

Statement on alternative feedstocks



The demand for biobased products is higher than ever, thanks to consumers' continued interest in sustainable products. The use of biobased raw materials instead of fossil-based resources to produce specialty chemicals supports the transition to a circular economy as biobased raw materials are renewable by nature, insofar as their production is sustainably managed. According to the Bioplastic feedstock alliance, a sustainable biobased feedstock is legally sourced, conforms to the Universal Declaration of Human Rights (UDHR), does not adversely impact food security, and does not result in deforestation. Corbion's sustainable agriculture policy describes our key principles for the production of biobased raw materials.

Although the land used for growing crops for biochemicals and biobased plastics today is minimal, and projected to remain so in the years to come, societal concerns around the use of food crops for other applications than food and feed remain. With the projected increase in world population, this will put pressure on availability of agricultural land, while at the same time global demand for biomass for industrial applications is expected to increase.

Today Corbion predominantly uses the highest yielding feedstocks regionally available: sugar from cane is used by our production plants in Thailand and Brazil, dextrose from corn is used in our production plant in USA, and sugar from sugar beet is used by our production plants in Spain and the Netherlands. Corbion is also committed to a sustainable supply chain for our five key agricultural raw materials: palm, cane sugar, corn, soy and wheat.

In parallel to advancing sustainable agricultural practices, Corbion is looking for new sources of feedstocks that can improve our sustainability impact. Unlike feedstocks, such as sugarcane or sugar beet (G1), second generation or cellulosic feedstocks (G2) and third generation (G3) feedstocks are not intended for human consumption and have the potential to move biochemical processes further out of the food-chain. Some of the options that Corbion is investigating in this category include whey, food waste, wood and paper mill residues and saw dust.

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G3 feedstocks include primarily algae and seaweed applications, and here too, Corbion is involved in longer term research with the one aim being of converting to CO₂ directly into fermentable carbohydrates

Corbion welcomes all developments regarding G2 and G3 feedstocks. We are continuously evaluating them for future use by proactively engaging with external parties who have the potential to supply G2 feedstock to our production plants. Today, the scale is small and technology readiness is low, through open collaboration with technology providers and sugar suppliers, and the provision of feed and off-take options, we aim to stimulate the development of commercial-scale supply chains of G2 and G3 feedstocks in the coming decade.

This statement was approved by the Executive Committee of Corbion on May 11 2022.

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