

There are a number of issues relating to the scope and definitions used in the green paper that LARAC wishes to comment on.

1. Definition

LARAC questions the definition of biowaste.

Firstly, 'garden waste' is included in the definition, but seemingly only as part of MSW (page 1, 4th paragraph). LARAC wishes to point out that a substantial amount of garden waste is produced by commercial gardening and grounds maintenance companies, which is not part of MSW, and would like clarification on whether or not this is included in the definition of biowaste.

Secondly, LARAC would like a rationale for the exclusion of paper and card from the definition. This exclusion almost implies that the paper and card fraction is now seen as a resource instead of a waste, conversely implying that the remainder of biowaste is still a waste rather than a resource. LARAC is of the opinion that all waste should be seen and treated as a resource. Or, possibly, there is an implication that the best environmental treatment option is different for paper and card than it is for biowaste as defined - but this will depend on circumstances, and indeed different treatment options may be preferable for different types of biowaste.

LARAC suggests that the scope of the definition was perhaps set as a result of the fact that separate collections this fraction of MSW are already in place in several countries, alongside separate paper collections. However, in several UK Local Authorities cardboard is collected for composting along with garden waste, which would mean that 'biowaste' is not strictly speaking separately collected in these authorities.

MSW contains both park / garden and kitchen waste; from commercial sources it is more likely that waste is either garden/park waste or food waste but not a mix. As the nature of garden/park waste is different from kitchen waste (in woody tissue and moisture content), it may worth considering these commercial wastes in particular separately from each other.

In par. 3.1, the term 'Green Waste' is used. This term is not defined in the document and should be avoided.

LARAC also would like clarification on whether overproduction in the food industry is included in the definition, and at which point it would change from agricultural waste to biowaste (e.g. when it leaves the farm).

Finally, LARAC would like clarification on whether cooking oil is included in the definition of biowaste.

LARACs view is that all non-hazardous biodegradable material that is discarded should be counted as biowaste.

2. Bio-waste management

LARAC proposes that separate collection be not considered a treatment option in its own right, but rather that feedstock is specified when considering other technologies what feedstock is used (eg source separated garden waste, kitchen waste, fruit and vegetable waste only, mixed waste).

LARAC also finds the term 'compost' is ill defined in the document. In section 3.1, it is stated that

compost can refer to composted digestate. Whereas this is acceptable in the case of source separated and subsequently digested biowaste, it is problematic where MBT digestate is concerned unless the MBT digestate is produced to a specification that allows it to be beneficially used on land (horticulture or agriculture) as a compost. We acknowledge that in some countries there is a positive list of materials allowable as compost feedstock.

LARAC further proposes that some consideration be given to the option of disposing macerated food waste via the sewerage system, as widely practiced in the US and Australia, with subsequent AD treatment.

Question 1: Waste prevention is at the top of the EU's waste treatment hierarchy. From your experience, what could be specific bio-waste prevention action at EU level?

LARAC argues it may be beneficial to distinguish between true waste prevention and keeping waste out of MSW. For example, in the case of (edible) food waste, not producing it would be true waste prevention, whereas disposing of it in home composters would keep the food waste out of MSW but would not prevent resources being wasted in the production of the food.

This notwithstanding;

- As Home Composting can be counted as waste prevention, the promotion thereof is an effective bio-waste prevention measure.
- Relaxing or abolishing product size and shape specifications for fruit and vegetables can prevent waste
- Restricting the use of 'Best before' and 'Use by' dates to only putrescible goods would help reduce food waste
- The principle of allowing biomaterials that are composted at or very near the place of production not to be accounted as waste at all may, in some circumstances, be an effective waste prevention activity, for example unsaleable agricultural produce or animal waste that is composted on the farm; or small scale community compost projects.
- The free distribution by retailers of food nearing its Sell-by date through charitable organisations can prevent waste
- A review of the restrictions of the use of waste food for animal consumption, with a view to maximise such use whilst keeping in place sufficient safeguards for animal and human health, may further prevent food waste.

Question 2: Do you see benefits or disadvantages of further restricting the amount of biodegradable waste that is allowed on landfills beyond the targets already set in the EU Landfill Directive? If yes, should this be done on EU level or left to decide by Member States?

In the short term, LARAC would not support further restrictions for Local Authorities on the amount of biowaste allowable in landfill. It would however support exploration of viable options to reduce commercial biowaste to landfill **with robust measures that proper sorting and treatment is conducted**. In the longer term, we would debate the option of prohibiting the landfilling of biodegradable waste, but this would have to allow time for the development of national infrastructures for dealing separately with biowaste and be subject to financial drivers that will not create added cost for local authorities.

Question 3: Which options for the treatment of bio-waste diverted from landfills would you prefer to see strengthened and what would you see as their main benefits? Do you think that the choice of the treatment of bio-waste diverted from landfills should benefit from a wider and more consistent use of life-cycle assessment studies?

