



Fédération Européenne des Activités de la Dépollution et de l'Environnement
European Federation of Waste Management and Environmental Services
Europäische Föderation der Entsorgungswirtschaft

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FEAD position on the Commission Green Paper on the management of bio-waste in the European Union

FEAD is the European Federation representing the European waste management industry. Its members are national management associations, with an approximate 70% share in the household waste market and handling more than 75% of industrial and commercial waste in Europe (with a collective annual turnover of approximately € 50 billion).

FEAD has 22 members from 21 EU Member States and Norway. FEAD represents companies with activities in all forms of waste management. These companies employ over 350 000 people who operate around 2 000 recycling and sorting centres, 1 700 composting sites, 400 waste-to-energy plants and 2 200 controlled landfills and play an important role in the determination of the best environmental option for waste management problems.

FEAD is registered under the Register for Interest Representatives under the ID number: 2157643512-49.

FEAD welcomes the opportunity to address the views of the waste management sector on the Green Paper on the management of bio-waste in the European Union.

Introduction

The issue of a legal instrument on the biological treatment of biowaste was brought up at European level in 2000 with a working document (1st draft). In 2001, a further working document was presented (2nd draft), followed up by a draft discussion document on biowaste and sludges in 2003. FEAD was disappointed not to see any further developments since then.

For the past years, FEAD advocated for a dedicated Directive on the Biological Treatment of Waste and Organic Matter Recycling and was in 2006 part of a stakeholders' coalition bringing together industry and civil society.

FEAD is of the opinion that any legislative action at European level should address a broad scope and welcomed at the time the Commission's working document on the biological treatment of bio-waste (2nd draft from 2001) as it covered a broad range of input materials (annex I) as well as the different treatment options.

Legislative action at European level on the management of bio-waste would positively address the issue of soil organic matter decline by encouraging the production of compost and in general the recovery of organic matter. Moreover it would help Member States to fulfill the diversion targets of the Landfill Directive. The climate change argument should also not be minimised when considering the role of soil organic matter acting as a carbon sink.

General comments

FEAD generally welcomes the content of the Green Paper as it provides a simplified but good overview of the management of bio-waste within the European Union.

APOH, Slovakia
ARS, Romania
AVFALL NORGE, Norway
AVFALL SVERIGE, Sweden
BDE, Germany

CAOH, Czech Republic
ESA, UK
EWMA, Estonia
FEBEM-FEGE, Belgium
FISE, Italy

FLEA, Luxembourg
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IWMA, Ireland
JLY, Finland
KSZGYSZ, Hungary

LASUA, Latvia
PASEPPE, Greece
PIGO, Poland
VA, Netherlands
VÖEB, Austria

FEAD however considers that the introduction of the Green Paper should acknowledge the positive role of the waste management operators when dealing with an increasing generation of waste. Negative effects of waste production should not be assimilated to bad waste management. It should be pointed out that a raising production of waste does not imply that the waste will not be treated in accordance with the highest environmental and human health requirements.

The Waste Framework Directive provides a definition of bio-waste which the Green Paper uses as basis. However it is worth mentioning that bio-waste is defined and understood differently across the European Union. Even in the Green Paper itself, the use of the bio-waste definition is not always consistent. For instance, manure is excluded from the definition (introduction, p.2) but manure is implicitly covered in the text. Moreover it is not clear whether the figures mentioned do actually relate to this definition. The same is true for sludge. FEAD therefore calls for a consistent approach when it comes to the treatment and use of organic matter.

Question 1: Prevention aspects

As identified in the waste hierarchy referred to in the Waste Framework Directive, prevention is a key element of a waste management policy. Throwing away edible food, from households or from the retail sector, is not acceptable from an ethical point of view, even if it constitutes a part of our business.

The Waste Framework Directive foresees the establishment of waste prevention programmes by 2013 (Art. 29). These programmes could include measures on the prevention of bio-waste. Actions already exist at national level:

- Swedish EPA: "Svinn i livsmedelskedjan, Möjligheter till minskade mängder"* Leander och Rytterstedt. Naturvårdsverkets rapport 5885, november 2008.
- Life project in Finland:
[http://www.ytv.fi/ENG/fiksu/background information/wpk_project/frontpage.htm](http://www.ytv.fi/ENG/fiksu/background_information/wpk_project/frontpage.htm)

Green waste is difficult to prevent, therefore efforts should be put on the prevention of food waste from the food and retail industries.

