Country profile

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

Austria

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 Austrian Umweltbundesamt in September 2020 and April 2021 to a questionnaire developed by the EEA and ETC/WMGE. The EEA and ETC/CE would like to thank the Austrian authorities for the information provided and for the kind review of drafts of this report in 2021 and April 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 Austria. 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 Austria 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, chapter 2.1 assesses the likelihood for Austria 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 Austria to achieve the overall packaging waste and specific packaging materials' recycling targets for 2025. Chapter 2.3 examines the prospects for Austria 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

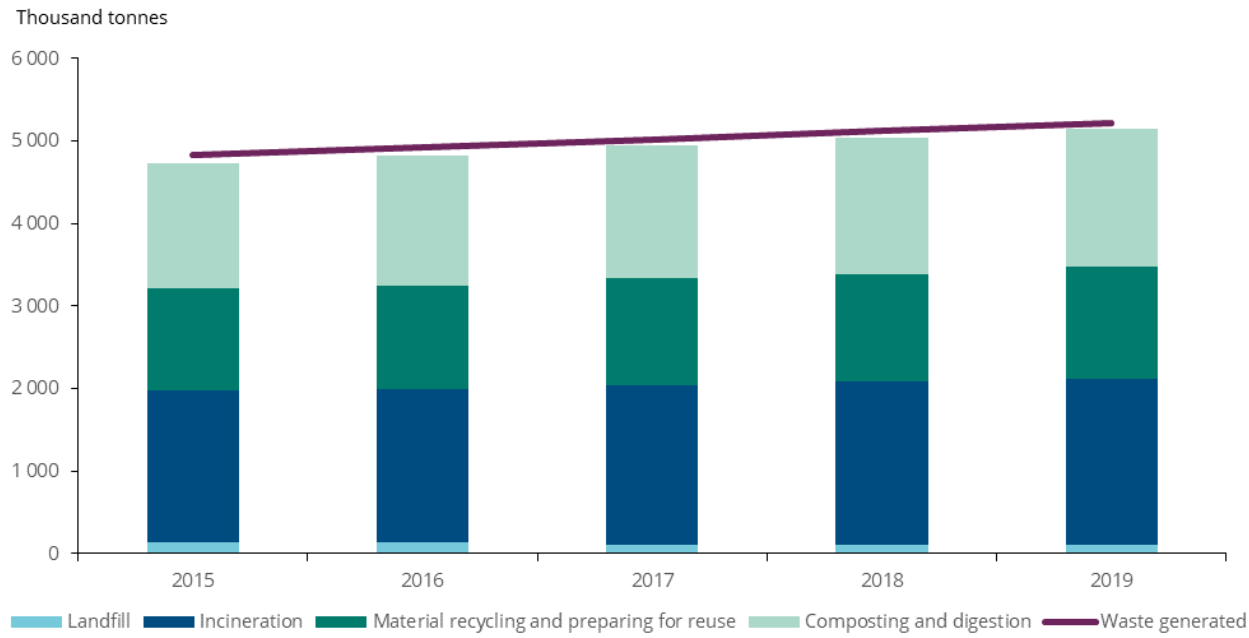
Municipal waste generation and treatment

Austria's municipal waste generation has increased slightly over the past five years. In 2019 the country generated 5.2 million tonnes of municipal waste (Figure 1.1). This corresponds to 588[1] kg/cap in 2019, which is above the (estimated) EU average of 501 kg/cap for the same year.

Austria has been a frontrunner in municipal waste recycling in Europe, having managed over the last years to divert more than half of the municipal solid waste (MSW) generated to recycling. A landfill ban and a disposal tax contributes to diverting waste to recycling. In addition, key obligations to source separate and collect recyclable waste, specifically for biogenic waste and packaging, were introduced in the early 1990s.

The country has a high level of incineration, which has been stagnating at about 38 % of municipal waste generated for the past five years. Austria also has a high recycling rate stagnating at 58 % and a minimal landfilling rate of 2 %. Since 1991, all municipal waste incineration plants feature energy recovery for district heating (EEA, 2016).

Figure 1.1 Municipal waste generation and treatment in Austria between 2015 and 2019, in thousand tonnes



Note: Provisional data for waste generated, material recycling and preparing for reuse and composting and digestion in 2019. Provisional Eurostat estimate for incineration and landfill for 2019. 2020 data will re-submitted by 30 June 2022, and the 'provisional' flag will then be removed.

Source: Eurostat (2022a)

[1] provisional

Legal Framework

In many cases, Austrian waste legislation was adopted before the respective EU legislation came into force, such as the Ordinance on the Separate Collection of Biogenic Waste (Verordnung über die getrennte Sammlung biogener Abfälle, 1992). The most important legal basis for waste management in Austria is the Waste Management Act, *Abfallwirtschaftsgesetz* in German, short AWG 2002, and associated ordinances (Abfallwirtschaftsgesetz, 2002). The Waste Management Act has been amended in December 2021 (AWG-Novelle Kreislaufwirtschaftspaket, 2021).

The key contents of the AWG 2002 concern the prevention, preparation for reuse, recycling, other recovery and disposal of waste, obligations of persons who work in waste management, as well as specifications for waste treatment plants, covering permitting and inspection.

Regarding MSW and packaging waste, the AWG 2002 is implemented by, inter alia, the following ordinances:

- Packaging Ordinance 2014, as amended;
- Packaging Differentiation Ordinance 2015, as amended;
- Waste Wood Recycling Ordinance 2012, as amended;
- Waste Treatment Obligation Ordinance 2017, as amended;
- Waste Balance Ordinance 2008, as amended;
- Ordinance on mobile facilities for the treatment of waste, 2002;
- Ordinance on the Separate Collection of Biogenic Waste 1991;
- Ordinance on WEEE 2005, as amended;
- Ordinance on Batteries 2008, as amended;
- Ordinance on compost 2001;
- Ordinance on Waste recording and reporting 2012, as amended.

In addition to the AWG 2002, there are state laws in force in all nine Austrian federal states that regulate those aspects of waste management law that are within the responsibility of the state legislators.

This concerns the setting of waste management fees and the legal framework for the organization of the waste collection. The collection of municipal waste is regulated by the individual state waste management laws (Allgemeines zur Abfallwirtschaft, 2021).

With respect to packaging waste, the Packaging Ordinance (VerpackVO) first came into force on 1 October 1993 in an attempt to tackle increasing waste volumes in Austria. This was the first time that the producer responsibility principle was introduced comprehensively, after this had already been tested for individual product groups since 1990. Manufacturers, packers, distributors and importers were made responsible for taking back and recycling packaging waste from households, trade and industry. In 2006 it was adapted to the requirements of the EU Packaging and Packaging Waste Directive 94/62/EC, amended by Regulation (EC) No. 1882/2003 (Packaging Ordinance, 2014).

By the amendment of the Austrian Waste Management Act in December 2021 (AWG-Novelle Kreislaufwirtschaftspaket, 2021), Austria' legislative framework was adapted to the revised EU directives.

Waste management plan(s)

To achieve the objectives and principles of the AWG 2002, the Federal Minister for Climate Action, Environment, Energy, Mobility, Innovation and Technology creates a Federal Waste Management Plan at least every six years and publishes it online. Since 2017 the sixth update is available.

The new Federal Waste Management Plan 2022 is planned to be published in June 2022. The consultation process started in April 2022. It will reflect the requirements of the EU Waste Directives as amended in 2018 (Umweltbundesamt GmbH, 2021).

The Federal Waste Management Plan provides a detailed insight into the Austrian waste industry, inter alia, via taking stock of waste streams and waste treatment plants, and derives specific measures, strategies and programmes from the latter, including the Austrian Waste Prevention Programme and further programmes that are required under EU law.

The Austrian federal provinces shall draw up provincial waste management plans, reports and/or policies at regular intervals on the basis of the respective Provincial Waste Management Act. In addition, several federal provinces shall annually publish updated waste management reports or statistics on waste on their websites (Federal Ministry for Sustainability and Tourism, 2017).

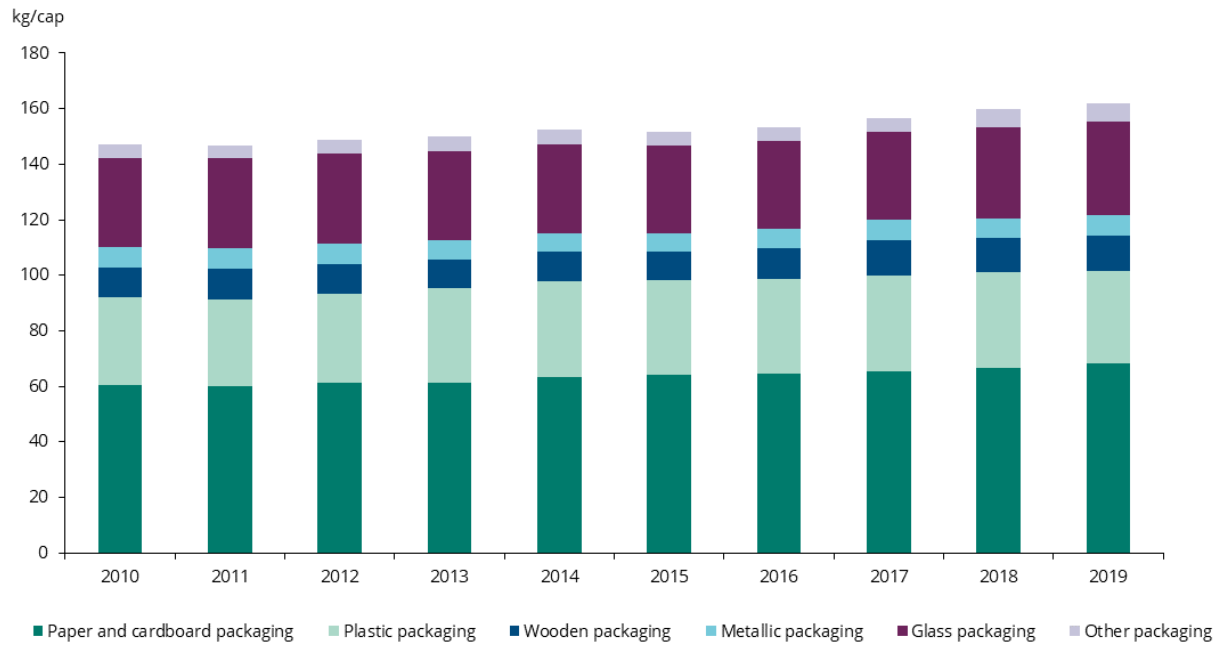
Packaging waste generation and treatment

In Austria, 1.4 million tonnes (162 kg/cap) of packaging waste were generated in 2019, which is slightly below the EU average of 177 kg/cap.

