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Riccardo Gambini | European Compost Network

Organic soil improvers from biowaste – Regulatory challenges

Introduction of the project



Guiding the mainstreaming of best biowaste recycling practices in Europe

2,5-year project, start date 1/1/23

CALL LIFE 2021-PREP-NATURA NATURE AND BIODIVERSITY



**Co-funded by
the European Union**

**LIFE Preparatory Projects - Projects addressing ad hoc
Legislative and Policy Priorities (PLP)**

**Preparing the basis for EU guidance and
standardization on closing the gap in the
biological cycle to enrich soils with high quality
compost from collected organic waste in support
of nature and biodiversity**



ECN (European
Compost Network)



ZWE (Zero Waste
Europe)



ACR+

ACR+
(Association
of cities and
Regions)



Fundació
ENT



CIC (Italian
Composting
and Biogas
Association)



Objectives

- Identification and validation of the current Best Practices (BP) and management instruments
- Establish series of reference Key Performing Indicators (KPI)
- Study of proposed targets and requirements for bio-waste management
- Approach organic waste as a cross-cutting issue and a link to soil health
- Stakeholder involvement and networking activities and organize events

Outputs

- Front-runner and best practices factsheets
- Guidelines on separate collection, governance and economic incentives, quality compost and digestate
- Policy brief on regulatory/policy barriers
- BIOBEST Decision Support Web Tool
- Standards for biowaste entering organic recycling processes
- Comprehensive EU guidance for regional and local entities

D5.2 A policy brief including regulatory barriers

T5.1: Identifying and analysing policy and regulatory barriers for the production of high-quality compost and digestate from bio-waste

- Introduction & Existing Legal Framework
- Methodology
- BIOBEST Results
- Conclusions & Recommendations

