SUMITOMO FORESTRY

April 23, 2025

For Immediate Release

Sumitomo Forestry Co., Ltd.

Sumitomo Forestry and Rengo sign a basic agreement to manufacture wood-derived bioethanol

～Utilizing construction waste to make sustainable aviation fuel (SAF)～

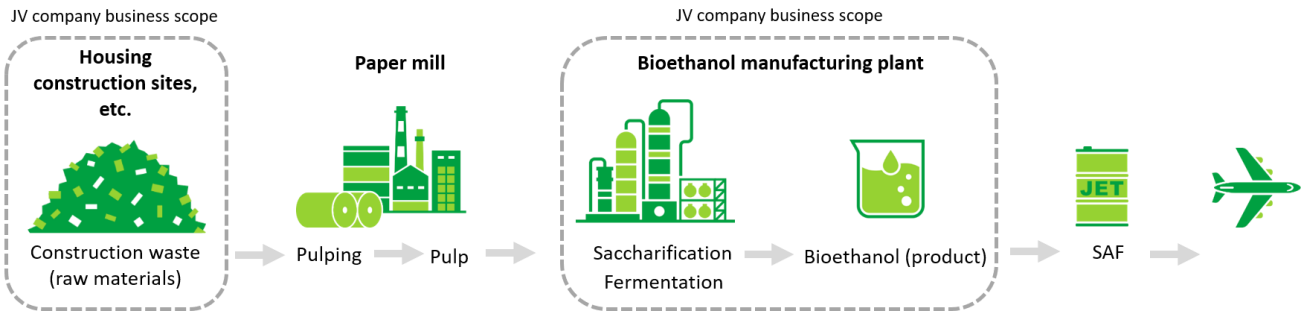
Sumitomo Forestry Co., Ltd. (President and Representative Director: Toshiro Mitsuyoshi; headquarters: Tokyo; hereinafter, Sumitomo Forestry) and Rengo Co., Ltd. (President and Representative Director: Yosuke Kawamoto; headquarters: Osaka; hereinafter, Rengo) are pleased to announce the signing of a basic agreement to manufacture wood-derived bioethanol. Using wood waste generated at Sumitomo Forestry's housing construction sites and other sources, the companies will produce bioethanol as a feedstock for sustainable aviation fuel (SAF). Our aim is to quickly establish mass production technologies to meet growing demand for wood-based bioethanol as a petroleum alternative.

Image of wood chips made from construction waste

■Collaboration details

Sumitomo Forestry and Rengo plan to continue discussions with the aim to establish a joint venture company by December 2025. The target for annual commercial production is 20,000 kL by 2027. This bioethanol will be sold to fuel suppliers, converted to SAF and used as aviation fuel.

For the production of bioethanol, the company will implement technologies developed by Biomaterial in Tokyo Co., Ltd. (President and Representative Director: Yoshiya Izumi; headquarters: Onojo, Fukuoka), a Rengo subsidiary engaged in the research and development of biomass chemicals. The production site will be the head office factory of Taiko Paper Mfg., Ltd. (President: Yoshihisa Shiokawa; headquarters: Fuji City, Shizuoka), a Rengo subsidiary that manufactures packaging paper and recycles waste materials. Sumitomo Forestry will collect construction waste from our own housing construction sites in the Shizuoka Prefecture and its surrounding areas and supply it as CORSIA[*1] certified eligible feedstock. Furthermore, we are considering using lignin by-products generated during the manufacturing process to produce housing paint and other materials with the aim to create a business model that makes full use of wood resources.



