

December 10, 2020
Mitsui O.S.K. Lines, Ltd.
Tohoku Electric Power Co., Inc.

MOL, Tohoku Electric Power Sign Deal for Transport Using Coal Carrier Equipped with Hard Sail Wind Power Propulsion System (Wind Challenger)

~Aiming to Reduce Environmental Impact and Boost Economic Efficiency by Introducing World's 1st Coal Carrier Equipped with a 'Sail'~

TOKYO—Mitsui O.S.K. Lines, Ltd. (MOL; President & CEO: Junichiro Ikeda, Headquarters: Minato-ku, Tokyo) today announced that the company has reached a coal transport deal with Tohoku Electric Power Co., Inc. (President: Kojiro Higuchi; Headquarters: Sendai-shi, Miyagi Prefecture), using a coal carrier equipped with a hard sail wind power propulsion system, also known as the "Wind Challenger*."

Construction of the vessel will start at Oshima Shipbuilding Co., Ltd. (President: Eiichi Hiraga; Headquarters: Saikai-City, Nagasaki Prefecture), aiming to start operation in 2022.

The introduction of the Wind Challenger is expected to reduce emissions of greenhouse gases (GHGs) by about 5% on the Japan-Australia route or about 8% on the Japan-North America West Coast route, in comparison with a conventional vessel of the same class.

MOL and Tohoku Electric Power will conduct more verification tests on the system's GHG reduction effects toward the 2022 target date for the new carrier to begin operation.

[Outline of coal carrier equipped with Wind Challenger]

Ship operator	Mitsui O.S.K. Lines, Ltd.
LOA/Breadth	About 235m/About 43m
Deadweight tonnage	About 99,000 tons
Shipyard	Oshima Shipbuilding Co., Ltd.
Scheduled delivery	2022

Logomark



Image of Wind Challenger



- * The Wind Challenger is a telescoping hard sail that converts wind energy to propulsive force. Installation of the system on merchant ships has the potential to significantly reduce fuel consumption, which in turn reduces the environmental impact of vessel operation while improving economic efficiency. This follows the "Wind Challenger Plan" started in 2009, an industry-academia joint research project led by The University of Tokyo. In January 2018, MOL and Oshima Shipbuilding took charge of the plan and now play a central role in this project. In October 2019, it acquired Approval in Principle (AIP) for the design of a hard sail system. Please refer to the press release on that date: "Wind Challenger" Design Acquires Preliminary Approval - Realizing Japan's 1st Large Cargo Ship with 'Sail', Aiming at Reduction of GHGs -. (<https://www.mol.co.jp/en/pr/2019/19065.html>)

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