

Governing plastic waste management in the Republic of Cyprus

Assessment of legal, policy and institutional frameworks



INTERNATIONAL UNION FOR THE CONSERVATION OF NATURE



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Executive Summary

According to the National Guidance for Plastic Pollution Hotspotting and Shaping Action Report for the Republic of Cyprus¹, the plastic waste generation per capita is very high, and amounts to 94 kg/cap/year (> 53 kg/, cap/year, world average from Jambeck et al. 2015), of which up to 11 kg/cap/year are attributed to tourism. There is no primary plastic production in Cyprus and, with inexistent recycling facilities on the island, around 11% of plastic waste is exported for recycling (half of the Republic of Cyprus export is directed to Greece and 44 % is exported to Asian countries). Main sector hotspots in Republic of Cyprus are the packaging sector responsible for most of the plastic leakage, followed by automotivetyres. However, the fishing and tourism sectors follow closely.2

Several types of plastic polymers³ are leaking in Cyprus due to a lack of segregation at source and incentives for recycling plastic.⁴ Cyprus should make a considerable investment in recycling and separate collection in the coming years to reach the already-past 2020 recycling target of 50%. The European Commission published an 'early warning report'⁵ for

Cyprus, setting out priority actions for Cyprus to comply with the 2020 and the post-2020 recycling targets.⁶

2015 The municipal solid waste management plan prioritises separate collection introduces economic and deterrents such as a landfill tax, the extension of the extended producer responsibility (EPR) to plastics and pay-asyou-throw (PAYT). However, schemes such as PAYT, banning of single use plastics and Deposit Return Schemes (DRS) will not be implemented until the end of 2021, delaying the solutions for better plastic waste management.

Cyprus still faces problems in implementing the relevant EU waste policy and this is mainly due to the lack of infrastructure and systems for collecting recyclables, the lack of coordination between different administrative levels and the lack of capacity at local level. With only the implementation of the plastic bag tax, Green Dot Recycling schemes and some pilot programs focusing on PAYT, local authorities are taking a step towards managing plastic waste, but it is not enough to curb the plastic pollution issue.

http://www.moa.gov.cy/moa/environment/environmentnew.nsf/page20 en/page20 en?OpenDocument

¹ IUCN-EA-QUANTIS, 2020, National Guidance for plastic pollution hotspotting and shaping action, Country report Cyprus

 $[\]underline{\text{https://plastichotspotting.lifecycleinitiative.org/pilots/}}$

² Idem

³ LDPE, PET, PP, synthetic rubber (IUCN-EA-QUANTIS, 2020, National Guidance for plastic pollution hotspotting and shaping action, Country report Cyprus)

⁴ Department of Environment, Waste Management Strategy available at:

⁶ <u>Directive (EU) 2018/851</u>, <u>Directive (EU) 2018/852</u>, <u>Directive (EU) 2018/850</u> and <u>Directive (EU) 2018/849</u> amend the previous waste legislation and set more ambitious recycling targets for the period up to 2035.

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1. Methodology

The aim of this study is to provide an overview of the legal and policy instruments in the Republic of Cyprus directly tackling marine plastic pollution at national level, in the context of the IUCN's "Plastic Waste Free Islands-Med" project. Drawing on prior IUCN experience, desk research, and consultation with the main local stakeholders, the report assesses the comprehensiveness effectiveness of the national legal and regulatory framework governing plastic waste management in order to identify gaps weaknesses existing and that contribute to plastic leakage into the Mediterranean Sea.

The primary methods chosen for collecting data were a literature review and the use of a qualitative questionnaire. The questionnaire was designed to collect information from national sources on existing targets, strategies, policies or legal provisions at national level.

This questionnaire was prepared and reviewed in May 2020 by IUCN staff within the IUCN Mediterranean Cooperation Centre and Environmental Law Programme. The following table shows the final questions included in this questionnaire:

Target	Plastic value chain	Sectors	Clean-up measures	Opinion 1	Opinion 2
Is there any target at the national level that specifically addresses plastic pollution?	Are there legal instruments at national level that specifically address plastic waste across the plastic value chain?	Are there additional legal tools in place at national level to tackle plastic pollution in the tourism and fisheries sectors?	Is there any remedial measure at national level that directly addresses plastic waste already polluting the marine and coastal environment?	In your opinion, what are the most appropriate legal tools to tackle plastic pollution?	How could the institutional and legal framework be improved to ensure the proper implementation of such tools?

In early June 2020, the questionnaire was sent to the project's implementing partners on the island, who subsequently circulated it among their national networks to reach the experts working on the topic in Government agencies and Non-Governmental organizations. This report used the answers from the questionnaire and other relevant online sources, including available documents from the Programmes of Measures required by the European Commission from Member States in the context of the Marine Strategy Framework Directive (MSFD). ECOLEX⁷, an information service on environmental law, operated jointly by the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP) and IUCN, was also consulted in search of relevant national legislations on waste that mention plastic or are related to marine plastic pollution, as well as Government websites, and other relevant online sources.

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⁷ https://www.ecolex.org/

2. International Legal Framework on plastic waste management

2.1. International Treaties, Agreements and Conventions

The Republic of Cyprus has signed and ratified many international conventions relating to waste, marine pollution, and addressing the plastic pollution issue.

- In 1979, Cyprus ratified the Convention for Protection of the Mediterranean Sea against Pollution, and simply referred to as the Barcelona Convention (1976);
- In 1979, Cyprus ratified the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972), commonly called the "London Convention", and its Protocol (1996) in 2003;
- In 1988, Cyprus ratified the United Nations Convention on the Law of the Sea, UNCLOS (1982);
- In 1989, Cyprus ratified the International Convention for the Prevention of Pollution from Ships, MARPOL (1973), and implemented its Annex V, related to the control and prevention of the release of solid waste (including plastic waste) from ships. The MARPOL Annex V regulation is a relevant legal instrument for

preventing plastic waste from entering the marine environment. The Department of Merchant Shipping (DMS) in Cyprus, in its capacity as the competent Cypriot authority under Regulation 8 of MARPOL Annex V (Port State control on operational requirements), performs random inspections on all ships (national and foreign) within the port areas of Cyprus, as well as inspections of Cypriot ships abroad (a fleet of about 1000 foreign going ships) to ensure compliance with MARPOL Annex V;8

- In 1992, Cyprus ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989);
- In 2015, Cyprus also participated in the United Nations meeting that set the seventeen "Sustainable Development Goals", which includes the Goal 14, "Life below Water" including one of its targets to prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution by 2025.

2.2 European policy framework

At the European level, the **Marine Strategy Framework Directive (MSFD)**⁹ has the objective of achieving Good Environmental Status (GES) of the EU's marine areas by 2020. Annex I of the MSFD provides 11 qualitative descriptors for determining whether an area has GES.

