NYK Group ESG Story 2023

Co-Creation Cases

6.Nov.2023

The main contents of NYK Group ESG Story 2023 are based on NYK's material issues: Safety, Environment, and Human Resources.

The material issues, their associated visions, and the key themes for realizing them are determined following approval by the Management Meeting and the Board of Directors. The determination process also entails discussions among many employees and managers.

This section provides examples of our co-creation cases with the various stakeholders involved in the key themes.







Key Themes Linked to the NYK Group's Material Issues and the Backgrounds for Selecting Said Themes

01	. Safety	Vision	The NYK Group supports logistics sites with its expert knowledge, skills, and experience based on a high level of safety awareness while continuing to be an organization where people create safety and safety protects and nurtures people's lives and livelihoods.			
	Preventing serious accidents and incidents	Because safety is	s at the core of ESG management and is the first priority in all matters for the NYK Group.			
	Maintaining and enhancing safety awareness	Because we aim that they are not	maintain a high level of safety by passing on to the next generation the lessons learned from past serious accidents and ensuring rgotten.			
	Complying with occupational health and safety	Because safety is premised on the establishment of accident-free environments where NYK Group employees and supply chain personnel can we with peace of mind.				
	Responding to operational risk	Because, as a comprehensive logistics company, we must fulfill our social mission and responsibility to support our customers' supply chains.				
	Strengthening cybersecurity	Because the upgrading of IT security and management of systems are essential for safe logistics.				
02	! Environment	Vision	The NYK Group will continue to be a force that supports the sustainable development of the Earth and humanity by taking a leading role in solving environmental issues on a global scale through continuous co-creation of necessary value for the future beyond the scope of a comprehensive logistics company.			
	Promoting decarbonization	Because, given that GHG emissions mainly from ships significantly impact the environment, the NYK Group views decarbonization as a matter of the highest priority.				
	Responding to climate change risk	significantly affec	the fact that the NYK Group operates businesses in the natural environment, climate change is an environmental issue that could ect the Group's business.			
	Preserving marine and biodiversity	Because, as a co inhabit it.	rporate group whose founding business was maritime shipping, we have a responsibility to protect the ocean and the organisms that			
	Preventing air pollution	Because, given that GHG emissions mainly from ships have a significant impact on the atmosphere, we need to fulfill our responsibility				
	Building sustainable supply chains	Because, as a corporate group that is responsible for part of the supply chain, we need to ensure that the entire life cycles of ships are sustainable, from shipbuilding through to ship dismantling.				
03 Human Resources		Vision	The NYK Group encourages all employees to vigorously bring their best and authentic selves to work and to perform at their full potential, thereby enabling us to remain a good corporate citizen implementing social sustainability initiatives.			
	Enhancing employee engagement	Because the strength of the NYK Group lies in the vitality and vibrancy with which its employees work.				
	Ensuring diversity and inclusion	Because the Group aims to advance Groupwide management that utilizes the diversity of its workforce and encompasses a range of values.				
	Developing talent management	Because develop	veloping personnel and assigning the right person to the right place will enable us to maximize its value.			
	Co-creating to achieve our mission of "Bringing value to life"*	Because we aim to increase the value of all Group businesses by taking on the challenge of creating new businesses and implementing ambided management.				
	Respecting human rights	Because we want to not only prevent in-house harassment but also responsibly address human rights issues in the value chain as a corporate group.				
	Co-existing with local communities	Because, as a company that operates businesses in various regions around the world, our aim is to create value based on harmony and co-existence with local communities.				
	Fostering ethical workplaces	Because the NYK Group aims to retain its appeal by respecting the labor practices of each country and region in which it operates.				

