

UPPE-T PROJECT

by Fuensanta Monzó



UPCYCLING BIO-PLASTIC OF FOOD & DRINK PACKAGING

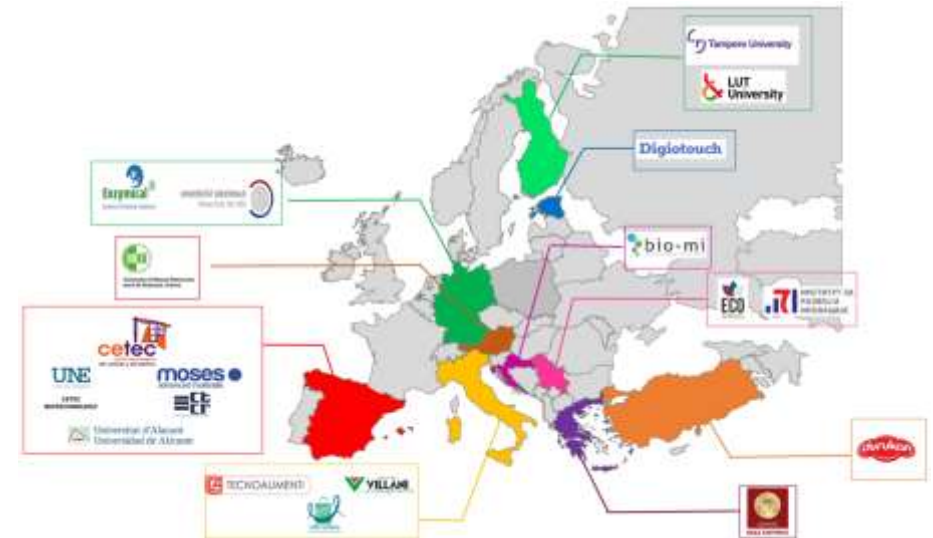
1. upPE-T project

EU contribution
€ 7 826 685

4 years project

20 partners

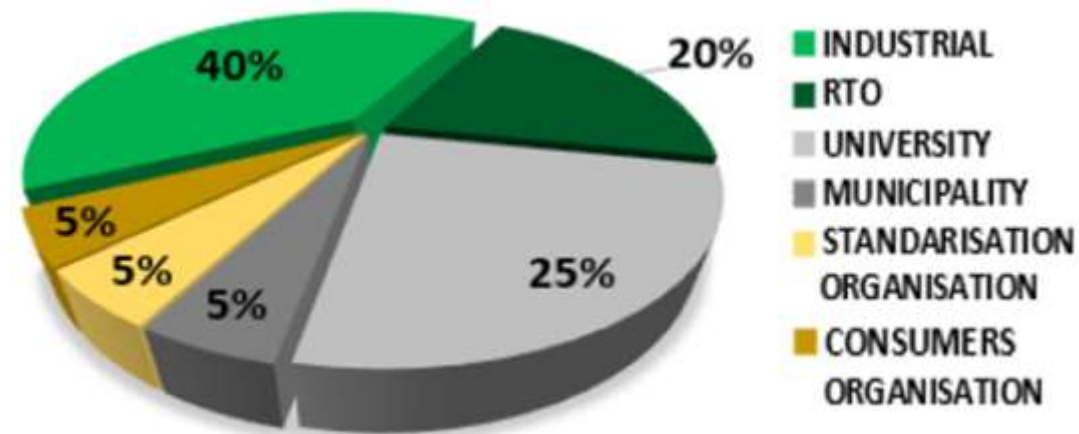
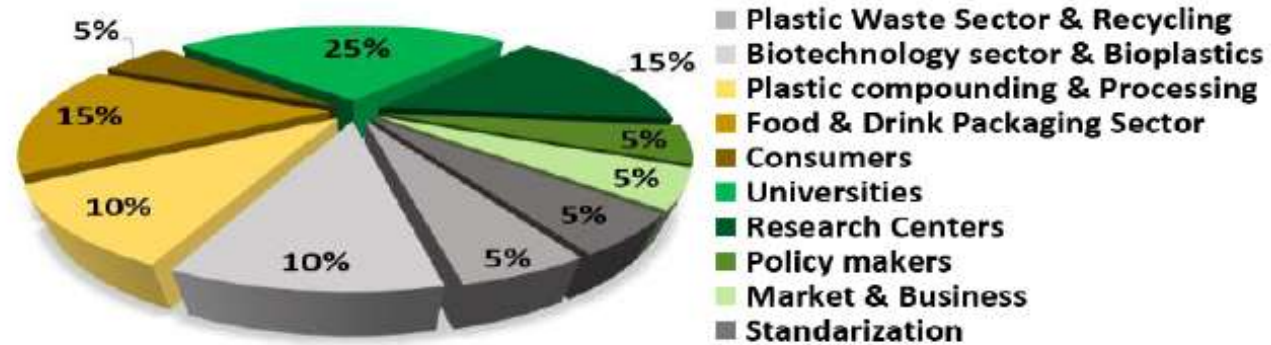
10 countries



