

## Nippon Yusen Kabushiki Kaisha Green/Transition Bond Framework

### 1. Introduction

Nippon Yusen Kabushiki Kaisha (hereinafter, "our company" or "NYK") has developed the following Green/Transition Bond Framework (hereinafter, "this framework"). NYK has obtained a second party opinion from DNV Business Assurance Japan Co. Ltd. as an independent external reviewer that this framework is aligned with the Green Bond Principles 2021 (ICMA), Green Bond Guidelines 2020 (Ministry of the Environment, Japan), Climate Transition Finance Handbook 2020 (ICMA), and Basic Guidelines on Climate Transition Finance (May 2021) (Financial Services Agency, Japan; Ministry of Economy, Trade and Industry, Japan; and Ministry of the Environment, Japan). NYK will issue the green/transition bonds under this framework.

### 2.1 NYK Group ESG Management

The NYK Group is engaged in business, such as the liner & logistics business which consists of the liner trade, air cargo transportation, and logistics business, the bulk shipping business, real estate business, and other business services. We have set and issued the "The NYK Group ESG Story" in February 2021, which integrates ESG factors to management strategies. The ESG management that we aspire to involve adding ESG yardsticks—in other words, an emphasis on a sustainable society and environment—to yardsticks focused on earnings maximization while providing robust support to both aspects of our activities through governance, the base for business activities.



### 2.2 Priority Goals

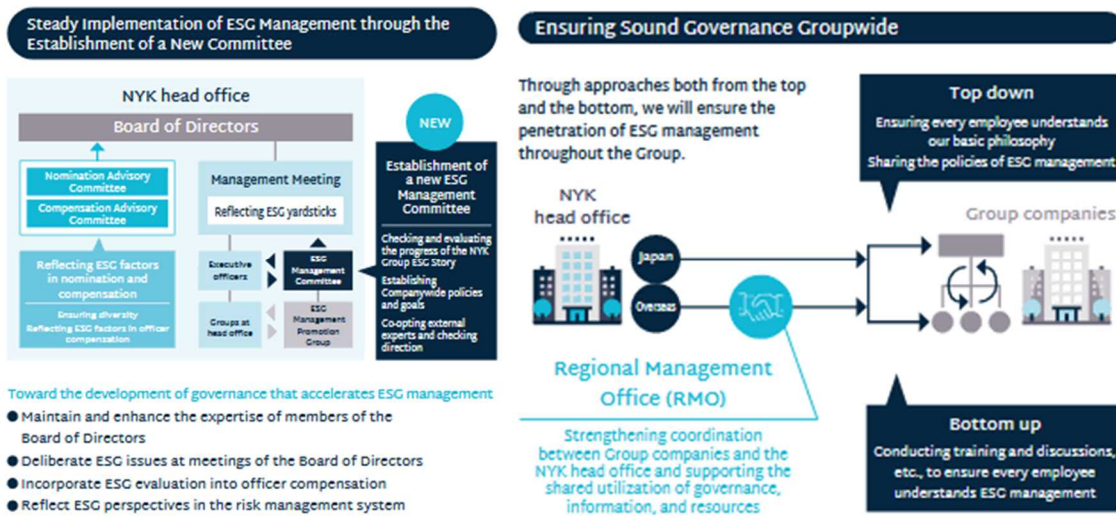
We will advance New Value Creation to Realize the NYK Group of Tomorrow, one of the goals of ESG management. Surveying existing and new business fields, the section highlights measures aimed at Ensuring Safe Ship Operations, Reducing GHG Emissions, Taking On Ambitious Initiatives in the Energy Field, and Addressing Social Issues.

- ① Ensuring Safe Ship Operations
- ② Reducing GHG Emissions
- ③ Taking On Ambitious Initiatives in the Energy Field

④ Addressing Social Issues

**2.3 Establishing Support Systems for ESG Management**

To move ESG management forward, we need to correctly understand environmental and social issues, monitor whether appropriate decisions have been made to address these issues as well as whether related specific measures are progressing, and have deeper discussions when deciding how to heighten the effectiveness of such measures. To these ends, we have established a new ESG Management Committee that includes external experts and which reflects the opinions of external stakeholders. While confirming the overall direction of the Group's ESG management, the new committee will check and evaluate the progress of the NYK Group ESG Story, establish policies and goals, and report on progress quarterly to the Management Meeting and the Board of Directors. In addition, we will develop our governance structure to accelerate ESG management.



