Country profile

Early warning assessment related to the 2025 targets for municipal waste and packaging waste

Portugal

June 2022

European Environment Agency

Contents

Acknowledgements

This draft assessment was prepared by the ETC/WMGE and the successive ETC/CE under guidance of the European Environment Agency and with inputs from a consortium led by Rambøll Group under contract with the European Commission. It builds to a large extent on the answers provided by the Portuguese Environment Agency, Agência Portuguesa do Ambiente, I.P. (APA) in May 2021 to a questionnaire developed by the EEA and ETC/WMGE. The EEA and ETC/CE would like to thank the Portuguese authorities for the information provided and for the kind review of drafts of this assessment in 2021 and May 2022.

1 Introduction

1.1 Background and purpose

The Waste Framework Directive 2008/98/EC (as amended by Directive (EU) 2018/851) includes a target to recycle and prepare for reuse, by 2025, 55 % of municipal waste generated. The Packaging and Packaging Waste Directive (94/62/EC as amended by Directive (EU) 2018/852) includes targets for the recycling of packaging waste, both in total and by material, to be achieved by 2025. The Landfill Directive (1999/31/EC as amended by Directive (EU) 2018/850) requires to limit the landfilling of municipal waste to 10 % of the generated municipal waste by 2035. The Directives also foresee that the European Commission, in cooperation with the European Environment Agency, publishes early warning reports on the Member States' progress towards the attainment of the targets, including a list of Member States at risk of not attaining the targets within the respective deadlines, three years ahead of the target dates. This assessment is a contribution from the EEA to the early warning reports according to Article 11b Waste Framework Directive and Art. 6b Packaging and Packaging Waste directive.

This document is an early warning assessment for Portugal. The document is based on the analysis of a number of factors affecting recycling performance (success and risk factors). The assessment aims at concluding whether Portugal is at risk of missing the targets for municipal waste and packaging waste set in EU legislation for 2025. In addition, it provides a preliminary assessment of the prospects for meeting the 2035 target for landfilling of municipal waste.

The assessment takes into account information that was available before 10 May 2022.

1.2 Approach

The assessment follows a methodology developed by the EEA and ETC/WMGE and consulted with the Eionet in 2020 (ETC/WMGE, 2021), which was adjusted in 2021 taking into account experiences with applying the methodology in 2021 (ETC/CE & ETC/WMGE, 2022). This methodology uses a set of quantitative and qualitative success and risk factors that have been identified to affect the recycling performance. The assessment is to a large extent based on the information provided by the Member State in the reply to an EEA-ETC/WMGE questionnaire as well as on available data and information from Eurostat and other relevant sources. In addition, a consortium under contract with the European Commission (led by Rambøll Group) has conducted a critical review of the draft assessment in Q4/2021 and provided further information.

More specifically, Section 2.1 assesses the likelihood for Portugal to achieve the target to prepare for reuse and recycle at least 55 % of municipal solid waste (MSW) for 2025. Chapter 2.2 assesses the likelihood for Portugal to achieve the overall packaging waste and specific packaging materials' recycling targets for 2025. Chapter 2.3 examines the prospects for Portugal to landfill less than 10 % of the generated municipal solid waste by 2035. The official early warning assessment for the landfilling target is only due in 2032 and accordingly, the assessment contained in Chapter 2.3 is only preliminary.

1.3 Member State profile – context parameters

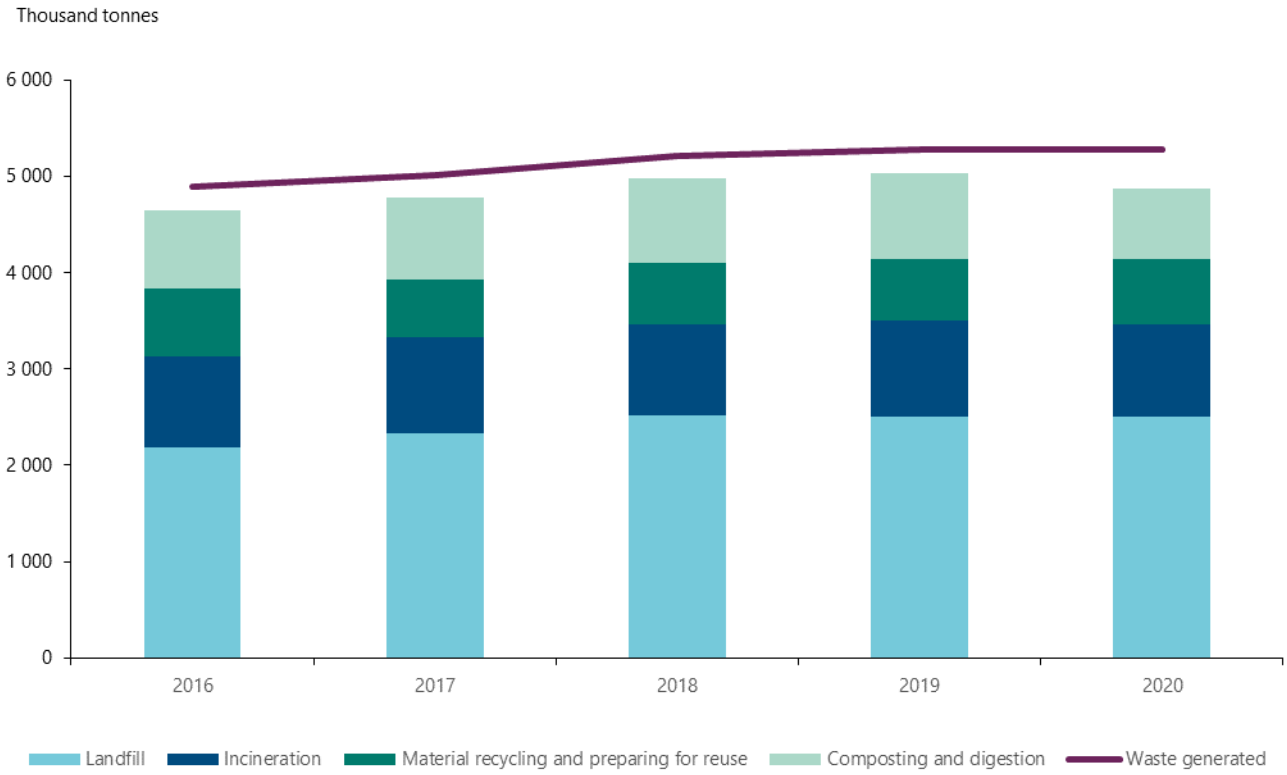
Municipal waste generation and treatment

Waste generation in Portugal has steadily increased from 2016 to 2019, staying at a stable amount between 2019 and 2020. In 2020 the country generated 5.28 million tonnes of municipal waste (Figure 1.1). This corresponds to 513 kg/cap, which is slightly above the (estimated) EU average of 505 kg/cap.

The amount of material recycling has barely changed in Portugal over the past five years. The increasing amounts of composting and digestion are to a large degree due to increased treatment of mixed municipal waste in newly installed mechanical biological treatment (MBT) plants from 2015 onwards, with a slight decrease again in 2020 which is according to the Portuguese authorities probably due to the COVID-19 pandemic. The difference between the generated municipal waste and the sum of all treatments can mainly be explained by mass losses at MBT plants.

Portugal still has a relatively high level of landfilling, which has been stagnating at about 47 % for the past five years. Portugal's incineration rate has been stable at around 18-19 % since 2016.

Figure 1.1 Municipal waste generation and treatment in Portugal between 2016 and 2020, in thousand tonnes



Note: Eurostat estimates for incineration and landfill for 2020

Source: Eurostat (2022a)

Legal Framework

The legal framework in Portugal governing waste management has been consolidated over the past decades including regulations for managing specific waste flows. National waste related legislation

predominantly transposes the EU Directives. The producer responsibility principle is widely applied to achieve targets for prevention, separate collection, and recovery and recycling.

Decree-Law No. 178/2006, of 5 September 2006, amended by Decree-Law No. 73/2011, of 17 June 2011, No. 67/2014, of 7 May 2014 and No. 165/ 2014, of 5 November 2014, established the general regime applicable to the prevention, production and management of waste. This law transposed the EU Waste Framework Directive, which established, amongst other things, the obligation for Member States to draw up strategic plans for municipal waste (PERSU) (Decreto-Lei n.º 73/2011, 2011). In addition to PERSU, Order 3350/2015 defines intermediate targets for each municipal waste management system (Despacho n.º 3350/2015, 2015).

The new Decree-Law 102-D/2020 of 10 December 2020, rectified by Declaration No. 3/2021, of 21 January 2021, and amended by Law No. 52/2021, of 10 August 2021, entered into force on 1 July 2021. It includes three legal regimes, namely specific waste streams, prevention, production and management of waste, and landfilling. This law transposes the 2018 amended EU Waste Framework Directive, and focuses on waste prevention, separate collection and the diversion of waste from landfill. It includes prevention targets to reduce the generation of municipal waste and food waste by 2025 and 2030 (Decreto-Lei n.o 102-D/2020, 2020).

There are various other decrees regulating specific waste streams or treatment options. The Ministry of the Environment is responsible for all waste legislation. While the municipalities are responsible for mixed municipal waste collection, the 23 urban wastes management systems (SGRUs) deal with waste treatment and separate municipal waste collection. There are also some municipalities that are responsible for separate waste collection. Regarding "new" waste streams like bio-waste, the responsibility for collection lies mainly with the municipalities.

Moreover, there are Producer Responsibility Organisations (PRO) for specific waste streams included in municipal waste, such as Sociedade Ponto Verde, Novo Verde, Electrão responsible for recycling of packaging waste; VALORMED, responsible for medicines packaging; ERP Portugal and Electrão, responsible for batteries and accumulators; and ERP Portugal, Electrão and Weeecycle, responsible for waste electrical and electronic equipment (WEEE).

Waste management plan(s)

The national waste management plan (PNGR) establishes the national macro strategy on prevention and waste management, which is currently being approved for publication. It defines the guiding rules for the two Strategic Plans relating respectively to municipal waste (PERSU) and non-municipal waste (PERNU) (APA, 2021).

So far there have been three waste management plans for municipal waste in Portugal: PERSU I was ratified in 1997 and covered the period until 2006. PERSU II covered the period from 2007 to 2013. The third plan, PERSU 2020, covered the period 2014–2020, and was approved in September 2014.

PERSU 2020 had identified separate collection as one of the weak spots in municipal waste management and the evaluation of existing collection schemes with respect to frequency and type of collection was foreseen. The focus was on increased door-to-door collection. Under PERSU 2020 the construction of further MBT plants was foreseen driving up the recycling rates of bio-waste and helping to achieve landfill diversion targets. To minimise the risk of high MBT capacity decreasing the incentive for further investment in separate collection systems, PERSU 2020 also created a target for recycling from separate collection.

In 2019, PERSU 2020+ was published, which complements and adjusts the measures of PERSU 2020 in order to re-orient the intervention priorities, with the new targets in mind. PERSU 2020+ also emphasized the need to enforce separate collection and includes a measure regarding DRS legislation

and implementation. Regarding bio-waste, it also promotes treatment at source, e.g., home composting.

With respect to PERSU 2030, the first draft was concluded and submitted to public consultation together with the Strategic Environmental Assessment procedure. The consultation ended on 5 May 2022, and all contributions are under analysis (PERSU 2030, 2022).

The new national waste management plan, PNGR 2030, together with the strategic plans for municipal waste and non-municipal waste, is intended to promote change in the current waste management paradigm by promoting waste prevention and circular economy. Once finalized it is going to be submitted for public consultation (Despacho n.º 4242/2020, 2020).

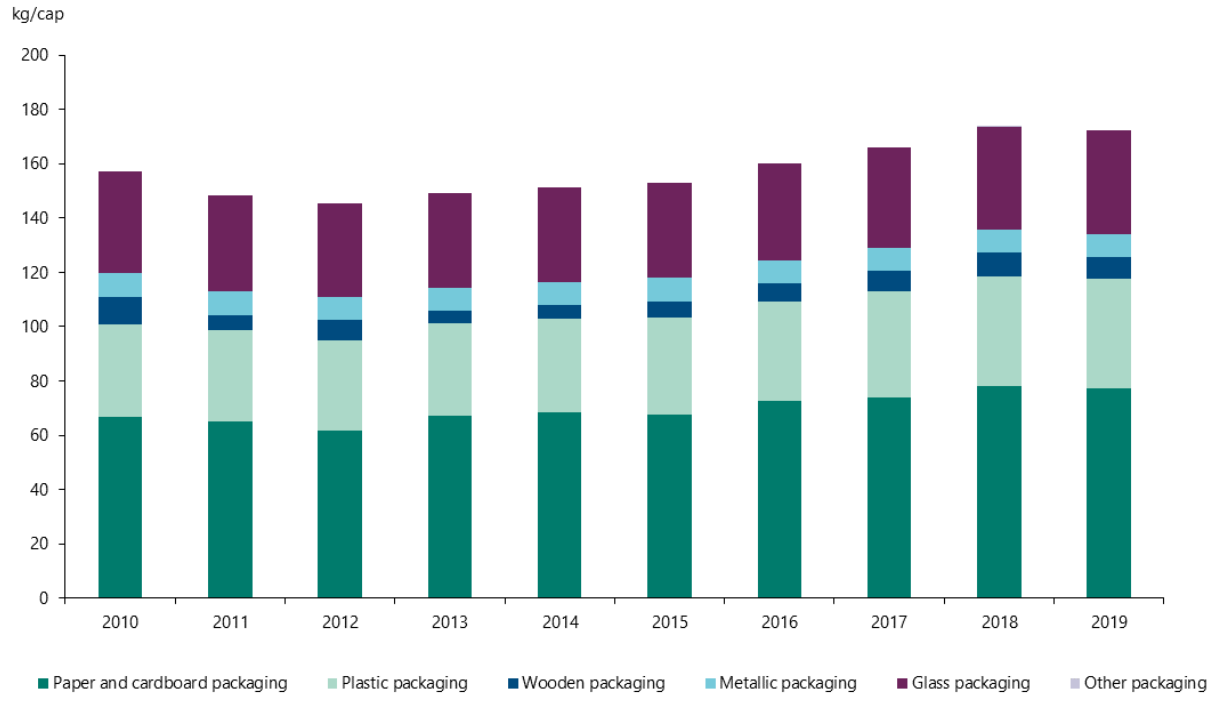
Implementation of previous early warning recommendations

Portugal had been considered at risk of missing the 2020 target of 50 % preparation for re-use / recycling for municipal waste by the European Commission (EC, 2018b), and it received a set of policy recommendations (EC, 2018a). Annex 1 lists the recommendations and a self-assessment from Portugal on the status of taking them into account.