2. The whole value chain represented

Interdisciplinary nature

Multisectorial approach



1st Stage: Wastes Recycling

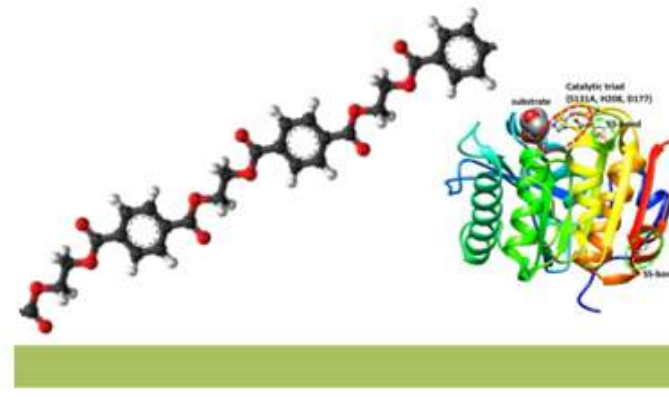


→
Pretreatment
Improved affinity to enzymes

+
Enzymatic degradation
Customized biocatalysis

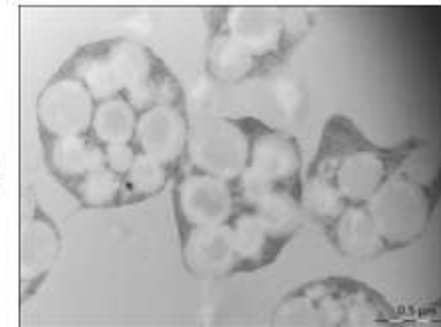
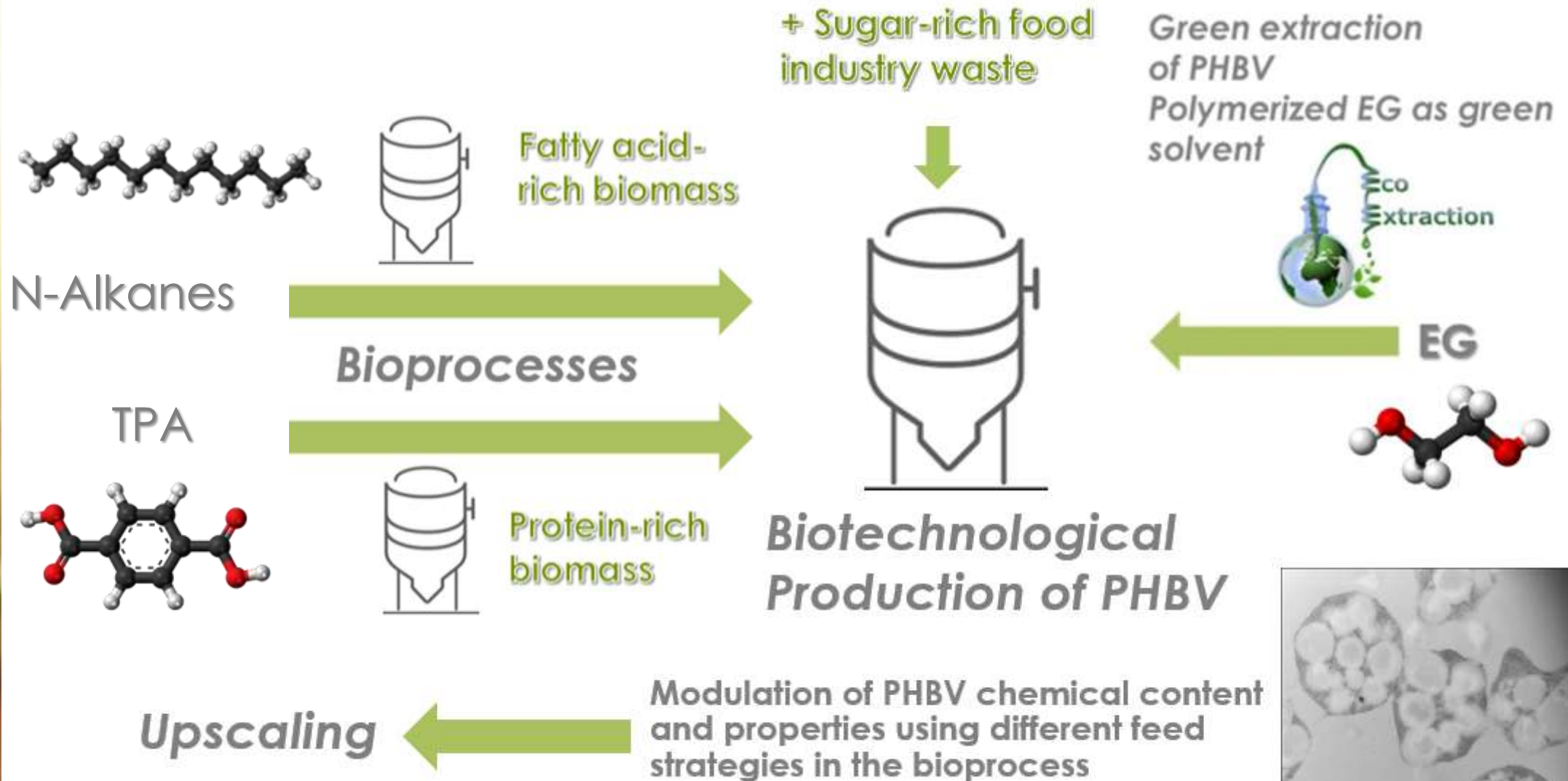
TPA & EG