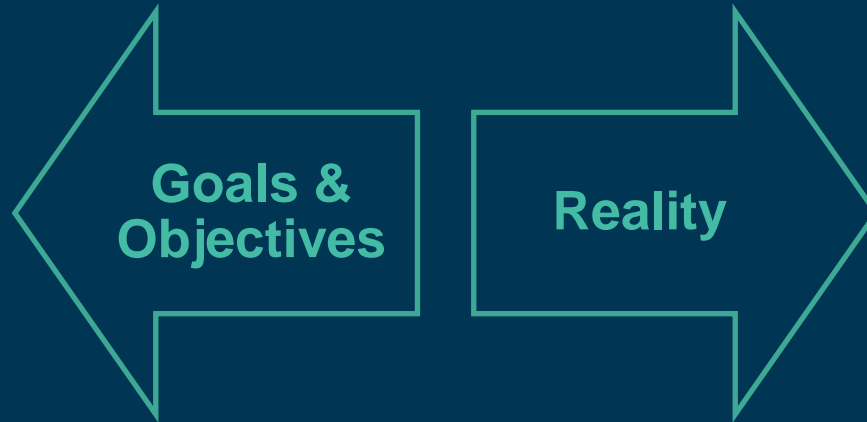
Existing legal framework

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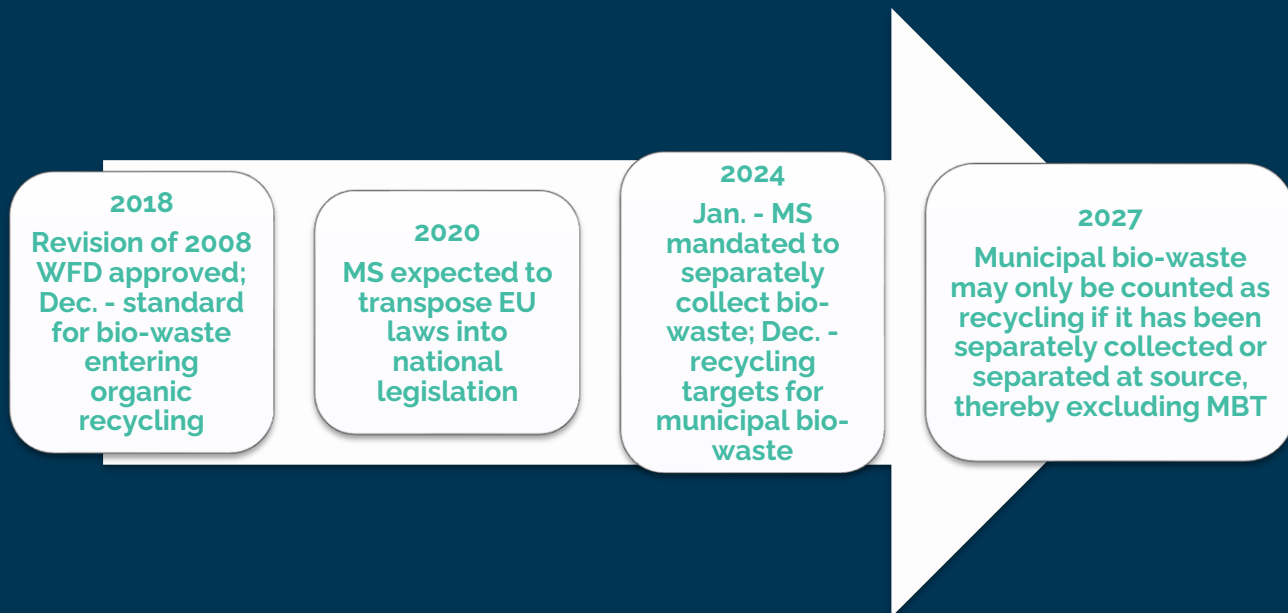
01

Big idea

- Why study the gaps and barriers to the practical application and implementation of EU bio-waste policy?

