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Tokyo Gas Co., Ltd.
Mitsubishi Corporation

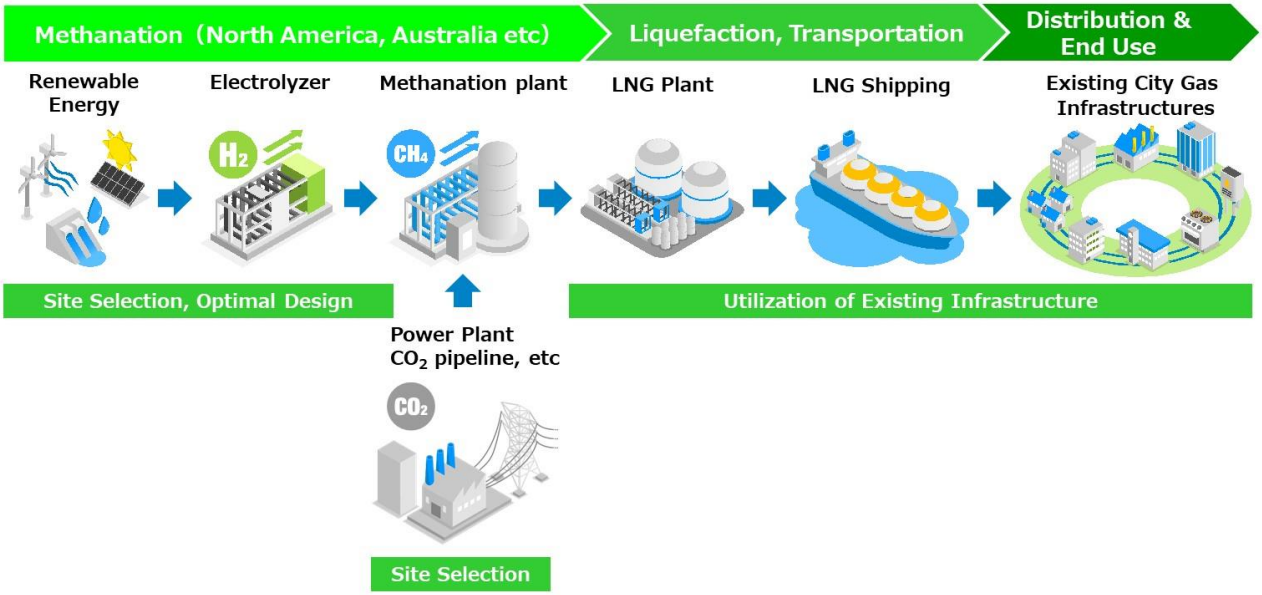
Tokyo Gas and MC to Explore Feasibility of International Synthetic Methane Supply Chain for Carbon Neutrality

Tokyo Gas Co., Ltd. (Tokyo Gas) and Mitsubishi Corporation (MC) are pleased to announce that we are jointly exploring feasibility[*1] for a synthetic methane supply chain in LNG exporting countries. Among the countries and regions covered by this study are North America, Australia, the Middle East and Asia. The study will focus on synthetic methane produced from green hydrogen using renewable electricity and CO_2.

In order for Japan to realize its goal to go carbon neutral by 2050, it will need to decarbonize its heating industry. To that end, Japan's sixth Strategic Energy Plan highlights the importance of replacing natural gas with synthetic methane for carbon neutrality.

Public and private interests are now working together to accelerate the commercialization of related technologies. Future production of synthetic methane requires the combination of green hydrogen derived from affordable renewable energies produced overseas with locally captured CO_2. A supply chain that leverages existing infrastructure to liquefy and transport the methane will also need to be forged.

< Synthetic Methane Supply Chain >



This study will combine both companies' respective strengths to optimize the supply chain and infrastructure. Tokyo Gas brings its advanced hydrogen and methanation technologies, as well as its expertise in LNG value-chain development, while MC will contribute its experience in energy businesses, which covers overseas LNG projects, renewable energy initiatives and other operations.

More specifically, the study will examine all issues pertinent to supply chains, from procurement of renewable energy and CO_2, to production of hydrogen and synthetic methane, and further still to liquefaction and transportation operations. It will include work aimed at determining the locations for production facilities and delivery terminals, as well as cost reduction.

In the future, we plan to conduct demonstrations at these locations. Our hope is to make synthethic methane an important component within Japan's future energy mix.

As part of its group's management vision "Compass2030," Tokyo Gas promotes the challenge of achieving net-zero CO_2. Committing to the early development of a synthetic methane supply chain will contribute Japan to achieve its goal to go carbon neutral by 2050.

In addition to fulfilling its responsibility to provide Japan with stable energy supplies, MC also remains committed to decarbonizing by growing its renewable operations and helping to forge a next-generation energy supply chain.

Both companies look forward to realizing this vision together and leveraging synthetic methane to make LNG and city-gas operations as clean as possible.

*1: This study will examine the carbon-neutral potential of synthetic methane. CO_2 life cycles in shipping and other supply-chain operations to achieving end-to-end carbon neutrality will be long term goal.