

**Biocircularcities Trilogy – Ep. 1:
Supporting local players with the
transition to circular bioeconomy,
and lifting the current barriers**

BIO CIRCULAR CITIES

The Biocircularcities project and its collaborative approach: how to support territories with their transition to circular bioeconomy?



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 Bio-based Industries
Consortium



Horizon 2020
European Union Funding
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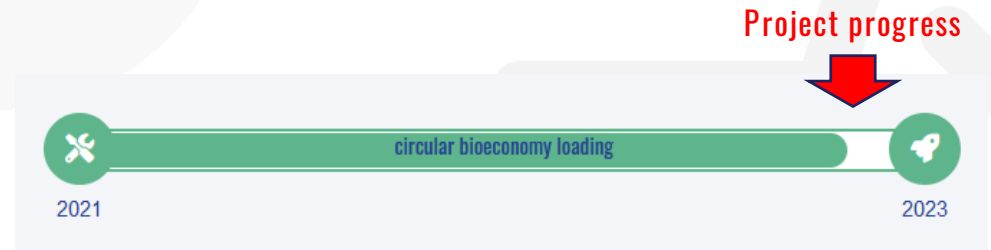


BIOCIRCULARCITIES

Exploring the circular bioeconomy potential in cities.
Proactive tools for implementation by policy makers and stakeholders



Coordination and Support Action



Aim

- Supporting the development of innovative regulatory frameworks aligned with circular bioeconomy principles
- Exploring models for valorising unexploited bio-based waste streams in 3 pilot areas

Discover Biocircularcities in video
https://youtu.be/kMQp_vmlWqE English version

Watch this video also
in Bulgarian, Catalan, Italian, or Spanish.

8 consortium partners



BIOCIRCULARCITIES – 3 pilot areas with different selected value chains

Metropolitan Area of Barcelona (MAB, Spain)
Separately collected biowaste



Metropolitan Area of
Barcelona (ES)



- Improving separate biowaste collection
- Upgrading biogas from anaerobic digestion into biomethane for the local gas grid

Pazardzhik Province (PP, Bulgaria)
Forestry residues



Region of
Pazardzhik (BG)



- Lignocellulosic valorisation (production of biobased chemicals)
- CHP plants (bioenergy)

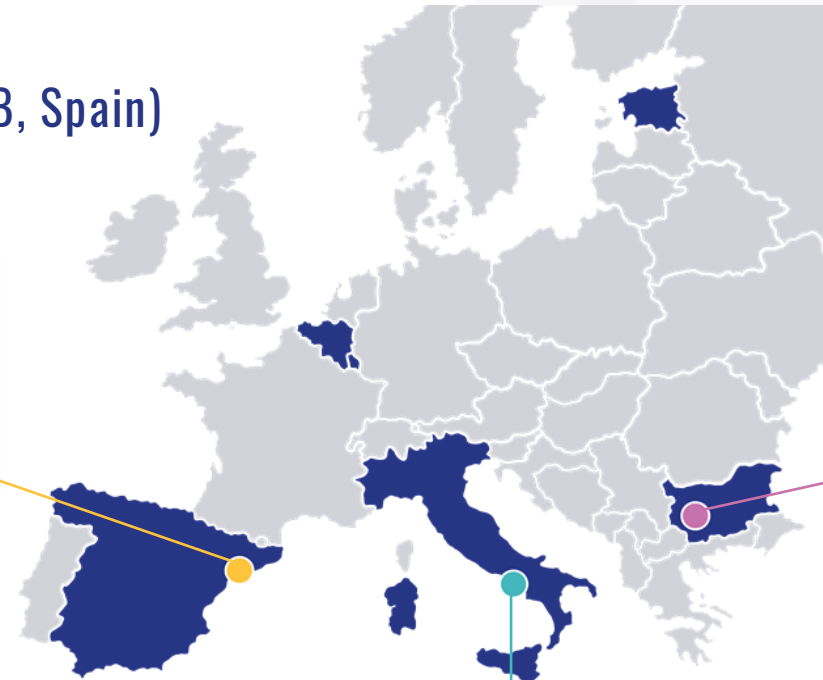
Metropolitan City of Naples (MCN, Italy)
Agro-industrial organic waste