In the context of the implementation of the EU MSFD, each Member State having marine waters had to elaborate a **Programme of Measures (PoM).** Cyprus has general targets aiming at reducing the amount of marine litter that is threatening marine life on its shores and at sea, but also included more **specific targets**. In the PoM of Cyprus, there are 2 targets related to marine

⁸ http://www.mcw.gov.cy/mcw/dms/dms.nsf/mission en/mission en?OpenDocument

⁹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0056

litter, i.e. "the marine environment of Cyprus is considered to be in good environmental status if:

1) The amount of marine litter on beaches and on the seafloors is minimized and, if possible, effectively eliminated, and 2) Mortality of Caretta caretta individuals (loggerhead sea turtles) due to entanglement by marine litter, and subsequent stranding, is minimized and, if possible, effectively eliminated" 10. Therefore, Cyprus is aiming to measure plastic in the sea using these two indicators. The MSFD is translating into national legislation using instruments such as a National Marine Strategy and Cyprus has a National Action Plan on marine litter as an existing measure (within its PoM). Furthermore, both within and outside the context of the MSFD, Cyprus also stressed its engagement in promoting awareness amongst the general public on the importance of tackling marine litter, with specific activities for schools and fishers.

Cyprus also joined the recent **United Nations Environment Assembly (UNEA)** meetings, and among those, the Fifth UN Environment Assembly (UNEA-5) established the **ad hoc openended expert group (AHEG)** on **marine litter and microplastics.**¹¹ The group is "reviewing the present situation and analysing the effectiveness of existing and potential response options related to marine plastic litter and microplastics". It is also discussing the possibility to "develop a new global agreement, framework or other form of instrument to provide a legal framework of global response and to facilitate national responses especially for those countries with limited resources and capacities that could contain either legally binding and/or non-binding elements".

2.3 EU waste management law

Directive 2008/98/EC¹² on waste **(Waste Framework Directive)** establishes a legal framework for treating waste in the EU and sets the basic concepts and definitions related to waste management, such as definitions of waste, recycling, recovery. Article 4 establishes the waste hierarchy, which shall apply as a priority order in waste prevention and management, according to which prevention is the most desirable option and disposal the least desirable (prevention, reuse, recycling, recovery for other purposes such as energy and disposal).

The Directive sets out important provisions and timeframes for implementation with respect to prevention (Article 9), reuse, recycling and recovery (Articles 10 and 11) and disposal (Article 12). Other provisions concern the application of the principle of proximity and self-sufficiency (Article 16) and the application of the "polluter pays principle" and the "extended producer responsibility" (Article 14) for the distribution of waste management costs.

The Directive requires that competent national authorities of the Member States adopt waste management plans and waste prevention programmes. The Directive also includes measures and targets to implement the waste hierarchy, e.g. the establishment of recycling targets by 2020, such as the preparing for re-use and the recycling of plastic waste materials, which must be increased to a minimum of 50% by weight.

 $^{^{10} \}underline{\text{http://www.moa.gov.cy/moa/dfmr/dfmr.nsf/all/DBDD640DA763DA8C42257F4100311170/\$file/metra\%20programmatos.pdf?openelement}$

¹¹ https://papersmart.unon.org/resolution/uploads/chair_summary_final.pdf#overlay-context=Fourth-adhoc-oeeg

¹² Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives (OJ L 312, 22.11.2008, pp. 3–30).

The **Directive 94/62/EC**¹³ sets out the EU's rules on managing **packaging and packaging** waste and has been amended by the Directive (EU) 2018/852¹⁴, which contains updated measures designed to prevent the production of packaging waste, and promote the reuse, recycling and other forms of recovering of packaging waste, instead of its final disposal, thus contributing to the transition towards a circular economy.

EU countries must take **measures**, such as national programmes, incentives through extended producer responsibility schemes and other economic instruments, to prevent the generation of packaging waste and to minimise the environmental impact of packaging. They should encourage the increase in the share of **reusable** packaging put on the market and of systems to reuse packaging without compromising food safety. This may include deposit-return schemes, targets, economic incentives, minimum percentages of reusable packaging placed on the market for each type of packaging, etc.

EU countries must also take the necessary measures to meet certain **recycling targets**, which vary depending on a packaging material. By 31 December 2025, at least 65% by weight of all packaging must be recycled, with a 50% recycling target for plastics. By 31 December 2030, at least 70% of packaging must be recycled, with a 55% **recycling** target for plastics.

EU countries should ensure that **packaging recovery systems** are set up to provide for the return and/or collection of used packaging and/or packaging waste, as well as the reuse or recovery including recycling of the packaging and/or packaging waste collected.

By 2025, EU countries should ensure that **producer responsibility schemes** are established for all packaging. Producer responsibility schemes provide for the return and/or collection of used packaging and/or packaging waste and its channelling to the most appropriate waste management option, as well as for reuse or recycling of the collected packaging and packaging waste.

The **Directive (EU) 2019/904** — on the reduction of the impact of certain plastic products on the environment¹⁵ (**single-use plastics ban)** delivers on the EU's plastic strategy, an important element in the EU's move towards a circular economy. It aims to prevent and reduce the impact on the environment of certain plastic products by introducing a mix of measures tailored to the products covered by the directive, including an EU-wide ban on single-use plastic products whenever alternatives are available.

The Directive has to become law in the EU countries by 3 July 2021. The market restrictions and marking of product rules apply from 3 July 2021, while the product design requirements for bottles apply from 3 July 2024. The Extended Producer Responsibility measures apply from 31 December 2024.

The **Directive 1999/31/EC on the landfill of waste** provides measures and procedures to prevent or reduce the negative environmental impacts from the landfill of waste. According to the Directive (Article 5), Member States must set up a national strategy for the implementation of the reduction of biodegradable waste going to landfills. This strategy should include measures to

¹³ European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (OJ L 365, 31.12.1994, pp. 10-23).

¹⁴ Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste (OJ L 150, 14.6.2018, pp. 141-154).

¹⁵ Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (OJ L 155, 12.6.2019, pp. 1-19).

achieve the targets of the Directive by means of in particular, recycling, composting, biogas production or materials / energy recovery.

The **Directive 2000/76/EC** on the **incineration of waste** and Directive 2008/98/EC concerning the performance of waste incineration impose stringent operational conditions and technical requirements for plants incinerating or co-incinerating waste. Conditions are also imposed on the efficiency of incineration plants in order to achieve maximum recovery.

The **Directive (EU) 2019/883**¹⁶ on **port facilities for the delivery of waste from ships** aims to protect the marine environment from the negative effects of waste from ships using EU ports, by improving port reception facilities for waste from ships. It has applied since 27 June 2019 and has to become law in the EU countries by 28 June 2021. The directive is part of the Circular Economy policy and the plastics strategy of the European Commission. It aligns EU legislation with the amended **International Convention for the Prevention of Pollution from Ships (MARPOL),** which focuses on operations at sea, and to which the EU is a party.

¹⁶ Directive (EU) 2019/883 of the European Parliament and of the Council of 17 April 2019 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC (OJ L 151, 7.6.2019, pp. 116-142).

