

November 8, 2024

Kawasaki Kisen Kaisha, Ltd.

Daito Corporation Has Decided to Build an Electric Tugboat

Kawasaki Kisen Kaisha, Ltd. (“K” LINE) is pleased to announce that Daito Corporation (Daito), its consolidated subsidiary, has decided to build an electric tugboat, an electric vessel (EV) powered by a large-capacity lithium-ion battery. Today, Daito held a signing ceremony for a collaboration agreement regarding the construction of the EV tugboat with Kawasaki Heavy Industries, Ltd. (KHI) and Daizo Corporation (Daizo).

This EV tugboat is equipped with a high-capacity battery of 3.2 MWh and operates using green electricity charged into the battery. By using battery power, it significantly reduces fuel consumption and carbon dioxide emissions compared to conventional tugboats equipped with heavy fuel oil engines. Furthermore, through the newly developed hull design and the automatic control of onboard power demands utilizing the latest IoT technologies, the energy consumption is optimized, enabling energy-efficient and high-performance operations of the vessel. This results in approximately a 60% reduction in carbon dioxide emissions compared to traditional tugboats. This initiative are a part of the subsidized, Grant Program for the Promotion of Energy Efficiency and Non-Fossil Energy Transition in the Transportation Sector (Innovative Navigation Efficiency and Transition to Non-Fossil Energy for Coastal Shipping), a collaboration between the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism, playing a significant role in the coastal shipping industry's environmental initiatives.

The EV tugboat is being constructed at Daizo, the shipbuilder, with the cooperation of KHI providing the control and propulsion systems and its integration. The completion is scheduled for May 2027, and it will offer towage service for vessels at Yokohama Port and Kawasaki Port, contributing to the development of carbon-neutral ports (CNP) in both locations.

“K” LINE Group's long-term environmental policy, “K” LINE Environmental Vision 2050 -Blue Seas for the Future- <sup>\*1</sup>, establishes and operates the “DRIVE GREEN NETWORK” framework to promote environmental management, reflecting its commitment to environmental conservation. We will continue to advance efforts to support the decarbonization of society and contribute to enhancing the quality of life for people.

<sup>\*1</sup>. “K” LINE Environmental Vision 2050: Blue Seas for the Future

As part of our action plan to reduce GHG, it is engaged in a number of initiatives, for instance introducing zero-emission fuels such as ammonia and hydrogen fuels, and carbon-neutral fuels such as bio-LNG and synthetic fuels.

<https://www.kline.co.jp/en/sustainability/environment/management.html>

【EV image】



【Signing ceremony】



From left

Managing Director, Daizo Corporation

President, Daito Corporation,

Managing Executive Officer, Kawasaki Heavy Industries, Ltd.

[Contact Information]

Manager of Business Management Team No.2

Logistics, Port and Affiliated Business Group

Kawasaki Kisen Kaisha, Ltd.