^{*} Including crew members, dispatched personnel, personnel with fixed employment periods, and vendo



Examples at a Glance

Page	Co-Creation Cases	Related Key Themes		
4	Support for Safer, More-Efficient Ship Operations through the Use of Ship Data	Preventing serious accidents and incidents	Strengthening cybersecurity	Responding to operational risk
5	NAV9000 Assessment Activities Based on Dialogues	Complying with occupational health and safety	Maintaining and enhancing safety awareness	Preventing serious accidents and incidents
6	Introduction of Equipment That Suppresses Hull Shaking to Enable Safe, Efficient Cargo Handling	Responding to operational risk	Complying with occupational health and safety	Preventing serious accidents and incidents
7	Joint Development of Ammonia-Fueled Ships for Decarbonization	Promoting decarbonization	Complying with occupational health and safety	Responding to climate change risk
8	Provision of Low-Carbon Transportation Services Based on the Practical Use of LNG Fuel for Ships	Promoting decarbonization	Preventing air pollution	Building sustainable supply chains
9	Japan-Chile Project for the Zero-Emission Transportation of Copper Products	Responding to climate change risk	Promoting decarbonization	
10	Realization of Marine Life Conservation through Participation in a Biodiversity Observation Network	Preserving marine and biodiversity	Co-creating to achieve our mission of "Bringing value to life"	
11	Challenge of a Space Business Development Initiative to Realize Ambidextrous Management	Building sustainable supply chains	Developing talent management	
12	Multinational Captains and Chief Engineers / Organization That Integrates Onshore and Offshore Operations	Ensuring diversity and inclusion	Co-creating to achieve our mission of "Bringing value to life"	
13	Exchanges among and Further Development of the Personnel Who Are the Group's Foundations	Developing talent management	Enhancing employee engagement	Ensuring diversity and inclusion
14	Better Quality of Life for Crew Members through Expansion of MarCoPay Services	Co-creating to achieve our mission of "Bringing value to life"	Co-existing with local communities	
15	Design of New Ships and Reform of Ship Management Operations through Utilization of 3D Models	Co-creating to achieve our mission of "Bringing value to life"	Complying with occupational health and safety	
16	Initiatives to Ensure Respect for Human Rights throughout the Value Chain	Respecting human rights	Building sustainable supply chains	Fostering ethical workplaces
17	Regional Development in Akita Prefecture through an Offshore Wind Power Generation Project	Co-existing with local communities	Preventing air pollution	Developing talent management
18	Perpetuation of Japanese Culture through ASUKA CRUISES	Co-existing with local communities	Enhancing employee engagement	



Support for Safer, More-Efficient Ship Operations through the Use of Ship Data

In SIMS3 (Ship Information Management System), detailed data on ships' operational status and fuel efficiency can be shared in realtime (every minute) between ships and onshore operations.

Moreover, we are reducing serious accidents and maintenance costs and reforming the workstyles of crew members by installing more sensors to increase the scope and sophistication of anomaly detection.

In addition, given the increased volume of data being shared between ships and onshore operations, we have established the Maritime IT Committee to strengthen the safety of ship operations in relation to digital technologies. Combining the expertise of marine engineers and members with competence in relation to digital transformation, the committee is heightening cybersecurity by enhancing the onshore monitoring of ships' IoT data and cybersecurity risks.

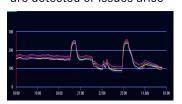




Ship Information Management System

Data at one-minute intervals

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



Ships equipped with SIMS3:

73* *As of the end of October 2023

Voyage-related data

Speed (over ground/water), wind direction, wind speed, course, rudder angle, etc.

Engine-related data

Fuel consumption, engine speed (RPM), horsepower, exhaust gas temperature of main engine, and cooling water temperature

Additional sensors for onshore monitoring and automatic anomaly detection

Remote **Diagnostic Center**



Based in Manila in the Philippines, RDC experts analyze the anomalies in engine data detected by anomaly detection systems in light of their own knowledge and experience as marine engineers, and the results of analyses are reported to vessels and ship management companies. The center's functions are being increased and enhanced.

LiVE for Operator

Data collected from ship operations is analyzed and visualized in easy-to-understand



graphs and other formats. The application is being built for ship operators.

Massa Insight—WADATSUMI—

Through co-creation with BEMAC, we are developing LiVE for Shipmanager. The NYK Group is using its knowledge to help evolve the maritime industry as a whole.





regulations, revisions to standards

and guidelines, etc.