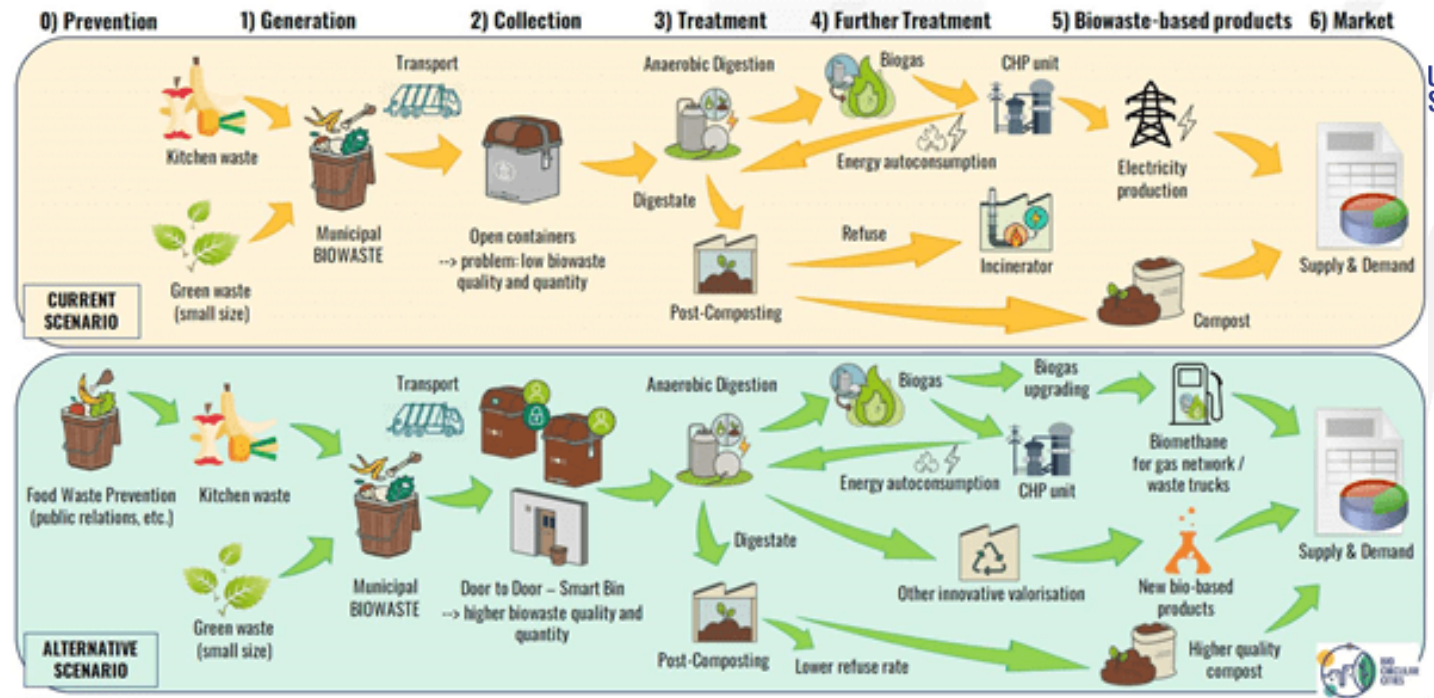
Metropolitan City of
Naples (IT)