Packaging waste generation and treatment

In Portugal 1.77 million tonnes (172 kg/cap) of packaging waste were generated in 2019, which corresponds roughly to the EU average of 177 kg/cap. Packaging waste generation increased by 9.4 % from 157 kg/cap in 2010 to 172 kg/cap in 2019 (Figure 1.2).

Figure 1.2 Packaging waste generation in Portugal between 2010 and 2019, in kg per capita



Source: Eurostat (2022b)

Capture rates for recyclables

The capture rate is a good performance indicator of the effectiveness of the separate collection system. The capture rate is calculated by dividing the separately collected weight of a certain material

for recycling by the weight of the material in total municipal waste. For Portugal, Table 1.1 shows the calculated capture rates for different waste fractions:

Table 1.1 Capture rates for different waste fractions in Portugal

	Residual waste composition (%)([b])	Residual waste composition (tonnes)([a])	Separately collected amounts (tonnes)([b])	Materials in total MSW (tonnes)	Capture rates (%)
Reference year	2019				
Mixed municipal waste, total		4 047 002			
Paper and cardboard	7 %	297 050	196 053	493 103	40 %
Metals	2 %	68 799	3 312	72 111	5 %
Glass	4 %	174 426	185 757	360 182	52 %
Plastic	12 %	469 048	124 222	593 269	21 %
Bio-waste	43 %	1 760 041	192 867	1 952 908	10 %
Textiles	4 %	169 974	2 068	169 974	1 %
Wood	1 %	28 329	28 081	30 397	50 %

([a]) Note: Share of material in residual waste (household waste only) multiplied with the amount of residual waste in 2019 as reported in the questionnaire by APA (2021)

([b]) Source: As reported in the EEA-ETC/WMGE questionnaire by APA (2021)

This indicates that there is room for improvement to capture higher amounts of all materials, and especially textiles, metals, bio-waste and plastics.

2 Success and risk factors likely to influence future performance

2.1 Target for preparing for reuse and recycling of municipal waste

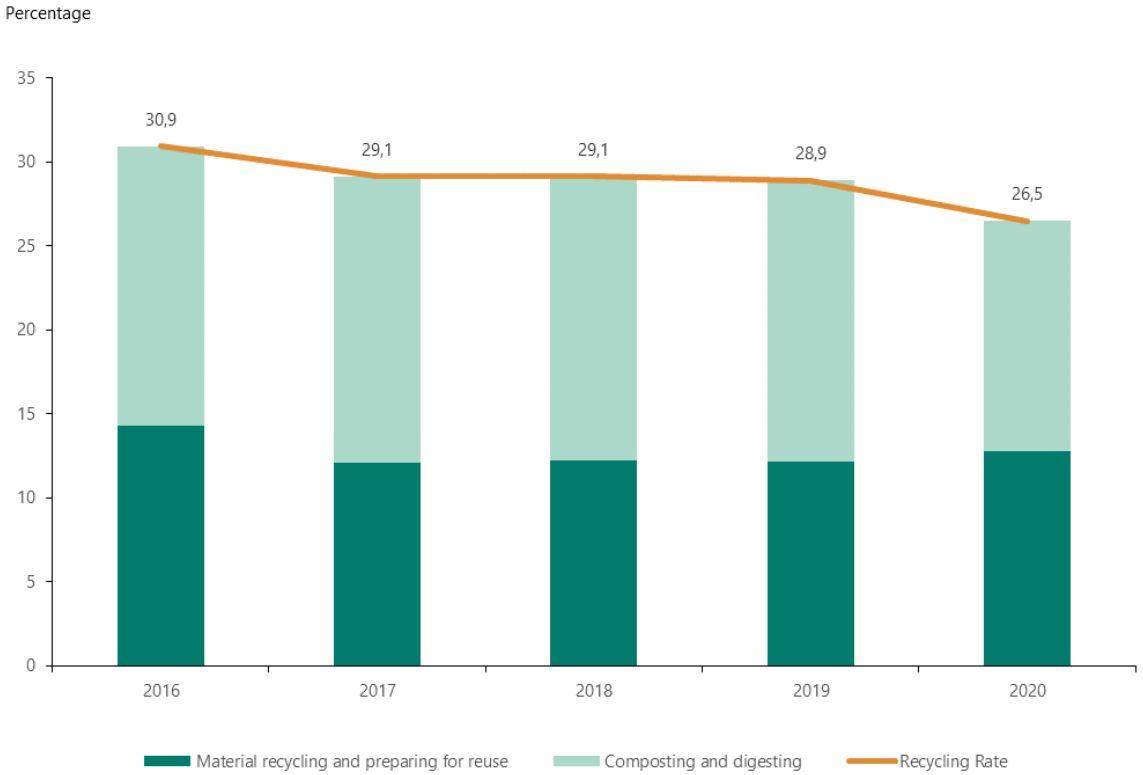
This chapter aims at assessing the prospects of Portugal to achieve the **55 % preparing for reuse and recycling target** for municipal waste in 2025. For a detailed description of the methodology followed, the development of success/risk factors and their impact on recycling, please consult the methodology report (ETC/CE & ETC/WMGE, 2022).

2.1.1 Current situation and past trends

SRF MSWR-1.1: Distance to target

The overall recycling rate of Portugal shows a decrease from 30.9 % in 2016 to 26.5 % in 2020 (Figure 2.1). In this analysis the recycling rate is calculated by dividing the summed amounts of recycling of materials and of composting and digestion by the total generated amounts. The data source used is the Eurostat data set *Municipal waste by waste management operations [env_wasmun]* (following the OECD/Eurostat Joint Questionnaire); Data reported by Member States according to Article 10.2(a) of the Waste Framework Directive are not used for this assessment as the reporting methods differ by Member State, resulting in a lack of comparability between Member States. The data source used here is assumed to be the best available proxy, given that data in accordance with the rules on the calculation of the attainment of the targets defined in Article 11a are not yet available.

Figure 2.1 Recycling rate in Portugal between 2016 and 2020, in percentage



Source: Eurostat (2022b)

The actual distance to the target for the most recent data point is a key factor determining the likelihood of meeting/not meeting the target. The closer the Member State is to the target already, the more likely that the target will be met. In 2020, 12.7 % of the materials were reported to be recycled and 13.77 % went to composting/digestion, resulting in a total recycling rate of 26.5 %. This means that Portugal is still 28.5 percentage points away from reaching the 2025 target of 55 %.

However, the data used for this analysis are based on a different methodology than the calculation rules for the target. The actual impact of the application of the new calculation rules to the recycling rate has not been quantified yet in Portugal. A few Member States have provided quantified estimates indicating how the application of the new reporting rules would influence the recycling rate (compared to the data reported to Eurostat under the Joint Eurostat/OECD questionnaire), resulting in reductions between 3.8 and 13 percentage points, and on average 5.5-6.7 percentage points. While the effect depends on how Portugal currently reports the data, an effect of a reduction with 5 percentage points is therefore assumed for this assessment.

In addition, Portugal has significant MBT capacities for the treatment of residual waste. While the MBT outputs are currently included in the relatively high composting rate, this will not be possible anymore as of 2027, in accordance with the revised Waste Framework Directive (EC, 2019b). This change is expected to further significantly decrease Portugal's overall recycling rate (APA, 2021).

Summary result

Distance to target > 15 percentage points	Based on the currently available data, Portugal's recycling rate is 26.5 % in 2020, which is 28.5 percentage points below the 2025 target. Considering, however the impact of the new calculation rules, we assume a reduction of 5 percentage points from this assessment, resulting in an estimated recycling rate of 21.5 %, 33.5 percentage points below the target.
Robustness of the underlying information	The currently available data do not yet reflect the calculation rules applicable to the target. Portugal has assessed, but not quantified, the influence of the new calculation rules on the recycling rate (at the time of writing this assessment). They expect the new calculation rules will lower the recycling rates significantly. However, also a recycling rate which would be 5 percentage points below the currently reported one (resulting in 21.5 %), would not change the assessment for this SRF.

SRF MSWR-1.2: Past trend in municipal solid waste recycling rate

The recycling rate over the last five years has decreased from 30.9 % in 2016 to 26.5 % in 2020 (Figure 2.1).

More efficient separate collection practices and an increase in the landfill tax are seen by the Portuguese government as the key measures to achieve the 55 % recycling rate by 2025. Increased separate collection, however, has to be complemented by sufficient treatment capacities, e.g., adaptation of MBT infrastructures to separate collection, bio-waste recycling at source, treatment of residues and information campaigns. The rates of both the landfill and incineration taxes have been increased and the new Decree-Law introduces incentives and penalties, depending on the levels of separate collection and material recovery achieved (APA, 2021).

Summary result

RR < 45% and increase in last 5 years < 10 percentage points	The recycling rate has decreased by 4.4 percentage points between 2016 and 2020. For Portugal, the application of the new calculation rates would result in an estimated recycling rate of 21.5 %.
Robustness of the underlying information	There are no breaks in the time series data. The currently available data do not yet reflect the calculation rules applicable to the target.

2.1.2 Legal instruments

SRF MSWR-2.1: Timely transposition of the revised Waste Framework Directive into national law

Timely transposition of the Waste Framework Directive as amended by Directive 2018/851, into national law within the foreseen period is key for a waste management system in line with EU requirements.

Portugal transposed the amended Waste Framework Directive into national law on 1 July 2021 through the Decree-Law 102-D/2020, almost 12 months after the deadline of 5 July 2020 (APA, 2021).

Summary result

Transposition with a delay of less than 12 months	The amended WFD has been transposed into national law with a delay of less than 12 months.
Robustness of the underlying information	Credible information received from the European Commission (status as of 12 November 2021) and the Portuguese authorities

SRF MSWR-2.2: Responsibilities for meeting the targets, and support and enforcement mechanisms, e.g. tools, fines etc.

Clearly defined responsibilities, enforcement and support mechanisms for meeting the targets across different entities and governance levels are important for achieving high recycling rates. The clearer the responsibilities for meeting the target and the accountability for failing the targets are, the higher the chance that the targets will be met.

The following authorities and other stakeholders have certain responsibilities which influence the recycling rate of generated municipal solid waste (APA, 2021):

- The Ministry of the Environment is responsible for all waste legislation;
- The responsible entities for implementing waste policies are the national authority, namely the Portuguese Environment Agency (Agência Portuguesa do Ambiente), the five regional development coordinating commissions (Comissões de Coordenação e Desenvolvimento Regional), the autonomous regions' authorities (Madeira and Azores) and the regulator ERSAR (entidade reguladora dos serviços de águas e resíduos);
- The municipalities are responsible for waste collection (except for separate collection of (paper/cardboard, plastics and metal packaging which is mainly done by SGRUs);
- The 23 urban waste management systems (SGRUs) deal with waste treatment, many of which are also responsible for separate waste collection (paper/cardboard, plastics and metal packaging). Out of these 23 systems, 11 are private entities and 12 are public municipality associations;
- Producer Responsibility Organizations (PROs) manage specific waste streams, such as Sociedade Ponto Verde, Novo Verde, Electrão, Valormed, Sigeru, ERP Portugal, Weeecycle, Sogilub, Valorcar, Valorpneu, GVB (EEA, 2016).

For the management of packaging waste and achieving the targets, the same players are relevant. In addition, the PROs dealing with packaging waste, Sociedade Ponto Verde, Novo Verde, Electrão, Valormed, and SIGERU, and the waste management operators influence the recycling rate of packaging waste (APA, 2021).

Responsibilities are defined in national legislation in Decree-Law nº 73/2011 (Decreto-Lei n.º 73/2011, 2011), which was substituted by Decree-Law 102-D/2020 (Decreto-Lei n.º 102-D/2020, 2020). This law transposes the EU WFD targets, and foresees strategic plans for municipal waste (PERSU). PERSU 2020 established three targets for the diversion of biodegradable waste from landfill, preparation for reuse and recycling, and material recycling from separate collection for each SGRU (municipal waste management system). These targets vary amongst different SGRUs according to a set of assumptions. Order 3350/2015 defines intermediate targets to achieve the final target by 2020, for each SGRU in mainland Portugal (Despacho n.º 3350/2015, 2015). For some SGRUs, minimum service requirements are defined by "concession contracts" established between the State and the management systems (APA, 2021).

With respect to packaging waste, responsibilities are defined in national legislation in Decree-Law nº 102-D/2020, 10 December 2020, transposing the EU WFD (Decreto-Lei n.º 102-D/2020, 2020) and Decree-Law nº 152-D/2017, transposing the Packaging and Packaging Waste Directive (and other waste streams Directives) (Decreto-Lei n.o 152-D/2017, 2017). In addition, Order 4707/2018 defines targets for the amount of packaging waste from separate collection sent for recycling, for each municipal waste management systems in mainland Portugal (Despacho n.º 4707/2018, 2018). The amended PPWD directive has not yet been fully transposed yet into national law.

Order 14202-C/2016 defines financial compensation paid by the PROs to municipal waste management systems according to the amount of packaging waste sent for recycling originating from separate or mixed collection (Despacho n.º 14202-C/2016, 2016).

Order 4707/2018 defines the separate collection targets for packaging waste for the municipal waste management systems.

Order 14202-E/2016, 14202-D/2016 and 6907/2017 defines the recycling targets for each PRO (SPV, Novo Verde and Electrão , respectively) both overall and by material.

