Idemitsu and Mitsubishi Gas Chemical to establish supply system for e-methanol and biomethanol in Japan by March 2026

Idemitsu Kosan Co., Ltd. (Head Office: Chiyoda-ku, Tokyo; Representative Director, President and Chief Executive Officer: Shunichi Kito; hereinafter referred to as "Idemitsu Kosan") and Mitsubishi Gas Chemical Company, Inc.(Head Office: Chiyoda-ku, Tokyo; President: Masashi Fujii; hereinafter referred to as "MGC") announced today that they have agreed to establish a supply system for e-methanol and biomethanol in Japan by March 2026. The new supply system for e-methanol and bio-methanol ("Circular Carbon Methanol"), targeted at marine fuel applications, is expected to accelerate demand, and expand the market.

*Mitsubishi Gas Chemical defines "Circular Carbon Methanol (CCM)" as methanol produced through the conversion of carbon dioxide (CO₂) emissions and recycled resources such as waste plastics and is used in relation to chemical products, fuel, and power generation applications.

In response to the growing demand for e-methanol and biomethanol in the marine fuel sector, the two companies will combine their accumulated knowledge and infrastructure to establish a supply system designed to meet and stimulate market demand. Specifically, the collaboration has three goals:

- Reduce supply costs by jointly operating and efficiently utilizing each other's methanol storage tanks, bunkering vessels and other facilities.
- Work together to support the development of effective approval procedures by respective authorities and guidelines and related systems at ports where methanol is supplied as marine fuel.



• Explore opportunities for joint procurement of e-methanol and biomethanol.

Flow chart of the collaboration schedule

Idemitsu Kosan is working to establish a supply network for energy and materials that are diverse and environmentally friendly under its 2050 Vision, "Shaping Change." Since methanol is a liquid at room temperature and pressure, Idemitsu Kosan's existing facilities can be used for storage, transportation, and supply. In addition, in the field of fuels and chemical raw materials with low environmental impact, an area where e-methanol and biomethanol have the potential for use, we can take advantage of the network that the company has built up over many years in the petrochemical businesses. MGC, which has years of experience developing methanol-synthesis technologies with its own catalysts, as well as operating and producing methanol at manufacturing bases overseas, worked on the development of methanol production technology using CO₂ and hydrogen as feedstock from early on. MGC is also promoting the use of environmentally friendly methanol throughout its corporate group. Furthermore, working through cross-industry alliances to help realize a recycling-oriented world, MGC has initiated an environmental recycling concept, known as the Carbopath[™] platform, for producing methanol from sources such as CO₂ emissions, waste plastics and biomass for use in fuel and powergeneration applications, materials and chemicals.

Methanol is a basic chemical used in various applications. Both e-methanol synthesized from CO₂ and hydrogen derived from renewable energy resources and bio-derived biomethanol are attracting attention as effective energy resources for reducing CO₂ emissions. E-methanol and biomethanol can be used as feedstock for synthetic fuels such as synthetic gasoline, synthetic diesel and sustainable aviation fuel (SAF), as well as a fuel for power generation and as a marine fuel.

The International Maritime Organization (IMO) has set greenhouse gas (GHG) reduction targets that have led to GHG-reduction initiatives in the shipping sector, both in Japan and abroad, resulting in many ships being converted to alternative fuels that emit lower GHG. The use of e-methanol and biomethanol as marine fuels to replace heavy fuel oil is expected to expand due to their low carbon emission characteristics and ease of storage and handling compared to other alternative fuels.

Going forward, Idemitsu Kosan and MGC hope to promote the widespread use of Circular Carbon Methanol (CCM), including e-methanol and biomethanol, and thereby contribute to a carbon neutral society.

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