The overall packaging waste generation increased by 10 % since 2010, with an increase in all materials except metallic packaging (Figure 1.2).

Data on packaging waste generation were derived from various sources: an extended producer responsibility (EPR) scheme, specific questionnaires and waste analysis (Eurostat, 2021).

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



Source: Eurostat (2022b)

Austria has traditionally reported high levels of recycling for most types of packaging waste fractions. Overall packaging waste recycling levels stood at 64 % already in 1997. In more recent years, packaging waste recycling was stable, but above 65 %, mainly driven by paper and cardboard, metals and glass packaging recycling. Plastics packaging recycling has remained stable at relatively low levels of around 31 %. Wooden packaging recycling stands at the lowest level and was rather stable in recent years,

around the threshold of 20 %. The recycling rate of other packaging (including textiles, biogenic and composite packaging) has decreased from 26 % in 2009 to 21 % in 2019. With regard to the reporting of composite packaging; If the main component of a composite packaging is > 80 %, the total weight is allocated to the main component, otherwise the total weight is allocated to *Other packaging*. If plastic is the main component with less than 95 %, the total weight is allocated to *Other packaging*. If paper is the main component of a composite packaging and > 80 %, it is collected together with paper and cardboard and is counted as recycled paper. If plastic is the main component of a composite packaging and > 95 %, it is in case of recycling counted as recycled plastics (Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie, 2021).

The high historical levels of packaging waste recycling can be explained by high public awareness and a longstanding recycling tradition thanks to early waste related legislation. Austria is one of the first countries that introduced the producer responsibility principle and related separate collection schemes.

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 Austria, Table 1.1 shows the calculated capture rates for different waste fractions:

Table 1.1 Capture rates for different waste fractions in Austria

	Residual waste composition (%)([b])	Residual waste composition (tonnes)([a])	Separately collected amounts (tonnes)([b])	Materials in total MSW (tonnes)	Capture rates (%)
Reference year	2018/2019				
Mixed municipal waste, total		1 458 788			
Paper and cardboard	7 %	100 656	653 659	754 315	87 %
Metals	3 %	40 846	124 400	165 246	75 %
Glass	5 %	67 104	230 206	297 310	77 %
Plastic	10 %	147 338	161 006	308 344	52 %
Bio-waste	18 %	258 205	1 035 316	1 293 521	80 %
Textiles	4 %	55 434	37 687	93 121	40 %
Wood	1 %	13 129	283 619	296 748	96 %

([a]) Note: Share of material in residual waste (household waste only) multiplied with the amount of residual waste in 2018 as reported in the questionnaire by Umweltbundesamt GmbH (2021)

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

This indicates that there is especially room for improvement to capture higher amounts of the generated plastics and textiles.

2 Success and risk factors likely to influence future performance

2.1 Target for preparing for reuse and recycling of municipal waste

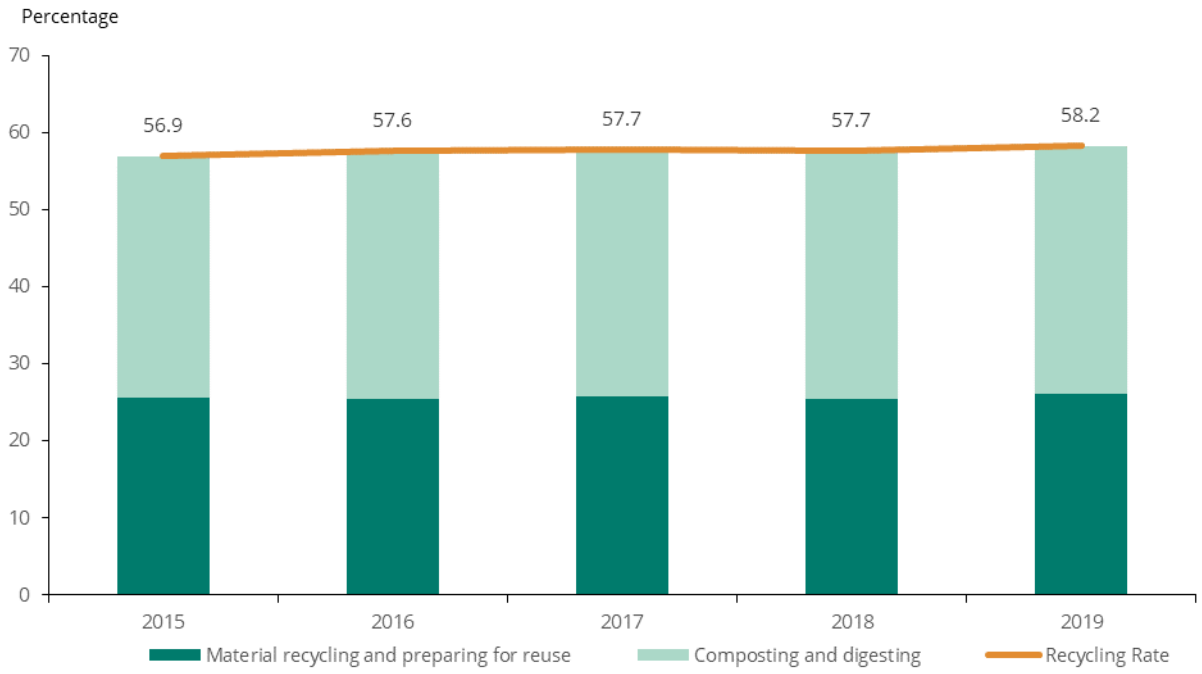
This chapter aims at assessing the prospects of Austria to achieve the **55 % preparing for reuse and recycling target** for municipal waste in 2025. For a detailed description of the methodology followed, the development of success/risk factors and their impact on recycling, please consult the methodology 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 Austria shows a small increase from 56.9 % in 2015 to 58.2 % in 2019 (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 as defined in Article 11a are not yet available.

Figure 2.1 Recycling rate in Austria between 2015 and 2019, in percentage



Note: Provisional data for waste generated, material recycling and preparing for reuse and composting and digestion in 2019

Source: Eurostat (2022a)

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 it becomes that the target will be met. For Austria, the recycling rate in 2019 is 58.2 %, which is 3.2 percentage points higher than 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. According to the Austrian authorities the assessment on the impact of the application of the new calculation rules on the recycling rate is still ongoing (Umweltbundesamt GmbH, 2021). 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. If an effect of a 5 percentage point reduction would be assumed for Austria, the recycling rate under the new rules could drop to 53.2 % in 2019, but the effect depends on how Austria currently reports the data. The Austrian authorities indicated that preliminary results for the application of the new reporting rules would increase the recycling rate (Umweltbundesamt GmbH, 2022). Nevertheless, even a reduction by 5 percentage points does not result in a change of the assessment for this SRF.

Summary result

Distance to target < 5 percentage points	Based on the currently available data Austria's recycling rate lies at 58.2 % in 2019, 3.2 percentage points above the 2025 target. Considering however the impact of the new calculation rules, the Austrian authorities' first calculations indicate an increase in the recycling rate once the new rules are applied. However, even if a reduction with 5 percentage points would be assumed based on average estimates done by other Member States, the resulting recycling rate of 53.2% would be only 1.8 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. The Austrian authorities indicate that first results show an increase of the recycling rate if the new calculation rules are applied. However, neither a higher recycling rate nor a recycling rate which would be 5 percentage points below the currently reported one, would change the rating for this SRF.

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

The recycling rate over the last five years shows an increase from 56.9 % in 2015 to 58.2 % in 2019 (Figure 2.1).

More efficient separate collection practices with a special focus on plastics are considered by the Austrian government as the key measures to achieve the 55 % recycling rate by 2025 under the new calculation rules. Moreover, a strong focus is put on waste prevention in the Federal Waste Management Plan (Federal Ministry for Sustainability and Tourism, 2017) which includes the Waste Prevention Programme.

Summary result

RR > 50 % and increase in the last 5 years < 5 percentage points	The recycling rate has increased by 1.3 percentage points between 2015 and 2019. For Austria the application of the new calculation rules could result in an estimated recycling rate of 53.2%, however the Austrian authorities first calculations indicate an increase in the recycling rate once the new rules are applied.
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.

Austria has transposed the Directive 2018/851 into national law by December 2021 through the AWG-Novelle Kreislaufwirtschaftspaket.

Summary result

Transposition with delay of > 12 months	Austria has transposed the Waste Framework Directive as amended by Directive (EU) 2018/851 into national law by December 2021, i.e. with a delay of more than 12 months.
Robustness of the underlying information	Credible information received from the European Commission (status as of 12 November 2021).

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 targets and the accountability for failing the targets are, the higher the chance that the targets will be met.

While the legislation regarding hazardous waste falls exclusively under the jurisdiction of the Federal Government, for non-hazardous waste, the Federal Government has only 'authority in case of need'. This allows for the adoption of administrative rules concerning proper disposal but also regarding measures connected with waste prevention, waste reduction and waste recovery and, hence, regarding economic policy measures. If the federal Government does not make use of its authority in case of need, the provincial legislators shall have jurisdiction. For certain types of non-hazardous waste, including packaging waste, biogenic waste and construction and demolition waste, this authority in case of need has been claimed (partly) by the Federal Government (Federal Ministry for Sustainability and Tourism, 2017).

The AWG 2002 and associated ordinances bring together key areas of regulation in this regard concerning hazardous and non-hazardous waste and, in addition, transpose EU law in Austria (Abfallwirtschaftsgesetz, 2002). The Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology is responsible for the transposition of the EU Waste Framework Directive. Further, a large number of waste law procedures can be processed electronically via the

EDM (electronic data management) portal of the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology (Allgemeines zur Abfallwirtschaft, 2021).

