

 **Mitsui O.S.K. Lines**

 **MOL Coastal Shipping, Ltd.**



TABUCHI KAIUN CO., LTD.

 **新居浜海運株式会社**

 **Murakami Hide Shipbuilding Co., Ltd.**
村上秀造船株式会社

 **HANSHIN DIESEL**

March 23, 2023

Mitsui O.S.K. Lines, Ltd.
MOL Coastal Shipping, Ltd.
Tabuchi Kaiun Co., Ltd.
Niihama Kaiun Co., Ltd.
Murakami Hide Shipbuilding Co., Ltd.
Hanshin Diesel Works, Ltd.

Six Companies Team up to Build, Operate Japan's 1st Methanol-fueled Coastal Tanker

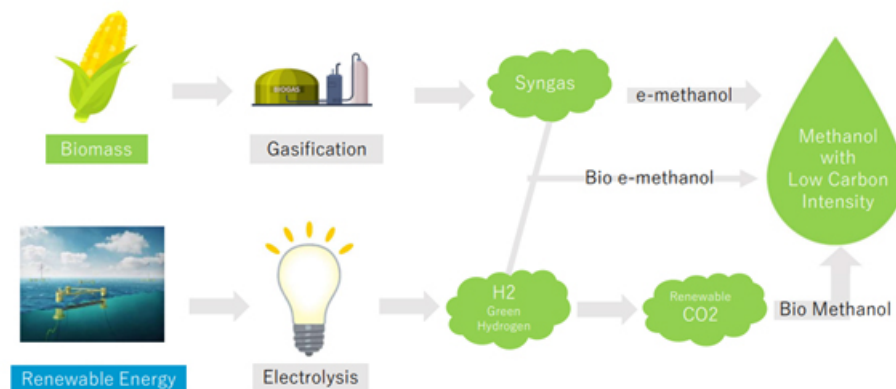
Mitsui O.S.K. Lines, Ltd., MOL Coastal Shipping, Ltd., Tabuchi Kaiun Co., Ltd., Niihama Kaiun Co., Ltd., Murakami Hide Shipbuilding Co., Ltd., and Hanshin Diesel Works, Ltd. today announced the decision to build a methanol-fueled coastal tanker. The six companies have long been pursuing a strategic alliance to develop a coastal tanker with a methanol-fueled engine.

The vessel will be jointly owned by MOL Coastal Shipping, Tabuchi Kaiun, and Niihama Kaiun, and on December 28, 2022, those three companies signed a shipbuilding contract with Murakami Hide Shipbuilding. The vessel will be built at Kanasashi Heavy Industries Co., Ltd. part of the Murakami Hide Shipbuilding Group and is slated for delivery in December 2024. It will be bareboat chartered to Niihama Shipping through the three shipowning companies, and then time-chartered to MOL Coastal Shipping through Tabuchi Kaiun. MOL Coastal Shipping will sign a time charter contract with Mitsubishi Corporation, and the vessel will be engaged in domestic methanol transport from the time of delivery.

Based on the strategic alliance, MOL will provide technical support for the development of the vessel and further promote and develop this strategic alliance, while Hanshin Diesel Works will develop a methanol-fueled engine.

Compared to heavy oil, which is currently the primary marine fuel oil, the use of methanol fuel can reduce sulfur oxide (SOx) emissions by up to 99%, particulate matter (PM) emissions by up to 95%, nitrogen oxide (NOx) emissions by up to 80%, and carbon dioxide (CO₂) emissions by up to 15%. Methanol fuel is already in practical use and can be supplied and bunkered at about 130 major ports worldwide. The use of methanol derived from non-fossil energy sources, such as e-methanol produced by synthesizing CO₂ recovered from various emission sources and hydrogen produced using renewable energy, and biogas-derived bio-methanol, can lead to further reductions in net GHG emissions.

Methanol is used as an environmentally friendly fuel in oceangoing vessels, including five vessels operated by the Mitsui O.S.K. Lines Group, and such use is expected to be significantly expanding in next couple of years. However, this is the first time it has been used in coastal vessels.



The development of the vessel has also been adopted as subsidy project of the “Utilizing AI/IoT, etc. and More Efficient Transport Promotion Project Grant Subsidy (Coastal Ship Innovative Operational Efficiency Demonstration Projects)” by Japan’s Ministry of Economy, Trade and Industry (METI) and Ministry of Land, Infrastructure, Transport and Tourism (MLIT). ^(Note 1)

The six alliance partners will bring together their respective strengths in technology, know-how, and networks ^(Note 2) to realize a low-carbon, decarbonized society.

[Outline of the vessel]

Gross tonnage: about 570 tons

LOA: about 65.50m

Breadth: 10.00m

Draft: about 4.38m

Speed: 11.15 knots or higher

Main engine: One Hanshin Diesel Works “LA28M” methanol-fueled marine engine

(Note 1)

The program subsidizes the costs of demonstration projects aimed at optimizing overall transport through measures from software aspects such as optimization of operational planning and cargo handling, and those from hardware aspects such as energy-efficient hulls, high-efficiency propulsion systems, and efficient cargo handling equipment.

(Note 2)

Roles of companies in the business alliance



<Outline of companies>

Mitsui O.S.K. Lines, Ltd.

Established	May 1884
Head Office	2-1-1 Toranomom, Minato-ku, Tokyo
Representative	President & CEO Takeshi Hashimoto
Business	Ocean shipping, etc.

MOL Coastal Shipping, Ltd.

Established	December 22, 1953
Head Office	2-1-1 Toranomom, Minato-ku, Tokyo
Representative	President Hiroshi Kobayashi
Business	Marine transport

Tabuchi Kaiun Co., Ltd.

Established	October 1935
Head Office	2-3-11 Minamisemba, Chuo-ku, Osaka-shi, Osaka
Representative	Norio Tabuchi
Business	Marine transportation, etc.

Niihama Kaiun Co., Ltd.,

Established	August 1948
Head Office	1-4-18 Nishibaracho, Niihama-shi, Ehime
Representative	President and Representative Director Shuichi Moriga
Business	Marine transportation

Murakami Hide Shipbuilding Co., Ltd.

Established	November 1963
Head Office	4641-2 Kinoura, Hakata, Imabari City, Ehime Prefecture
Representative	Eiji Murakami
Business	Ship newbuilding and ship repair, etc.

Hanshin Diesel Works, Ltd.

Established	January 1918
Head Office	Shinko Building 4th Floor, 8 Kaigan-dori, Chuo-ku, Kobe City, Hyogo Prefecture
Representative	President Kazuhiko Kinoshita
Business	Production of marine engines, etc.