3. Institutional framework governing plastic waste management

According to the Waste Law of 2011, the main competent Authority for waste management is the Ministry of Agriculture, Rural Development and Environment (MARDE). However, in relation to specific waste streams, including mixed municipal waste, specific roles and responsibilities are attributed to the Ministry of Interior (MoI), especially in relation to the recycling, treatment and disposal activities of these waste types.

The development of waste management policy is the responsibility of the MARDE and this policy is adopted by the cabinet. The waste Law establishes the Advisory Committee for Waste Management (ACWM), which consists of representatives from:

- MARDE (chair)
- Mol

- Ministry of Labour, Welfare and Social Insurance (MLWSI)
- Ministry of Energy, Commerce, Industry and Tourism (MECIT)
- Ministry of Transport, Communications and Works (MTCW)
- Ministry of Health (MoH)
- Union of Municipalities (UoM)
- Union of Communities (UoC)
- Federation of Environmental Organizations (FEO)
- Scientific Technical Chamber (STC)

Amongst its responsibilities, this committee provides advisory services to the competent authority for the development of waste policy and legislation, the approval of waste management systems and the issuance of permits. With respect to the responsibilities of the main stakeholders. These are summarised on the following table:

Stakeholder	Main responsibilities
MARDE	 Development of waste management policy and legislation Permitting of waste management activities (excluding mixed municipal waste and other waste streams) Control, and monitoring, of waste management activities (excluding mixed municipal waste and other waste streams) Monitoring of the fulfilment of waste management targets Reporting to international organizations (EUROSTAT, EC, etc)
Mol	 Permitting of waste management activities for mixed municipal waste (and other waste streams) Control, and monitoring, of waste management activities for mixed municipal waste (and other waste streams)

	 Construction of municipal waste management infrastructure
Local Authorities	 Promoting waste hierarchy as set in the existing national waste management plan and the new regulations for the municipal waste management plan (MWMP) – still under approval Provision of municipal waste services (as it is set in the Municipalities Law and the Communities Law) Development, implementation and operation of systems for separate collection of paper, metals, plastics and glass – Reaching of recovery / recycling targets (as set in the new regulations for the municipal waste management plan (MWMP) – still under approval) Development, implementation and operation of systems separate collection organic waste (as set in the new regulations for the municipal waste management plan (MWMP) – still under approval) The District Councils for the operation of waste disposal and utilization sites are responsible for the operation of municipal waste management facilities within their territory (district) Reporting to MARDE (as set in the new regulations for the municipal waste management plan (MWMP) – still under approval)
Collective systems for packaging waste	 The collective system for packaging waste (Green Dot Cyprus) is responsible for managing packaging waste (development of separate collection schemes and recovery/recycling activities) Reporting to MARDE
Private Sector	 Provision of collection services for municipal waste following contracts with local authorities, especially in remote areas Provision of collection services for packaging waste following contracts with Green Dot Operation of waste management facilities following contracts with the Mol/District Councils Provision of collection services to business producing waste (paper, plastic, metal, glass or other).

4. National legal framework on plastic waste management

4.1 Waste Management Strategy

The **Waste Management Strategy,** according to the Department of the Environment,¹⁷ is mainly based on the waste hierarchy (prevention, reuse, recycling, recovery, and disposal) and the ultimate aim is to protect the environment and human health. This is achieved through the reduction/elimination of the negative effects of the generation and management of waste, the promotion of reuse, recycling and recovery and generally the environmentally sound management in order to reduce the disposal in landfills and to reduce the overall impact of the use of resources by improving the efficiency and effectiveness of their use.

The main axes of the strategy are: compliance with the obligations arising from the European directives on waste management that fall under the municipal waste stream, full utilization of existing private and public waste management infrastructure, maintaining the waste management hierarchy, with emphasis on prevention and separate sorting of waste and the adoption of best practices with the lowest cost.

Within the above context, **qualitative and quantitative objectives** have been set. Among the quantitative objectives there are:

- (a) 40% separate collection on the total rate of municipal solid waste by the year 2021, with the ultimate target of 50% until 2027 (from 20% in 2012),
- (b) 50% of recyclable materials (paper, plastic, metal, glass) in municipal waste to be prepared for reuse by 2020,
- (c) 15% of municipal organic waste to be collected separately by 2021, and
- (e) the achievement of the objectives of the European directives on packaging waste.

The main legislation that sets the framework for waste management in the Republic of Cyprus is the **Waste Law 185(I)/2011**, which transposes the **Waste Framework Directive (2008/98/EC)**.

The most important provisions of the Law include:

• Article 9 on the hierarchy of waste management, assigning priority to (a) prevention, (b) preparing for reuse, (c) recycling, (d) other recovery, such as energy recovery and (e) disposal.

Article 11 on Extended Producer Responsibility:

The principle of the Extended Producer Responsibility foresees the assumption of responsibility by the importers and manufacturers of selected products for financing and infrastructure performance to enable consumers to return a product when it becomes waste. In the context of the implementation of Extended Producer Responsibility and the harmonisation of EU Directives, through which this concept is applied, the Department of Environment assesses applications for the creation of collective and individual systems and issues the relevant permits, which are signed

¹⁷ Department of Environment, Waste Management Strategy available at: http://www.moa.gov.cy/moa/environment/environmentnew.nsf/page20_en/page20_en?OpenDocument

by the Minister of Agriculture, Rural Development and Environment. Regular inspections and audits of the operation of individual and collective systems are carried out in order to properly implement permit conditions.

- Article 13 on reuse and recycling:
 - By 2015, the introduction of separate collection for at least paper, metal, plastic and glass.
 - By 2020, the preparing for reuse and the recycling of waste materials, such as at least paper, metal, plastic and glass from households and possibly from other origins, as far as these waste streams are similar to waste from households, must be increased to a minimum of 50% by total weight.
- Article 15 on the obligations of waste holders and original waste producers.
- Article 23 on the allocation of the costs of waste management in accordance with the polluter pays principle
- Article 24 on waste management permits for waste treatment facilities
- Article 29 on the obligations of the holder of the waste management permit
- Article 35 on the preparation of national and local waste management plans and
- Article 36 on the preparation of waste prevention programs.

The Cypriot legislation governed by the principle of **Extended Producer Responsibility is the Packaging and Packaging Waste Law (N.32 (I)/2002,** 133(I)/2003, 159(I)/2005, 48(I)/2006, 58(I)/2012, 59(I)/2012 and 125(I)/2012), which is the transposition of the Directive 94/62/EC on packaging and packaging waste.

Article 6 of the Law adopted recycling targets of 25-45% by weight (for each recycled material) and recovery targets of 50-65% for all waste packaging, to be achieved by December 2005. Through subsequent amendments of the Law (N. 48(I)/2006) highest recycling rates of 55-80% by weight were adopted (60% for paper / carton, 60%, for glass, 50% for metal, 22.5% for plastic and 15% for wood), together with a 60% recovery target for total packaging waste by December 2012.

