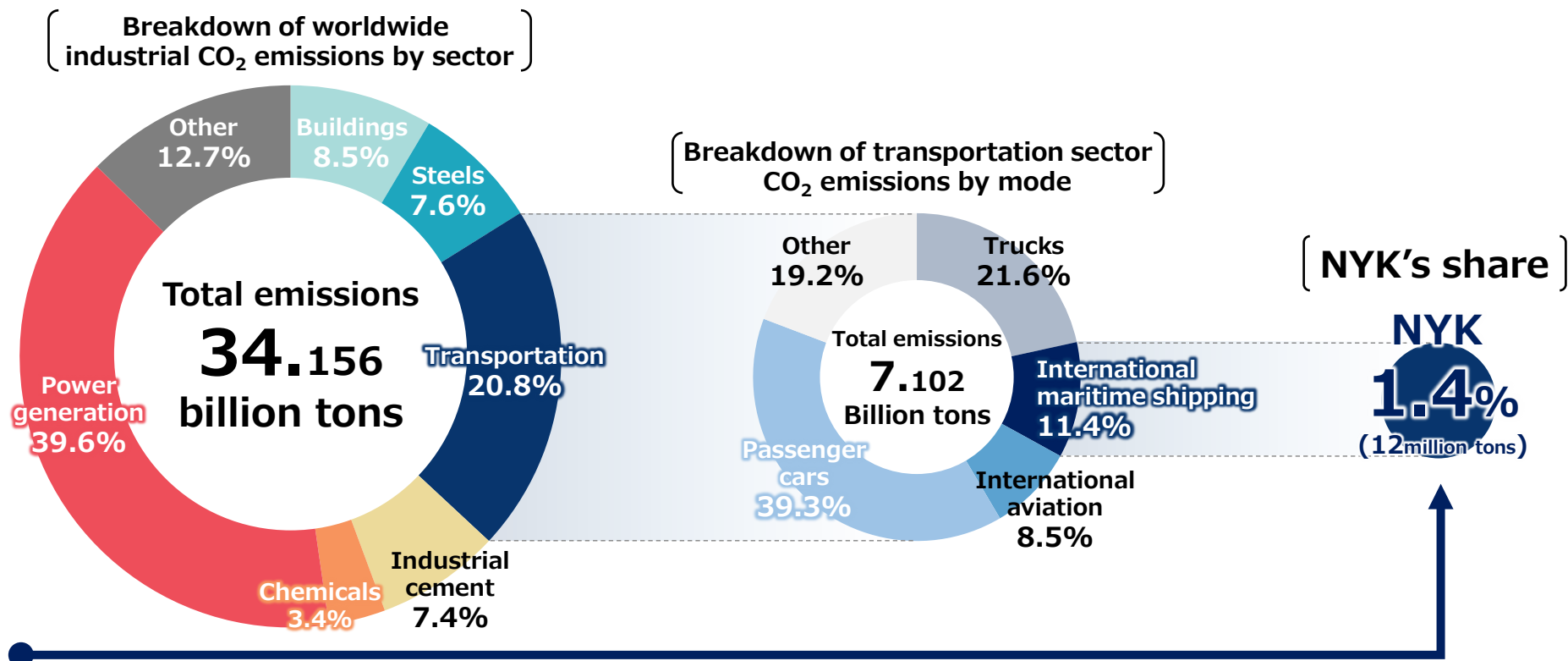
## Expansion & Enhancement of core ship management systems





# Placing the NYK Group's CO<sub>2</sub> Emissions in the Context of Industrial Sector CO<sub>2</sub> Emissions

Breakdown of worldwide industrial CO<sub>2</sub> emissions by sector, breakdown of transportation sector CO<sub>2</sub> emissions by mode, and NYK's share of international maritime shipping CO<sub>2</sub> emissions



**0.03%** The NYK Group accounts for worldwide industrial CO<sub>2</sub> emissions.

## Exploring and Forming Partnerships to Achieve Decarbonization

### Investing in an Australian carbon credit sales company

Investing in and collaborating with the company with the aims of securing a new source of earnings and acquiring expertise in the carbon credit business and its development



