

Avantium awarded €3 million EU grant to demonstrate the electrochemical conversion of CO₂ to consumer products

AMSTERDAM, 17 May 2022, 07:00 hrs CEST – Avantium N.V., a leading technology company in renewable chemistry, announces that it has been awarded a €3 million grant by the EU Horizon Europe programme for its participation in the 4-year research and development programme WaterProof. This programme aims to demonstrate the value of electrochemical conversion of carbon dioxide (CO₂) into high-value chemicals and products. The €3 million grant will be paid out in tranches to Avantium over a period of four years.

Avantium is a frontrunner in developing and commercialising innovative technologies for the production of chemicals and materials based on sustainable carbon feedstocks, i.e. carbon from plants or carbon from the air (CO₂). One of Avantium's innovative technology platforms is called Volta Technology and uses electrochemistry to convert CO₂ to high-value products and chemical building blocks such as formic acid, oxalic acid and glycolic acid. The latter two are key building blocks for polyesters and other materials, allowing production of CO₂ negative plastics.

The WaterProof programme aims to demonstrate the full value chain of a closed carbon cycle. Under this programme, Avantium will convert CO₂, from wastewater purification and waste incineration into formic acid using its proprietary catalytic electrochemistry platform. This formic acid can then be used to make new consumer products. This project will demonstrate that competitive and profitable business opportunities can be created by turning CO₂ into value-added products.

The WaterProof programme will start in June 2022 under the coordination of Avantium. In addition to Avantium, the WaterProof consortium consists of eleven leading companies and knowledge institutes: Funditec (Spain), Tecnalia (Spain), Stichting Waternet (Netherlands), Ecover (Belgium), Nova Institut GmbH (Germany), Nordic Fish Leather (Iceland), Izes GmbH (Germany), Frames Renewable Energy Solutions BV (Netherlands), Coatema GmbH (Germany), HVC (Netherlands), CTA (Columbia). The consortium received at total an EU Horizon Europe grant of €9.2 million.

Annelie Jongerius, senior scientist at Avantium and scientific coordinator of WaterProof, comments: "We are pleased with the EU Horizon Europe grant for the WaterProof programme, allowing us to showcase the added value of electrochemical conversion of CO₂ into carbon-negative ingredients and materials. Electrochemistry has the potential to use CO₂ as a feedstock for the sustainable production of chemicals and materials and this is seen as a 'game-changer' for the chemical industry. Leading the WaterProof programme is a fantastic opportunity for us to work with like-minded organisations towards a fossil-free future."

The WaterProof Project receives funding from the Horizon Europe Framework Programme under the Grant Agreement Number 101058578.

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 FDCA (furanedicarboxylic acid), the key building block for the sustainable plastic PEF (polyethylene furanoate). Avantium has successfully demonstrated the YXY[®] Technology at its pilot plant in Geleen, the Netherlands, and has started construction of the world's first commercial plant in 2022, with planned large-scale production of PEF in 2024. The second technology is Ray Technology[™] and catalytically converts industrial sugars to plant-based MEG (mono-ethylene glycol): plantMEG[™]. Avantium is scaling up its Ray Technology[™] and the demonstration plant in Delfzijl, the Netherlands opened in November 2019. The third technology is called 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. 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 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.

This press release by Avantium N.V. contains information that qualified or may have qualified as inside information for the purposes of Article 7 of the Market Abuse Regulation (EU) 596/2014 (MAR).

For more information:

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