The AWG 2002 is enforced by the local governors and the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology. The responsibilities with respect to MSW management are split between the federal and the provincial level (Allgemeines zur Abfallwirtschaft, 2021).

The most significant stipulations regulated at federal level, related to MSW collection and treatment responsibilities, include the separate collection of biogenic waste (unless recovered in the immediate vicinity of the household or the production site) via the Ordinance on the separate collection of biogenic waste.

Also waste treatment, i.e., disposal and recovery, generally falls under federal jurisdiction: Waste treatment operators must satisfy corresponding requirements regarding their activities or the operation of their plants as prescribed, for instance by the Waste management Act, the Waste Treatment Obligations Ordinance, the Recycled Construction Materials Ordinance, the Compost Ordinance, the Recycled Wood Ordinance, the Waste Incineration Ordinance, the Ordinance on Mobile Plants for Treating Waste and the Landfill Ordinance 2008 (Federal Ministry for Sustainability and Tourism, 2017).

In accordance with Article 23 of the Waste Management Act 2002, there is the option to specify general obligations for waste holders via regulations (Abfallwirtschaftsgesetz, 2002). The Federal Minister for Climate Action, Environment, Energy, Mobility, Innovation and Technology shall come to an agreement in consultation with the Federal Minister for Science, Research and Industry as to which types of waste are to be collected separately and for which type of treatment the waste shall be supplied, along with requirements for collection, storage and transportation, and specifications for the treatment of waste in accordance with the state of the art (Federal Ministry for Sustainability and Tourism, 2017).

In addition to the AWG 2002, there are state laws in force in all nine federal states that regulate those aspects of waste management law that are within the responsibility of the state legislators. The federal states primarily hold jurisdiction over MSW management, the associated levying of waste charges and the design of plants for this waste. The organization of the collection of municipal waste is usually within the responsibility of the individual municipalities or waste management associations of the local provinces and municipalities (Arbeitsgemeinschaft Österreichischer Abfallverbände, 2019).

In the provincial waste management laws or in the corresponding ordinances typically provisions can be found on the collection and treatment of mixed municipal waste, bulky waste and biogenic waste, provincial waste management planning (including waste prevention measures), public relations work and providing information for the population, the enactment of removal orders by the municipalities, on the establishment of waste management associations, on the obligations incumbent upon the property owners (and users) in the context of waste disposal, on the obligation to connect to municipal collection or the obligation to tender delivery to the same, and on the setting and prescription of tariffs by the municipalities (Federal Ministry for Sustainability and Tourism, 2017).

To ensure that sustainable waste management is also taken into account in normal operational practice, for example at company level, the AWG 2002 specifically makes provisions in Article 10 and Article 11 for the use of two effective instruments: the waste management concept and waste officer (Abfallwirtschaftsgesetz, 2002).

If the responsible entities do not take (enough or ineffective) action towards sustainable waste management, the AWG 2002 foresees penalties at national and federal state level. Regular and frequent inspections take place and a number of fines have been issued, as described in the Federal Waste Management Plan (Federal Ministry for Sustainability and Tourism, 2017). However, it remains unclear how the targets will be enforced if these entities fall short in contributing effectively to meeting the targets that have to be met on national level.

There are support tools or mechanisms in place to improve the efficiency and performance of the responsible entities. For example, training and guidance at company and community level are provided by the Waste Management Associations of the local provinces in Austria (Arbeitsgemeinschaft Österreichischer Abfallverbände, 2019).

Summary result

Clearly defined responsibilities and good set of support tools but unclear enforcement mechanisms for meeting the recycling targets	Responsibilities are defined and support mechanisms are in place, but it remains somewhat unclear how the targets will be enforced if the municipalities and other responsible entities fall short in contributing effectively to meeting the targets that have to be met on national level.
Robustness of the underlying information	Credible information received from the Austrian 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.

Landfill taxes are regulated in the Austrian Act on the Remediation of Contaminated Sites BGBl. Nr. 299/1989, last amended by BGBl. I Nr. 104/2019 (Altlastensanierungsgesetz, 1989). In Austria a landfill tax has been introduced in 1989. The tax depends on the composition of waste and the standards of the landfill. Currently, for pre-treated municipal waste the landfill tax on a “mass-waste” landfill (Massenabfalldeponie) amounts to 29.80 EUR/t and has not been changed since 2012. For other waste streams, such as mineral waste, the tax has been continuously increased over the years (Altlastenbeitrag, 2021). Tax exemptions are laid down for specific waste treatment operations. For example, residues from incineration and co-incineration plants are exempted from the landfill tax (Federal Ministry for Sustainability and Tourism, 2017) as those waste streams are already taxed via a tax on the input in incineration (8 EUR/t).

Since 1997, there is a landfill ban in place in Austria, which was fully implemented on 1 January 2004 with local exemptions until 31 December 2008. Waste with a total organic carbon (TOC) content of above 5 % is banned from being landfilled. Exemptions from the ban on landfilling of waste with TOC > 5 % are laid down in the Austrian Landfill Ordinance, e.g. for waste from mechanical-biological treatment (MBT), waste with a calorific value of max. 6 600 kJ/kg dry substance, residues from mechanical waste treatment with a calorific value of max. 6 600 kJ/kg dry substance and TOC of max 8 % (Deponieverordnung, 2008).

For the government period from 2020 to 2024, an amendment of the Austrian Act on the Remediation of Contaminated Sites is planned with the aim of achieving a faster, more efficient and safe

remediation of contaminated sites and to make a contribution to remediation of abandoned brownfields (Umweltbundesamt GmbH, 2021).

Summary result

Ban in place for landfilling residual or biodegradable waste	In Austria, there is a ban on landfilling of waste with TOC > 5 % and a landfill tax in place. For pre-treated municipal waste the landfill tax on a *mass-waste* landfill (Massenabfalldeponie) amounts to 29.80 EUR/t .
Robustness of the underlying information	Credible information received from the Austrian authorities through the EEA-ETC/WMGE questionnaire.

SRF MSWR-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. For the comparison with the threshold level, the level of this tax is rescaled based on purchasing power parities.

The tax on incineration of waste including the production of Refused Derived Fuel (RDF) is laid down in the Austrian Act on the Remediation of Contaminated Sites BGBl. Nr. 299/1989, last amended by BGBl. I Nr. 104/2019. Since 2012 the tax amounts to 8 EUR/t, when it was increased from previously 7 EUR/t (Altlastensanierungsgesetz, 1989). No further increases are foreseen at the moment. In case the waste is exported for incineration the same rules and procedures apply as for domestic incineration, including production of RDF.

With respect to treatment residues a tax has to be paid for the outputs of MBT or sorting plants that are landfilled. Residues from waste incineration in waste incineration plants which are landfilled or backfilled are, however, exempted (Umweltbundesamt GmbH, 2021).

Summary result

Yes, taxes > 7 EUR/t([a]) but without escalator	Austria has an incineration tax in place, which increased in 2012 from 7 EUR/t in 2006 to 8 EUR/t (corresponding to 7 EUR/t rescaled based on purchasing power parities).
Robustness of the underlying information	Credible information received from the Austrian 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.

In Austria, the whole population is covered by PAYT charging systems, as required by Austrian waste legislation and implemented by municipalities. The setting of fees falls under the competence of the relevant federal provinces (EEA, 2016). According to the Austrian authorities, the responsible institutional levels for introducing PAYT schemes are the municipalities, waste management associations, and waste management operators. Different approaches are established in the regions in Austria.

In cities, different approaches are taken compared to semi-urban or rural areas, with respect to collection frequency, container sizes and PAYT schemes. The PAYT cost models usually depend on the collection frequency, weight or volumes of waste generated and / or on the number and size of the waste bins provided (Umweltbundesamt GmbH, 2021). Some provinces also use pre-paid waste bags (Municipal waste management „Pay as you throw-system", Land Vorarlberg/Austria, 2013).

In Austria, bins for residual waste are provided for each building, and costs are accounted separately for each building. This is a very strong incentive for people living in semi-urban or rural areas to collect recyclables and packaging waste separately, as waste management fees can be reduced significantly by reducing the amount of residual waste. In urban areas, with multi-storey housing, where the bins allocated to a building are used by many households, the economic incentive to sort waste at source is weaker for an individual household (Umweltbundesamt GmbH, 2021).

Summary result

PAYT scheme fully rolled out (to at least 80% of the population)	In Austria, different types of PAYT charging systems are in use, covering the whole population.
Robustness of the underlying information	Qualitative information received from the Austrian authorities through the EEA-ETC/WMGE questionnaire. No comprehensive data on the population share covered by the different systems (volume based, frequency of collection, weight based) is available.

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 taking into account the different materials according to their average share in municipal waste. This is described in more detail in the methodology (ETC/WMGE, 2021).

For Austria, according to the most recent data, the percentage of households living in cities is 33 %, in towns and suburbs 27 % and in rural areas 40 % (Eurostat, 2021).

Austria's authorities report that residual waste is mainly collected via door-to-door collection across the country. Paper and cardboard is mainly collected separately door-to-door, and also to some extent via civic amenity sites except in rural areas where it is also collected by means of nearby bring points. Door-to-door collection of paper and cardboard does not distinguish between packaging and non-packaging waste.

In cities, towns and suburbs and rural areas, ferrous metals, aluminium, glass, textiles, composite and plastics packaging are collected mainly via nearby bring points and to some extent via civic amenity sites. In towns and suburbs these fractions (except for glass and textiles) are also collected co-mingled

door-to-door in some parts of Austria. Usually ferrous metals and aluminium are collected together, in some regions ferrous metals, aluminium and plastics (in some regions only bottles) and composite packaging are collected co-mingled. In some regions metallic packaging and small metallic items are collected together. In these cases periodic waste analyses are performed to distinguish how much of the metals are packaging waste. In some municipalities plastics and composite packaging are collected together.

Small wooden packaging waste is also collected in the *yellow bag*, together with plastics and metal packaging. Glass is usually collected separately, distinguishing between clear and coloured glass. The limitation to the collection of packaging for these materials reduces the potential capture rate for these materials.

