





SUstainable PlastiC biorefinerY for reCyclable and biodegradabLE packaging

UPCYCLE is a Horizon Europe project that turns non-recyclable mixed plastic waste into next-generation highly recyclable and/or biodegradable packaging materials. Building on the H2020 UPLIFT results, which reached TRL5-6 (small pilot scale), UPCYCLE advances these technologies to TRL7, addressing key challenges in scalability, process intensification, and industrialisation. With 19 partners across 10 countries and 7.9€ million in funding, the project focuses on four real-world packaging use-cases (salad and cheese films, beverage bottles, and personal-care rigid packaging). By combining chemoenzymatic depolymerisation, microbial upcycling, and eco-design principles, UPCYCLE aims to cut greenhouse-gas emissions by 30% and reduce production costs by up to 40% compared to current bioplastics.







