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Mitsubishi Heavy Industries and Taiwan Fertilizer to develop Fuel Ammonia Value Chain in Taiwan

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Mitsubishi Heavy Industries, Ltd. (MHI) has entered into a Memorandum of Understanding (MoU) with Taiwan Fertilizer Co., Ltd. (TFC) to conduct a joint pre-feasibility study that will explore the establishment of an ammonia value chain in Taiwan. This is in support of Taiwan's "2050 Net-Zero Emissions" goal.

Under this MoU, MHI and TFC will assess facilities and economic feasibility of the fuel ammonia value chain, including ammonia receiving, storage, handling, and delivery to power plants, as well as using ammonia as a fuel for power generation. Through this study, both companies aim to lay a strong foundation for a robust ammonia value chain in Taiwan.

Ammonia, a compound comprised of hydrogen and nitrogen, serves as an efficient carrier for transporting hydrogen and can also be directly combusted as a fuel without producing CO_2. As ammonia emerges as a clean fuel of the future, the establishment of a comprehensive value chain, from production to utilization, will greatly contribute to achieving a carbon-neutral society.

In March 2022, the Taiwanese government announced its climate target to achieve carbon neutrality by 2050, with a focus on reducing carbon emissions and promoting the adoption of less carbon intensive fuels. To achieve this, TFC is committed to promoting the use of blue ammonia and green ammonia as a fuel in Taiwan, as demonstrated by its importation of Taiwan's first low-carbon ammonia in June 2023 and establishment of an Ammonia Energy Division in January 2024.

Blue ammonia: ammonia produced by using the hydrogen derived from fossil fuels using CO_2Â capture. Green ammonia: ammonia produced by using renewable energy power, water, and air as raw materials and using process that does not emit CO_2. Low-carbon ammonia: ammonia that has reduced CO_2Â emissions throughout the supply chain, achieved through processes such as CO_2Â separation and capture during production.

MHI Group is pursuing a growth strategy in the area of Energy Transition, aiming for decarbonization on the energy supply side to support the Company's goal of achieving Carbon Neutrality by 2040. Through this collaboration with TFC, MHI Group will support the establishment of the fuel ammonia value chain in Taiwan to meet the decarbonization needs of various industries, including the power generation sector, and as a way of contributing to the realization of a sustainable, Carbon Neutral world.