

Modernizing waste management system – case of Estonia

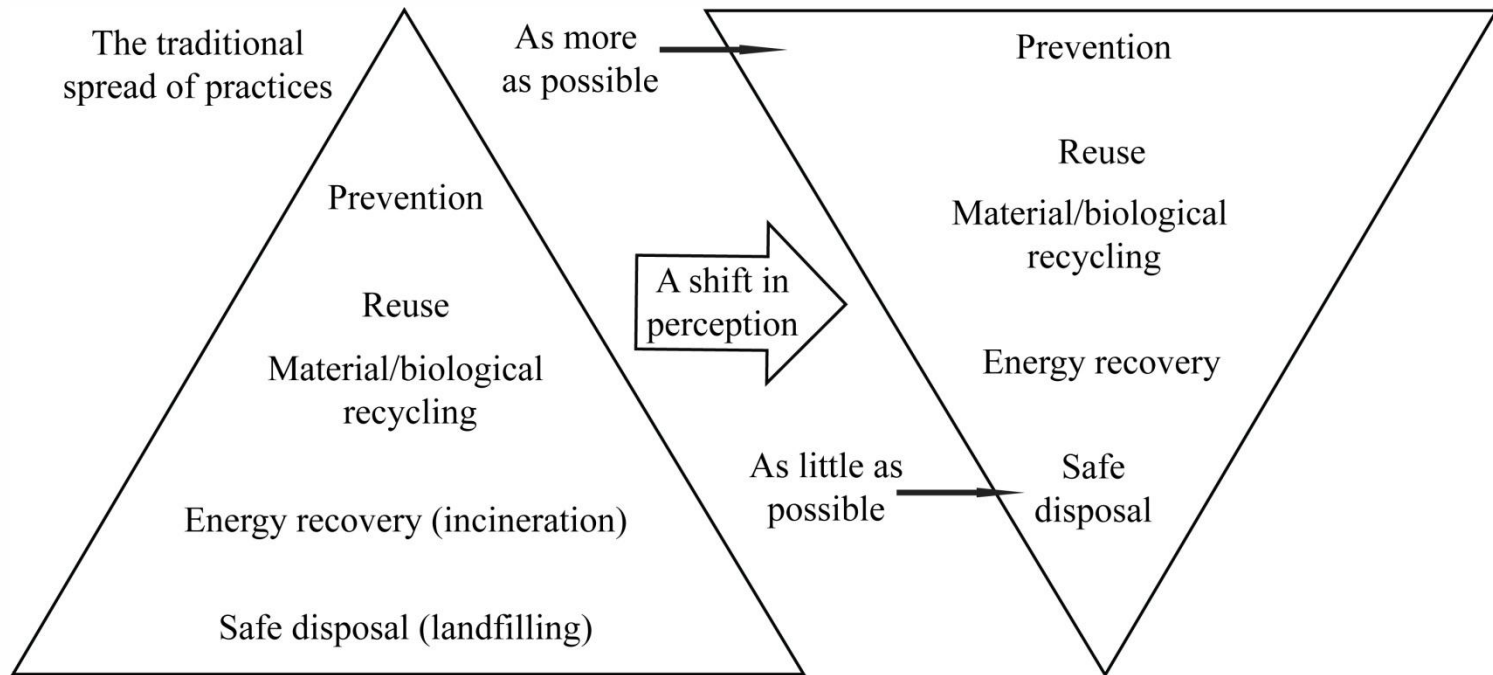
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Municipal solid waste as a problem

- Significant increase of waste quantities
- Increasing consumption and rapid process of urbanization
- Poor waste management contributes to health and environmental problems - climate change, air pollution, soil and water contamination...
- Economic loss and management costs
- Waste management is a complex issue, combining technical, economic, political, social and behavioural aspects
- Municipal waste itself is multi-faceted problem (variety of waste materials, increasing amount of toxic substances)
- Waste management solutions in one region might not be appropriate elsewhere