**3. Materiality and SDGs**

The NYK Group pursues the creation of social value and corporate value by ensuring and enhancing safety, the environment, and human resources, which are material issues, while also contributing to achieving the SDGs.



#### 4.1 The NYK Group's GHG Emissions Intensity Reduction

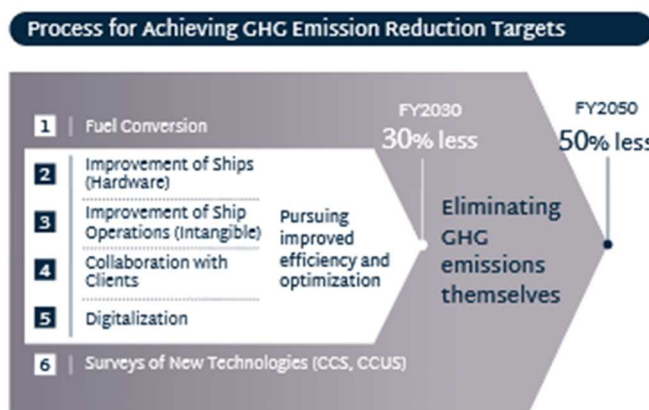
To promote the reduction of greenhouse gas (GHG) emissions, we have built a framework for climate change response management. We employ a wide variety of methods and systems to advance in-house measures focused on the climate change issue. For example, the Board of Directors supervises GHG emission reduction activities, while the Risk Management Committee identifies climate change-related risks and monitors the progress of countermeasures. Other initiatives under the framework include our introduction of internal carbon pricing and the further promotion of green finance—a field where we have been playing a progressive role. Further, based on an awareness of the disclosure methods of the Task Force on Climate-related Financial Disclosures (TCFD) and with a view to responding to changes that may arise from future scenarios, such as the effects of climate change on businesses, we have introduced a new management method that involves making observations of key fixed points, which act as benchmarks that show how trends and scenarios are emerging.

The NYK Group's GHG Emissions Intensity Reduction (Base line: 2015) is below.



Breaking down the target of a 30% reduction by fiscal 2030, improvements in intangible aspects of ship operations, tangible improvements in ships and through fuel conversion are expected to bring the GHG emission reduction benefits. As for the target of a 50% reduction by fiscal 2050, the introduction of zero-emission ships will be essential, and we are setting our sights on the adoption of new technologies to this end.

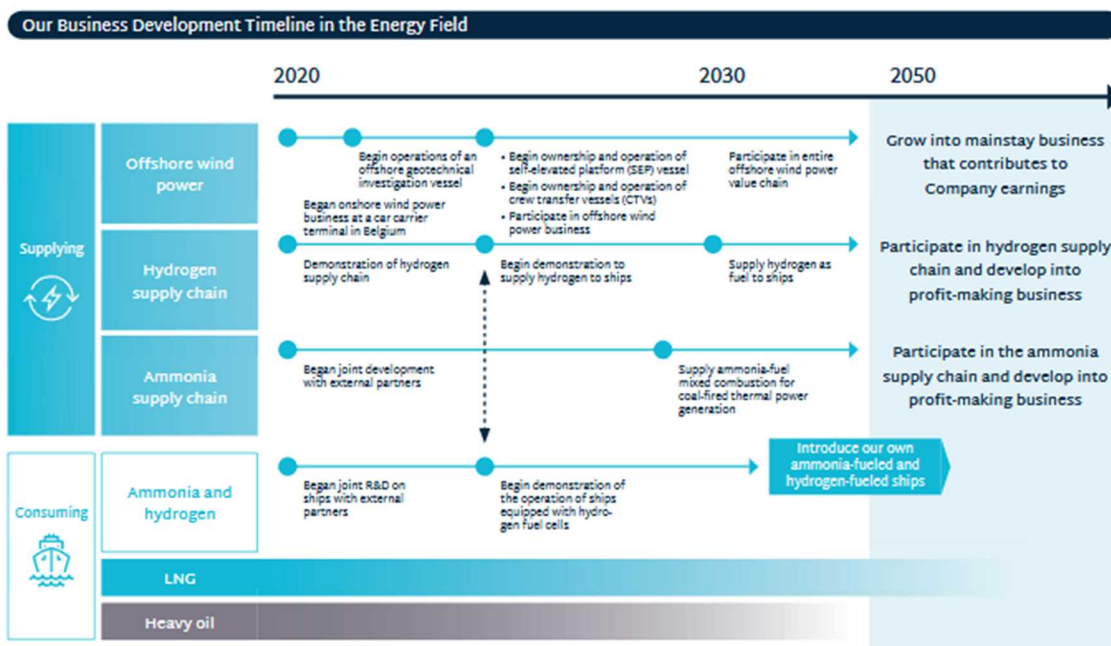
50% reduction by fiscal 2050 would be also achieved through the pursuit of improved efficiency and optimization as a supplement to direct efforts focused on GHG emission reduction. In 2018, our emission reduction targets were approved by Science Based Targets initiatives.