Bio-waste is collected separately door-to-door in cities and towns and suburbs, but also via nearby bring points and civic amenity sites. In rural areas it is mainly separate door-to-door collection and to some extent via civic amenity sites. Wood waste (except of small wooden packaging), WEEE and other (e.g. bulky, hazardous) waste are only collected via civic amenity sites. Retailers with a sales area of more than 150 m² are obliged to take back household WEEE free of charge when an equivalent new device is purchased (*step by step*). Online-retailers have the same obligation and can fulfil this obligation to take back step by step by setting up at least two publicly accessible locations per political district. Full information on take-back sites is provided by the Austrian EEG-clearing house (Umweltbundesamt GmbH, 2021).

Bio-waste for high-rise buildings is in general also source separated at collection points located at the high-rise buildings area (Umweltbundesamt GmbH, 2021).

Table 2.1 gives an overview of the collection system in Austria. For plastics, metals and glass, most of the collection systems used in Austria are targeting packaging waste only.

Table 2.1 Characterisation of the collection system in Austria

	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
Mixed/residual waste	xx					xx					xx		x	
Paper and Cardboard	xx				x	xx				x	xx		x	x
Ferrous metals			xx		x		x	xx		x		x	xx	x
Aluminium			xx		x		x	xx		x		x	xx	x
Glass			xx		x			xx		x			xx	x
Plastic			xx		x		x	xx		x		xx	x	x
Bio-waste	xx		x		x	xx		x		x	xx			x
food														
garden														
Textiles			xx		x			xx		x			xx	x
Wood					xx		x			xx		x		xx
WEEE					xx					xx				xx
Composite packaging			xx		x		x	xx		x		xx	x	x
Other: bulky waste, hazardous waste					xx					xx				xx

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

Source: Umweltbundesamt GmbH (2021)

Summary result

Paper and cardboard	A high share of the population is covered by high convenience collection services	Paper and cardboard is collected door-to-door (incl. collection points) across the whole country.
Metals	A high share of the population is covered by high convenience collection services	In some regions, separate collection is limited to metals from packaging.
Plastics	A high share of the population is covered by high convenience collection services	Plastics collection is currently still limited to plastics packaging, but this will change with the implementation of the Packaging Ordinance as revised in 2021.
Glass	A high share of the population is covered by high convenience collection services	Glass collection is largely limited to packaging glass, however, the share of non-packaging glass in Austria is low, so the impact of this limitation is small.
Bio-waste	A high share of the population is covered by high convenience collection services	Door-to-door separate collection is the dominant collection system across the country, complemented with nearby collection points and civic amenity sites.

Wood	A low share of the population is covered by high convenience collection services	Wood waste is mainly collected via civic amenity sites with a full coverage of the population. However, delivery at civic amenity sites require efforts from citizens and is thus not considered as a high convenience system. Small wooden packaging waste is also collected co-mingled in the *yellow bag* together with plastics and metals packaging.
Textiles	A high share of the population is covered by high convenience collection services	Textiles are mainly collected via high-density collection points.
WEEE	Medium convenience collection services dominate	WEEE is mainly collected via civic amenity sites and through take back at retailers when an equivalent new device is purchased.
Robustness of the underlying information	Credible information received from the Austrian 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 most fractions more than 80 % of the population is already covered by high convenience collection points, there is still room for improvement for WEEE and wood waste. However, Austrian authorities report that there are no changes planned for these fractions.

For plastics, Austria introduced an obligation to etablish a plastics collection system by the amendment 2021 to the Austrian Waste Management Act. For non-packaging plastics the provinces will be responsible to establish this collection system. Some provinces have already established separate collection of non-packaging plastic waste in the civic amenity sites (Umweltbundesamt GmbH, 2021).

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)	
Metals	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
Plastics	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	Austria introduced an obligation to establish a plastic collection system by the amendment 2021 to the Austrian Waste Management Act. For non-packaging plastics the provinces will be responsible to establish this collection system. Some provinces have already established separate collection of non-packaging plastic waste in the civic amenity sites. However, the timing of implementation is not entirely clear.
Glass	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
Bio-waste	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	

Wood	No firm plans to improve the convenience and coverage	No changes planned.
Textiles	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
WEEE	No firm plans to improve the convenience and coverage	No changes planned.
Robustness of the underlying information	Credible information received from the Austrian 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 Austria, no advanced fee modulation is in place. However, fee modulation is currently assessed by a Ministry working group (focusing on multi-layer packaging and plastic packaging) to be taken up more in detail in the future (Umweltbundesamt GmbH, 2022).

Summary result

No advanced fee modulation	In Austria no advanced fee modulation system is in place.
Robustness of the underlying information	Credible information received from the Austrian authorities.

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 residual waste as reported by Austria's authorities amounts to about 1.5 million tonnes in 2017. The reported share of bio-waste in residual waste is 18 %, meaning that a total of 258 000 tonnes of bio-waste is present in residual waste (Table 1.1). Adding the volumes reported as separately collected bio-waste in 2018 of 1.04 million tonnes, results in an overall amount of generated bio-waste of 1.3 million tonnes, excluding home-composted amounts (Umweltbundesamt GmbH, 2021). This means that about 80 % of bio-waste was captured in 2017 (own calculations, Table 1.1).

The available treatment capacity for bio-waste in Austria amounts to 1.25 million tonnes in fermentation plants and 1.6 million tonnes in composting plants. This is well above a treatment capacity which is considered sufficient, namely 80 % of total generated bio-waste, which would amount to 1.03 (80 % of 1.3) million tonnes. The available treatment capacity for bio-waste is 43 % higher than the currently generated municipal bio-waste (own calculations).

Austria's authorities report that there are no majors issues hampering the collection and treatment of municipal bio-waste as the Austrian system is a decentralized system with a high number of low capacity facilities on digestion and composting (Umweltbundesamt GmbH, 2021).

Summary result

Enough bio-waste treatment capacity for 80% of generated municipal bio-waste	The overall available capacity for municipal bio-waste treatment in Austria is estimated to be above 80 % of generated municipal bio-waste.
Robustness of the underlying information	Credible information received from the Austrian 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.

Compost or soils from waste may only be placed onto the market if they comply with the various quality requirements specified by means of regulation (Federal Ministry for Sustainability and Tourism, 2017). For digestate, a guideline on the application of digestate in agriculture applies, complemented with laws and ordinances at the level of the Austrian states.

The Ordinance on the Separate Collection of Biogenic Waste (entered into force on 1 January 1995) prescribes which biodegradable wastes shall be collected separately, unless recovered at home or at business operations (composted). Separate collection of biogenic waste is considered key for the good quality of compost (Verordnung über die getrennte Sammlung biogener Abfälle, 1992).

The Compost Ordinance regulates the quality of compost produced from waste with the aim to improve its competitiveness on the market while limiting environmental impacts (Kompostverordnung, 2001).

Quality assurance is carried out by several organisations, following Austrian standards ÖNORM S 2206-1 und S 2206-2 and ONR 192206 on the Implementation of quality assurance on composting plants.

In summary, Austria has mature national standards for compost quality embedded in national legislation and a quality management system in place (EEA, 2020).

Summary result

Legally binding national standards for compost/digestate quality in place, and quality management system in place	The Austrian Compost Ordinance sets quality standards for compost from biogenic wastes and is complemented by laws and ordinances for the application of compost and digestate in the Austrian states. In addition, Austrian standards exist for a quality management system that is applied by various organisations in the country.
Robustness of the underlying information	This information is robust. It was provided by the Austrian authorities for the development of the 2020 EEA report Bio-waste in Europe – turning challenges into opportunities.

2.2 Target for the recycling of packaging waste

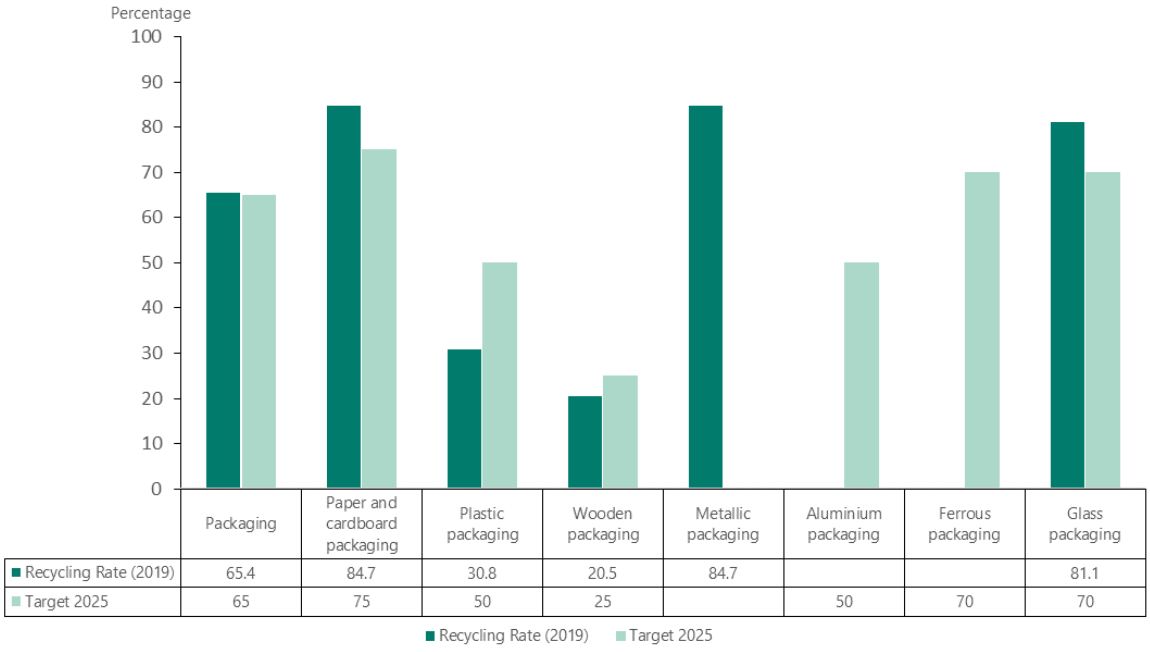
This chapter aims at assessing the prospects of Austria to achieve the **65 % recycling target for packaging waste** in 2025 as well as the **material specific packaging waste recycling targets** (50 % of plastic; 25 % of wood; 70 % of ferrous metals; 50 % of aluminium; 70 % of glass; 75 % of paper and 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/not meeting the target. This analysis is based on data reported by Austria to Eurostat in accordance with Commission Decision 2005/270/EC as last amended by the Commission Implementing Decision 2019/665 (EC, 2019), 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 Austria is illustrated in Figure 2.2.

