

The overall idea of UPLIFT is to biologically depolymerize bio- and fossil-based plastic packaging waste and convert it into more renewable and easily upcyclable polymers, following a biorefinery approach. UPLIFT will address the full plastic packaging value chain, from monomer production to packaging material manufacturing and back to Eol reusing and recycling options.

## IMPACTS

Contribution to upcycle F&D packaging materials which account for, at least, 60% of the market by 2030:

- Novel standards and certification schemes to be applied.
- Delivery of novel plastic packaging solutions with less environmental impact.
- Contribution to bring the European plastic packaging industry in the forefront of innovations and sustainability worldwide.

## OBJECTIVES

The main objective of UPLIFT is the development of a circular plastic packaging value chain in the F&D sector by applying novel eco-design strategies and biochemical upcycling technology routes.

To this end, the vision of the project revolves around two main axes:

- to combine bio-depolymerization of plastics and bio-based building blocks to obtain smarter and renewable plastic materials, which will enable the effective upcycling of plastic packaging waste streams.
- to fully integrate the bio-chemical upcycling technologies within already existing and more mature recycling processes and fermentation processes. All these prototype materials and processes will be tested in a relevant operational scale close to excected performance (TRL 6).

PROJECT PARTNERS





