→ *Upscaling*

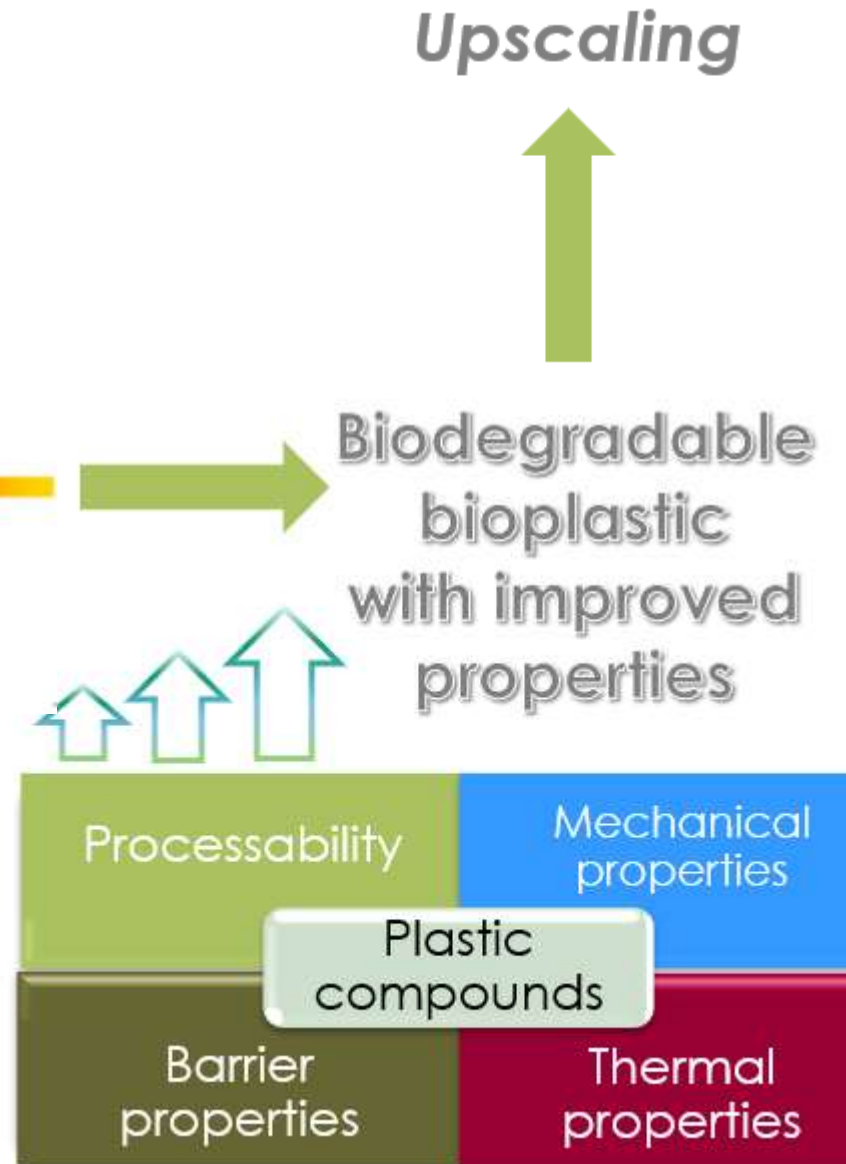
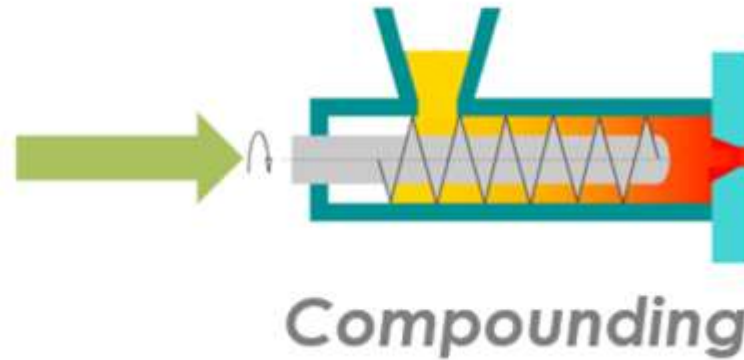
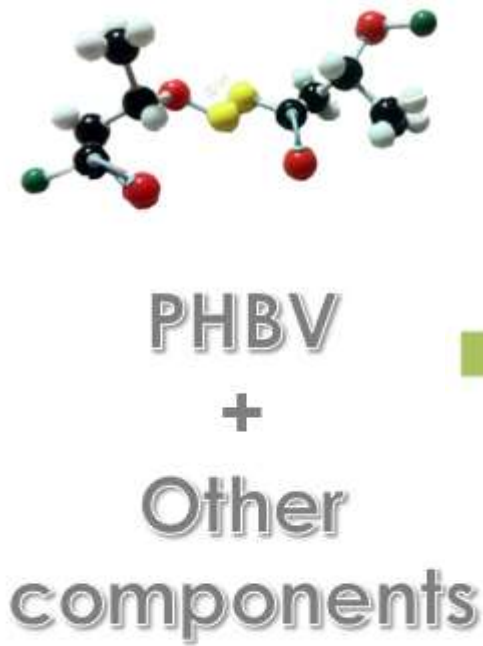


