Waste management in Austria – Waste legislation in Austria
Overview

Austrian situation
  » Waste generation
  » Waste treatment
  » Waste management plants

Austrian waste legislation
Austrian situation
Waste Management in Austria

• AUSTRIA

Area: 83859 sq.km
Population: 8.44 Mio (2011)
Waste Management in Austria

- TOTAL WASTE VOLUMES

53.5 million tonnes per year (2009)

- Waste from households and similar establishments (18.5%)
- Municipal sewage sludge and faecal sludge (7.2%)
- Waste from trade and industry (4.2%)
- Waste from demolition and construction (12.7%)
- Waste wood without wood packaging (8.3%)
- Ash, sludge from thermal waste treatment (2.4%)
- Green waste, street sweepings, market waste (2.2%)
- Excavated material
- Other waste
Waste Management in Austria

• WASTE TREATMENT (2009)

- Thermal treatment
- Waste collected for the purpose of treatment and recovery
- Other treatment
### Waste Management in Austria
#### Treatment plants (Number of plants 2010)

<table>
<thead>
<tr>
<th>Type of Plant</th>
<th>Number of Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-technical plants for separately collected biogenous waste (Composting plants)</td>
<td>466</td>
</tr>
<tr>
<td>Biogas plants</td>
<td>157</td>
</tr>
<tr>
<td>Bio-technical pre-treatment plants for residual waste (MBT)</td>
<td>16</td>
</tr>
<tr>
<td>Recycling plants</td>
<td>48</td>
</tr>
<tr>
<td>Chemico-physical treatment &amp; recycling plants</td>
<td>43</td>
</tr>
<tr>
<td>Sorting plants for separately collected waste</td>
<td>182</td>
</tr>
<tr>
<td>Thermal treatment (without treatment of municipal waste)</td>
<td>96</td>
</tr>
<tr>
<td>Incineration plants for municipal waste</td>
<td>10</td>
</tr>
<tr>
<td>Landfills for residual waste, mass waste, demolition waste &amp; excavated soil</td>
<td>666</td>
</tr>
</tbody>
</table>
Waste Management in Austria

Treatment of household and similar waste 2009

~3,895 Mio t

ST special treatment
TT thermal treatment
R recovery
MR material recovery
Waste management in Austria

Separate Collection

Separately collected household waste and similar waste

• Paper
• glass – packaging waste
• Metals
• textiles
• Plastics – packaging waste
• Bio - waste
• others: cooking oil, bulky waste (waste wood)
Waste Management in Austria

Waste from households and similar establishments
Quantity generated, recovery and disposal between 1989 and 2009

in % by mass
First treatment pathways:

- Green: recovery of biogenic waste, particularly from separate collection and from green waste
- Light green: recovery of recoverables, especially from separate collection
- Blue: treatment of hazardous household waste and waste electrical and electronic equipment from separate collection
- Red: thermal treatment (incineration or co-incineration)
- Yellow: biotechnical treatment in (mechanical-)biological treatment plant
- Brown: landfilling

Graph showing trends from 1989 to 2009.
Austrian waste legislation
Waste legislation

Responsibilities

Shared competence

- Federal government
- Provinces

Competence as regards non hazardous municipal waste (household waste and similar waste)

- Requirements for collection
- Fees
Waste legislation

Overview of waste law

• Waste Management Act (1+9)
• Clean-up of Contaminated Sites Act

Ordinances – Material/waste stream related

• Compost Ordinance
• Ordinance on the Separate Collection of Biowaste
• Waste Treatment Obligations Ordinance
• Ordinance on the Separation of Construction and Demolition Waste
Waste legislation

Ordinances - product related
• Packaging Ordinance
• End-of-life Vehicles Ordinance
• Electrical and Electronic Equipment Ordinance
• Battery Ordinance

Ordinances - plant related
• Landfill Ordinance
• Waste Incineration Ordinance
• Ordinance on Mobile Plants
Waste legislation

Other Ordinances

- Waste Balances Ordinance
- Ordinance on Waste Recording and Reporting
- Waste Classification Ordinance

- EC-Waste Shipment Regulation
Waste legislation

Waste Management Act

Principles

• Waste organisation –
  » Precaution and sustainability
  » No negative impacts on humans, animals, plants
  » Reduction of emissions
  » Conservation of resources
  » No greater hazard potential of recycled materials than comparable primary raw material
  » No endangering of future generations by the residual waste

• 5-step hierarchy
Waste legislation

Waste Management Act

Obligations of the waste holder

• General obligations – collection, transport, storage, treatment
• Special treatment obligations eg. for waste containing PCB
• Recording obligations
• Delivery of hazardous waste - Declaration with consignment note
• Transport of hazardous waste – consignment note has to accompany the transport
• Reporting obligation of the waste producer of hazardous waste
• Registration obligation for notifier (and obligation to update data in electronic register)
Waste legislation

Waste Management Act

Additional Obligations of waste collector / waste treatment operator

• Reporting obligations of data of consignment notes
• Electronic reporting of an annual waste balance
• Annual electronic reporting by landfill owner
• Emission reporting obligation by incinerators
• Treatment of hazardous waste - in specific cases obligation to appoint a waste management manager
Waste legislation

Waste Management Act

Plant related measures
- Waste management concept
- Waste manager

Requirements for waste treatment plants
Requirements for permits
Waste legislation

Waste Management Act

Waste Management Plan
- Current waste management situation in Austria
- White Paper of Austrian waste management
- Description of state of the art
- revised and published on the internet in 2011

Waste Prevention Programm
- Aim - Decoupling of economic growth and the environmental impacts associated with the generation of waste
- Waste prevention measures (eg construction and demolition waste, food waste, Re-use)
- Benchmarks
- Published in 2011
Waste legislation

Recycling targets

• By 2020 preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households and similar waste from - 50 % by weight;
• By 2020 the preparing for re-use, recycling and other material recovery (including backfilling operations) of non-hazardous construction and demolition waste (excluding soil) - 70 % by weight.

• Calculation methods determined by European Commission
• calculation of household waste in Austria: paper, metal, plastic and glass and other types of household or similar waste (e.g. bio-waste)
• Monitoring by Austrian Waste Management Plan
Waste legislation

Landfill Ordinance

• Determination of the state of the art for landfill sites
• Waste acceptance procedures for waste landfilled
• Financial surety for landfill sites
• Landfilling ban for biodegradable waste (if TOC exceeds 5%)
Waste legislation

Compost Ordinance

- Determination when compost ceases to be waste
- Treatment obligations for composting
  - Determination of the input materials
  - Quality requirements for compost
  - Obligation - quality management system
- Determination of application areas
Waste legislation

Ordinance on the Separate Collection of Biowaste

- Organic waste suitable for aerobic and anaerobic recovery
  - waste from gardens and parks,
  - vegetable waste from the preparation of food
  - vegetable residues from the processing of agricultural and forestry products
- Obligation of the waste owner to collect separately
Waste legislation

Ordinance on classification of waste

• List of hazardous and non hazardous waste
• Classification of waste as hazardous

Waste balances Ordinance

• Requirements for electronic recording
• Requirements for electronic reporting of annual waste balance
Waste legislation

Clean-up of Contaminated Sites Act

• basis for funding grants for projects concerning identification of suspected contaminated sites and the remediation of contaminated sites

• Determination of tariffs for disposal and thermal treatment of waste