NAV9000 Assessment Activities Based on Dialogues

Through assessments based on our original NAV9000 quality assurance standards, which were established in 1998, we monitor the safety of not only NYK-owned ships but also our fleet of chartered ships. Also, based on NAV9000, our safety activities heighten safety levels and foster a culture of safety through dialogues that include shipowners and the employees of ship management companies, who are important stakeholders.

With the motto "together with our partners," our employees visit operating ships, shipowners' offices, and ship management companies and directly exchange information with their representatives to maintain strong partnerships and realize an advanced safety management system that anticipates safety issues.



Dialogues together

Through in-person dialogues between our employees and crew members as well as company managers, we share safety information, customer requirements, the latest industry standards, and our experience. We aim to grow with society by implementing highly effective measures together.

Partners together

Our activities cover approximately all 700 of our operating ships, including NYK-owned ships and chartered ships. Since the establishment of NAV9000, we have conducted dialogues that also include chartered ships and crew members. We conduct safety assessments of approximately 200 ships and 30 companies per year.

Business expansion together

We received additional ISO9001:2015 certification from Nippon Kaiji Kyokai (ClassNK) for NAV9000 assessment activities targeting crew transfer vessels (CTVs) for offshore wind power generation.



We are committed to achieving high levels of quality management and safety in ship operations together with expanding businesses.



Introduction of Equipment That Suppresses Hull Shaking to Enable Safe, Efficient Cargo Handling

At ports facing the open sea, ships are prone to hull shaking even while in berth, leading to various undesirable effects. Also, the introduction of larger ships in recent years has created a need for the further enhancement of both port safety and port utilization rates. Consequently, the suppression of hull shaking has become a pressing issue.

To solve this issue, we have collaborated with Trelleborg Marine Systems to install two DynaMoor Type-L ship mooring systems at the coal discharging berth of JERA's Hitachinaka Thermal Power Station on a one-year trial basis. Through this trial, we are obtaining performance data and verifying the effectiveness of the system. With the cooperation of our partners, we are also addressing on-site issues in the supply chain—from transportation operations through to loading and unloading operations.

Issues

In berths facing the open sea, ships are prone to hull shaking caused by sea swells and long-period waves.

- Reduction in ship and port utilization rates due to cargo-handling interruptions and evacuation from ports
- Concerns about work safety being affected by the breakage of mooring lines

Improvement of ports through co-creation with a marine port materials manufacturer







Operator

- Network (customers and ports)
- Experience gained from ship operations and ship handling

Scientific approach

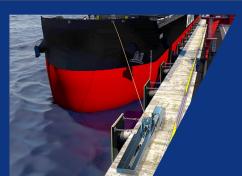
- Operational data on Japanese ports
- · Data on weather and sea conditions (mechanisms of swells and longperiod waves)
- · Product effectiveness verification tailored to the conditions at each site



Manufacturer (Sweden)

Strengths

 Excellent products (DynaMoor and AutoMoor)



DynaMoor

DynaMoor is a system that is installed on piers and connected to ships' mooring lines. By using electronically controlled hydraulic dampers, the system adjusts mooring line tension to maintain it at a constant level. The system can be installed in a small area and helps enhance cargo-handling safety and port utilization rates.





Joint Development of Ammonia-Fueled Ships for Decarbonization

Upon receiving a subsidy from the New Energy and Industrial Technology Development Organization (NEDO) as a consortium engaged in a Green Innovation Fund project, five entities—including a Japanese shipbuilding company, an engine manufacturer, and a ship classification society—began the development of ammonia-fueled ships in 2022. By utilizing ammonia as a next-generation fuel, we hope to significantly reduce GHG emissions during voyages. Together with our consortium partners, we will find solutions to numerous challenging issues and advance trailblazing initiatives aimed at changing the future through the maritime industry. All processes, from engine development and manufacturing through to shipbuilding, will be carried out in Japan.

Ammonia-Fueled Tugboat

The world's first ammonia-fueled ship is scheduled to be delivered in 2024. We are engaged in R&D with IHI Power Systems, and in July 2022 our ammonia-fueled tugboat received an approval in principle (AiP) from ClassNK. In April 2023, we succeeded in the world's first stable combustion of ammonia fuel with a mixed fuel percentage of 80%.

