



in-built Triggered Enzymes to Recycle Multi-layers: an Innovation for Uses in plastic-packaging

Meeting/Conference name – date and place

TERMINUS is funded by the European Union under Horizon 2020
Call: H2020-NMBP-ST-IND-2018
Grant agreement: 814400



Background

Multi-layer packaging

- Widely used due to many properties
- Used for packaging of food, beverages, cosmetics, pet food, etc.
- Extend lifetime of goods, helping reduce food waste
- **Due to complex structures, these materials are unrecyclable**
- **100% of multi-layer packaging is incinerated or landfilled**



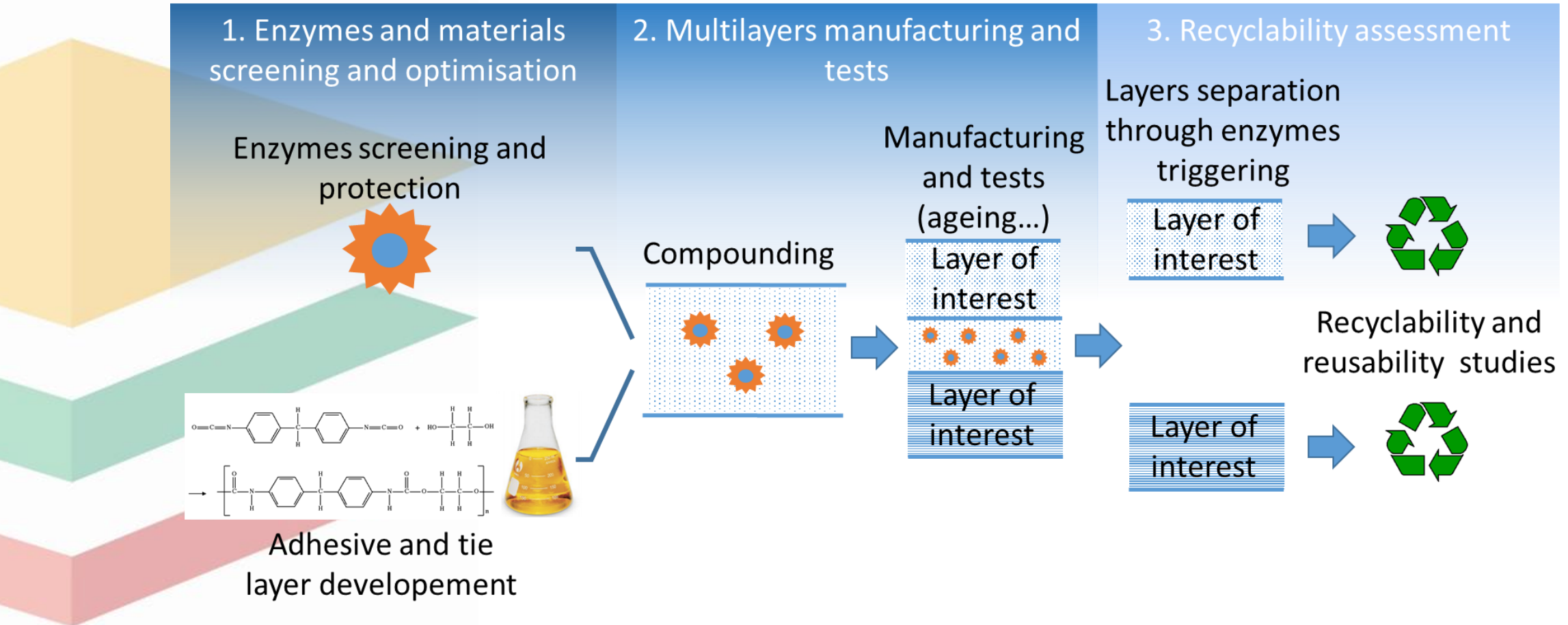
A graphic on the left side of the slide consisting of three overlapping, downward-pointing chevron shapes. The top one is orange, the middle one is teal, and the bottom one is pink. The text "Objective of the project" is written in a green, sans-serif font across the middle chevron.

Objective of the project

TEMINUS addresses the challenge of unlocking recycling and reuse of flexible multi-layer and multi-compound packaging

- Range of smart enzyme-containing adhesive or tie layer polymers
- Intrinsic self-biodegradation properties
- Controlled biodegradation of adhesives and tie-layers
- **Enable separation of different layers of packaging, which can then be recycled**

Objective of the project



Expected results



15% improvement in economic efficiency of end-of-life management



80% reduction of landfilling for multi-layer plastic packaging



55% reduction of overall plastic landfilling

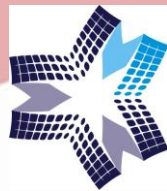


65% decrease in the overall CO₂ footprint

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