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



	Packaging	Paper and cardboard packaging	Plastic packaging	Wooden packaging	Metallic packaging	Aluminium packaging	Ferrous packaging	Glass packaging
Recycling Rate (2019)	65.4	84.7	30.8	20.5	84.7			81.1
Target 2025	65	75	50	25		50	70	70

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

In Austria, the recycling rates of total packaging waste as well as of glass and paper and cardboard packaging are higher than the 2025 targets already, with a recycling rate of 65.4 % for overall packaging, 81.1 % for glass packaging, and 84.7 % for paper and cardboard packaging. For metals packaging, a recycling rate of 84.7 % is reported, without differentiation between steel and aluminium packaging. In contrast, the plastics packaging recycling rate is only 30.8 %, 19.2 percentage points

below the 2025 target of 50 %, and the wooden packaging recycling rate stands at 20.5 %, being currently 4.5 percentage points below the 2025 target of 25 %.

For Austria the data on packaging waste generated are derived from various sources: the extended producer responsibility organisations, reports on the amount of separately collected packaging waste, and regular waste analysis by which the amount of packaging waste in residual waste is determined, including packaging waste from online sales and possibly free-riders (Umweltbundesamt GmbH, 2021).

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.

Austria is still evaluating the impact of the new calculation rules on the recycling rates and no results are available yet.

As a matter of sensitivity analysis, to assess what the impact of these new calculation rules could be (change in calculation point), losses in recycling plants 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 84.7 % to 76.2 %
- Metal packaging: decrease by 14 %, from 84.7 % to 72.8 %
- Glass packaging: decrease by 5 %, from 81.1 % to 77.0 %
- Plastic packaging: decrease by 21 %[2], from 30.8 % to 24.3 %
- Wooden packaging: decrease by 11 % from 20.5 % to 18.2 %
- Total packaging: Calculated based on the amounts of each packaging material generated and recycled in 2019, the recycling rate would drop from 65.4 % to 58.8 %.

For plastics packaging, the Austrian PRO ARA also estimated that the application of the new calculation rules would reduce the plastics packaging recycling rate to 25 % (ARA, 2019).

With the amendment of the Packaging Ordinance, harmonized obligatory separate collection of plastics packaging across Austria is foreseen. In addition, Austria has announced financial support to sorting plants for plastics packaging and expects that the implementation of these measures will lead to an increase of the recycling rate.

For wooden packaging, Austria expects that the target for wooden packaging will be achieved once the reuse of wooden pallets is included in the reported recycling rate, as foreseen in the new calculation rules (Umweltbundesamt GmbH, 2021).

[2] 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 %).

Summary result

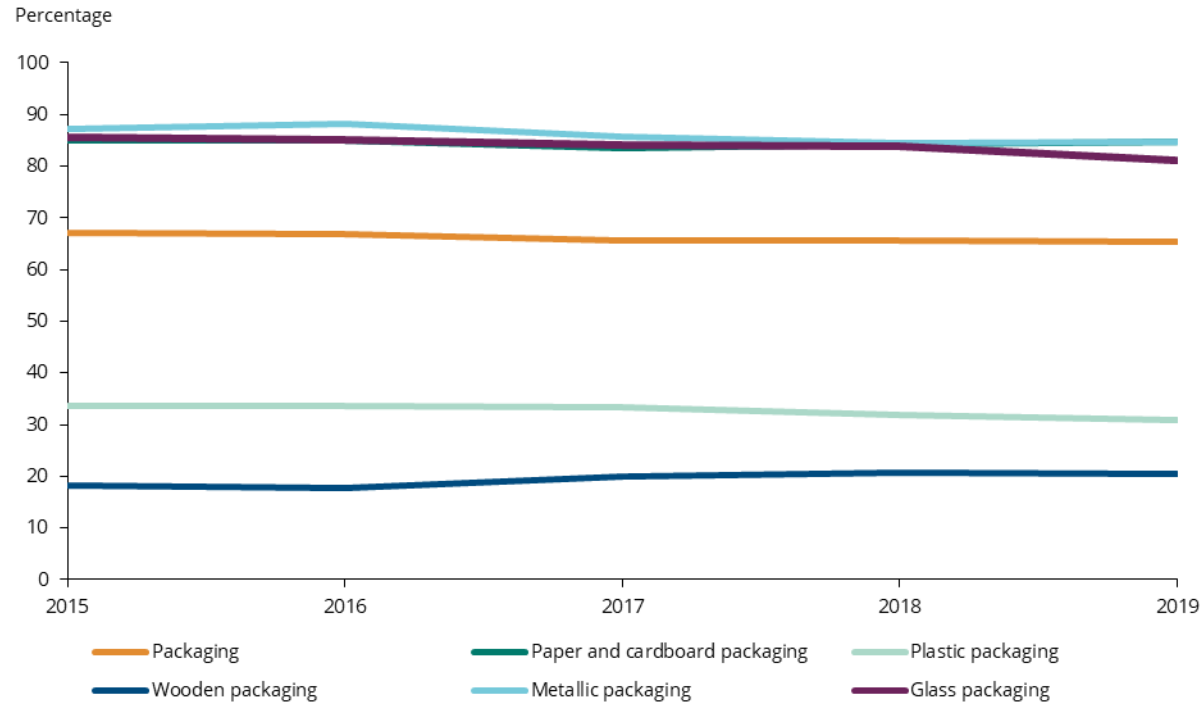
Total packaging	5 - 15 percentage points below target	Austria reports a recycling rate of 65.4 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 58.8 %, 6.2 percentage points below the target.
Paper and cardboard packaging	Target exceeded	Austria reports a recycling rate of 84.7 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 76.2 %, 1.2 percentage points above the target.
Ferrous metals packaging	Target exceeded	Austria reports a recycling rate of 84.7 % 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 72.8 %, 2.8 and 22.8 percentage points above target for steel and aluminium packaging.
Aluminium packaging	Target exceeded	
Glass packaging	Target exceeded	Austria reports a recycling rate of 81.1 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 77.0 %, 7 percentage points above the target.
Plastics packaging	> 15 percentage points below target	Austria reports a recycling rate of 30.8 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 24.3 %, 25.7 percentage points below the target.
Wooden packaging	5 - 15 percentage points below target	Austria reports a recycling rate of 20.5 %. If the new calculation rules were applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 18.2 %, 6.8 percentage points below the target, but is expected to increase when repair of wooden pallets will be accounted for.
Robustness of the underlying information		The assessment is limited by the fact that the recycling rates for 2019 reported by Austria 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. In addition, there are no separate data available for aluminium and steel packaging.

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 Austria are illustrated in Figure 2.3.

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



Source: Eurostat (2022c)

In Austria, the recycling rates for total packaging as well as all packaging materials remained rather stable over the past five years.

Summary result

Total packaging	RR > 55%, and increase in last 5 years < 10 percentage points	The recycling rate decreased by 1.7 percentage points over the past five years and is estimated at 58.8 % if the new calculation rules would be applied (taking into account losses in the recycling plants)
Paper and cardboard packaging	RR > 75%	The recycling rate decreased by 0.2 percentage points over the past five years and is estimated at 76.2 % if the new calculation rules would be applied (taking into account losses in the recycling plants)
Ferrous metals packaging	RR > 70%	The recycling rate decreased by 2.5 percentage points over the past five years and is estimated at 72.8 % if the new calculation rules would be applied (taking into account losses in the recycling plants). No separate data is available for aluminium and steel packaging waste.
Aluminium packaging	RR > 50%	
Glass packaging	RR > 70%	The recycling rate decreased by 4.5 percentage points over the past five years and is estimated at 77.0 % 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 decreased by 2.8 percentage points over the past five years and is estimated at 24.3 % if the new calculation rules would be applied (taking into account losses in the recycling plants)
Wooden packaging	RR > 15% and increase in last 5 years < 10 percentage points	The recycling rate increased by 2.5 percentage points over the past five years and is estimated at 18.2 % if the new calculation rules would be applied (taking into account losses in the recycling plants), but is expected to increase when repair of wooden pallets will be accounted for
Robustness of the underlying information		The assessment is limited by the fact that the recycling rates for 2019 reported by Austria 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. 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.

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.

Austria has fully transposed the amended Packaging and Packaging Waste Directive into national law by December 2021 (Amendment to the Austrian Packaging Ordinance 2014 (BGBl. II Nr. 597/2021) (Umweltbundesamt GmbH, 2022).

Summary result

Transposition with delay of > 12 months	The Packaging and Packaging Waste Directive has been fully transposed into national law by December 2021.
Robustness of the underlying information	The information has been provided by the Austrian 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.

The responsibilities with respect to packaging waste management is on the federal level. Producers of packaging must set up and operate a collection and recovery scheme with the obligation to take back these products and materials from the end-user once they become waste (EPR scheme).

Furthermore, coordinating bodies are set up which are responsible, inter alia, for ensuring the coordination of the information provided to the consumers, including the coordination of the financial settlement of the services undertaken by the municipalities and municipal associations, as laid out in the AWG 2002 and the Packaging Ordinance (Umweltbundesamt GmbH, 2021).

In 2013, the amendment to the AWG 2002 overturned the existing monopoly for the licensing of household packaging in Austria. Since January 2015, the Austrian system of separate collection and recycling of packaging was restructured in order to promote competition for packaging from the household sector and at the same time create fair conditions. Since then, in addition to the previous monopoly of Altstoff Recycling Austria AG (ARA), other providers are also allowed to carry out household-related collection of packaging waste, in order to comply with European competition law. New rules have made it clear what is meant by household and commercial (non-household) sectors. The establishment of separate parallel collections is prohibited and all suppliers must share the existing packaging collection infrastructure. At the same time, the new Compensation Ordinance introduced EPR beyond separate collection to packaging remaining in residual waste. This means that packaging producers pay municipalities to deal with packaging waste included in residual waste (Umweltbundesamt GmbH, 2021).

