EU policy on organic resources and biowaste recycling in Europe – Challenges by implementing the Waste Framework Directive and the target review process

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Outline

1. Existing European legislation on bio-waste
2. Support to implementation
3. Target Review - Background, Objectives, Method
4. Adaptation of the targets
EU waste Legislation
Definitions


*The "bio-waste" means:*

• biodegradable garden and park waste,
• food and kitchen waste from households, restaurants, caterers and retail premises and
• comparable waste from food processing plants;

Biodegradable waste: (Landfill Directive)

*any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, and paper and paperboard;*

*Differences: Paper, Agri-waste, Forestry waste, Sewage sludge*
Existing targets

Landfill diversion targets for biodegradable waste (compared to 1995 data)

- 25% in 2010
- 50% in 2013
- 65% in 2020

4 year derogation provided to 14 MS

Municipal waste

- 50 % minimum recycling by 2020
- 4 calculation methods
Separate Collection

Waste Framework Directive – Article 11

• Member States shall set up separate collection to ensure high quality recycling

• By 2015 separate collection should be set up at least for paper, metal, plastic and glass
Member States shall take measures, as appropriate, and in accordance with Articles 4 and 13, to encourage:

• the separate collection of bio-waste with a view to the composting and digestion of bio-waste;

• the treatment of bio-waste in a way that fulfils a high level of environmental protection;

• the use of environmentally safe materials produced from bio-waste.
Fertilizing requirements (including proposed changes)
Compost standards for organic farming and standards for eco-label


- 2006/799/EC: Commission Decision of 3 November 2006 establishing revised ecological criteria and the related assessment and verification requirements for the award of the Community eco-label to soil improvers

- 2007/64/EC: Commission Decision of 15 December 2006 establishing revised ecological criteria and the related assessment and verification requirements for the award of the Community eco-label to growing media
End of waste standards for bio-waste

- The technical report is being prepared by Technical Working Group run by DG JRC/IPTS in Seville and is expected to be ready by the end of 2013. Last working document is available here:
  

- Based on this report the Commission will assess preparation of regulatory proposal, which could be adopted by Member States in 2014 (in comitology process).
## EoW proposal – draft

<table>
<thead>
<tr>
<th>Parameter</th>
<th>(1) Minimum organic matter content:</th>
<th>(2) minimum stability</th>
<th>(3) content of pathogens</th>
<th>(4) viable weeds</th>
<th>(5) macroscopic impurities &gt; 2mm (dry sieving)</th>
<th>(6) limits of heavy metals and organic pollutants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>15% on dry matter weight</td>
<td>several methods</td>
<td>No <em>Salmonella</em> sp. in 25 g sample</td>
<td>1000 CFU/g fresh mass for <em>E. Coli</em></td>
<td>2 viable weed seeds per litre</td>
<td>Zn</td>
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</table>
Revision of regulation 2003/2003/EC on fertilizers

- The current Regulation deals with mineral fertilizers only and do not address environmental issues – the revised one is planned to introduce limit of contaminants and widen its scope also on following product groups (often made from waste):
  - Organic fertilisers
  - Soil improvers
  - Growing media

- Link to End of Waste – either inclusion (e.g. as Annex) or reference if EoW is ready before.

- Time planning: Legislative proposal in Autumn 2014
  further info at:
Other related legislation

Covers management and emissions from large composting and digestion plants dealing with waste.

Requirements: Integrated permit taking into account Best Available Techniques (BAT).

- **Best Available Technique Reference Document (BREF) – "Waste Treatment" - ....**

When biological treatment is covered?

