Managing Biodegradable Waste in Bulgaria

Eva Galabinova, Chief Auditor

Dimitar Dimitrov, Auditor

Definitions

"Biodegradable waste" is any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, paper, cardboard and other.

"Bio-waste" is biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants

"Biomass" means products that consist of plant matter from agriculture or forestry, which can be used for the purpose of recovering its energy content as well as the following types of waste: vegetable waste from agriculture; vegetable waste from the food processing industry; waste from pulp production, cork waste and waste from wood processing.

Classification of Biodegradable Waste in Terms of its Collection

Bio-waste from the municipal systems for separate collection

- Households
- Restaurants
- Marketplaces
- Retail premises

- Green and garden waste from public parks

Bio-waste from industrial sources (not using the municipal system for collection)

- Gardening and landscape activities
- Companies producing agricultural products

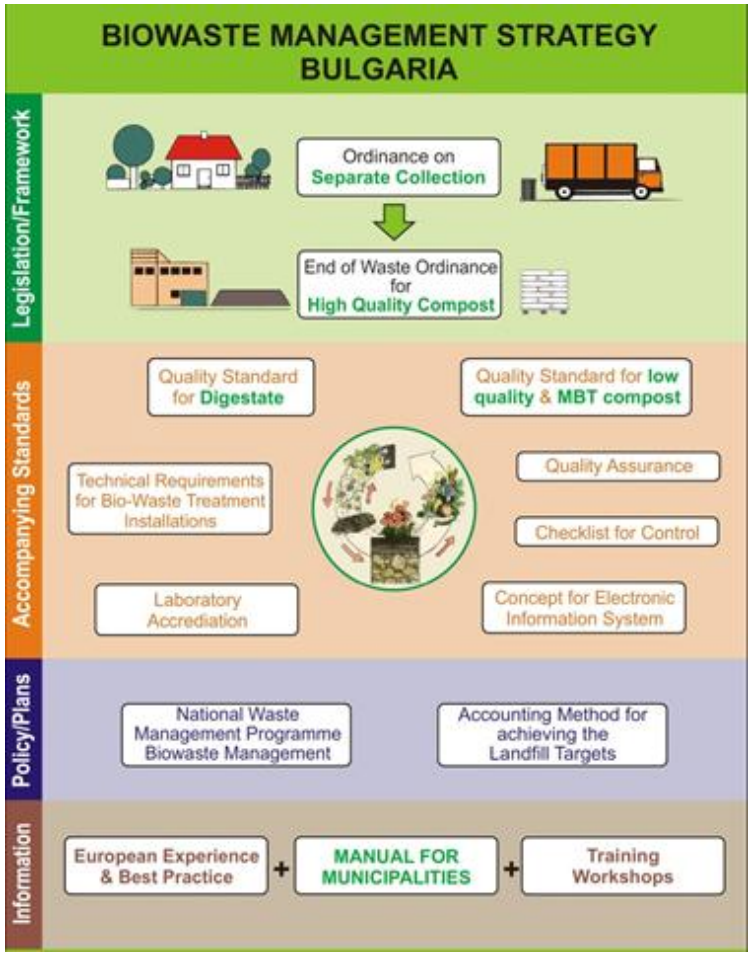
Classification of Biodegradable Waste in Terms of its Treatment

Waste for biologic treatment of plant origin (no residual animal waste or meat)	Waste for biologic refinement, including of animal origin
• From gardens and parks • From consuming food and beverages • From retail premises or from agriculture and industry • Other organic waste • Processed residue from anaerobic decomposition of waste materials	• From food waste from households and public catering establishments, • From fodder and manure; • From processing meat and fish • From the dairy and bread manufacturing industries

Regulatory Framework

- **National legislation**
- Waste Management Act, 2003
- Ordinance for the treatment of biowaste, 2013
- Ordinance for the separate collection of biowaste, 2013
- Ordinance on packaging and packaging waste, 2012

- **European legislation**
- Directive 94/62/EC - Article 14
- Directive 1999/31/EC - Article 5
- Directive 2008/98/EC - Ch. 1, Art. 3



Potential and Trends

	2009	2010	2011	2012
Average for EU -27	122	125	129	132
Bulgaria	119	136	122	103

- Recycled waste is decreasing as per 2012 (kg. per person per year)
- Over 50% of municipal waste is biodegradable - includes garden and green waste, food waste, paper, cardboard and other biodegradable waste.

- In recent years there has been improvement in the indicator composted municipal waste per person, but the large gap to the EU average has not yet been overcome. The reasons are rooted in insufficient number of facilities for utilization of biodegradable municipal waste.
- In 2013, legislation on biodegradable and bio-waste was adopted, which combined with economic instruments such as taxes per ton of deposited waste has led to positive trends.

Potential and Trends

Biomass potential in Bulgaria

	Unused quantities
Tree branches and twigs	315 000 м^3 /y
Industrial wood residues	50 000 t dry mass/year
Solid agricultural waste, including:	
Straw	542 900 t/year
Corn stalks	1 079 808 t/year
Sunflower stalks	762 000 t/year
Vine twigs	136 000 t/year
Branches from fruit-trees	47 120 t/year
Tobacco stems	40 000 t/year

Target Values

Key indicator: No later than 31 December 2020: limiting the quantity of biodegradable municipal waste deposited in landfills to 35 % of the total quantity of such waste generated in Bulgaria in 1995.

Regional target values for separate collection and re-use of municipal waste:

Deadline	Based on the municipal waste generated in that region in 2014
31 December 2016	No less than 25 %
31 December 2020	No less than 50 %
31 December 2025	No less than 70 %

Stakeholders and responsibilities

- Ministry of Environment and Water
- Regional Environment and Water Inspectorates
- Municipality administrations and Mayors (55 Regional Waste Management Associations in Bulgaria)
- Everyone who produces or treats waste

Challenges

- Unfinished systems for separate collection and treatment
- Insufficient know-how and training of personnel
- Population is not informed and stimulated enough to participate
- Need of funding

"I miss the days when you could chuck stuff in the bin and not have to think about it for ten minutes."

Good practices

- Projects funded by EU under the Operational programmes
- Incentives for municipalities
- Collection and re-use of waste from parks and gardens
- Collection and recycling of paper and cardboard
- Home composting

Thank you for the attention!