One aspect of prevention is home and community composting, which should be regarded as interesting options. However potentials of home and community composting are often over-estimated, especially in urban areas. Amounts of bio-waste diverted from landfills or incinerators through this channel are not significant. These bio-wastes will not be totally prevented but only diverted from the municipal waste stream. Moreover environmental and health impacts resulting from home and community composting have not been fully assessed yet and would therefore require further investigations. Home and community composting are therefore suitable options for rural and high density population areas when properly managed and when the output is adequately used.

A further aspect in prevention is the quality aspect. It is therefore not only a matter of the quantity of bio-waste, which should be prevented, but it is a matter of the quality of bio-waste, which is to be composted or digested. Special attention has therefore to be paid to avoid contamination by pollutants.

Question 2: Beyond the Landfill Directive diversion targets

The Landfill Directive is a good tool to divert biodegradable waste away from landfills. FEAD therefore calls for the full and consistent implementation of the Landfill Directive throughout Europe. Support to help Member States to comply with the requirements of the Landfill

Directive, in particular the diversion targets of biodegradable waste, would be welcome. A driver to steer bio-waste to organic recovery facilities would support the implementation process.

The implementation of the diversion targets are however lacking clear methodological and accounting rules. Considering that one ton of municipal solid waste is not equal to one ton of stabilised municipal solid waste, FEAD calls on the Commission to provide clear guidance on the calculation method.

It could also be considered that a legislative act on bio-waste foresees a further target after 2016. A more ambitious target could be set by 2021, the longer term objective being to minimise as far as possible the amount of bio-waste to be landfilled. Certain Member States set themselves more stringent requirements than the ones of the Landfill Directive. This could give the path to other Member States to be more ambitious in that regard but should in any case go hand in hand with a support to the Member States lagging behind.

Question 3: Treatment options for bio-waste

In Europe, there are already existing high-quality installations treating bio-waste, which have proven their effectiveness and good track records. These installations include composting, anaerobic digestion, combination of both composting/anaerobic digestion and energy from biomass.

FEAD supports an integrated approach in waste treatment but considers that the waste hierarchy, as stipulated in the Waste Framework Directive, should be respected when it comes to biological treatment of bio-waste. The recovery of organic matter through anaerobic digestion and/or composting should therefore be regarded as first appropriate treatment option for bio-waste.

In general terms, FEAD welcomes the use of life cycle assessment (LCA) studies for the choice of the local suitable waste treatment option. Such an instrument is generally helpful for the selection of the adapted way to collect and treat waste considering the specific situations. It however very much depends on the methodology and parameters used in the LCA.

In the case of organic matter recovery, ecological parameters, such as the value of organic fertilisers (nutrients recovery), substitution of peat/carbon sequestration and improved erosion behaviour in soil must also be taken into consideration and have to be included in the LCA.

Question 4: Energy recovery from bio-waste

Energy recovery from bio-waste can indeed make a valuable contribution to sustainable resource and waste management when it is considered as part of an integrated waste management system. In order to ensure a global positive environmental contribution, energy recovery from bio-waste should be combined with a developed organic recovery and nutrient of bio-waste. The waste hierarchy must always remain the reference even if flexibility, justified by a life cycle thinking approach, should be granted.

The valuable contribution of the sector is also recognised in the Directive on the energy produced from renewable sources (RES Directive).

Anaerobic digestion is an interesting way of producing energy out of bio-waste but FEAD points out that the biogas production depends on the kind of input material, which in addition could considerably vary during the year. Referring to the potentials of biogas production provided in the Green Paper, kitchen and canteen waste, oil and fat have biogas generation rates up to 200 m³ per ton whereas bio-waste from separate collection ranges around 100 m³ per ton.

For FEAD, the energy recovery aspect is important but when it comes to bio-waste management, the waste hierarchy should apply and therefore the focus should be on resources recovery (organic matter and nutrients). Arguing that increasing recycling of bio-waste could limit the amount of bio-waste available for incineration is not suitable as the purpose of waste-to-energy plants is anyhow not to incinerate wet fractions, which have a low calorific value.

Moreover the potential of energy recovery from bio-waste through anaerobic digestion is two-folded: production of energy from the process itself and the offsetting of energy consumption for the production of mineral fertilisers through the production of organic fertilisers. A further added value is the energy saving from the work of land due to the improved quality of soils after organic matter recycling.

Question 5: Promotion of bio-waste recycling

FEAD is of the opinion that awareness has to be raised on the need to protect soils and recycle limited nutrient resources, especially phosphorous. One good way is to boost organic matter recycling and the use of composted material on land and in growing media.