Article 9 defines the responsibilities of economic operators, i.e. person who manufactures, imports, transports, supplies or otherwise trades packaging subject to the requirements for the management of waste packaging, to meet the costs for the management of the resulting packaging waste through the establishment of an individual or collective producer responsibility scheme.

For the fulfilment of the Republic's obligations to achieve the quantitative targets and avoid the imposition of strict sanctions by the European Union, the primary responsibility lies with the producers, i.e. those who package products and import packaged products at minimum volumes of up to 2 tonnes per material per year. These producers have the obligation to create *individual* or collective management systems for packaging waste in accordance with the Packaging and Packaging Waste (Responsibility of Financial Operators) Regulations (R.A.A.747/2003). The Department of Environment, based on the introduction of the possibility to regulate out of court

settlements pursuant to the Packaging and Packaging Waste Law, carries out inspections and fines the producers who do not comply with the relevant legislation.

Finally, the Directive (EU) 2019/904 — on the reduction of the impact of certain plastic products on the environment¹⁸ (single-use plastics ban) is being transposed into the national legislation (WASTE LAWS OF 2011 TO 2016, Regulations under Articles 11, 13, 23 and 54) and the act will enter into force as of 03/07/2021. The regulations will ban the use of ten single-use plastics products. The Department of the Environment is responsible for the implementation of the law, which needs to be approved by the Parliament of Cyprus. Also, the Council of Ministers decided to amend the Packaging and Packaging Waste Law (N. 32(I)/2002) and to adopt stricter measures, which will ban the disposal of the thin plastic carrying bag at points of sale. The new draft law, which was preceded by a public consultation, will enter into force after its approval by the House of Representatives.¹⁹

In addition, the **Solid and Hazardous Waste (Landfill) Regulations of 2003** (Act 618/2007), which amended the Solid and Hazardous Waste (Landfill) Regulations (Act 562/2003) is the transposition into Cypriot law of the Directive 1999/31/EC. The Regulations set targets for the reduction of waste going into landfills and restricts the acceptance of hazardous waste, such as hospital waste, tires etc.

Through the Solid and Hazardous Waste (**Waste Tires**) Regulations of 2011 (R.A.A. 61/2011) **the tire producer's liability** was adopted. In the context of these Regulations, two Collective Systems are operating (RTM Tires Recycling Ltd and E4C Ltd) as well as an individual system. The purpose of these systems is to comply with the obligations imposed by the Regulations on "tire producers". For waste tire management in Cyprus, a shredder unit, a granulation unit and a combustion unit have been licensed. In the context of their compliance, authorised systems cooperate with these units as licensed collectors/transporters for the sound management of waste tyres.

The tables below set out the legislative framework of the European Union with regard to plastic waste management and the respective national law and targets:

1) Correlation table between European and Cypriot legislation

EUROPEAN LEGISLATION	CYPRUS LAW
WASTE	
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (replaces Directive 2006/12/EC (formerly 75/442/ EEC) and repealing Directive 91/689/EC on hazardous waste and 75/439/EC on used motor oils) Directive (EU) 2018/851, amending Directive 2008/98/EC	The Waste Law (N.185 (I)/2011) ➤ Amended by Law 6(I)/2012 and supplemented with the following regulations and decrees: ✓ The Solid and Hazardous Waste (Waste Register) Decree of 2003 (Act 158/2003) ✓ The Solid and Hazardous Waste (Hazardous Waste Identification Forms) Decree of 2003 (Act 159/2003)
Directive (EU) 2019/904 — on the reduction of the	✓ The Solid and Hazardous Waste

¹⁸ Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (OJ L 155, 12.6.2019, pp. 1-19).

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¹⁹ https://moa.gov.cy/ypougiko-symvoulio-telos-sti-diathesi-tis-plastikis-sakoulas/

EUROPEAN LEGISLATION CYPRUS LAW impact of certain plastic products on the (Application for Waste Management Permit) Decree of 2003 (Act 160/2003) environment √ The Solid and Hazardous Waste (Application for Waste Management License) Decree of 2003 - (Act 161/2003) Pending transposition into the national law Decision 2000/532/EC replacing Decision 94/3/EC establishing the Waste Catalog and Decision The Solid and Hazardous Waste Act (Waste 94/904/EC establishing a list of hazardous wastes Catalog) Decree of 2003 (Act 157/2003) under Directive 91/689/EC on Hazardous Waste **LANDFILL WASTE** > The Solid and Hazardous Waste (Landfill) Regulations of 2003 (Act 562/2003) Directive 1999/31/EC on landfill of waste The Solid and Hazardous Waste (Landfill) (Amendment) Regulations of 2007 (Act Directive (EU) 2018/850, amending 618/2007) Directive 1999/31/EC The Solid and Hazardous Waste (Sanitary Landfills) Amendment Regulations f 2014 (Act 147/2014) Decision 2003/33/EC establishing criteria and Decree establishing on criteria procedures for the acceptance of waste at landfills procedures for the acceptance of waste at pursuant to Article 16 and Annex II of Directive landfills of 2007 (Act 282/2007) 1999/31/EC **INCINERATION OF WASTE** Directive 2000/76/EC on the incineration of waste The Water Pollution Control (Disposal of (replacing the earlier Directives 94/67/EC on Waste from Incineration) Regulations (Act hazardous waste, 89/369/EEC and 89/429/EC on 535/2004) household waste) **PACKAGING AND PACKAGING WASTE** ➤ Directive 91/692/EEC standardizing The Law on Packaging and Packaging Waste rationalizing reports on the implementation of Law (N. 32(I)/2002) certain directives on the environment

- > Directive 94/62/EC on packaging and packaging
- waste
- > Directive (EU) 2018/852, amending Directive 94/62/EC
- ➤ Decision 97/129/EC establishing an identification system for packaging materials pursuant to Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste (Text with EEA relevance)
- > Decision 97/622/EC for decisions in relation to

- The amendments:
- ✓ The Law on Packaging and Packaging Waste Law (Amendment) (N.133(I)/2003)
- ✓ The Law on Packaging and Packaging Waste Law (Amendment) (58(I)/2012)
- ✓ The Law on Packaging and Packaging Waste (Amendment) (59(I)/2012)

