AI4 WASTE

FOSTERING AWARENESS AND INNOVATION IN ADULT EDUCATION

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TOOLKIT

[Overview of Waste Management in Portugal]

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SUMMARY



To avoid and reduce these impacts, waste policy focuses on its prevention and its use as a resource, continuing the life cycle of materials and returning materials and energy to the economy.

Waste policy also seeks to ensure the sustainable management of waste that cannot be prevented, ensuring efficient use of natural resources and promoting the principles of the circular economy.

Waste management is based on a hierarchy that promotes prevention first, followed by (preparation for) reuse, recycling, other types of recovery and, finally, disposal.

The management of waste collection, transport and treatment is regulated at the level of municipal waste and non-municipal waste, namely hospital and industrial waste, including hazardous waste. Some types of waste have a differentiated approach, designed to optimize their management - these are the specific waste streams: construction and demolition waste, waste batteries and accumulators, used oils, packaging and packaging waste, waste electrical and electronic equipment, used tires and end-of-life vehicles.

The APA, as the National Waste Authority, ensures and monitors the implementation of the national waste strategy and has licensing powers, monitoring of waste management activities and the issuance of technical standards. The APA also carries out the operational and administrative control of waste shipments in the national territory.

The APA ensures the collection and processing of waste information, ensuring the validation of the information necessary for the application of the economic and financial regime for waste management - Waste Management Fee (TGR).

The Regional Coordination and Development Commissions (CCDR) are Regional Waste Authorities and have their own competences in waste management.

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Overview of Waste Management in Portugal

The urban waste sector in Portugal has undergone significant transformations in recent years, driven by European directives and the growing concern for environmental sustainability. However, it still faces important challenges to achieve the established goals.

Current Situation:

Waste Generation: In 2023, Portugal produced 5.338 million tons of municipal waste, a slight increase compared to 2022. Per capita production is about 505 kg/inhabitant/year. (Source: APA [1])

Selective Collection: Although progress has been made in the selective collection of packaging (paper, plastic, metal and glass), the implementation of selective collection of bio-waste is still weak, despite the fact that it is expected to be mandatory since the beginning of 2024. The collection of textiles, furniture waste and other bulky waste and hazardous waste is expected to start in 2025. (Source: APA [2, 5])

Waste Treatment: A significant portion of municipal waste in Portugal is still landfilled (about 57%), which is a far cry from the target of 10% by 2035. This situation is aggravated by the limited capacity of landfills in mainland Portugal, which is in the process of being exhausted. (Source: Online Environment [4])

Infrastructure: Portugal has invested in waste treatment infrastructure, such as sorting plants and organic recovery units, but there is still a need for modernization and expansion to cope with the increase in waste production and recycling targets.

Legislation and Planning: The Strategic Plan for Urban Waste (PERSU 2020+) defines the guidelines for waste management in Portugal, with the aim of promoting prevention, reuse, recycling and energy recovery, and reducing landfilling. The Action Plans for Urban Waste Management (PAPERSU 2030) are derived from PERSU and detail the actions to be implemented at the municipal level. (Source: Sustainable Magazine [5])

Challenges:

Achieving Recycling Targets: Portugal needs to significantly increase recycling rates to meet European and national targets.

Reduce Landfilling: The high rate of landfill represents a major environmental and economic challenge. It is necessary to invest in alternatives such as composting, anaerobic digestion and energy recovery.

Implement Separate Biowaste Collection: Effectively implementing separate biowaste collection is crucial to increase recycling rates and reduce the amount of organic waste sent to landfill.

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Modernize Infrastructure: It is necessary to invest in the modernization and expansion of waste treatment infrastructure to ensure its efficiency and capacity to handle different types of waste.

Awareness and Education: It is essential to raise awareness among the population about the importance of correct waste separation and promote more sustainable consumption practices.

Financing: The implementation of new technologies and infrastructure requires significant investments.