Ammonia-Fueled Ammonia Gas Carrier

Using knowledge garnered from developing the tugboat, we aim to complete construction of a carrier in 2026.

We are conducting R&D in partnership with Japan Engine, IHI Power Systems, and Nihon Shipyard.

In September 2022, we obtained an AiP from ClassNK.

In May 2023, we successfully tested the world's first mixed combustion of ammonia in a single cylinder 2-stroke engine.



Around 2035

Upscale

Ammonia-fueled ships

- Promote R&D through co-creation
- Accumulate insight upfront by commencing service early (2030–)
- Increase the number of ships

2024 2026 First vessel International vessel commences service commences service

Tugboat

Ammonia-fueled Car carrier ammonia gas carrier

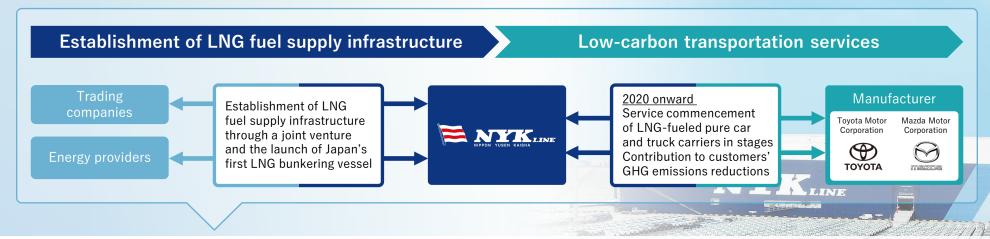
Replace main engines to shift to ammonia-fueled vessels



Provision of Low-Carbon Transportation Services Based on the Practical Use of LNG Fuel for Ships

The NYK Group delivered the world's first LNG bunkering vessel in Europe in 2017 and started co-creation with various partners in 2018 for implementation within Japan. To facilitate LNG-fueled ship operations, we are establishing an LNG supply network and infrastructure that will ensure the stability of business operations from the outset.

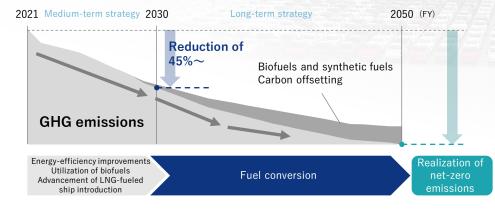
We will utilize the safety technologies, ship operational know-how, and partnership expertise acquired through LNG initiatives to convert to ammonia, hydrogen, and other environment-friendly ship fuels. In this way, we aim to achieve net-zero emissions going forward.



Development of Similar Initiatives in Other NYK Group Businesses

The establishment of a low-carbon LNG fuel supply infrastructure is a bridging solution and the first step toward decarbonization. Aiming to achieve net-zero emissions and co-exist and prosper with various partners and customers, we will continue co-creation with them in such initiatives as the construction of ammonia and hydrogen supply chains.

The NYK Group's Scenario for Achieving Net-Zero Emissions





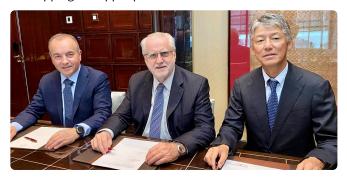
Japan-Chile Project for the Zero-Emission Transportation of Copper Products

Chilean state-owned copper producer CODELCO and NYK Bulk & Project Carriers (NBP) have signed a memorandum of understanding on jointly studying the decarbonized maritime shipping of copper products.

