
Launch of Fabulose: Fabricating vegan and circular leather alternatives from bio-tech derived cellulose

The EU funded Fabulose project has officially launched in June 2025, starting a major step forward in the development of sustainable, animal-free leather alternatives. Coordinated by the German Institutes of Textile and Fiber Research and grouping a consortium of leading research institutes, biotech innovators, and industry stakeholders, Fabulose aims to transform the artificial leather materials landscape by developing efficient biotech routes for the production of high-performance, biodegradable leather-like fabrics derived from bacterial cellulose and cyanophycin.

The project, supported by the Circular Bio-based Europe Joint Undertaking (CBE JU), is designed to address the urgent need for alternative environmentally responsible materials in sectors such as automotive, fashion, and upholstery. By leveraging advanced fermentation techniques and AI-driven process optimisation, Fabulose will scale up the production of bio-based materials that replicate the durability and aesthetics of traditional leather, while minimising environmental impact.

“Fabulose is not just about replacing leather; it’s about rethinking how we produce and consume materials,” said Iris Houthoff, coordinator of the project and researcher at the German Institute for Textiles and Fibers Research. “Our goal is to deliver a circular, sustainable, and scalable solution that aligns with the European Green Deal and sets a new benchmark for sustainable innovation.”

Key features of the project include:

- **Innovation Pipeline:** Development of novel coating, finishing, and recycling processes to ensure technical excellence and environmental safety
- **Circular Design:** Monitor and optimize the entire lifecycle of the materials.
- **Eco-Performance:** Targeting a 90% reduction in greenhouse gas emissions compared to conventional leather production
- **Stakeholder Engagement:** A robust communication and dissemination strategy to foster adoption across industries and communities

The project kicked off with a two-day event in June 2025, where partners aligned on technical work packages, stakeholder engagement strategies, and exploitation pathways.

Fabulose is poised to become a flagship initiative in Europe’s transition to a circular bioeconomy, offering a compelling alternative to fossil-based and animal-derived materials.



On July 5th 2025, the FABULOSE consortium met in Karlsruhe and kicked off the project activities.

The FABULOSE Project in short:

Project Name: Fabricating vegan and circular leather alternatives from bio-tech derived cellulose

Call Topic: HORIZON-JU-CBE-2024-RIA-02 Biotech routes to obtain bio-based chemicals/ materials replacing animal-derived ones

Duration: 3,5 years (June 2025 – May 2029)

Partnership: The consortium includes partners from across Europe, each bringing expertise in biotechnology, materials science, and market deployment: [German Institutes of Textile and Fiber Research](#) (Germany), [Next Technology Tecnotessile Societa Nazionale](#) (Italy), [University of Maribor](#) (Slovenia), [Sumatrix Biotech](#) (Turkey), [VTL GmbH](#) (Austria), [Novis GmbH](#) (Germany), [Melina Bucher](#) (Germany), [Benecke-Kaliko AG](#) (Germany), Konrad Hornschuch AG (Germany), [University of Aveiro](#) (Portugal) and [Steinbeis 2i GmbH](#) (Germany)

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More Information: <https://www.cbe.europa.eu/projects/fabulose>