



9 Identified Recommendations to Achieve the New Agreed Bio-waste Targets

1. Consumer acceptance of better separate collection of bio-waste

A key success factor for better use of the bio-resources in cities is a high degree of consumer acceptance for source separation and the use of bio-waste-based products. From 2023, all European citizens will be asked to source separate bio-waste. - *This could lead to an increase of the amount of bio-waste that could be available for bio-refining.* According to experiences from the front runners all over Europe, motivated citizens lead to higher degree of source separation and a better quality on the bio-waste. Hence, we ask for an initiative from the Commission to organise a joint European communication effort bringing together the EU-level, Member states, cities and municipalities and other actors in a communication campaign for better bio-waste management.

The associations of EUROCITIES, Municipal Waste Europe and European Compost Network will all like to participate in developing this initiative.

2. Acceptance from industry and agriculture of bio-waste as a resource

Waste from urban bio-resources is a high value input to both industry and farmers. Still, this resource lack of trust from some users, and the organisers of the workshop underline the need for invest efforts to establish this trust throughout the value chain for bio-resources. The European Commission has a key role in this work, and we ask for initiatives from the Commission to bring together the whole value chain in identifying barriers and possible solutions to increase the trust in bio-waste as a resource.

3. Improve the quality of the bio-waste as input to industrial processes

A key barrier for better use of the bio-resources is to increase the quality of the bio-waste as a feedstock for bio-refining, and thus to decrease the amount of impurity in the bio-waste. One way of overcome this barrier is to work out standards for input on separate bio-waste. Separate collection of bio-waste is a precondition for producing high quality compost, digestate and upgraded bio-based products. Therefore, we urge the Commission to set up implementation guidelines for cities and municipalities to introduce separate collection and to mandate the development of European standards for bio-waste entering the organic recycling process as requested in paragraph 3 Article 22 of the Waste Framework Directive.

4. Use of bio-fertiliser as lock of carbon into the soil

By treating of bio-resources into high quality compost and digestate, used mainly as organic soil improvers and organic fertilisers, the carbon will be transported back to the soil and be captured. Hence, the use of compost and digestate as fertiliser has a potential to reduce the CO₂ in the atmosphere and to increase the soil organic matter content. There is a lack of knowledge by citizens, farmers and gardeners on the beneficial impacts of applying compost and digestate on soils from such a lock, and the organisers of the workshop call for an initiative from the Commission to

develop fact sheets to document the possible effects of soil organic matter from bio-resources, including carbon sequestration and mitigating greenhouse gas emissions and increasing water holding capacities in soils.

5. Regulatory barriers for better use of bio-resources

The participants of the seminar pinpointed several barriers in existing legislation dealing with bio-waste, waste water and fertilizers. As a part of the work of the Urban Agenda Partnership on Circular Economy, the partnership will launch a separate action on legal barriers for better use of urban bio-resources. The input from the seminar will be used in this action. [Precise information is needed to identify specific elements of the EU legislations constituting potential obstacles and drivers for boosting an urban circular bioeconomy, hence the Partnership's analysis on regulatory aspects can provide an important contribution.](#) The input will also be used by the organising associations in their continuing work for a best possible framework for bio-waste treatment.

6. The need for research and support of new technologies

New treatment methods like extraction/production of biochemicals and plastics, bioprospecting, hydrolysis, fungus, algae and insects as feed lack of suitable regulations and funding for developing. There is a need for more research both on the technology and to develop the necessary regulations to support innovation. There is also an investment barrier in the upgrading in scale and technology, leading to non-optimal investments. [Further R&I support is needed for the Technology Readiness Level upgrade and assess the economic, social and environmental impacts of innovative bio-waste-based processes.](#) EU funding programs are available for actors. Those programs must be more visible and the organisers of the seminar calls for joint effort between the Commission and the member states to inform of the possibility of fund raising for better bio-resource management.

7. Understanding the value of urban bio-waste and its valorisation through the production of high-value bio-based products – economic, social and sustainability aspects

Also, among local policy makers, urban bio-waste is increasingly seen as a source of valuable substances for producing more products than the classicals (compost, digestate and biogas) – in concrete case studies, cities are looking for options to extract more value (also economically) from this precious feedstock. [A precise analysis of \(i\) costs and benefits, \(ii\) potential employment, and \(iii\) environmental and climate impact and potential contribution to climate mitigation of each bio-waste-based technology and process](#) is needed to provide policy makers with a clear set of information for their decisions on potential present and future options to better valorise the urban bio-waste resources in their territory → further specific research should be carried out, based on concrete and representative case studies.

8. Developing a European bioeconomy

The organising associations will strongly support the initiative of the Commission to develop a separate strategy for European bioeconomy. Most of the barriers and possible solutions identified by the participants in the seminar should be taken into consideration as part of this strategy. The organisations would like to elaborate this in a separate meeting with the relevant part of the EU Commission.

9. Local governance for better bio-resource management

Implementing of a better resource management of bio-resources will depend on the governance on municipal and regional level. Cities need the support of developing the necessary strategies, measurements, legal framework and funding possibilities. This responsibility has to be followed-up on member state level. **The launch and implementation of urban and regional circular bioeconomy strategies can provide significant contribution to boosting this policy areas at the local level with the active participation of the public sectors and all the relevant stakeholders. These strategies should include specific targets, expected outcomes and methodologies to achieve them.** The organisers of the workshop will follow-up this outcome of the workshop by asking the Commission to:

- Make sure that the reporting by member states on the different requirement in the revised Waste Framework Directive includes a report on the introduction on regional and municipal level.
- Develop guidelines for cities and municipalities in different tools to be used, like waste management strategies, **circular bioeconomy strategies**, peer to peer learning, Pay as you throw (PAYT) schemes etc.
- Tools for green public procurement for bio-based products as part of the general work on Green Public Procurement.

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