



UPM starts construction of €550-million biochemicals facility in Germany

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UPM (Helsinki, Finland) has started construction of a new €550-million (\$645-million) biochemicals facility in Leuna, Germany, that will produce 220,000 metric tons/year of bio-monoethylene glycol (bio-MEG) and lignin-based renewable functional fillers. The biorefinery, using wood as feedstock, is expected to come onstream by the end of 2022, it says.

The facility will also produce bio-monopropylene glycol (bio-MPG) and industrial sugars made from sustainably harvested beechwood sourced regionally in Germany, UPM says. The wood-based biochemicals investment is a “major milestone” in the company’s ongoing strategic transformation, it says. The technology and process have been developed by the company over the past 10 years, building mainly on its own innovation capabilities and working selectively with partners.

“The biorefinery in Leuna will be the nucleus for an entirely new and high-value growth business and opens totally new markets for UPM with large growth potential for the future,” says Jyrki Ovaska, executive vice president/technology at UPM. Awareness of climate change has increased customer demand for sustainable alternatives to fossil-based products, he says.

The bioproducts will significantly reduce the carbon dioxide (CO₂) footprint of end-use products such as plastics,

textiles, rubber, cosmetics, and other industrial uses, according to the company. A project office has been established onsite, with COVID-19 having not disrupted work throughout the pandemic, according to UPM.

UPM reported annual sales in 2019 of €10.2 billion and first unveiled plans for an industrial-scale biorefinery in Germany earlier this year. Once production at the facility is fully ramped up and optimized, UPM expects it to achieve a targeted return on capital investment of 14%. The plant will be linked to existing chemicals infrastructure in Leuna and be in “close proximity” to customers, the company said earlier this year.

The global glycols market produces over 30 million metric tons/year (MMt/y) and is expected to grow annually by approximately 4%, according to UPM. The worldwide market for carbon black and silica combined is more than 15 MMt/y with expected annual growth of approximately 3%, it says.

In February this year, UPM and Ineos announced a long-term agreement to supply a renewable raw material for bio-attributed polymers to be produced at Ineos’s Cologne, Germany, site.

UPM has been studying conceptual plans to build a biorefinery in Germany since 2017.