In Portugal, municipalities must ensure the collection of MSW from waste producers which generate up to 1100 litres per producer per day (households and other entities). Large producers of municipal waste can use private waste operators. The type and specific features of the collection systems vary throughout the country and even within a given municipality. Typically, municipal waste collection from households is under the responsibility of the municipalities or with private collectors operating on their behalf – often separate collection of paper/cardboard, plastic and metal packaging is carried out by one of the 23 urban waste management systems (SGRUs) (EEA, 2016).

If the responsible entities do not comply with their responsibilities, they can be fined depending on the target deviation. If the PROs do not comply with their collection and recycling targets, they have to pay penalties related to the amount of waste suitable for recycling or other material recovery, as foreseen under the new Decree-Law 102-D/2020. This law also foresees tax reductions for municipalities depending on whether they have bio-waste separate collection in place and achieve the recycling targets (APA, 2021).

Moreover, there are support tools and mechanisms in place to improve the efficiency and performance of the responsible entities influencing the recycling rate of municipal solid waste and packaging waste (APA, 2021):

- Financial and technical support for the planning of separate collection or recycling at source of bio-waste;
- Training in waste management for technicians;
- Financial support for bio-waste separate collection and recycling at source;
- Financial support for increasing separate material collection and the citizens' participation in the process;
- Financial support for increasing bio-waste treatment capacity and for the modernization of municipal waste treatment facilities and conversion of MBT units into organic recovery for the reception of bio-waste from separate collection;
- Infrastructure sharing by some municipal waste management systems;
- Monitoring information through municipal waste reporting forms with a certain periodicity (Municipal waste registration map – MRRU);
- Education/public awareness national campaigns.

There are also some support tools or mechanisms in place to improve the efficiency and performance of the responsible entities influencing the recycling rate of packaging waste:

- PROs pay a financial contribution to the municipal waste management systems for the amount of packaging waste sent for recycling. They pay more for packaging waste that originates from separate collection of packaging waste and less if it originates from mixed collection;
- Monitoring information through PROs reporting forms with a certain periodicity (quarterly and annual reporting).

Summary result

Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets	Responsibilities are defined and support mechanisms are in place, and there are direct consequences if the targets are not met.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

2.1.3 Economic instruments

SRF MSW-3.1: Taxes and/or ban for landfilling residual- or biodegradable waste

Bans and taxes on landfilling of residual municipal waste can help to discourage strong reliance on residual waste treatment and thus support recycling.

In 2007 a landfill tax was introduced in Portugal. The tax increased steadily from 6.6 EUR/t in 2016 to 22 EUR/t in 2021. Further increases are planned, namely to 25 EUR/t in 2023, to 30 EUR/t in 2024 and 35 EUR/t in 2025. Information about the tax rates can be found in Articles 110 and 111 of Annex I of Decree-Law No. 102-D/2020 (Decreto-Lei n.º 102-D/2020, 2020).

For landfills managed by municipal waste management systems, the tax rates depend on whether the waste sent to landfill would have been suitable for recycling or other material recovery. The tax is

escalated when recyclable waste is sent to landfill instead of being recovered. The rates will increase based on the following scheme:

- by 10 percentage points in 2023;
- by 20 percentage points in 2024;
- by 30 percentage points in 2025.

For example, in 2025 the amount of waste not suitable for recycling/material recovery sent to landfill will be charged with a landfill tax of 35 EUR/t, whereas the amount of waste suitable for recycling/material recovery will be charged 130 % of 35 EUR/t , i.e. 45.5 EUR/t.

In order to incentivise the separate collection or recycling at source of bio-waste, the tax is reduced based on the following scheme (APA, 2021):

- 10 percentage points, if the municipality shows to have separated and recycled at source or separately collected 5 % of bio-waste;
- 30 percentage points, if the municipality demonstrates having separated and recycled at source or separately collected 15 % of bio-waste;
- 50 percentage points, if the municipality shows to have separated and recycled at source or separately collected 30 % of bio-waste.

Summary result

Low tax (< 30 EUR/t([a]))	In Portugal the current landfill tax amounts to 22 EUR/t (24.7 EUR/t rescaled based on purchasing power parities) and there is an escalator in place. By 2025 the tax is planned to increase to 35 EUR/t. As of 2023, the tax will incentivize separate collection and recycling of bio-waste and other recyclables.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

([a]) Note: Rescaled based on purchasing power parities Eurostat (2020a)

SRF MSWR-3.2: Taxes on municipal waste incineration

Taxes on incineration of mixed municipal waste can help to discourage strong reliance on waste incineration and thus support recycling.

The current tax levels for incineration and energy recovery (treatment operations D10 and R1, respectively) are 85 % and 20 % of the landfill tax, respectively. So currently, in 2021, the landfill tax amounts to 22 EUR/t, the incineration tax to 18.7 EUR/t, and the energy recovery tax to 4.4 EUR/t.

In the case of dedicated incinerators with energy recovery managed by one of the municipal waste management systems, the tax amounts to 20 % of the landfill tax. It increases proportionally with the quantities sent to incineration which would have been suitable for recycling or other recovery activities. The following increases are planned:

- 45 percentage points in 2023;
- 55 percentage points in 2024;
- 65 percentage points as of 2025.

The tax is reduced with increasing separate collection based on the following schemes:

- 2.5 percentage points, if the municipality proves to have separated and recycled at source or selectively collected at least 5 % of bio-waste;
- 5.5 percentage points, if the municipality demonstrates that it had separated and recycled at the source or collected selectively at least 15 % of bio-waste;

- 8.5 percentage points, if the municipality proves to have separated and recycled at source or selectively collected at least 30 % of bio-waste.

Summary result

Taxes > 7 EUR/t([a]) with escalator	The current tax levels for incineration and energy recovery are at 85 % and 20 % (in case of energy recovery) of the landfill tax, respectively. So currently, with a landfill tax of 22 EUR/t, the incineration tax amounts to 18.7 EUR/t (corresponding to 21 EUR/t rescaled based on purchasing power parities), and the energy recovery tax to 4.4 EUR/t. By 2025 the tax will further increase .
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

([a]) Note: Rescaled based on purchasing power parities Eurostat (2020a)

SRF MSWR-3.3: Pay-as-you-throw (PAYT) system in place

PAYT systems are designed to incentivize citizens to make a bigger effort in separating their waste at source. However, a PAYT system should be designed with the appropriate level of source separation encouragement to ensure that citizens do not misplace waste in recycling bins in order to avoid residual waste charges. Overall, PAYT usually has a positive effect on source separation and thus recycling rates through direct involvement of citizens.

According to the Portuguese Water and Waste Services Regulation Authority (ERSAR) there are three cities with PAYT tariffs. PERSU 2030 sets measures promoting PAYT systems. However, currently in Portugal there is no PAYT system in place which covers a major share of the population (APA, 2021).

Summary result

Less than 50% of the population covered by PAYT	In Portugal, there is no PAYT system in place, which covers a major share of the population
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

2.1.4 Separate collection system

SRF MSWR-4.1: Convenience and coverage of separate collection systems for the different household waste fractions

Separate collection systems are a key enabler for high recycling rates and for collecting recyclables at adequate quality. Generally, the more convenient and accessible these systems are for their users, the better results they deliver. The assessment methodology categorises different types of collection systems (door-to-door, bring points with a density of > 5 per km^2, bring points with a density of < 5 per km^2, civic amenity site) for assessing the degree of convenience, and differentiates between cities (densely populated), towns and suburbs (intermediate densely populated) and rural (thinly populated areas). It then calculates which share of the population is served by which type of system. The assessment is done on a material basis and takes into account the different materials according to their average share in municipal waste. This is described in more detail in the methodology (ETC/CE & ETC/WMGE, 2022).

For Portugal, according to the most recent data, the percentage of households living in cities is 45.3%, in towns and suburbs 27.8% and in rural areas 26.9% (Eurostat, 2021a).

In general, Portugal's authorities report that door-to-door collection exists mainly in cities, while in less densely populated areas door-to-door collection is less frequent and is in most cases only done in some neighbourhoods. In 2020, about 70 % of the municipal waste was collected separately via bring points and about 20 % via separate door-to-door collection. The remaining 10 % are collected via civic amenity sites and "punctual/specific" collections (APA, 2021).

According to the Portuguese authorities, the amount of residual waste collected in cities via nearby bring points remains slightly higher than the amount collected via door-to-door, while in towns, suburbs and rural areas residual waste is mainly collected via nearby bring points. The amount of paper and cardboard, plastics and composite packaging, ferrous metals and aluminium collected in cities via nearby bring points remain slightly higher than the amount collected via door-to-door, while in towns and suburbs these fractions are mainly collected via nearby bring points. Door-to-door collection in rural areas is practically non-existent for these fractions, with only a few pilot projects (APA, 2021).

Glass is collected throughout Portugal via bring points. For the separate collection of glass, plastics and metals, only packaging materials are included. Other plastics and metals are collected in civic amenity sites. Bulky waste is collected via door-to-door collection upon request.

Portugal does not have separate collection of food waste although in some cities' neighbourhoods, food waste is collected separately. This kind of collection system is limited to restaurants and bigger waste producers. Recently, via a number of pilot projects, separate collection of bio-waste is being implemented in towns and suburbs, both door-to-door and via nearby bring points. However, this is still limited to some neighborhoods, especially with high-rise buildings. In rural areas community composting is most common. Each municipality has the responsibility to choose the type of collection. Garden waste is collected via separate door-to-door collection upon request and nearby bring points, while in rural areas this waste stream is only collected via civic amenity sites (APA, 2021).

Textiles and wood waste are collected via civic amenity sites. For textiles there is also a network of bring points for reusable textiles in place. WEEE is mainly collected via civic amenity sites and in cities also via bring points (APA, 2021). All over the country there are also bring points integrated in the EPR scheme and there is the obligation of stores to take back WEEE after purchase and / or delivery of a new EEE. Table 2.1 gives an overview of the collection system in Portugal.

Table 2.1 Characterisation of the collection system in Portugal

	Cities (densely populated areas)					**Towns and suburbs** (intermediate density areas)					**Rural areas** (thinly populated areas)			
	Door-to-door - separate	Door-to-door - co-mingled	Bring point (>5 per km²)	Bring point (<5 per km²)	Civic amenity site	Door-to-door - separate	Door-to-door - co-mingled	Bring point (>5 per km²)	Bring point (<5 per km²)	Civic amenity site	Door-to-door - separate	Door-to-door - co-mingled	Bring point	Civic amenity site
Residual waste	x		xx			x		xx					xx	
Paper and Cardboard	x		xx			x		xx					xx	
Ferrous metals		x	xx				x	xx					xx	
Aluminium		x	xx				x	xx					xx	
Glass	x		xx			x		xx					xx	
Plastic		x	xx				x	xx					xx	
Bio-waste														
food	x													
garden	x				x	x				x				x
Textiles					x					x				x
Wood					x					x				x
WEEE			x		x			x		x			x	x
Composite packaging		x	xx				x	xx					xx	

Note: xx: dominant system; x: other significant systems. Grey cells indicate high convenience collection systems.

Source: APA (2021)

Summary result

Paper and cardboard	A high share of the population is covered by high convenience collection services	Door-to-door or high convenience collection points are the dominant systems in cities, towns and suburbs, and rural areas for paper and cardboard packaging waste and reclaimed paper.
Metals	A high share of the population is covered by high convenience collection services.	Door-to-door co-mingled or high convenience collection points are the dominant systems in cities, towns and suburbs, and rural areas. Only packaging metals are targeted. Other metal waste is collected via civic amenity sites and bulky metal waste via door-to-door collection upon request.
Plastics	A high share of the population is covered by high convenience collection services.	Door-to-door co-mingled or high convenience collection points are the dominant systems in cities, towns and suburbs, and rural areas. Only packaging plastics are targeted. Other plastic waste is collected via civic amenity sites and bulky plastic waste via door-to-door collection upon request.
Glass	A high share of the population is covered by high convenience collection services	High convenience collection points are the dominant systems in cities, towns and suburbs, and rural areas for glass packaging waste

Bio-waste	A low share of the population is covered by high convenience collection services	For food waste, door-to-door collection is limited to some city neighbourhoods, to restaurants and bigger waste producers. In towns, suburbs, and rural areas there are no separate collection systems in place. For garden waste, door-to-door collection upon request is the dominant system in cities and towns and suburbs and there are low convenience collection points in use.
Wood	A low share of the population is covered by high convenience collection services	Only lower service level collection points are in place.
Textiles	A low share of the population is covered by high convenience collection services	Only lower service level collection points are in place. However, there is a collection network for reusable textiles in almost all the country.
WEEE	High to medium convenience collection services dominate	WEEE is collected mainly via civic amenity sites, via take back schemes at retailers and in cities, towns and suburbs also via bring points and door-to-door collection upon request (as bulky waste)
Robustness of the underlying information		Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

SRF MSWR-4.2: Firm plans to improve the convenience and coverage of separate collection for the different household waste fractions

While for paper and cardboard, metals, plastics and glass a large share of the population is already covered by high convenience collection points or door-to-door collection, there is still room for improvement for textiles, wood and bio-waste (APA, 2021).

The new Decree-Law, in force as of July 2021, makes separate collection of waste mandatory. An increase of separate collection coverage is expected and also some changes in the collection schemes (door-to-door, bring points, etc.) (Decreto-Lei n.º 102-D/2020, 2020). For waste managed by municipalities there are deadlines for implementing separate collection schemes. There are no changes planned for WEEE and wood waste specifically, but by 2025, textiles, bulky and hazardous waste, used cooking oils and construction and demolition waste produced in households must be collected separately. With these new requirements, Portugal will introduce collection schemes for bio-waste, textiles, hazardous and bulky waste, all over the country. This will be done through improving the convenience by reducing the distance for people to bring points or civic amenity sites and increasing door-to-door collection. The new Decree-Law simplifies the licencing of these sites.

