

Municipal Waste Management Strategy 2021 – 2027



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Municipal Waste Management Strategy 2021 – 2027

- The Municipal Waste Management Strategy 2015 – 2021 provided the policy framework for the implementation of some key measures aimed at decentralising waste management in Cyprus
- The Waste Law was amended assigning responsibility to local authorities for the management of municipal waste and regulations have been prepared which:
 - require the adoption of local waste management plans and waste prevention programmes,
 - the establishment of separate collection systems for the different municipal waste streams, including organic waste and
 - the adoption of pay-as-you-throw (PAYT) schemes
- Their adoption by the House of Representatives is expected in the first half of 2022 and will be an important step towards meeting EU targets, significantly increasing separate collection and subsequently facilitating reuse and recycling

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- Recognizing that further work is needed to achieve compliance with EU objectives and to facilitate the drive towards the circular economy, the MARDE has prepared the Municipal Waste Management Strategy 2021-2027, defining the framework of actions and measures to be implemented over the next six years for the management of municipal waste
- The Strategy was prepared by the IMPEL Network (the European Union Network for the Implementation and Enforcement of Environmental Law) through technical support from the European Commission's Structural Reform Support Service (SRSS)
- It builds upon the achievements of the MWMP 2015-2021 and identifies further measures, actions and procedures for sustainable waste management and transitioning Cyprus towards a circular economy
- One of the key objectives is to shift focus away from landfill disposal and towards capturing the resource value from waste materials and the development of a more circular economy, in line with the objectives of the WFD

The Municipal Waste Management Plan 2021-2027 is underpinned by the following strategic principles:

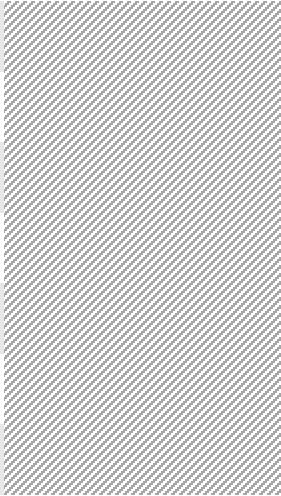
- Compliance with the obligations arising from the European Directives on waste management regarding municipal waste, including the obligation to establish separate collection measures, recycling targets, the diversion of biodegradable waste from landfill, the closure and rehabilitation of uncontrolled landfills, and the Directives on packaging waste, electrical and electronic equipment, and batteries and accumulators from households
- Full utilization of existing waste management infrastructure including the two MBTs, the Green Points network and private waste management plants
- Delivery of the waste hierarchy
- Adoption of best practices and value for money

The Municipal Waste Management Strategy includes:

- An analysis of the current waste management situation in Cyprus
- EU targets and obligation to be met
- An assessment of existing major disposal and recovery installations
- Predictions of future waste quantities (mixed and separately collected waste)
- An Action Plan outlining the measures to be taken to improve environmentally sound preparation for re-use, recycling, recovery and disposal of waste, including
 - Infrastructure measures
 - Waste prevention and reuse measures
 - Measures to strengthen producer responsibility schemes
 - Regulatory and economic measures

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Targets

EU CIRCULAR ECONOMY TARGETS	2025	2030	2035
Preparing for reuse and recycling of municipal waste (by weight)	55%	60%	65%
Reduction in the amount of municipal waste landfilled			10% of the waste generated
Recycling of packaging waste	65%	70%	
• Plastic	50%	55%	
• Wood	25%	30%	
• Ferrous metals	70%	80%	
• Aluminium	50%	60%	
• Glass	70%	75%	
• Paper/cardboard	75%	85%	
Separate collection of hazardous waste from households and textiles	1 st January 2025		
Bio-waste is either separated and recycled at source or is collected separately and is not mixed with other types of waste	31 st December 2023		

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Distance to targets

- Cyprus produces 609 kg of municipal waste per capita per year, being far higher than the EU average of 505 kg
- Cyprus recycles approximately 16.6% of its municipal waste, compared to an EU-wide average of 47%
- 67% of all municipal waste is disposed of in landfill, more than three times higher than the European average of 23%, and well below the 10% target set for 2030

		2015	2016	2017	2018	2019	2020
Waste generated	tonnes	525.24	538.69	537.49	562.10	571.07	542.84
Preparation for reuse and recycling	tonnes	86.70	87.13	86.49	93.77	94.11	90.21
	%	16.5%	16.2%	16.1%	16.7%	16.7%	16.6%
Municipal waste landfilled	tonnes	409.99	424.44	423.16	392.86	379.39	364.14
	%	78.1%	78.8%	78.7%	69.9%	66.4%	67.1%

