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Tokuyama Corporation
Mitsubishi Gas Chemical Company, INC.

MGC and Tokuyama Corporation Begin Joint Study on Social Deployment of Circular Carbon Methanol Utilizing CO₂, First of its Kind in Japan

Tokuyama Corporation (Tokuyama; Registered Headquarters: Shunan City, Yamaguchi Prefecture; President: Hiroshi Yokota) and Mitsubishi Gas Chemical Company, Inc. (MGC; Head Office: Chiyoda-ku, Tokyo; President: Masashi Fujii) have signed an MOU to conduct a feasibility study into the manufacture and sale of methanol made from carbon dioxide ("CO₂") emitted and hydrogen ("H₂") generated at Tokuyama's Tokuyama Factory, using MGC's newly developed methanol production technology. This study will also consider the use of H₂ produced using green electricity generated by biomass power generation.

Methanol is a base material for various chemical products, and as it can be produced from CO₂, a greenhouse gas, it is expected to be a powerful resource for building a carbon neutral society through Carbon Capture and Utilization ("CCU").

MGC and Tokuyama have decided to jointly study the commercialization of green products, which have low greenhouse gas emissions, from a shared desire to deploy these products in society and build a decarbonized world.

The commercialization of the results of this study will lead to the establishment of Japan's first commercial plant to recycle CO₂ emitted from factories to produce methanol. This methanol will be a feedstock for chemical products manufactured by Tokuyama and will increase their sustainability. It will also be supplied via MGC's existing supply network to customers who need environmentally recyclable chemical products as well as those who need a source of fuel/H₂ with low greenhouse gas emissions.

Tokuyama has set a CO₂ emissions reduction target in its Medium-Term Management Plan 2025 under the slogan "Contribute to the mitigation of global warming," and has

been pursuing the reduction of CO₂ emissions generated from in-house power generation and manufacturing processes. Through this feasibility study, the company aims to establish CCU technology and accelerate its efforts toward a carbon-neutral society by effectively utilizing electricity generated in-house from biomass fuels, H₂ generated from caustic soda production, and CO₂ generated in the Tokuyama Factory.

Based on MGC's mission of "Creating value to share with society," MGC has been promoting Circular Carbon Methanol ("CCM"), an initiative to recycle CO₂, waste plastics, biomass, etc., into methanol for use in chemical products, fuel, and power generation, using methanol production technology based on its proprietary catalysts developed over many years. Through the deployment of this idea in society, MGC and Tokuyama will contribute to the reduction of greenhouse gas emissions and the transition to a recycling-oriented economy.

Through this study, the two companies will attempt to create "low carbon value" and "environmental recycling value" by encouraging the proliferation of green products such as CCM. MGC and Tokuyama will actively promote cross-industry initiatives between the public and private sectors, not only in the chemical industry but also across industries, to create a market for domestically produced green products and realize the deployment of the CCU industry in society.

Enquiries

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