

Press release

SURFs UP Kick-off meeting. Ghent, 15-16 May 2024

The Kick-off meeting of the **SURFs UP** project, a European project financed by the European Commission through the [Circular Bio-Based Europe Joint Undertaking](#) (CBE JU) program, took place on 15 and 16 May 2024 in the vibrant city of Ghent, Belgium.

Coordinated by the non-profit SME [Bio Base Europe Pilot Plant](#) (Belgium), SURFs UP is a testament to the power of collaboration, bringing together **12 partners** from **8 European countries**, including **SMEs, industries, research institutes, and universities**. Its collective goal is to demonstrate optimised, cost-effective, Safe and Sustainable by Design (SSbD) production of second-generation (2G) **biosurfactants** based on biobased raw materials, including hardwood (sugars and lignin from wood processing residues) and waste from regional food processing.

Today, the surfactant market is in a critical phase. Only **4% of the market share** comprises **100% biomass-based compounds** (surfactants or biosurfactants completely of biological origin), despite the urgent need for non-hazardous SSbD biosurfactants. The biosurfactants market is expected to grow at a CAGR of 5.2 to 10.5% between 2022 and 2028. However, the diversity of available safe and sustainable biosurfactants is nowhere near enough to meet market needs – diversity is key.

SURFs UP is poised to make a significant impact. It aims to fill this gap by demonstrating optimised, cost-effective processes for second-generation (2G) SSbD biosurfactant products that will be formulated into prototypes for home and personal care and agrochemical applications. This ambitious goal will respond to an urgent need and create new and integrated value chains in Europe. The SURFs UP ingredients are in total nine biosurfactants: (1) seven **microbial biosurfactants**: two drop-in and two **new-to-market sophorolipids**, one new-to-market **mannosylerythritol** lipid, two new-to-market **lipopeptides**, and (2) two new-to-market chemically produced **biosurfactants** from waste lignin of woodworking. All the SURFs UP aforementioned ingredient production processes will be scaled-up to TRL7 in the project. Additionally, these ingredients will be fully characterised (physicochemical properties) and evaluated according to the SSbD Framework criteria and ecotoxicity testing. SURFs UP will operationalise the European SSbD framework for developing new biosurfactants and work on all aspects of social awareness and acceptance of these products by organising consumer surveys involving managers, policymakers, and social media. Finally, a SURFs UP DEMO Plant will be built to produce microbial BSs.

A diversified and multidisciplinary consortium, SURFs UP, is participated by industrial players of **Bio Base Europe Pilot Plant** (Belgium), a flexible and diverse open-access pilot plant for developing and enhancing new biologically based processes, [Amphistar BV](#) (Belgium), producer of high-performance microbial biosurfactants, [Fibinol OU](#) (Estonia), company for the valorisation of wood residues, [Ajinomoto OmniChem](#) (Belgium), supplies innovative development and production solutions between the agrochemical market and other markets, [Ecover Co-ordination Center NV](#) (Belgium) develops all EU cleaning products for the EU market and [Unilever](#) (United Kingdom) one of the world's largest consumers goods companies. The latter three big industrial players have a pivotal role in the project to make the potential project results tangible enough to accelerate market uptake.

Academic activities leverage the advanced expertise of six research institutions, [DBFZ](#) (Germany), a non-profit research organisation well recognised for its scientific work in the field of bio-based technologies and products, [IST-ID](#) (Portugal), combines scientific and technological expertise in the fields of sustainable biosynthesis, bioprocessing and downstream processing, the [University of Liège](#) (Belgium) has developed a very long experience on lipopeptide biosurfactant over the last 35 years, [Teknologian Tutkimuskeskus VTT OY](#) (Finland), a leader in research on the valorisation of lignin, [Leitat](#) (Spain) offers solutions for the development of new materials from waste conversion and use of natural resources, and [Consorzio Italbiotec](#) (Italy), the first Italian non-profit organisation for the development of biotechnology, a leader in innovation management and business development.



**Circular
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