Bioenergy 250624

Pilot plant for wood-derived ethanol/sugar

Oji Holdings Corporation announces that it has decided to install pilot manufacturing equipment for wood-derived ethanol/sugar solution at the Yonago Mill of Oji Paper Co., Ltd. With the goal of contributing to the decarbonisation of society through the replacement of petroleum-derived fuels and plastics with biomass-derived alternatives, the Oji Group has been advancing the development of new wood-derived materials using wood obtained through its sustainable forest management. Related to these efforts, it is expected that demand will grow for wood-derived ethanol to be used as SAF1 in the airline industry or used in the manufacturing of basic chemical products in the chemical industry, and for a wood-derived sugar solution, an essential raw material in a variety of bio manufacturing processes

Regarding wood-derived ethanol, the Oji Group was commissioned to implement a NEDO project in 2018 and, since then, it has been enhancing its manufacturing technologies. Regarding the sugar solution, it has succeeded in developing proprietary technologies including a diastatic enzyme recycling technology, and numerous users have tried using samples.

With the pilot manufacturing equipment installed, a large volume of ethanol and sugar solution will be supplied to users eyeing commercialization. At the same time, it will accelerate initiatives towards the future operationalization of the process through continuous technical improvement (Target for 2030: Supply of 100,000 kL of ethanol).

By installing the equipment in the paper mill, the existing pulp manufacturing lines can be used and, additionally, the lignin that is a by-product of the manufacturing process can be utilized as biomass energy. This is also expected to reduce the CO2 emitted during the manufacturing of the ethanol and sugar solution.