

Transition Finance | Case Study 1: Nippon Yusen Kabushiki Kaisha

Case Study Overview

■ Corporate Profile

Company Name	Nippon Yusen Kabushiki Kaisha
Industry	Shipping
Location	Japan
Business	One of the world's leading shipping companies. Currently, the NYK Group is engaged in general cargo transportation, consisting of liner trade, air cargo transportation, and logistics, as well as bulk shipping, real estate, and other businesses.

■ Bond Outline

Issue Date	• July 29, 2021
Summary	<ul style="list-style-type: none"> • Issue amount : 10 billion yen • Term : 5 years • Interest rate : 0.26% per year <ul style="list-style-type: none"> • Issue amount : 10 billion yen • Term : 7years • Interest rate : 0.38% per year
Repayment Term	<ul style="list-style-type: none"> • July 29, 2026 • July 28, 2028
Evaluation Agency	• DNV BUSINESS ASSURANCE JAPAN K.K.

3rd Party Evaluation

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- Confirmed that the transition strategy is a strategy for achieving goals consistent with the Paris Agreement. It is also designed for the Climate Transition Finance Handbook and meets the 4 elements of the Basic Guidelines as it includes plans to implement it along the timeline, etc.

Market Reaction

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- More than 10 times investors' demand (209.9 billion yen/163 cases) for 20 billion yen in total.
 - Institutional investors as well as other investors invested because they were transition bonds.

Mitsubishi UFJ Securities Holdings Co.,Ltd.

Use of Proceeds

LNG-fueled Ships

- LNG-fueled ships expenditure

Offshore Wind Power Generation

- Self-elevating platform
- Crew transfer vessel for offshore wind power generation

LNG Fuel Supply Ships

- LNG fuel supply ships expenditure (LNG-fueled bunkering ships)

Green Terminals

- Establishment of new Green Terminals

LPG-fueled Ships

- LPG-fueled ships expenditure

Ammonia-fueled Ships

- AFAGC: Ammonia Fueled Ammonia Gas Carrier and tugboat

High Efficiency and Optimization of Operations

- Development of technology for high efficiency and optimization of operations

Hydrogen-fueled Ships

- Implementation of vessels equipped with high-power fuel cells

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Alignment with the Four Elements in Basic Guidelines on Climate Transition Finance

■ Transition Strategy and Science-based Targets (Elements 1 · 3)

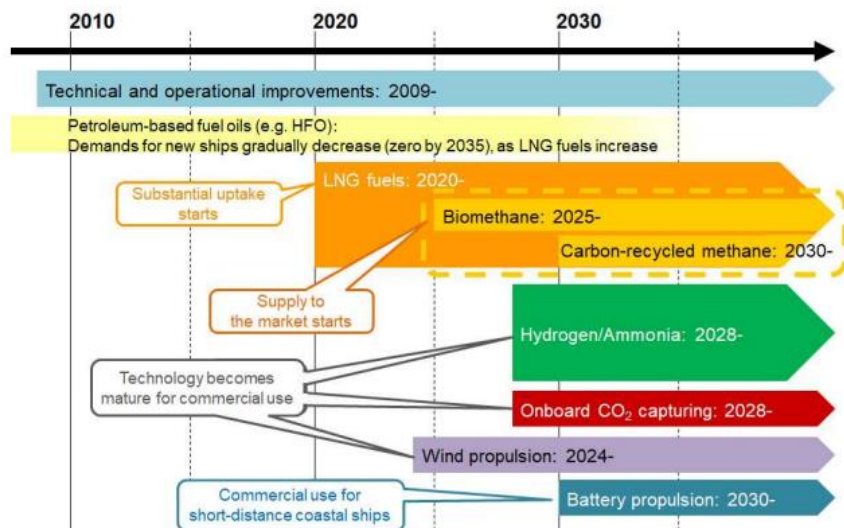
The NYK Group GHG Reduction Targets
(Compared to IMO, MLIT and others)

Items	IMO, MLIT and others	The NYK Group (SBT certified)
Base year	2008	2015
2030 Target*1	40%(min)	30%
2050 Target	70%(min) + Total Emissions*250%(min)	50%