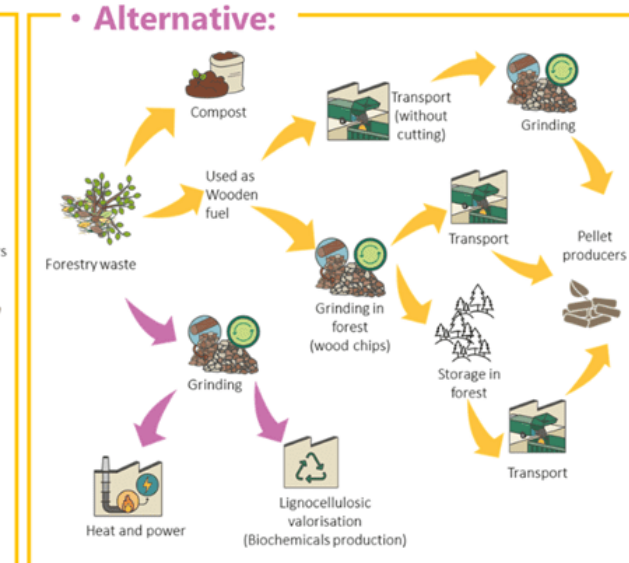
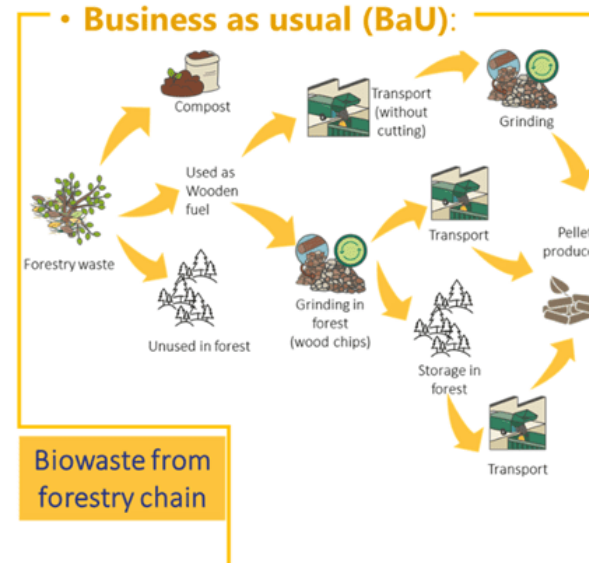
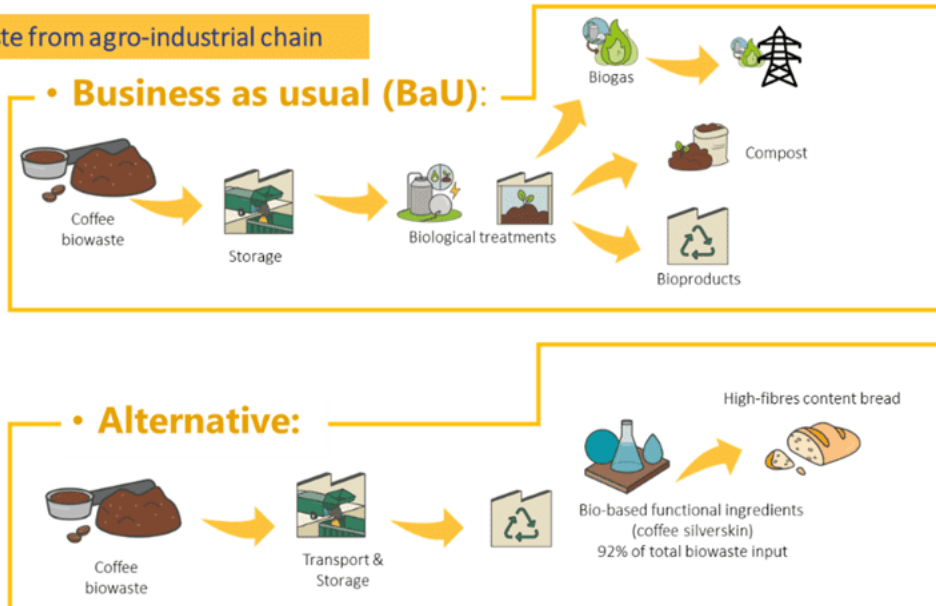
- Processing coffee roasting residues (coffee silverskin) into functional ingredients