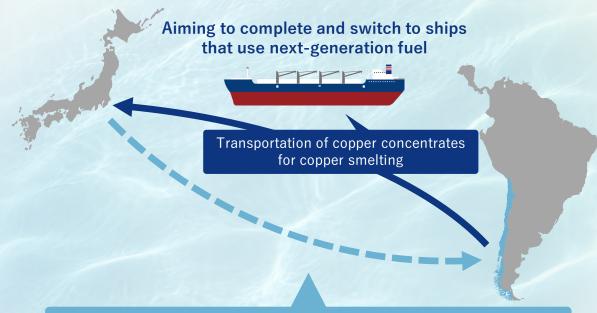
Global demand for copper is expected to increase due to the development of power grids for offshore wind power generation and the spread of electric vehicles, etc. With a view to contributing to the realization of a decarbonized society, the two companies will jointly promote the verification and development of next-generation fuel technologies and implement initiatives aimed at the use of zero-emission ships for the maritime shipping of copper products.

Summary of the memorandum of understanding

- CODELCO and NBP will jointly study the decarbonization of the maritime shipping of copper products.
- CODELCO will consider a long-term consecutive voyage service with NBP's fleet of decarbonized vessels for the transportation of copper products.
- NBP will study new technologies with a view to realizing decarbonized ships and decarbonization of the maritime shipping of copper products.



Left: Carlos Alvarado, Chief Commercial Officer, CODELCO Middle: Máximo Pacheco, Chairman of the Board, CODELCO Right: Masashi Suda, President, NBP



We will seek co-creation with other mining/trading companies through utilization of the **Chilean Green Corridors Network Project**,* in which we already participate.

* A project led by the Chilean government, which aims to increase the production and use of renewable energy, and the Maersk Mc-Kinney Møller Center for Zero Carbon Shipping, which is focused on decarbonized transportation



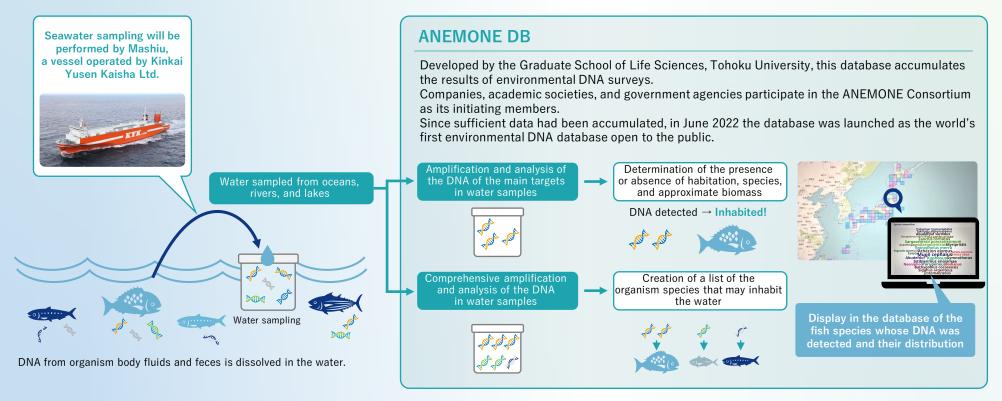
Realization of Marine Life Conservation through Participation in a Biodiversity Observation Network

In conserving biodiversity, the first step is to grasp the current status of nature. However, ecological surveys of oceans require an enormous amount of labor and expense. Until recently, a method of efficiently surveying wide areas had not been established.

Environmental DNA analysis makes possible innovative ecological surveys that reveal the types and distribution of living organisms by using "a bucket of water." As it can be used to survey the current conditions in extensive sea areas, environmental DNA makes biodiversity visible, thereby enabling the use of analysis results for the conservation and planned utilization of organisms.

Every month, the NYK Group samples seawater on its commercial shipping routes and provides the samples to the ANEMONE Consortium. We will continue to conduct research activities and contribute to the expansion of the ANEMONE DB and the territories it surveys.





Source: The Japanese website of Environmental Research & Solutions Co., Ltd. (ctiers.co.jp)



Challenge of a Space Business Development Initiative to Realize Ambidextrous Management

In FY2020, the launching of rockets from the ocean was proposed by NYK Digital Academy trainees. The proposal and the trainees' enthusiasm were well received by management, and initiatives were begun with the aim of creating a new business. In March 2022, the NYK Group and Mitsubishi Heavy Industries submitted a joint application to the Innovative Future Space Transportation Program of the Japan Aerospace Exploration Agency (JAXA). The application was accepted, and the three parties started joint research on the theme of marine retrieval of a reusable rocket.