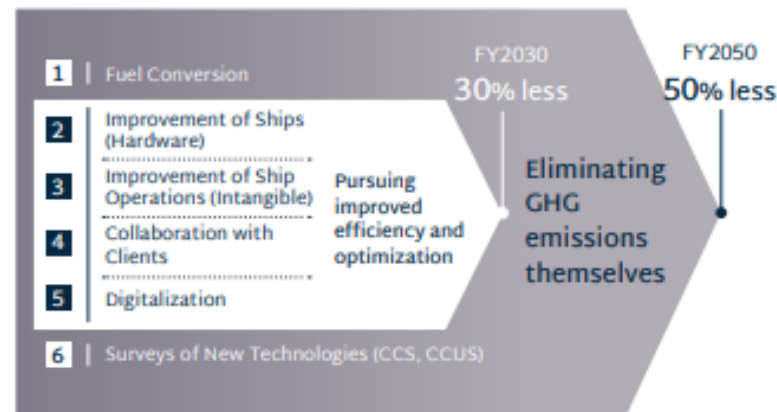
*1 Target : basic unit target of GHG emissions

*2 Total Emissions : estimate considered the number of vessels in operation

■ MLIT's Roadmap



Emission Reduction Targets Achievement Process



Element 1
(Transition Strategy and Governance)

- The transition strategy is a strategy for achieving goals that exceed the roadmap compiled by the IMO and the MLIT that are consistent with the Paris Agreement.
- Promotes efficiency and optimization through fuel conversion, improvement of ships (hardware) and operations (software), etc.
- LNG-fueled ships related projects, a candidate for the use of proceeds, are initiatives based on the above and is positioned as an alternative for heavy oil-fueled ships.

Element 2
(Materiality)

- Attempts for promoting climate transitions are the core business of the NYK Group and are linked to priority themes and materiality.

Element 3
(Science-based Targets & Pathways)

- Emission reduction targets are SBT certified and based on scientific evidence.
 - Exceeds the goals of IMO* and MLIT that are consistent with the Paris Agreement.
- ※International Maritime Organization

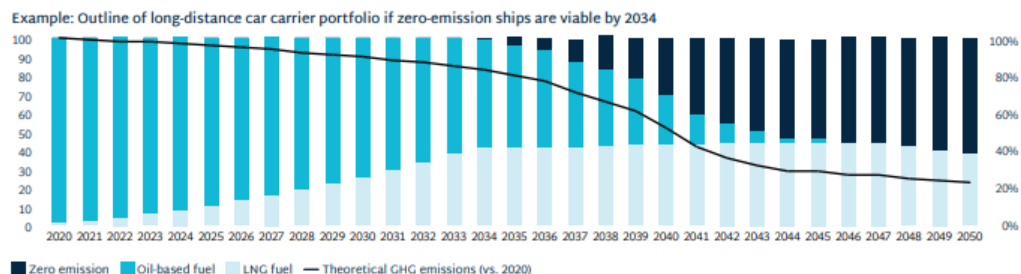
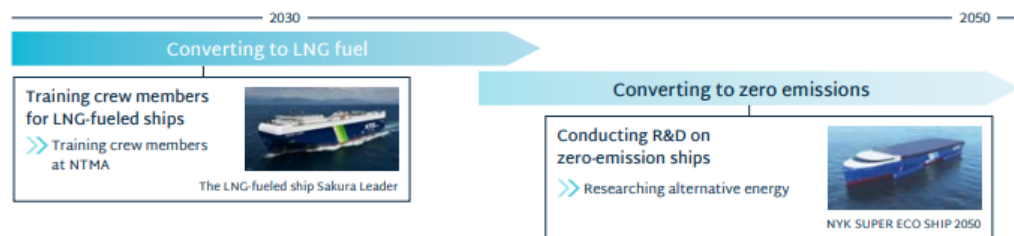
Element 4
(Transparency)

- There is a plan to implement the transition strategy along the timeline for the overall investment plan (investment amount).
- No additional significant environmental or social impact on implementation.