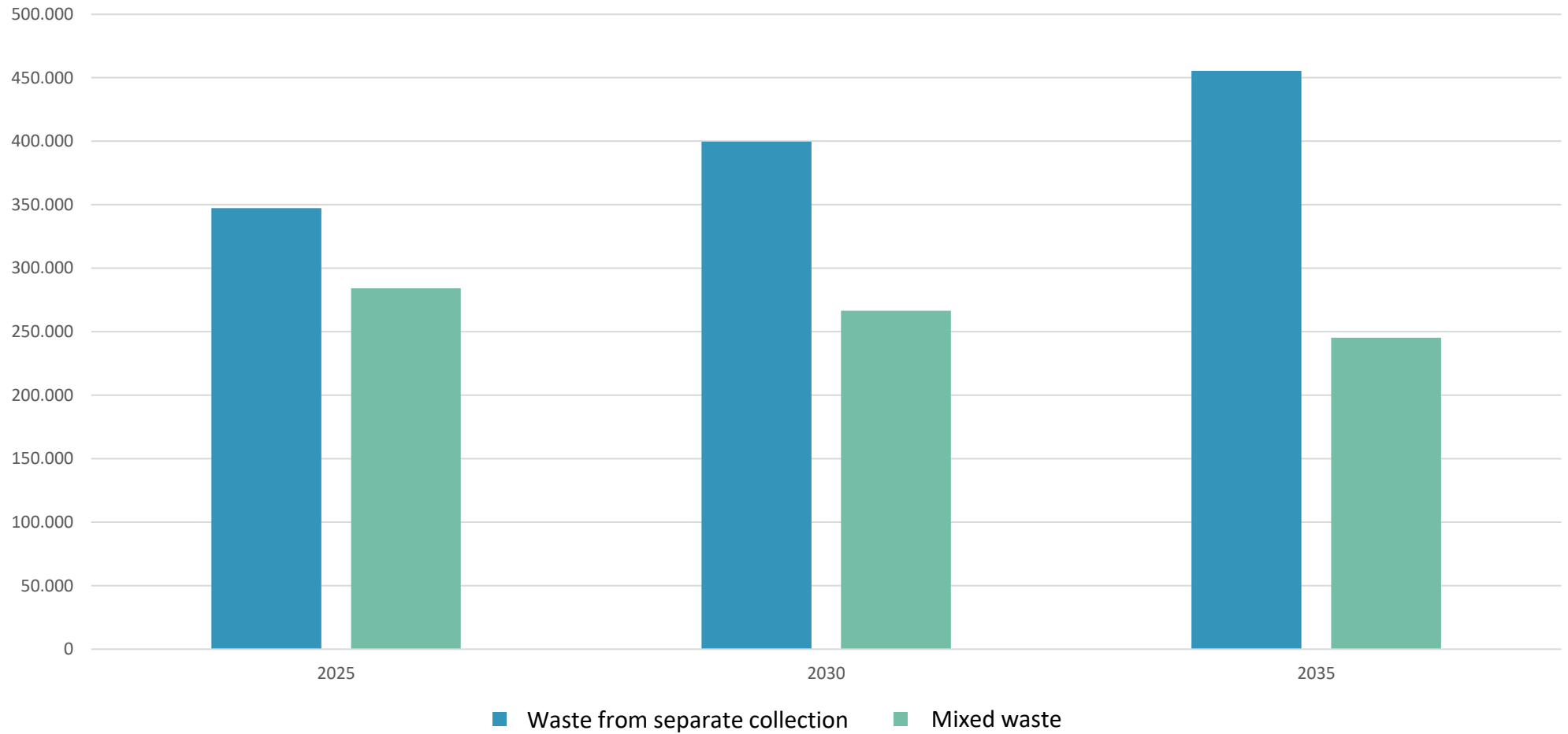
- The two MBTs at Koshi and Pentakomo, currently operate either close to or beyond their maximum capacity
- The separate collection of segregated recyclables and organics will be implemented throughout Cyprus in line with the requirements laid out in the regulations
- With the implementation of separate collection the recyclable and organic waste will be diverted from the MBTs potentially allowing the treatment of the mixed waste from all districts
- There is a need to move away from mixed waste disposal and towards sustainable waste management, while still ensuring adequate capacity for the treatment and proper management of mixed/residual waste
- Existing infrastructure must be used to its fullest extent where possible and supplemented by new infrastructure where existing sites cannot, or should not, be utilized further

- Existing infrastructure must be used to its fullest extent where possible and supplemented by new infrastructure where existing sites cannot, or should not, be utilized further
- Infrastructure needs were determined based on the projected quantities of mixed and separately collected waste
- Forecasting of waste arisings throughout the duration of the waste management strategy must take into account the impacts arising from the development of new services and infrastructure to maintain the balance between sufficient capacity and the incentive towards segregation and treatment of recyclables
- Organic waste production: 40% of organic in the municipal waste and 60% capture rate from separate collection.
- The current capacity for the treatment of organic waste is limited. As the organic fraction from separate collection increases in time, there will be insufficient capacity of dedicated organic waste treatment plants for quality compost or anaerobic digestion