N-Alkanes

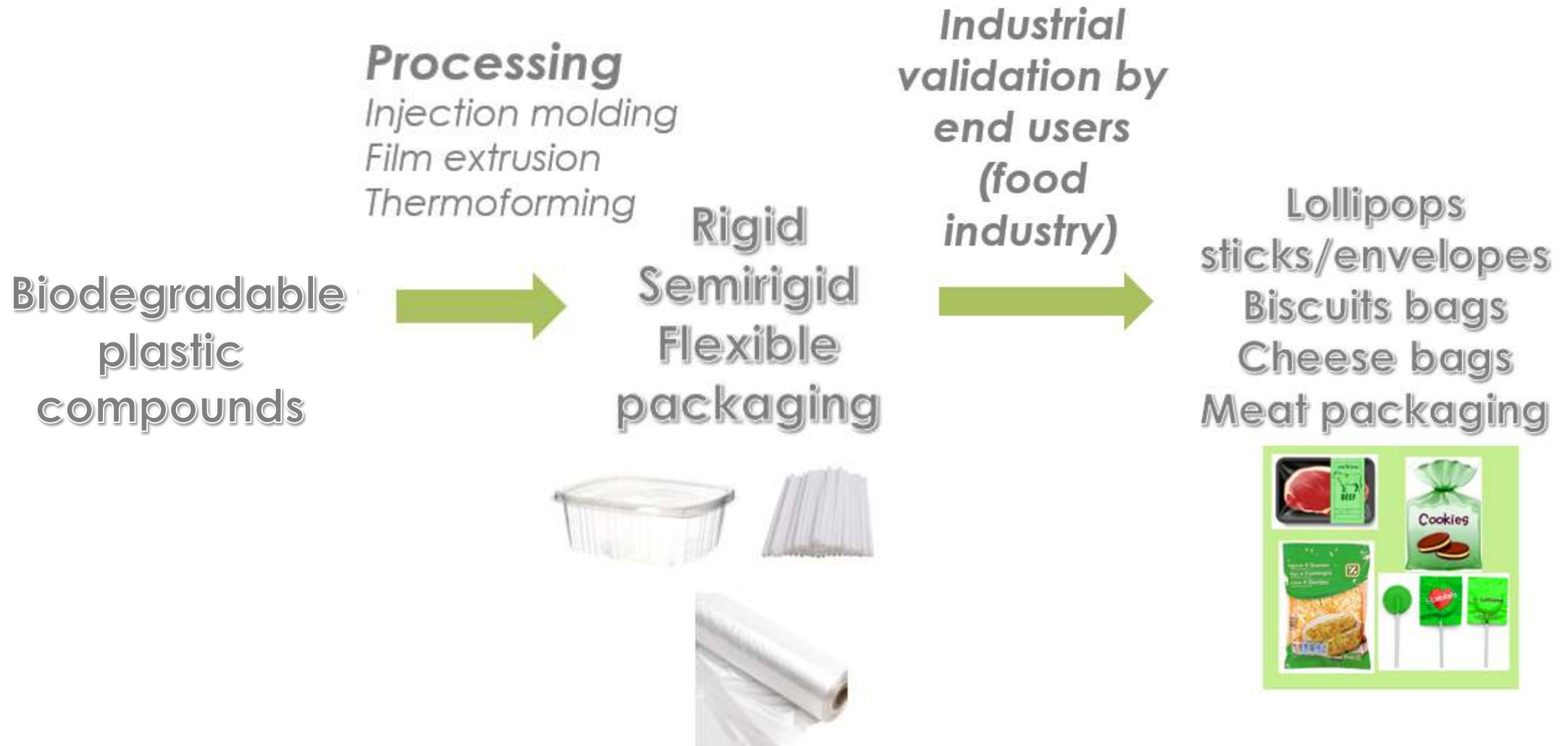
2nd Stage: Biological factories



3rd Stage: Compounding of bioplastic to packaging materials



4th Stage: Transformation into packaging and industrial validation



Cross-cutting activities

Evaluation of the environmental impact of upPE-T solution

- LCA, sLCA, LCC
- Valorization of byproducts
- Circularity studies: recyclability, compostability and biodegradability



Cross-cutting activities

Integration SSH and gender aspects across upPE-T project

- Study the current attitude of European citizens with respect to recycling and purchasing food & drink packages to design a roadmap that aims to improve consumers behaviour and attitude towards drink&food packaging recycling and purchasing.
- Study of the gender structure in the recycling industry





Cross-cutting activities

Standardization and certification activities

Exploitation, innovation and business plans

Dissemination and communication activities

Clustering and networking activities

Stakeholders engagement

Cross-cutting activities

European Citizens Awareness Enablers:

- European citizens' awareness Platform and Virtual Reality (VR) based mobile app
- *A Massive Open Online Course (MOOC)*
- Awareness events such as workshops at educational institutions, visits to plastic waste recycling plants, etc.



Cross-cutting activities

Policy review

- The review of the regulatory framework of the upPE-T solutions & tools in the EU.
- Propose measures to improve current legal & regulatory framework in this field.



Thank you for your attention



upPE-T

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