



The HOOP solution to vitalise Europe's Urban Bioeconomy

Gemma Castejón & Martín Soriano, Coordinators of HOOP
Vitalise Europe's Urban Bioeconomy
EU Green Week, 26 May 2021



The HOOP project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°101000836

Biowaste: Current Picture



**Europeans throw
away 200 kg of
biowaste / year**



**75% of biowaste
is landfilled or
incinerated**



**Landfill biowaste
causes emissions
and pollution**



**€5.25 billion annual
commercial value of
biowaste sent to
landfill in EU**

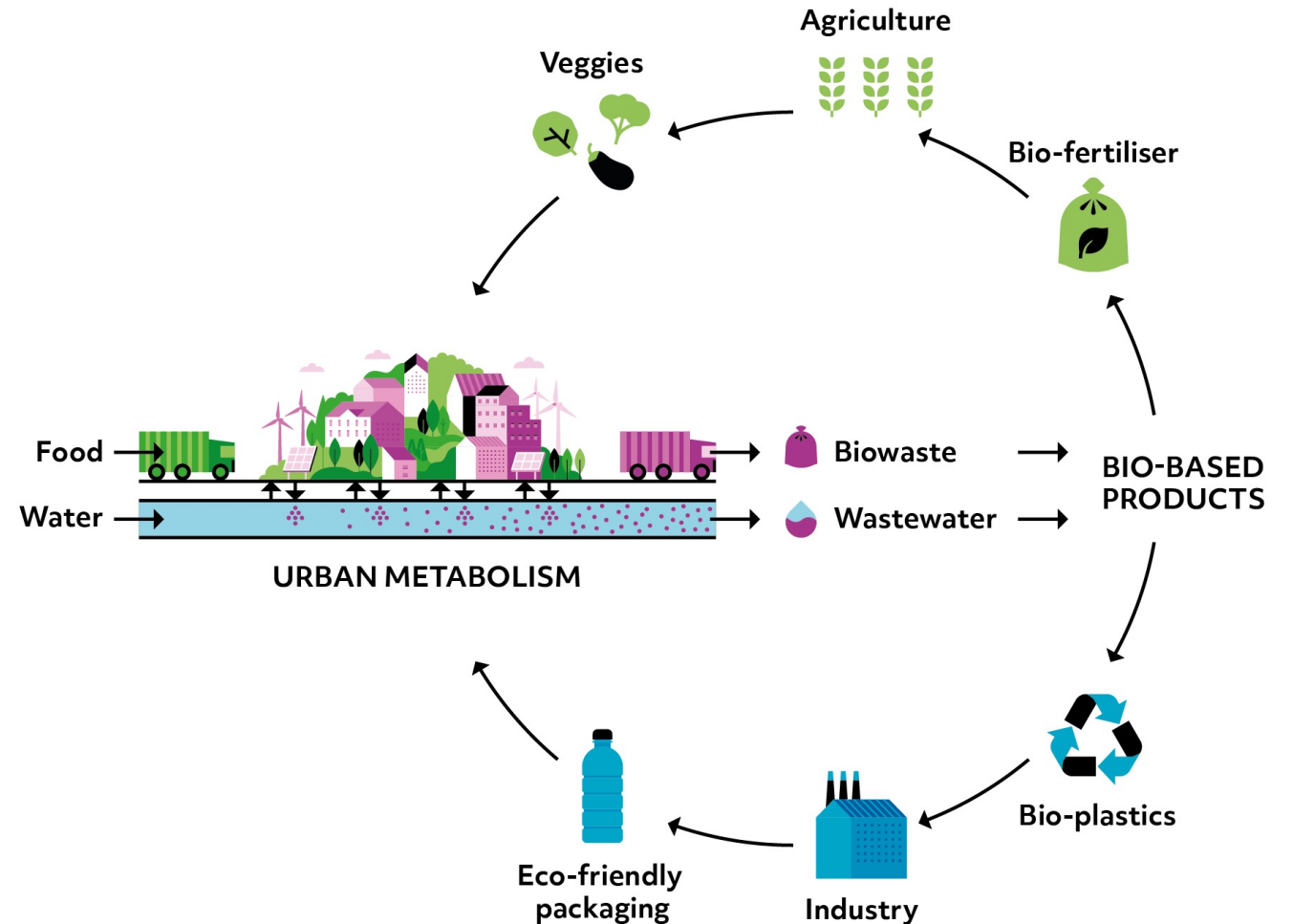
Urban Bioeconomy Challenges

- 1. Increase quantity and quality of selectively collected biowastes:** Poor selective collection (23%)
- 2. Raise citizen awareness about biowaste separation:** their contribution is crucial to increase the quality
- 3. Ensure market value of biobased products for profitable processes:** market value of the final products do not offset the costs of waste valorizing
- 4. Scale-up Biobased Technologies:** current technologies characterized by low TRL's and few large-scale experiences available
- 5. Develop new sustainable and circular business models:** current models are linear. New models must be integrated in the current waste management schemes
- 6. Adapt Legislation:** current framework does not promote the utilization/commercialisation of bioproducts
- 7. Ensure Safety/functionality of biobased products:** To reach the market ensuring a safe use/consume
- 8. Increase Social acceptance of biobased products:** consumers show uncertainties against products they are not familiar with coming from human waste
- 9. Improve Logistic:** It is essential for lowering costs

10. Unlock investments and deploy local bioeconomies: cities becoming major circular bioeconomy hubs

The EU Bioeconomy Strategy sees cities becoming **major circular bioeconomy hubs**, where biowaste is a feedstock for safe and sustainable bio-based products.

But up to now very few cities & regions have developed **circular bio-based economy strategies** or projects for the production of **innovative bio-based products**.



How to address the last challenge?



The HOOP Solution

The HOOP project supports 8 lighthouse cities and regions in developing large-scale urban circular bioeconomy initiatives. As well as unlocking significant investments in the 8 territories HOOP will foster replication across Europe.

