15 November 2021, Brussels

FEAD Feedback to the JRC Study on separate collection - Subgroup 1: Logistics of waste collection

1. Logistics of waste collection/Level of segregation

- Do you agree with our finding that **door-to-door collection schemes lead to the highest performance of separate waste collection**, compared to other methods? **To which extend shall the (primary/secondary) collection schemes be harmonised**?

Yes, door-to-door lead to the highest performance of separate waste collection.

An improvement of the separate collection systems is welcomed by the waste management industry, although it should be carefully assessed where the needed improvements can be achieved by way of harmonisation. In this respect, FEAD is concerned that harmonization may not be the most appropriate way to achieve effective separate collection in all cases considering that local factors are essential in this context, and a cost-benefit approach should be taken into account. As a matter of fact, the waste management competence sits usually with local authorities. Thus, and according to the principle of subsidiarity, the EU should act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States (including at regional and local level). Maximising the allocation of public support, costs for citizens and economic operators, private investments, remain a key driver for the design of waste management policies.

In general, the focus or goal should not be the forced harmonisation but the improvement of the separate collection systems, where needed, which can be done e.g., sharing best practices (to be adapted to each specific environment) or through the development of guidelines. If there are loopholes in the implementation of mandatory obligations, this does not mean that harmonisation is needed, but a need for strengthening the implementation. FEAD advocates in this sense, for an obligation of results but not for an obligation of means. A one-size-fits-all approach is not appropriate for the waste management sector and there is currently not sufficient data available to consider what concrete parameters could be harmonised. The availability of qualitative and comparative data is essential. On the basis of such data, performance benchmarks can be developed and only once this is achieved, harmonisation should be considered, and only carried out where suitable to achieve effective separate collection. In any case, a detailed matrix of waste flows and situations (geography, economics, etc) should show that there is no "one-size fits-all" solution, and

help target the only situations where, potentially, there would be added value – if any – in a harmonisation process.

- **Which are the parameters that in your opinion need to be harmonised** across the member states? Which difficulties do you foresee in the harmonisation of specific logistic parameters (e.g. minimum distance, frequency of collection, etc.)?

See above. A harmonisation of the separate collection systems across the EU should especially not be done on the basis of studies and literature dated more than 3 - 4 years ago.

- How can we take into account the **development of rural areas or sparsely populated areas** in the upcoming years? To which extend shall the waste collection system be modular to allow addressing this expansion and including additional fractions in the future?

A harmonised system risks failing to sufficiently address the diverse local factors existing across the EU, such as density, urban structure (towns vs. villages) and size of the population and its development or variability in time or during the year (e.g., touristic regions). Local factors also include geographical factors (e.g., islands or remote areas) and climate conditions. When considering local factors, the integration of the collection system in the whole waste management chain (availability of appropriate sorting and treatment facilities) and the existing market conditions for recycled/recovered materials, in particular for composts, are also a relevant aspect.

A harmonised system is not only hardly suitable to all local specificities (one-size-fits-all approach), but also lacks adaptability or flexibility, which is essential e.g., regarding climate change, emergency situations (health or environment) or in cases of development of rural areas or sparsely populated areas.

In any case, a cost-benefit analysis should be carried out. Benefits to consider are sanitary/health and environmental/circularity. However, the additional recycling/recovery rate per invested euro should also be taken into account. The quality of the collection and the capability of making long term choices are also key. **In general, consideration should be given to the best overall environmental outcome in a given local context.**

- As a result of the literature review, commingling of plastics and metals is acceptable and can be implemented as best practice. Are there in your view any other **waste streams that could be commingled with no/minimal impact on downstream processing and recycling quality?**

The concrete circumstances are also relevant when assessing the possibility commingled waste streams. In general, separate collection provides the better results. However, as mentioned above, consideration should be given to the best environmental outcome in a given local context. In any case, the separation of dry and wet fractions is crucial, which means that biowaste should always be collected separately.

2. QMS

- A consistent data reporting is key for an effective waste management system. Would it be advantageous to implement a **standardised data reporting following specific harmonization guidelines?** Which elements could be included in your opinion? Which KPIs shall be included in the system and possibly be harmonised?

Sampling or digital solutions could be considered. In addition, EU reported data should be audited. Nevertheless, it remains extremely difficult to track bulky waste and count waste generation.

- The knowledge of waste composition is essential for an effective waste management system. Composition analysis can be a method to quantify the amount of residual waste and its composition. Would it be useful to set a **minimum harmonised frequency to carry out a composition analysis**?

No harmonisation is needed. Sorting centres and waste management operators do composition analyses on a regular basis according to their specific needs.