- *Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day*
- *Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day*
- *When the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.*
Renewable energy

Implementation
Landfilling evolution – 2006-2009

Legend:
- Gray bar: Landfilling of biodegradable municipal waste, 2006
- Purple bar: Landfilling of biodegradable municipal waste, 2009
- Red line: Target 2006
- Orange line: Target 2009
- Yellow line: Target 2016

* countries with derogation off periods of up to 4 years to achieve the targets
** countries which declared derogation lately
Municipal Waste Treatment (2011)

Source: Eurostat
Things (slowly) moving in the right direction:

- Over the past 10 years recycling + composting increased by 13% for the whole EU – from 27% to 40%

- During the same period, 13% reduction of the landfilling rate – from 50% to 37%

- But still a long way to go – EEA report on municipal waste management: Extraordinary effort needed in a majority of MS to achieve the 50% recycling target

  - 9 MS: 2-4% increase per year
  - 7 MS: more than 4% per year
What the statistics tell us:

- Sharp differences amongst MS
- Recycling rate beyond or very close to the 50% target in some MS; in others, close to zero
- Landfilling virtually phased out in some MS; others still heavily relying on landflling
- Problems persist everywhere: Incineration overcapacity in several MS with low landfilling and high recycling rates
How to address implementation gap?

*Compliance promotion initiative launched last year – focusing on:*

- Selected MS where distance to targets is bigger – and waste management not in line with the waste hierarchy
- Municipal waste (500 Kg of waste generated per capita/y)

Starting point: publication of a waste management scoreboard last summer assessing MS' performance against 18 criteria
<table>
<thead>
<tr>
<th>Criterion</th>
<th>EU MS</th>
<th>1.1 Decoupling</th>
<th>1.2 WPP</th>
<th>1.3 Amount of municipal waste recycled</th>
<th>1.4 Amount of municipal waste recovered (energy recovery)</th>
<th>1.5 Amount of municipal waste disposed</th>
<th>1.6 Development of municipal waste recycling</th>
<th>2.1 Existence of ban/restrictions for the disposal of municipal waste into landfills</th>
<th>2.2 Total typical charge for the disposal of municipal waste in a landfill</th>
<th>2.3 Existence of pay-as-you-throw (PAYT) systems for municipal waste</th>
<th>3.1 Collection coverage for municipal waste</th>
<th>3.2 Available treatment capacity for municipal waste</th>
<th>3.3 Forecast of municipal waste generation and treatment in the WMP</th>
<th>3.4 Existence and quality of projection of municipal waste generation and treatment</th>
<th>3.5 Compliance of existing landfills for non-hazardous waste</th>
<th>4.1 Fulfilment of the targets related to biodegradable municipal waste going to landfills</th>
<th>4.2 Rate of biodegradable municipal waste going to landfills</th>
<th>5.1 Number of infringement procedures – WFD and Landfill Directives</th>
<th>5.2 Number of court cases – WFD and Landfill Directives</th>
<th>Overall score</th>
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Note: Scores for the criteria 1.3, 1.4 and 1.5 (marked with ‘D’) are doubled for overall scoring
What is the Commission doing?

- Seminars held in the 10 selected MS and final seminar in Brussels in March
- For each MS, 'Roadmap' with specific recommendations to improve waste management:
  - More separate collection (especially of bio-waste)
  - Increase use of economic instruments (landfill taxes, PAYT schemes)
  - Extend and improve the cost-effectiveness of EPR schemes
  - Address institutional obstacles (co-operation with and among municipalities)
  - Improve data collection statistics and analysis of impacts, as a basis for the development of WMPs
What is the Commission doing (part 2)?

This compliance-promotion initiative not one-off shot – planned follow-up:

- Assessment of Waste Management (and Prevention) Plans;
- Monitoring of developments in the 10 MS;
- Extension to other MS with poor performance levels.

- Finally – stronger financial link - better link of EU cohesion funds to country performance (conditionality criteria) and waste hierarchy. No more financing of landfills, problematic financing of non-recycling operations.
Target Review

Background and objectives,
Target Review

Legal background

• Review clauses in 3 Directives by 2014 (Waste Framework Directive (art 11.4), Landfill Directive (art 5.2) and Packaging Directive (art 6.5)

Strategic documents:

• Roadmap on Resource Efficiency
• 7th EAP (strategic targets for 2020)
Roadmap on Resource Efficiency

2020 "aspirational" objectives

- Full implementation of the EU waste acquis
- Waste generation per capita in decline
- Recycling and reuse are economically attractive and at 'max feasible level'
- Energy recovery limited to non-recyclable materials
- Landfilling virtually eliminated
7th EAP – 2020 objectives

