

Municipal waste management



North Macedonia 

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Country	North Macedonia
General facts	
<ul style="list-style-type: none"> • Surface area 25 713 km²; population 2 100 025; population density (inhabitants/square km) 81.7; total gross domestic product (GDP) USD 29.52 billion; GDP per capita USD 14 500; degree of urbanisation 57.1 % of total population, annual rate of urbanisation 0.11 %. Economy (% of GDP): agriculture 8.4 %; industry 25.2 %; services 66.5 % 	
Status quo	
<p>In North Macedonia, most municipal disposal sites are not regulated or licensed, leading to a vast number of illegal dumpsites. Additionally, there are many industrially contaminated hotspots. Due to organisational and staffing issues, there are cost recovery and financing problems. Also, there are shortcomings in generating and sharing reliable data.</p>	
Legal framework	
<ul style="list-style-type: none"> • 2004 Law on Waste Management • 2005 Law on Environment • 2007 National Strategy for Environmental Approximation, Waste Sector • 2009 Law on Packaging and Packaging Waste Management • 2010 Law on Batteries and Accumulators and Waste Batteries and Accumulators • 2012 Law on Management of Electrical and Electronic Equipment and Waste Electrical and Electronic Equipment • National Waste Management Strategy 2008-2020 • National Waste Management Plan 2009-2015 	
Objectives	
<ul style="list-style-type: none"> • Regulate the ways of handling, labelling, treatment, processing, storage and removal of waste from asbestos and waste from products containing asbestos • Reduce use of plastic bags • Develop an integrated regional waste management system • Increase investments in waste separation and recycling 	
Specific targets	
<ul style="list-style-type: none"> • As regards reducing biodegradable waste sent for landfill, a programme for reducing biodegradable waste was prepared in 2012, with support from the Netherlands Government. Targets for the reduction of biodegradable waste going to landfill set by the Rulebook on the quantity of biodegradable waste that could be landfilled are as follows: 25 % reduction of biodegradable waste going to landfill by 2017, 50 % reduction by 2020 and 65 % reduction by 2027 	
Waste management	
<ul style="list-style-type: none"> • Waste generation total in 2015: 26 052 500 tonnes • Two thirds of waste is generated in the mining sector • Municipal solid waste (MSW) is only 1.61 % • No organised collection system for end-of-life vehicles (17 500 tonnes/year), usually collected by the informal sector, but a system is in place for collection of waste electrical and electronic equipment (WEEE) • Batteries and accumulators are separated by consumers and collected by collection companies 	
Recycling	
<ul style="list-style-type: none"> • An integrated regional waste management system is a priority and investments need to increase, particularly those focusing on waste separation and recycling 	

- A coherent national policy promoting municipal waste recycling has not yet been developed and there are no investment programmes aimed at creating the necessary infrastructures at the municipal level. Yet, systems for separate collection and recycling of packaging waste are in place
- Some sporadic measures have been taken (distributing waste bins and containers intended for recycling)
- Collection and recycling of recyclable materials is limited and undertaken by the informal sector and private companies
- 2012 recycling rates: glass 0.31 %, plastic 19 %, paper and cardboard 18 %, metal packaging 4 %
- 2015 recycling rates: glass 10.01 %, plastic 44.36 %, paper and cardboard 59.89 %, metal packaging 1.47, wood 7.37 %

Landfilling

- Hazardous and industrial solid waste is usually disposed at industrial landfill sites, together with other waste from processes, or at municipal landfills, together with other waste (clearly this is not compliant with the current legal framework)
- It is estimated that around 5 000 tonnes of industrial non-hazardous waste is disposed at municipal landfills, together with around 500 tonnes of industrial hazardous waste
- Compliance and enforcement are not adequately developed
- Total deposits are estimated at 267.6 million m³, covering an estimated 260 ha of land (UNECE, 2011, p. 138)
- There are numerous illegal dumpsites where smaller communities and villages in rural areas dispose their waste (around 1 000 sites)
- 2008: 78 % of collected municipal waste was landfilled (EEA, 2015)
- 2012: 99.74 % of collected municipal waste was landfilled (due to increased coverage of the nationwide MSW collection system) (EEA, 2015)

Incineration

- One incinerator has been in operation since 2000
- Maximum capacity is 1 tonne/day
- There are plans for a new incineration plant with higher capacity and capacity to co-incinerate

Other problems

No information

Initiatives taken to improve municipal waste management

- Two Instrument for Pre-accession Assistance (IPA)-funded projects were started at the end of 2015, one being related to preparation for a feasibility study, environmental impact assessment (EIA) and tender documentation for establishing a waste management infrastructure for the north and north-east region of North Macedonia where measure to deal with biodegradable waste are proposed
- The second project is related to the preparation of regional waste management plans, feasibility studies, EIA and tender documentation for establishing a waste management infrastructure for four waste management regions: Vardar, Pelagonia, Southwest and Skopje regions
- Landfills have been classified as landfills for municipal, hazardous, non-hazardous and inert waste, out of which 55 are municipal and 16 are industrial landfill sites. The Ministry of Environment and Physical Planning adopted a National Plan for Closure of Non-compliance Landfills in 2012, prepared with support from the Swedish Government. According to this plan, North Macedonia has 55 municipal landfills that do not comply with the requirements. So far, only one landfill (Drisla in Skopje) has obtained an adjustment permit and has been granted a transitional period for complying with the law. The other 54 landfills in North Macedonia will be

closed. The legal framework for closure and aftercare procedures has been established, including two sets of guidelines prepared in 2012. An effective inspection and enforcement system is already in place

Possible future trends

- Monitoring and information systems need further development and investment to strengthen institutional capacities at central and local level. Coordination between institutions and public participation in decision-making processes need to be emphasised and improved

Sources

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