### Promoting low-carbonization and decarbonization through a start-up accelerator program

With a view to developing personnel and fostering innovative ideas inside and outside the Group, conducting a program tasked with cultivating and supporting start-ups that help realize a low- or carbon-free society



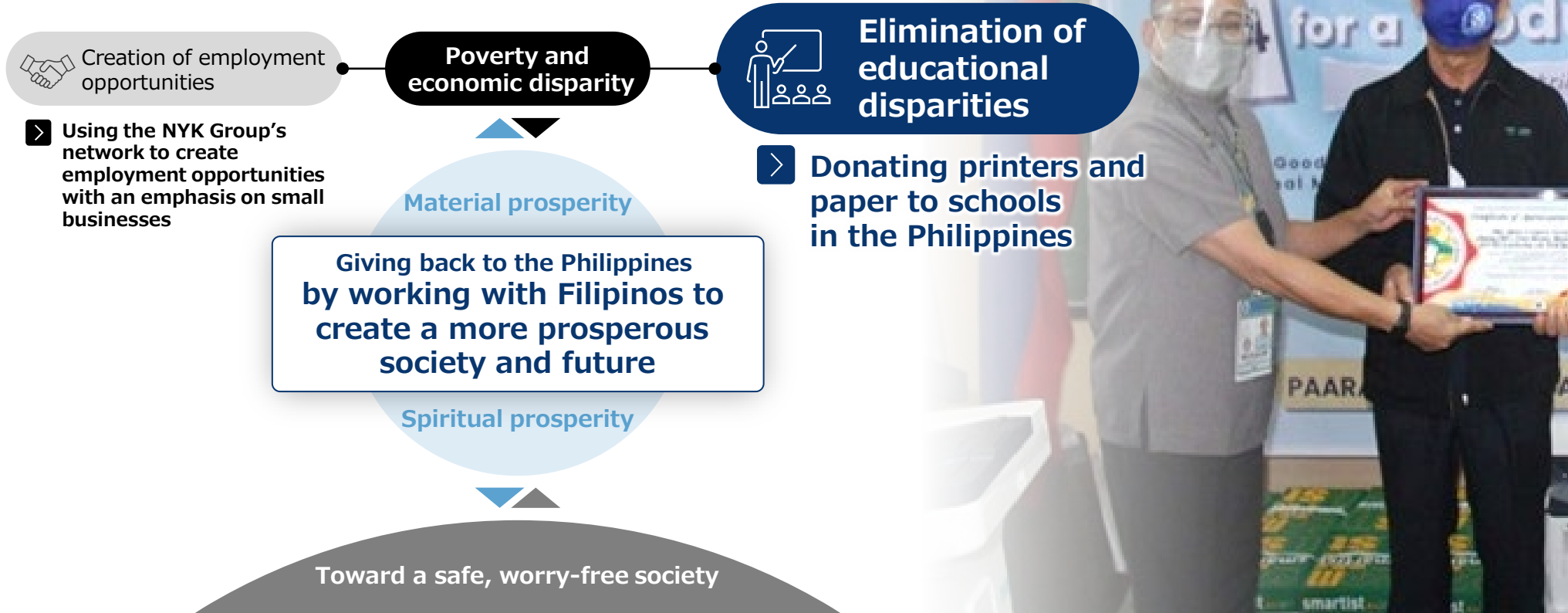
### Joining forces with BP to help decarbonize hard-to-abate sectors

Exploring collaborations focused on the rollout of valuable decarbonization solutions in a wide range of business fields

# Advancing the NYK Group Sustainability Initiatives

## Giving Back to the Philippines

The NYK Group is getting a lot of support from Filipino crew members as well as their families and the local communities that support them. Aiming to help address the problems faced by such communities and work with them in the creation of a prosperous society and future, we are considering what we should and can do now and acting accordingly.