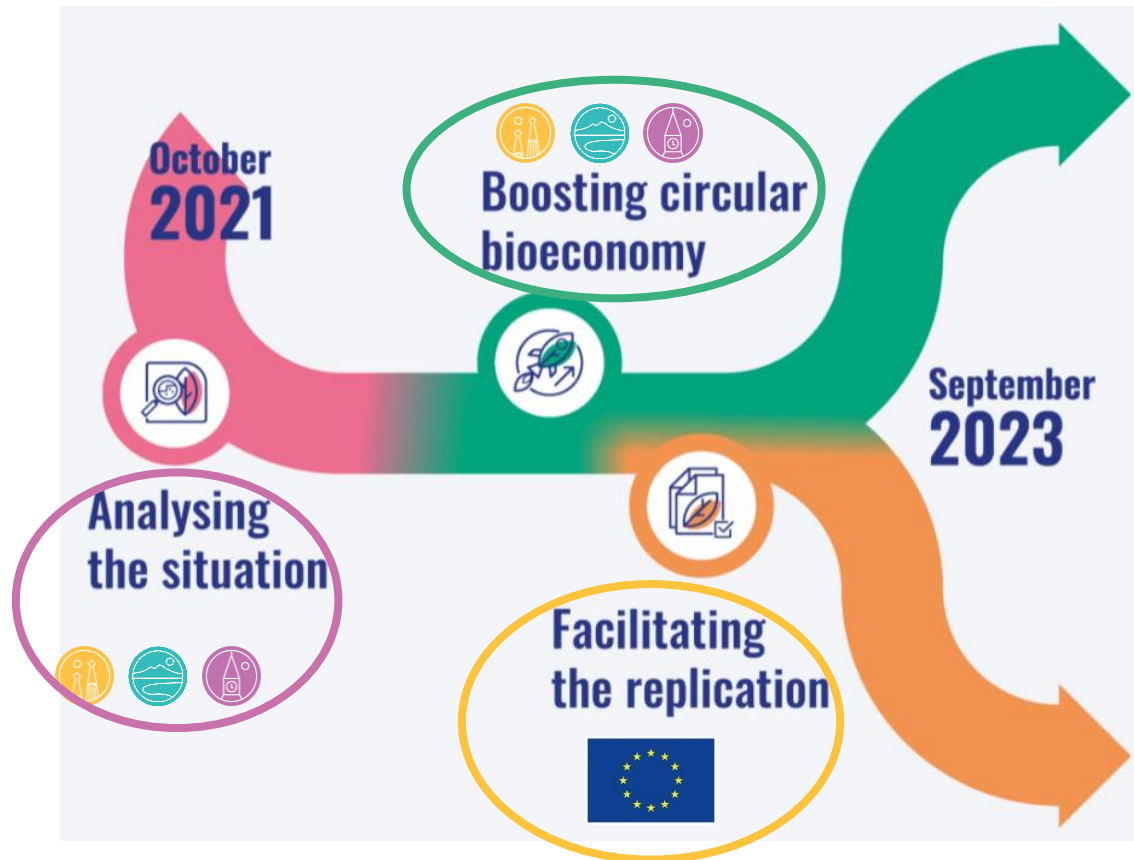
Value chains



Biowaste from agro-industrial chain



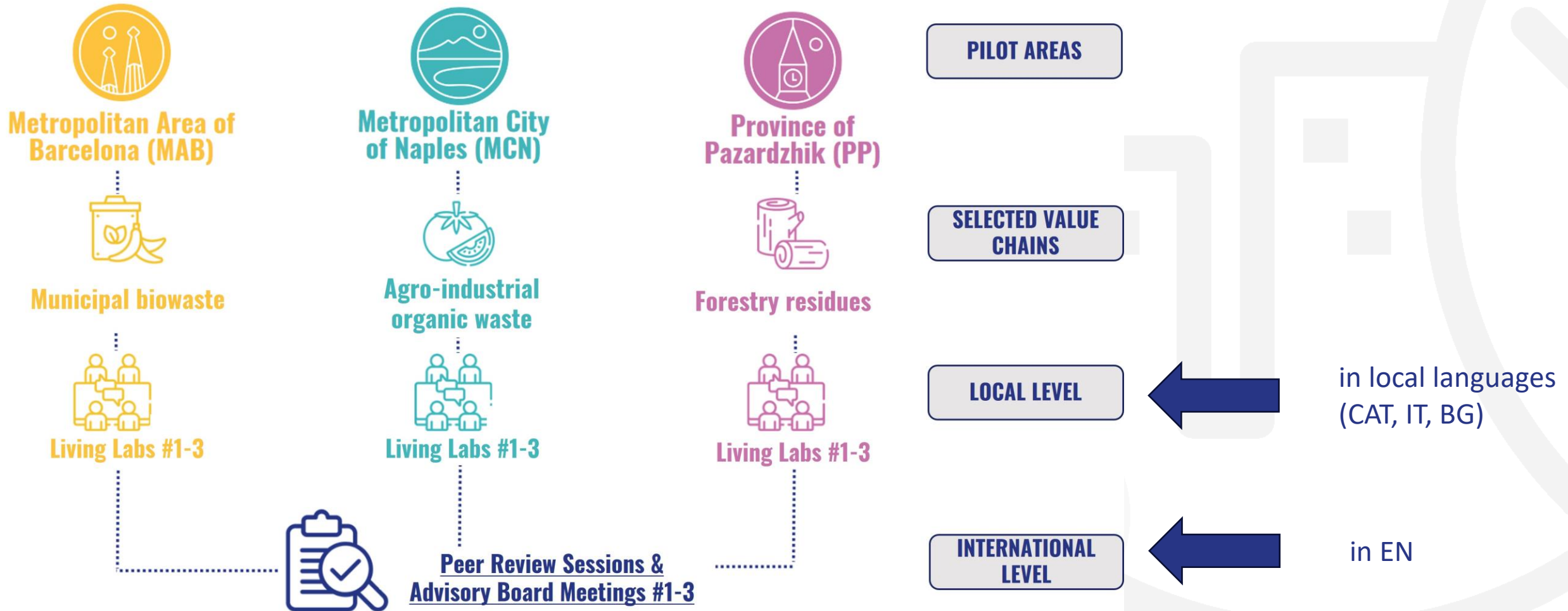
BIOCIRCULARCITIES – Main outcomes



- Lifecycle assessment and costs of the 3 selected pilot value chains to compare the current state with the alternative scenarios.
- Policy recommendations based on drivers and barriers identified in the policy framework of the 3 selected value chains
- Web-based tool to assist policy makers and industry in designing biowaste management strategies

Multi-actor approach: Continuous involvement of local and international stakeholders in the project outcomes.

Multi-actor contribution



How did we select the LL stakeholders?

Academic and Research institutions	<ul style="list-style-type: none">• Scientific knowledge
Local authorities	<ul style="list-style-type: none">• Local waste policies, communication, incentives, logistics
Local waste authorities / waste companies	<ul style="list-style-type: none">• Operational aspects of waste collection and treatment
Biowaste/by-products end-users	<ul style="list-style-type: none">• Transformation of biowaste in added value products
NGOs and trade unions	<ul style="list-style-type: none">• Structure public opinion, engage, advocacy
Communities	<ul style="list-style-type: none">• Informal organisations like neighbourhood activists, indigenous communities...
Professional Associations	<ul style="list-style-type: none">• Technical advice to achieve advancements in the prevention and management of biowaste.

Peer-review process

- Identification of key experts depending on the topic at stake
- Organisation of meetings following discussions in local living labs
- Objectives:
 - Improve the quality of the project's outputs
 - Address questions and barriers of local stakeholders and local partners
 - Get an external perspective on project's development
 - Identify inspiration from other initiatives and projects

