

Session	Alternative and Unconventional Feedstocks
Title	Let's take bioplastic beyond the bin!
Company	Beyond Bioplastic
Speaker	Merel Witteman & David Strik
Keywords feedstock	Biodegradable plastic waste containing streams,
(max 2)	PHA/PLA/TPS/PBS/PBAT
Keywords technology	Microbial Recycling, Open-culture Anaerobic Fermentation
(max 2)	
Keywords	Volatile Fatty Acids, Bioplastic
End-Product (max 2)	
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## **Abstract:**

Ever thought your used bioplastic cup or compostable bag could go beyond waste?

Today, most biodegradable plastic waste gets burned or composted — releasing  $CO_2$  and ending its story too soon. At Beyond Bioplastic, that's where our story starts.

At Wageningen University, we've developed a microbial recycling process that lets bacteria consume biodegradable plastic waste streams and transform them into valuable volatile fatty acids. These volatile fatty acids can replace fossil-based ingredients and be used for dozens of applications, including making brand-new bioplastics.

This isn't just recycling — it's going beyond end-of-life. We're scaling our Biokraker™ technology from the lab to the real world, tackling all kinds of mixed and dirty bioplastic-containing waste streams. The presence of biowaste is an added benefit, since it can be co-fermented into volatile fatty acids as well. The Biokraker™ is scalable and can be integrated into existing waste infrastructures. With the expected increase in biodegradable plastic waste, our solution could become one of the major recycling technologies applied worldwide. With our partners, and supported by the Biotech Booster program, we're building a vibrant ecosystem and preparing for the first implementation of our invention — where nothing truly goes to waste.

Let's cut the compost, and go Beyond Bioplastic.