Currently, in addition to the offshore launch and recovery of rockets, we are conducting research with various partners with a view to providing a wide range of services that use the management resources the Group has as a comprehensive logistics company. These services include the utilization of data collected from launched satellites for ships and ports and the land transportation of rockets and satellites.

Advantages of launching rockets from the ocean

- Rockets can be launched at the ideal time.
- Rockets can achieve orbital insertion using the optimal launch method.
- Costs can be reduced.
- The capacity of launch sites can be increased.

Advantages of recovering rockets from the ocean

- Costs can be reduced by reusing rockets.
- Rockets can be launched more frequently.



Co-creation participants





Multinational Captains and Chief Engineers / Organization That Integrates Onshore and Offshore Operations

Appointment of Captains and Chief Engineers from Various Countries

Our goal is to develop high-quality crew members and contribute to job creation in a range of countries. We are fostering high-quality crew members regardless of their nationality. This is a concrete result of our initiatives to promote excellent crew members to senior positions on board high-risk vessels.*

* Vessels that transport hazardous materials, such as tankers and LNG carriers





2013

Appointment of a Filipino captain and a Filipino chief engineer

Appointment of an Indonesian captain and an Indonesian chief engineer

Appointment of a Nigerian captain and a Nigerian chief engineer

Personnel Who Combine Frontline and Leadership Capabilities Rooted in Onboard **Experience**

Working onshore gives multinational marine engineers the opportunity to utilize their knowledge while learning about the duties of onshore positions. Further, the collective organizational strength resulting from these systems has led to co-creation among Group companies around the world.

Examples of global personnel mobility

- Utilization of personnel regardless of nationality or country of residence
- Roles of non-Japanese marine engineers at the head office and Group companies

Percentage of Japanese marine engineers working onshore



Exchanges among and Further Development of the Personnel Who Are the Group's Foundations

NYK Digital Academy

In this approximately nine-month training program, employees learn about the creation of new markets and clients in an era of increasing uncertainty.

In FY2023, the academy held a workshop on design thinking in Singapore. Collaborating with the personnel of a local Group company and interacting with the representatives of start-ups over three days, participants learned methods of innovation and developed the qualities and abilities of business leaders.

We are currently strengthening external tie-ups with universities and companies in Japan and overseas through activities such as providing lectures and training.

Program design

New value creation proposals Exercises Alliances with other companies and research institutions, etc.

Basic program Liberal arts and business skills (mathematical science, management strategy theory, data science, thought and philosophy, accounting and finance, etc.)

A lecture

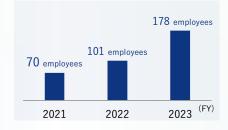




ESG Navigator System

Now in its third year, the ESG Navigator System has evolved into a more agile system to facilitate the implementation of ESG management. Through this system, we expect ESG Navigators to think flexibly and take action while receiving a wide range of insight from external resources, thereby leading to the realization of ESG management.

Number of **ESG Navigator System participants**



Examples of activities



Global NYK Group Week

Held since FY2002, this training program promotes exchanges across national, company, and divisional boundaries and enables national staff to acquire the leadership skills that will make the NYK Group more competitive.

In FY2022, for the first time in three trainees attended the vears. program face-to-face. Selected from around the world, 15 employees participated in workshops and made presentations to executive officers.





MUFG

Better Quality of Life for Crew Members through Expansion of MarCoPay Services

MarCoPay is a life-supporting platform for crew members that uses electronic money. Since the launch of the service in June 2021, its user base has been expanding steadily. At present, more than 17,000 people use the platform. Through the MarCoPay platform, we aim to actualize the potential value of the crew member community and thereby circulate this value.

We will continue evolving MarCoPay with our sights set on a mission to co-create a variety of services with diverse partners and to support the happiness of crew members and their families.