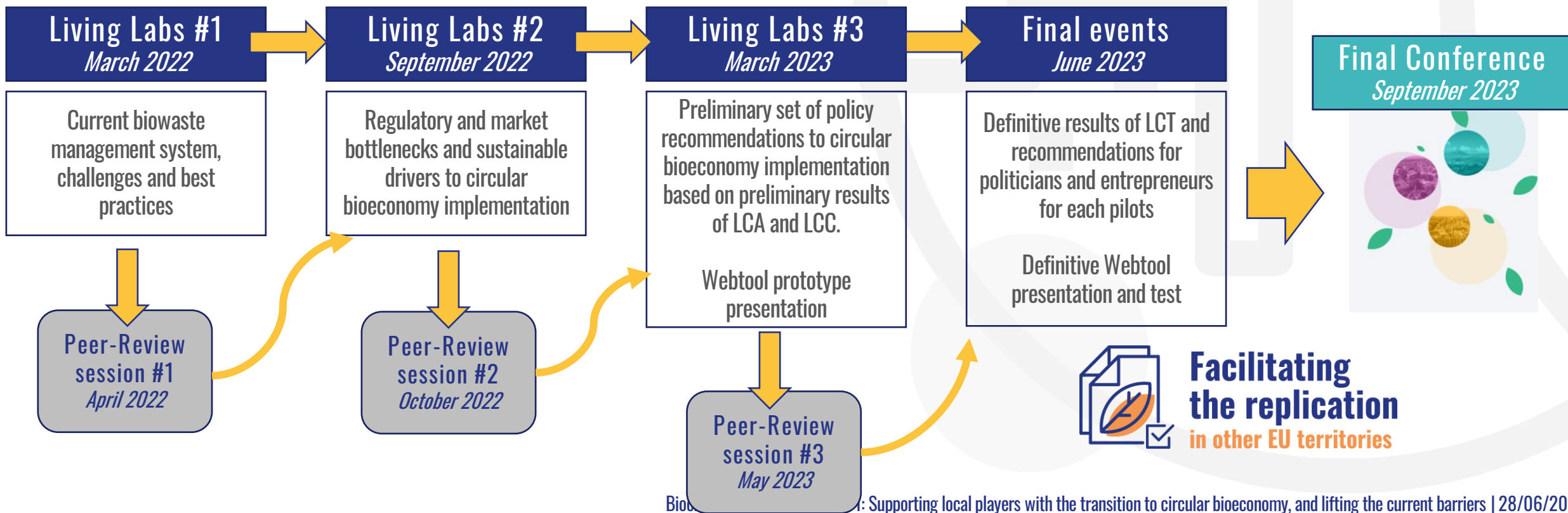
Living Labs and Peer Review Sessions



Analysing the situation
in pilot territories



Boosting circular bioeconomy
in pilot territories

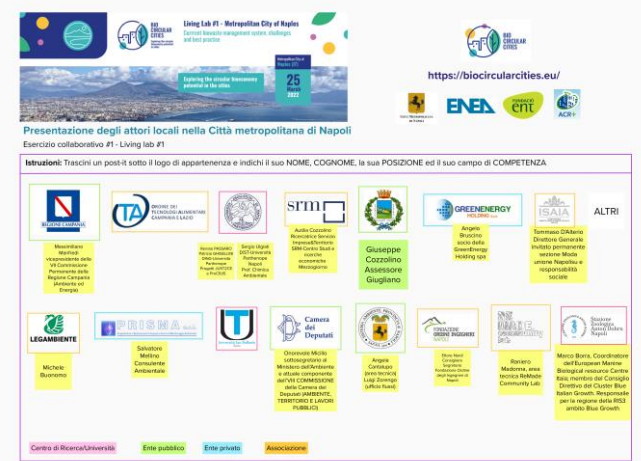


Online Local Living Labs

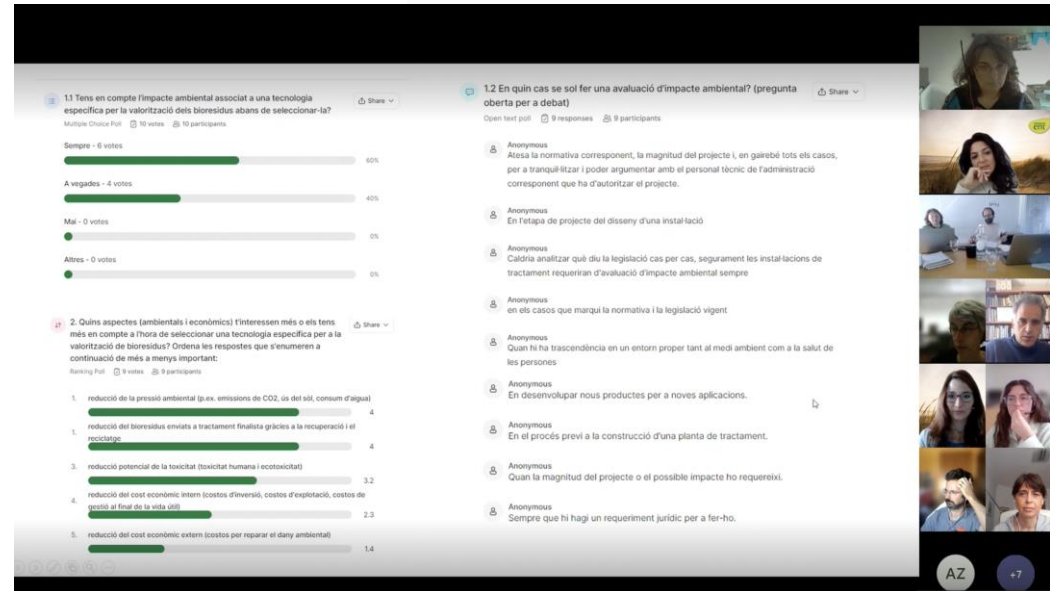
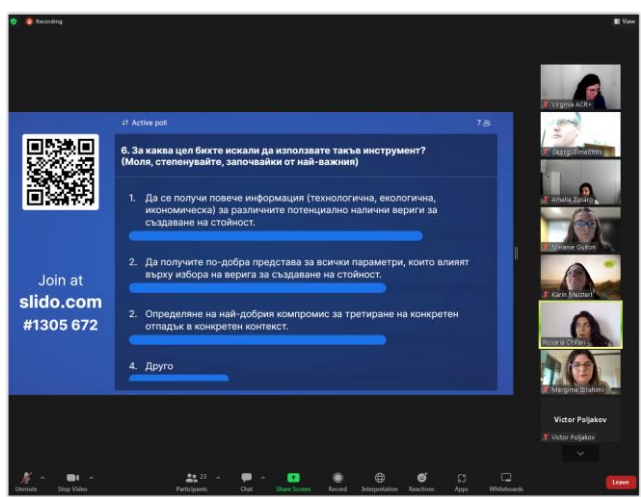
Teams/Zoom meeting



