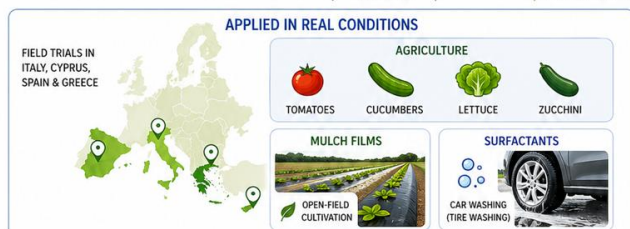




WHERE ARE WE AT?



TURNING URBAN BIOWASTE
INTO BIO-BASED SOLUTIONS
FOR A CIRCULAR FUTURE



After 66 months of strong collaboration, the LIFE EBP prototype treated compost and biowaste to produce over 1 ton of biofertilizers, biosurfactants and bioplastics, tested in

agriculture and car washing across Europe. Results were widely disseminated and the process assessed, supporting circular bioeconomy solutions and strong market potential.

FUTURE WORK!

After LIFE, a joint venture led by Hysytech, involving technology owners, waste operators and industrial partners, will scale up the conversion of municipal biowaste into high-value bio-based products.

The model ensures secure feedstock, market access and EU-wide replication, supported by private investment, early revenues and continued innovation, delivering environmental and economic impact.

LIFE EBP After-LIFE plan



LIFE CYCLE ASSESSMENT

1 SCENARIOS (S0–S3)		2 SCENARIOS COMPARISON				
S0	BASELINE	S0	S1	S2	S3	
0% recycling Grid electricity		CLIMATE IMPACT (GWP100)	100%	50%	18%	8–12%
50% recycling Grid electricity		COST (€/kg dry BP)	3.55	2.35	1.45	1.05
90% recycling Grid electricity		MSP (€/kg dry BP)	5.80	4.20	2.60	1.90
90% recycling Renewable electricity		OVERALL PERFORMANCE	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★
		★ BEST SCENARIO: S3				
		✓ LOWEST IMPACT				
		✓ LOWEST COST				
		✓ LOWEST MSP				

The LIFE EBP project shows how municipal biowaste can be turned into valuable bio-based products. Key cost and environmental drivers are KOH and electricity, especially in dry processing. Boosting circularity

—via KOH recycling and renewable energy— can cut impacts by up to 90% and reduce costs to ~€2/kg or even €1/kg. Agriculture and mulch films are the most promising applications.

EVENTS & DISSEMINATION



The project successfully concluded with the publication of two new papers and a series of dissemination activities, including a final workshop in Cyprus and a monitoring visit in Turin. Both papers

focused on the application of bio-based products (BPs) in agriculture, highlighting their potential to support more sustainable practices.

The final workshop in Cyprus brought together key stakeholders to explore pressing environmental challenges in the region and to discuss how LIFE EBP technology can contribute positively. The discussions underscored strong opportunities for successful implementation within the country.

The monitoring visit in Turin included the participation of the project monitor and project officer, providing valuable feedback and ensuring alignment with project objectives.

The Layman's Report is currently being prepared by POOL and is expected to be available by the end of May.

For more info: www.lifeebp.eu \ LinkedIn page.

THE PROJECT ADVISOR INTERVIEW

**MILINA
SCHUMANNOVA**

Project Advisor at
CINEA –
European Climate,
Infrastructure and
Environment
Executive Agency



«It was very interesting to visit the mobile plant and hear the details of the LIFE EBP project. I think the project is really contributing to circular bioeconomy on the EU level, because it is addressing a problem of municipal biowaste and it

shows that this problem can also have a potential solution and that municipal biowaste issue can also create new value chains that are developing different innovative products like fertilizers, turning waste into a resource. I believe

that with further work the project certainly has the potential for the replication in other member states, of course subject of sub-certification and regulatory challenges for the certification of the biowaste products»

HYSYTECH

HYSYTECH is an engineering company founded in 2003, specialized in the design, development and industrial implementation of new turn-key process technologies and equipment. HYSYTECH's skills start from the know-how in chemical and process engineering, up to commissioning, monitoring and maintenance.

Hysytech is the coordinating beneficiary of the LIFE EBP project and the developer of the multistep process included into the prototype for the production of the biopolymers.

