

## Biodegradable waste management in Slovenia

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## Slovenia



Total area: 20 273 km<sup>2</sup>  
 Population: 2 millions  
 Population density: 99 inh/km<sup>2</sup>  
 Forests cover: 66% of territory  
 Agricultural areas: 27,8%  
 Specially protected: 11% of territory



## Waste legislation

⇒ The legal basis for waste management in Slovenia represents the **Environmental Protection Law (EPL)**. EPL was accepted already in 1993, and has been amended twice in the last ten years. On its basis many regulations covering waste management has been issued, mostly as **Government's Decrees**.

The most important is the

⇒ **Decree on waste management**, which together with EPL provides an overall legislative framework and policy objectives for the handling of waste in Slovenia, transposing the EU Waste Framework Directive.

⇒ **Decree on the landfill of waste**

lays down the permitted quantity of biodegradable components in municipal waste that may be landfilled

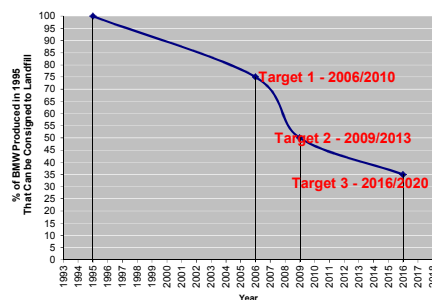
⇒ **Decree on the management of organic kitchen waste and garden waste** (Official Gazette of the Republic of Slovenia, no. 32/2010)

⇒ **Decree on the treatment of biodegradable waste** (Official Gazette of the Republic of Slovenia, no. 62/2008) → currently in revision



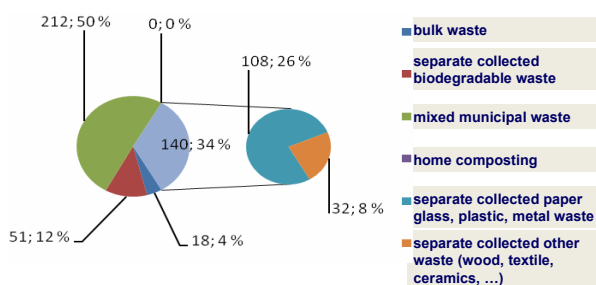
## Decree on the landfill of waste

→ lays down the permitted quantity of biodegradable components in municipal waste that may be landfilled



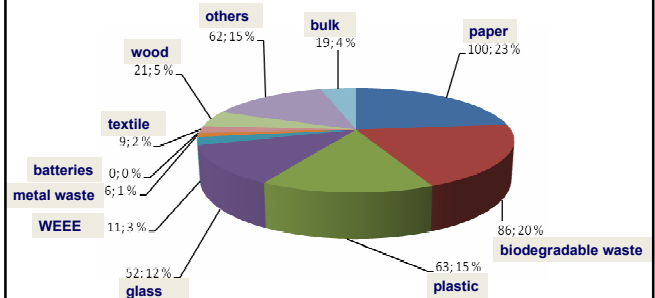
## Waste management situation in 2011

kg/inh; percentage (%)



## Composition and amount of municipal waste in 2011

kg/inh; percentage (%)



**Decree on the management of organic kitchen waste and garden waste**

Decree deals with kitchen waste (20 01 08) and garden waste (20 02 01)

Decree lays down the **mandatory separate collection** of the biodegradable waste on the whole territory of Slovenia since July 2011.

- ⇒ from households ⇒ **local public service for municipal waste management** ⇒ **compost plants**
- ⇒ from catering ⇒ **collector** ⇒ **biogas plants**

**Household kitchen waste**



**Aerobic treatment** → **Composting**

**Catering waste**



**Anaerobic treatment** → **Biogas plant**

**Biogas and composting plants in Slovenia**

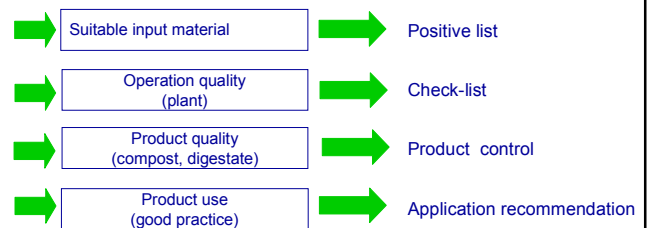
- 11 composting plants with the capacity of 60,000 t
- 23 biogasplants for agriculture and biodegradable waste with an installed capacity of 26,6 MWe



**Decree on recycling of biodegradable waste and use of compost and digestate (draft)**

- ⇒ requirements for recycling of biodegradable waste
  - ⇒ aerobic treatment – composting
  - ⇒ anaerobic treatment – biogas plant
- ⇒ use of compost and digestate
  - ⇒ for agriculture and non agriculture purposes
- ⇒ to set up the national standards for treatment of catering waste, mainly separately collected from household and treated in an open windrow compost system (as defined in Directive 1096/2009 (Animal By Product Regulation) art. 15(2)(ii))
- ⇒ to establish the evidence of the quality of feedstock (positive list)
- ⇒ to introduce requirements on treatment processes and techniques
- ⇒ to provide monitoring evidence of the processes to check indirectly product quality
- ⇒ to set up the thresholds values for compost and digestate and set up the quality class
- ⇒ to lay down the requirements when compost and digestate cease to be waste and become a product
- ⇒ to assure that the risk assessment is carried out by an accredited laboratory
- ⇒ to set up the declaration of the product for the defined purpose

**Quality management**



**Thank you for your attention!**

