

Session	Start-ups/SMEs looking for Finance: Series A and Series B/C
	Funding
Title	From wastewaters to PHA-rich biomass: B-Plas embraces the industrial challenge!
Company	B-Plas sbrl
Speaker	Davide Collini
Keywords feedstock (max 2)	Wastewaters - Sludges
Keywords technology (max 2)	MMC
Keywords End-Product (max 2)	PHA-rich biomass

Abstract:

B-Plas technology is an innovative and sustainable bioprocess that converts organic waste into valuable PHA bioplastic precursors, supporting a circular economy and reducing environmental impact. The system integrates anaerobic digestion and microbial fermentation to transform biodegradable feedstocks—such as food waste, sludge, or agricultural residues—into polyhydroxyalkanoates (PHAs), a class of fully biodegradable biopolymers. The process begins with the biological breakdown of organic matter into volatile fatty acids (VFAs), which serve as substrates for specialized bacterial strains cultivated in optimized conditions. These microorganisms accumulate PHAs as intracellular carbon and energy reserves, which are then extracted and purified into bioplastic materials. B-Plas operates within a closed-loop, utilizing byproducts such as biogas and digestate for energy recovery and nutrient recycling. B-Plas offers a low-carbon, resource-efficient alternative that mitigates landfill burden, decreases dependence on fossil fuels, and promotes sustainable waste valorization. Its modular and scalable design enables integration into municipal and industrial waste management systems, turning everyday waste into high-value, eco-friendly materials.