Country profile

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

Finland

June 2022

European Environment Agency

Contents

Acknowledgements

This 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 Finnish Ministry of the Environment in March 2021 to a questionnaire developed by the EEA and ETC/WMGE. The EEA and ETC/CE would like to thank the Finnish authorities for the information provided and for the kind review of drafts of this assessment 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 Finland. 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 Finland is at risk of missing the targets for municipal waste and packaging waste set in EU legislation for 2025. In addition, it provides 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 Finland 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 Finland to achieve the overall packaging waste and specific packaging materials' recycling targets for 2025. Chapter 2.3 examines the prospects for Finland 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.

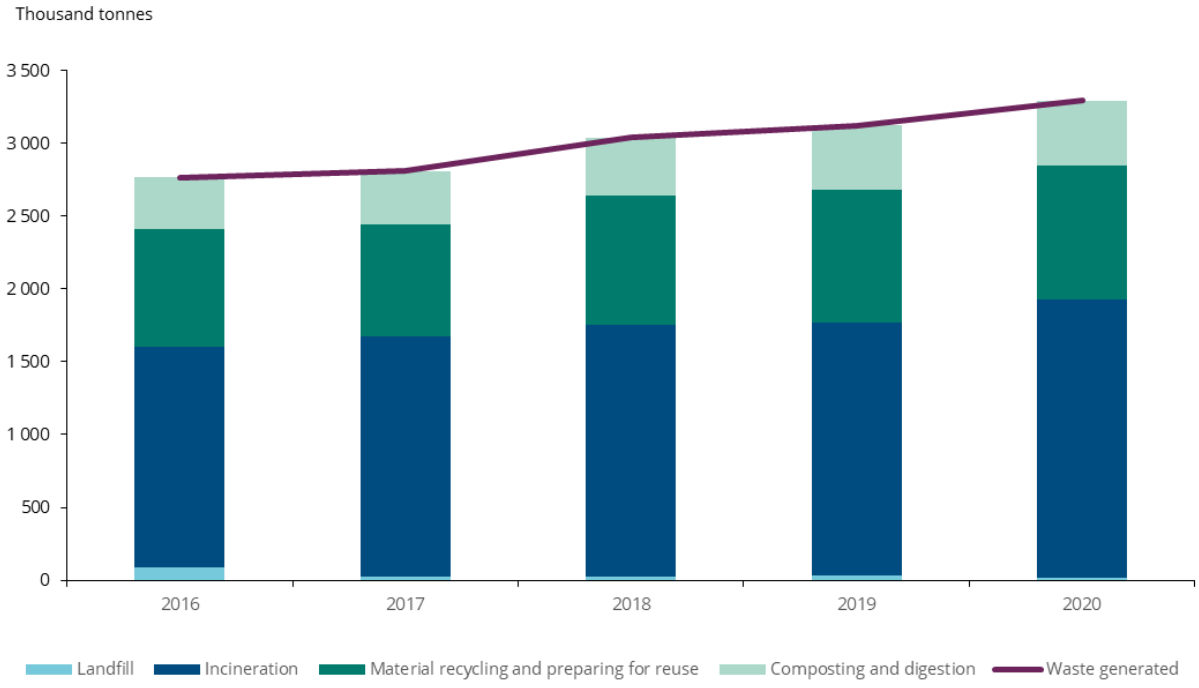
1.3 Member State profile – context parameters

Municipal waste generation and treatment

Finland generates more than 3 million tonnes of municipal waste annually, and the waste generation has increased over the past five years (Figure 1.1). According to the Life IP project Circwaste, the increase comes mostly from non-household sources of municipal waste (Ministry of the Environment, 2021d). The waste generation corresponds to 596 kg/cap in 2020, which is above the (estimated) EU average of 505 kg/cap. The country relies strongly on waste incineration: its share increased from 54.7 % to 57.9 % in the period from 2016 to 2020. The past increase in the incineration rate was mainly caused by a landfill ban on biodegradable and other organic waste containing more than 10 % of organic substances, which came into force in 2016 (Government of Finland, 2021c). As a result of the ban, the share of landfilling has decreased by 11 percentage points between 2015 and 2017 and has remained below 1 % since. The waste statistics include data on Åland. (Ministry of the Environment, 2021d)

The shares of material recycling and composting and digestion have remained rather stable during the five-year period considered, between 29.2 % in 2016 and 28.1 % in 2020 for material recycling, and between 12.8 % in 2016 and 13.5% for composting and digestion in 2020 (Figure 1.1). At the same time, however, the waste composition has changed and especially the paper waste generation has decreased, which has also diminished the amount of recycled paper waste (Ministry of the Environment, 2021d).