- Absolute waste generation and waste generated per capita in decline;
- Strategy to combat food waste and increase composting/biomethanisation;
- Energy recovery limited to non-recyclable materials;
- Phasing out landfilling (limited to non-recyclable and non-recoverable) waste, taking into account existing time derogations
- Use of market based instruments, full implementation of the legislation
Target adaptation
<table>
<thead>
<tr>
<th>Municipal Solid Waste (MSW)</th>
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<tbody>
<tr>
<td><strong>EU 2020 Target (4 methods)</strong></td>
<td>50 %</td>
</tr>
<tr>
<td><strong>EU Average (2011) (method: all MSW)</strong></td>
<td>38 % (EU28)</td>
</tr>
<tr>
<td><strong>EU Top 3 (2011) (method: all MSW)</strong></td>
<td>59 %</td>
</tr>
<tr>
<td><strong>MS &gt; 50% target (2011) (method: all MSW)</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>MS &gt; 50% target in 2020 (method: all MSW, based on EEA projections)</strong></td>
<td>9 to 16</td>
</tr>
</tbody>
</table>

*Source: Eurostat 2013; EEA 2013*
<table>
<thead>
<tr>
<th>Country</th>
<th>% in the past (and when)</th>
<th>current % (and when)</th>
<th>Average per year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>62 % (1989)</td>
<td>3 % (2009)</td>
<td>2,95 % (-59% in 20 years)</td>
<td>Study on economic instruments</td>
</tr>
<tr>
<td>NL</td>
<td>30 % (2001)</td>
<td>3 % (2005)</td>
<td>1,35 % (-27% in 20 years)</td>
<td>Eurostat 2010</td>
</tr>
<tr>
<td>Sweden</td>
<td>63 % (1975)</td>
<td>5 % (2005)</td>
<td>1,93 % (58 % in 30 years)</td>
<td>SE sources Eurostat 2010</td>
</tr>
<tr>
<td>Denmark</td>
<td>39 % (1985)</td>
<td>6 % (2005)</td>
<td>1,65 % (33 % in 20 years)</td>
<td>ETC/SCP, Eurostat 2012</td>
</tr>
<tr>
<td>Germany</td>
<td>39 % (1995)</td>
<td>1 % (2006)</td>
<td>3,45 % (38 % in 11 years)</td>
<td>Eurostat 2010</td>
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</tbody>
</table>

**Evolution of landfilling of municipal waste in leading MS**
Sources: EEA on the basis of Estat, 2010

Recycling of municipal waste, 2008/2009

- Orange: 0–<10%
- Yellow: 10–<20%
- Light green: 20–<30%
- Green: 30–<40%
- Dark green: 40–<50%
- Teal: 50–<60%
- Blue: 60–<70%
- Dark blue: 70–<80%
- Dark violet: 80–<90%
- Black: 90–100%
- Light grey: Outside data coverage
MS options to calculate the 50% target
Open questions:

- Are existing targets appropriate? Is it necessary to clarify/adjust/strengthen them?

- Need for additional targets on prevention, limits on energy recovery or landfilling?

- Need for targets for other waste streams or for other categories of waste?

- Overlaps and scope for simplification? E.g. one target instead of 3.
Open questions – details:

• Targets on recycling or maybe on residual waste?

• Targets calculation methods - 1 method/4 methods?

• Time horizon – 2020, 2025, 2030?

• Same target for all MS or relative targets?
Target Review - timeline

- On-going public consultation (closed on 10/9)
- List of options to be considered – end of 2013
- Impact assessment – early 2014
- Legislative proposal in 2014

- Supporting action: Modelling of waste generation (in cooperation with EEA)
- Additional supporting actions: Fitness Check, study on Extended Producer Responsibility, Green paper on plastics, Marine litter study
Thank you for your attention!

**Additional sources of information:**

DG ENV “waste” website:  
http://ec.europa.eu/environment/waste/index.htm

Study on Economic Instruments:  
http://ec.europa.eu/environment/waste/use.htm

Additional study on EPR:  http://epr.eu-smr.eu/

Public consultation on target review:  
http://ec.europa.eu/environment/consultations/waste_targets_en.htm