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Projected waste quantities

Projected waste quantities



	Separately collected waste (tonnes)	Mixed waste (tonnes)
2025	347,210	284,081
2030	399,624	266,416
2035	455,507	245,273

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Waste reduction and reuse measures

- Green Public Procurement: Support tendering procedures to include circular economy principles in public contracts
- Establish a sharing platform to encourage food donation from retail and hospitality, including connecting companies that have food to donate with redistribution organisations
- Support local initiatives to reduce food waste
- Support R&D on eco-design with the aim to create new circular products and services
- Set up a Sharing Marketplace platform for the circular economy, aiming to connect supply and demand of materials, scrub or waste in a professional manner, in order to reduce waste

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Waste reduction and reuse measures

- Set up 2 Re-use and Repair Centres and a network of re-use shops in major cities in order to initiate re-use and preparation for re-use (repair) activities
- Streamline processes for establishing End-of-Waste status and support the creation of a stable and secure market for secondary materials
- Funding programme under the National Circular Economy Action Plan to support business investments in the circular economy
- Collection and exploitation of marine debris
- Promote the donation of clothes and reuse of fabrics

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Separate collection measures

- Adoption of the regulations for the management of municipal waste by local authorities – mandatory separate collection and establishment of Pay-As-You-Throw schemes throughout Cyprus
- Programme for the techno-economic support of local authorities for the establishment of separate collection systems for municipal solid waste and the implementation of Pay-As-You-Throw Schemes
- The Municipal Solid Waste Reduction Program (sorting at source and separate collection) for Coastal Hotel and Related Tourism Infrastructure in Limassol and Paphos
- Programme for the prevention, separate collection and recovery of municipal waste in the mountainous areas of Cyprus

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Separate collection measures

- Installation of 50 green kiosks in remote and semi-remote areas
- Expansion of the Green Points Network (New Green Points, additional mobile units and installation of Green Corners in mountainous communities)
- Installation of 50 small and medium sized community composters and 2000 home composters in remote and semi-remote areas for the treatment of organic waste
- Set up end-of-waste standards for quality compost, as well as standards for bio-waste entering organic recycling processes, based on best available practices.
- Establish separate collection of hazardous waste from households

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Extended producer responsibility measures

- Revise the EPR Schemes (reinforcing financial responsibility on waste prevention measures, centres for re-use and preparing for re-use, take-back and collection systems, and the prevention of littering)
- Establish EPR schemes for bulky waste (furniture, mattresses etc) and other waste streams (plastic waste from agriculture, construction waste, medicinal waste etc)
- Adjust financial contributions in EPRSs to ensure they are based on a life-cycle approach, considering product durability, reparability, reusability and recyclability and the presence of hazardous substances.
- Establish deposit-refund and return-refill schemes

- *Preparation of the Feasibility Study for the proposed infrastructure measures by the IMPEL Network*
- **Infrastructure for the management of recyclables**
 - Assess the need for an R13 installation for the storage of recyclables
 - Assess the need for an R13 or R12 installation for the storage and the treatment of bulky waste
 - Set up transfer stations for remote areas where necessary
- **Infrastructure for the management of the separately collected organic waste**
 - Expand infrastructure for the treatment of organic waste, including the construction of composting/anaerobic digestion units
 - Promote community composting units and home composting in remote communities

- **Management of organic waste in the MBTs of Koshi and Pentakomo**
 - Treatment of organic waste from separate collection (Feasibility Study)
 - Treatment of the organic fraction from the mixed waste (Feasibility Study)
 - Infrastructure for the treatment of mixed waste
 - Treatment of the mixed waste in the MBTs of Koshi and Pentakomo (Feasibility Study)
- **Waste to energy**
 - Assess solutions for the availability of the RDF. Establish the availability of RDF users in the internal market
 - Assess the need for the construction of a waste-to-energy facility to accept all the SRF/RDF from the two MBTs

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Legislative measures

- Adoption of the Waste Regulations (Municipal Waste Management by Local Authorities)
- Implementation of extended producer responsibility for the separate collection of construction and demolition waste
- Regulations for the separate collection of fabrics by 2025
- Regulations for the separate collection of hazardous waste from households by 2025
- Adoption of the regulations for the establishment of extended producer responsibility for household medicinal waste
- Define end-of-waste criteria for the production of solid recovered fuels (SRF) at the national level

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Legislative
measures

- Regulation on End-of-Waste criteria of **C&D waste** as **secondary raw materials** for construction of roads and compulsory use in public works
- Regulation on End-of-Waste criteria of **excavated land** and **biofertilizers**
- Regulation on **backfilling** of excavated areas or landscaping
- Compulsory **EMS** and waste BATs implementation for waste managers
- Legislation on **Sustainable Product Policy**, such as recyclability standards, bans, public disclosure requirements on pollutants, liability for hazardous material and waste, and environmental permits
- Compulsory **label** information on the reparability and **recyclability** of a product