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



Source: Eurostat (2022b)

A mechanical treatment (MT) plant started operation in 2016 The mechanical treatment plant in Lahti is able to sort metals, cardboard and plastics from 66 thousand tonnes of dry recyclables and mixed waste annually (excl. bio-waste) to be further processed by the recycling industry. In addition, a MT

plant located in Oulu, Northern Finland, has just recently started operation. The plant's annual sorting capacity is 100 thousand tonnes for commercial and industrial packaging waste and construction and demolition waste. The actual volumes extracted for recycling of MSW and packaging waste are not exactly known as the data systems do not follow the waste origin However, in Finland, the recycling of municipal and packaging waste is still almost entirely based on separation at source. Although extraction of recyclables from mixed municipal waste is not prioritised in strategic planning, the Finnish authorities note that more MT plants may be needed, if the municipal waste or plastic packaging waste recycling targets cannot be met only by extended and more efficient separate collection. (Ministry of the Environment, 2021d)

Legal Framework

Generally, the Finnish waste legislation follows the EU waste legislation but is partly stricter and more comprehensive. The general legislative framework concerning waste and packaging is presented below:

- Waste Act 646/2011 (amended in 2021 (714/2021)) (Government of Finland, 2021i)
- Government Decree on Waste 978/2021 (Government of Finland, 2021f)
- Government Decree on Waste Incineration 151/2013 (amended in 2015) (Government of Finland, 2015)
- Government Decree on Landfills 331/2013 (amended in 2021 (1030/2021)),) (Government of Finland, 2021c)
- Environmental Protection Act 527/2014 (amended in 2021 (715/2021)) (Government of Finland, 2021a)
- Government Decree on Environmental Protection 713/2014 (amended in 2021 (979/2021)) (Government of Finland, 2021h)
- Waste Tax Act 1126/2010 (amended in 2020) (Government of Finland, 2020a)
- Government Decree on Packaging and Packaging waste 1029/2021 (Government of Finland, 2021g)
- Government Decree on the Return System for Beverage Containers 526/2013 (to be revised) (Government of Finland, 2013b), *and;*
- Act on Excise Duty on Certain Beverage Containers 1037/2004 (amended in 2020) (Government of Finland, 2020b)

In order to transpose the revised EU waste legislation, the Finnish waste legislation has been revised in 2021. Finland has revised the Waste Act (646/2011) (Government of Finland, 2021i), the Environmental Protection Act (527/2014) (Government of Finland, 2021a), Chemicals Act (599/2013) (Government of Finland, 2021d) and the Criminal Code (39/1889) (Government of Finland, 2021e) to implement the EU waste package, including the revised Waste Framework Directive and several other directives in the field of waste management. Revised acts came into force on 19 July 2021, establishing the main elements to achieve, among other, the reuse and recycling targets for municipal waste and the recycling targets for packaging waste. In addition, some of the more detailed regulations are enacted in Government Decrees. Ten revised Decrees, including the Waste Decree (Government of Finland, 2021f) and the Packaging and Packaging Waste Decree (Government of Finland, 2021g), were adopted in November 2021 (Ministry of the Environment, 2021d).

During the legislative process, Finnish authorities made proposals to reduce the fragmentation of responsibilities in the waste sector as recommended by the previous Early warning report. However, this caused strong political disputes (see more information in Appendix 1, recommendation 11), which delayed the legislative process and Finland was unable to transpose the necessary regulations according to the deadlines set (Ministry of the Environment, 2021d).

The Finnish Waste Act (Government of Finland, 2021i) applies in Åland through a *blanket law* (i.e. a simple reference to the law of mainland Finland). However, some adjustments, e.g. regarding responsible authorities (ÅFS 2018:83) are applied. Thus, the directives are implemented in part through referring to the amended Waste Act and Decrees of mainland Finland. In addition, Åland has enacted some waste decrees on its own (i.e. Government Decree on Waste (ÅFS 2018:90), Government Decree on Landfills (ÅFS 2007:3), Environmental Protection Act (ÅFS 2008:124) and Environmental Protection Decree (ÅFS 2008:130)) and is revising these decrees accordingly.The Government Decree on Waste Incineration (ÅFS 2015:16), the Government Decree on Packaging and Packaging waste (ÅFS 2018:92), and the Government Decree on the Return System for Beverage Containers (ÅFS 2018:9) apply in Åland with certain adjustments, whereas the Waste Tax Act (Government of Finland, 2020a) and the Act on Excise Duty on Certain Beverage Containers (Government of Finland, 2020b) are applied directly. (Ministry of the Environment, 2021d)

Waste management plan(s)

From recycling to a circular economy - The National Waste Plan to 2027 (NWP) adopted by the Finnish Government in 2022 (Ministry of the Environment, 2022b) includes a ten-point vision for waste management and waste prevention in 2030, as well as detailed targets up to 2027 and measures to be taken to achieve these targets. For example, specific targets for municipal waste are to slow down the growth of municipal waste generation in relation to the GDP and to achieve relative decoupling, and to recycle 57 % of municipal waste; for packaging waste, to increase the recycling of packaging wastes to be at least in line with the target levels of the EU Packaging and Packaging Waste Directive; for food and bio-waste, to halve the food waste by 2030 and to recycle 65 % of all municipal bio-waste generated.