Financial Information

9,00 M€
budget

5,78 M€
for PDA
Management

51,7 M€
Investment
Induced

8,00 M€
EC Contribution

Implementation

48
months

9
Work Packages

10
Countries

23
Partners



The HOOP project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°101000836

Project Concept

8 Lighthouse cities & regions: the HOOP demonstrators



SFC-25 EU funded projects

- Scalibur
- Valuwaste
- WaysTUP!



15 bio-processes



PDA for Circular Cities Systemic Innovation

Provide technical, economic, legal, feasibility studies and business assistance



Stakeholder engagement & mobilisation

- Quadruple helix
- BCs



Replicability strategy



Network of follower cities



The Urban Circular Economy Hub (UCBH)



Circular Bio-based Quality Label



Tools for evaluation and decision making



Virtual Academy

8 Lighthouse Cities and Regions



Albano Laziale



Almere



Bergen Region (R)



Kuopio



Greater Porto (R)



Münster



Murcia



Western Macedonia (R)

Project Development Assistance

The HOOP project will provide Project Development Assistance (PDA) to the 8 lighthouse cities and regions – providing them with the **technical, economic, financial and legal expertise needed to develop concrete investments** to valorise OFMSW (Organic Fraction of Municipal Solid Waste) or UWWs (Urban Wastewater Sludge) with the aim of obtaining safe and sustainable bio-based products.

PDA elements



Local context &
urban metabolism



Circular business
models



Technological and
environmental
assessments



Innovative financial
engineering &
procurement

The HOOP network

The [HOOP Network of Cities and Regions](#) will facilitate exchange of knowledge and mutual learning among cities and regions willing to recover valuable resources from urban biowaste and wastewater. Visit our [network page](#) for more information and to register your city/region!



**Replicability
strategy**



**Network of
follower cities
& regions**



Urban Circular Bioeconomy Hub (UCBH)



Circularity label



Knowledge exchange activities



Virtual Academy

Join HOOP and Get in the Loop!



**Cities and regions
can join our network**



**Sign up to our
quarterly newsletter**



**Join the conversation
on social media**



Thank you for your attention!

Gemma Castejón
gemma.castejon@cetenma.es

Martín Soriano
martin.soriano@cetenma.es