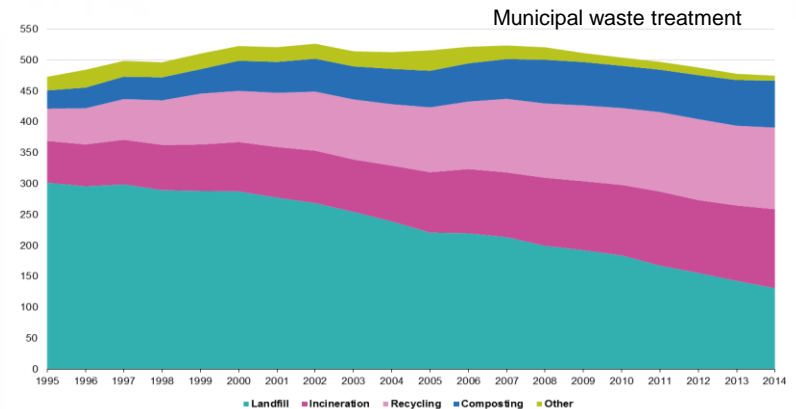
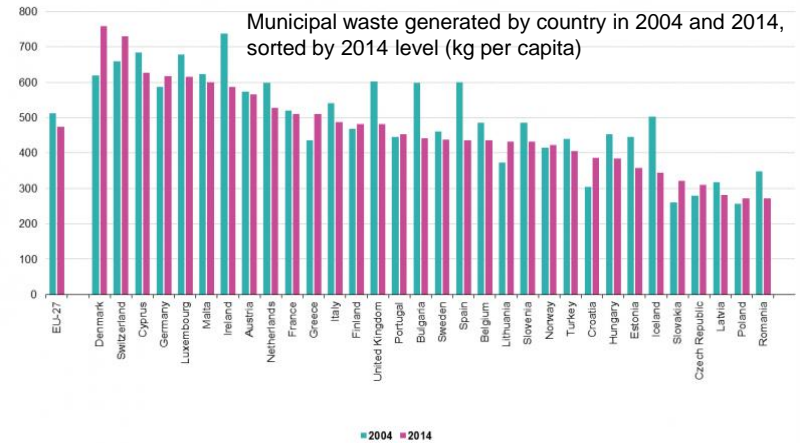


Waste hierarchy: change of priorities in waste management strategies



Municipal waste management in the EU

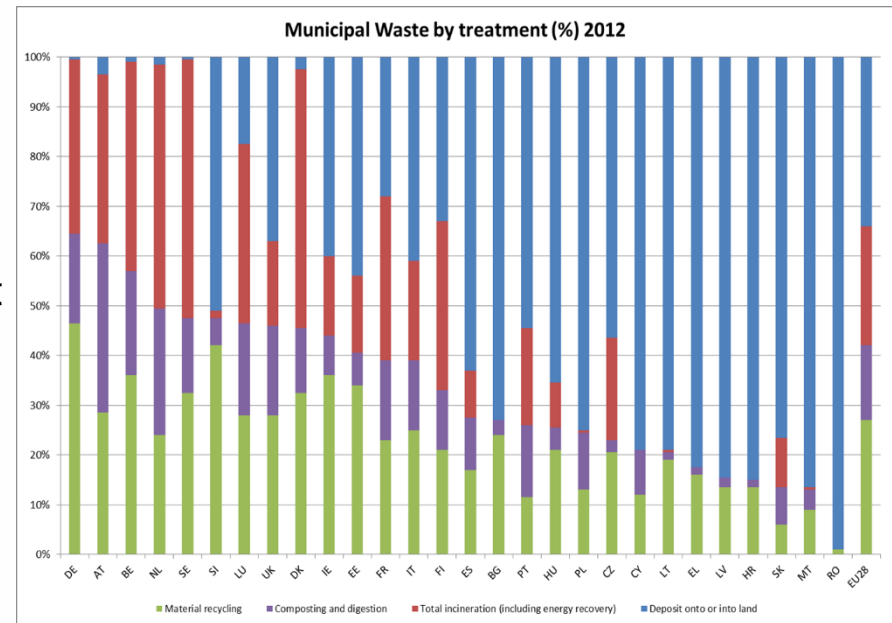
- Waste generation in decline
- EU approach to waste management is based on the waste hierarchy
- The shift in waste management is closely linked to EU waste legislation
- EU legislation sets ambitious targets (the Waste Framework Directive along with other EU waste directives on landfilling, end-of-life vehicles, e-waste, batteries, packaging waste, etc.)
- Overall in the EU, an increasing amount of waste is recycled and a decreasing amount is sent to landfills



