

Challenges resulting from (the revision of) the Waste Hierarchy

Marco Ricci-Jürgensen

Chair of the WG Biological Treatment of Waste

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The regulatory context: drivers from EU env policy

- Revised Waste Framework Directive 2008/98/EU
 - waste hierarchy
 - Recycling/reuse targets
 - prevention programmes
- Landfill Directive
 - diversion targets for biodeg waste
 - obligation for pretreatment
- EU Climate Change Programme
- EU Soil Strategy

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EP resolution of 20 April 2012 - priorities for 7th EAP

- *(the EP)* Takes the view that the 7th EAP should provide for full implementation of waste legislation, including compliance with the waste treatment hierarchy while ensuring coherence with other EU policies; considers that it should set more ambitious prevention, re-use and recycling targets, including a net decrease in waste generation

Article 22

bio-waste

- **Member States shall take measures, as appropriate, (...) to encourage:**
 - (a) the separate collection of bio-waste with a view to the composting and digestion of bio-waste;
 - (b) the treatment of bio-waste in a way that fulfils a high level of environmental protection;
 - (c) the use of environmentally safe materials produced from bio-waste.
- **The Commission shall carry out an assessment on the management of bio-waste with a view to submitting a proposal if appropriate. The assessment shall examine the opportunity of**
 - setting minimum requirements for bio-waste management and
 - quality criteria for compost and digestate (...) in order to guarantee a high level of protection for human health and the environment.

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The regulatory context: drivers from EU env policy

- Revised Waste Framework Directive
 - waste hierarchy
 - Recycling/reuse targets
 - prevention programmes
- **Landfill Directive (1999/31/EC)**
 - diversion targets for biodeg waste
 - obligation for pretreatment
- EU Climate Change Programme
- EU Soil Strategy

Implementing Directive 99/31

(and art. 11 of WFD - material recovery targets!)

- **Bans on biodegradables to landfills (e.g. BR, US)**
 - Most stringent provisions
 - May lack flexibility
 - Requires codified thresholds for acceptance at landfills
- **Targets for sep collection / composting / recycling**
 - Specific biowaste processing targets (e.g. Sweden)
 - General recycling + composting targets (IT & UK)
 - Result-oriented + flexible

Implementing Directive 99/31

(and art. 11 of WFD - material recovery targets!)

- **Obligation on separate collection**

- NL: compulsory schemes for separate collection
- AT: obligation upon households to either take part in separate collection or to compost in the backyard
- GER: KrW-AbfG revised in 2012 → separate collection for all municipalities
- Catalunya (Spain): ley 6/93 → compulsory for all Municipalities with a pop. > 5000; Now, compulsory for all municipalities
- SK (Act 24/04): Garden Waste to be separately collected by 2006; biowaste by 2010

Pros/contra:

- On Municipalities (e.g. NL) – may be deceived with poor performing / low participation systems
- On households (e.g. AT) – very effective, if stringent control possible
- May require phased implementation

Targets: calculation and accounting methodology

- reliable and unambiguous definition about how the targets can be measured and controlled
- definition of bio-waste: Biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises, and comparable waste from food processing plants

Needs for targets on biowaste collection

- using organic waste as nutrient source as well as a carbon sink to achieve the goals of EU Climate Change Program
- tackle the constant decline of soil organic matter in arable land and encourage the recovery of organic matter in line with the Thematic Strategy for Soil Protection
- provide legal certainty on EU level for the biological treatment of waste by ensuring long-term confidence for investors, banks and industry and avoiding unacceptable financial risk for both the private and public sectors

Pretreatment

- Besides thermal treatment, also biological treatment (MBT) able to reduce/degrade/mineralise biodegradable materials (80-90% loss of fermentability) and optimise landfilling of outputs
- Worth considering:
 - Costs (Cap.Ex. and Op.Ex.)
 - Flexibility (possibility to turn into sites processing separately collected materials)
 - Scalability (viability of options also at low throughputs: rural areas, small waste management districts)
 - Timeline for construction! (the sooner, the better)

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- In Member States where no data exists for 1995, a more recent baseline year should be set with targets adjusted accordingly
- Define 'pre-treatment' in an unambiguous manner so that the ban on landfilling waste that is not pre-treated is applied equally across all countries
- Introduce targets for the progressive reduction in the quantity of residual waste irrespective of how it is subsequently managed (whether it is sent to incineration, MBT or landfill, or any other residual waste management method)

Targets for biowaste in the WFD?

- A target for Biowaste recycling is missing and can be added to the once provided for paper, metal, plastic and glass
- Establish a single target and calculation method based only on the quantity of municipal waste collected. This would require that a consistent definition of municipal waste is used in all Member States. (optional)
- Introduce requirements on businesses to sort a range of waste materials for recycling and composting / anaerobic digestion

principle options for targets

1. **Total bio-waste recycling targets**
2. **Gradually increasing biowaste recycling targets**
3. **Separate collection targets**
4. **Bio-waste treatment targets**

principle options for targets

1. **Total bio-waste recycling targets**

include BIO-WASTE in the minimum list of waste streams (paper, glass and metals) to be recycled by 50 % as defined by Art. 11 (WFD)

principle options for targets

2. Gradually increasing biowaste recycling targets

- Similar to the EU Landfill Directive
- needs to be increased in every
- Member State step by step over a certain period of time

principle options for targets

3. Separate collection targets

- setting specific collection in kg/person/year or a percentage of total bio-waste
- to be combined with the request for a following biological treatment

principle options for targets

4. Bio-waste treatment targets

- Specific quantity of the total bio-waste is treated biologically.
- No specification on collection procedure.
- No specification on treatment types

Thank you

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ricci@compost.it