The Decree-Law establishes the evaluation of the separate collection performance and the definition of targets with regard to the number of collection points and minimum quality standards of the collected material. Next to this, there is an evaluation of the quality of the service provided by SGRUs and municipalities that takes into account the density of bring points. There are penalties for SGRUs and municipalities if service quality is not achieved.

One of the measures of PERSU 2030, currently under development, is the further development of door-to-door collection systems for packaging waste and bio-waste in places with more than 50 000 inhabitants. Catering and industrial activities that produce less than 25 tonnes of bio-waste per year must separate this by the end of 2022, or by the end of 2023 in case they produce more than 25 tonnes per year (APA, 2021).

Additionally, PERSU 2030 has a specific measure to improve the accessibility and functionality of civic amenity sites, measures to promote PAYT systems and to create tariff systems with benefits for home or community composting (APA, 2021).

To further improve the separate collection of glass, a project has been developed and implemented that includes measures such as extended door-to-door collection for hotels, restaurants and cafés (HORECA), an improved coverage of ecopoints (selective sorting containers), TMB glass recovery, incentives based on quantities and an Integrated System for Extra-SIGRE Packaging (APA, 2022).

Summary result

Paper and cardboard	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	No plans to further improve the collection system.
Metals	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	The convenience level will be increased by limiting the distance for people to bring points or civic amenity sites and increasing door-to-door collection, and by implementing the deposit-return scheme for metal beverage packaging. The new Decree-Law simplifies the licencing of these sites.
Plastics	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	The convenience level will be increased by limiting the distance for people to bring points or civic amenity sites and increasing door-to-door collection, and by implementing the deposit-return scheme for plastic bottles. The new Decree-Law simplifies the licencing of these sites.
Glass	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	There are plans to further improve the collection system such as extended door-to-door collection for HORECA, improved coverage of ecopoints, TMB glass recovery, incentives based on quantities and an Integrated System for Extra-SIGRE Packaging.
Bio-waste	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline.	Separate collection or recycling at source will become mandatory by the end of 2023. Smaller catering and industrial activities must separate bio-waste by the end of 2022 and larger operations must do so by end of 2023 .
Wood	There are plans to improve the collection service but unclear plan for implementation.	Bulky waste from households, which includes wood waste, will have to be collected separately by 2025. However, there is no information about the implementation and envisaged service level available.
Textiles	There are plans to improve the collection service but unclear plan for implementation.	Separate collection of textiles will be mandatory by 2025. The recent revision of Decree-Law 102-D/2020, made by Law 52/2021, 10th August, requires the implementation of an EPR scheme for textiles by the end of 2026. This plan is, however, not expected to contribute to achieving the 2025 recycling targets.
WEEE	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	Bulky waste from households, including large household appliances will have to be collected separately by 2025. This plan is, however, not expected to contribute to achieving the 2025 recycling targets.
Robustness of the underlying information		Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

2.1.5 Extended producer responsibility (EPR) and similar schemes

SRF MSWR-5.1: Fee modulation in EPR schemes for packaging

Within EPR schemes, fee modulation (or eco-modulation) is a system with different fees for different types of packaging material and designs. While basic fee modulation, i.e. different fees for the main material groups, are common, advanced fee modulation can create stronger incentives for packaging producers to design for recycling and thus create favourable conditions for higher recycling rates. The level of advancement of the fee modulation is assessed against four criteria that have been selected as benchmarks for a well-designed eco-modulated fee system:

- recyclability, for example differentiating between PET and PS, between different colours of PET, or between 100% cardboard boxes and laminated beverage cartons;
- sortability and disruptors, for example a malus for labels/caps/sleeves made of other materials, which are not fitted for the recycling technologies of the main packaging;
- recycled content; and
- if there is a transparent compliance check by the PRO that producers report correctly.

In Portugal, there are EPR schemes in place for packaging waste from households and for premises whose daily production does not exceed 1 100 litres, including packaging made from paper and cardboard, ferrous metals, aluminium, glass, plastics, wood and composite packaging. Excluded are all industrial and commercial (non-household) sources whose daily production exceeds 1 100 litres. Further, Portugal has implemented EPR schemes for other specific types of packaging, including pesticide, fertilizer, seed and plant packaging and medical and pharmaceutical packaging (APA, 2021).

In Portugal the fees charged to producers have been modulated according to environmental criteria, rewarding good sorting practices and eco-design (bonus), and penalising packaging which hinders recycling (malus) (Institute for European Environmental Policy, 2017). Currently for paper and cardboard, ferrous metals, aluminium and wood packaging, the criteria recyclability and recycled content are considered, while for composite packaging only recycled content is considered. For glass and plastics packaging, recyclability, recycled content and sortability are considered. In addition, according to Decree-Law 152-D/2017 (article 12º, n.º 1 al), PROs are obliged to perform audits to ensure correct reporting (compliance check). These are performed by independent third-party auditors contracted by the PROs (APA, 2021).

The fee differs for each material and amongst the different PROs. Moreover, each PRO establishes different criteria to benefit and / or penalize packers according to the type of packaging they put on the market. However, Decree-Law 152-D/2017 foresees to establish harmonized criteria for all PROs, and the Portuguese authorities report that this will be tackled soon (APA, 2021).

Summary result

There is advanced fee modulation for at least two of the main packaging fractions([a]) AND fee modulation for one packaging fraction meets three assessment criteria	In Portugal there is advanced fee modulation for paper and cardboard, ferrous metals, aluminium and wood packaging, taking into account recyclability and recycled content, while for composite packaging recycled content is taken into account. For glass and plastic packaging, fees are modulated taking into account recyclability, recycled content and sortability. In addition, PROs are obliged to perform audits to ensure correct reporting.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

([a]) Note: Paper and cardboard, ferrous metals, aluminium, glass, plastic

2.1.6 Treatment capacity for bio-waste

SRF MSWR-6.1: Capacity for the treatment of bio-waste

Bio-waste is the largest single waste fraction in municipal waste, and adequate treatment capacity needs to be made available.

The overall residual waste in Portugal amounts to 4 million tonnes in 2019. The reported share of bio-waste in residual waste is 43 %, meaning that a total of 1.7 million tonnes bio-waste is present in residual waste (Table 1.1).

Adding the volumes reported as separately collected bio-waste in 2019 of 192 867 tonnes, this results in an overall amount of generated bio-waste of 1.9 million tonnes, excluding home-composted amounts. This suggests that about 10 % of bio-waste was captured in 2019 (own calculations, Table 1.1). Another 698 530 tonnes (2019) of bio-waste are extracted from residual waste treated in MBT plants to produce compost from mixed MSW (APA, 2021).

MBT plants are common in Portugal. In 2010, ten new MBT plants came into operation (EEA, 2016). In addition to the MBT plants, there are two plants treating separately collected food waste and three plants processing garden waste. Their treatment capacity amounts to 130 000 tonnes per year (APA, 2021). This is far below the treatment capacity which is considered sufficient, namely 80 % of total generated bio-waste, or 1.52 (80 % of 1.9) million tonnes.

Portugal's authorities report that it is impossible to collect bio-waste separately throughout the territory due to the fact that few geographical areas of the territory are densely populated. In these cases, the distance between the sources of bio-waste generation and the treatment facilities impedes the viability of separate bio-waste collection**.** Infrastructure has to be adapted to bio-waste separate collection. MBT infrastructure adaptations are currently being made and planned to adapt to separate collection.

Summary result

Bio-waste treatment capacity below 80% of generated municipal bio-waste and no plans to extend capacity, or no capacity information available	The bio-waste treatment capacity is below 80 % of total generated municipal bio-waste. This would require 1.52 million tonnes of waste, while currently only a capacity of 130 000 tonnes is available in Portugal.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

SRF MSWR-6.2: Legally binding national standards and Quality Management System for compost/digestate

To create a market for compost and digestate, compost should be of a good quality for use as a soil improver or fertilizer. Legally binding standards provide guarantees regarding the quality of the compost/digestate produced. A quality management system aims at addressing different elements of a production process to ensure a stable and high-quality output (product) which helps toward reaching a defined quality for the product.

Portugal has legislation for fertilizers in place which includes standards for compost quality and classification related to the allowed uses, as specified by Decree-Law 103/2015. There is a quality management system in place, as the compost that is going to be put on the market has to be approved

by the public authority for fertilising legislation (DGAE), regarding its characteristics and quality. Control measures have to be applied by operators (APA, 2021).

Summary result

Legally binding national standards for compost/digestate quality in place, and quality management system in place	Portugal has national standards for compost quality and a quality management system in place.
Robustness of the underlying information	Credible information received from the Portuguese authorities.

2.2 Target for the recycling of packaging waste

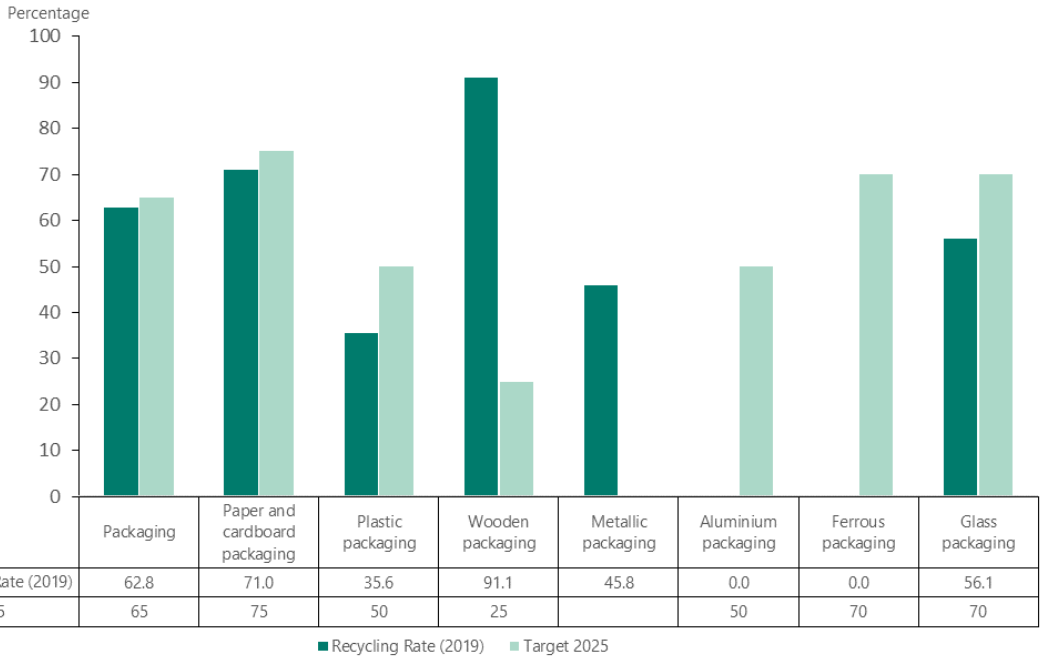
This chapter aims at assessing the prospects of Portugal to achieve the **65 % recycling target for packaging waste** in 2025 as well as the **material specific packaging waste recycling targets** (50 % of plastic; 25 % of wood; 70 % of ferrous metals; 50 % of aluminium; 70 % of glass; 75 % of paper and cardboard). In order to conclude on this likelihood, the analysis takes stock of the status of several factors that are proven to influence the levels of recycling in a country. For a detailed description of the methodology followed, the development of success/risk factors and their impact on recycling, please consult the methodology report (ETC/CE & ETC/WMGE, 2022).

2.2.1 Current situation and past trends

SRF P-1.1 Distance to target

The actual distance to the target for the most recent data point is a key factor determining the likelihood of meeting or not meeting the target. This analysis is based on data reported by Portugal to Eurostat in accordance with Commission Decision 2005/270/EC as last amended by the Commission Implementing Decision 2019/665 (EC, 2019a), published in the dataset *Recycling rates of packaging waste for monitoring compliance with policy targets, by type of packaging [env_waspacr].* The latest available data refer to 2019. The performance of Portugal for 2019 is illustrated in Figure 2.2.

Figure 2.2 Packaging recycling rates for Portugal in 2019, in percentage



	Packaging	Paper and cardboard packaging	Plastic packaging	Wooden packaging	Metallic packaging	Aluminium packaging	Ferrous packaging	Glass packaging
Recycling Rate (2019)	62.8	71.0	35.6	91.1	45.8	0.0	0.0	56.1
Target 2025	65	75	50	25		50	70	70

Note: No data are available for ferrous metals and aluminium, only for total metallic packaging.
Source: Eurostat (2022d), EU (2018)

Overall, in Portugal the recycling rates of packaging waste do not meet the 2025 targets yet, with a recycling rate of 62.8 % for overall packaging, 56.1 % for glass packaging, 71.0 % for paper and cardboard packaging, and 45.8 % for metallic packaging (there is no distinction made between ferrous metals and aluminium packaging). The only exception where the recycling target is met, is a comparatively high wooden packaging recycling rate of 91.1 %, being 66.1 percentage points above the 2025 target of 25 %.

However, the recycling rates presented are based on the calculation rules of the Commission Decision 2005/270 before it was amended by the Commission Implementing Decision 2019/665 and will likely differ from the recycling rates to be reported according to the new calculation rules. The new calculation rules will only be mandatory to be used for the reference year 2020 and onwards. A key difference in the new calculation rules compared to the old rules is that the amount of sorted packaging waste that is rejected by the recycling facility shall not be included in the reported amount of recycled packaging waste.

The Portuguese authorities have carried out a preliminary assessment of the impact of the new calculation rules and found that these new rules will lead to lower recycling rates for packaging waste. Portugal has technical standards for packaging waste, for different materials, defining the maximum limits for contaminants in the batches of waste packaging prepared for recycling. Those standards were defined jointly with producer responsibility organisations (PROs), municipal waste management systems (SGRUs) and recyclers. Portugal intends to make use of these technical standards which are under revision to assure a level of very high exigence and to assume that the compliance with those standards allows to consider the quantity of packaging waste recycled (APA, 2021).