We aim to achieve a 50% reduction by fiscal 2050 through the pursuit of improved efficiency and optimization as a supplement to direct efforts focused on GHG emission reduction.

## 4.2 Taking On Ambitious New Businesses in the Energy Field

By leveraging expertise and technological competence accumulated over many years and its global network, the NYK Group is tackling ambitious projects in the renewable energy field with the aim of creating a new core business. Another promising way of providing an alternative to fossil fuels and helping reduce GHG emissions is to build a global hydrogen supply chain. With this in mind, we will participate in R&D on the transportation of hydrogen and ammonia and move forward with the development of value chains for new energy.



## 4.3 Participation in External Initiatives

- The Maersk Mc-Kinney Moller Center for Zero Carbon Shipping

A not-for-profit, commercial foundation founded by seven commercial partners, i.e., the American Bureau of Shipping (ABS), A.P. Moller-Maersk, Cargill, MAN Energy Solutions, Mitsubishi Heavy Industries, NYK, and Siemens. The center's activities have begun. The center is committed to seeing commercially viable deep-sea zero-carbon vessels powered by zero-carbon fuels and accelerating the development of operationally and financially viable technologies through a coordinated effort within applied research across the entire supply chain to realize the IMO's ambition to reduce GHG emissions.
- Getting to Zero Coalition

The Getting to Zero Coalition, a partnership among the Global Maritime Forum, the Friends of Ocean Action, and the World Economic Forum that builds on the Call to Action in Support of Decarbonization launched and signed by more than 70 leaders from across the maritime industry and financial institutions. The Coalition is committed to getting commercially viable deep-sea zero-emission vessels powered by zero-emission fuels into operation by 2030 to realize the IMO's ambition to reduce GHG emissions, thus accelerating maritime shipping's decarbonization.

- **Hydrogen Council**  
A global initiative of leading energy, transport and industry companies with a united vision and long-term ambition for hydrogen to foster the energy transition. NYK was one of the first shipping companies to become a member of the Hydrogen Council.
- **Board members of Clean Fuel Ammonia Association (CFAA)**  
To establish a value chain that extends from the distribution of CO<sub>2</sub>-free ammonia to the use of it, CFAA conducts studies on technological and economic assessments, develops policy proposals, and promotes international collaboration. CFAA now has over 130 members, including domestic companies, organizations, and overseas-associates. NYK is the only shipping company among all members.
- **Global CCS Institute**  
The Global CCS Institute is an international think-tank established to promote the use of carbon capture and storage (CCS) technologies worldwide.
- **Roadmap to Zero Emission from International Shipping**  
Japan's Ministry of Land, Infrastructure, Transport and Tourism, in collaboration with the maritime industries, research institutes, and public organizations, developed the "Roadmap to Zero Emission from International Shipping" in March 2020.
- **Shipping Industry Working Group**  
NYK has participated in the development of shipping criteria as part of the Climate Bonds Initiative.
- **TCFD participation**  
NYK declared its support of the TCFD in December 2018 and joined the Japan TCFD Consortium in May 2019.

