

Session 1	Start-ups/SMEs looking for finance - pre-seed/angel/seed funding
Pitch Title	Pioneers in recycling of mix natural and synthetic fibres
Company	BioFashionTech
Speaker	Dr. Fabiola Polli
Keywords feedstock	Mix fiber textile waste, feedstock made of cellulose and plastic fibers (packaging waste, water waste etc)
Keywords technology	Biotech, enzymes
Keywords End-Product	Sugars, mix plastic fibers (nylon, elastane, polyester, acrylic etc)
Amount investment needed	350 K Euros
Abstract:	

BioFashionTech is a pioneering company in sustainable innovation and the circular economy, dedicated to transforming mixed natural-plastic fiber textile waste into valuable bio-based raw materials.

The textile recycling market is poised for significant growth, driven by legislative changes and the increasing environmental consciousness among consumers and businesses. The market is expected to create a profit pool of  $\in$ 1.5 billion to  $\notin$ 2.2 billion by 2030.

BioFashionTech aims to capitalize on the significant textile waste in the EU, targeting both industrial and post-consumer waste streams. The total addressable market includes:

- Industrial Textile Waste: 4.5 million tonnes annually in the EU.
- Post-Consumer Textile Waste: 7 million tonnes annually in the EU.

By addressing these waste streams, BioFashionTech can significantly impact the market, providing sustainable solutions that align with upcoming regulations and consumer demand for environmentally friendly products. BioFashionTech offers a patent-pending biotechnology process to separate, decompose, and transform coloured, mixed fiber waste into sugars and recycled plastics. Our process involves shredding various textiles (viscose, linen, hemp, nylon, elastane, polyester), separating fibers, recovering sugars and plastics, and creating high-value products. This approach uses no harsh chemicals, is energy-efficient, scalable, modular, and works with mixed fibers.

Our unique solution has breakthrough potential because it addresses a significant environmental problem with a practical, scalable technology that is superior to existing solutions. We have achieved TRL 5 and plan to demonstrate our technology on a pre-market scale, validating our proof of concept for wider adoption.

Recycling 1,000 tonnes of textile waste saves 2,010 tonnes of CO2, equivalent to the absorption capacity of nearly 95,714 trees, and recycles 27.9 million plastic bottles. Our solution promotes local economies by creating jobs, supports sustainable practices, and reduces reliance on petroleum-based raw materials. This aligns with key SDGs and contributes to the broader objectives of the EU Green Deal.