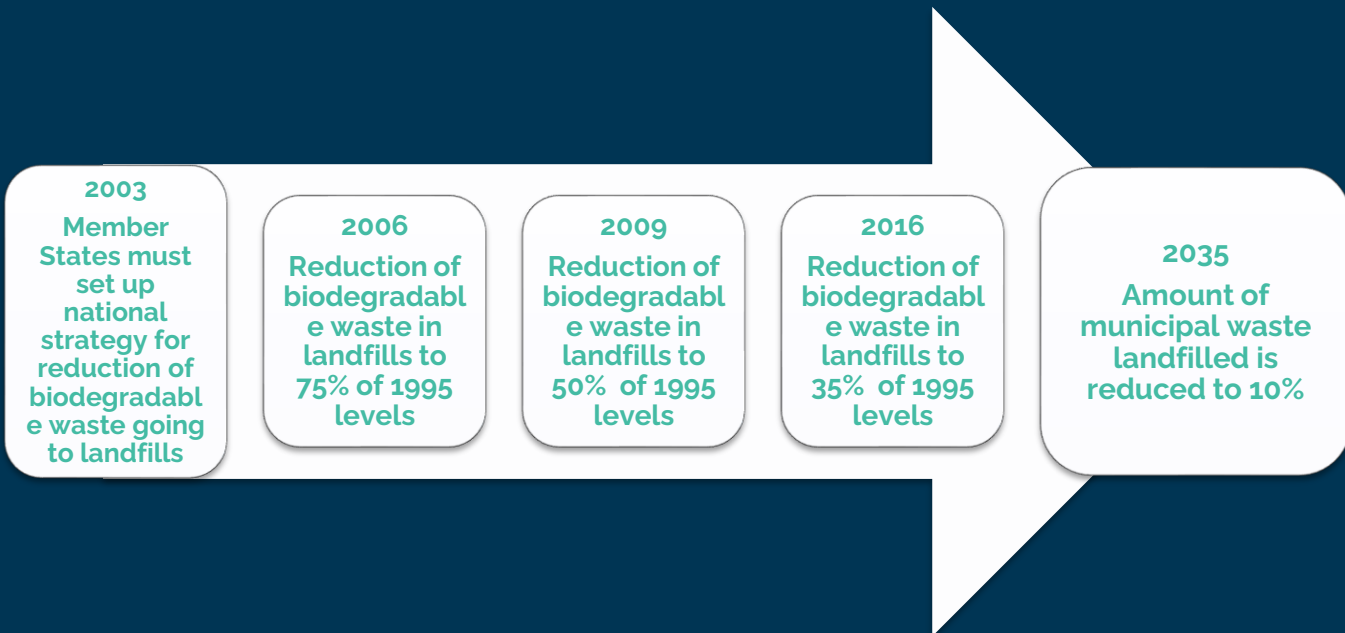


Waste Framework Directive



- No mention of quality despite the importance for the calculation of the recycling levels and the closing of the loop
- Low implementation rates
- Low capture rates, especially food waste

Landfill Directive

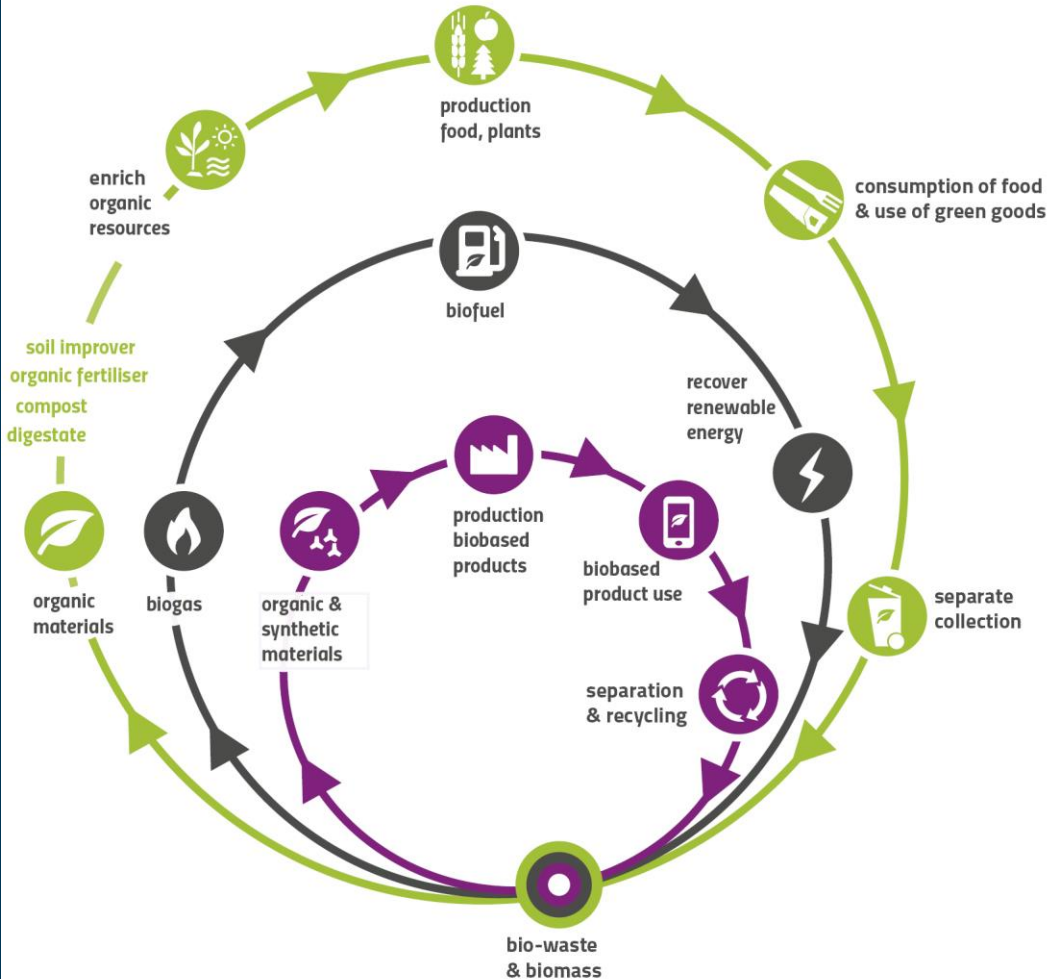


- Lack of compliance
- Compliance achieved through shift to incineration
- Regional variation

