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**MOL, MOL Drybulk, J-ENG Sign Agreement for Trial of Hydrogen-fueled  
Engine equipped Onboard  
~ Aiming to Realize a Zero Emissions Vessel ~**

Mitsui O.S.K. Lines, Ltd.  
MOL Drybulk, Ltd.  
Japan Engine Corporation

TOKYO—Mitsui O.S.K. Lines, Ltd. (MOL), MOL Drybulk, Ltd., and Japan Engine Corporation (J-ENG) today announced the signing of a basic agreement to cooperate in a trial of hydrogen-fueled engine equipped on an in-service vessel. The ship will be operated by MOL and MOL Drybulk, and the engine—the world’s first low-speed, two-stroke hydrogen-fueled marine engine—will be developed by J-ENG.

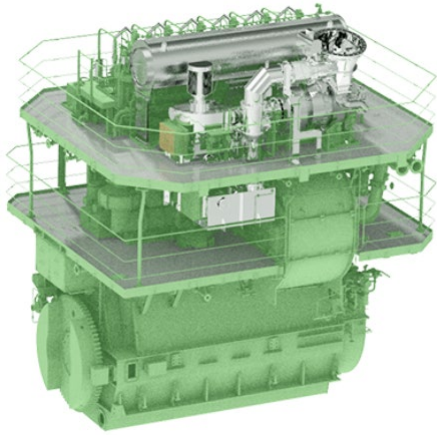
While accelerating efforts to reduce greenhouse gas (GHG) emissions as measures to address climate change, the ocean shipping industry has also promoted a shift to environment-friendly, next-generation fuels.

In the future, hydrogen supply chains are expected to expand globally in response to progress in the use and adoption of hydrogen in various fields such as power generation and mobility. Even in the ocean shipping industry, hydrogen fuel is drawing considerable attention as a promising next-generation fuel.

In cooperation with Kawasaki Heavy Industries, Ltd. and Yanmar Power Technology Co., Ltd., J-ENG will develop the hydrogen-fueled engine, which will be the world’s first main engine for large ocean-going or coastal vessels. The engine development was selected for a government-subsidized project by the New Energy and Industrial Technology Development Organization (NEDO), part of Green Innovation Funding Program.

The MOL Group aims to deploy net zero emissions ocean-going vessels in the 2020s and achieve net zero GHG emissions by 2050, as set out in the “MOL Group Environmental Vision 2.1.”

Through this agreement, MOL, MOL Drybulk, and J-ENG will conduct a trial with an in-service vessel equipped with hydrogen-fueled engine, aiming to commercialize net zero hydrogen-powered vessels and promote their wide adoption in the ocean shipping industry.



3D-view of hydrogen-fueled engine



Image of hydrogen-powered ship

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