

MUNICIPAL WASTE MANAGEMENT

17 April 2023

Nr. VAE-2

SUMMARY

The Relevance of the Audit

In Lithuania, 6.9 million tonnes of waste will be generated in 2021, of which 1.345 million tonnes (20%) will be municipal waste (about 479 kg per capita). In 2021, 596 thousand tonnes (44.33%) of municipal waste were recycled or exported for recycling. The use of non-recyclable materials in products and packaging, the improper management of the waste generated and the inadequate sorting of waste by the population have led to 680 000 tonnes (50.52%) of waste being incinerated for energy production or disposed of in landfill sites, whereas recycling or re-use of such waste should be encouraged.

To meet the EU targets, Member States should recycle or re-use at least 55% of municipal waste by 2025, and the amount of municipal waste disposed of in landfills should not exceed 10% by 2035. To achieve these targets, the National Waste Prevention and Management Plan 2021-2027 was developed and approved in 2022, setting out tasks and measures.

In order to manage municipal waste efficiently and effectively, the amount of waste generated must be reduced, waste must be properly sorted, and the remaining waste must be managed in the most efficient and least environmentally damaging way..

Objective and Scope of the Audit

The objective of the audit is to assess whether municipal waste is managed efficiently.

Key audit questions:

- whether the municipal waste collection system is operating effectively and efficiently;
- whether the waste collected is treated in a way that achieves the EU targets for municipal waste management.

Audited entities:

- Ministry of Environment: formulates state policy on waste management, regulates and coordinates waste management, monitors the implementation of the requirements and tasks set, and supervises state control of environmental protection.
- Environmental Protection Agency: receives, collects, processes, summarises and analyses accounting data on waste generation and management, prepares and disseminates statistical information based on these data.
- Department of Environmental Protection: carries out control and prevention of waste management, monitors whether waste accounting is being carried out properly and whether correct waste accounting data are being reported.

We collected data and information from the Lithuanian Association of Regional Waste Management Centres and municipalities.

The audit period is 2014-2020; to assess changes, we also used data from the previous year and 2021.

The audit was carried out in accordance with international standards of supreme audit institutions. The scope of the audit and the methods used are described in more detail in Annex 2 "Audit scope and methods" (page 37).

Key audit results

The municipal waste management system would be more efficient if residents were provided with the conditions and motivation to separate waste properly, and if it ensured that the waste collected was treated and managed in accordance with the waste hierarchy.

1. Municipal waste collection system to be improved

- Despite an increase in the share of the population sorting municipal waste from 40% (2016) to 60% (2021) and an increase in awareness of waste management of around 74-80% between 2015 and 2021, the share of secondary raw materials in mixed municipal waste has remained stable at around 33% due to the poor sorting. Without proper separation of waste at source, the recycling targets for municipal waste will not be met (Section 1.1, page 11).
- Due to differences in the organisation of municipal waste management processes and costs, the average monthly per capita costs for municipalities for the management of municipal waste in 2021 varied by as many as 5 times, i.e. from EUR 0.8 (Rokiškis district) to EUR 4.0 (Molėtai district) (Section 1.1, page 11).
- Mixed municipal waste collected in municipalities is not weighed or otherwise recorded at the time of collection in order to attribute the actual quantities of waste managed to the population, which does not ensure that the waste management fee set for this type of waste encourages proper waste sorting and thus reduces the amount of mixed municipal waste (Section 1.1, page 11).

- Inadequate sorting of waste results in 33% of the waste in mixed municipal waste being packaging, the management of which must be paid for by producers or importers in accordance with legal requirements, and other secondary raw materials. Therefore, the cost of managing packaging in mixed municipal waste is actually borne by the population (Section 1.1, page 11).
- In order to manage all household waste, a municipal waste collection service must be available, but in 19 municipalities this service is not available to the entire population, which does not ensure that all household waste is collected and properly managed (Section 1.2, page 16).
- By 2021, 118 bulky waste collection sites had been set up in the municipalities, and only four municipalities do not have the required number of sites, which means that these municipalities do not provide sufficient conditions for the population to manage their bulky waste properly (Section 1.2, page 16).

