

CITISYSTEM

CITISYSTEM Project in Nutshell



CITISYSTEM


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$$\text{CITI} + \text{SYSTEM} =$$

Supporting **cities** in
sustainable biobased
systemic change



CITISYSTEM & Circular Bioeconomy

CITISYSTEM project's partners share the desire to **develop circular bioeconomy** on the **systemic** and **stakeholder** levels **in cities**.

Systemic solutions include effective and innovative ways to organise **policies** to support **circular bioeconomy**, optimize the **circulation of bioresources**, and improve **collection and utilization** of **biowaste** and **biomass**.



CITISYSTEM

CITISYSTEM Goals

CITISYSTEM supports cities in promoting circular bioeconomy.

Efficient management of **bioresources, nutrients, and energy flows** is crucial to create a sustainable and regenerative city system.

1. **Implementing system-level solutions for circular bioeconomy**, e.g., organizing separate biowaste collections, promoting innovative utilization in products, and supporting the biogas and compost production to promote local energy production and nutrient cycles.
2. **Raising awareness and understanding** among communities and stakeholders regarding the value of the regional circular bioeconomy, e.g., the full utilization of local bioresources.



CITISYSTEM in NUTSHELL



Core phase:
1.3.2023-28.2.2026
(3 years)



8 partners
from 6 countries



Specific objective:
CIRCULAR ECONOMY



Follow-up phase:
1.3.2026-28.2.2027
(1 year)



Budget:
1 473 301 €

GREEN



Policy objective:
GREENER EUROPE



Partnership

Finland

LAB University of Applied Sciences (Lead partner)
City of Lahti

Slovakia *

Technical University of Košice

Slovenia

BSC, Business Support Centre L.t.d., Kranj

Belgium

City of Mechelen

Greece*

Regional Development Fund of Central Macedonia

Spain*

CERCA Institute - Catalan Research Centres Institute (until 31.8.2024)
IRTA Institute of Agrifood Research and Technology (from 1.9.2024)

* APA – Associated Policy Authorities

Slovakia: Košice Self-Governing Region

Greece: Region of Central Macedonia

Spain: Ministry of Climate Action, Food and Rural Agenda, Government of Catalonia



CITISYSTEM Multilevel Knowledge Exchange & Capacity Building



CITISYSTEM ACTIVITIES

By sharing knowledge, experiences and practices, everyone can capitalize on already tried-and-tested solutions.

- Interregional events
- Site visits
- Thematic workshops and studies
- Roundtable policy discussions
- Sharing knowledge & expertise on circular bioeconomy
- Collecting Good Practices = good examples
- Dissemination events in all regions
- Activating local stakeholders



Current situation on policy changes

Situation for November 2024, semester 4

Circular Bioeconomy Policy Development in Lahti, Finland

- Lahti City Budget document: City-owned companies are obliged to implement actions they have chosen from the Circular Economy roadmap and report about them in 2025.
- Forming a comprehensive overview of circular bioeconomy in city corporation:
 - a workshop was held in August to discuss the current state of the circular bioeconomy and the challenges faced.
 - Topics chosen for further development: development to reduce food waste and demolition, and utilization of the bio-based material generated in the city corporate group operations.
- **New project idea:** Enhancing the separate collection of biowaste together with Lahden Talot and Salpakierto & LAB.
- Designing sustainability education programme for basic education
 - Designing circular economy content, material and educational visits for the programme together with teachers and local stakeholders
 - Developing waste sorting and awareness raising at schools
 - Planning pupils' visits to local waste management center
- City of Lahti is preparing a **commitment** related to national Circular Economy Green Deal. This commitment will strengthen the implementation of CE roadmap. Topic of Lahti commitment:
 - Advancing the circular economy in infrastructure construction
 - A workshop is scheduled for December 2024



Policy Changes in Mechelen, Belgium

VLAREMA: Flemish regulation for the sustainable management of material loops and waste = basis

Mandatory selective collection of organic waste: since 1 jan 2021 for hospitals, schools, caterers,..., and since 1 Jan. 2024 for households and all companies

Policy change in policy plan city of Mechelen 2020-2024

Subsidy for value chain collaboration in view of selective collection with sustainable urban logistics and processing of organic waste of hospitality sector in the inner city (specific needs)

Policy change in policy plan city of Mechelen 2025-2030

- **“Pay as you throw” system for household waste** will be introduced as incentive to correctly sort
- **Selective collection of organic waste from households** implemented in 2026 (we are almost ready for it 😊)
- We will keep on promoting **neighborhood and home composting** among citizens
- New project ideas on **reducing food loss**, sort out organic waste at the city offices, and other impactfull ideas based on a planned study regarding the organic waste streams