As a matter of sensitivity analysis, to assess what the impact of these new calculation rules could be (change in calculation point), recycling losses found in literature (EXPRA, 2014) are applied to the packaging recycling rates as reported for reference year 2019:

- Paper and cardboard packaging: decrease by 10 %, from 71.0 % to 63.9 %
- Metal packaging: decrease by 14 %, from 45.8 % to 39.4 %
- Glass packaging: decrease by 5 %, from 56.1 % to 53.3 %
- Plastic packaging: decrease by 21 %[1], from 35.6 % to 28.1 %
- Wooden packaging: decrease by 11 % from 91.1 % to 81.1 %
- Total packaging: Calculated based on the amounts of each packaging material generated and recycled in 2019, the recycling rate would drop from 62.8 % to 52.7 %.

Applying these estimates further increases the distance to the recycling targets. Only the wooden packaging recycling rate remains above the target.

The Portuguese authorities expect that the planned establishment of deposit return systems for beverage packaging made of plastic, ferrous metals and aluminium in 2023 (and later for glass, if the targets for this material are not met) will lead to an increase of the amount of collected and recycled packaging, so that the 2025 targets would be met. (APA, 2022)

Summary result

Total packaging	5 - 15 percentage points below target	Portugal reports a recycling rate of 62.8 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 52.7 %, 12.3 percentage points below the target.
Paper and cardboard packaging	5 - 15 percentage points below target	Portugal reports a recycling rate of 71.0 %. I the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 63.9 %, 11.1 percentage points below the 2025 target.

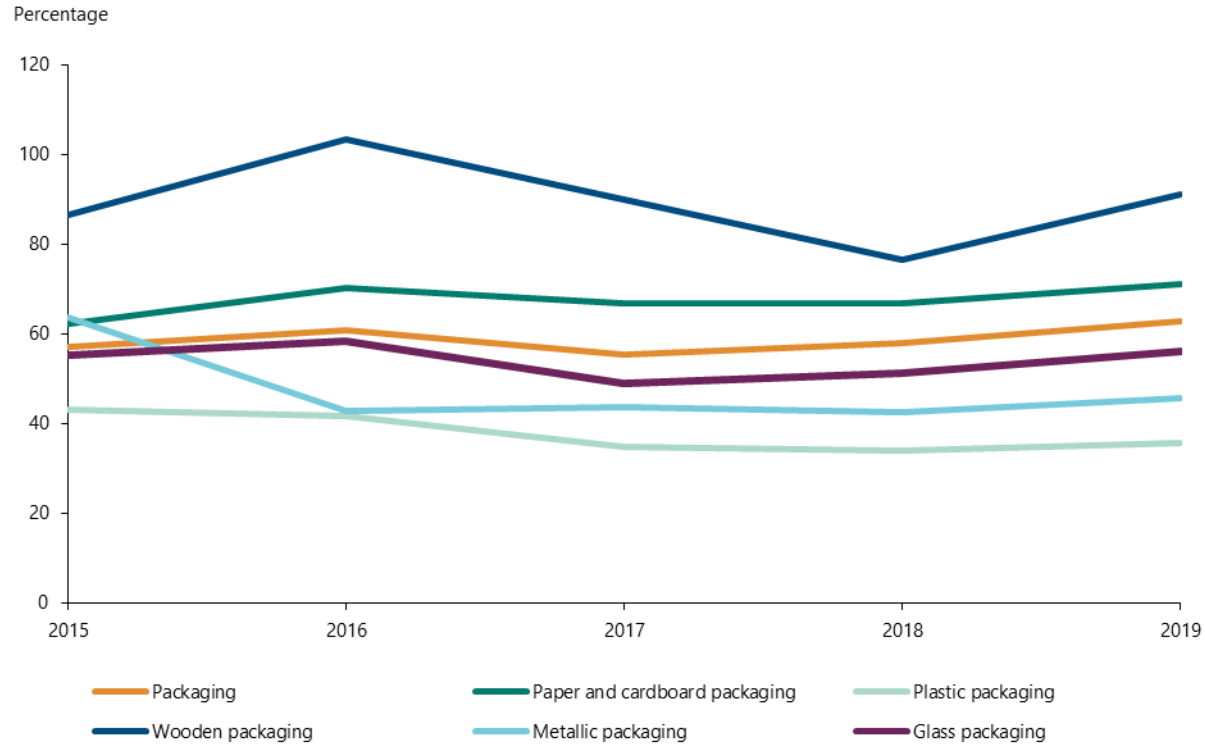
[1] This is the weighted recycling loss taking into account the 29 % recycling loss for packaging waste from household sources (66 %) and the 5 % recycling loss for packaging waste from commercial sources (33 %).

Ferrous metals packaging	> 15 percentage points below target	Portugal reports a recycling rate of 45.8 % for metallic packaging. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 39.4 %. If it is assumed that the recycling rate is the same for ferrous metals and aluminium, the recycling rate would be 10.6 and 30.6 percentage points below the 2025 target for aluminium and steel respectively. However, information from the Portuguese PROs indicates that the recycling rate for aluminium packaging is lower than for ferrous metals packaging but quantitative data is not yet available for this assessment.
Aluminium packaging	5 - 15 percentage points below target	
Glass packaging	> 15 percentage points below target, or no data reported	Portugal reports a recycling rate of 56.1 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 53.3 %, 16.7 percentage points below the 2025 target.
Plastics packaging	> 15 percentage points below target, or no data reported	Portugal reports a recycling rate of 35.6 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 28.1 %, 21.9 percentage points below the 2025 target.
Wooden packaging	Target exceeded	Portugal reports a recycling rate of 91.1 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 81.1 %, still 56.1 percentage points above the 2025 target.
Robustness of the underlying information		Separate data for ferrous metal and aluminium packaging is not yet available, but information from PROs indicate higher recycling rates for ferrous metals than for aluminium. The conclusion with respect to the distance to the target for metals packaging is therefore very uncertain. The assessment is further limited by the fact that the recycling rates for 2019 reported by Portugal to Eurostat do not yet reflect the new calculation rules, and the impact of the new calculation rules has therefore been estimated based on literature. According to information from APA, these estimated losses are too high for several materials but quantified data has not been provided.

SRF P-1.2: Past trend in Packaging Waste Recycling

The development of the historical trend in the recycling rate indicates previous efforts towards packaging waste recycling. In this analysis the recycling rate reported in the Eurostat dataset *Recycling rates of packaging waste for monitoring compliance with policy targets, by type of packaging [env_waspacr]* (latest data year: 2019) is used. The recycling trends for packaging waste by material in Portugal are illustrated in Figure 2.3.

Figure 2.3 Trend in packaging waste recycling rates in Portugal between 2015 and 2019, in percentage



Note: Break in time series in 2017 flagged in Eurostat's database, affecting mainly the quantity of plastic, paper/cardboard and wooden packaging incinerated at energy recovery plants

Source: Eurostat (2022d)

In Portugal, there is a slight increase in total packaging recycling rates from 57.1 % in 2015 to 62.8 % in 2019, and for paper and cardboard from 62.2 % in 2015 to 71.0 % in 2019. Recycling rates for glass packaging increased slightly from 55.2 % in 2015 to 56.1 % in 2019. Recycling rates for metals packaging, including steel and aluminium packaging, decreased significantly from 63.6 % in 2015 to 45.8 % in 2019. Also for plastics packaging there is a decrease from 43.0 % in 2015 to 35.6 % in 2019.

Recycling rates for wooden packaging have been fluctuating from 86.5 % in 2015, up to 103.4 % in 2016 and then down to 76.5 % in 2018, back to 91.1 % in 2019 (Eurostat, 2022d). It is assumed that reusable and non-reusable packaging is often mixed, mainly in the case of wooden pallets or wooden boxes to transport food products. Distinguishing between recycling of reusable and non-reusable packaging is reportedly often difficult (Eurostat, 2022a).

Since 2017 Portugal has implemented an electronic system (producer registry) to report the quantities placed on the market for all waste streams, including packaging. However, the data quality is still considered very weak and the data is therefore not used yet. There is a great number of packers that are not reporting, which is why the placed on the market quantities are estimated based on the reports released by the EPR schemes. With respect to waste treatment, EPR schemes report by material. Waste treatment operators and Municipal Waste Management Systems report on the electronic platforms under a certain European List of Waste (ELW) code. But some ELW codes are wrongly assigned or the assigned EWL codes differ at the entrance as compared to the exit of a sorting facility, resulting in poor data quality (Eurostat, 2021b).

Summary result

Total packaging	RR < 55% and increase in last 5 years < 10 percentage points	The recycling rate has increased with 5.7 percentage points over the past five years and is estimated at 52.7 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Paper and cardboard packaging	RR < 65% and increase in last 5 years > 10 percentage points	The recycling rate has increased with 11.1 percentage points over the past five years and is estimated at 63.9 % if the new calculation rules would be applied (taking into account losses in the recycling plant).
Ferrous metals packaging	RR < 60% and increase in last 5 years < 10 percentage points	The recycling rate has decreased with 17.8 percentage points over the past five years and is estimated at 39.4 % if the new calculation rules would be applied (taking into account losses in the recycling plants)
Aluminium packaging	RR < 40% and increase in last 5 years < 10 percentage points	
Glass packaging	RR < 60% and increase in last 5 years < 10 percentage points	The recycling rate has increased with 0.9 percentage points over the past five years and is estimated at 53.3 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Plastics packaging	RR < 40% and increase in last 5 years < 10 percentage points	The recycling rate has decreased with 7.4 percentage points over the past five years and is estimated at 28.1 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Wooden packaging	RR > 25%	The recycling rate has increased with 4.6 percentage points over the past five years and is estimated at 81.1 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Robustness of the underlying information		The assessment is limited by the fact that the recycling rates for 2019 reported by Portugal to Eurostat do not yet reflect the new calculation rules. There are some signs that the recycling rates would be lower once the new calculation rules will be applied but this is uncertain at this stage. The trends over time seem to be robust as there are no breaks in time series indicated. There are no data available for ferrous metals and aluminium separately, therefore the assessment assumed that the recycling rate is the same for ferrous metals and aluminium. However, information from the Portuguese PROs indicates a lower recycling rate for aluminium packaging than for ferrous metals packaging but quantitative data is not yet available for this assessment that would allow to modify the assumption.

2.2.2 Legal instruments

SRF P-2.1: Timely transposition of the revised Packaging and Packaging Waste Directive into national law

Timely transposition of the Packaging and Packaging Waste Directive as amended by Directive 2018/852, into national law within the foreseen period is key for a waste management system in line with EU requirements.

Portugal has transposed the amended Packaging and Packaging Waste Directive into national law through the Decree-Law 102-D/2020, 10 December 2020, which amended the Decree-Law 152-

D/2017, 11 December 2017, enforced since 1 July 2021, almost 12 months after the deadline of 5 July 2020 (APA, 2021).

Summary result

Transposition with a delay of less than 12 months	The amended Packaging and Packaging Waste Directive has been transposed into national law with a delay of less than 12 months.
Robustness of the underlying information	Credible information received from the European Commission (status as of 12 November 2021) and the Portuguese authorities.

SRF P-2.2: Responsibilities for meeting the targets, and enforcement mechanisms, e.g. fines etc.

Responsibilities for meeting the targets, and support and enforcement mechanisms with respect to packaging waste are described in detail in section 2.1.1 under SRF MSWR-2.2.

Summary result

Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets	Responsibilities are defined and support mechanisms are in place, and there are direct consequences if the targets are not met.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

2.2.3 Economic instruments

SRF P-3.1: Taxes and/or ban for landfilling residual- or biodegradable waste

Bans and taxes on landfilling of residual waste can help to discourage landfilling and thus support recycling, also of packaging waste.

As described in Section 2.1.3 in more detail, Portugal has a landfill tax in place since 2007. Rates depend on whether the waste was separated at source and whether it could have potentially been recycled. As of 2023, for landfills managed by the municipalities, the tax will incentivize separate collection and recycling of bio-waste and other recyclables.

Summary result

Low tax (< 30 EUR/t([a]))	In Portugal the current landfill tax amounts to 22 EUR/t (24.7 EUR/t rescaled based on purchasing power parities) and there is an escalator in place. By 2025 the tax is planned to increase to 35 EUR/t. As of 2023, the tax will incentivize separate collection and recycling of bio-waste and other recyclables.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

([a]) Note: Rescaled based on purchasing power parities Eurostat (2020a)

SRF P-3.2: Taxes on municipal waste incineration

Taxes on incineration of residual waste can help to discourage strong reliance on residual waste treatment and thus support recycling. As described in Section 2.1.3 in more detail, Portugal has an incineration tax with escalator in place.

Summary result

Taxes > 7 EUR/t([a]) with escalator	The current tax levels for incineration and energy recovery are at 85 % and 20 % (in case of energy recovery) of the landfill tax, respectively. So currently, in 2021, with a landfill tax of 22 EUR/t, the incineration tax amounts to 18.7 EUR/t (corresponding to 21 EUR/t rescaled based on purchasing power parities), and the energy recovery tax to 4.4 EUR/t. By 2025 the tax will further increase .
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

([a]) Note: Rescaled based on purchasing power parities Eurostat (2020a)

SRF P-3.3: Packaging taxes

Packaging taxes can support the aim to reduce packaging waste generation and/or to influence the choice of packaging materials and encourage recyclability and eco-design.

In Portugal, in February 2015 a tax on plastic bags was implemented to reduce the consumption of plastic grocery bags. The tax amounts to EUR 0.10 per lightweight plastic bag, including value added tax. Very lightweight plastic bags are excluded (APA, 2021). However, this tax targets only a very small part of all packaging.