Cross-cutting legislation - ECN

EUROPEAN GREEN DEAL

- Bioeconomy Strategy
- Biodiversity Strategy
- Farm to Fork Strategy
 - Soil Strategy
- Waste Framework Directive
- Zero Pollution Action plan

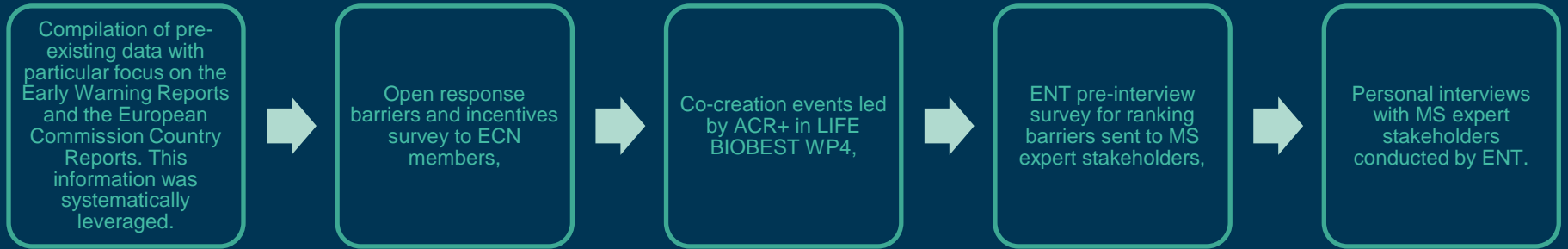


Methodology

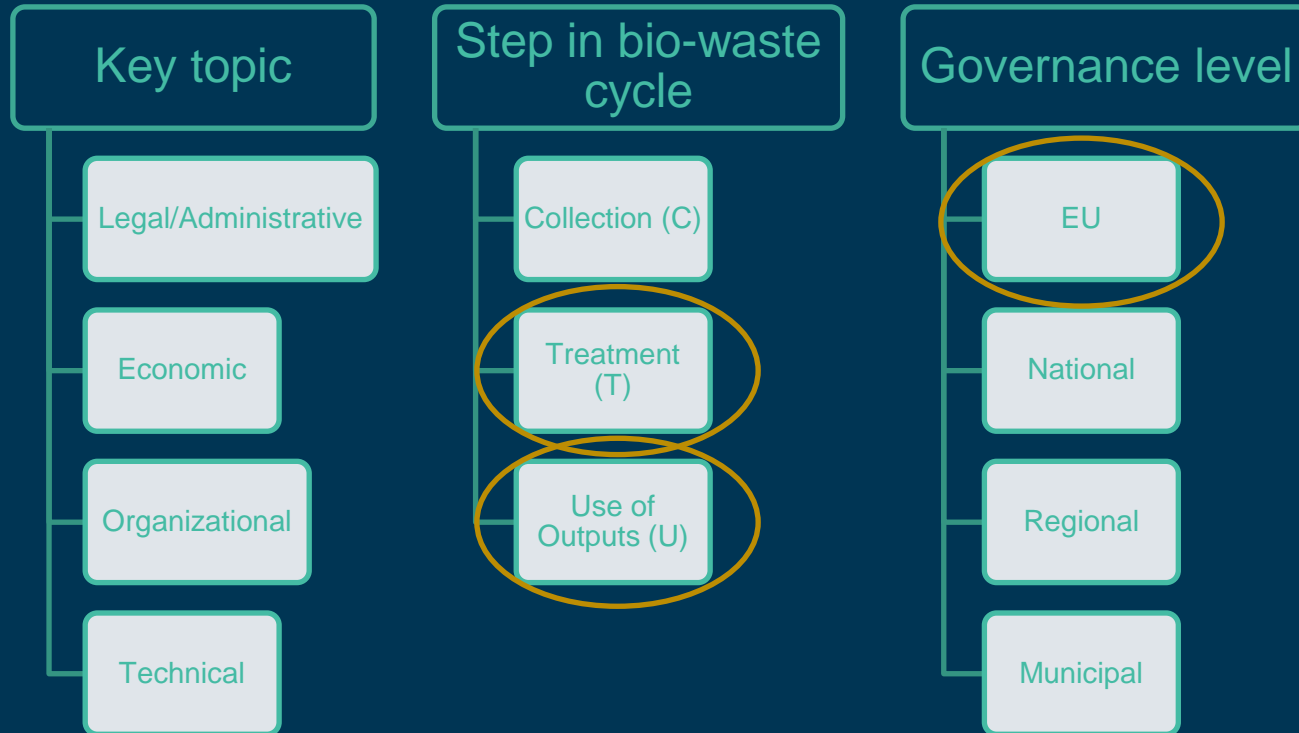
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02