With the establishment of an independent coordination body for packaging waste as stipulated in the Austrian Waste Management Act, the control of the correct declaration of the packaging quantity placed on the market by the obligated companies is to be ensured. To date seven schemes are operating in Austria for packaging waste. The coordination body (VKS Verpackagungskoordinierungsstelle) coordinates the interests of the different parties operating in the area of collecting and recycling packaging waste with the aim to ensure fair competition between the different producer responsibility schemes (PROs). It also informs the PROs about their tasks and performs audits.

While the recycling rates as such do not have to be met by each single PRO, PROs are obliged to collect a certain share of household packaging waste put on the market according to the Packaging Ordinance:

<table>
<tr><th></th><th>2022</th><th>2023</th><th>2025</th><th>2030</th></tr>
<tr><td>Paper and cardboard</td><td>80%</td><td>80%</td><td>80%</td><td>85%</td></tr>
<tr><td>Glass</td><td>80%</td><td>80%</td><td>80%</td><td>85%</td></tr>
<tr><td>Ferrous metals</td><td rowspan="2">50%</td><td rowspan="2">60%</td><td>65%</td><td>75%</td></tr>
<tr><td>Aluminium</td><td>65%</td><td>75%</td></tr>
<tr><td>Plastics</td><td>60%</td><td>75%</td><td>80%</td><td>85%</td></tr>
<tr><td>Beverage cartons</td><td>50%</td><td>60%</td><td>80%</td><td>80%</td></tr>
</table>

Source: Verpackungsverordnungs-Novelle (2021)

PROs have to regularly report about meeting all the legal requirements. The Federal Ministry on Climate Action, Environment, Energy, Mobility, Innovation and Technology can revoke the operating permission if a PRO does not fulfil the legal requirements (Paragraph 31 of the AWG).

In summary, there are consequences for the PROs if the targets are not met (VKS Verpackungskoordinierungsstelle gemeinnützige GmbH, 2021).

Summary result

Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets	Responsibilities are defined and there are consequences for the PROs if they do not meet the collection targets or other legal requirements. The coordination body provides both support tools for PROs to improve the efficiency and performance and audits their performance.
Robustness of the underlying information	Credible information received from the Austrian 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, Austria has a ban on landfilling of waste with TOC > 5 %. For pre-treated municipal waste the landfill tax on a *mass-waste* landfill (Massenabfalldeponie) amounts to 29.80 EUR/t.

Summary result

Ban in place for landfilling residual or biodegradable waste	In Austria, there is a ban on landfilling of waste with TOC > 5% and a landfill tax in place. For pre-treated municipal waste the landfill tax on a *mass-waste* landfill (Massenabfalldeponie) amounts to 29.80 EUR/t .
Robustness of the underlying information	Credible information received from the Austrian authorities through the EEA-ETC/WMGE questionnaire.

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, Austria has an incineration tax in place.

Summary result

Taxes > 7 EUR/t([a]) but without escalator	Austria has an incineration tax in place, which increased from 7 EUR/t in 2006 to 8 EUR/t (corresponding to 7 EUR/t rescaled based on purchasing power parities) in 2012.
Robustness of the underlying information	Credible information received from the Austrian 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.

According to the information available, Austria does not have a packaging tax in place.

Summary result

No packaging taxes	Austria currently has no packaging tax in place.
Robustness of the underlying information	Credible information received from the Austrian authorities through the EEA-ETC/WMGE questionnaire.

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.

The Pay-as-you-throw (PAYT) system in Austria is described in detail under SRF MSWR-3.3.

Summary result

PAYT scheme fully rolled out (to at least 80 % of the population)	In Austria, different types of PAYT charging systems are in use, covering the whole population.
Robustness of the underlying information	Qualitative information received from the Austrian authorities through the EEA-ETC/WMGE questionnaire. No comprehensive data on the population share covered by the different systems (volume based, frequency of collection, weight based) is available.

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.

Austria does not have mandatory DRS for any packaging in place. However, there are voluntary schemes for refillable glass beverage bottles, plastic crates and wooden pallets. For example, one filler voluntarily established a deposit for one-way mineral water bottles. A new regulatory framework to introduce DRS for PET plastic bottles and beverage cans made from aluminium and ferrous metals is currently being discussed (Umweltbundesamt GmbH, 2021).

In 2020, the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology conducted a study on options to increase plastic capture rates concluding that only a DRS will achieve a 90 % separate collection rate for plastic beverage bottles as stipulated in the EU directive on Single-Use-Plastics (Ministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie, 2020).

Legal requirements have been established by the amendment of the Austrian Waste Management Act in December 2021, so that DRS systems for beverage plastic bottles and drink cans made from aluminium and ferrous metals will become mandatory by 2025 (Umweltbundesamt GmbH, 2022).

Summary result

Aluminium drink cans	No DRS for drink cans	No DRS at the moment. However DRS systems for aluminium (and ferrous metals) drink cans will become mandatory by 2025.
Glass drink bottles	Voluntary DRS for some drink bottles	Voluntary system for refillable beverage bottles. However, legal requirements for a DRS have been established by the amendment of the Austrian Waste Management Act in December 2021.
Plastic drink bottles	Voluntary DRS for some drink bottles	Only one filler established a voluntary deposit for one-way mineral water bottles. However, DRS systems for plastic drink bottles will become mandatory by 2025
Plastic crates	Voluntary DRS for some plastic crates	Voluntary DRS for crates for beverage bottles, fruit, vegetables etc.
Wooden packaging	Voluntary DRS for some wooden packaging	Voluntary system for wooden pallets
Robustness of the underlying information		Credible information received from the Austrian 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 high recycling rates for packaging waste and for collecting recyclables at adequate quality. Such systems generally deliver better results the more convenient and accessible they are for their users, also compared to the collection of residual waste. 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 system in Austria is described in detail under SRF MSWR-4.1 in section 2.1.4.

For around one third of Austrian citizens, plastics packaging collection is limited to plastic bottles while other plastics packaging is collected with mixed municipal waste (ARA, 2019). For non-household packaging there is an obligation either to participate in an EPR scheme or to recover packaging themselves. Both request source separation, but sorting at source is currently not mandatory for commercial and industrial sources. However, according to the amended Packaging Ordinance, adopted on 29 December 2021 (Verpackungsverordnungs-Novelle, 2021), it will become mandatory by 2023 (Umweltbundesamt GmbH, 2022).

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 not 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 not mandatory for non-household ferrous metals packaging waste	
Aluminium packaging	**1. 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 not 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	For around one third of Austrian citizens, plastic packaging collection is limited to plastic bottles. At the same time, 72 % of the population is covered by high convenience plastic packaging collection schemes.
	2. Packaging waste from non-household sources Separation at source is not mandatory for non-household plastic packaging waste	
Wooden packaging	**Packaging waste from non-household sources** Separation at source is not mandatory for non-household wooden packaging waste	
Robustness of the underlying information	Credible information received from the Austrian authorities through the EEA-ETC/WMGE questionnaire	

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 convenience and coverage of separate collection. This SRF is only relevant for MS 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[3]. Again, the material specific assessment considers packaging waste from both household and non-household sources.

In order to increase the plastic packaging recycling rate, the collection of light-weight-packaging will be extended and harmonised (Umweltbundesamt GmbH, 2021). Door-to-door collection of co-mingled plastics, composite and metals packaging will be extended as well as separate collection of these materials during events and in touristic areas from 2023 (ARA, 2019). In addition, DRS systems for beverage plastic bottles and drink cans made from aluminium and ferrous metals will become mandatory by 2025, with the aim to increase the capture rate and thereby the recycling rate for plastics and metals packaging.

Sorting at source is currently not mandatory for commercial and industrial sources however, according to the amended Packaging Ordinance, adopted on 29 December 2021 (Verpackungsverordnungs-Novelle, 2021), it will become mandatory by 2023. The Ordinance also harmonizes obligatory separate collection of plastic packaging from households as well as from commercial and industrial sources, so that all types of plastics packaging will have to be collected separately across Austria from 2023 onwards. Compliance will be monitored in more detail in the future (Umweltbundesamt GmbH, 2021).

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 Firms plans to introduce mandatory separate sorting for non-household paper and cardboard packaging waste	Sorting at source of non-household paper and cardboard packaging waste will become mandatory by 2023.
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 Firms plans to introduce mandatory separate sorting for non-household ferrous metals packaging waste	Sorting at source of non-household ferrous metals packaging waste will become mandatory by 2023.
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 Firms plans to introduce mandatory sorting at source for non-household glass packaging waste	Sorting at source of non-household glass packaging waste will become mandatory by 2023.

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

Plastics packaging	**1. Packaging waste from households** Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	Sorting at source of all types of plastics packaging from households will be harmonized by 2023.
	2. Packaging waste from non-household sources Firms plans to introduce mandatory separate sorting for non-household plastic packaging waste	Sorting at source of non-household plastics packaging waste will become mandatory by 2023.
Wooden packaging	**Packaging waste from non-household sources** Firms plans to introduce mandatory separate sorting for non-household wooden packaging waste	Sorting at source of non-household wooden packaging waste will become mandatory by 2023.
Robustness of the underlying information		Credible information received from the Austrian authorities through the EEA-ETC/WMGE questionnaire

2.2.5 Extended producer responsibility (EPR) and similar schemes

SRF P-5.1: Coverage of EPR schemes

In Austria, EPR applies to all packaging. There are seven accepted PROs for packaging in Austria, covering all major material fractions from household and non-household sources (VKS Verpackungskoordinierungsstelle gemeinnützige GmbH, 2021):

- ARA Altstoff Recycling Austria AG (covering Household, Commercial and Industrial packaging)
- Austria Glas Recycling GmbH (covering glass packaging only)
- Bonus Holsystem Gesellschaft m.b.H. & Co KG (covering Household, Commercial and Industrial packaging)
- European Recycling Platform (ERP) Austria GmbH (covering Household, Commercial and Industrial packaging)
- Interseroh Austria GmbH (covering Household, Commercial and Industrial packaging)
- Reclay UFH (covering Household, Commercial and Industrial packaging) GmbH
- GUT Galle Umwelttechnik GmbH (covering Commercial and Industrial packaging)

In 2013, the amendment to the AWG 2002 made it possible also for other providers to carry out household-related collection of packaging waste in addition to the previous monopoly of Altstoff Recycling Austria AG (ARA), as explained in more detail under SRF P-2.2, complying with EU competition law. New rules have made it clear what is meant by household and commercial sectors. The establishment of separate parallel collections is prohibited and all suppliers must share the existing packaging collection infrastructure. At the same time, the new Compensation Ordinance introduced EPR beyond separate collection to packaging remaining in residual waste (Umweltbundesamt GmbH, 2021).

