



ROOTS

Circular policies for
changing the biowaste
systems



WaysTUP!

VALUE CHAINS FOR DISRUPTIVE TRANSFORMATION OF URBAN
BIOWASTE INTO BIOBASED PRODUCTS IN THE CITY CONTEXT

SCALBUR

VALUEWASTE
Unlocking new value from urban biowaste

hoop

What is ROOTS?

ROOTS is a collaboration of four Horizon 2020 projects in the field of biowaste valorization

The aim is to promote innovative solutions for the European Circular Economy and identifying the regulatory barriers that are still blocking a more sustainable future



VALUE CHAINS FOR DISRUPTIVE TRANSFORMATION OF URBAN BIOWASTE INTO BIOBASED PRODUCTS IN THE CITY CONTEXT

What are the projects doing?

The projects are piloting new solutions to transform urban biowaste and wastewater into valuable products like **feed, fertilizers, bioplastics, biopesticides, proteins** and **bioethanol**.



Recommendation #1

Recycling targets and treatment plants

Despite separate collection of bio-waste being mandatory from January 2024, , there is no specific recycling target for bio-waste at EU level. There is no reward mechanism for the collection and recycling of materials that could be treated in bio-refineries and fully valorised.

Recommendation: Set recycling targets for bio-waste and efficient collection schemes. Develop new support mechanisms for the new biowaste treatment plants enabling the production of clean compost, bioenergy and new low impact biobased products.



Recommendation #2

Waste and by-products

There are overlaps and inconsistencies in the definitions of “by-products” and “waste” in the current legislation, specifically (Directive 2008/98/CE and Regulation 1069/2009).

Recommendation: Products coming from biowaste should have more specific regulation/standardisation allowing for multiple re-use, aligned with the principles of the Circular Economy. This should help to clarify and simplify the whole framework.



Recommendation #3

Biopesticides

Biopesticides are also defined as “low risk” plant protection products, according to Regulation 1107/2009 they are defined as: “not containing substances of concern, being sufficiently active, and not causing unnecessary pain and suffering to vertebrates to be controlled”. However, they face the same barriers as chemical pesticides. This implies that even products completely renewable, biodegradable, coming from low impact technologies cannot be used.

Recommendation: The EU should create a simplified regulatory framework allowing for an easier commercialisation of biopesticides, characterised by biodegradability and of 100% vegetable source.



Recommendation #4

Insects for Animal Feed

Insects are a great source of proteins, using biowaste to grow and feed insects could unlock several economic opportunities. The projects of ROOTS are developing value-chains based on insect-rearing for feed production. Currently, their use as feed ingredient is approved only for aquaculture. EU legislator should favor the uptake of insect-based animal feed by bringing down the regulatory impediments.

Recommendation: In this regard, ROOTS pledges for the revision of Regulation 767/2009 and 1069/2009



The way ahead

The ROOTS members will continue to work on regulatory barriers and will promote its messages and recommendations.

Dialogue and interaction with private stakeholders and EU institutions will be at the heart of our upcoming activities