Decree-law no. 152-D/2011, as amended by Decree-Law 102-D/2020, 10 December 2020, provides that in order to avoid the placing on the market of superfluous packaging, the free provision of box bags is prohibited, that is, bags with or without handles, including pouches and cartridges, made of any material, which are intended for filling at the point of sale for packaging or transporting products for or by the consumer, with the exception of those intended for filling at the point of sale of bulk products. For plastic bags to which the above-mentioned fee applies, this obligation no longer applies. This measure came into force on 1 July 2021. (APA, 2022)

The Portuguese National Budget Law for 2020 foresaw the establishment of a tax on single-use packaging products, exclusively for take-away and home delivery meals. More recently, the Portuguese National Budget Law for 2021 proposed a contribution of EUR 0.30 per single-use package, which has to be specified on the invoice, on plastic, aluminium or multi-material with plastic or aluminium single-use packaging purchased under the schemes 'ready to eat' and 'take-away or home delivery'. This contribution does not apply to packaging used in a social or humanitarian context, namely, in the social distribution of food or in fighting food waste (APA, 2021). The contribution applies from 1 July 2022 for packaging made of plastic or made of multi-material with plastic and from 1 January 2023 for packaging made of aluminium or made of multi-material aluminium (Legalease, 2022).

Summary result

Limited packaging tax	In Portugal, there is a tax on plastic bags of EUR 0.10 per bag and there are firm plans on a contribution of EUR 0.30 per single-use packaging made of plastic or aluminium purchased in ready-to-eat meals.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire and other credible sources.

SRF P-3.4: Pay-as-you-throw (PAYT) system in place

As a large share of packaging waste is generated in households, incentivising households to separate packaging waste at source, e.g. by applying PAYT systems, is relevant for meeting the recycling targets for packaging waste.

According to the Portuguese Water and Waste Services Regulation Authority (ERSAR) there are 3 cities with PAYT tariffs. PERSU 2030 sets measures promoting PAYT systems. However, currently in Portugal there is no PAYT system in place which covers a major share of the population (APA, 2021).

Summary result

Only experimental (less than 50% of the population covered)	In Portugal, there is no PAYT system in place, which covers a major share of the population
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

SRF P-3.5: Deposit return systems

Deposit Return Systems (DRS) generate high capture rates for packaging covered by the system and thus contribute to increased recycling rates.

At the moment, in Portugal there are no mandatory DRS in place. Currently there is only a deposit system for reusable packaging in place, and the use of reusable packaging is voluntary. Currently, the national legislation only allows for the establishment of deposit return schemes for reusable packaging intended for the consumer and for industrial/professional use (in this case the deposit is not mandatory).

The Law no. 69/2018 foresaw the implementation of an incentive system in the form of a pilot project, to encourage the final consumer to return non-reusable plastic beverage containers (Lei n.º 69/2018, 2018). This pilot-project is presently ongoing, having started in March 2019 until June 2022. 50 % of the collected materials are aimed to stay in the bottle-to-bottle cycle. The project has had public support, although on a much smaller scale than expected, especially during the pandemic. The data collected during the project will be used in an analytical study to verify the possibility of establishing national policies or standards for measurement of recycled content. This will help to design the rules and procedures of a DRS for non-reusable plastic, glass, ferrous metals and aluminium beverage containers as described in Law no. 69/2018. A DRS for single-use packaging is foreseen in legislation to be implemented in 2022 (Decree-law 102D/2020, 10 December 2020, which amended the Decree-Law 152-D/2017, 11 December 2017). This pilot project was funded by the European Economic Area Financial Mechanism: EEA Grants 2014-2021, Call#1 - Deposit refund system for beverage bottles and cans (APA, 2021).

Summary result

Aluminium drink cans	No or voluntary DRS for some drink cans	In Portugal there are only voluntary deposit systems for reusable packaging in place, while there is no DRS for single-use packaging yet. However, Portugal plans to establish in 2023 deposit return systems for beverage packaging made of plastic, ferrous metals and aluminium (and later for glass, if the targets for this material are not met).
Plastic bottles	No or voluntary DRS for some plastic bottles	
Plastic crates	No or voluntary DRS for some plastic crates	
Glass bottles	No or voluntary DRS for some glass bottles	
Wooden packaging	No or voluntary DRS for some wooden packaging	
Robustness of the underlying information		Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

2.2.4 Separate collection system

SRF P-4.1: Convenience and coverage of separate collection for different packaging waste fractions

As a large part of packaging waste comes from households, separate collection systems for households and similar sources are a key condition for achieving high recycling rates of packaging waste and for collecting recyclables at adequate quality. Generally, the more convenient and accessible these systems are for their users, the better results they can deliver. The material specific assessment considers packaging waste from both household and non-household sources. For assessing the convenience and coverage of separate collection systems for households, the same methodology is used here as described in section 2.1.4.

The separate collection systems in Portugal are described in detail under SRF MSWR-4.1 in section 2.1.4.

The coverage and convenience level for the collection of packaging waste is high, including both household and non-household sources. However, the share of packaging waste from non-household sources is still significantly lower than from household sources. Currently there are no mandatory DRS in place.

To increase the capture rates and thereby the recycling rates, there is currently a pilot project ongoing to help design a DRS for non-reusable plastics, glass, ferrous metals and aluminium beverage containers as described in Law no. 69/2018, which is supposed to be operational as of 1 January 2022 (APA, 2021).

Summary result

Paper and cardboard packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household paper and cardboard packaging waste	

Ferrous metals packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household ferrous metals packaging waste	
Aluminium packaging	**Packaging waste from households** A high share of the population is covered by high convenience collection services	
Glass packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household glass packaging waste	
Plastics packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household plastics packaging waste	
Wooden packaging	**Packaging waste from non-household sources** Separation at source is mandatory for non-household wooden packaging waste	
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire. The assessment for non-household packaging is based on information from the Portuguese authorities that separation at source is mandatory for all packaging materials as of July 2021.	

Note: The main source for aluminium packaging waste is drink cans from households, therefore the assessment does not consider aluminium non-household waste.

SRF P-4.2: Firm plans to improve the convenience and coverage of separate collection for the different packaging waste fractions

Concrete plans are needed to improve the type and coverage of separate collection. This SRF is more relevant for Member States and materials that do not score 'green' in SRF P-4.1. The assessment is done on a material basis and summing up the scores of the different materials according to their average share in packaging waste[2]. Again, the material specific assessment considers packaging waste from both household and non-household sources.

Portugal scores green in all categories with respect to convenience and coverage of separate collection for different packaging waste fractions (cf SRF P-4.1). There are no plans to further improve the system, however, for glass a project has been developed and implemented that includes measures such as extended door-to-door collection for hotels, restaurants and cafés (HORECA), an improved coverage of ecopoints (selective sorting containers), TMB glass recovery, incentives based on quantities and an Integrated System for Extra-SIGRE Packaging (APA, 2022).

[2] Based on data from Eurostat on the share of packaging materials in total packaging generated in 2018.

Summary result

Paper and cardboard packaging	**1. Packaging waste from households** N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source)	
Ferrous metals packaging	**1. Packaging waste from households** N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source)	
Aluminium packaging	**Packaging waste from households** N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
Glass packaging	**1. Packaging waste from households** N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source)	
Plastics packaging	**1. Packaging waste from households** N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source)	
Wooden packaging	**Packaging waste from non-household sources** N/A (for countries already having mandatory separation at source)	
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire. The assessment for non-household packaging is based on information from the Portuguese authorities that separation at source is mandatory for all packaging materials as of July 2021.	

2.2.5 Extended producer responsibility (EPR) and similar schemes

SRF P-5.1: Coverage of EPR schemes

Portugal has implemented EPR schemes for specific waste streams and product categories, namely packaging waste, WEEE, batteries and accumulators, end-of-life vehicles, used tires and used mineral oils.

With respect to packaging, there are EPR schemes in place for packaging waste originating from both households and similar premises whose daily production does not exceed 1 100 litres, including packaging made from paper and cardboard, ferrous metals, aluminium, glass, plastics, wood and composite packaging. Further, Portugal has implemented EPR schemes for other specific types of packaging, including pesticide, fertilizer, seed and plant packaging and medical and pharmaceutical packaging.

Currently, in total five Producer Responsibility Organizations (PROs) are operating in Portugal for packaging: the oldest PRO is Sociedade Ponto Verde, and there are two more recent PROs, Novo Verde and Eletrão, established in 2017 and 2018 respectively. The licenses of these three PROs cover primary, secondary and tertiary non-reusable packaging, including service packaging, placed on the national market and packaging waste for which the Urban Waste Management Systems are responsible (i.e. household waste and similar waste) and for which the daily production does not exceed 1 100 liters per producer, as defined in Decision 2011/753 / EU, of 18 November, and Article 5 of Decree-Law no. 178/2006, of 5 September (APA, 2021).

The PRO Valormed covers primary medical packaging including residues, for human use, packaging of veterinary medicines and veterinary products for domestic animals sold at Community Pharmacies at Non-Prescription Drug Sales Locations (NPDSL). The waste generated by end-consumers is collected both through community pharmacies and NPDSL, and through Veterinary Reception Centers (APA, 2021).

The PRO Sigeru covers primary packaging of plant protection products (under EU Regulation 1107/2009), of harmful animals control biocides of and wood protection biocides (under EU Regulation no. 528/2012) whose residues are classified as hazardous and seeds whose residues are classified as non-hazardous and respective packaging waste. The scope of the license comprises packaging waste labelled as hazardous waste, classified with the code LER 15 01 10 *, according to the application of Decision 2014/955 / EU (APA, 2021).

To prevent free-riding, product producers and packers must register on an electronic platform (SIRER) to declare the annual amount of products and packaging materials placed on the market, keeping a registration number. Currently legislation to prevent free-riding is prepared, foreseeing that the respective SIRER registration numbers appear on the invoices, as it is now already mandatory for EEE. This legislative proposal is currently under discussion. Once this stage is completed, the proposed law will be subject to public consultation, before being sent for approval to the Parliament (APA, 2021).

Summary result

All main packaging fractions([a]) are covered by EPR schemes but industrial packaging is not covered by EPR	In Portugal the EPR scheme covers waste and similar waste of all materials for which the daily production does not exceed 1 100 liters per producer. However, industrial packaging is not yet covered by the system.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

([a]) **Note:** Paper and cardboard, Ferrous metals, Aluminium, Glass, Plastic

SRF P-5.2: Fee modulation in EPR schemes for packaging

As explained in Section 2.1.5, fee modulation (or eco-modulation) is a system with different fees for different types of packaging material and designs. The assessment is the same as described in Section 2.1.5

In Portugal the fees charged to producers are modulated according to environmental criteria (eco-modulation), rewarding good sorting practices and eco-design (bonus), and penalising packaging which hinders recycling (malus) (Institute for European Environmental Policy, 2017). Currently for paper and cardboard, ferrous metals, aluminium and wooden packaging, the criteria recyclability and recycled content are considered, while for composite packaging only recycled content is considered.

For glass and plastics packaging, recyclability, recycled content and sortability are considered. In addition, according to Decree-Law 152-D/2017 (article 12º, n.º 1 al), PROs are obliged to perform audits to ensure correct reporting (compliance check) (APA, 2021).

Currently, each PRO establishes different criteria to reward and / or penalize packers according to the type of packaging they put on the market. However, it is considered to be better for the administration (Agência Portuguesa do Ambiente and DGAE – Direção Geral das Atividades Económicas) to establish common criteria for all PROs, as mentioned in n.º 4 and 5 of article 15º of Decree-Law 152-D/2017 (APA, 2021).

Summary result

There is advanced fee modulation in at least two of the main packaging fractions([a]) AND fee modulation for one packaging fraction meets all four assessment criteria	In Portugal there is advanced fee modulation for paper and cardboard, ferrous metals, aluminium and wooden packaging, taking into account recyclability and recycled content, while for composite packaging recycled content is taken into account. For glass and plastics packaging, fees are modulated taking into account recyclability, recycled content and sortability. In addition, PRO's are obliged to perform audits to ensure correct reporting.
Robustness of the underlying information	Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

([a]) **Note:** Paper and cardboard, Ferrous metals, Aluminium, Glass, Plastic

SRF P-5.3 Material specific EPR assessment

The material specific assessment is based on a combination of the coverage of the material-specific EPR schemes and the use of fee modulation for the specific packaging material. The assessment takes the different situations for different types of materials into account: Plastics packaging is the packaging material that is the most difficult to recycle out of the packaging materials targeted by the Packaging and Packaging Waste Directive. Fee modulation therefore plays a larger role for plastic packaging than for the other materials and is therefore rated differently from paper/cardboard, ferrous metals, aluminium and glass. The methodology foresees a green score for plastics packaging only if all four fee modulation assessment criteria mentioned above are met. On the other hand, wooden packaging is mainly generated by commercial and industrial sources and fee modulation is less relevant, therefore the methodology only relies on EPR schemes for wooden packaging from commercial and industrial sources.

At the moment in total five Producer Responsibility Organizations (PROs) are operating in Portugal: the oldest PRO is Sociedade Ponto Verde, and more recently, there are two new PROs, Novo Verde and Eletrão, covering all major material fractions for which the daily production does not exceed 1 100 liters per producer, with fee modulation meeting at least two assessment criteria as described under SRF P-5.2 (APA, 2021). However, industrial packaging is not yet covered by the system (APA, 2022).

Summary result

SRF P-5.3.1 EPR scheme for Paper and cardboard packaging waste	EPR scheme covering only household packaging	
SRF P-5.3.2 EPR scheme for Ferrous metals packaging waste	EPR scheme covering only household packaging	

SRF P-5.3.3 EPR scheme for Aluminium packaging waste	EPR scheme covering only household packaging	
SRF P-5.3.4 EPR scheme for Glass packaging waste	EPR scheme covering only household packaging	
SRF P-5.3.5 EPR scheme for Plastic packaging waste	EPR scheme covering only household packaging	
SRF P-5.3.6 EPR scheme for Wooden packaging waste	EPR scheme covering only household packaging	
Robustness of the underlying information		Credible information received from the Portuguese authorities through the EEA-ETC/WMGE questionnaire.

2.3 Target on landfill of municipal waste

2.3.1 Current situation and past trends

SRF LF-1.1: Distance to target

The Landfill directive (1999/31/EC), as amended by Directive (EU) 2018/850, sets a target to reduce, by 2035, the amount of municipal waste landfilled to 10 % or less of the total amount of municipal waste generated (by weight).

