



PRESS RELEASE

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JGC and TOYO Sign Alliance Agreement on Domestic SAF Plants

Yokohama and Narashino, Japan- JGC Holdings Corporation has announced that domestic EPC operating company JGC Japan Corporation and Toyo Engineering Corporation(TOYO) have signed an alliance agreement on March 30, 2023, to pursue and execute orders for front-end engineering design (FEED) and engineering, procurement and construction (EPC) services for domestic sustainable aviation fuel (SAF) plants.

In response to global calls for GHG reduction, in October 2022 the International Civil Aviation Organization adopted a long-term goal of net-zero CO2 emissions from the international aviation sector by 2050. Meanwhile, in relatively recent updates adopted in ICAO's CORSIA*1 program, CO2 emission reduction in this sector by 2035 is being sought by mandating the use of SAF and purchases of emission credits for the portion of emissions exceeding a baseline level (85% of 2019 emissions) as a short- to medium-term goal.

In Japan, a target based on the government's Green Growth Strategy supporting carbon neutrality by 2050 seeks to replace 10% of jet fuel used by domestic airlines with SAF by 2030. Domestic SAF demand is expected to grow significantly from approximately 300,000 kiloliters in 2025 to 1.71 million kiloliters*² in 2030.

Currently, several companies – domestic oil refining companies and others – have tapped the government's Green Innovation Fund and taken other steps to make steady progress in preparing to build domestic SAF plants using a variety of feedstocks including bioethanol. Many such plant construction plans are likely to come to fruition from 2024 to 2027, in consideration of the Green Innovation Fund period, with large-scale investment on an overall scale of several hundred billion yen expected.

In SAF production, the JGC Group has wide-ranging expertise in production and supply planning as an operator, while the TOYO Group possesses knowledge and technology for production of SAF derived from synthesis gas using raw materials such as ethanol and wood biomass. Both companies also have extensive construction experience for large oil refineries and chemical/petrochemical plants in Japan and overseas.

The alliance was founded on the expectation of even more compelling proposals, greater competitiveness, and superior overall plant construction that combines each

company's strengths and enables collaboration on SAF plant construction plan from FEED to EPC services.

Following an alliance agreement on fuel ammonia plants concluded in April 2022, the present agreement on domestic SAF will align the companies' sales activities and project execution in SAF plant design and construction. Through this alliance, the JGC Group and the TOYO Group will contribute in implementing client investment plans and working toward decarbonization in Japan.

- *1 CORSIA: Carbon Offsetting and Reduction Scheme for International Aviation
- *2 Source: meeting materials from the second meeting of an MLIT public-private council promoting the introduction of SAF (November 2022).



Signing Ceremony

Left: JGC Japan Corporation President, Shoji Yamada

Right: TOYO President & CEO, Haruo Nagamatsu

Contacts

Akihiro Yamagami

Corporate Communication Group JGC HOLDINGS CORPORATION

E-mail: yamagami.akihiro@jgc.com

Yoshifumi Shiraishi / Takuo Yamada
Corporate Communications Department
Toyo Engineering Corporation

E-mail: pr@toyo-eng.com