Circular Economy Beyond Waste: A More Comprehensive View on Resource Efficiency

Joint DYNAMIX / POLFREE Policy Platform

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Background

- Review clauses in key Directives
  - Landfill Directive (Art. 5.2)
  - Packaging and packaging waste Directive (Art. 6.1)
  - Waste Framework Directive (Art. 11 (and 9))

- Context:
  - Roadmap to a Resource Efficient Europe
  - DG Enterprise Raw Materials Initiative
  - Green Paper on plastics
  - European Resource Efficiency Platform
  - Consultations on sustainable food systems and sustainable construction
  - Marine litter
Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL


Towards a circular economy:
A zero waste programme for Europe

{SWD(2014) 206 final}
{SWD(2014) 211 final}
Key Targets in CE Package, Municipal Waste

- Any one of 4 Methods
- One Method

<table>
<thead>
<tr>
<th>Year</th>
<th>% Prep. For reuse and recycling</th>
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<tr>
<td>2014 (current status)</td>
<td>40%</td>
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<tr>
<td>Target 2020</td>
<td>50%</td>
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<tr>
<td>Target 2030</td>
<td>80%</td>
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Art 6(1)(b) – each material to be considered separately
'1a. For the purpose of calculating whether the targets laid down in Paragraph 2(a) and (c) / Article 6(1)(a) to (k) have been achieved, the weight of waste prepared for re-use and recycled shall be understood as the weight of the waste put into a final preparing for re-use or recycling process less the weight of any materials which were discarded in the course of that process due to presence of impurities and which need to be disposed of or undergo other recovery operations.

However, where the discarded materials constitute 2% or less of the weight of the waste put into that process, the weight of the waste prepared for re-use and recycled shall be understood as the weight of the waste which was put into a final preparing for re-use or recycling process.'
Key Targets in CE Package - Landfilling

- No landfilling of
  - recyclable waste including plastics, metals, glass, paper and cardboard, and other biodegradable waste by 1 January 2025
  - more than 25% of the total amount of municipal waste generated in the previous year, from 1 January 2025.

- And endeavour not to landfill
  - anything other than residual waste by 1 January 2030, so that no more than 5% of the total amount of municipal waste generated in the previous year is landfilled (to be reviewed by 2025).
  (note definition of “residual waste”)
The Hierarchy as Viewed by Designers

- Design
- Prevention
- Preparation for Reuse
- Recycling
- Other Recovery
- Disposal
1. (Art 8, WFD)

   2. Member States shall take appropriate measures to encourage the design of products in order to reduce their environmental impact and the generation of waste in the course of the production and subsequent use of products, without distorting the internal market.

   Those measures shall include measures to encourage the development, production and marketing of products that are suitable for multiple use, that are technically durable and that are, after having become waste, suitable for re-use and recycling in order to facilitate proper implementation of the waste hierarchy. The measures shall take into account the full life cycle impacts of products.

   '3. When developing and applying extended producer responsibility, Member States shall comply with the minimum requirements laid down in Annex VII
1. (Art 12, PPWD – the same)

- '12. Member States shall take appropriate measures to encourage the design of packaging in order to reduce its environmental impact and the generation of waste in the course of the production and subsequent use, provided that such measures avoid distortions of the internal market and do not hinder compliance with this Directive by other Member States.

- Those measures shall include measures to encourage the development, production and marketing of packaging that is suitable for multiple use, that is technically durable and that is, after having become waste, suitable for re-use and recycling in order to facilitate proper implementation of the waste hierarchy. The measures shall take into account the full life cycle impacts of packaging.';
1. (Art 9)

- 3. Member States shall take measures to prevent food waste generation along the whole food supply chain. The measures shall endeavour to ensure that food waste in the manufacturing, retail/distribution, food service/hospitality and household sectors is reduced by at least 30% between 1 January 2017 and 31 December 2025.

- By 31 December 2017, the Commission shall adopt implementing acts to establish uniform conditions for the monitoring of the implementation of food waste prevention measures taken by Member States. Those implementing acts shall be adopted in accordance with the procedure referred to in Article 39(2).
1. Early Warning System (WFD, PPWD, LFD)
2. Control of hazardous waste (Art. 17, WFD)
3. Separate collection of bio-waste by 2025 (Art. 22, WFD)
4. New exemptions from permitting for collection and transport of non-haz waste (Art. 24)
5. Describe collection systems for waste containing ‘significant amounts of critical raw materials’ (Art. 28)
6. Electronic registries for at least hazardous waste (Art. 35, WFD)
7. Measures to control dumping / uncontrolled management including littering (Art. 36, WFD)
‘Non-legislative’ Package

1. Large-scale innovation projects under Horizon 2020
2. Facilitate development of more circular models
   ➢ Product policy and Ecodesign Directive
3. Cascading principle for biomass
4. Financial instruments
5. Green public procurement
6. Integrate into EU funding priorities
7. Build on Environmental Footprint pilot phase
8. Stakeholder cooperation through funding and others
9. Build on RMIP commitments related to resource productivity
10. Support job creation
11. Support best practice exchange
12. Reduce marine litter by 30% by 2020
13. Markets for materials from C&D waste
14. Common basis for assessment of buildings
15. EREP recommendation re headline target for RE
16. Development of RE Scoreboard (land, water)
17. Statistical offices to agree Raw Material Consumption methodology
What is Lacking?