BIOBEST Data Collection



Categorising Barriers



Regulatory/Policy Barriers vs. Local Challenges

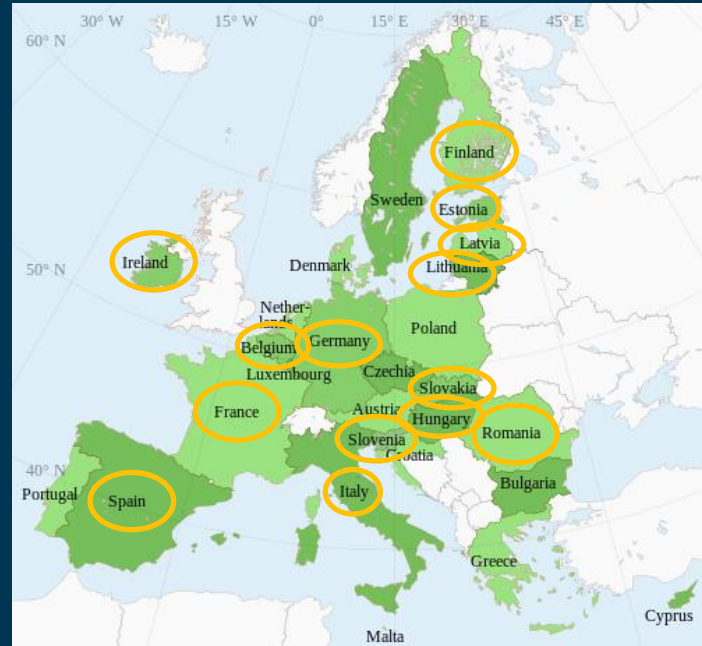
Systemic vs. Contextual

- Lack of quality and service standards for input and output materials (T)
- Lack of resources to build or outfit waste treatment facilities for bio-waste (T)
- Lack of synchronization across public and private entities in charge (C & T)
- Difficulties due to extreme weather,
- Difficulties due to wildlife/pests,
- Difficulties with certain populations or remote areas,
- Difficulties with tourism or seasonal variation,
- Garden waste influxes overwhelm collection system,
- High transportation costs from the collection area to the treatment facility,
- Selection of improper/inefficient treatment technologies.
- Odors or bothersome impacts from collection facilities or treatment plants,
- Lack of local users.