As mentioned earlier, a legislative proposal on the management of bio-waste would help solving the problem of soil organic matter decline by encouraging the recycling of organic matter and providing quality organic matter to eroded soils. As regards climate change aspects, organic matter in soil can contribute to greenhouse gas reduction through the sequestration of carbon.

Bio-waste recycling also needs to be promoted to provide some economic incentive for the development of the organic recycling industry. Legal certainty is necessary for a healthy investment climate. Waste management treatment facilities in general require high investments and waste management policies must therefore have a long-term perspective. Long-term confidence for both the public and private investments is therefore crucial for the viability of waste management strategies. This can only be achieved through clear legislative guidelines at European level.

FEAD is aware that it will be difficult to come up with a driver, in the form of a target that will be suitable for all Member States. This should however not be an argument not to make any proposal.

Another path to explore could be to follow the example of the proposed Directive on the energy produced from renewable sources. A target on the use of organic matter, fertilisers and growing media from renewable sources could be envisaged.

The target should :

- For growing media and soil conditioners, take into consideration the need to keep the organic matter content of soil stable over time and guarantee the humus balance of soil.
- For fertilisers, include a minimum level of nitrogen, phosphorus or potassium from renewable source (from bio-waste, manure, ...). This would lead to delivering 'green certificates for fertilisers' as it is the case for green certificates in the energy sector.

Examples of incentives to boost the recycling of organic matter, which should be promoted at European level, also include:

- Eco-design measures for the production of fertilisers in order to promote the use of organic fertilisers over the use of mineral fertilisers.
- Green public procurement favouring tenders which promote the use of recycled organic matter.
- Use of recycled organic matter by the public sector (for public gardens, public works ...)

Question 6: Use of compost/digestate

A legislative proposal is needed at European level to regulate the appropriate use of the output from composting (compost) and from anaerobic digestion (digestate).

Quality standards

Two regimes of compost should indeed be considered: a product regime and a waste regime. Quality standards should aim at protecting human health and the environment and should therefore have to be set based on health and environmental risk assessments.

Rules for the use of compost/digestate

General rules (declaration of nutrients (NPK), information for the user, quality insurance system) should be set in a legislative act. Detailed rules on the use should however be left to Member States due to the difference in soils' needs across Europe.

Pollutants and concentrations for the standards

Work has already been initiated at European level in 2001 (Commission's 2nd draft working document) and more recently in the framework of the end-of-waste discussion. These documents however require further assessments using a risk-based approach, which has, as far as we know, not been done so far.

Use of compost (digestate) from mixed waste

Two main approaches can be highlighted: one focusing on quality compost based on separate collection of bio-waste and composting/anaerobic digestion, the other focusing on the quantity potential of compost from mixed waste.

Some Member States have chosen to develop composting or digestion of separately collected bio-waste, green waste and organic waste from industries (food industry, restaurants, markets ...) with legal requirements for the compost quality and/or quality assurance systems.

Some other Member States have chosen another approach, which is two-folded:

- (a) the composting of separately collected green wastes or catering wastes from big retailers,
- (b) the collection of household mixed wastes and mechanical sorting, before composting or digestion, of the organic fraction in parallel to legal requirements for the quality of the final output.

FEAD supports the call on Member States to encourage the separate collection of bio-waste with a view to the composting and digestion of bio-waste as stated in article 22 of the Waste Framework Directive. This should be the way forward when it is applicable under local conditions. A legal text should however not rule out a technology if the output (compost or digestate) meets the requirements set at European level.

Question 7: Operational standards

The revision of the IPPC Directive foresees the inclusion of plants treating over 50 tons of bio-waste per day in the scope of the new Directive. The number of plants falling out of the scope is quite important in some Member States. Considering that the environmental impact would not be different and considering that a level playing field is required in terms of operational standards, a simplified version of the IPPC requirements could be foreseen under a legislative act on the management of bio-waste for plants treating less than 50 tons per day.

Question 8: New bio-waste management techniques

Innovations have indeed to be considered but it should be acknowledged that there are already existing successful processes and plants with established composting and anaerobic digestion techniques. The focus should be on the existing technologies, which include stable processes showing good track records.

In order to support innovation in the field of bio-waste management, financial incentives and supports should be integrated in the Eighth Framework Programme for Research and Technological Development.

The only regulatory obstacle that FEAD sees for the development of new technologies is the lack of legal clarity and certainty at European level, which has a direct impact on investments. This is also valid for the development of existing technologies.