# Advancing the NYK Group Sustainability Initiatives

## Supporting COVID-19 countermeasures worldwide

### ➤ Providing oxygen cylinders to India free of charge

Providing oxygen cylinders to municipal authorities through the Tata group, which is working with the Indian government to take COVID-19 countermeasures in India—an important business base and a significant source of crew members



### ➤ Donating to COVID-19 countermeasure support activities

Making donations to 15 organizations, including those with which we regularly collaborate, in order to help support activities that target crew members and their families, who have been affected by movement restrictions in various countries; hard-to-reach medical facilities; those requiring medical care; and families and children in need

- Seafarers International Relief Fund, for crew members and their families
- UNICEF's COVID-19 Vaccine Global Access
- The Nippon Foundation
- COVID-19 Crisis Fund of Médecins Sans Frontières, etc.

# Advancing the NYK Group Sustainability Initiatives (NYKSI)

## Advancing initiatives through alliances with external partners

Looking for, devising, and implementing activities that can be conducted while face-to-face activities are not possible due to the COVID-19 pandemic

### Organizing the “NYKSI Talks”

With the aims of heightening Group employees’ awareness of social issues and increasing the number of participants in our collaborative activities with external partners, holding monthly online talks in which representatives of partner organizations outline their efforts.

Talks attended by a total of 382 employees, as of February 28, 2022.



### Putting translation stickers in picture books

Asking employee volunteers to take picture books home and put translation stickers in them; having these volunteers complete the process by signing their names in the target language and in Japanese on the last page; and since 2004 transporting the books to Cambodia, Laos, and other countries via a Group company engaged in the operation of container ships.



### Organizing the charity RUN+WALK+a campaign

Conducting a campaign aimed at improving the health of NYK Group employees and raising their awareness of social issues; encouraging employees to run, walk, and take part in other forms of exercise while using a dedicated app that accumulates points, which are then converted into cash donations for Médecins Sans Frontières; and receiving certification as a Tokyo Sports Promotion Company for the fifth consecutive year.



### Making envelopes from nautical charts

Tasking employee volunteers with the creation of envelopes from nautical charts that are no longer needed; conducting these activities when restrictions on coming to work are eased; and providing the envelopes for the mailing of equipment and braille books for the visually impaired.



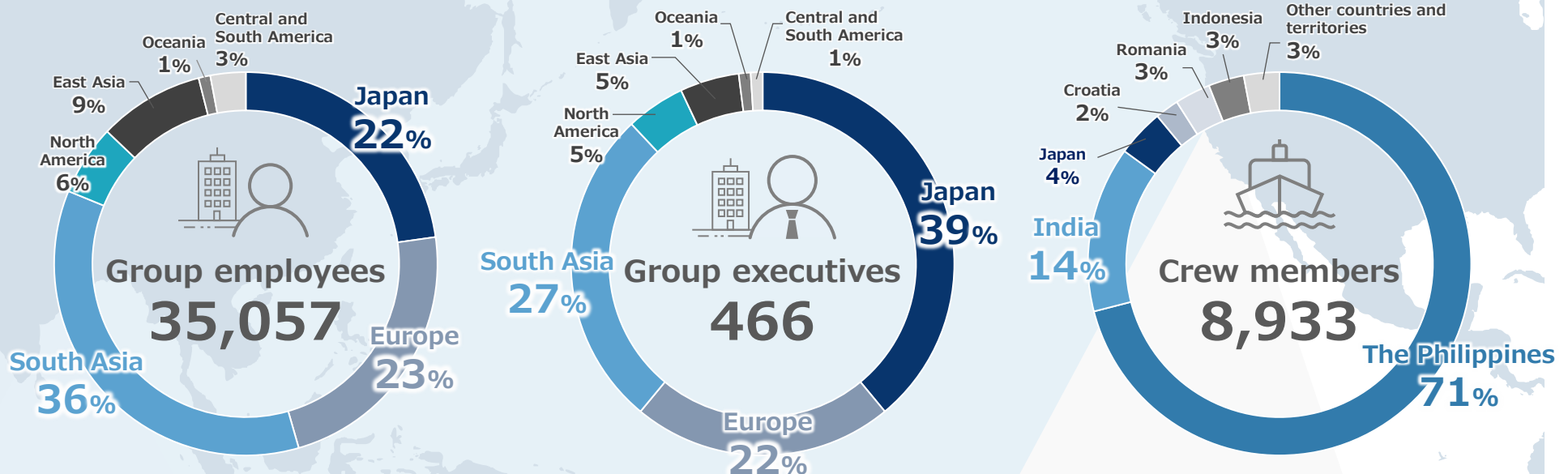
## Reinforcing human resources and organizations