Policy Situation - Region Of Central Macedonia, Greece

The Regional Development Fund of Central Macedonia (RDFCM) and the Region of Central Macedonia (RCM), in collaboration with the OECD, organized a working meeting with the participation of 36 key stakeholders of Central Macedonia in Thessaloniki, on 3-5.07.2024. This action was carried out in the framework of “The Circular Economy in Central Macedonia, Greece” case study of the “OECD Programme on the Circular Economy in Cities and Regions” and the “Circular Cities and Regions Initiative” (CCRI), to **ascertain the level of implementation** of the circular economy in the RCM.

Also, as of 1.04.2024, RDFCM has become a **partner in two new Interreg Europe projects**—FISSH and DeCo—both related to CITISYSTEM. These projects aim to **enhance the implementation of regional policies on bioeconomy**.

A representative of the RDFCM participated in the 8th Conference of the Hellenic Solid Waste Management Association (HSWMA) on “Circular Cities and Solid Waste Management – The Challenges for Society, the Authorities, the State”, which took place last September in Athens. The Conference hosted four (4) Dialogue Tables:

- “Public Policies for Accelerating Country’s Transition to the Circular Economy”,
- “Circular Economy in Cities”,
- “Energy recovery of municipal bio-waste with emphasis on the role of private sector and co-processing possibilities with agro-food”
- “Contemporary needs, innovative solutions in Alternative Waste Management and New Streams”.

The conclusions and applicable proposals formulated in the context of the conference aiming at the transition to the circular economy **are to be published in a special publication**.




EBC2030

 ESTRATÈGIA
DE LA BIOECONOMIA
DE CATALUNYA 2030

Policy Situation – Catalonia, Spain

- To our current knowledge, there haven't been any news regarding the policy situation related to circular bioeconomy. There are projects and initiatives being developed with the potential to change policies or public organizations.
- CITISYSTEM has contributed to a capitalization project (COMdeHORT)
- Meeting at Barcelona of different Stakeholders. July 10th sharing good practices.
 - **ARC Waste Agency of Catalonia:** for improving waste collection and its quality (other slides)
 - DARP (Department of Agriculture): **Bioeconomy strategy 2030.**
 - Autonomous University of Barcelona. **Decentralized composting** in the area.
 - **Implementation of decentralized composting** in *Les Masies de Roda* municipality in Barcelona province (Beta Technological Centre), *Port Aventura* (Tarragona)
 - IRTA: COMdeHORT project. **Capitalization project**
- Catalogue of 26 project/initiatives of decentralized composting, including CITISYSTEM project.
- LIFE INFUSION project results are pushing for the use of new fertilizers/water with fertilizers (celebration of the Open Day in Genoa, Italy the 30th October 2024).
- **Expected policy change:** give value to new fertilizers (ammonium sulphate obtained from scrubbers in composting modules (closed systems) (AMB-Barcelona). Regulation is needed.


 Catalonia,
SPAIN


Policy situation – Kranj, Slovenia

- It is likely that regional development program for Gorenjska region 2020 – 2027 will be improved. The document so far does not mention the bioeconomy challenges at all. **We are elaborating options with the regional working group**, since the procedure of changing the RDP needs to be aligned also with national ministry responsible for regional development. We are in contacts with the National ministry to prepare and implement the right steps (in line with national legislation). **It is foreseen that action plan can lead us to the change of policy.**
- There is no change in policy instrument so far, but there exist an option that there might be positive change also via preparation of the regional paper connected to bioeconomy.
- We will start to **prepare action plan** as basis for the change in policy



Policy development – Košice, Slovakia

- Although there have been no formal changes in policy instruments, the **number of events** in Slovakia **focused on** the greater **deployment of renewable energy sources and energy communities is increasing**. Slowly but steadily, mayors are becoming engaged in such initiatives and are working to involve their communities together with help of national associations.
- One of the recent measures is the **dramatic increase in fees for the collection and recycling of PET bottles**, known as the "industry fee." This fee has risen by 500–564%, depending on the color of the bottles, which **may lead to their withdrawal from sale**, especially in the case of green and blue bottles. In addition, manufacturers face a higher tax on sugary drinks and stricter European regulations on packaging recycling, which set ambitious targets for 2025 and 2030. These changes could help advance bioeconomy in Slovakia by **promoting biodegradable and renewable packaging**.

