

# Bioplastics integrated solutions for green packaging industry

## BIOPLASTICS

### Bioplastics

#### An innovative and sustainable material for packaging

Plastic is the most used material for packaging but it is also highly harmful to the environment. Based on OECD data, global plastics production doubled from 2000 to 2019 to reach 460 million tonnes. Plastics account for 3.4% of global greenhouse gas emissions. That is why bioplastics represent the future for the packaging industry, which needs to adopt green practices to reduce their impact on the environment.

#### Delivery of integrated solutions for each stage of the bioplastics value chain

Bioplastics represent a huge opportunity to achieve the goal of providing more sustainable packaging. This cluster of projects has broad potential thanks to their innovative solutions in the bioplastics value chain. The Project Group has the potential to deliver integrated solutions, from organic waste (REWIND) to the production of food packaging (PRESERVE) and the production of biodegradable plastic (upPE-T). In addition, the projects taken together cover each stage of the biopolymers production chain, complying with the European Strategy for Plastics in a Circular Economy.

### Key results



Identifying the most interesting and promising research areas for the production of bioplastics and biodegradable polymers in the frame of circular economy.



Raising awareness of the environmental needs of biodegradable solutions like bioplastics.



Developing a series of recommendations that could be rapidly implemented to increase bioplastics production and decreasing non-degradable plastic production.



Developing a dedicated communication campaign to overcome the resistance of industrial stakeholders in the production of bioplastics in place of non-degradable plastic.



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### The Impact

- ▶ Proposing solutions for each stage of the bioplastics production chain including compliance with the European Strategy for Plastics in a Circular Economy
- ▶ Increasing awareness among industry stakeholders of adopting bioplastics in place of non-degradable plastic
- ▶ Overcome resistance in large enterprises by providing a valid, effective, and sustainable replacement for “classic plastic”
- ▶ Develop new standards in the domains of bioplastics and the circular economy

### Who benefits?

 Policy Makers and Public Administrations

 Research & Academia

 Large enterprises and SMEs

 Civil Society and Citizens

**This cluster of projects is collaborating to address the challenges and opportunities of bioplastics**



#### REWIND

Producing bioplastics through valorisation of waste cooking oil



[cordis.europa.eu/project/id/101031186](https://cordis.europa.eu/project/id/101031186)

GA 101031186



#### PRESERVE

Boosting the circular use of bio-based packaging  
[www.preserve-h2020.eu](http://www.preserve-h2020.eu)



GA 952983



#### upPE-T

Developing PE and PET upcycling using enzymatic technologies



[uppet.eu](http://uppet.eu)

GA 953214