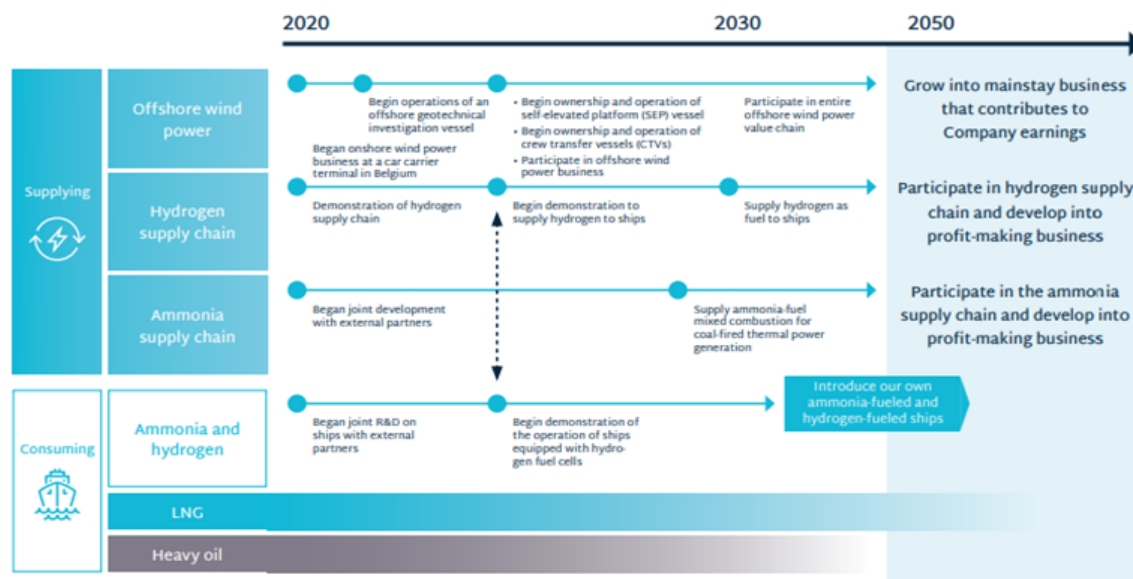
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Key Points in the Case Study (Element 1: Transition Strategy)

Portfolio Transition Prospect



Business Timeline



Key Points

- Based on scientific evidence, NYK Group has set GHG emission reduction targets aligned with the Paris Agreement and the international industry standards such as the IMO and Ministry of Land, Infrastructure, Transport and Tourism in its transition strategies. NYK is also constructing plans for its realization.
- For instance, LNG-fueled ships, use of proceeds for this bond, is an initiative based on the transition strategy and are alternatives for heavy oil-fueled ships. It exhibits the business's future transition toward decarbonization alongside the future implementation of zero emission vessels.
- Additionally, the strategy addresses our challenge towards energy fields through the construction of new business. The timeline promotes new energy value chain construction through renewable energy business (offshore wind power generation), R&D and deployment for building a supply chain for hydrogen and ammonia.

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Summary of Results

Case Study: Nippon Yusen Kabushiki Kaisha (NYK) Transition Bonds

Modelability Review Results: Approval

An advanced and ambitious approach, appropriate as a model case

Main opinions

Transition strategy

- In the vessel portfolio, LNG is a replacement for heavy oil, reducing the absolute amount of emissions. It shows a future transition, namely a decrease as the number of zero-emission ships increases in future.
- Zero-emission ships are not limited to hydrogen and ammonia, but carbon neutral methane using LNG carrier infrastructure is also understood to have the potential to achieve decarbonization.

Scientific basis

- Currently, this is a hard-to-abate sector with no alternative technologies, and SBTi confirms alignment with the Paris Agreement as a scientific basis. Alignment with IMO's reduction strategy and MLIT's marine transportation roadmap.
- The referenced target values and roadmaps of IMO, SBTi etc. could be updated more ambitiously in the future, but the applicant's response and stance on them were confirmed. This is an important point in other cases, too, and is expected to be stated in relation to the basic guidelines.

Other elements/others

- It has been confirmed that there are no issues with environmental and social impacts other than climate change for a fair transition.
- LPG tankers are also candidates for the use of proceeds, and it has been confirmed that switching from heavy oil vessels reduces GHG emissions.
- Transitions, not just green technologies, are very important for effective emission reduction.
- Financial institutions are beginning to set a goal of net zero in their investment and loan portfolios, and transitions are important from this perspective as well.
- The key to a transition is to build a system for a superior decarbonized society that coexists with green technologies, and in which the use of existing technologies and innovation through new technologies mutually compensating for each other's shortcomings taking into account the timeline. It is hoped that a firm philosophy will be established in the background.

This report focuses on the contribution of transition finance to the realization of Japan's 2050 carbon neutrality and the Paris Agreement, and does not cover any evaluation of the risks of transition finance as a financial instrument. Even in the model case of this project, it should be noted that credit risks and other risks (such as price fluctuation or liquidity risks in the case of bonds) exist as in ordinary financing.