



Urban circular bioeconomy

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Bioeconomy (EU BioE Strategy, 2012)

'The Bioeconomy encompasses the **production** of renewable biological resources and the **conversion** of these resources and waste streams into value added products, such as food, feed, bio-based products and bio-energy'.

Biobased value chains

- Agricultural
- Forestry
- Algae
- Urban biowaste and wastewater sludge
- etc.

Examples of urban biowaste-based products

- Compost and biogas
- Ethanol and methanol
- Chemicals, fertilisers, plastics, feed ingredients

Potentials

- Better capture the value of urban biowaste
- Industrial symbiosis
- Increase recycling & reduce landfilling
- Reduce GHG emissions from (bio)waste
- Resource efficiency and security
- Unavoidable waste stream available all year round
- No conflict with food production and land use
- etc.

Challenges

- Production limited to compost and biogas
- Non-commercial TRL for some technologies
- Financial aspects
- Regulatory aspects
- Social/cultural aspects
- etc.

Research & Innovation activities

- Analysis
- Inputs to H2020 and BBI JU topics
- Matchmaking
- Dissemination
- Cooperation with related initiatives



Partnership on CE: Analysis of the EU regulatory framework

- Circular Economy Package
- REACH
- Animal by-products
- Regulation on fertilisers
- Renewable Energy Directive
- etc.

Bio-waste related provisions in the new WFD

Article 22: by 31 December 2023 bio-waste shall either be separated and recycled at source or collected separately + shall not be mixed with other types of waste

Article 22.2: Member States shall take measures to:

[...]

- promote the use of materials produced from bio-waste.

http://ec.europa.eu/environment/waste/target_review.htm