

Hapag-Lloyd, Titan, and STX in largest bio-LNG bunkering operation



Titan Clean Fuels, a supplier of LNG and liquefied biomethane (LBM) or bio-LNG, and STX Group have made what is said to be the largest ship-to-ship delivery of bio-LNG -2,200 tonnes- to Hapag-Lloyd's Brussels Express container ship in the Port of Rotterdam.

Michele Labrut | Apr 11, 2024

Hapag Lloyd Brussels Express is the world's first large container ship converted to gas propulsion.

For this operation, STX Group and Titan Clean Fuels collaborated to liquify, store, and deliver mass-balanced biomethane in Zeebrugge in Belgium under ISSC certification fully recognised under the European Union's Renewable Energy Directive known as RED II.

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Bio-LNG used in the maritime industry is produced from biomass feedstocks like human or agricultural waste, which means it does not compete with the production of food, fiber, or fodder - a key concern in biofuel sustainability. Bio-LNG can have net-zero or even net-negative GHG emissions on a lifecycle basis depending on the method of production, according to Titan.

Annual production of biomethane, from which bio-LNG is produced, is currently around 30m tonnes or around 10% of shipping's total annual energy demand.

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Titan is currently building the world's largest bio-LNG plant at the port of Amsterdam, which will have a capacity to produce 200,000 tons annually when completed. The independent supplier recently chartered Alice Cosulich, increasing its bunkering fleet to three.

"This pioneering deal demonstrates that bunkering large quantities of liquefied Biomethane is possible and scalable. However, there is still more progress required regarding the necessary infrastructure and the regulatory framework. For us, bunkering liquefied Biomethane is another measure in our step-by-step approach to further decarbonise our operations to reach our goal of becoming net-zero by 2045," said Jan Christensen, Senior Director of Fuel Purchasing at Hapag-Lloyd,