EUROPEAN LEGISLATION	CYPRUS LAW
Directive 91/692/EEC Commission communication in the framework of implementing Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste 2005/C44/13	
Directive 2003/35/EC on public participation in the drawing up of certain environmental plans and programs and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC	The Law on Packaging and Packaging Waste (Amendment) (N.159(I)/2005).
 Directive 2004/12/EC of the European Parliament and of the Council of 11 February 2004 amending Directive 94/62/EC on packaging and packaging waste Directive 2005/20/EC of the European Parliament and of the Council of 9 March 2005 amending Directive 94/62/EC on packaging and packaging waste 	The Law on Packaging and Packaging Waste Law (Amendment) (48(I)/2006)
Decision 2005/270/EC of the Commission of 22 March 2005 laying down the matrices of the database system pursuant to Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste	The Packaging and Packaging Waste Law (Amendment) (125(I)/2012)
Directive 2013/2/EU of 7 February 2013 amending Annex I to Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste	Decree on the replacement of Annex IIA to the Packaging and Packaging Waste Law of 2002 to 2012 of 2014 (Act 31/2014)
 Decision 1999/177/EC laying down the exemption conditions for plastic crates and plastic pallets in relation to the heavy metal concentration levels established in Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste ▶ Decision 2009/292/EC laying down the exemption conditions for plastic crates and plastic pallets in relation to the heavy metal concentration levels established in Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste (amending Decision 1999/177/EC) ▶ Decision 2001/171/EC laying down the conditions for a derogation for glass packaging in relation to the heavy metal concentration 	By regulation: The Packaging and Packaging Waste Regulations of 2002 (Act 183/2002) (In accordance with Articles 9 and 13 of the Packaging and Packaging Waste Law) The Packaging and Packaging Waste (Liability Financial Agents) Regulations of 2003 (Act 747/2003) The Packaging and Packaging Waste (Inspectors Powers and Duties) Regulations of 2003 (Act 746/2003)

EUROPEAN LEGISLATION	CYPRUS LAW
levels established in Directive 94/62/EC on packaging and packaging waste > Decision 2006/340/EC amending Decision 2001/171/EC in order to prolong the derogation conditions for glass packaging in relation to the concentration levels of heavy metals laid down in Directive 94/62/EC of the European Parliament and Council	
Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of eco-design requirements for energy related products	Law laying down eco-design requirements for energy related products (N. 17(I)/2011)

2) Objectives to be achieved in accordance with the law

National Legislation	Timetable of Implementation	Type of Waste	Target
WASTE			
The Waste Law (N.185(I)/2011. (Directive 2008/98/EC	2015	For at least paper, metal, plastic and glass, at least	Establishment of separate collection
of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives)	2020	Waste paper, metal, plastic and glass from households and possibly from other sources as far as these are similar to waste from households	Increase of preparation for reuse and recycling to at least 50% of the total weight
	12 December 2013	Waste	Preparation of waste prevention programs
LANDFILL OF WASTE			
The Solid and Hazardous Waste (Landfill) Regulations (Acts 562/2003, 618/2007, 147/2014) Directive 1999/31/EC on the landfill of waste	a) by 15/06/2010 b) Until 15/06/2012 c) Until 15/07/2016	Biodegradable municipal waste going to landfills	The biodegradable waste must be reduced to a) 75%, b) 50% and c) 35%) of the total weight of the biodegradable municipal waste produced in 1995 or the last year before 1995 for which standardized data are available from Eurostat
	From 2006	Used tires	Ban landfill
PACKAGING AND PACKAGING WASTE			

The Law on Packaging and Packaging Waste Law (N. 32(I)/2002), 133(I)/2003, 159(I)/2012, 59(I)/2012, 125(I)/2012 Directive on packaging and packaging waste 94/62/EC		Packaging / packaging waste	(A), recovery or incineration in a waste incineration plant with energy recovery of at least 60% by weight of packaging waste (B) recycling between 55% as a minimum and 80% maximum by weight of packaging waste (C) the following minimum recycling target: 22.5% by weight for plastics, counting exclusively material that is recycled back into plastics
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4.2. Municipal Waste Management Plan

In accordance with article 28 of Directive 2008/98/EC (corresponding to article 35 of L.185/2011), Member States shall establish one or more waste management plans, which define the framework, directions, activities, procedures and measures for the protection of the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste, based on the waste hierarchy.

In this context, the Department of Environment developed 2012 the Management Plan for Household and Similar Type of Waste which, after consultation (2012) and new political decisions, was changed into the 2015-2021 Municipal Waste Management Plan.²⁰ At the same time, a summary description of the Municipal Waste Management Plan entitled "Municipal Waste Management Strategy" was prepared for the period 2015-2021.²¹ The Strategy and Plan for municipal waste were developed following wide consultation with all interested parties as well as consultation with the European Commission.²²

Prior to the adoption of the new plan, given the lack of legal and other instruments (bans, obligations for separate collection, landfill tax, etc.), there had been no real responsibility or motivation for people and stakeholders involved in waste management to actually move waste management up the hierarchy.

The new Plan was adopted in November 2015 by the Council of Ministers and introduces a new concept for waste management in Cyprus, sets new targets, and for the first time, makes local authorities responsible for implementing separate collection systems and reaching specific targets.²³

The current situation reveals that moderate progress has been made in relation to municipal solid waste (MSW) management, especially in relation to recycling of packaging waste, while the country still lacks sufficient infrastructure for waste treatment and disposal, and the separate waste collection (apart from packaging waste) has not been developed yet.²⁴

²⁰ MARDE, Draft Law on Municipal Waste Management Plan 2014 – 2020

²¹ MARDE – Environment Department, interview with representatives of the waste department on 7/5/2015

²² EEA, Municipal waste management in Cyprus, ETC/SCP, 2013

²³https://ec.europa.eu/environment/waste/framework/pdf/facsheets%20and%20roadmaps/Factsheet_Cyprus.pdf

²⁴ Eunomia et al., European Reference Model on Municipal Waste Management, Member State Consultation Questionnaire – Cyprus, 2013

The plan introduces specific quantitative and qualitative targets for waste management, which are in line with, and in some cases, exceed, the requirements of the Waste Framework and Landfill Directives²⁵. These targets include key objectives such as:

- Environmental protection
- Supply the economy with secondary raw materials and energy sources (circular economy)
- Increase the contribution of waste management to sustainable material flow and resource management (resource efficiency)
- Increase the degree of utilization of recyclables, as raw materials, locally in Cyprus (reduction of CO2 emissions)
- Training and capacity building
- Strengthening of collection and recovery systems and improvement of waste disposal (green growth economy)
- Encourage desirable treatment channels through economic incentives
- Generation of a recycling society increase in public participation in waste management
- Promotion of the design and use of products in line with preservation of resources
- Development of a reliable, operational and flexible data collection and processing system

The new waste management plan seeks to address these problematic issues and its most significant elements include:

- The constitution of local authorities as responsible for the implementation and operation of separate collection for recyclable and organic waste and for reaching of the collection and recycling targets.
- The establishment of **new quantitative waste management targets:**
 - o 50% of MSW to be separately collected by 2021 (corresponding to approximately 295.000 tonnes of MSW)
 - o 50% of paper, plastic, metals and glass to be recycled by 2020 (corresponding to approximately 137,000 tonnes of recyclables)
 - 15% of MSW to be separately collected as organic waste by 2021 (corresponding to approximately 88,000 tonnes of organic material)
 - No more than 20% of MSW to be disposed in landfills by 2021 (corresponding to 472,000 tonnes of MSW diverted from disposal)
- Development of **green points networks for separate collection** of several waste streams
- Establishment of a reliable, operational and flexible system for data collection and processing
- Provision of extension of Extended Producer Responsibility (EPR) to materials that were not included before, such as non-packaging paper and plastic

²⁵ European Commission, Detailed evaluation report for assessing the waste management plan of Cyprus – National, BIPRO, 2015

• Commitment to adopt legally the **introduction of a landfill tax** and restrictions in disposal of certain waste streams: this is a measure expected to contribute significantly to the diversion of waste from disposal.