Article 75 of the AWG 2002, prescribes that the Ministry of Environment is responsible for checking producers and importers of packaging for compliance with provisions stipulated by AWG 2002 and the Austrian Packaging Ordinance. The Ministry conducts annual inspections for compliance with the Packaging Ordinance. Based on Article 30a of the AWG 2002, the Austrian packaging coordination body (*clearing house*) was founded to perform specific tasks for all collection and recovery systems (VKS Verpackungskoordinierungsstelle gemeinnützige GmbH, 2021). Its tasks include in particular monitoring participants in all collection and recovery systems in a coordinated way. According to Article 29 (2) 8a AWG 2002, the extent of these checks comprises at least 80 % of the packaging mass

contracted by the collection and recycling systems, based on the respective collection category of the individual system, within three years (Abfallwirtschaftsgesetz, 2002).

Summary result

All main packaging fractions([a]) are covered by EPR schemes, covering household and non-household packaging	Austria has EPR schemes in place covering household, industrial and commercial packaging for all packaging fractions.
Robustness of the underlying information	Credible information received from the Austrian 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 Austria, no advanced fee modulation is in place (Umweltbundesamt GmbH, 2021). However, as indicated in Section 2.1.5, fee modulation is currently assessed by a Ministry working group (focusing on multi-layer packaging and plastic packaging) to be taken up more in detail in the future (Umweltbundesamt GmbH, 2022).

Summary result

No advanced fee modulation	In Austria no advanced fee modulation system is in place.
Robustness of the underlying information	Credible information received from the Austrian authorities.

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.

There are seven PROs operating in Austria, dealing with packaging waste, covering all major material fractions from household and non-household sources. Austria also has an EPR scheme in place covering household, industrial and commercial packaging for composite packaging waste.

Summary result

SRF P-5.3.1 EPR scheme for Paper and cardboard packaging waste	EPR scheme covering household and non-household packaging	Austria has an EPR scheme in place covering household, industrial and commercial packaging for paper and cardboard packaging waste, but without applying advanced fee modulation.
SRF P-5.3.2 EPR scheme for Ferrous metals packaging waste	EPR scheme covering household and non-household packaging	Austria has an EPR scheme in place covering household, industrial and commercial packaging for ferrous metals packaging waste, but without applying advanced fee modulation.
SRF P-5.3.3 EPR scheme for Aluminium packaging waste	EPR scheme covering household and non-household packaging	Austria has an EPR scheme in place covering household, industrial and commercial packaging for aluminium packaging waste, but without applying advanced fee modulation.
SRF P-5.3.4 EPR scheme for Glass packaging waste	EPR scheme covering household and non-household packaging	Austria has an EPR scheme in place covering household, industrial and commercial packaging for glass packaging waste, but without applying advanced fee modulation.
SRF P-5.3.5 EPR scheme for Plastic packaging waste	EPR scheme but without fee modulation	Austria has an EPR scheme in place covering household, industrial and commercial packaging for plastic packaging waste, but without applying advanced fee modulation.
SRF P-5.3.6 EPR scheme for Wooden packaging waste	EPR scheme covering all non-household packaging	Austria has an EPR scheme in place covering household, industrial and commercial packaging for wood packaging waste. Fee modulation is less relevant for wooden packaging.
Robustness of the underlying information		Credible information received from the Austrian authorities through the EEA-ETC/WMGE questionnaire. In addition, Austria has an EPR scheme in place covering household, industrial and commercial packaging for composite packaging waste.

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 Austria was 2 % in 2019 (first treatment step) (calculated based on (Eurostat, 2022a)). For 2020 no data are available yet.

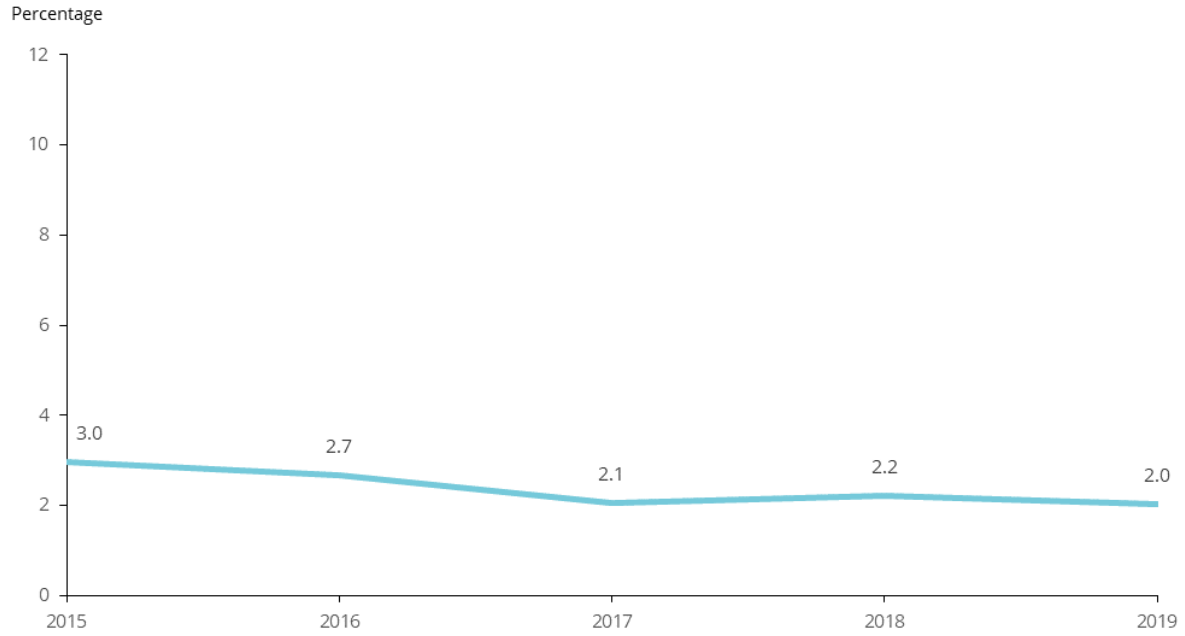
Summary result

Distance to target < 10 percentage points, or target exceeded	The landfill rate in 2019 was 2 %.
Robustness of the underlying information	The data are derived from Eurostat and are considered to be rather 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. The Austrian authorities do not expect any increase for landfilled waste by applying the new rules, rather a shift between recycling and incineration (referring to metal content in ashes/slags and sorting residues from biological treatment activities) (Umweltbundesamt GmbH, 2022).

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

Over the past five years, the overall landfilling rate of Austria has decreased from 3 % in 2015 to 2 % in 2019 (Figure 2.4).

Figure 2.4 Landfilling in Austria between 2015 and 2019, in percentage



Source: Eurostat (2022a)

Summary result

Landfill rate below 10%	The landfill rate in 2019 is 2 % and remained at a very low level over the past five years.
Robustness of the underlying information	The data is derived from Eurostat and is considered to be rather robust. There is no break 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

Landfilling of biodegradable and other organic waste with TOC > 5 % is banned in Austria. As the output from MBT is considered as fully degraded as a result of the biological treatment step, Austria has reported 0 % biodegradable waste landfilled for 2016 (Umweltbundesamt GmbH, 2021).

Summary result

Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has been achieved in 2016 or in the year specified in the derogation where applicable	Austria has reported 0 % biodegradable waste landfilled for 2016 of the total amount (by weight) of biodegradable municipal waste produced in 1995, and therefore met the target already.
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 Austria 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 Austria, only the SRFs relevant to Austria are taken into account to define the maximum score. Austria is considered to be 'not at risk' if its score is 50 % or more of this maximum score, and 'at risk' if its score is less than 50 % of this maximum score.

3.1 Prospects for meeting the recycling target for municipal solid waste

77 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that Austria is **not at risk for not meeting the MSW recycling target in 2025**.
Current situation and past trends:	The recycling rate increased from 56.9 % in 2015 to 58.2 % in 2019, already exceeding the 2025 target of 55 % by 3.2 percentage points.
Legal instruments:	The amended WFD has been fully transposed into national law by December 2021. Responsibilities are defined and support mechanisms are in place but enforcement mechanisms are unclear.
Economic instruments:	A ban on landfilling of waste with TOC > 5 % and a landfill tax are in place. An incineration tax is in place. PAYT is applied across the whole country.
Separate collection systems:	A high share of the population is covered by high convenience collection services for paper and cardboard, metals, plastics, glass, bio-waste and textiles. Plastics collection is currently limited to packaging and partly even to plastic bottles only, but this will change with the implementation of the Packaging Ordinance as revised in 2021. Bring systems dominate the collection of WEEE (including take back at retailers), and a low share of the population is covered by high convenience collection services for wood, while there are no firm plans to improve the type and coverage of collections for these materials.
Extended producer responsibility:	All main packaging fractions are covered by EPR schemes, covering household and non-household packaging, but without applying advanced fee modulation. Fee modulation is currently assessed by a Ministry working group.

Bio-waste treatment capacity and quality management:	The bio-waste treatment capacity is well above 80 % of the total generated municipal bio-waste. There are national standards for compost products including a quality management system.