Data to show the current rate of landfilling in line with the reporting rules will only be reported by mid-2022. Therefore, this analysis calculates the landfilling rate based on the current Eurostat dataset *Municipal waste by waste management operations [env_wasmun]*; by dividing the amount of landfilled waste by the total amount of waste generated. The overall landfilling rate of Portugal was 47.5 % in 2020 (calculated based on (Eurostat, 2022b)).

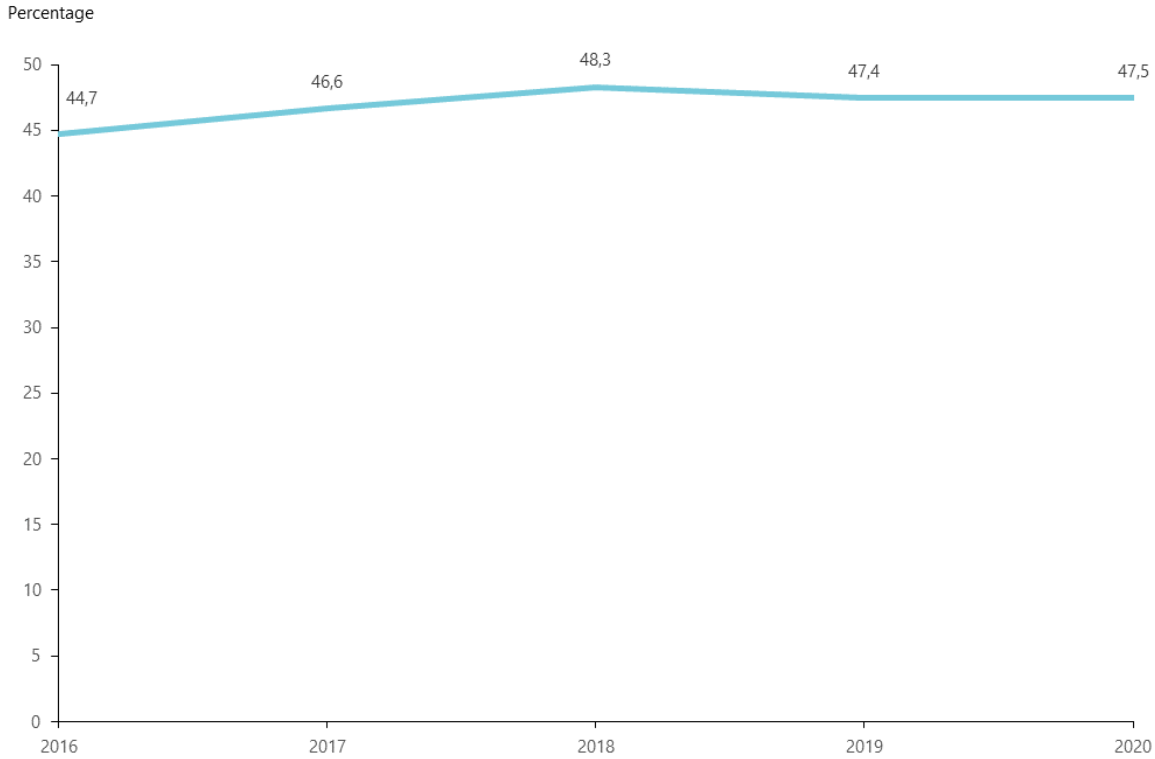
Summary result

Distance to target > 20 percentage points	The distance to target is 37.5 percentage points with a landfilling rate of 47.5 % in 2020.
Robustness of the underlying information	The data are derived from Eurostat and are considered to be robust. However, the reported landfill rate might increase once the new calculation rules laid down in the Commission Implementing Decision (EU) 2019/1885 will be applied. Based on the available information, it is currently not possible to quantify the impact of the new calculation rules on the landfill rate.

SRF LF-1.2: Past trend in municipal solid waste landfill rate

Over the past five years, the overall landfilling rate of Portugal has slightly increased from 44.7 % in 2016 to 47.5 % in 2020, indicating that no progress has been made (Figure 2.4).

Figure 2.4 Landfilling in Portugal between 2015 and 2020, in percentage



Note: Eurostat estimate for landfilling for 2020

Source: Eurostat (2022b)

Summary result

Landfill rate in 2020 > 25% and decrease in last 5 years < 15 percentage points	The landfilling rate in 2020 was 47.5 % and no real progress was made over the past five years.
Robustness of the underlying information	There are no breaks in the time series data.

SRF LF-1.3: Diversion of biodegradable municipal waste from landfill

According to Art. 5(2c) of the EU Landfill Directive, Member States had to ensure that by 2016, biodegradable municipal waste going to landfills is reduced to 35 % of the total amount (by weight) of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available. However, Portugal benefits from a four year derogation period and thus has to meet the target by 2020.

Portugal generated about 2.25 million tonnes of biodegradable municipal waste in the reference year. 41 % of this generated amount was still landfilled in 2016, 43 % in 2017, 46 % in 2018 and 45 % in 2019 (EC, 2022).

Summary result

Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has not been achieved yet and available data indicate that it is unlikely to be achieved	Portugal has reported 45 % biodegradable waste landfilled for 2019 of the total amount (by weight) of biodegradable municipal waste produced in 1995, 10 percentage points above the target. Portugal benefits from a four year derogation period, but the evolution over the past years does not show feasible evidence that the target could be met.
Robustness of the underlying information	Based on officially reported data which is well in line with otherwise reported statistical data on landfilling of municipal waste.

3 Conclusion

This risk assessment indicates whether Portugal is at risk of not meeting the targets. The 'total risk' categorization is the result of the sum of the individual scores of each SRF as described in the previous chapter, where the assessment of each SRF results in a score of **2 points (green), 1 point (amber) or 0 points (red)**, depending on the assessment of the SRF. As some SRFs are considered to have a higher impact on meeting the target, the score of the SRF is multiplied by the defined weight of the SRF. As some SRFs might not be applicable to Portugal, only the SRFs relevant to Portugal are taken into account to define the maximum score. Portugal is considered to be 'not at risk' if its score is 50 % or more than the maximum score, and 'at risk' if its score is less than 50 % of the maximum score.

3.1 Prospects for meeting the recycling target for municipal solid waste

36 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that Portugal is **at risk for not meeting the MSW recycling target in 2025**.
Current situation and past trends:	Based on the currently available data, Portugal's recycling rate is 26.5 % in 2020, which is 28.5 percentage points below the 2025 target. Considering, however, the impact of the new calculation rules, in line with what other MS report, we assume a reduction of 5 percentage points from this assessment, resulting in an estimated recycling rate of 21.5 %, 33.5 percentage points below the target.
Legal instruments:	The amended WFD has been transposed into national law with a delay of less than 12 months.
Economic instruments:	The current landfill tax amounts to 22 EUR/t (24.7 EUR/t rescaled based on purchasing power parities) and there is an escalator in place. By 2025 the tax is planned to increase to 35 EUR/t. As of 2023, the tax will incentivize separate collection and recycling of bio-waste and other recyclables. There is no PAYT system in place, which covers a major share of the population.
Separate collection systems:	For food waste, door-to-door collection is limited to some city neighbourhoods, to restaurants and bigger waste producers. In towns, suburbs, and rural areas there are no separate collection systems in place. For garden waste, door-to-door collection upon request is the dominant system in cities and towns and suburbs and there are low convenience collection points in use. Only lower service level collection points are in place for textiles and wood waste.

Extended producer responsibility:	In Portugal there is advanced fee modulation for paper and cardboard, ferrous metals, aluminium and wood packaging, taking into account recyclability and recycled content, while for composite packaging recycled content is taken into account. For glass and plastics packaging, fees are modulated taking into account recyclability, recycled content and sortability. In addition, PROs are obliged to perform audits to ensure correct reporting.
Bio-waste treatment capacity and quality management:	The bio-waste treatment capacity is below 80 % of total generated municipal bio-waste. This would require 1.52 million tonnes of waste, while currently only a capacity of 130 000 tonnes is available in Portugal.

3.2 Prospects for meeting the recycling targets for packaging waste

53 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that Portugal is **not at risk for not meeting the 65 % recycling target for packaging waste in 2025**	
53 % of maximum score	Paper and cardboard	Not at Risk
33 % of maximum score	Ferrous metals packaging	At Risk
47 % of maximum score	Aluminium packaging	At Risk
31 % of maximum score	Glass packaging	At Risk
29 % of maximum score	Plastics packaging	At Risk
69 % of maximum score	Wooden packaging	Not at Risk
Current situation and past trends:	Portugal reports a total recycling rate of 62.8 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 52.7 %, 12.3 percentage points below the target. Waste streams more than 15 percentage points below target are: ferrous metals, glass and plastics packaging. The total recycling rate has increased with 5.7 percentage points over the past five years and is estimated at 52.7 % if the new calculation rules would be applied (taking into account losses in the recycling plants). Waste streams of most concern are: ferrous metals, aluminium, glass and plastic packaging.	
Legal instruments:	The amended Packaging and Packaging Waste Directive has been transposed into national law with a delay of less than 12 months.	

Economic instruments:	A low landfill tax is in place, with an escalator. There is a tax on plastic bags of EUR 0.10 per bag and there are firm plans on a contribution of EUR 0.30 per single-use packaging made of plastic or aluminium purchased in ready-to-eat meals. There is no PAYT system in place, which covers a major share of the population. No mandatory DRS in place. There is only a deposit system for reusable packaging, and its use is voluntary.
Separate collection system:	The coverage and convenience level for the collection of packaging waste is high, including both household and non-household sources. Source separation is mandatory for commercial and industrial packaging waste.
Extended producer responsibility:	All main packaging fractions are covered by EPR schemes but industrial packaging is not covered by the system.

3.3 Prospects of meeting the landfill of municipal waste target

0 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that Portugal is **at risk for not meeting the 2035 target to reduce the amount of municipal waste landfilled to 10 % or less of the total amount of municipal waste generated.**
Current situation and past trends:	The distance to target is 37.5 percentage points with a landfilling rate of 47.5 % in 2020. Over the past five years, the overall landfilling rate of Portugal has remained stable.
Diversion of biodegradable municipal waste from landfill	Portugal has reported 45 % biodegradable waste landfilled for 2019 of the total amount (by weight) of biodegradable municipal waste produced in 1995, 10 percentage points above the target. Portugal benefits from a four year derogation period, but the evolution over the past years does not show feasible evidence that the target could be met.

List of abbreviations

Abbreviation	Name
DRS	Deposit Return System
EC	European Commission
EEA	European Environment Agency
EEE	Electronic and Electric Equipment
Eionet	European Environmental Information and Observation Network
EPR	Extended producer responsibility
ETC/CE	European Topic Centre on Circular Economy and resource use
ETC/WMGE	European Topic Centre / Waste and Materials in a Green Economy
EWL	European List of Waste
MBT	Mechanical biological treatment
MS	Member state
MSW	Municipal solid waste
PAYT	Pay-as-you-throw
PERSU	Strategic Plan relating to municipal waste
PNGR	National waste management plan
PPWD	Packaging and Packaging Waste Directive
PRO	Producer Responsibility Organisation
R&D	Research and development
RR	Recycling rate
SGRU	Urban waste management system
SRF	Success and risk factor
WEEE	Waste Electric and Electronic Equipment
WFD	Waste Framework Directive

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Annex 1 Implementation of previous early warning recommendations

In the questionnaire, the Portuguese Environment Agency, Agência Portuguesa do Ambiente, reported that Portugal has partly addressed the recommendations given it in the previous Early warning report. The recommendations and the actions taken are described in this section.

Recommendations on Contribution of MBT towards recycling

1) Undertake a review of the calculations currently being used to determine the contribution to the target that is assumed to come from increased recycling from Mechanical Biological Treatment facilities.

Portugal has not yet addressed this recommendation. The methodology adopted by Portugal which is to be applied until 2020, as described in the Strategic Plan, was maintained in order to not break the time series until the year in which the plan remains in force. Nevertheless, calculations have been made and will be published in PERSU 2030 (Agência Portuguesa do Ambiente, I.P., 2021).

2) To introduce a harmonised taxation scheme on waste disposal (i.e. landfill and incineration) operating across all Autonomous Communities.

The Autonomous Regions of Portugal are independent and adopt national legislation to their specific interests. The administrative execution is under the responsibility of the bodies and services of the respective administrations (Agência Portuguesa do Ambiente, I.P., 2021).

Recommendations on improving separate collection

3) Without delay, review whether current fee levels (to be paid by the waste management systems that do not meet recycling targets) are set at a sufficient level to stimulate the introduction of effective separate collection systems.

a. This should be communicated to the municipalities and municipal waste management systems.

b. Begin the process of amending the legislation as soon as possible, so that if current fee levels are found to be insufficient, there remains the possibility of amending these levels ahead of the 2020 target.

Portugal has only partly (3a) / not yet (3b) addressed this recommendation. The waste management tax was increased from 11 to 22 €/tonne. The new formula to calculate waste management taxes includes variations depending on the results achieved. It includes benefits if certain bio-waste separate collection rates are achieved and penalties if recoverable materials are landfilled or incinerated (Agência Portuguesa do Ambiente, I.P., 2021).

4) If funding is deemed insufficient, consider additional funding sources, taking into account:

a. the changes in funding that will occur as a result of the review of the household waste fee which will come into effect in 2019;

b. the scope for increasing the fees paid by packaging producers.

Portugal has only partly addressed this recommendation. APA reviewed the funding of collection schemes together with Entidade Reguladora dos Serviços de Águas e Resíduos (ERSAR) to ensure that

funding levels for the roll out of door-to-door collection schemes are sufficient (Agência Portuguesa do Ambiente, I.P., 2021).

5) Consider the introduction of legislation which will ensure action by the producer responsibility schemes in respect of developing deposit refund systems.

