AI4 WASTE

FOSTERING AWARENESS AND INNOVATION IN ADULT EDUCATION

2023-2-PT01-KA210-ADU-000184346

TOOLKIT

[Main Challenges in Portugal]

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Authors

[To be defined]

Contributors

[To be defined]

Contact: https://ai4waste.eu

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SUMMARY

Urban waste management is a critical issue in Portugal, as it is in many developed countries. While significant progress has been made in recent years, several challenges remain that hinder the country's transition to a truly sustainable waste management system. These challenges stem from a combination of factors, including inadequate infrastructure, limited public awareness and participation, illegal dumping, high costs, the impacts of climate change, and coordination issues between different levels of government.

Addressing these challenges is crucial not only for environmental protection but also for economic development and public health. A sustainable waste management system is essential for a healthy and prosperous future for Portugal.

This overview will delve deeper into each of these challenges, exploring their specific impacts and the potential solutions that can be implemented to overcome them.

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Main Challenges in Portugal



The main challenges in the urban waste sector in Portugal are multifaceted and require an integrated approach to ensure more efficient and sustainable management. We can group these challenges into several categories:

1. Increased Waste Production:
It is not a problem of Portugal, but a global problem, the growth of population, consumption and economic activity has led to a significant increase in waste production. This requires continuous improvements in infrastructure and management efficiency.

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2. Compliance with European and National Targets:

Increased Recycling Rates: Portugal needs to significantly increase recycling rates to achieve the targets set by the European Union. This means improving separation at source, separate collection and the efficiency of sorting facilities.

Landfill Reduction: The high landfill rate is one of the biggest challenges. Portugal needs to divert waste from landfills and promote alternatives such as composting, anaerobic digestion and energy recovery, as stipulated in PERSU 2020+. The European landfill target is 10% by 2035, a challenging goal for Portugal.

Implementation of Selective Biowaste Collection: The mandatory selective collection of biowaste since the beginning of 2024 represents a logistical and infrastructure challenge for many municipalities. It is necessary to implement effective systems for the collection, treatment and recovery of this waste. The collection of textiles, furniture waste and other bulky waste and hazardous waste represents a similar challenge, scheduled to start in 2025.

3. Infrastructure and Technology:

Modernization of Treatment Infrastructures: Many waste treatment infrastructures in Portugal need to be modernized to cope with the growing amount and diversity of waste, as well as to optimize recycling and recovery processes.

Investment in New Technologies: The adoption of new technologies, such as artificial intelligence, automation, and robotics, can improve the efficiency of waste management, from collection to sorting and treatment. However, the initial investment can be a hindrance.

Limited Landfill Capacity: The limited capacity of landfills in mainland Portugal, which is in the process of being exhausted, requires the urgent search for alternative solutions for the treatment of the remaining fraction of waste that cannot be recycled or recovered.

4. Economic and Financial Aspects:

Sector Financing: The implementation of new infrastructure, technologies and collection systems requires significant investments. It is necessary to ensure adequate funding for the sector, through public, private and community funds.

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Treatment and Disposal Costs: The costs of waste treatment and disposal have increased, which represents a challenge for municipalities and citizens. It is necessary to find economically viable and sustainable solutions.
Incentives for Prevention and Recycling: It is important to create economic incentives to promote the prevention of waste generation, reuse and recycling, both for businesses and citizens.

5. Behavior and Awareness of the Population:
Environmental Awareness and Education: It is essential to raise awareness among the population about the importance of correct waste separation, the prevention of waste production, and the adoption of more sustainable consumption practices.
Civic Participation: It is important to promote the active participation of citizens in waste management, through awareness campaigns, environmental education programs, and community engagement initiatives.
Changing Habits: Changing consumption and production habits is essential to reduce the amount of waste produced and promote a more circular economy.

6. Management and Governance:
Coordination between the Different Stakeholders: Greater coordination is needed between the different actors in the sector – government, municipalities, waste management companies, associations and citizens – to ensure a more integrated and efficient management.
Implementation and Enforcement of Legislation: It is important to ensure the effective implementation of legislation and enforcement of compliance, to ensure the proper functioning of the sector and the achievement of the established goals.
Strategic Planning: Long-term strategic planning is crucial for developing a more sustainable and resilient waste management sector.
In summary, the challenges in the urban waste sector in Portugal are complex and interconnected. Overcoming them requires a joint effort from all stakeholders, with a focus on prevention, reuse, recycling, recovery and reduction of landfilling. Technological innovation, environmental education and the **effective implementation of public policies are key elements for success.**

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