



September 27, 2022

Mitsui O.S.K. Lines, Ltd.  
MOL Techno-Trade, Ltd.  
Akishima Laboratories (Mitsui Zosen) Inc.

**Three Companies Conclude Strategic Partnership  
Aimed at Boosting Ship Fuel Efficiency/Reducing GHG Emissions  
-Collaboration among MOL, MOL Techno-Trade and Akishima Laboratories-**

TOKYO—Mitsui O.S.K. Lines, Ltd. (MOL; President & CEO: Takeshi Hashimoto), MOL Techno-Trade, Ltd. (MOLTT; President: Yoshikazu Kawagoe), and Akishima Laboratories (Mitsui Zosen) Inc. (President: Taiji Maeda) today announced that they have formed a strategic partnership to progress fuel efficiency of MOL Group-operated vessels and minimize vessels' greenhouse gas (GHG) emissions.

With the technology playing an increasingly critical role in every aspect of the business, MOL Group recognizes the need to accelerate its operational development through capitalizing in various Energy-Saving Devices (ESD) and technology deployment to its MOL Group-operated vessels to drive successful transformation translated into and improved fuel efficiency and reduction of GHG emissions in the most effective and immediate manner.

Through this partnership, leveraging the synergy of the collective strengths of the three companies— MOL's FOCUS project <sup>(Note 1)</sup>, MOLTT's technical resources backed by a wide and rich range of ESDs marketing and effectiveness verification experiences, and Akishima Laboratories (Mitsui Zosen)'s dedicated focus on marine technology research and engineering expertise, a special taskforce about 30 project specialists from the three companies will be involved to pursue fuel efficiency and further reduce GHG emissions from vessels immediately. The partnership has set a clear target to achieve a 5% improvement in fuel efficiency (i.e. compared to FY2019) by end of FY2024 through synergetic collaborations with EcoMOL Inc. <sup>(Note 2)</sup>, which was established in the Philippines in May, with the goal of promoting vessel operating efficiency.

Specifically, the partner companies will comprehensively examine the different characteristics and conditions of every vessel, and combine 18 different types of measures, encompassing optimal trim, advanced low friction & antifouling paint usages, optimal propeller retro-fittings, best ESD combinations studies, and introduction of various energy-saving technologies and equipment in a timely manner. In addition, the scope will expand to each vessel's optimal maintenance revision not limited to dry-

docking maintenance but also other timings such as during berthing/anchoring so that the companies can utilize every opportunity to improve vessels performance.

Furthermore, the companies will expand their projects in an effective and systematic manner through conducting highly accurate analysis, validation of the effects, and continuous improvements in line with the PDCA cycle, utilizing highly granular operational big & rich data which is readily available from the equipment already installed to vessels in FOCUS project, and steering an engineering-based approach.

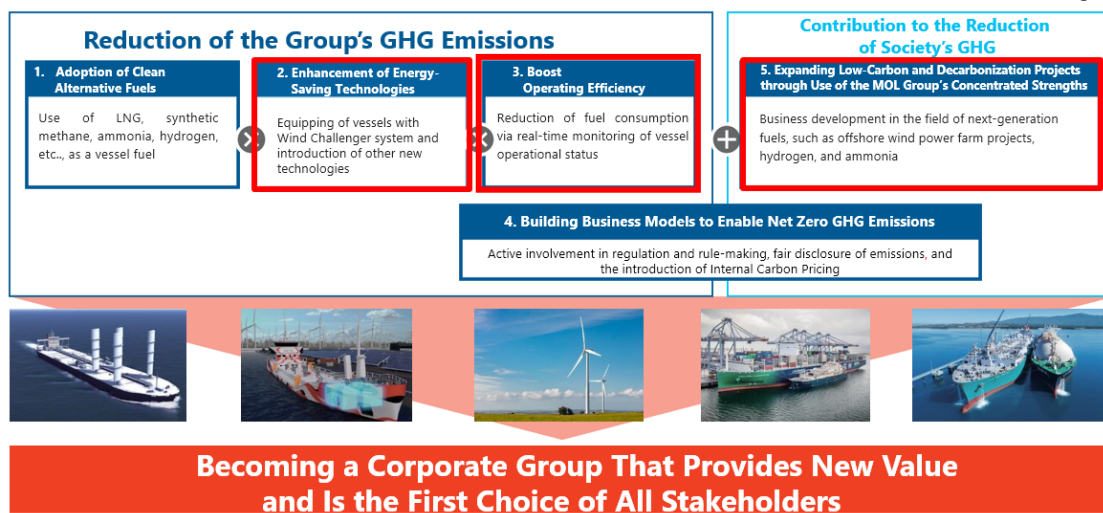
The MOL Group set mid-to-long-term targets to reduce GHG emissions intensity in marine transport by approximately 45% by 2035 (i.e. versus 2019) and achieve net zero GHG emissions by 2050 through five strategies which includes boosting operational efficiency in “[MOL Group Environmental Vision 2.1](#).” (Fig.1). Through the strategic partnership, the MOL Group will carry forward fuel efficiency and GHG reduction from ships and contribute in achieving a low-carbon and decarbonized society.

(Fig. 1)

### Initiatives to Realize MOL Group Environmental Vision 2.1

We will pursue five initiatives to achieve our medium- to long-term goals.

Through the five initiatives, we will work with industry leaders to reduce our own and society’s GHG emissions. ■ Five initiatives to achieve the targets



(Note 1) “FOCUS” is the MOL project that aims to enhance the safe operation of its operated vessels and reduce environmental impact by using oceanographic big data. Please refer to the October 15, 2018, press release.

[Launching of the "FOCUS" Project - Collaborative Innovation Transcending Business Categories: ICT-based, Data-driven Project Aims at Safer Operation and Cleaner Environment –](#)

(Note 2) EcoMOL Inc. is MOL’s wholly owned subsidiary, established in the Philippines in May with the objective to promote operational efficiency. For details, please refer to June 22, 2022, press release.

[MOL Establishes EcoMOL Inc. in the Philippines Sailing towards de-carbonized future: Progressing GHG Emissions Reduction Initiatives by promoting operational efficiency](#)