Press release

Avantium awarded €5.4 million grant from Netherlands Enterprise Agency for expansion of FDCA pilot plant

AMSTERDAM, 16 December 2020, 07:00 CET – Avantium N.V, a leading technology company in renewable chemistry, announces that the Netherlands Enterprise Agency (*RVO - Rijksdienst voor Ondernemend Nederland*) has awarded the company a €5.4 million grant as part of the Demonstration Energy and Climate Innovation (DEI+) scheme, to be paid out in 16 tranches over a period of 4 years. This grant is solely designated for the expansion of Avantium's FDCA (furandicarboxylic acid) pilot plant in Geleen (The Netherlands) and will therefore not be used for the potential construction of the FDCA flagship plant in Delfzijl. FDCA is the key building block for the high-quality, fully recyclable, plant-based polymer PEF (polyethylene furanoate) to be used in a wide range of applications such as bottles, packaging, film and textiles.

RVO is an executive department of the Dutch Ministry of Economic Affairs and Climate, which supports innovative and sustainable entrepreneurship by Dutch companies. With the DEI+ scheme, RVO financially supports projects that contribute to a cost-effective reduction of CO_2 emissions by 2030. Avantium's YXY® plants-to-plastics technology to produce FDCA and PEF fits perfectly into this initiative.

Avantium will use the grant to set up new units in the FDCA pilot plant to demonstrate optimal polymerisation[1] as well as mechanical recycling of pure PEF and PET/PEF mixtures. Avantium's PEF can be used in both monolayer PEF applications and as a barrier material in multilayer PET applications, enabling improved performance and full recyclability of both pure PEF and PET/PEF mixtures. This is a solution for many plastic applications, such as small sized bottles which are not fully recyclable as they include other materials (e.g. nylon) for barrier properties. With the new units, Avantium can further validate and showcase the quality of (recycled) PEF as a monolayer and PET/PEF multilayers in bottle, film and fibre applications.

With this expansion, the entire PEF value chain will be covered at the FDCA pilot plant in Geleen. As a result of this, the pilot plant can act as a true centre of excellence for Avantium's YXY® Technology. Heleen Goorissen, Director Innovation & Technology of Avantium Renewable Polymers, says: "The DEI+ grant of RVO for the new piloting units allows Avantium to independently test and prove all the steps in our YXY® Technology. The pilot plant expansion will support the successful operations of our FDCA flagship plant, planned to start-up in 2023, and enables us to actively file new patent applications to protect our leading FDCA/PEF position and our licensing strategy."

[1] Polymerisation is the chemical process to convert the FDCA monomers and MEG (mono-ethylene glycol, such as Avantium's plantMEG) monomers into the polymer PEF.

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 Technology™ 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, the Netherlands opened on November 7, 2019. Next to developing and commercialising 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 likeminded 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). Avantium is included in the Euronext Amsterdam SmallCap Index (AScX). Its offices and headquarters are in Amsterdam, the Netherlands.

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