

Barriers identified in the value chain of bio-resources

28th May, 2018

Ingunn Dale Samset

Scoping Fiche on Bio-resources

- Potentials and challenges to boost an urban circular bioeconomy
- Identified bottlenecks in regulation, funding, knowledge, technical aspects and market
- Case studies of cities and biowaste-based refineries
- R&I projects
- Related EU initiatives
- EU legislation and funds

Three dimensions

- Improve regulations
- Create more workable financial instruments
- Create European platforms for urban inspiration and knowledge sharing



Bottlenecks - REGULATION

Regulations affecting biobased products from urban biowaste and wastewater :

- **Protect health and environment** but risk to limit innovation.
- **Biobased resources risk to be wasted:** lack of end-of-waste criteria.
- The **climate mitigation potential** of biobased products are not formally recognised by the EU climate and energy regulation.
- Lack of **standards** for bio(waste)based products.
- Etc.



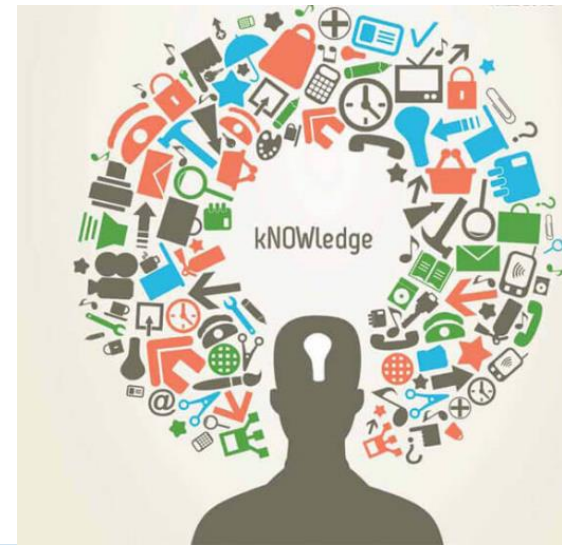
Bottlenecks - FUNDING

- **Limited financial resources** in cities
- Significant **investments in existing infrastructures** for treatment of biowaste/wastewater can reduce/block new investments in innovative technologies
- Costly **TRL upgrade** of some biowaste-based technologies.
- **Subsidies** on biomass are **supporting** production of **energy** and not materials
- Etc.



Bottlenecks - KNOWLEDGE

- **Limited knowledge about potentials** of the production of high-value biobased products among local stakeholders and policy/ decision-makers.
- **Consumers** can be **sceptical** in buying products produced from biowaste or wastewater sludge.
- **Not all citizens participate** in the separate collection of biowaste.
- **Farmers may not recognise** the full benefits of using compost/biofertilizer.
- Etc.



What action is needed?

- Need to **identify** specific regulatory obstacles and drivers for boosting an urban circular bioeconomy.
- Need to provide **policy- and decision-makers** with this information.
- Need to identify and suggest **improvements in legislation** for better valorising in a sustainable way urban bioresources.

ACTION

Explore how to make the most of bioresources

*This action will produce a **paper** analysing **regulatory obstacles and drivers** to better valorising urban bioresources. The study may also contain **recommendations** on how specific EU legislations could be improved.*

WHAT HAVE WE DONE SO FAR?

- Prepared a Questionnaire
- Selected the sample of experts and stakeholders
- Survey launched in February 2018
- Replies received from 24 stakeholders
- Replies' classification and pre-analysis by Europa Decentraal

Thank you for your attention!

Ingunn Dale Samset
City of Oslo, Agency for Waste Management

ingunn.dale.samset@ren.oslo.kommune.no