Expert Interviews

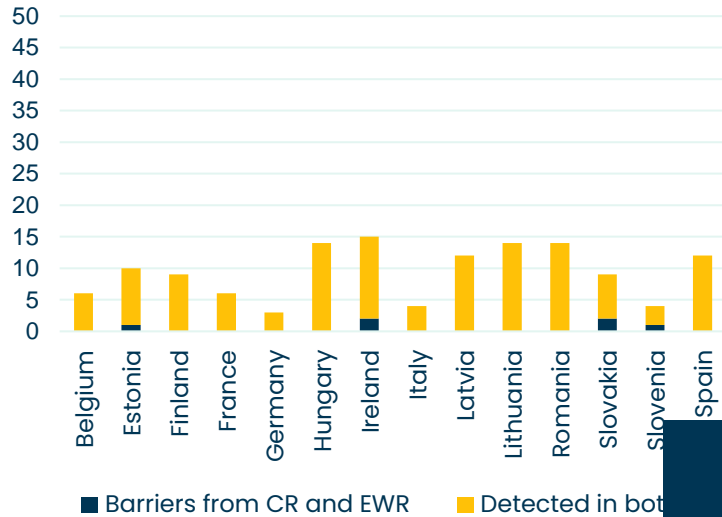
LIFE BIOBEST interviewed experts from diverse geographic locations in the EU, reaching a total of 14 MS.

The 14 MS represent all geographical regions of the EU, and many are those with largest populations.

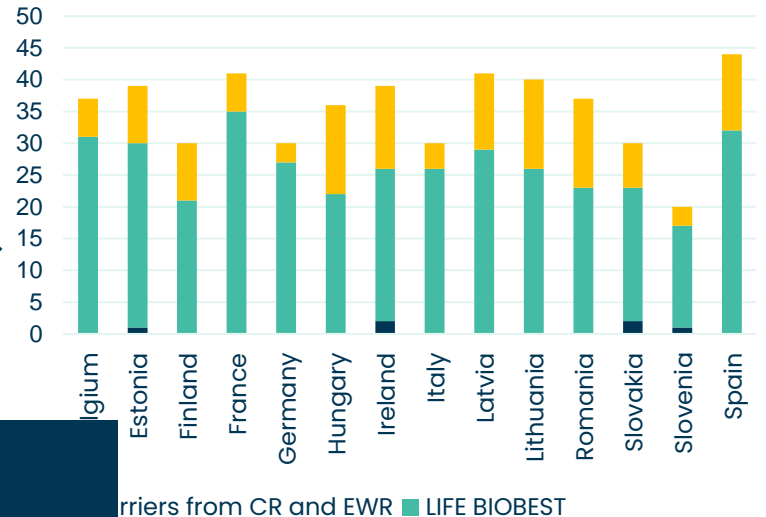


Northern Europe				Western Europe				Central and Eastern Europe				Southern Europe	
Estonia	Finland	Latvia	Lithuania	Belgium	France	Germany	Ireland	Hungary	Romania	Slovakia	Slovenia	Italy	Spain