Opportunities:

Circular Economy: The transition to a circular economy, in which resources are kept in use for as long as possible, represents a great opportunity for the waste sector in Portugal.

Technological Innovation: Adoption of new technologies, such as artificial intelligence, can optimize waste management, from collection to sorting and treatment.

Job Creation: The waste management sector has the potential to generate new jobs, especially in the areas of recycling and recovery.

In summary: The municipal waste sector in Portugal has evolved, but it still faces significant challenges to achieve sustainability goals. A joint effort by all stakeholders – government, municipalities, companies and citizens – is needed to implement the necessary measures and promote more efficient and environmentally friendly waste management. The commitment to innovation, environmental education and the effective implementation of public policies are crucial for the future of the sector.

Planning

The waste plans implement the national waste policy, giving shape to the objectives of waste prevention and its use as a resource, ensuring the efficient use of natural resources and returning materials and energy to the economy.

To this end, the plans define guidelines, objectives, actions and targets for waste prevention and management, at national level, which translate into action plans at municipal level.

In Portugal, the basic guidelines for waste policy are given by the following instruments:

National Waste Management Plan (PNGR);

Strategic Plan for Urban Waste (PERSU);

Strategic Plan for Non-Urban Waste (PERNU), which replaces the previous sectoral plans (Hospital Waste and Industrial Waste);

Bio-waste Strategy.

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The plans are developed in planning cycles (preparation, implementation, evaluation, review) that integrate a process of public participation with a view to actively involving key actors and the general population.

In 2020, public consultations were launched on the ongoing work to prepare the PNGR, PERSU and PERNU, for the 2030 horizon.

In 2022, the plan proposals were put out for public consultation, and in the case of PERSU and PERNU, with the respective Environmental Assessments.

The PNGR 2030 and PERSU 2030 were published in March 2023.

The APA is responsible for the preparation and implementation of these plans, including their follow-up and monitoring, whose approval is made by resolution of the Council of Ministers, after hearing the entities that make up the Waste Management Monitoring Commission (CAGER), in the case of PNGR and PERNU, and the National Association of Portuguese Municipalities, in the case of PERSU.

Waste Production and Management

In the General Waste Management Regime, obligations are defined for waste producers, with a view to its proper management.

Waste management integrates the activities necessary to control waste from its origin to its final destination, including its collection, transport and treatment, either by recovery or disposal.

These activities aim at the sustainable management of materials in order to ensure a rational use of natural resources and reduce pressure on ecosystems in order to protect, preserve and improve the quality of the environment and human health. Waste management promotes the principles of the circular economy and reduces dependence on imported resources, providing new economic opportunities and contributing to long-term competitiveness.

Waste management is based on the principle of waste hierarchy: prevention, reuse, recycling, recovery and disposal. This principle sets out the priorities in terms of waste action, policies and legislation.

Another principle of waste management is that the responsibility for waste management, including its costs, lies with the original producer of the waste, and this responsibility may be extended by law to the producer of the product that gave rise to the waste and shared by the distributors of that product. This principle does not apply to municipal waste, the management of which is ensured by municipal or multi-municipal systems.

Waste management operations are regulated and subject to licensing and take place in appropriate facilities that ensure a high level of protection of the environment and public health, preferably in national territory and close to the place of production of the waste.

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The APA, as the National Waste Authority, and the Regional Coordination and Development Commissions (CCDR), as Regional Waste Authorities, license and monitor waste management operations. Technical standards for waste management are issued by the APA.
All people and entities that produce waste must contribute to the prevention of waste and to ensure its separation, in order to enable the selective collection of waste and subsequent recovery.

To assess compliance with the legal requirements provided for in the waste legislation, the APA held a clarification session for auditors on January 19, 2024, with the following topics:
- Waste Declassification Mechanisms
- MIRR – Integrated Waste Registration Map
- Extended Producer and Authorized Representative Responsibility
- Waste landfills

Legislation
The General Waste Management Regime is established in Decree-Law No. 102-D/2020, of 10 December.

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