1. Inclusion in legislative package of some instruments
   - Prevention targets
   - (Preparation for) Re-use targets
   - Targets for C&I waste recycling
   - Means to address marine litter
   - Demand-side for recycled materials

2. But how to set them for 28 MS…
   - .. in the absence of reliable data; and
   - where consistent application of definitions is lacking
Challenges – Consumption Levels

4 countries with similar AIC

AIC per capita (PPP-adjusted figures, 2012)

Luxembourg, Germany, United Kingdom, Austria, Sweden, Denmark, Finland, France, Belgium, Netherlands, EU-28, Ireland, Italy, Cyprus, Spain, Malta, Greece, Slovenia, Portugal, Lithuania, Slovakia, Poland, Czech Republic, Hungary, Latvia, Estonia, Croatia, Bulgaria, Romania

Factor 3?
Challenges – Definitions and Data

Hhld waste = MSW
What is Lacking?

1. Policies to stimulate inner circles of CE
   - What are they (at EU level)?
   - Can the EU assume the means?
     - Subsidiarity?
     - If not specifying the means, then what’s the overarching target / objective?
   - Existing measures (Ecodesign Directive)
     - Product by product?
     - How shall we conserve space for innovation in design (and design ‘for what’)?
   - Existing measures – VAT Directive
   - Existing measures – EPR (and extension to other materials)
What Would be Desirable

1. Attention to policy design
   - Economy of instruments
   - Things a policy maker can be held to account on
     - Not articles / policies with words like ‘promote’, ‘encourage’, ‘work towards’, ‘take appropriate measures’
     - Not ‘increase spending on’ without sound justification
     - Maybe ‘explore’ to lay the groundwork (data?)
   - Things that can be done in the real world
     - Material specific landfill bans?
     - Early landfill bans?
   - Targets against which performance can be measured
     - Data availability / quality / realism
   - Fairness across MSs
     - Space to ‘be like others’?
A Longer-term Objective

• Policy making for ‘a business model’ (let alone several) is not easy…
  ➢ ... and not necessarily desirable

• What is the CE trying to encourage?
  ➢ Not discarding?
  ➢ Durability of products?
  ➢ Design for remanufacture?
  ➢ Reusability of products?

• What incentives will be efficient ones?
External Benefits of Secondary v Primary

Source: Eunomia
Resource Taxation

- ‘Only things of relatively low value that aren’t widely traded’
- Aggregates
  - UK
  - Austria (regional)
  - Denmark
  - Sweden
  - Belgium (Flanders)
  - Italy (regional)
  - France (part of TGAP)
  - Latvia
  - Lithuania
  - Estonia
  - Slovenia
  - Czech Rep (‘fees’)
  - Hungary (royalties)
Resource Taxation

- Others
  - Peat (Austria (regional), Estonia, Latvia, Lithuania)
  - Amber (Lithuania)
  - Portland cement (Malta)
  - Oil shale (Estonia)
  - Phosphate rock (Estonia)
  - Crude oil, superior quality coal, low quality coal, uranium, thorium and other extractive activities (Romania)
  - Medicinal mud (Latvia)
  - Disposable cutlery (Belgium)
  - Plastic bags (many)
  - ODCs / CFCs (Czech Rep, Denmark, Latvia, Slovenia, Spain)
  - Land use change (Czech Rep)
  - PVC (Denmark)
  - Pesticides (Denmark)
  - N-Fertilisers (Denmark)
Resource Taxation

- Others (cont/)
  - Phosphate in feed (Denmark)
  - Batteries (Denmark)
  - Edible park snails (Latvia)
  - Tyres (many)
  - Mattresses / bedding (Malta)
  - Packaging (several, but not always widely applied as taxes)
  - Packaging prevention levy (Belgium)
  - Chewing gum (Malta)
  - Soil pollution taxes (Aragon, Spain)
  - Transmission lines / mobile masts (Asturias, Canary Islands, La Rioja (Spain))
  - WEEE (many, but not widely applied as taxes)
  - Water (not just ‘charges’)
  - Snow guns (water use) (Austria (regional))
A Longer-term Objective - EU Wide
Resource Tax

• Differentiates:
  • By material type (may be GHGs, overburden)
  • Preferably, between primary and secondary

• Targets:
  • Everything
    • Ores
    • Raw materials
    • Packaging
    • Products

• Paid by all those purchasing the above, or the first importer into EU

• Appropriate border tax adjustment
Source: World Bank
In Summary

- There was a lot in the abandoned package
- What will a ‘more ambitious’ package look like?
- Short-term, EU-level policies to drive the CE need careful thought
- Long-term, can we aim for a raw materials tax?
- Need to establish incentives for the CE to flourish
- Commodity prices cannot be relied upon to drive a circular economy