Purchasing

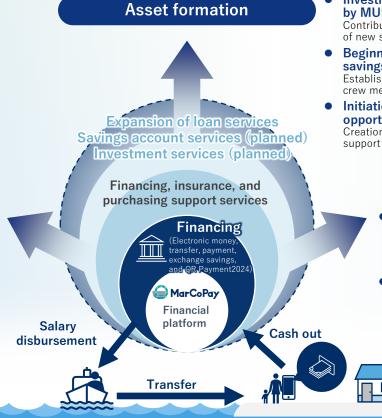
- Alliance with local insurance company BPI MS in April 2022
 - Beginning of sale of non-life insurance under preferential terms
- Alliance with Japan Airlines in December 2022
 - Launch of services promoting tourism to Japan
- Alliance with local property company DDC Land in June 2023
 - Offering of properties at special prices for crew members
- Alliance with Mitsubishi Motors Philippines in July 2023
 - Marketing of vehicles at special prices for crew members
- Alliance with Kubota Philippines in October 2023
 - Offering of agricultural machinery at special prices for crew members











Investment in MarCoPay by MUFG Bank in March 2022



Beginning of discussions with local banks regarding savings accounts

Establishment of relationships to better facilitate loan screening for crew members and stepped-up offering of loans to crew members

Initiation of study on the formation of investment opportunities

Creation of investment opportunities unique to MarCoPay and support for asset formation in preparation for retirement

Credit

 Expansion of in-house financing services in January 2021

Expansion of the scope of preferential loans for crew members and provision of loans to more crew members with terms suited to their credit rating

 Alliances with local banks such as Security Bank in April 2022

Establishment of relationships to better facilitate automobile and housing-related loan screening for crew members and the marketing of automobile and housing-related loans for crew members











Design of New Ships and Reform of Ship Management Operations through Utilization of 3D Models

In April 2023, the NYK Group established the Ship Business Group with the aim of contributing to the resolution of issues such as maritime clusters as well as to the safety and sustainability of shipbuilding and maritime transportation through the broad external dissemination of technologies the Group has developed to date.

In shipbuilding and post-completion ship management, many unresolved issues remain. One of the issues is that design information is shared with stakeholders in the form of 2D drawings, making the sorting of hull information difficult.

To solve such issues and improve the efficiency of shipbuilding and post-completion ship management, we are creating a system that increases overall integration by sharing design information with stakeholders in the form of 3D models and establishing a common understanding.

Workflow through to ship completion

Development and design planning

Basic design

Detailed design

Charterers, shipowners, and shipyards

Production design

Construction

Ship operations and ship management

Crew members and ship management companies

Utilizing 3D models to increase product competitiveness

- Improving design efficiency by front-loading design*
- Enabling collaborative design operations between shipbuilders and shipowners through the utilization of 3D models that realize front-loading
 - * This method gives priority to important decisions and design elements in the early stages of the design process. It heightens efficiency and quality in later development processes and in change control.



Combining design data and data on ship operations

- Using 3D design data to organize completed digital drawings
- Utilizing such data for maintenance management, design feedback, and crew training

Project members























Initiatives to Ensure Respect for Human Rights throughout the Value Chain

Under the leadership and commitment of senior management and in accordance with the United Nations Guiding Principles on Business and Human Rights, the NYK Group promotes respect for human rights through collaboration among the UN Global Compact Promotion Committee, the ESG Strategy Committee, and related in-house departments. We also regularly receive expert advice from a third-party organization (Caux Round Table Japan). To further strengthen the abovementioned efforts, we regularly hold dialogues with stakeholders and other experts.

Realization of Respect for Human Rights throughout the Value Chain

Human Rights Due Diligence

Human rights risk assessment

With reference to the results of a risk assessment conducted by a third-party organization, in June 2022 we held an in-house workshop for managers from 10 groups in five related headquarters and divisions to identify salient human rights issues.



Human rights impact assessment

A third-party organization conducted interviews with on-site workers to check the Group's management of the identified salient human rights issues.



Implementation of appropriate countermeasures

Based on the results of the human rights impact assessment, related inhouse departments, Group companies, and business partners jointly examined corrective measures and checked their progress.