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Economic tools

- Landfill tax
- Green tax on goods, such as single use plastic products and products with a plastic content
- Assess the possibility of a VAT reduction for second-hand and End-of-Waste products (secondary materials)
- Establish pay-as-you-throw systems
- Promote deposit-refund and return-refill schemes

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Waste data management

- Establish an electronic waste data platform for administrations and operators to include permits, the Waste Operators Register, waste shipments, data on the management of waste, single-use plastic products, end-of-Waste and secondary products traceability.
- Establish an electronic platform on the reporting of food waste data throughout the food supply chain, including primary production, processing and manufacturing, retail and other food distribution, restaurants and food services and households.
- Electronic system for the management, control and communication of information on the implementation of the waste management programmes
- Development of software tool for Mapping and monitoring of marine litter

- Establish a central inspectorate unit and strengthen the inspection capabilities of local authorities
- Establish a **regulatory** framework for **reporting**, monitoring compliance, **supervision**, and **sanctions**
- Implement a police and local authorities **coordinated** program to reduce uncontrolled **dumping**
- **Waste Inspection Programs by trained inspectors.**
- **Use standardized protocols**, guides, instructions and checklists to facilitate enforcement of law

- Establish a **Coordinating Body** between central and local government for efficient **Waste Management**
- Enhance the **administrative capacity** and improve the functioning of public administration for better policy-making and implementation
- **Capacity-building** and training for law makers, permit writers, inspectors, implementers and disciplinary drivers.
- **Training** programs for **local authorities**
- Strengthen inspection capabilities of local authorities.
- **Campaigns targeted at households** to encourage the separation and **appropriate disposal** of waste, particularly when introducing new waste schemes as PAYT, LFT, DRS, Re-use & Repair Centers.

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Funding projects

Programme for the techno-economic support of local authorities for the establishment of a separate collection system for municipal solid waste and the implementation of the Pay-As-You-Throw Scheme	01/10/2027	€25.000.000	Structural Funds
Municipal Solid Waste Reduction Program for Coastal Hotel and Related Tourism Infrastructure in Limassol and Paphos	31/12/2023	€6.400.000	Structural Funds
Programme for the prevention, separate collection and recovery of municipal waste for the mountainous areas of Cyprus	01/10/2027	€1.500.000	Structural Funds
Program for the improvement of existing and the development of infrastructure for the treatment of organic waste	2022 – 2027	€15.000.000	Structural Funds
Integrated information system for the management and monitoring of waste management systems	01/12/2024	€1.421.420	Structural Funds
Installation of 50 community composters in remote and semi-remote areas	2022-2025	€7.000.000	ΣAA
Establishment of 2 reuse and repair centers and a network of stores	2022-2025	€4.000.000	ΣAA
Installation of 50 green kiosks in remote and semi-remote areas	2022-2025	€3.300.000	ΣAA
Improvement and extension of the Cyprus Green Points Network and creation of a network of Collection Points and Recycling Corners	2022-2025	€10.000.000	ΣAA
Establishment of a coordinating body between central government and local government for waste management	2022-2025	€900.000	Structural Funds
LIFE-IP CYzero WASTE - “Intelligent monitoring and efficient waste reduction in Cyprus Island” (LIFE20 IPE/CY/000011)	2021 –2029	€14.785.848	LIFE

Total project funding: €89.307.268

The **evaluation** of the results of the waste management program will be carried out **every two years**, taking 2020 as a reference, based on the following **possible indicators**: (to be revised)

- Total amount of **waste generated / year**
- Total amount of waste generated by economic activity
- Total amount of waste generated / year / GDP
- Total amount of municipal waste / year
- Levels of food waste
- Amount of **hazardous waste / year / industrial GDP**
- Amount of **construction and demolition waste / year / GDP**
- Total amount of **packaging waste / year**
- Total amount of **WEEE / year**
- Total amount of waste **batteries and accumulators / year**

A Committee will be established to oversee implementation of the Municipal Waste Management Strategy

- The public consultation was concluded in **April 2022**
- The final Waste Management Strategy will be submitted to the Council of Ministers for adoption in **May 2022**
- The Feasibility Study for the infrastructure measures will be completed by IMPEL in **May 2022**

NATIONAL WASTE PREVENTION PLAN

- IMPEL has submitted the revised Waste Prevention Programme
- The Programme will cover measures in the following priority sectors:
 - Tourism
 - Construction
 - Food systems
 - Textiles
 - Plastics
 - Electrical appliances
- The Programme will be finalized and opened for public participation by **June 2022**