

August 2, 2024 Idemitsu Kosan Co.,Ltd.

Transition of HEFA-SAF Production Project at Tokuyama Complex to FEED

Progress toward starting production of 250,000 kL of SAF from waste oils and other raw materials per year (FY2028)

Idemitsu Kosan Co.,Ltd. (Head Office: Chiyoda-ku, Tokyo; Representative Director, President and Chief Executive Officer: Shunichi Kito; hereinafter "Idemitsu Kosan") has completed the Feasibility Study (FS)^{*1} of its SAF (Sustainable Aviation Fuel) production project using HEFA^{*2} technology at its Tokuyama Complex (Shunan City, Yamaguchi Prefecture; Executive Officer, General Manager of Tokuyama Complex: Yoshihiko Ota), and has decided to move to the next phase, FEED (Front-End Engineering & Design)^{*3}. With the goal of establishing a domestic supply system of 500,000 kL per year by 2030, we aim to start producing 250,000 kL of SAF per year at the Tokuyama Complex in FY2028.

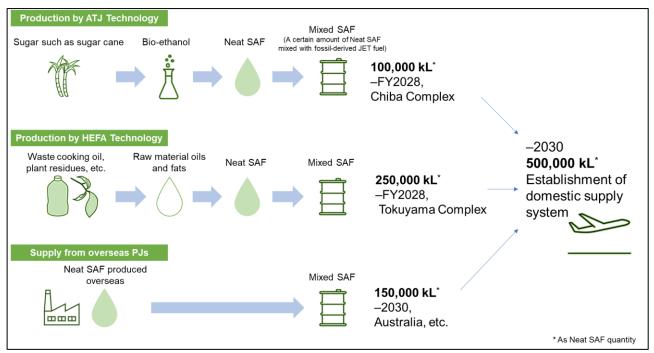


Tokuyama Complex, the planned construction site of the HEFA-SAF production facility (center of photo)

During the FS, candidate construction sites within the Tokuyama Complex have been considered, and the impact of construction on facilities within the Complex, as well as processes and construction schedules have been verified. Having completed the FS and concluded that the project is feasible, we have made the decision to move to the FEED phase. We aim to complete and operate the HEFA-SAF production facility in FY2028. The plan is to utilize several oils and fats with high GHG (greenhouse gas) reduction rates as raw materials, including waste materials such as waste cooking oil and tallow, soybean oil, and, in the future, oilseed plants such as pongamia.

Idemitsu Kosan aims to build an annual SAF supply system of 500,000 kL in order to achieve the initial goal of the Japanese government and airline industry to replace 10% of fuel consumption by Japanese airlines with SAF by 2030. Idemitsu Kosan will contribute to the decarbonization of aviation fuel by proceeding with efforts toward verification production (100,000 kL/year) by introducing ATJ^{*4} technology at the Chiba Complex using the Green Innovation Fund, production (250,000 kL/year) by

HEFA technology at the Tokuyama Complex, and supply (150,000 kL/year) from overseas projects in which Idemitsu Kosan is participating.



SAF supply system Idemitsu Kosan aims to establish

- *1 FS (Feasibility Study)
 - Preliminary study and consideration of project feasibility
- *2 HEFA (Hydroprocessed Esters and Fatty Acids)
 Technology and process for producing SAF from hydroprocessed esters and fatty acids obtained by hydrotreating of vegetable oils and other materials. Certified as "ASTM D7566 Annex 2," the international standard for SAF.
- *3 FEED (Front-End Engineering & Design)
 Basic design to be implemented after the FS. To determine the basic specifications of the plant based on a more detailed scrutiny of the issues, risks, and costs of the project.
- *4 ATJ (Alcohol to Jet)

Technology and process to produce SAF from ethanol and other materials. Certified as "ASTM D7566 Annex 5," the international standard for SAF.

- Contact for Inquiries on this subject -

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