#### 4.4 Rationale for Green/Transition Bond Issuance

Our transition targets incorporate the GHG reduction targets of the IMO and the "Roadmap to Zero Emission from International Shipping" developed by Japan's Ministry of Land, Infrastructure, Transport and Tourism. Our targets also contribute to the achievement of the Paris Agreement. We have set the issuance of green/transition bonds as an initiative to accomplish our transition strategy. In addition, we also consider issuance to be an opportunity to inform various stakeholders of the NYK Group's initiatives. Our long-term strategy will be reviewed if policy assumptions change.



#### 4.5 Corresponding Sections to the Four Disclosure Elements of the ICMA Climate Transition Handbook

We intend to have our transition bond issuance aligned with the Climate Transition Finance Handbook 2020 (ICMA) and Basic Guidelines on Climate Transition Finance (May 2021) issued by Japan’s Financial Services Agency, the Ministry of Economy, Trade and Industry, and the Ministry of the Environment. The four disclosure elements and the corresponding sections are as follows:

disclosure elements	sections
1. Climate Transition Strategy and Governance	2.1/2.2/2.3/3/4.1/4.2/4.3/4.4/5.1/7
2. Business Model Environmental Materiality	2.2/4.2/4.3/5.1
3. Climate Transition Strategy to be Science-based Including Targets and Pathways	4.1/4.2/4.3/4.4/5.1
4. Disclosures	4.2/5.1/6

### 5. Green/Transition Bond Framework

#### 5.1 Use of Proceeds

NYK plans to allocate the proceeds from green/transition bonds to refinance new and existing investments related to eligible projects that meet the following criteria. In the case of existing investments, allocation is limited to expenditures made within three years before the issuance of the green/transition bond.

Under this framework, NYK can issue below types of bonds.

1. Green Bonds – for which the funds raised are exclusively allocated to green project categories;
2. Transition Bonds – for which the funds raised are exclusively allocated to green project categories and transition project categories;

Green Projects (environmental objectives of the GBP: Climate change mitigation)

Category	Business/Project	GBP Project Categories	Consistency with SDGs
Renewable Energy	Expenditure for offshore wind support vessel, self-elevating platform (SEP) vessel and crew transport vessel (CTV). (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	Renewable Energy	7. Affordable and clean energy
	Expenditure for new construction and expanding of the Green Terminal. (Capital investment, R&D funds,		8. Decent work and economic growth
			9. Industry, innovation and infrastructure
			13. Climate action
			17. Partnerships for the goals

	business development and operation funds, working capital, etc.)		
Ammonia-fueled vessel	Expenditure for ammonia-fueled ammonia gas carrier and tugboat. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)		
Hydrogen-fueled vessel	Expenditure for vessel equipped with high-power hydrogen fuel cells. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)		

#### Transition Projects

<b>Category</b>	<b>Business/Project</b>	<b>Consistency with SDGs</b>
LNG-fueled vessel	Expenditure for LNG-fueled vessels. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	7. Affordable and clean energy 8. Decent work and economic growth 9. Industry, innovation and infrastructure
LNG-bunkering vessel	Expenditure for LNG-bunkering vessels. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	13. Climate action 17. Partnerships for the goals
LPG-fueled vessel	Expenditure for LPG-fueled vessels. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	
Operation efficiency & optimization	Expenditure for technology development that contributes to operational efficiency and optimization. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	

## **5.2 Exclusion Criteria**

The proceeds from green/transition bonds will not be allocated to project related to the following:

- Unfair transactions that do not comply with the laws and regulations of the country, such as bribery, corruption, blackmail, embezzlement, etc.
- Transactions that can cause social problems relate to human rights and the environment

## **5.3 Process for project evaluation and selection**

NYK's Finance Group will select potential eligible projects, and the CFO will approve such selections. Eligibility assessments are done in a comprehensive manner from financial, technical and operational, market, and ESG-related risk points of view. In addition, in the operation and implementation of the project, NYK is working on the conservation of the surrounding environment in each related department, which the company regularly monitors in the PDCA cycle.

## **5.4 Management of Proceeds**

NYK's Finance Group will manage the allocation status of the proceeds annually using the internal management system until the full amount of the proceeds from the issuance of green/transition bonds is allocated. The proceeds will be allocated to eligible projects within two years from issuance and will be managed in cash or cash equivalents until the full amount of the proceeds from the green/transition bond is allocated.

