SOWISE+ is a five-year European project demonstrating **a first-of-its-kind multipurpose biorefinery** for the valorisation of urban bio-waste and post-consumer absorbent hygiene products into **PHBV**, recovered **cellulose** and new bio-based products.

60
months

23
Partners
+2 affiliated entities

09
Countries

TRL8
demonstration

230
t/year PHBV

Up to **700** t/year
recovered cellulose

Project number:101292578
Topic: HORIZON-JU-CBE-2025-IAFlag-01
Project duration:60 months

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Partners

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SPHA Sustainable Innovative PHA
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The project is supported by the Circular Bio-based Europe Joint Undertaking and its members. Funded by the European Union under grant agreement No. 101292578. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CBE JU. Neither the European Union nor the CBE JU can be held responsible for them.

Bio-based Industries Consortium

Co-funded by the European Union

SOWISE+

Solid Organic Waste Into Sustainable End-products



The challenge

- Valuable resources are still lost through conventional waste-treatment routes.
- Urban biowaste and absorbent hygiene products are complex but potentially valuable feedstocks.
- Europe needs circular solutions that recover higher-value materials and reduce reliance on fossil-based resources.



“What if urban waste could become the starting point for new industrial value chains?”

Objective

SOWISE+ aims to demonstrate, at industrial scale and TRL8, a new model for turning complex urban waste streams into valuable bio-based materials and products.

The project will establish an integrated multipurpose biorefinery that combines the conversion of urban biowaste into PHBV with the recovery and upgrading of cellulose from post-consumer absorbent hygiene products.

Beyond proving the technical performance of these processes, SOWISE+ will validate downstream materials and products, assess their safety and sustainability, examine their market potential and involve stakeholders in their development and uptake.

The overall ambition is to demonstrate a viable model of urban-industrial symbiosis that can create higher value from municipal waste while reducing dependence on disposal routes such as landfill and incineration and providing a basis for replication in other European regions.

The SOWISE+ concept

SOWISE+ is a first-of-its-kind multipurpose biorefinery that will combine urban biowaste valorisation with cellulose recovery from post-consumer absorbent hygiene products.