LARAC believes that life cycle analysis can be a guiding principle in deciding a treatment option. More consistent use of LCA studies would be welcomed. In general, LARAC prefers treatment options that do not release large amounts of carbon to the atmosphere. In particular, LARAC supports Anaerobic Digestion, as it allows carbon sequestration whilst generating further carbon savings where the biogas produced replaces fossil fuels for energy generation. LCA outcomes will depend on, inter alia, the feedstock, treatment option, transport, and markets for secondary materials, electricity and heat. It is important to recognise that waste infrastructure planning will therefore have a significant effect on LCA outcomes and that such effects are understood and taken into full account by planners.

Question 4: Do you think that energy recovery from bio-waste can make a valuable contribution to sustainable resource and waste management in the EU and meeting the EU's renewable energy targets in a sustainable way and, if so, under which conditions?

LARAC understands that energy supply is likely to be (and desirably) increasingly diverse and that energy from waste will be part of this diverse supply. It strongly recommends that the environmental costs of transport are taken fully into account, for example where it is proposed to import biomass for energy generation whilst exporting other biomass for recycling purposes. LARAC supports CHP processes wherever possible and would like to see measures to encourage heat markets close to energy producing treatment plant.

LARAC strongly supports measures to enable biogas to be fed into the gas grids. It draws attention to the fact that dry (woody) biowaste is not very well suited to the production of biogas and suggests that where practicable separate collection (and treatment) of wet and dry biowastes may optimise energy yield.

As stated before, LARAC would see LCA as a guiding principle. This should include a differentiation of calorific value calculation methods depending on feedstock and treatment; e.g. incineration of wet food waste will not yield energy but digesting it anaerobically will. LCA may indicate issues to do with markets for digestate cake, relating to feedstock, are taken into account.

Question 5: Do you see a need for promoting bio-waste recycling (i.e. compost production or use on land of composted material) and, if so, how? How can synergies be achieved between bio-waste recycling and energy recovery? Please provide the necessary evidence.

NB the Green Paper mentions the possibilities of Community-wide or National targets for bio-waste recycling, and the possibility of a separate collection obligation

Yes, bio-waste recycling should be promoted. LARAC would not support any measures making separate bio-waste collections obligatory for Local Authorities; the Landfill Directive BMW diversion targets have been sufficient to encourage LA's to set up separate biowaste collections where practicable. Much more effort is now required to divert biowaste from other, non-municipal waste streams.

Question 6: In order to strengthen the use of compost/digestate:

– Should quality standards be set for compost as a product only or also for compost of lower quality still covered by the waste regime (e.g. for applications not linked to food production)?

The term 'compost' should be reserved for end-of-waste products ie products no longer subject to the waste regime. Quality standards for compost should relate to, or be identical to, the end-of-waste criteria for this type of waste. For lower quality biologically treated materials, LARAC would

welcome a separate range of quality standards to strengthen market development for such materials. These should however not be labeled 'Compost'. The waste regime should still apply, and record keeping requirements should be in place, in particular where pollutants may bio-accumulate.

- *Should rules for the use of compost/digestate (e.g. limits on pollutant concentration in compost/digestate and land on which compost/digestate is applied) be set ?*

For end-of-waste compost, no. End-of-waste criteria should be set sufficiently high to ensure the application of the products is not harmful to the environment. For lower quality products, including digestate from mixed waste MBT, rules should be set.

It is understood that such rules would increase the administrative burden for operators choosing to use lower quality products, but this may in itself strengthen the market for quality compost and thereby support source separated collection of biowastes.

- *Which pollutants and concentrations should these standards be based on?*

LARAC is not suitably qualified to recommend any detailed criteria for such products. Limits should be set to protect human health and the environment. Both environmental or agricultural benefit (e.g. improved water retention) and environmental harm (e.g. harmful pollutants) should be taken into account. Caution should be exercised when relating concentration limits to land use (e.g. lower limits for land not intended for food crops) as land use may change over time and it is not desirable to render land unsuitable for food crops long term due to the presence of pollutants.

- *What are the arguments for/against the use of compost (digestate) from mixed waste?*

See above.

Question 7: Is there any evidence of gaps in the existing regulatory framework concerning the operational standards for plants which do not fall under the IPPC scope and if so, how should this be addressed?

Smaller plants are likely to include community composting sites and on-farm AD plant. Whereas some aspects of such sites will need to be subject to controls, any regime should avoid being overprescriptive. Small plant is likely to process local biowaste and therefore has the immediate environmental benefit of avoiding transportation. A certain amount of control over harmful chemicals in smaller biowaste plants may be achieved by restricting the retail and use of persistent herbicides or pesticides (such as e.g. aminopyralid).

Question 8: What are the advantages and disadvantages of the abovementioned bio-waste management techniques? Do you see regulatory obstacle preventing the further developments and introduction of these techniques?

LARAC perceives the main obstacles to be a lack of public awareness and understanding for the advantages and disadvantages of various treatment techniques. As mentioned before, it would welcome the development of a heat distribution network and efforts to enable the gas grid to utilise biogas.