

Louis Dreyfus Armateurs Partners with Technip Energies to Integrate Ammonia Cracking Technology into its FRESH Solution for Low-Carbon Energy Logistics

Suresnes, France - May 22nd, 2025

Louis Dreyfus Armateurs (LDA), a leading shipowner, operator, and logistics provider, is pleased to announce the signing of a Memorandum of Understanding (MoU) with Technip Energies, a global technology and engineering powerhouse. This partnership aims to develop the ammonia cracking component of LDA's innovative FRESH solution, a ship-based processing and storage facility for low-carbon ammonia and hydrogen.

This 170-meter-long vessel features a substantial storage capacity of 45,000 cbm for imported ammonia and can convert it into hydrogen using an innovative cracking plant integrated on the vessel deck. FRESH will be stationed at port during production and regularly supplied by ammonia carrier vessels. Its cracking plant converts ammonia into gaseous hydrogen (50,000 tonnes hydrogen production annual capacity at 99.9+% purity, with above 90% of energy efficiency). The hydrogen is then compressed and offloaded to shore to continuously and on demand supply industries and heavy mobility. The vessel can be seamlessly relocated according to hydrogen demand.

Technip Energies will integrate its proprietary high-energy efficiency ammonia cracking technology on FRESH. LDA will oversee the hull design and construction and will manage the vessel operations for the FRESH solution.

Mathieu Muzeau, Transport & Logistics Managing Director at LDA, stated: "This partnership with Technip Energies marks a significant milestone in our journey to operate a floating low-carbon hydrogen terminal. By integrating their ammonia cracking technology, we are taking a crucial step in developing a reliable and efficient solution while ensuring very low GHG and NOx emissions."

The MoU was signed in April 2025, marking the beginning of a promising collaboration between LDA and Technip Energies.



FRESH: Floating Renewable Energy Solutions for Hydrogen and its derivatives © Louis Dreyfus Armateurs

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About Louis Dreyfus Armateurs

For over 170 years, LOUIS DREYFUS ARMATEURS Group (LDA) has specialized in providing custom industrial maritime solutions with high-added-value activities and integrated services to its clients, ranging from ship design and ship management to maritime operations, in the fields of transport, logistics, submarine cables and renewable energy.

LDA is a French family-owned Group, offering a worldwide presence with over 1,800 staff and 30 vessels.

For more information, visit: www.lda.fr