Use of MURAL to interact with Local Stakeholders



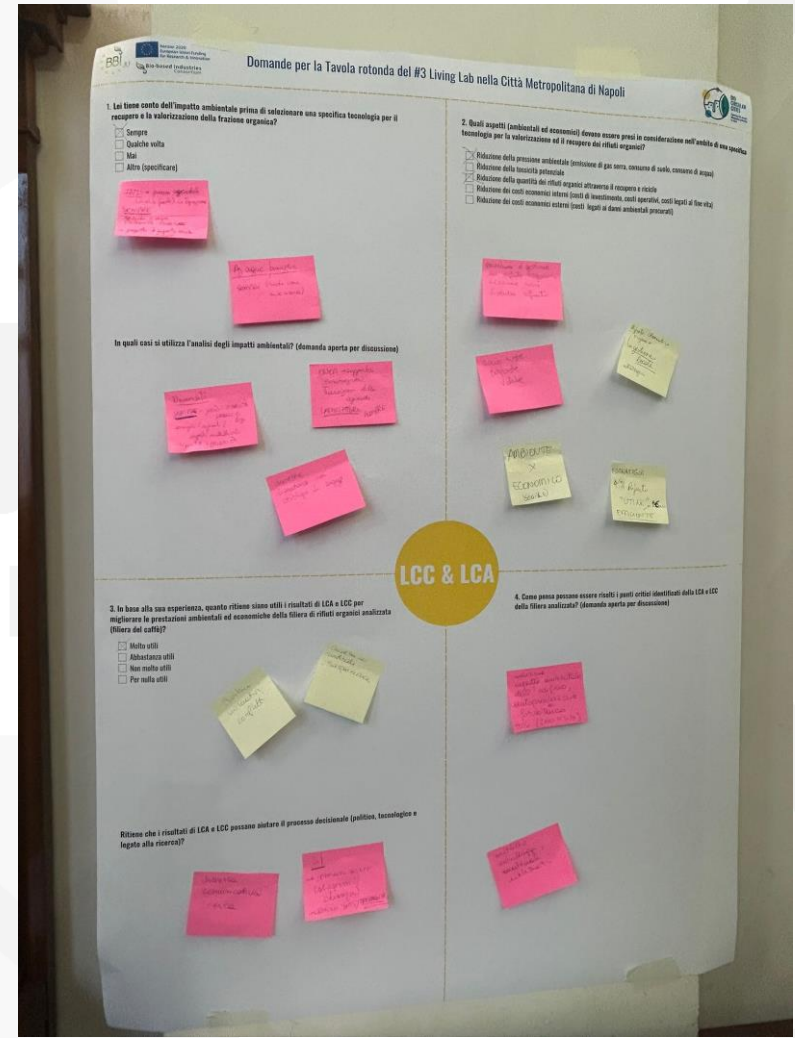
Use of SLIDO for interactive Q&A



On-site Local Living Labs



Very interactive,
networking among
participants!



A participative approach: some challenges

- **Reaching the key stakeholders:**
 - Some local players more difficult to reach than others
 - Involvement sometimes challenging in online meetings
- **Facilitating the discussions on technical/legal topics**
- **Very different value-chains, targeting different players, raising different questions, and requiring different expertise**

Key outcomes

- Well-identified **barriers and opportunities** for the different value-chain by the local stakeholders, opening to improvements
- **Clearer view on environmental benefits...**
- ... even though legal and economic dimensions are considered first
- Relevant input of external experts to **confront or confirm findings** by taking stock of existing practices/policies, especially considering the need to address **the whole value-chain**



This project has received funding from the Bio-based Industries Joint Undertaking (JU) under the European Union's Horizon 2020 research and innovation programme under grant agreement No 101023516. The JU receives support from the European Union's Horizon 2020 research and innovation programme and the Bio-based Industries Consortium.



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Exploring the circular
bioeconomy potential
in cities

Thank you
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