2. It is essential to ensure that waste management follows priorities

- The introduction of the packaging deposit scheme and the expansion of sorting infrastructure has resulted in a 25% reduction in mixed municipal waste in 2021 compared to 2011 (from 0.97 to 0.72 million tonnes). However, due to the limited capacity of mechanical and mechanical-biological treatment facilities and the low price of the secondary raw materials (paper, glass, plastics, etc.) collected there, only 20.5 thousand tonnes (8.5%) of the 240.2 thousand tonnes of secondary raw materials contained in mixed municipal waste were separated and prepared for recycling in 2021. Without proper sorting of municipal waste and sufficient capacity to treat secondary raw materials, the recycling targets may not be met (Section 2.1, page 20).
- Recycling capacity for secondary raw materials has remained almost unchanged since 2012 and there is a lack of modern and efficient technologies in the recycling sector. As a result, the amount of paper and cardboard, metals, plastics and glass waste in the municipal waste stream that would be prepared for reuse and recycling reached 42.4% in 2020, out of the 50% envisaged in the State Waste Management Plan 2014-2020 (Section 2.2, page 22).
- By 2021, 717.85 thousand tonnes of mixed municipal waste was treated in mechanical and mechanical-biological treatment plants, but due to the underdevelopment of the sorted municipal waste collection system and inefficient waste treatment plants, around 219.7 thousand tonnes of secondary raw materials contained in this waste were incinerated for energy recovery or disposed of in landfills, which does not ensure that recycling of the appropriate secondary raw materials is achieved (Section 2.2, page 22).
- The introduction of mechanical and mechanical-biological treatment and new incineration plants in the regions has led to a reduction of municipal waste landfilling by more than 3.5 times (from 58.85% to 15.36%) between 2014 and 2021. Landfilling is prohibited for untreated waste that is suitable for recycling or other recovery after treatment, but in 2021 alone, 17,100 tonnes of waste suitable for recycling or other recovery were disposed of in landfills, without ensuring that it is managed in the safest way possible for human health and the environment (Section 2.2, page 22).

- In order to ensure the monitoring of the implementation of the tasks envisaged in the State Waste Management Plan 2014-2020, all authorities responsible for the implementation of the measures envisaged in the Plan were required to report to the Environmental Protection Agency on the implementation of the measures envisaged for them. 59 municipalities submitted reports in 2018, 58 in 2019 and 57 in 2020, while the other authorities did not, making it impossible to assess whether the tasks have been fulfilled and to take appropriate measures to address the problems identified (Section 2.3, page 27).
- The Environmental Protection Agency should have carried out an annual assessment of the annual reports submitted by waste producers and handlers through the Uniform Information System for the Accounting of Products, Packaging and Waste, but has not done so, which does not ensure that the reports submitted comply with the requirements set out in the Uniform Waste Accounting Information System, and that the data reported is accurate, complete and correct and that informed decisions are made on the basis of the information provided (Section 2.3, p. 27).
- 327 000 tonnes of municipal waste and 370 000 tonnes of packaging waste were imported into Lithuania for recycling in 2019-2021. Imported municipal waste is banned for disposal and/or incineration for energy recovery, but the lack of technical capacity to identify risks in cross-border waste shipments does not ensure control of the destination of waste imported into Lithuania (Section 2.3, page 27).

Recommendations

To the Ministry of Environment

1. To improve the sorting of municipal waste in order to reduce the amount of mixed municipal waste and the cost of its treatment, provide for additional measures (Key audit result 1).
2. To assess the actual provision of the municipal waste management service to the population in the municipalities, provide measures to assess the provision of the service (Key audit result 1).
3. To increase the amount of municipal waste ready for reuse and recycling, provide and implement measures to motivate municipal waste to be managed as a higher priority (Key audit result 2).
4. To have reliable and comprehensive data on municipal waste management for informed decision-making, ensure that annual reports on the implementation of the measures envisaged in the State Plan for Waste Prevention and Management 2021-2027 are prepared and submitted to the Environmental Protection Agency (Key audit result 2).
5. To have reliable and comprehensive data on municipal waste management for informed decision-making, ensure that quality and comparable data on municipalities' municipal waste management systems are provided to the Environment Agency in a timely manner on an annual basis (Key audit result 2).

6. To ensure that imported municipal waste is not incinerated or disposed of, provide for measures to control the destination of imported waste (Key audit result 2).

To the Environmental Protection Agency

7. To have quality data on municipal waste management for informed decision-making, ensure that the annual assessment of the annual reports submitted by waste producers and handlers to the Environment Agency is carried out on an annual basis in accordance with the established procedures (Key audit result 2).
8. The measures and timeframes for the implementation of the recommendations, the expected impact of the audit and the indicators for measuring change are set out in the section of the report 'Plan for the implementation of the recommendations' (p. 31). Up-to-date information on the status of implementation of the recommendations, results and developments is published in Lithuanian in open data on the National Audit Office website <https://www.valstybeskontrole.lt/LT/AtviriDuomenys>.