Disclosure

Disclosure via our website and integrated report

Follow-up assessment

Confirmation of the effectiveness of remedial measures

Slavery and Human **Trafficking Statement**

Establishment of the

NYK Group Human

The above policy was formulated in November 2022. To ensure that the Group fulfills its responsibility to respect the human rights of all stakeholders, the policy applies to all officers and employees. Moreover, we encourage all business partners involved in our businesses. products, and services to comply with the

Rights Policy

policy.

Since the UK Modern Slavery Act came into force in 2015, the Group has published a statement every year.

■ Grievance Mechanism

We have established a mechanism for handling grievances, and we offer victims access to remedy.



Regional Development in Akita Prefecture through an Offshore Wind Power Generation Project

Under a comprehensive partnership agreement with Akita Prefecture, NYK launched the operations of its Akita Branch in April 2022.

The branch and the prefecture will collaborate in a partnership to revitalize the region in various ways. In addition to promoting renewable energy projects in fields such as offshore wind power generation and developing related personnel, the partnership will focus efforts on the further utilization of ports, development of ship-related personnel, tourism promotion, and advancement of environmental preservation.

The Akita branch will serve as a new base for the Group in the Tohoku region, where offshore wind power generation is expected to grow. We will strengthen the operational capabilities of offshore wind power generation-related businesses and expand and enhance partner networks in each prefecture.



Construction of an offshore wind power value chain

■ Contributing to decarbonization and the spread of renewable energy in Japan

chain of offshore wind power generation in Japan.

coasts of Akita Prefecture and Chiba Prefecture.

The NYK Group

Municipalities and educationa institutions

Related companies Development of personnel related to the offshore wind power value chain and other initiatives

Raising interest among the next generation in offshore development

- -To expand offshore wind power generation, the development of maintenance and management personnel is urgently required. In Akita Prefecture, we plan to establish a comprehensive training facility for workers and crew members.
- In collaboration with Akita Prefecture and the city of Oga, we will establish a training center for offshore wind power generation-related personnel and crew members that uses such facilities as those of Akita Prefectural Oga Kaiyo High School. As well as offering enhanced convenience and economy by making effective use of existing facilities, the center will pursue the broader goal of arousing school students' interest so that it can develop and secure personnel over the long term.
- The center will utilize simulators to introduce training on CTV handling.

Transportation and

Operation and

Marine consulting

- While leveraging our strengths, including our technological competence as

well as expertise and networks cultivated in our offshore businesses, we will

build businesses in collaboration with European partners. In this way, we will operate CTVs and self-elevated platform (SEP) vessels to support the value

- In July 2023, the CTV business began ship operations at Ishikari Bay New Port.

Going forward, we will expand operations to general sea areas located off the









A lecture at Akita Prefectural Oga Kaiyo High School





Renderings of crew member training





Photograph supplied

by Hideya Katsura



Perpetuation of Japanese Culture through ASUKA CRUISES

Operated by NYK Group company NYK Cruises, ASUKA II is the largest Japan-registered cruise ship and has led the development of Japan's cruise culture. To serve as a bridge between the past and future of ASUKA CRUISES, ASUKA III will commence service in 2025, giving us two cruise ships.

Going forward, both ships will increase their contribution to regional revitalization and heighten the profile of Japanese culture by promoting exchanges among people and linking regions through cruise culture.

At the same time, motivated by a desire to realize cruise ships that cater precisely to cruise passengers' needs, we will pay close attention to every moment of the cruise experience and provide services that are even more wholeheartedly crafted.



Onboard museum of art ASUKA III

- Co-creating with living national treasures and cultural figures
- Heightening the profile of Japanese culture even further

Kazumi Murose, living national treasure in the traditional art of "maki-e" (Japanese lacquerware sprinkled with gold or silver powder)

Large-scale lacquer artwork adorning the atrium

ASUKA×47

Co-creation between
ASUKA III and
47 prefectures

 Planning to decorate 47 guest rooms with specialties from each prefecture as an embodiment of regional revitalization

Shunkei Yahagi, the renowned calligrapher whose brushwork is used on ASUKA III (飛鳥III)