■Background

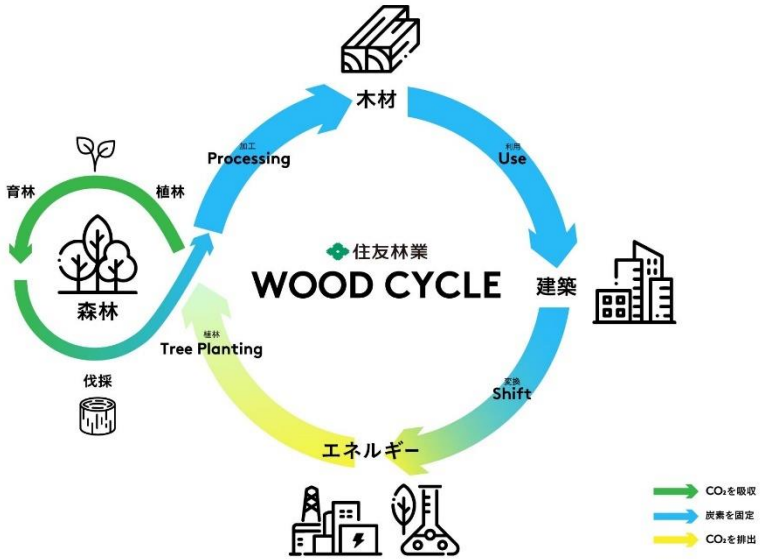
Reducing CO_2 emissions to combat global warming is an urgent global issue. In the international aviation industry, the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) have set out a goal to reduce CO_2 emissions to net zero by 2050. SAF reduces aircraft CO_2 emissions by approximately 70~80% compared to conventional petroleum-derived jet fuel and is in increasing demand as the most effective means to reduce CO_2 emissions. However, while it is estimated that 450 million kL of SAF would be needed to

achieve carbon neutrality by 2050, the volume of supply was only approximately 300,000 kL (0.07% of the necessary volume) as of 2022. The Japanese government has set out a goal to replace 10% of fuel used by domestic airline companies with SAF from 2030, and the Ministry of Economy, Trade and Industry estimates that the domestic demand for SAF for the same year will be 1.72 million kL. With the implementation, adoption and supply shortages of SAF expected both in Japan and abroad, there is an urgent need to develop and manufacture domestic SAF.

While technologies to produce SAF from used cooking oil, corn and sugarcane have been established, an increase in global demand is leading to raw material shortages and competition with food supply. Commercial production of bioethanol from non-food wood sources would not only promote the use of carbon-neutral wood but also reduce CO_2 emissions and contribute to the diversification of feedstocks.

Focusing on the potential of wood biomass chemicals and fuels, Sumitomo Forestry launched the Biorefinery Promotion Office as part of the New Business Development Department in January 2024 to develop technologies and verify business models needed to launch a biorefinery business.[*2] This bioethanol production project aims to establish mass production technologies as soon as possible to promote the shift from fossil fuels to biofuels, reduce CO_2 emissions and contribute to the decarbonization of society.

Sumitomo Forestry Group is engaged in a broad range of global businesses centered on wood, including forestry management, the manufacture and distribution of wood building materials, the contracting of single-family homes and medium- to large-scale wooden buildings, real estate development, and wood biomass power generation. In our long-term vision Mission TREEING 2030, we are seeking to promote the Sumitomo Forestry Wood Cycle, our value chain to contribute to decarbonization for not only our company but also the whole of society by increasing the CO_2 absorption of forests and popularizing wooden buildings that store carbon for long periods of time. Through our biorefinery operations, we are striving to maximize the potential of wood biomass resources, reduce CO_2 emissions, increase carbon fixation amounts, and accelerate and promote our Wood Cycle.



Video: Sumitomo Forestry's long-term vision, Mission TREEING 2030:
https://www.youtube.com/watch?v=2ty-tASVWPk

■Rengo Co., Ltd. (https://www.rengo.co.jp/english/index.html)

Headquarters	2-2-7 Nakanoshima, Kita-ku, Osaka
Representative	Yosuke Kawamoto (Representative Director, President & COO)
Establishment	May 1920
Capital	31,066 million yen (as of March 31, 2024)
Employees	23,389 (as of March 31, 2024, consolidated)
Business description	The manufacture and sale of paper products, corrugated cardboard, paper containers, flexible packaging, heavy-duty packaging and other

*1 Abbreviation for Carbon Offsetting and Reduction Scheme for International Aviation, CORSIA is a framework that seeks to reduce greenhouse gas emissions in the international aviation industry. To be used as CORSIA SAF, the feedstock and fuel conversion process must meet certain requirements and obtain certification as CORSIA-eligible feedstock.

*2 The technology of producing chemicals and fuels from biomass, such as plants and agricultural product.