The intention of the country is to move up the waste hierarchy promoting waste prevention and recycling instead of mixed waste treatment and disposal. Particular focus is on the separate waste collection, in line with the provisions of the Waste Framework Directive. Several instruments need to be implemented in order to serve this priority, including the **establishment of a landfill tax**, the ban of disposal of certain waste streams, the extension of EPR to other waste streams, the promotion and implementation of Pay-As-You-Throw (PAYT) systems, the obligation for local authorities to implement separate collection and the development of waste management fund.²⁶

With respect to sanctions, the Waste Law L.185/2011 foresees sanctions which are mainly related to the performance of the waste management operators (e.g. perform waste management activities without permit, or failing to fulfil the permit conditions, or failing to protect the environment during waste management services, etc.). The sanctions for such cases may include imprisonment up to 3 years and fines up to 500.00 €.

4.3. National Waste Prevention Plan

In accordance with Article 29 of Directive 2008/98 /EC (corresponding to article 36 of the Waste Law L.185/2011), Member States shall establish, in accordance with Articles 1 (Subject matter and scope) and 4 (Waste Hierarchy) of the Directive, waste prevention programmes not later than

²⁶ In principle, the plan includes the main elements requested under article 28.3 of the Waste Framework Directive:

- Type, quantity and source of waste generated within the territory;
- Waste shipment: as the plan focuses on MSW, there is no waste shipped to and from the country;
- Projection of future waste generation: there are projections for total waste generation until 2030 (the model of European Topic Centre / Resource and Waste Management was used for the projections);
- Existing waste collection schemes: the plan describes the existing collection schemes for mixed municipal waste and packaging waste;
- Major disposal and recovery installations: the plan presents all existing recovery, treatment and disposal facilities:
- Assessment of the need for new collection schemes: the plan introduces new concepts in relation to waste collection in line with WFD, including:
 - Separate collection of glass, paper, metals and plastics from MSW (currently, such systems are restricted to packaging waste, but this will be extended to cover non-packaging waste);
 - Separate collection of biodegradable waste;
 - o Introduction of "green points" for collection of various waste streams.
 - Establishment of the responsibility of local authorities to develop the separate collection schemes;
- Additional waste installation infrastructure: the plan includes provisions for the development of one central waste management facility in Limassol (consisting of MBT and landfill) and a sanitary landfill in Nicosia;
- Economical instruments/schemes, financial aids that will prompt the private sector to get more actively involved (extra capacity/investment seems to be needed in plastic treatment, composting or other treatment of organic waste and energy recovery)
- Capacity of future disposal or major recovery installations: the plan includes information on the future capacities of the recovery, treatment and disposal installations;
- General waste management policies: the plan includes the policy priorities, technologies and methods for all elements of waste management. The priorities in relation to each waste management stage include:
 - o Waste collection: separate collection of recyclables and biodegradable waste;
 - o Waste collection: Development of green points;
 - o Waste treatment: Recovery of recyclables and pre-treatment of waste prior to disposal;
 - o Waste disposal: development of a network of sanitary landfills for waste and residues;
 - o Waste disposal: cessation of operation and rehabilitation of all non-compliant landfills.

12 December 2013. The main objective of these programmes is to take measures and actions aimed at breaking the relationship between economic growth and the environmental impact associated with the generation of waste.

For compliance with the above obligations, the Department of Environment of the Ministry of Agriculture, Rural Development and Environment of the Republic of Cyprus prepared an independent **Waste Prevention Plan for the period 2015 – 2021,**²⁷ which implements the provisions of the Waste Framework Directive.

The general objectives set by the plan include:

- Change in consumption patterns related to waste generation;
- Reduction of waste generation for specific streams;
 - Promotion of reuse:
- Reduction of organic waste that is landfilled; and
- Reduction in the generation of hazardous waste.

The programme also lays down the measures' control and monitoring instruments as well as an indicative timetable for their implementation. The existing measure already implemented as described in the National Waste Prevention Plan for plastic materials is Green procurement, while the planned activities/measures are:

- Raising on public awareness and training activities
- Reduction of the use of plastic bottles for water
- Voluntary agreements for the use of reused bags, exchange or sale of good
- Development of repair and sale centres for toys

4.4 Summary of Policy Mechanisms and Instruments to Meet Targets

The plan includes a series of instruments and measures to support and ensure the accomplishment of the objectives and targets foreseen in the plan as follows:

Legal instruments

- Legal provisions aiming at local authorities:
 - o Development of local waste prevention and management plans
 - Development of infrastructure of separate collection of paper, glass, metal, plastics and organic waste
 - Separate collection of 50% of MSW by 2021
 - o 50% of recycling by 2020
- Legal provisions aiming at producers
 - Extension of EPR to plastics
 - Environmental tax on selected products for which their negative environmental effect, when they become waste, has been well documented
- Legal provisions aiming at reduction of disposal
 - Establishment of a landfill tax

These instruments are not yet in place and no timeline for their introduction is included within the plan.

 $^{^{27}}$ MARDE, Draft Law on National Waste Prevention Program for 2015 – 2021

Financial instruments

The government intends to finance the development of the following infrastructure to support the local authorities in delivering the targets:

- Network of green points (in progress)
- Sanitary landfill in Nicosia (in progress)
- Utilization of the material disposed in the non-compliant landfills in Nicosia and Limassol (in progress)
- Rehabilitation of all non-compliant landfills (in progress)

Other economic instruments to be used in order to motivate the stakeholders include:

- Instruments aiming at local authorities
 - Co-financing of PAYT systems
 - o Co-financing of measures promoting the implementation of separate collection (e.g. provision of equipment)
 - Co-financing of activities for integrated waste management in isolated areas (zero waste approach)
 - o Co-financing for technical assistance contracts aiming at capacity building, raising of awareness etc.
- Instruments aiming at the private sector
 - Financial support for companies of specific size and personnel, that are big producers of waste, for the implementation of a waste prevention and separate waste collection program in their operation cycle
 - Financial support for existing or new waste management facilities that seek to expand, upgrade or be equipped
 - Financial support for industries for the utilization of recycled material in their production processes
- Instruments aiming at the public sector
 - Financial support in the public sector for the promotion of waste prevention and separate waste collection
- Instruments aiming at horizontal activities
 - Donations competitions establishment of prizes for best performance in waste prevention and separate collection systems

Administrative and information instruments

The following practical measures are foreseen:

- Establishment of a reliable, operational and flexible system for data collection and processing including the development of a database
- Improvement of the website of the Environmental Department of MARDE
- Development of an electronic platform for exchange of information, opinion and know-how between the stakeholders and among the public
- Implementation of awareness-raising campaigns
- Implementation of capacity building programs for local authorities and other stakeholders
- Issuance of guidelines, brochures, leaflets, books and FAQ for waste prevention and management for households and institutions
- Establishment of communication line for guidance and support to the citizens in relation to waste prevention and management

5. Policy framework for the plastic value chain

Production

Extended Producer Responsibility Mechanisms

An important factor in effective waste management is the application of the principle of the Extended Producer Responsibility (EPR), the assumption of responsibility by the importers and manufacturers of selected products for financing and infrastructure performance to enable consumers to return a product when it becomes waste, in order to be adequately managed. The implementation of Extended Producer Responsibility is regulated for the waste streams of packaging, electrical and electronic equipment, batteries and accumulators and tyres. As already mentioned, the national plan foresees the adoption of legislation expanding the EPR to other materials such as non-packaging paper, plastics and metal.