Number of Regulatory/Policy Barriers Detected per EU Member State



Number of Regulatory/Policy Barriers Detected per EU Member State



3x
Increase in barriers detection

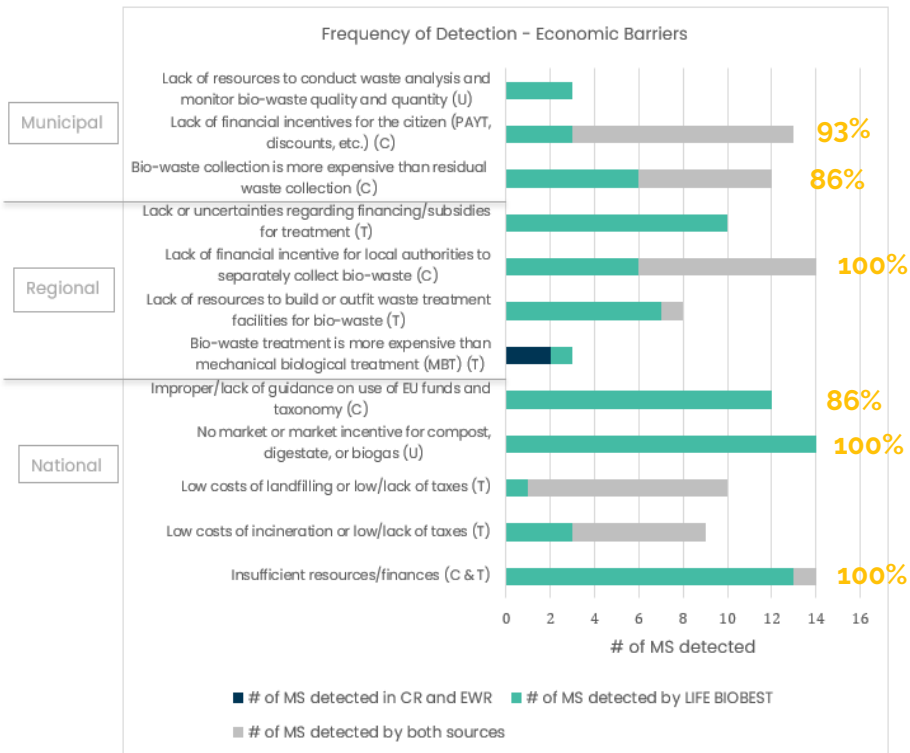
Results

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03

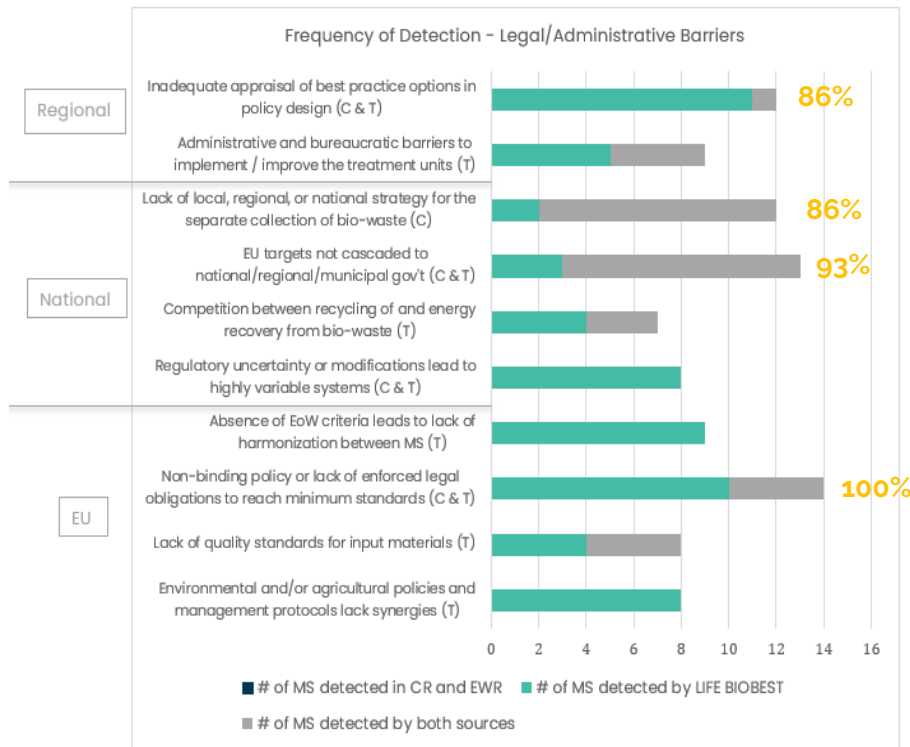
Economic Barriers

Frequency of Detection - Economic Barriers



Legal/Administrative Barriers

Frequency of Detection - Legal/Administrative Barriers



BARRIER

TYPE

Lack of effective binding policy or enforced legal obligations to reach minimum standards, more specifically lack of recycling targets for bio-waste (T & U)	Legal/adm
Absence of EoW criteria leads to lack of harmonization between MS (T)	Legal/adm
Inadequate appraisal of best practice options in policy design (C & T) Inadequate appraisal of local circumstance in system set-up (C & T)	Legal/adm Technical
Poor institutional organization and limited capacity to implement legislation (e.g., bottleneck present in the FPR is the conformity assessment procedure for waste-derived input materials such as compost and digestate) (C, T, U)	Legal/Organis.
Insufficient resources/finances (C & T)	Economic
No market or insufficient market incentives for compost, digestate, or biogas (U)	Economic
Bio-waste treatment is more expensive than mechanical biological treatment / competition of high existing incineration capacities (T)	Economic
Lack of resources to conduct waste analysis and monitor bio-waste quality and quantity (T & U)	Economic
Insufficient data monitoring systems to track implementation, performance and evolution (C & T)	Technical

FPR constraints

<p>INPUT MATERIALS</p>	<p>No sludges from the food and feed industry as input material allowed</p>
<p>ANIMAL BY PRODUCTS</p>	<p>For ABP-derived materials (catering waste) the standard transformation parameters of the EU ABPR have to be fulfilled (70°C/1h 12mm). Alternative transformation parameters for plants under national Regulation are not valid</p>
<p>CONFORMITY ASSESSMENT</p>	<p>External control/conformity assessment of the quality assurance scheme of an operator by accredited organisation. No national QAO accredited, current notified bodies have limited experience with auditing composting and anaerobic digestion plants, the amount of plant audits too high</p>

Conclusions & Recommendations

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04

LIFE BIOBEST Calls to action	Topic				Target Level	
	E	L/A	O	T	Promoter	Recipients