—Linking Human Resource Strategies to Management Strategies—

### Promoting Diversity and Inclusion

Becoming a corporate group in which all employees can fully realize their abilities and play active roles

Breakdown of employees by region and country  
As of March 2021



# Examples of Innovation from NYK Digital Academy

## NYK Digital Academy

Benefit

**Incorporating expertise from outside**  
the maritime shipping industry

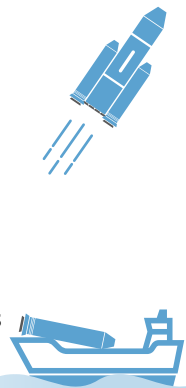


NYK Digital Academy graduates  
FY2019(H2)–FY2021(H2) **51**

### ➤ Research into developing technologies to be used on ships for the offshore recovery of rockets

#### JAXA, Mitsubishi Heavy Industries, and the NYK Group

Although demand for launching small satellites is growing, launch costs are hindering the development of the space industry in Japan and overseas. After holding discussions to address this issue with members of the space industry and other parties, NYK Digital Academy trainees have initiated a project that includes outside parties and is tasked with researching technologies to be utilized in the offshore recovery of rockets. MTI (Monohakobi Technology Institute) has also joined the project, the concept of which involves enabling the reuse of rocket parts by having them land on ships.



### ➤ “Bringing Value” Project

#### People Tree and NYK

In a trial collaboration with People Tree, a brand specializing in fair-trade products, we used social media to publicly share photos of the transportation of chocolate in reefer containers. The photos depict aspects of the logistics process that consumers usually do not see—such as maritime shipping sites and the daily lives of crew members—and show how and by whom goods are transported. In this way, we provided consumers with the kind of information that they really want, namely, the stories behind goods and the thoughts and feelings of those involved.



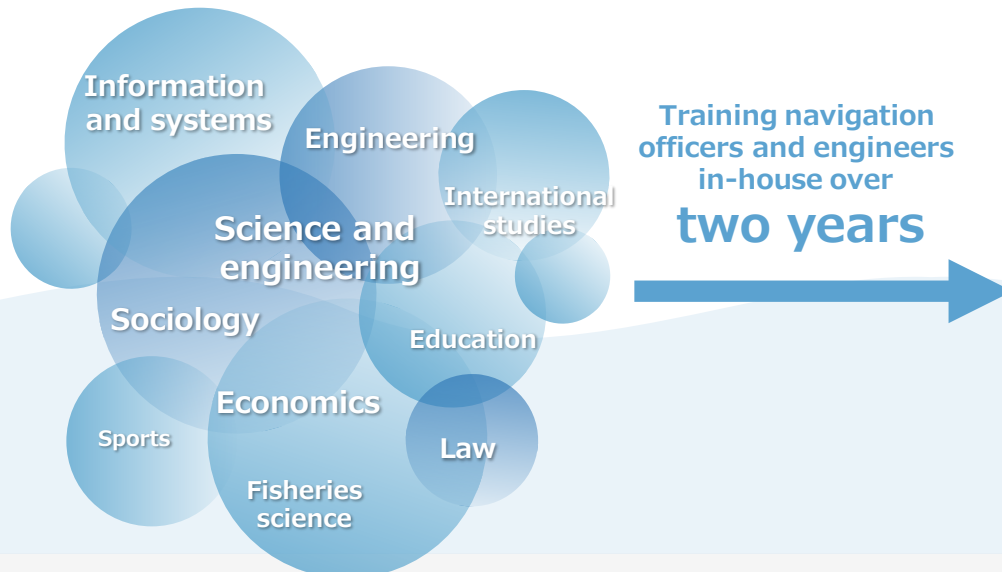
# Diverse Navigation Officers and Engineers Offer Insights into Marine Transportation Quality Improvement and Contribute to International Rule Making