Eurostat

Municipal waste management in different member states

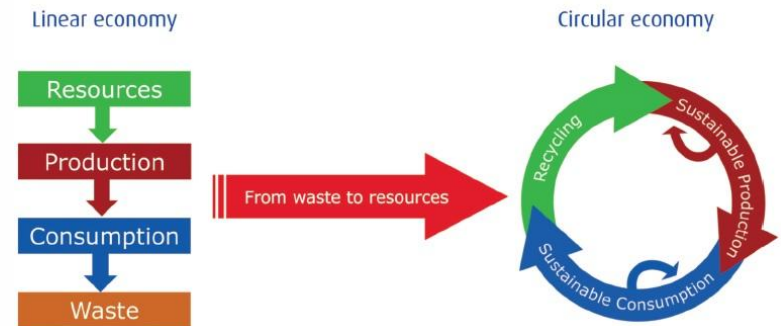
- EU countries can adopt different approaches in order to reach their waste targets
- Large discrepancies still exist between countries
- Some approaches seem to work better than others
- National and local policies have a significant influence on municipal waste recycling targets
- Landfill taxes can play important role in shifting up the waste hierarchy
- Right set up of EPR schemes is important
- Many countries still need to make an extraordinary effort in order to achieve the targets



Eurostat

Circular Economy – waste as a resource

- European Commission has adopted an ambitious new Circular Economy Package to stimulate Europe's transition towards a circular economy
- Key elements of the revised waste proposal include:
 - target for recycling 65% of municipal waste by 2030;
 - target for recycling 75% of packaging waste by 2030;
 - A binding landfill target to reduce landfill to maximum of 10% of all waste by 2030;
 - A ban on landfilling of separately collected waste;
 - Promotion of economic instruments to discourage landfilling ;
 - Simplified and improved definitions and harmonised calculation methods for recycling rates throughout the EU;
 - Concrete measures to promote re-use and stimulate industrial symbiosis – turning one industry's by-product into another industry's raw material;
- A clear signal to economic operators that the EU is using all the tools available to transform its economy, opening the way to new business opportunities and models



Development of municipal waste management in Estonia

Closing old landfills and open dumps

- High number of dumping sites, ‘behind the corner’ and mostly ‘free of charge’ until early 2000-s
- No motivation to recover/recycle waste
- 2001-2007 - rapid economic development and high growth rates of municipal waste
- Closure of old landfills, 5 new EU compliant landfills in 2010
- The waste management market in Estonia became to a great extent controlled by the private sector



From landfilling to recovery

- Relatively high landfill tax together with ban for landfilling of unsorted MSW have resulted in favourable conditions for the development of new waste recovery facilities in Estonia (MBT, WtE plant in Tallinn)
- As a result less than 10% of municipal waste is landfilled
- Overcapacity in mixed municipal waste treatment (landfills, MBT, incinerator)
- This has negative impact to separate collection and recycling schemes and therefore challenge the fulfilment of future recycling targets



Efficiency of producers responsibility schemes

- Packaging waste constitutes the biggest share in the recycled waste stream
- Several problems with producer responsibility schemes
- High share of impurities in source separated packaging waste
- The deposit system in Estonia has proven to be an effective measure in addressing the away-from-home consumption and recovery of beverage packaging waste



The role of municipalities and liberalisation of waste management market

- The increased liberalisation and free competition pressure from the government has led to the situation where the waste management market in Estonia is in a high content controlled by the private sector
- Many small municipalities, most of the municipalities have not joined waste management cooperation structures
- Municipalities have very limited ability to coordinate and control the municipal waste management system. This has occasionally caused legal problems regarding the ownership of the waste.
- The extremely liberal waste management market has led to intense commercial competition between different privately owned waste recovery facilities and companies
- No interest to develop source separation and recycling capacity

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Issues to consider

- Waste management data – data quality and reporting methodologies
- Combination of economic and regulatory instruments – gate fees and regulatory restrictions play an important role in shaping waste management decisions
- Planning of waste management infrastructure
- The role of municipalities - ability and willingness of local authorities to regulate and control the waste sector plays a crucial role
- EPR schemes - competitive issues, sharing costs and responsibilities

Whether waste will constitute a problem or a resource all depends on how we manage it.

Thank you!

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