



Waste2Func: The technology is ready, are we?

Ghent, 24 May 2024

Today the [Waste2Func project](#) releases an original out-of-the-box video. The consortium has heard and seen that it is often difficult for the broader public to understand the importance of bioeconomy for the future. With this video it wants to strengthen the bioeconomy narrative in general while explaining the project: converting food waste into molecules to make cleaning agents, personal care products or packaging and this at industrial scale! Watch and witness: also our children believe in a bright new future where bioeconomy plays an important role. The video is available in English, Dutch, French, German, Spanish and Italian. All versions can be found on the [YouTube Channel](#) of Waste2Func coordinator Bio Base Europe Pilot Plant.

The main goal of the [CBE-JU funded](#) Waste2Func project is to **produce biosurfactants and lactic acid from food waste**. Currently, food waste flows, such as supermarket waste, fruit and vegetables that don't meet the standards or bad batches from food processing companies that no longer can be sold, often don't have a potential end-use route. Consequently, they just rot on the field, are discarded or even incinerated, which leads to unnecessary CO₂ emissions.

These emissions can be avoided by using these streams **to convert them in to high-value products**. Start-ups [AmphiStar](#) and [TripleW](#) developed technologies to convert mixed batches of food waste into functional ingredients, more specific microbial biosurfactants and lactic acid respectively, that can be used for the production of bioplastics and personal- and home care applications. Their molecules could already be found in a ["limited edition "too good to waste" home care box"](#) produced and marketed by Ecover, for part in the framework of this project. TripleW is currently looking into formulating their lactic acid in plastic applications and more applications of both the biosurfactants and lactic acid are in the pipeline.

Furthermore the conversion technologies were demonstrated at large scale by the Bio Base Europe Pilot Plant, resulting in a launch plant for the production of biobased surfactants by AmphiStar and a production plant for lactic acid by TripleW, both to be built in 2025.

A logistic platform to collect the agricultural and food waste is being set-up as we speak by ECOSON Recycling (part of Darling Ingredients Belgium) .

Would you like to know more about the Waste2Func project? Take a look at <https://www.waste2func.eu/en/> or get in touch.

This project has received funding from the Bio-based Industries Joint Undertaking (JU) under the European Union's Horizon 2020 research and innovation programme under grant agreement No 101023664.



Horizon 2020
European Union Funding
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Notes to editors:

WASTE2FUNC is made possible thanks to funding from the Bio-Based Industries Consortium Joint Undertaking (BBI-JU), it is coordinated by Bio Base Europe Pilot Plant, the Belgian open-access pilot facility for development and scale-up of biobased processes. In this project, the Bio Base Europe Pilot plant will focus on the scale-up of both the biosurfactant and lactic acid fermentation- and purification processes towards industrial scale. The consortium partners are:

- InBio: This research laboratory of Ghent University looks into development of strains for microbial biosurfactant production from waste.
- Amphistar develops and optimises biosurfactant production strains and processes from waste streams.
- City University of Hong Kong: The research laboratory focuses on food waste based biosurfactant production.
- Triple W: This SME looks into process and strain development for the production of food waste-based lactic acid on an industrial scale.
- Ecover: This large company looks into the application of both waste-based microbial biosurfactants and lactic acid in their products.
- Boerenbond: The innovation service center within this farmers organization looks into the development of the registration app for agricultural waste together with the farmers.
- Organic Waste Systems: This company looks into the economic, environmental and social assessment of the processes and technologies developed in the project.
- Arche Consulting: This SME looks into all waste regulation and regulation for registration of the products for market uptake.
- Group Op de Beeck (Darling Ingredients Belgium): This large waste collector provides one of their streams as feedstock and assists in the enrolment of the new logistic platform within their sister company Ecoson Recycling.
- Evonik: This large company looks into the application of waste-based microbial biosurfactants in their products.
- NNFCC: NNFCC is specialised in the biobased economy and works on the feedstock mapping and business models coming out of the project.

The project kicked off in June 2021 and will end in November 2024, the total project budget is 13,965 M€ of which 6,7 M€ is budget from BBI-JU.

More information, questions and/or interviews

Sofie Lodens, PhD, Project Coordinator of the WASTE2FUNC project can be contacted for interviews and further information about the project.

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