

# The team



Biodegradable by Design,  
Sustainable by Nature.



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



**Be part of the transition to sustainable packaging.**

Follow E-Oilé and discover how innovation, science, and collaboration are shaping biodegradable solutions for a circular future.

FOR ADDITIONAL INFORMATION:

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# E-oilé

Sustainable End-Of-Life routes for single-use monodose packaging for oily products.

Replace fossil-based single-use plastics for oily products with sustainable, biodegradable and circular solutions **designed for the food and cosmetics sectors.**

## ABOUT THE PROJECT

### E-OilÉ is rethinking packaging.

E-OilÉ will develop safe and sustainable biodegradable packaging close to market readiness as a cost-effective alternative to replace current monodose plastic packaging. The novel biopolyesters and polysaccharides materials, will be engineered to significantly improve barrier properties and mechanical strength, meeting the demanding requirements of oily food and cosmetic products. These new bio solutions target both flexible and semi-rigid formats while fully adhering to the Safe and Sustainable by Design (SSbD) framework.

## Engineering of two lines of biodegradable compounds at TRL7

Biodegradable aliphatic-aromatic polyesters from the esterification and polycondensation of diacids and diols from olive by-products rich in oleic acid.



Biopolymers based on high levels of thermoplastic polysaccharide content.

## E-OILÉ RELIES ON THREE PILLARS



### PILLAR 1

#### Safe and Sustainable by Design

All materials and end products developed by E-OilÉ will be **safe for people and ecosystems**. This will be ensured through human toxicology testing, ecotoxicology assessments, and verification of their suitability for food and cosmetic contact.

### PILLAR 2

#### Functional Design & Industrial Optimisation

All new biodegradable materials will **meet the demanding real packaging** performance requirements of oily products, while remaining cost-competitive and industrially efficient. They will be designed to match or outperform conventional plastics.

### PILLAR 3

#### Sustainable & Circular Market Validation

E-OilÉ solutions will be **sustainable, circular, reliable, market-ready, and aligned with consumer expectations**. This will be achieved by using LCA and LCC assessments, comprehensive biodegradability testing, and industrial-scale validation across **four use cases** (olive oil, oily sauces, body oil, and oil serum).

# Key figures

- 15 partners
- 07 industries
- 09 countries
- 02 novel lines of materials
- 06 end-products
- 04 uses Cases
- 12 to 18 months of demonstrated stability and shelf life
- 03 consumer acceptance studies
- 04 completed biodegradation tests
- 02 AI powered digital twins for biodegradation predictability
- Up to 60% reduction of GHG emissions
- 300 stakeholders reached
- 30 stakeholders actively engaged
- 12 evaluation tests on the functionality