3.2 Prospects for meeting the recycling targets for packaging waste

54 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that Austria is **not at risk for not meeting the 65 % recycling target for packaging waste in 2025**	
74 % of maximum score	Paper and cardboard	Not at risk
74 % of maximum score	Ferrous metals packaging	Not at risk
75 % of maximum score	Aluminium packaging	Not at risk
70 % of maximum score	Glass packaging	Not at risk
31 % of maximum score	Plastics packaging	At risk
50 % of maximum score	Wooden packaging	Not at risk
Current situation and past trends:	The total packaging recycling rate (applying the new calculation rules) is 58.8 %, 6.2 percentage points below the 2025 target. The only waste stream more than 15 percentage points below the target is plastic packaging (25.7 percentage points). The wooden packaging recycling rate (under the new calculation rules) is 6.8 percentage points below the 2025 target but is expected to increase when repair of wooden pallets will be accounted for. The total packaging recycling rate decreased from 67.1 % in 2015 by 1.7 percentage points over the past five years.	
Legal instruments:	The amended Packaging and Packaging Waste Directive has been fully transposed into national law by December 2021. Responsibilities are defined and support mechanisms are in place.	
Economic instruments:	A ban on landfilling of waste with TOC > 5 % and a landfill tax is in place. An incineration tax is in in place. There is no packaging tax in place. The EPR scheme requires producers to pay fees for the packaging placed on the market. Pay-as-you-throw systems are widely applied.	

	Currently only voluntary DRS, but mandatory DRS from 2025 for plastic bottles and aluminium cans introduced by the amendment 2021 to the Austrian Waste Management Act.
Separate collection systems:	The coverage and convenience level for the collection of packaging waste from households is high, and sorting at source of non-household packaging waste will become mandatory by 2023.
Extended producer responsibility:	EPR schemes are in place for packaging waste from households and non-households, including packaging made from paper and cardboard, ferrous metals, aluminium, glass, plastic, wood and composite packaging. No advanced fee modulation is applied.

3.3 Prospects of meeting the landfill of municipal waste target

100 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that Austria is **not 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 landfill rate in 2019 was 2 % (first treatment step) and remained at a very low level over the past five years, meaning that it is already below the 2030 target of a maximum 10 %. However, this does not yet take into account the new reporting rules related to the target.
Diversion of biodegradable municipal waste from landfill:	Austria has reported 0 % biodegradable waste landfilled for 2016 of the total amount (by weight) of biodegradable municipal waste produced in 1995.

List of abbreviations

Abbreviation	Name
AWG 2002	Abfallwirtschaftsgesetz (Waste Management Act)
DRS	Deposit Return System
EC	European Commission
EDM	Elektronisches Dantenmanagement (Electronic data Management)
EEA	European Environment Agency
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 Center / Waste and Materials in a Green Economy
MBT	Mechanical biological treatment
MS	Member state
MSW	Municipal solid waste
PAYT	Pay-as-you-throw
PET	Polyethylene terephthalate
PPWD	Packaging and Packaging Waste Directive
PRO	Producer Responsibility Organisation
R&D	Research and development
RDF	Refused Derived Fuel
RR	Recycling rate
SRF	Success and risk factor
TOC	Total Organic Carbon
WEEE	Waste Electric and Electronic Equipment
WFD	Waste Framework Directive

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Annex 1 Detailed scoring of success and risk factors

Assessment sheet - Recycling target for municipal waste

MS Austria

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
MSWR-1.1	Distance to target	Distance to target < 5 percentage points, or target exceeded	5	10
MSWR-1.2	Past trends in municipal solid waste recycling rate	RR > 50% and increase in last 5 years < 5 percentage points, or RR > 45%, and increase in last 5 years < 10 percentage points, or RR < 45% and increase in last 5 years > 10 percentage points	1	1
Legal instruments				
MSWR-2.1	Timely transposition of the revised WFD into national law	Transposition with delay of > 12 months, or no full transposition yet	1	0
MSWR-2.2	Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms	Clearly defined responsibilities and good set of support tools but weak/no enforcement mechanisms for meeting the recycling targets OR Unclear responsibilities but clearly defined enforcement mechanisms and a good set of support tools for meeting the recycling targets OR Clearly defined responsibilities and enforcement mechanisms but no/weak support tools for meeting the recycling targets	1	1
Economic instruments				
MSWR-3.1	Taxes and/or ban for landfilling residual or biodegradable waste	Ban, or landfill tax > 30 EUR/t* with escalator, or landfill tax > 45 EUR/t	1	2
MSWR-3.2	Taxes on municipal waste incineration	Taxes > 7 EUR/t*, but without escalator	1	1
MSWR-3.3	Pay-as-you-throw (PAYT) system	PAYT scheme fully rolled out (to at least 80% of the population) OR Implemented in some regions / municipalities (50-80% covered) and firm plans for rolling out to at least 80% of the population	1	2

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 high share of the population is covered by high convenience collection services	0.84	1.68
	Wood	A low share of the population is covered by high convenience collection services	0.06	0
	Textiles	A high share of the population is covered by high convenience collection services	0.06	0.12
	WEEE	Medium convenience collection services dominate	0.04	0.04
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	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.42	0
	Wood	No firm plans to improve the convenience and coverage	0.03	0
	Textiles	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.03	0
	WEEE	No firm plans to improve the convenience and coverage	0.02	0

Extended producer responsibility (EPR) and similar schemes				
MSWR-5.1	Fee modulation in EPR schemes for packaging	No advanced fee modulation OR fee modulation meets less than two assessment criteria	1	0
Bio-waste treatment capacity and quality management				
MSWR-6.1	Capacity for the treatment of bio-waste	Enough bio-waste treatment capacity for 80% of generated municipal bio-waste	1	2
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	**24.84**
			Maximum score	32.10
				77%

Assessment sheet - Recycling target for packaging waste

MS Austria

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 percentage points below target, or target exceeded	5	10
	Distance to target - Ferrous metals packaging	< 5 percentage points below target, or target exceeded	5	10
	Distance to target - Aluminium packaging	< 5 percentage points below target, or target exceeded	5	10
	Distance to target - Glass packaging	< 5 percentage points below target, or target exceeded	5	10
	Distance to target - Plastics packaging	> 15 percentage points below target, or no data reported	5	0
	Distance to target - Wooden packaging	5 - 15 percentage points below target	5	5
P-1.2	Past trends in packaging waste recycling rate	RR > 60% and increase in last 5 years < 5 percentage points, or RR > 55%, and increase in last 5 years < 10 percentage points, or RR < 55% and increase in last 5 years > 10 percentage points	1	1
	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 %, or RR > 75%	1	2
	Past trends in ferrous metals packaging recycling	RR > 65% and increase in last 5 years > 5 percentage points, or RR > 60% and increase in last 5 years > 10 %, or RR > 70%	1	2
	Past trends in aluminium packaging recycling	RR > 45% and increase in last 5 years > 5 percentage points, or RR > 40% and increase in last 5 years > 10 %, or RR > 50%	1	2
	Past trends in glass packaging recycling	RR > 65% and increase in last 5 years > 5 percentage points, or RR > 60% and increase in last 5 years > 10 %, or RR > 70%	1	2

	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 percentage points, or RR < 15% and increase in last 5 years > 10 percentage points	1	1
Legal instruments				
P-2.1	Timely transposition of the revised Packaging and Packaging Waste Directive into national law	Transposition with delay of > 12 months, or no full transposition yet	1	0
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	Ban, or landfill tax > 30 EUR/t* with escalator	1	2
P-3.2	Taxes on municipal waste incineration	Taxes > 7 EUR/t*	1	1
P-3.3	Packaging taxes	No packaging taxes	1	0
P-3.4	Pay-as-you-throw (PAYT) system	PAYT scheme fully rolled out (to at least 80% of the population) OR Implemented in some regions / municipalities (50-80% covered) and firm plans for rolling out to at least 80% of the population	1	2
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 not mandatory for non-household paper and cardboard packaging waste	1	0
	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 not mandatory for non-household ferrous metals packaging waste	1	0
	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 not mandatory for non-household glass packaging waste	1	0
	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 not mandatory for non-household plastic packaging waste	1	0
	Wooden packaging	Separation at source is not mandatory for non-household wooden packaging waste	2	0
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)	Firm plans to introduce mandatory sorting at source for non-household paper and cardboard packaging waste	0.5	1
	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)	Firm plans to introduce mandatory sorting at source for non-household ferrous metals packaging waste	0.5	1
	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)	Firm plans to introduce mandatory sorting at source for non-household glass packaging waste	0.5	1

	Plastics packaging (household)	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0.5	1
	Plastics packaging (non-household)	Firm plans to introduce mandatory sorting at source for non-household plastics packaging waste	0.5	1
	Wooden packaging	Firm plans to introduce mandatory sorting at source for non-household wooden packaging waste	1	2
Extended producer responsibility (EPR) and similar schemes				
P-5.1	Coverage of EPR schemes	All main packaging fractions* are covered by EPR schemes, covering household and non-household packaging	1	2
P-5.2	Fee modulation in EPR schemes for packaging	No fee modulation OR fee modulation meets less than two assessment criteria	1	0
P-5.3	Material specific EPR assessment - Paper and cardboard packaging waste	EPR scheme covering household and non-household packaging	1	1
	Material specific EPR assessment - Ferrous metals packaging waste	EPR scheme covering household and non-household packaging	1	1
	Material specific EPR assessment - Aluminium packaging waste	EPR scheme covering household and non-household packaging	1	1
	Material specific EPR assessment - Glass packaging waste	EPR scheme covering household and non-household packaging	1	1
	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	EPR scheme covering all non-household packaging	1	2
Total packaging recycling target				**18.05**
			Maximum score	33.33
				54%

Paper and cardboard recycling target

Total score	**23.00**
Maximum score	31.00
	74%

Ferrous metals packaging recycling target

Total score	**23.00**
Maximum score	31.00
	74%

Aluminium packaging recycling target

Total score	**24.00**
Maximum score	32.00
	75%

Glass packaging recycling target

Total score	**23.00**
Maximum score	33.00
	70%

Plastics packaging recycling target

Total score	**11.00**
Maximum score	36.00
	31%

Wooden packaging recycling target

Total score	**17.00**
Maximum score	34.00
	50%

Assessment sheet - Target for landfilling of municipal waste

MS Austria

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
LF-1.1	Distance to target	Distance to target < 10 percentage points, or target exceeded	5	10
LF-1.2	Past trends in municipal solid waste landfill rat	Landfill rate in 2020 < 20% and decrease in last 5 years > 5 percentage points, or Landfill rate in 2020 < 25% and decrease in last 5 years > 10 percentage points or Landfill rate in 2020 < or = 10%	1	2
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 been achieved in 2016 or in the year specified in the derogation where applicable	1	2
			Total score	**14.00**
			Maximum score	14.00
				100%