

## BioBased Circular Proposal with Avantium selected by National Growth Fund for funding to make plant-based materials

AMSTERDAM, 30 June 2023, 15:15 hrs CEST – The Dutch cabinet today announced that the National Growth Fund (Nationaal Groeifonds) has selected the BioBased Circular (BBC) proposal<sup>i</sup> for funding. The BBC programme, submitted also on behalf of Avantium, includes a track dedicated to the engineering and construction of a Flagship Plant to produce plant-based glycols based on Avantium's Ray Technology™. The BioBased Circular programme aims to set up a sustainable sugar-based chemical and materials manufacturing industry in the Netherlands. The programme, which runs until 2032, will link up the agricultural sector with the chemical and plastics industry, creating entirely new sustainable value chains to position the Netherlands as a frontrunner in the production of plant-based and circular plastic materials.

The BBC programme is conditionally awarded €338 million in total<sup>ii</sup>. The Ray Technology™ Flagship Plant had requested a total award of €53 million, which is now conditionally approved. One of the conditions is that the Ray Technology™ Flagship Plant will be constructed in the Netherlands. Other conditions that are detailed in the [National Growth Fund report](#) will be further evaluated. The grant award will be paid out to the Ray Technology™ Flagship Plant project in milestone payments over the coming years and pending Final Investment Decision.

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Avantium has developed an efficient and sustainable way to produce the plant-based glycols plantMEG™ and plantMPG™ from plant-based feedstocks, as alternative to fossil feedstock, with its Ray Technology™. PlantMEG™ is a plant-based product used in large applications like packaging, polyester textiles, and antifreeze. PlantMPG™ can be used for airplane de-icing, in unsaturated polyester resins such as used for the production of windmill blades and as a heat transfer fluid in solar panels. Avantium currently produces plantMEG™ and plantMPG™ at its demonstration plant in Delfzijl, the Netherlands using Cosun Beet Company's locally grown beet sugar as the renewable feedstock. The intention is to construct a Flagship Plant for the production of plant-based glycols and operate this plant by 2027.

The National Growth Fund is an initiative of the Ministry of Economic Affairs and Climate Policy and the Ministry of Finance of The Netherlands. Collectively, these Ministries manage the fund on behalf of the Dutch government. The National Growth Fund is intended for one-off public investment that contributes to the country's future economic growth. The projects that are granted funding are expected to all result in increased productivity and create new business.

Tom van Aken, CEO of Avantium: "We are pleased with the support of the National Growth Fund, showing the ambition of the Dutch government to position the Netherlands as a frontrunner in setting up a plant-based, circular chemical and materials industry. This support is an instrumental step towards securing the overall financing for the Ray Technology™ Flagship Plant. We see our plantMEG™ and plantMPG™ as key stepping stones for providing sustainable materials to consumers, reducing carbon emissions and our dependency on petroleum-based plastics."

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### About Avantium

Avantium is a leading technology development company and a frontrunner in renewable chemistry. Avantium develops and commercialises innovative technologies for the production of materials based on sustainable carbon feedstocks, i.e. carbon from biomass or carbon from the air (CO<sub>2</sub>). The most advanced technology is the YXY® Technology that catalytically converts plant-based sugars into FDCA (furan dicarboxylic acid), the key building block for the sustainable plastic PEF (polyethylene

furanoate). Avantium has successfully demonstrated the YXY<sup>®</sup> Technology at its pilot plant in Geleen, the Netherlands, and has started construction of the world's first commercial plant for FDCA in 2022, with planned large-scale production of PEF in 2024. The second technology is Ray Technology<sup>™</sup> and catalytically converts industrial sugars to plant-based MEG (mono-ethylene glycol) and plant-based MPG (mono-propylene glycol): plantMEG<sup>™</sup> and plantMPG<sup>™</sup>. Avantium is scaling up its Ray Technology<sup>™</sup> and the demonstration plant in Delfzijl, the Netherlands opened in November 2019. Avantium's Volta Technology uses electrochemistry to convert CO<sub>2</sub> into high-value chemical building blocks and sustainable plastic materials, including PLGA (polylactic-co-glycolic acid). Avantium also provides R&D solutions in the field of sustainable chemistry and is the leading provider of advanced catalyst testing technology and services to accelerate catalyst R&D. 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). Avantium is incorporated in the Euronext Amsterdam SmallCap Index (AScX). Its offices and headquarters are in Amsterdam, the Netherlands.

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<sup>i</sup> The BBC programme was submitted by the Minister of Economic Affairs and Climate Change, also on behalf of the Green Chemistry, New Economy (GCNE) coalition and the Top Consortium for Knowledge and Innovation BioBased Economy (TKI-BBE). The Ministry of Infrastructure & Water Management, the Ministry of Agriculture, Nature and Food Quality and the three top sectors of Agri&Food, Chemistry and Energy support the proposal. Leading parties from the ecosystem, such as Avantium, Brightsite, CBBB, Cosun the ROMs of five provinces, TNO, WUR, UM, UT and TUD have joined. In addition, more than sixty other organisations have expressed their support.

<sup>ii</sup> The first phase of Biobased Circular is conditionally granted by the Growth Fund (€102 million), and a reservation of the grant award of €236 million has been made for the second phase.