NYK Group navigation officers and engineers

**Personnel who combine leadership with frontline capabilities based on onboard experience**

## Training navigation officers and engineers in-house

- > An in-house seafarer training program that began in 2006 to augment the supply of graduates of merchant maritime universities and technical colleges—the main source of navigation officers and engineers—by developing graduates of non-maritime four-year universities and non-maritime technical colleges as senior officer candidates



**Assigning navigation officers and engineers with diverse viewpoints**

**Approximately 20%** of the Company's Japanese navigation officers and engineers trained in-house



**In 2020, our first in-house trained, non-maritime-university-graduate captain**



# Welcoming Our First NTMA-Graduate Captain and Strengthening Job-Specific Training

## NTMA

Securing and developing crew members with the qualities NYK requires

**Graduates**  
As of March 31, 2022

Approx.  
**1,250**

**Working in senior positions on board tankers and other high-risk ships**



**Emergence in 2021 of the first graduate to become a captain**



## Job-specific training

Unified transnational training that enables the implementation of transformation in lockstep



### Enhancing overall capabilities as businesspeople

- Stratified training and training on **more than 60 general business skills** (finance, etc.)
- Participation of **more than 7,000 employees** in e-learning in Japan and overseas each year



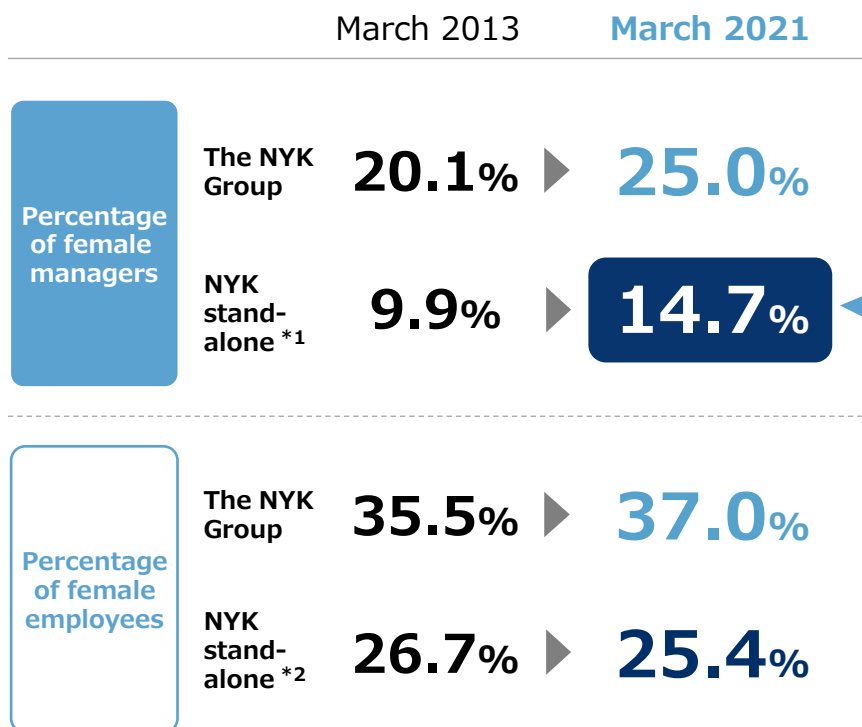
### Acquiring advanced skills for the respective duties of navigation officers and engineers

- Learning the knowledge and skills needed for each position **—from third officer and third engineer through to captain and chief engineer—**through on-the-job training, advanced simulators, and e-learning
- **Enhancing and expanding online training** during the COVID-19 pandemic  
Following on from online ship-handling training, introducing online cargo-handling training for LNG carriers and tankers, etc.



# Aiming for Women to Account for 30% of Managers by 2030

In order to realize a robust, diverse organization and a healthy gender balance among managers and other employees, setting and steadily achieving numerical targets



\*1 The NYK non-consolidated percentage of female managers refers to the number of female managers as a percentage of the number of employees in onshore management positions or equivalent positions, excluding the positions of navigation officer and engineer.  
 \*2 The NYK non-consolidated percentage of female employees refers to the number of female employees as a percentage of the number of onshore employees, excluding navigation officers and engineers.

