

October 26, 2021

Kawasaki Kisen Kaisha, Ltd.

Joint project on “Development of Ammonia-fueled ship” adopted as Green Innovation Fund

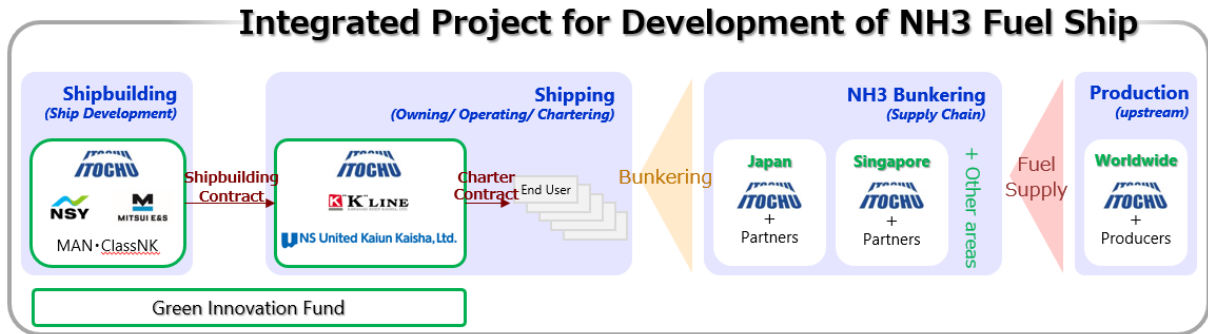
Kawasaki Kisen Kaisha, Ltd. (“K” LINE), together with ITOCHU Corporation, NS United Kaiun Kaisha, Ltd., Nihon Shipyard Co., Ltd. and Mitsui E&S Machinery Co., Ltd. have jointly applied for and been selected for the "Green Innovation Fund Project / Development Project for Next-Generation Ships / Development of Ammonia-Fueled Ships," a project publicly announced by the New Energy and Industrial Technology Development Organization (NEDO).

In order to achieve the International Maritime Organization's strategy to reduce greenhouse gas (GHG) emissions, this project will use ammonia as marine-fuel, which is attracting attention from various fields as a candidate for alternative fuels, to develop, own and operate propulsion systems and hulls ahead of other countries, with the aim of implementing ammonia-fueled ships in society under Japan's leadership as early as possible by 2028, so that Japan's maritime industry can maintain its long-term advantage in the field of zero-emission ships.

\*Role of each company\*

Company	Role
Mitsui E&S Machinery	1. Development of ammonia fuel tank & fuel supply system 2. Development of technology related to ammonia-fueled engine 3. Development of safety features specific to ammonia-fueled ship 4. Demonstration of related to ammonia-fueled engine & supply system
Nihon Shipyard	1. Development of hull equipped with ammonia fuel tanks 2. Ammonia fuel handling system onboard 3. Safety systems onboard 4. Verification of research and development through shipboard demonstration
“K” LINE ITOCHU Corporation NS United Kaiun	Operational demonstration of ammonia-fueled ship

Through the “Joint Study” framework for studying ammonia as an alternative marine fuel (Note 1) established in June this year, “K” LINE has been studying the use of ammonia as marine-fuel. Together with the four companies involved in this joint project, “K” LINE will continue to work toward the social implementation of ammonia, a promising zero-emission fuel, as a marine-fuel in society.



(Note 1)

Announced on 11-June 2021: Kick off "joint Study" framework for studying ammonia as an alternative marine fuel

[https://www.kline.co.jp/en/news/Liquefied\\_gas/Liquefied\\_gas-4035281298117405646/main/0/link/210611EN1.pdf](https://www.kline.co.jp/en/news/Liquefied_gas/Liquefied_gas-4035281298117405646/main/0/link/210611EN1.pdf)