Portugal has addressed this recommendation. The ordinance that will establish the regulation of the deposit refund system for plastic, glass, ferrous metal and aluminum beverage packaging, with non-reusable deposits, is under preparation, with the deposit system coming into operation on 1st of January 2023. Other deposit refund systems are being evaluated for portable batteries and for some categories of WEEE (Agência Portuguesa do Ambiente, I.P., 2021).

Recommendations on capacity building

6) Implement a system of technical support for municipalities in order to support them with, amongst other things:

a. Choice of collection services;

b. Procurement of services; and

c. Management of service.

The support should not only be about how authorities will achieve targets, it should also aim to support the active sharing of good ideas and practices that can improve efficiency in terms of cost reduction and improvement in performance.

Portugal has partly addressed this recommendation. A training program for municipalities technicians was set up to encourage knowledge sharing. Also, a fund was established to support municipalities in the development of waste management plans. Moreover, a simulation tool was developed to make the management of bio-waste more efficient as a function of the collection scheme implemented. This tool can be used to estimate recycling rates to be achieved depending on the scheme of bio-waste separate collection chosen for each neighbourhood. It allows to compare the results of implementing different approaches/schemes of separate collection (Agência Portuguesa do Ambiente, I.P., 2021).

Recommendations on communication and awareness-raising programmes

7) Develop a set of communications materials nationally (marketing collateral and iconography) with a purpose of using them at the local level so citizens have clear and consistent messages and signage at civic amenity sites, recycling containers and on communications leaflets for recycling services.

Portugal has partly addressed this recommendation. The Environment Global Facilities (EGF), an entity responsible for 11 SRGUS, i.e. the waste management systems, developed communication materials and run a national communication campaign, , financed by POSEUR. EPR schemes also made investments in communication, on average 14% or 9%, if all EPR schemes or only EPR packaging schemes are considered, respectively, of the fees applied to producers. Also some SRGUs and entities responsible for EPR schemes have developed communication campaigns. The Decree-Law 102-D establishes the obligation of creating an unique message for the separate collection equipments. APA will define the standards of the message (Agência Portuguesa do Ambiente, I.P., 2021).

8) In order to maximise the benefit of the budget on communications, APA should:

a. Take a more active role in identifying areas where funding is most needed, ensuring campaigns are undertaken alongside collection service updates;

b. Ensure funding can be accessed by municipalities, focusing in particular on the better performing larger municipalities;

c. Put in place methods by which municipalities can learn from each other.

Portugal has addressed this recommendation.

APA is implementing a communication campaign in partnership with other public entities. Part of the landfill tax is addressed exclusively for municipalities waste projects. During 2021 a national campaign for WEEE recovery has been developed and will be implemented later in 2021.

The strategy and measures included in PERSU 2030 will tackle all the recommendations and will allow the creation and implementation of complementary instruments to the ones already included in Decree-Law 102-D/2020 reviewed by the Law 52/2021.

Regarding communication and information campaigns about municipal waste, the new legislation clarifies the responsibilities of municipalities and municipal waste management systems and establishes that these entities must develop campaigns in order to reduce waste generation and inform and educate to separate collection. The Decree-Law also promotes the development of public awareness and information campaigns by all entities involved in the production, distribution, import and exports and use of products, individually or through agreements among themselves or with associations representing relevant sectors, on good practices for the management of their waste and on the potential negative impacts on health and the environment arising from its inadequate management

A minimum of 30 % of the budget allocated to awareness, communication and education actions will be used for integrated actions between PRO of the same EPR scheme.

Regarding funds, it is important to notice the use of EU funds from 2019 to 2021 to separate collection projects (material, bio-waste and other fractions as textiles, hazardous waste) and bio-waste recycling at source developed by municipalities, most of them including awareness and information campaigns, regarding the correct separation and management of waste (more than 50 projects financed). For EU funds, in some calls, the evaluation took into account the results of a study developed by this Agency which identified suitable areas for bio-waste separate collection and for recycling at source - the objective is to introduce some criteria to ensure that funding is attributed to municipalities investing in better solutions (for the specific area).

Annex 2 Detailed scoring of success and risk factors

Assessment sheet - MSW Target

MS Portugal

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
MSWR-1.1	Distance to target	Distance to target > 15 percentage points or no data reported	5	0
MSWR-1.2	Past trends in municipal solid waste recycling rate	RR < 45% and increase in last 5 years < 10 percentage points	1	0
Legal instruments				
MSWR-2.1	Timely transposition of the revised WFD into national law	Transposition with a delay of less than 12 months	1	1
MSWR-2.2	Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms	Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets	1	2
Economic instruments				
MSWR-3.1	Taxes and/or ban for landfilling residual or biodegradable waste	No landfill taxes or low tax (< 30 EUR/t*)	1	0
MSWR-3.2	Taxes on municipal waste incineration	Taxes > 7 EUR/t* with escalator, or tax > 18 EUR/t	1	2
MSWR-3.3	Pay-as-you-throw (PAYT) system	No or less than 50% of the population covered by PAYT	1	0

Separate collection systems				
MSWR-4.1	Convenience and coverage of separate collection systems for the different household waste fractions			
	Paper and cardboard	A high share of the population is covered by high convenience collection services	0.46	0.92
	Metals	A high share of the population is covered by high convenience collection services	0.08	0.16
	Plastics	A high share of the population is covered by high convenience collection services	0.28	0.56
	Glass	A high share of the population is covered by high convenience collection services	0.18	0.36
	Bio-waste	A low share of the population is covered by high convenience collection services	0.84	0
	Wood	A low share of the population is covered by high convenience collection services	0.06	0
	Textiles	A low share of the population is covered by high convenience collection services	0.06	0
	WEEE	High to medium convenience collection services dominate	0.04	0.08
MSWR-4.2	Firm plans to improve the convenience and coverage of separate collection systems for the different household waste fractions			
	Paper and cardboard	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.23	0
	Metals	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.04	0
	Plastics	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.14	0
	Glass	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.09	0
	Bio-waste	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0.42	0.84
	Wood	There are plans to improve the collection service but unclear plan for implementation	0.03	0.03
	Textiles	There are plans to improve the collection service but unclear plan for implementation	0.03	0.03
	WEEE	N/A (for countries where high to medium convenience collection services dominate already)	0.02	0

Extended producer responsibility (EPR) and similar schemes				
MSWR-5.1	Fee modulation in EPR schemes for packaging	There is an advanced fee modulation for at least two of the main packaging fractions* AND fee modulation for one packaging fraction meets three assessment criteria	1	2
Bio-waste treatment capacity and quality management				
MSWR-6.1	Capacity for the treatment of bio-waste	Bio-waste treatment capacity below 80% of generated municipal bio-waste and no plans to extend capacity, or no capacity information available	1	0
MSWR-6.2	Legally binding national standards and Quality Management System for compost/digistate	Legally binding national standards for compost/digestate quality in place, and quality management system in place	1	2
			Total score	**11.98**
			Maximum score	32.96
				36%

Assessment sheet - Packaging Target

MS Portugal

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
P-1.1	Distance to target - Overall packaging	5 - 15 percentage points below target	5	5
	Distance to target - Paper and cardboard packaging	5 - 15 percentage points below target	5	5
	Distance to target - Ferrous metals packaging	> 15 percentage points below target, or no data reported	5	0
	Distance to target - Aluminium packaging	5 - 15 percentage points below target	5	5
	Distance to target - Glass packaging	> 15 percentage points below target, or no data reported	5	0
	Distance to target - Plastics packaging	> 15 percentage points below target, or no data reported	5	0
	Distance to target - Wooden packaging	< 5 percentage points below target, or target exceeded	5	10
P-1.2	Past trends in packaging waste recycling rate	RR < 55% and increase in last 5 years < 10 percentage points	1	0
	Past trends in paper and cardboard packaging recycling	RR > 70% and increase in last 5 years < 5 percentage points, or RR > 65%, and increase in last 5 years < 10 percentage points, or RR < 65% and increase in last 5 years > 10 percentage points	1	1
	Past trends in ferrous metals packaging recycling	RR < 60% and increase in last 5 years < 10 percentage points	1	0
	Past trends in aluminium packaging recycling	RR < 40% and increase in last 5 years < 10 percentage points	1	0
	Past trends in glass packaging recycling	RR < 60% and increase in last 5 years < 10 percentage points	1	0

	Past trends in plastic packaging recycling	RR < 40% and increase in last 5 years < 10 percentage points	1	0
	Past trends in wooden packaging recycling	RR > 20% and increase in last 5 years > 5 percentage points, or RR > 15% and increase in last 5 years > 10 %, or RR > 25%	1	2
Legal instruments				
P-2.1	Timely transposition of the revised Packaging and Packaging Waste Directive into national law	Transposition with a delay of less than 12months	1	1
P-2.2	Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms	Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets	1	2
Economic instruments				
P-3.1	Taxes and/or ban for landfilling residual or biodegradable waste	No landfill taxes or low tax (< 30 EUR/t*)	1	0
P-3.2	Taxes on municipal waste incineration	Taxes > 7 EUR/t* with escalator, or tax > 18 EUR/t	1	2
P-3.3	Packaging taxes	Limited packaging tax	1	1
P-3.4	Pay-as-you-throw (PAYT) system	No or less than 50% of the population covered by PAYT	1	0
P-3.5	Deposit-return systems for aluminium drink cans	No or voluntary DRS for some drink cans	1	0
	Deposit-return systems for glass drink bottles	No or voluntary DRS for some drink bottles	1	0
	Deposit-return systems plastic drink bottles	No or voluntary DRS for some drink bottles	1	0
	Deposit-return systems for plastic crates	No or voluntary DRS for some plastic crates	1	0
	Deposit-return systems for wooden packaging	No or voluntary DRS for some wooden packaging	1	0

Separate collection systems				
P-4.1	Convenience and coverage of separate collection systems for the different packaging waste fractions			
	Paper and cardboard packaging (household)	A high share of the population is covered by high convenience collection services	1	2
	Paper and cardboard packaging (non-household)	Separation at source is mandatory for non-household paper and cardboard packaging waste	1	2
	Ferrous metals packaging (household)	A high share of the population is covered by high convenience collection services	1	2
	Ferrous metals packaging (non-household)	Separation at source is mandatory for non-household ferrous metals packaging waste	1	2
	Aluminium packaging	A high share of the population is covered by high convenience collection services	2	4
	Glass packaging (household)	A high share of population is covered by high convenience collection services	1	2
	Glass packaging (non-household)	Separation at source is mandatory for non-household glass packaging waste	1	2
	Plastics packaging (household)	A high share of the population is covered by high convenience collection services	1	2
	Plastics packaging (non-household)	Separation at source is mandatory for non-household plastic packaging waste	1	2
	Wooden packaging	Separation at source is mandatory for non-household wooden packaging waste	2	4
P-4.2	Firm plans to improve the convenience and coverage of separate collection systems for the different packaging waste fractions			
	Paper and cardboard (household)	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	0.5	0
	Paper and cardboard (non-household)	N/A (for countries already having mandatory sorting at source)	0.5	0
	Ferrous metals packaging (household)	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	0.5	0
	Ferrous metals packaging (non-household)	N/A (for countries already having mandatory sorting at source)	0.5	0
	Aluminium packaging	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	1	0
	Glass packaging (household)	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.5	0
	Glass packaging (non-household)	N/A (for countries already having mandatory sorting at source)	0.5	0

	Plastics packaging (household)	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.5	0
	Plastics packaging (non-household)	N/A (for countries already having mandatory sorting at source)	0.5	0
	Wooden packaging	N/A (for countries already having mandatory sorting at source)	1	0
Extended producer responsibility (EPR) and similar schemes				
P-5.1	Coverage of EPR schemes	Not all main packaging fractions* are covered by EPR schemes OR All main packaging fractions are covered by EPR schemes but none or only one covers household and non-household packaging	1	0
P-5.2	Fee modulation in EPR schemes for packaging	There is fee modulation in at least two of the main packaging fractions* AND fee modulation for one packaging fraction meets three assessment criteria	1	2
P-5.3	Material specific EPR assessment - Paper and cardboard packaging waste	No EPR scheme or EPR scheme covering only household, industrial OR commercial packaging	1	0
	Material specific EPR assessment - Ferrous metals packaging waste	No EPR scheme or EPR scheme covering only household OR non-household packaging	1	0
	Material specific EPR assessment - Aluminium packaging waste	No EPR scheme or EPR scheme covering only household OR non-household packaging	1	0
	Material specific EPR assessment - Glass packaging waste	No EPR scheme or EPR scheme covering only household OR non-household packaging	1	0
	Material specific EPR assessment - Plastics packaging waste	No EPR scheme or EPR scheme covering only household, industrial OR commercial packaging OR EPR scheme but without fee modulation	1	0
	Material specific EPR assessment - Wooden packaging waste	No EPR scheme or EPR scheme covering only industrial OR commercial packaging	1	0
Total packaging recycling target				**17.00**
			Maximum score	32.00
				53%

Paper and cardboard recycling target

Total score	**16.00**
Maximum score	30.00
	53%

Ferrous metals packaging recycling target

Total score	**10.00**
Maximum score	30.00
	33%

Aluminium packaging recycling target

Total score	**15.00**
Maximum score	32.00
	47%

Glass packaging recycling target

Total score	**10.00**
Maximum score	32.00
	31%

Plastics packaging recycling target

Total score	**10.00**
Maximum score	34.00
	29%

Wooden packaging recycling target

Total score	**22.00**
Maximum score	32.00
	69%

Assessment sheet - Landfill Target

MS Portugal

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
LF-1.1	Distance to target	Distance to target > 20 percentage points, or no data reported	5	0
LF-1.2	Past trends in municipal solid waste landfill rat	Landfill rate in 2020 > 25% and decrease in last 5 years < 15 percentage points	1	0
LF-1.3	Diversion of biodegradable municipal waste from landfill	Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has not been achieved in 2016 or in the year specified in the derogation where applicable, or data not reported. Or in case of derogation: Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has not been achieved yet and available data indicate that it is unlikely to be achieved	1	0
			Total score	**0.00**
			Maximum score	14.00
				0%