

## Recommendations for national policy in Poland to improve biodegradable waste management

An effective biodegradable waste management system is essential for implementing a circular economy and achieving climate neutrality goals. Achieving the targets set for biodegradable municipal waste requires the removal of many legal, technical and financial barriers. The role of government is to create the policy and legal framework and identify the necessary actions to be taken and delegate responsibility for achieving the targets to lower levels of government and other responsible parties. Transposition and implementation of EU, national, and regional laws and plans must take place at the local level.

### **Recommendation. Develop a long-term national biodegradable waste management plan.**

Strategic waste management plans at the national and regional levels are an element that reinforces the policy and regulatory framework and supports the achievement of the set targets.

The availability of infrastructure for the treatment of biowaste is key to achieving the targets. Existing and planned plant capacity must ensure that the biodegradable waste generated in the area can be treated. Prior planning is needed to build new or expand existing biodegradable waste treatment facilities in line with recycling and recovery targets. Biodegradable waste treatment facilities should be planned in a way that guarantees economies of scale and the application of the proximity principle. They should also consider aspects concerning the manageability of the products and residues generated from the treatment processes.

The biodegradable waste management plan should identify targets and key actions at national and regional levels, including infrastructure and education activities, based on trends and needs analysis. The national plan should also present best practices in biodegradable waste management and recommendations on bio-waste collection models, feasible economic instruments, treatment processes and proper management of products and residues from treatment processes.

A biodegradable waste management plan could also include actions to achieve food waste prevention targets.

### **Recommendation. Update the waste data collection system to ensure improved data quality and completeness.**

The development of biodegradable waste management requires a data collection system that includes information on the handling of waste at the different stages of its management (from collection to treatment, to the management of waste generated after treatment processes). The completeness of data is essential for monitoring and reporting progress towards targets. Analyses of waste management performed based on the Database on Products and Packaging and Waste Management (BDO) indicate significant data gaps regarding the management of biodegradable waste. The BDO needs to be updated to ensure that the data is more complete.

One element of monitoring carried out in the last two years is the development and publication of analyses based on BDO data on municipal waste treatment. Such analyses should be developed annually and published to ensure monitoring of municipal waste treatment.

Data management systems should operate at local, regional, and national levels. The data collected should enable the definition of Key Performance Indicators (KPIs) for the biodegradable waste management system. The data collected should enable monitoring of progress towards targets as well as infrastructural capacity and organisational and economic aspects (including the effects of economic instruments). An element of monitoring should be regular testing of the morphological composition of individual fractions of municipal waste and a standardised way of testing the level of backyard composting of biodegradable waste, which is necessary for the calculation of recycling targets.

**Recommendation. Identify and apply Key Performance Indicators (KPIs) in monitoring and evaluation of biodegradable waste management.**

To evaluate the biodegradable waste management system, it is necessary to have monitoring and control mechanisms at all levels of government. For this purpose, it is necessary to define indicators adapted to national needs. Such indicators allow, on the one hand, for an ad hoc control and evaluation of the effectiveness of the biodegradable waste management system and, on the other hand, for a trend analysis, which can help to identify future challenges and opportunities in waste management.

KPIs can also provide the data needed to make strategic decisions, such as investing in new waste treatment technologies, expanding infrastructure or introducing new educational programmes.

As waste management is based on waste segregation at source, the public needs to trust that the collection systems implemented and the fees paid by users translate into the achievement of the required targets. Governments and local authorities should report regularly and accurately on the status of the implementation of policies and plans.

A good step towards building public confidence in waste management is the obligation to develop and publish annual analyses of the state of municipal waste management. However, despite a seemingly uniform layout, not all analyses contain complete data to assess the waste management system in a municipality. The use of uniform performance indicators can be another of the elements of building public confidence in biodegradable waste management policies and strategies.

**Recommendation. Review, analyse and update the economic instruments used in municipal waste management.**

Economic instruments are one of the most effective tools to support public policies. A coherent system of economic instruments in waste management leads to a reduction in the amount of waste generated, an increase in recycling and recovery rates, optimisation of costs, and increased public awareness. It also allows the full external costs of waste management to be taken into account, thus diversifying waste treatment options in a way that promotes ways of managing waste that contribute to achieving the intended objectives. The national administration should aim to internalise the external costs of waste management and use economic instruments.

Landfill fees, gate fees in waste treatment facilities, and fees for waste collection from waste producers should form a coherent system that sends a clear signal to users regarding preferred collection and treatment options for waste, including biodegradable waste. Currently, the landfill fees for biodegradable fraction of municipal waste and non-segregated waste are the same. The gate fees for accepting municipal non-segregated waste for treatment in regional facilities are only slightly higher than those for biodegradable waste. The collection system for biodegradable waste is more expensive

than for non-segregated waste. The national administration should assess the effectiveness of the fees currently in place and adjust them so that options higher up the waste management hierarchy are more cost-effective. The use of variable charges for waste treatment depending on its quality (level of impurities) and the setting of impurities limits should also be promoted.

Uniform fees for waste collection, independent of the amount of waste generated, do not encourage waste reduction and increased segregation. The waste fee should be variable and dependent on actual waste generation (such as Pay-As-You-Throw, PAYT or Save-As-You-Throw, SAYT). The fee should reflect the actual costs, both direct and indirect, of waste collection, transport and treatment, recycling and final disposal operations.

At the same time, a combination of social communication and economic instruments should be sought in such a way as to create a system of incentives for the public leading to a change in behaviour and the achievement of higher levels of separate collection of municipal waste.

**Recommendation. Create a consistent incentive system for biodegradable waste management.**

An incentive system for the implementation of biodegradable waste management solutions increasing the level of selective collection and treatment is necessary to achieve the objectives.

Especially at the municipal level, where many municipalities face increasing difficulties in budgeting for the municipal waste management system, financial support is necessary.

At the same time, the role of the government administration should be to define the criteria for support and the mechanisms for monitoring the use of this support in such a way as to ensure the achievement of the objectives in terms of preventing the generation of biodegradable waste, increasing the level of selective collection and recycling.

**Recommendation. Conduct ongoing education on the collection and treatment of biodegradable waste.**

Education and raising public awareness are tools to increase public participation in the waste collection and treatment system. The aim should be to provide the necessary information and resources. The national administration should finance continuous and widely disseminated activities aimed at the general public.

Training and activities targeting politicians, professionals, waste producers and other key actors and stakeholders in the area of biodegradable waste collection and treatment should be an essential element. Politicians, government officials and professionals must have the skills to plan and implement effective solutions in the biodegradable waste management system. Technical guidance and access to know-how are needed for lower-level administrations to effectively implement planned solutions.

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