

Avantium advances its plant-based MEG technology with the opening of its demonstration plant

AMSTERDAM, 7 November 2019, 07:00 CET – Avantium today inaugurates its plant-based MEG (mono-ethylene glycol) demonstration factory in Chemie Park Delfzijl, the Netherlands, bringing industry yet another solution to reduce the reliance on fossil resources. The opening ceremonies are hosted by Nienke Homan, regional minister of the province of Groningen, the Netherlands and Avantium CEO Tom van Aken. Avantium additionally announces the naming of this innovative technology to produce plant-based MEG: Ray Technology™ - A Bright Step to The Future.

The opening celebrates a significant milestone in commercializing the production of plant-based MEG, a vital ingredient in the production of polyesters widely used in textiles and packaging. Today, 99% of MEG is produced from fossil resources representing a value of approximately \$25 billion. This market is expected to rapidly grow in the coming decades, providing a great opportunity for the introduction of plant-based MEG as part of the transition to a more renewable world. In addition to its sustainability advantages, the production of plant-based MEG with Ray Technology™ is cost competitive to fossil-based MEG. The Ray Technology™ demonstration plant with an industrially relevant capacity of 10 tons annually will also produce plant-based MPG (mono-propylene glycol) which is used in a diverse set of industries such as cosmetics, pharmaceuticals, food flavoring, and deicing.

Avantium CEO Tom van Aken: “Avantium is proud to be the first company in the world to have brought three technologies to demonstration stage – our YXY® Technology, Dawn Technology™ and now our Ray Technology™. It truly demonstrates our ability to scale up and commercialize advanced technologies in the renewable polyester value chain.”

The end-to-end plant-based Ray Technology™ demonstration plant will cover all process steps in converting industrial sugars to glycols, allowing for the production of MEG and MPG samples that are representative of the final product from subsequent commercial-scale plants. Zanna McFerson, Managing Director of Avantium Renewable Chemistries, comments: “The opening of this demonstration plant signifies years of research and trials to achieve a significant step towards a commercial flagship plant, aimed for start-up in 2024. Commercial conversations are already ongoing with partners who see an economic opportunity with Ray Technology™. We talk with feedstock providers who wish to diversify their markets, chemical companies who seek to enter a significant growth market and transition to a bio-based economy and consumer brands who are looking for plant-based solutions for their textiles and packaging.”

Please go to <https://www.avantium.com/renewable-chemistries/mekong/studio-avantium/> on Thursday 7 November at 15h CET to learn more about the announced progress of Ray Technology™.

Read the attached press kit about Avantium’s Ray Technology™ for more background information.



Press release



About Avantium

Avantium is a leading technology development company and a forerunner in renewable chemistry. Avantium develops novel technologies based on renewable carbon sources as an alternative to fossil-based chemicals and plastics. The company currently has three technologies at pilot and demonstration phase. The most advanced technology is the YXY® plant-to-plastics-technology that catalytically converts plant-based sugars into a wide range of chemicals and plastics, such as PEF (polyethylene furanoate). Avantium has successfully demonstrated the YXY Technology at its pilot plant in Geleen, the Netherlands. The second technology is the Dawn Technology™ that converts non-food biomass into industrial sugars and lignin in order to transition the chemicals and materials industries to non-fossil resources. In 2018, Avantium opened the DAWN pilot biorefinery in Delfzijl, the Netherlands. The third technology is called Ray Technology™ and catalytically converts industrial sugars to plant-based MEG (mono-ethylene glycol). Avantium is scaling up its Ray Technology™ and the demonstration plant in Delfzijl opened on November 7, 2019. Next to developing and commercializing renewable chemistry technologies, the company also provides advanced catalysis R&D services and systems to customers in the refinery and chemical industries. Avantium works in partnership with like-minded companies around the globe to create revolutionary renewable chemistry solutions from invention to commercial scale.

Avantium's shares are listed on Euronext Amsterdam and Euronext Brussels (symbol: AVTX). Its offices and headquarters are in Amsterdam, the Netherlands.

For more information:

Caroline van Reedt Dortland, Director Communications, Avantium
+31-20-5860110 / +31-613400179,
caroline.vanreedt-dortland@avantium.com
