

## PRESS RELEASE – Be-UP

### **New Be-UP EU-funded project to drive innovation in sustainable packaging**

Lyon, September 2025

**17 partners from 9 countries united in the new Horizon Europe-funded project Be-UP to boost the industrial uptake of biodegradable polymers across Europe.** The Be-UP project was officially launched to accelerate the industrial uptake of biodegradable polymers for packaging applications. The project will focus on developing innovative aliphatic-aromatic biopolyesters with increased renewable raw material content.

The project started on May 1st, 2025, with its official kick-off meeting on June 4–5 in Valencia, Spain. Coordinated by ITENE, Be-UP brings together a consortium of private and public organisations, including the companies Novamont (Versalis (Eni)), Particula, Hybrid Catalysis, Isotech, Aptar Group, Imerys, and Innotech (Grupo Lantero) and the laboratories of the University of Trieste, Polinivo, Normec, Cebimat, FTPO and IDENER. European Bioplastics and the competitiveness cluster Polymeris will ensure the amplification of the Be-UP results, with the support for standardization of UNE.

Amparo Verdú Solís, Be-UP project manager at ITENE indicated that “Be-UP will boost the use of renewable *biopolyesters and speed up the adoption of biodegradable packaging across Europe.*”

Be-UP will pioneer the development of new methods of synthesis and treatments by using biobased building blocks alongside innovative catalysts and additives. Be-UP also will utilise advanced digital modelling tools based on kinetic models, such as Kinetic Monte Carlo (kMC), to improve biopolyesters’ synthesis and polymerization. The resulting biopolyesters will be blended with commercial biopolymers such as PLA, PBAT, PHA, biobased chain extenders, and mineral fillers to create high-performance bioplastic packaging materials.

This process will be guided by advanced compounding modelling tools and innovative techniques – such as screw design and inline rheology measurements – to reach technical performance, sustainability and biodegradation goals thanks to a multi-objective function evaluation approach.

Industrial transformation will also be a priority within Be-UP, with a particular emphasis on key processes of the packaging industry –namely, blown film extrusion, injection moulding and thermoforming.

A series of packaging products’ prototypes at TRL7 technological readiness level will be manufactured to validate the materials developed. Their biodegradability will be assessed in various end-of-life scenarios, which include open environments and

controlled conditions. The biodegradability assessment will be crucial for the understanding of the materials' behaviour at the end of their life and beyond laboratory testing. The project's findings will include:

- Guidelines and tools promoting circular design, incorporating the Safe and Sustainable by Design (SSbD) framework;
- Evidence-based improvements to the regulatory framework for testing and labelling packaging materials and products.
- Development of circular business models for the production of biobased and biodegradable packaging materials and products at industrial scale.

Ultimately, Be-UP is foreseen to provide a concrete contribution to several European action plans and strategies, such as the Plastics Strategy, the Single-Use Plastics Directive, the Circular Economy Action Plan, and the Packaging and Packaging Waste Regulation.

The Be-UP project has received 8.5 M EURO funding from the European Union's Horizon Europe Research and Innovation Programme under Grant Agreement No. 101178689.



LinkedIn <https://www.linkedin.com/company/be-up-project>

Short summary of the project: <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/43108390/101178689>

Contact:

**Miriam Gallur**, BE UP Project coordinator, Materials and Packaging Area Manager, ITENE

Amparo Verdú Solís, BE UP project manager, Head of Novel Materials Formulation Unit, ITENE