Retail and consumer use

Levy on plastic bags

In the framework of the national law's harmonisation with the Directive (EU) 2019/904, a levy of 5 cents plus 19% VAT per plastic bag was implemented in Cyprus in 2019, while actions to reduce other single use plastics remain voluntary and at the personal judgement of the consumer.

Pay as you throw (PAYT) schemes

With respect to the PAYT schemes in the Republic, this is currently implemented only on a very small pilot scale in Aglatzia Municipality. In this pilot system, a microchip is installed in each bin, which corresponds to a certain household. The waste truck is equipped with a weighing system in order to register the weight of each bin of each participating household, which is then charged to the respective household (it is noted that the households are not actually charged according to this system, as the current legislation does not allow such charges).

End of life

Disposal

Waste management in the Republic of Cyprus relies heavily on waste disposal, even if this is not in line with the European Directives and national legislation and targets. The disposal of Municipal Solid Waste is the most common method of waste management in the Republic. Since 2011, almost 80% of the MSW is landfilled. For that purpose, there were 115 dumping sites (uncontrolled landfills)²⁸ all over Cyprus. These sites are not complying with the provisions of the Landfill Directive 1999/31/EC so they need to be closed and restored.

A landfill was constructed in 2005 in Paphos district. Once the landfill was operating, all the dumpsites of the district were closed. Their restoration started in 2010 and was then completed. A new waste management facility, a Mechanical and Biological Treatment (MBT) Unit was constructed in 2009 in Larnaca to serve the districts of Larnaca and Ammochostos, and was

²⁸ Action Plan for the restoration of landfills in Cyprus (May 2006)

complemented with a landfill. Once the landfill and the MBT Unit were operating, all the dumpsites for the two districts were closed. Their restoration started in 2010 and was completed. A second central waste management facility was built in Limassol (OEDA), consisting of MBT plant and landfill for the disposal of residues and started its operations in 2017.

The remaining dumpsites in the areas of Nicosia and Limassol were closed except for the two big ones – one in Nicosia named Kotsiatis and the other one in Limassol named Vati (they currently are in the last stages of closing procedures). Therefore, there are three landfills operating according to the directive 1999/31/EC, two dumpsites still in operation that need to be closed and rehabilitated, and also 60 landfills (in Limassol and Nicosia) that need to be rehabilitated. Cyprus does not tax landfills or MBT, so there is no economic incentive to recycle.

Recovery and Recycling

EU law sets mandatory recycling targets²⁹ for the management of municipal waste.³⁰

As presented in the Cypriot Questionnaire on the implementation of the Waste Framework Directive, the provisions for waste recovery are detailed in Article 12 of the national legislation (L.185/2011). In this respect, the authorities should take any necessary measure to ensure that the waste produced follows the waste hierarchy during its management cycle, with recovery taking precedence over disposal. Moreover, the national legislation that transposes the packaging directives promotes recovery of packaging waste (laws 32(I)/2002, 133(I)/2003), 58/(I)/2012 and 59/(I)/2012).

Municipalities are generally implementing a recycling **Green Dot** scheme. The separate collection system adopted by Green Dot Cyprus for packaging waste, which is going to be expanded for all recyclables, consists of a system of 3 bins for: paper / cardboard; glass; and plastic, metals, TetraPak (plastic bottles, metal packaging and drink cartons - PMD stream). The PMD stream is collected via a door-to-door system as well as bring systems (mainly in household complexes and blocks of flats). This system is supplemented by a network of **Green Points** which further enhance separate waste collection and recovery. The network consists of several points in each district where citizens may return numerous waste materials. The network of green points is made of 30 points (9 Nicosia District, 8 in Limassol District 8 in Larnaca/Famagusta Districts and 5 in Pafos District). Currently, waste at local level is collected in a mixed manner. Separate collection is implemented by Green Dot Cyprus only for packaging waste and printed paper, while private authorized collectors (in collaboration or not with Green Dot) serve businesses and industries.³¹

Clean-up measures

Policies or measures that are aimed at reducing the amount of litter already present in the marine environment tend to involve research and monitoring initiatives as well as clean-up activities. In Cyprus, some pilot studies have been carried out on Fishing for Litter, a measure to remove litter, including plastic, from the marine environment. However, at governmental level, this initiative has not been officially launched and implemented yet. It is a scheme that is mainly promoted by the **OSPAR Commission** as a recommendation to be implemented by the Contracting Parties (however, it is also implemented elsewhere, beyond the OSPAR North Atlantic countries). The scheme was created to work with fishermen

²⁹ Article 11.2 of <u>Directive 2008/98/EC</u>. This Directive was amended in 2018 by Directive (EU) 2018/851, and more ambitious recycling targets were introduced for the period up to 2035.

³⁰ Municipal waste consists of mixed waste and separately collected waste from households and from other sources, where such waste is similar in nature and composition to waste from households. This is without prejudice to the allocation of responsibilities for waste management between public and private sectors.

³¹ Green Dot Cyprus, annual report 2013

to clear the oceans of litter. As fishers often catch litter in their nets, the concept centres on providing them with large bags to store litter on-board the ship, which they then deposit in ports and harbours.

The **Programme of Measures**, under the **Marine Strategy Framework Directive**, has new measures related to addressing plastic waste polluting the marine environment, such as promoting collaboration with Municipalities for cleaning activities in riverbanks, where ecologically appropriate; and raising awareness by informing professional and amateur fishers about marine litter to reduce littering from fishing activities³².

6. Gaps and challenges

a. Design gaps and challenges

Cyprus still faces problems in implementing the relevant EU waste policy and this is mainly due to the lack of infrastructure and systems for collecting recyclables, the lack of coordination between different administrative levels and the lack of capacity at local level. Some measures to address these weaknesses have been introduced, including the ongoing capacity building and technical assistance programme for public administration, local authorities, stakeholders and the public.

Inadequate legislation and/or lack of legislations

As already mentioned, the new Waste Management Plan establishes for the first time the responsibility for the local authorities to meet specific targets for recycling and developing separate collection systems. However, the main problem is **the absence of clear responsibilities placed on local authorities**, as there are no clear sanctions for the local authorities in case they fail to implement the foreseen separate collection systems or fail to meet the collection and recycling targets. In fact, prior to the adoption of the new plan, local authorities were only responsible for waste collection, without any responsibilities/obligations to develop separate collection systems or meet specific targets.