## **6. Reporting**

### **6.1 Report of Allocation Status of Proceeds**

NYK will publish the allocation status on the company's website annually until the proceeds are fully allocated to projects that meet the eligible criteria. The content of the disclosure will include the amount of funds allocated to each project category, the amount of unallocated funds and the amount of funds that have been allocated to refinance the expenditures. In the event of a significant change in the allocation of funds raised, we will disclose it in a timely manner.



## 6.2 Impact Reporting

NYK will report the following indicators and project outlines on our website to the extent practically possible until the proceeds from the bond are fully allocated.

Category	Business/Project	Reporting Item
Renewable Energy	Expenditure for offshore wind support vessel, self-elevating platform (SEP) vessel and crew transport vessel (CTV). (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	<ul style="list-style-type: none"> <li>• Number of the vessels invested in</li> <li>• Major specifications</li> <li>• Location, cardinal number and capacity (kW) of introduced offshore wind power generation</li> </ul>
	Expenditure for new construction and expansion of the Green Terminal. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	<ul style="list-style-type: none"> <li>• Cardinal number and capacity (kW) of introduced wind power generation</li> <li>• Capacity of solar PVs (kW)</li> </ul>
Ammonia-fueled vessel	Expenditure for ammonia-fueled ammonia gas carrier and tugboat. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	<ul style="list-style-type: none"> <li>• Number of the vessels invested in</li> <li>• Major specifications</li> </ul>
Hydrogen-fueled vessel	Expenditure for the vessel equipped with high-power hydrogen fuel cells. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	<ul style="list-style-type: none"> <li>• Number of the vessels invested in</li> <li>• Major specifications</li> </ul>
LNG-fueled vessel	Expenditure for LNG-fueled vessels. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	<ul style="list-style-type: none"> <li>• Number of the vessels invested in</li> <li>• Major specifications</li> <li>• GHG emissions (mt/ship/year)</li> <li>• GHG · CO<sub>2</sub> · SO<sub>x</sub> · NO<sub>x</sub> emission reduction amount or ratio compared to conventional vessel</li> </ul>
LNG-bunkering vessel	Expenditure for LNG-bunkering vessels. (Capital investment, R&D funds, business development and	<ul style="list-style-type: none"> <li>• Number of the vessels invested in</li> <li>• Major specifications</li> <li>• GHG emissions (mt/ship/year)</li> </ul>

	operation funds, working capital, etc.)	<ul style="list-style-type: none"> <li>• GHG • CO<sub>2</sub> • SO<sub>x</sub> • NO<sub>x</sub> emission reduction amount or ratio compared to conventional vessel</li> </ul>
LPG-fueled vessel	Expenditure for LPG-fueled vessels. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	<ul style="list-style-type: none"> <li>• Number of the vessels invested in</li> <li>• Major specifications</li> <li>• GHG emissions (mt/ship/year)</li> <li>• GHG •CO<sub>2</sub> • SO<sub>x</sub> emission reduction amount or ratio compared to conventional vessel</li> </ul>
Operation efficiency & optimization	Expenditure for technology development that contributes to operational efficiency and optimization. (Capital investment, R&D funds, business development and operation funds, working capital, etc.)	<ul style="list-style-type: none"> <li>• GHG / CO<sub>2</sub> / SO<sub>x</sub> / NO<sub>x</sub> emission reductions or ratios before and after the introduction of equipment or systems compared to standard operations</li> </ul>

※Some or all of the reporting items will be disclosed.

## **7. External Review**

### **7.1 Second Party Opinion**

NYK has obtained a second party opinion from DNV Business Assurance Japan Co. Ltd. as an independent external reviewer that this framework is aligned with the Green Bond Principles 2021 (ICMA), Green Bond Guidelines 2020 (Ministry of the Environment, Japan), Climate Transition Finance Handbook 2020 (ICMA) and Basic Guidelines on Climate Transition Finance (May 2021) (Financial Services Agency, Japan; Ministry of Economy, Trade and Industry, Japan; and Ministry of the Environment, Japan).

### **7.2 Annual Review**

Within one year from the date of issuance of the green/transition bond, NYK will obtain a review from DNV Business Assurance Japan Co. Ltd. as an independent external reviewer to evaluate whether eligible projects are aligned with this green/transition bond framework. This review will be conducted annually until the proceeds from the bond are fully allocated.