<p>Cascade national recycling targets down to the municipal level with responsibility for waste collection systems and ensure that there are consequences for municipalities that fail to meet targets. National laws state the transfer of the EU objective to regions, thereby giving the capacity to regions to decide how to transfer the objective to the local level. (T)</p>		X			EU, MS	Regional, Municipal
<p>Certify the quality of the input, recycling process and resulting compost/digestate. Develop mandatory, EU-level EoW criteria for waste categories falling under the FPR, and revise existing transformation parameters to better reflect optimal bio-waste treatment conditions, thereby reducing intra-EU fragmentation. Create level playing field and increase cross-border market opportunities. (T/U)</p>		X	X	X	EU, MS	R, M, Private Company
<p>Promote accredited notified bodies of the quality assurance schemes dealing with bio-waste derived fertilising products and accredit at EU level under the FPR the existing quality assurance organization (QAO) for compost and digestate to assess the conformity. (T/U)</p>		X	X	X		MS, R, M
<p>Promote studies on compost/digestate quality, application methods and benefits to soil, as to facilitate the use of these outputs. (U)</p>		X	X	X	EU, MS	QAO

LIFE BIOBEST Calls to action	Topic				Target Level	
	E	L/A	O	T	Promoter	Recipients
Launch specific programme to promote private and public investment in new treatments facilities and to increase treatment capacity . This can be related to climate change mitigation actions. (T)	X	X	X		EU, MS	R, M, PC
Improve EU taxonomy by removing unnecessary and burdensome technical criteria , which de-facto exclude bio-waste recovery through composting and AD from receiving support in the form of green investments. (T)	X		X		EU	MS, R, M,
Promote awareness and training for agricultural producers to understand and apply compost and digestate on soil and farmland. (U)			X	X	MS, R	Farmers
Resolve conflict at EU level between the FPR and ABP on the end point in the manufacturing chain by allowing alternative transformation parameters for the composting and AD of bio-waste containing ABP which better reflect current practices. (T)		X		X	EU, MS	R, M, PC

LIFE BIOBEST Outputs

Guideline on separate collection (D3.1 led by CIC)

Guideline on governance and economic incentives (D3.2 led by ENT)

Guideline to promote quality compost and digestate (D3.3 led by ECN)

Guideline on communication strategies (D3.4 led by ZWE)

Proposal for EU standards for bio-waste entering recycling processes for high-quality compost and digestate (D5.4 led by ECN)

Thank you!

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