

September 17, 2025

Kawasaki Kisen Kaisha, Ltd.

SEAGATE CORPORATION Concludes Agreement on Construction of Electric Tugboat

SEAGATE CORPORATION CO., LTD. (SGC), a consolidated subsidiary of Kawasaki Kisen Kaisha, Ltd. ("K" LINE), officially concluded an agreement today with Kanagawa Dockyard Co., Ltd. (Kanagawa Dockyard) on the construction of an electric tugboat (EV tug, with EV standing for electric vessel) powered by a large-capacity lithium-ion battery.

SGC has discussed the detailed design of the tugboat with Kanagawa Dockyard and equipment manufacturers in accordance with the hybrid EV tug construction plan^{*1} announced in July 2022. The anticipated specifications have recently been achieved due to the downsizing of the tugboat's equipment and the improvement of maintenance performance resulting from introduction of a newly developed domestic technology, leading to the construction agreement with Kanagawa Dockyard.

The tugboat will have a hybrid EV system incorporating many new technologies which have not previously been used in domestic tugboats into its drive motors, swing devices, current control systems and other components. It is equipped with a power generator to be used when the battery does not have enough remaining electricity during the operation of the electric propulsion system which is primarily powered by the lithium-ion battery. This significantly reduces the consumption of fossil fuels and the amount of carbon dioxide emissions compared to tugboats equipped with conventional main engines fueled by heavy oil. The project is highly regarded for its innovative technologies, leading to the decision to choose it to be a demonstration project linked to the 2025 subsidy for the rationalization of energy consumption and the shift to non-fossil energy in the transportation sector (a project promoting the innovative streamlining of coastal shipping and the shift to non-fossil sources of energy), provided by the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism. The project will proactively seek to achieve the decarbonization of the coastal ship industry. The tugboat is scheduled for completion in the latter half of 2027 and will be deployed at the Port of Tokuyama-Kudamatsu in Yamaguchi prefecture, which seeks to become the hub for the supply of clean energy as it sits in front of one of West Japan's largest chemical complexes. The tugboat will facilitate the arrival and departure of ships at the port, and it will also engage in security operations, contributing to the establishment of a carbon neutral port (CNP).

The "K" LINE Group develops and operates the DRIVE GREEN NETWORK system for promoting the Group's environmental management activities in line with its long-term environmental policy, "K" LINE Environmental Vision 2050: Blue Seas for the Future.^{*2} The Group as a whole works together to protect the environment. The "K" LINE Group will continue to support the decarbonization of society and contribute to the enrichment of people's lives.

(*1) SGC Hybrid EV Tug Construction Plan (announced in July 2022)

<https://www.kline.co.jp/en/news/csr/csr-20200722.html>

(*2) “K” LINE Environmental Vision 2050: Blue Seas for the Future

As part of our action plan to reduce GHG, we are 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>