3. Biowaste

- How can separate collection of bio-waste be **optimised** to improve the overall system performance? Which (critical) parameters shall be considered (local climate, other specificities)?

The separate collection of bio-waste can be optimised e.g., through the exchange of good practices and/or the implementation of (mandatory) guidelines.

Local factors, such as the climate conditions should be considered, but also the integration of the collection system in the whole waste management chain (availability of appropriate sorting and treatment facilities) and the existing market conditions for recycled/recovered materials, in particular for composts. Consideration should be given to the best environmental outcome in a given local context.

- Would it be beneficial to segregate the sub-fractions kitchen waste and garden waste?

At this stage, the focus should lie on the separate collection of biowaste as a separate waste stream rather than on its further segregation in sub-fractions. The separation of dry and wet fractions is crucial, which means that biowaste should always be collected separately.

The possible benefits of further segregation of biowaste in the sub-fractions garden and kitchen waste depend on different factors, such as the treatment method, existing facilities, and the amount and relation of the sub-fractions. Also here, rather than a harmonised approach, the concrete circumstances and the best environmental outcome should be favoured in each case.

With regards to the treatment method:

- If going for anaerobic digestion, it is better to exclude certain garden waste, such as hedge clippings and branches. Soft materials, such as grass, weeds and leaves are however adequate for anaerobic digestion since more feedstock means more biogas, which is positive from an environmental perspective. Nevertheless, some anaerobic digestion plants have higher order front end processing and can also handle woody garden waste such as branches and hedge clippings.

- If the treatment method is composting, shredded garden waste is helpful for the process as it provides a medium. Food waste is very wet and cannot be composted on its own.

With regards to the amount and relation of kitchen and garden waste:

- Special economic actors such as industrial kitchens, restaurants or hotels could use special bins for kitchen waste as these fractions usually are best treated in wet fermentation plants (anaerobic digestion).

- Garden waste often consists of woody fractions (depending on the season and climate), which can be better treated in composting facilities as mentioned above. Therefore, it might be useful to complement the door-to-door-collection of separated biowaste with the offer of leaf sacks in autumn or civic amenity sites when the amount of such garden waste is higher.

In conclusion, it should be up to the collector to decide whether further segregation of biowaste in the sub-fractions kitchen and garden waste is or not beneficial in the concrete circumstances. The waste collector's needs will depend on the available treatment facilities in proximity to the collector's transfer station, which will probably also be the best environmental option.

- Which recycling/reuse options for bio-waste have the highest net environmental benefits?

Composting and anaerobic digestion.

- In the current state of technology, bio-plastic has a higher degradation time than bio-waste. How can this issue be addressed?

A clear definition and overarching principles applying to both biobased plastics (BBP) and biodegradable and compostable plastics (BDCP) is needed in

consideration of the circular economy and the waste hierarchy principles. It is important to make a clear distinction between bio-based, biodegradable and compostable plastics, recognising that some bio-based plastics are not compostable, and some compostable plastics are not bio-based, and that not all biodegradable plastics are truly and safely compostable.

BBP and BDCP has no EU sustainability criteria nor any appropriate standards that are supported by sound scientific testing, meaning that a variety of formulations and lack of regulations do not guarantee environmental and market performances.

So far, no standard exists for biodegradable plastics in other media such as the marine environment. Biodegradable and compostable plastics only bring environmental benefits when there is a clear co-benefit: **separating more bio-waste from residual waste and when they do not degrade the quality of organic waste.**

Given these points it should be assessed in which applications the use of biodegradable and compostable plastics is actually beneficial to the environment. Where this is not the case, the use of biodegradable and compostable plastics should be avoided.

Measurement methods and labelling of BBP should be clarified as well as the role of testing, labelling, certification to ensure effective biodegradation, alignment with existing disposal infrastructure, and avoiding consumer confusion for BDCP.

In conclusion, alternatives to conventional fossil-based plastics can offer environmental benefits. However, this is on the condition that they have been developed in compliance with EN standards, they bring clear environmental benefits and there is a collection and treatment infrastructure in place to manage them. As this is often not the case for biodegradable and compostable plastics, promotion and marketing of biodegradable and compostable plastics at this stage is premature. Recycling of biobased plastics should therefore be favoured over biodegradation, which only provides sustainable benefits in very specific applications. In line with the waste hierarchy, recycling is also to be favoured over recovery.

- How can the downstream processes be harmonised? Would it be beneficial to set purity thresholds for the single waste fractions?

Purity thresholds for collection are hardly implementable, especially in the case of municipal waste.

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