October 7 ,2022
Engineering Advancement Association of Japan
Kawasaki Kisen Kaisha, Ltd.
Nippon Gas Line Co., Ltd.
Ochanomizu University

NEDO Demonstration Project: Demonstration Test Ship for Liquefied CO2 Transportation has broken ground.

A groundbreaking ceremony for the hull of the demonstration test ship for liquefied CO2 transportation was held today, 7 October 2022 at the Shimonoseki Shipyard of Mitsubishi Shipbuilding Corporation (Shimonoseki, Yamaguchi; hereinafter 'Mitsubishi Shipbuilding').

This hull of demonstration test ship will be equipped with the liquefied CO2 tank system which is researched and developed by Engineering Advancement Association of Japan (hereinafter ENAA). After the completion, the demonstration test ship will be engaged in liquefied CO2 transportation for the purpose of “CCUS R&D and Demonstration Related Project / Large-scale CCUS Demonstration in Tomakomai /Demonstration Project on CO2 Transportation / R&D and Demonstration Project for CO2 Marine Transportation” (the demonstration projects) which have been conducted by New Energy and Industrial Technology Development Organization (NEDO) since June 2021.

At the groundbreaking ceremony, Mitsubishi Shipbuilding prayed for safety during the construction period and completion without accidents with the attendance of Sanyu Kisen Kaisha, which was contracted to provide the demonstration vessel for the project.
Nippon Gas Line Co., Ltd. (hereinafter NGL) and Kawasaki Kisen Kaisha, Ltd. (hereinafter “K” Line) also present the ceremony.

ENAA, “K” Line, NGL, and Ochanomizu University will accelerate R&D of the LCO2 transportation technology and contribute to cost reduction of CCUS technology and LCO2 safety, long-distance and large-scale transportation.

ENAA has been promoting research and development towards the operation of a demonstration ship equipped with a liquefied carbon dioxide ship tank system, and will continue to be responsible for planning, analysis and supervision of demonstration test.
“K” Line is planning to carry out a risk assessment of the demonstration test ship for the safety evaluation this year and will contribute to the development of an operation manual of the demonstration vessels.
NGL is proceeding with planning for management and operation of the demonstration vessel. In addition, NGL is conducting a case study on an own LPG vessel in preparation for data measurement of CO2 temperature, pressure, flow, etc. on the demonstration vessel.
Ochanomizu University conducts fundamental research on the control of carbon dioxide state

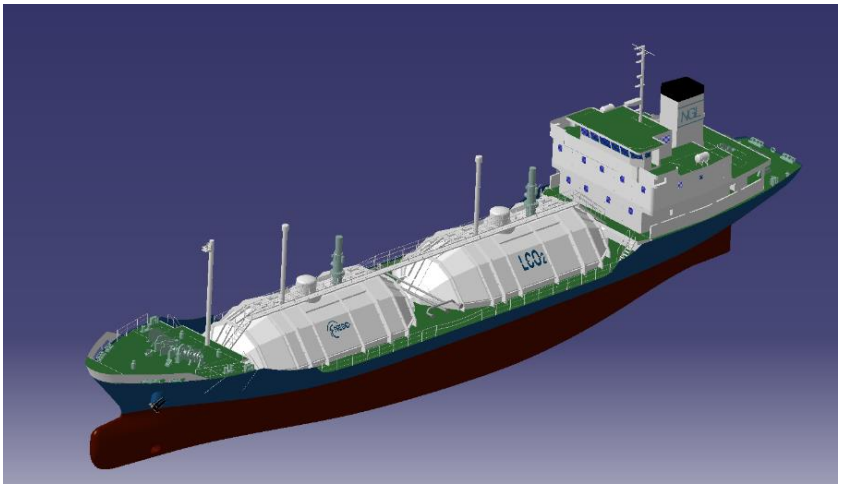
(phase change) and provide the information necessary for safe transportation studies.

ENAA, “K” LINE, NGL, and Ochanomizu University will contribute to realizing the carbon neutral society through this demonstration project.

＜Ceremony Photo＞

(From Left)
Kawasaki Kisen Kaisha, Ltd.: Mr. Satoshi Kanamori, Nippon Gas Line Co., Ltd.: Mr. Yasuhiro Muramatsu, Mr. Masafumi Ishizaki, MITSUBISHI HEAVY INDUSTRIES, LTD.: Mr. Koji Mori, Sanyu Kisen Kaisha: Mr. Masanobu Mochizuki.

＜Image of the demonstration test ship for LCO2 transportation ＞



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【General Particular】

Cargo tank capacity	: 1,450 ㎥
Length overall	: 72.0m
Breadth	: 12.5m
Draft	: 4.55m

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On February 2, 2022: NEDO Demonstration Project: The World's First Demonstration Test Ship for Liquefied CO2 Transportation to be Build

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