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Cosmo Oil Co., Ltd.
Mitsui & Co., Ltd.



MITSUI & CO.

Launch of Joint Study on the Establishment of a Sustainable Aviation Fuel (SAF) Manufacturing Business in Japan Using Alcohol to Jet (ATJ) Technology

Cosmo Oil Co., Ltd. (“Cosmo”, President, Representative Director and CEO: Yasuhiro Suzuki, Head Office: Minato-ku, Tokyo) and Mitsui & Co., Ltd. (“Mitsui”, Head Office: Chiyoda-ku, Tokyo, President and CEO: Kenichi Hori) have agreed to carry out a collaborative study using industry leading technology from LanzaJet, Inc. in preparation for the establishment of a biofuel production facility to make sustainable aviation fuel (SAF) and establish a new business in Japan.

The new business will combine Cosmo’s track record of safe and stable plant operations, jet fuel quality management, and trading operations in the oil refining business, with Mitsui’s ethanol procurement capabilities and LanzaJet’s proprietary SAF technology, in order to establish a reliable SAF supply chain and create new business in the growing biofuels sector.

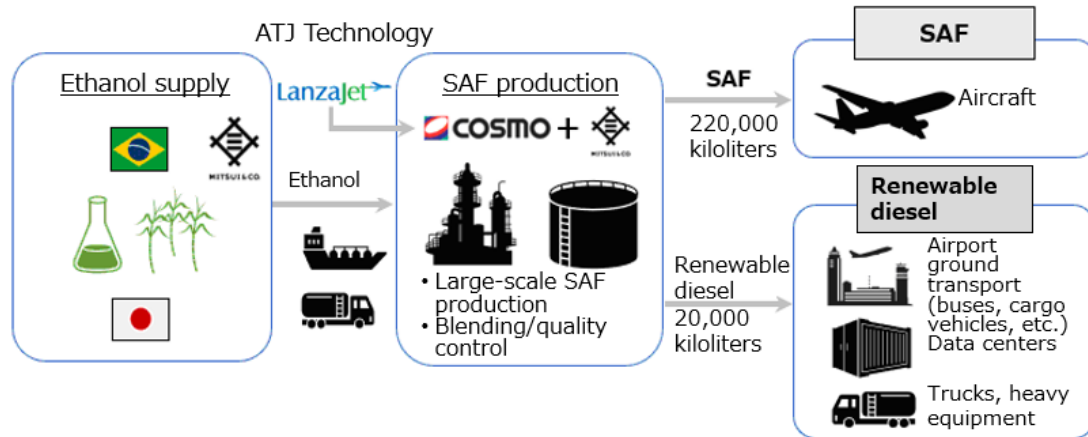
Cosmo and Mitsui aim to establish large-scale domestic SAF production operations at Cosmo refineries, using LanzaJet’s proprietary Alcohol-to-Jet* (ATJ) technology. LanzaJet’s ATJ process is a highly efficient technology that can produce up to 90% of its product as SAF and convert nearly all of the carbon from the ethanol to hydrocarbon products. ATJ technology was developed by LanzaJet, Inc., in which Mitsui has invested.

Demand for SAF is expected to expand rapidly because of its potential to reduce CO₂ emissions by the aviation industry, and commercial production has started in a number of countries. Japan will also need to realize large-scale production capacity for and stable supply of SAF to achieve a government target of replacing 10% of aviation fuel used by airlines with SAF by 2030. To resolve these issues, Cosmo and Mitsui plan to produce and supply 220,000 kiloliters of SAF in Japan annually by fiscal 2027 through this project. The two companies will also explore the possibility of each year selling 20,000 kiloliters of renewable diesel, which is a co-product of SAF production, as a fuel for transport vehicles, trucks, heavy equipment, and other machinery used at airports.

Cosmo and Mitsui have both identified the expansion of business that helps to address climate change as a major priority. The two companies see SAF manufacturing as a medium- to long-term business opportunity and will continue to contribute to the decarbonization of the aviation industry and the reliable supply of low-carbon fuels by continually expanding their SAF manufacturing operations in Japan, and by pursuing switching to domestic production of ethanol feedstock in the future.

*ATJ technology: This technology is used to manufacture sustainable aviation fuel (SAF) through similar technology used in traditional oil refineries, using sustainable (low-carbon) alcohol (ethanol) as the SAF building block, and has been certified for use in aircraft under the required ASTM standards (ASTM D7566 Annex 5). LanzaJet, Inc., a Mitsui & Co. investee, is building a 38 million liter per year commercial SAF manufacturing plant in Georgia, U.S.A.

Project concept



(The official language for Cosmo's filings with the Tokyo Stock Exchange and Japanese authorities, and for communications with Cosmo's shareholders, is Japanese. Cosmo has posted English versions of some of this information on this website. While these English versions have been prepared in good faith, Cosmo does not accept responsibility for the accuracy of the translations, and reference should be made to the original Japanese language materials.)

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