Lack of policy coherence and clear legislative framework

There seems to be **no common quality standards and requirements for waste collection** (especially in relation to separate waste collection) and each local authority (or cluster of authorities) sets the collection practices to be implemented within their territory (usually by the authorities themselves or in some cases via contracts with the private sector). This results in significant variations in the costs of the collection system between the authorities and problematic monitoring and control of the collection activities, which may result in not acceptable environmental standards.

Besides, the **mixed** competencies between MARDE and MoI and the unclear legal framework and policies have led to a delay in the adoption of the Waste Management Plan in 2015.

 $^{^{32}\}underline{\text{http://www.moa.gov.cy/moa/dfmr/dfmr.nsf/all/DBDD640DA763DA8C42257F4100311170/\$file/metra\%20programmatos.pdf?openelement}$

³³ MARDE, Draft Law on National Waste Prevention Program for 2015 – 2021

b. Implementation gaps and challenges

With only the implementation of the plastic bag tax, Green Dot Recycling schemes and some pilot programs focusing on PAYT, local authorities are taking a step towards managing plastic but it is not enough to curb the problem of plastic pollution.

Inadequate waste management capacities

The current situation reveals that moderate progress has been made in relation to municipal solid waste (MSW) management, especially in relation to recycling of packaging waste, while the country still lacks sufficient infrastructure for waste treatment and disposal, and separate waste collection (apart from packaging waste) is yet to be developed. Whilst the legal framework seems to be complete, having transposed all European Directives, the results of the system are relatively poor, especially in relation to waste treatment (most waste is landfilled without prior treatment) and separate waste collection (which is currently restricted to packaging waste). The main reason for this fact is the lack of the necessary installations, which have been delayed for several years.

In the 2017 **Environmental Implementation Review** (EIR), the main challenges identified for The Republic of Cyprus for the implementation of EU environmental policy and law were to address waste management issues, in particular to **close illegal landfills and put in place the necessary infrastructure**. Following the publication of the 2017 EIR, Cyprus has not yet organised an EIR national dialogue that would help to address the above challenges. The 2019 EIR³⁴ shows that there has been some progress, as the strategic framework for waste is now in place and the national waste management plans for all waste streams have been adopted. Moreover, the illegal landfills in Limassol and in Nicosia have been closed. Proper rehabilitation needs to be ensured after each closure. New economic instruments have been set out in the national waste management plan, but there is a significant delay in their adoption and implementation.

According to the 'Early Warning Report' issued by the European Commission in 2018, the Republic of Cyprus failed to meet the 2020 municipal waste recycling target of 50% (European Commission, 2018a).³⁵ Furthermore, the European Commission identifies the reasons why Cyprus is at risk of not meeting its recycling targets, among which the **lack of infrastructure** and collection systems for recyclables and the lack of incentives to prevent waste and improve recycling.

Finally, the Waste Management Plan foresees the adoption of a **landfill tax.** However, there is no indication as to the level of the tax that will be set, and no timeline for its introduction is provided. The plan also indicates a commitment to restrict the disposal of certain waste streams to landfill, although again no timeline is given, and little detail regarding the streams to be restricted, or the method of enforcing the restriction, is provided. Experience from other countries

³⁴ European Commission, The EU Environmental Implementation Review 2019, Country Report - CYPRUS

³⁵ European Commission (2018a). SWD (2018) 415 final Commission Staff Working Document. The early warning report for Cyprus Accompanying the document Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of EU waste legislation, including the early warning report for the Member States at risk of meeting the preparation for reuse/recycling target on municipal waste.

suggests that these restrictions are not the best way to drive diversion of waste from landfill due to the difficulties of enforcing such legislation.

Extended Producer Responsibility (EPR)

The Waste Management Plan focuses on the extension of the principle to additional material (e.g. paper and plastics), although no timeline is given with regard to these changes. However, attention should be given to additional elements that may strengthen the implementation of the EPR in meeting its objectives, such as:

- Promote different fees for each material or product that corresponds to its actual management cost at the end of its life. This would further motivate producers to design their products in a more eco-efficient manner.
- Public awareness activities should allow the citizens to become aware of the fees of each product associated with its management at the end of its life.
- Establish proper system of monitoring and enforcement system for EPR.

Pay-as-you-throw scheme (PAYT)

The Waste Management Plan foresees the promotion of PAYT systems on a broader scale. Such schemes currently exist only at a **very small pilot scale** at present, and no information is available with regard to their performance, while some future expansion of these schemes is foreseen to be implemented in areas covering around 300,000 citizens in 2021 (approximately 30% of the population). However, the plan does not include clear commitments to the development of PAYT systems.

In general, charging of the waste management costs to the citizens is included in the overall municipal fees and is not related to the generated waste quantities. Different fees apply to different municipalities, as well as different charging methods and the variation is significant. The fee should be calculated for the municipality based on the weight of the waste deposited. The landfill tax, foreseen by the Waste Management Plan, still needs to be implemented. This could facilitate the further extension of PAYT schemes to all the municipalities in Cyprus. Hence, the system does still not fully respect the "polluter pays" principle, and the development of more fair systems, such as PAYT, will contribute to better calculation and monitoring of the waste management costs.

Inadequate capacity for monitoring and poor coordination among relevant administrative bodies

In its Early Warning Report (2018), the European Commission also identifies the **lack of coordination between different administrative levels and lack of capacity at the local level** as main obstacles for meeting the 2020 municipal waste recycling target of 50%.

Municipalities have put into practice minimal measures on reducing plastic pollution, while they are focusing on recycling of waste, especially plastic. For instance, municipalities are purely focusing on retrieving plastic through promoting recycling schemes and not investing in solutions to decrease plastic pollution at source. Plastic recycling is seen as the easiest solution at the local authority level, with municipalities not focusing on plastic pollution prevention and stopping plastic

at sources. This issue is derived by the fact that municipalities do not have the resources, the capacity, or the know-how to stop plastic pollution at its source.

Municipalities also **lack the know-how or capacity,** caused by technical failures in the systems, or to financial, institutional and/or legislative barriers.

Low public awareness

Per the laws and regulations, municipalities are responsible for the collection, treatment and disposal of municipal waste and assume all related costs within their districts, unfortunately this is not being implemented since most of the municipalities are not aware of their basic duties, obligations and rights, mainly when it comes to waste management.

Lack of awareness within the tourism sector about marine litter and the sector's contribution to the problem, and lack of capacity within the sector to respond to the problem, add to the lack of implementation of appropriate separation and recycling schemes.

Low private sector involvement

The market on waste management is currently underdeveloped due to:

- Mixed competencies between MARDE and Mol and unclear framework and policies (delay in the adoption of the waste management plan);
- Underdevelopment of separate collection schemes; and
- Lack of necessary infrastructure

These uncertainties generate reluctance especially for the private sector to invest in waste management.





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