**Reasons for setting goals**

- To address the core task of creating a strong organization that leverages diversity
- To establish numerical targets that enable analysis of disincentives and quantification of the effectiveness of measures

**Measure 1: Supporting career development and improving employee engagement**  
 Helping in the balancing of life events and career development so that all employees remain highly motivated in their work

**Measure 2: Fostering an organizational culture that promotes the success of diverse personnel**  
 Implementing measures that cultivate awareness of unconscious bias and encourage mutual understanding, with the aim of creating an organization that embraces different values and leverages diversity

**Measure 3: Hiring more female employees**  
 Adopting measures to boost the percentage of female applicants for both new-graduate and mid-career positions and aiming to increase the number of female applicants hired without lowering the criteria

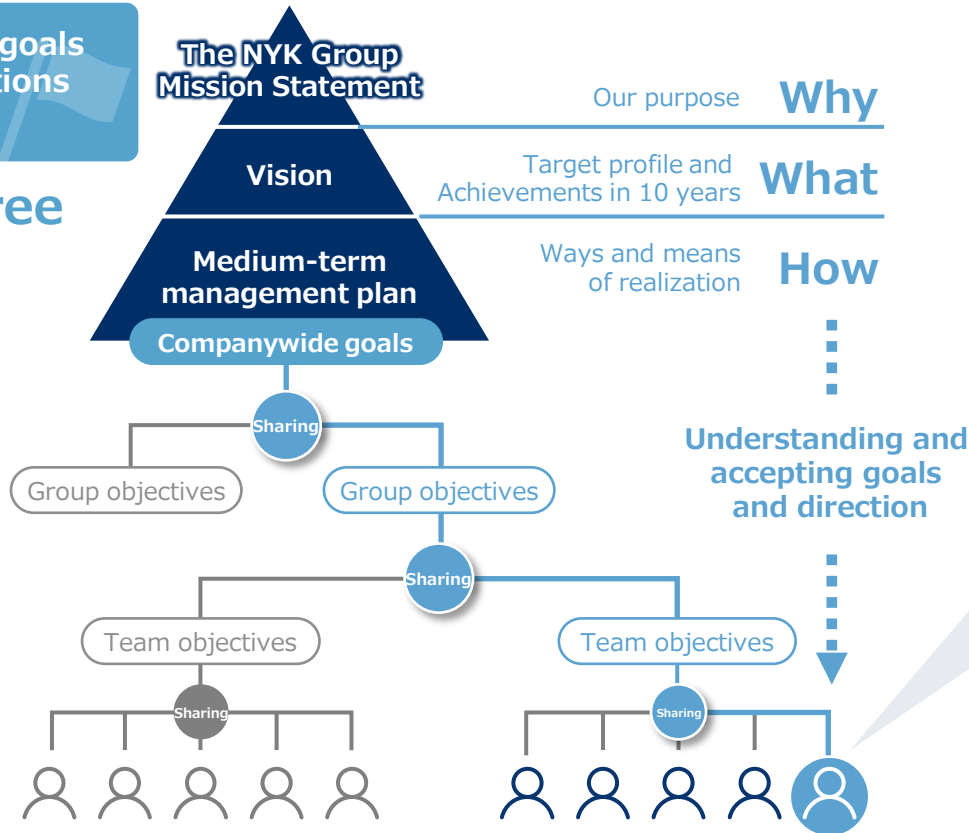
# Revamping Our Human Resource System

Ensuring each employee works based on an understanding of the Company’s ambitious goals, thereby leveraging the combined capabilities of the entire organization and accelerating transformation into a

## Sustainable Solution Provider

Establishing clear goals that link organizations and individuals

### Objective tree



Developing a human resource system that evaluates contributions to transformation

### Making “My Contribution”

Considering whether individual goals have been reached and whether the achievement thereof contributes to the goals of the team and group

Creativity, adaptability, and the ability to stay “half a step” ahead