According to the Finnish authorities, the new NWP is compatible with the revised WFD and in accordance with the implementation of the SUP Directive. The recycling targets are also in accordance with EU directives. (Ministry of the Environment, 2022a)

Finland has only a national waste management plan and no regional plans. In addition, Åland has its own waste plan.

Implementation of previous early warning recommendations

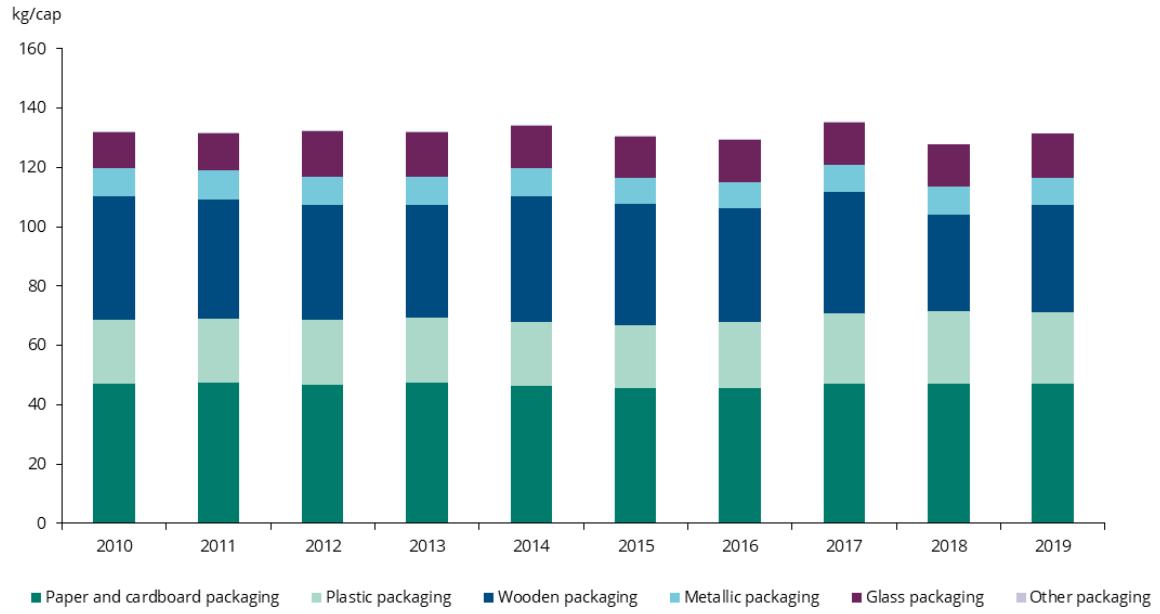
Finland had been considered of being at risk of missing the 2020 target of 50 % preparation for re-use / recycling for municipal waste by the European Commission (EC, 2018b), and it received a set of policy recommendations (EC, 2018a). Annex 1 lists the recommendations and a self-assessment of Finland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

Packaging waste generation and treatment

In 2019, Finland generated 0.7 million tonnes (131 kg/cap) of packaging waste, which is below the (estimated) EU average of 177 kg/cap.

Packaging waste generation per capita has remained quite stable since 2010, fluctuating slightly between the different years (Figure 1.2). The waste generation in different packaging waste categories has also remained more or less stable, except for wooden packaging and glass packaging which fluctuated but without clear trends. Packaging waste generation data is based on data of packaging put on the market reported by producer responsibility organisations. The actual amounts will be higher, as packaging placed on the market by smaller producers (turnover less than EUR 1 million), foreign internet shops, free riders and imports by private consumers are not included (Eurostat, 2021).

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



Source: Eurostat (2022c)

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 Finland, the calculated capture rates for different waste fractions are presented in Table 1.1.

Table 1.1 Capture rates for different waste fractions in Finland

	Residual waste composition (%)([b])	Residual waste composition (tonnes)([a])	Separately collected amounts (tonnes)([b])	Materials in total MSW (tonnes)	Capture rates (%)
Reference year		2019	2019		
Mixed municipal waste, total		1 735 109			
Paper and cardboard	17.0 %	294 969	441 879	736 848	60 %
Metals	2.3 %	39 908	164 145	204 053	80 %
Glass	2.4 %	41 643	80 350	121 993	66 %
Plastic	16.6 %	288 028	74 497	362 525	21 %
Bio-waste	30.2 %	524 003	464 267	988 270	47 %
Textiles	6.1 %	105 842	-	-	-
Wood	1.5 %	26 027	113 680	139 707	81 %

(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 Ministry of the Environment (2021d)

([b]) Source: As reported in the EEA-ETC/WMGE questionnaire by (Ministry of the Environment, 2021d)

The capture rates indicate that there is especially room for improvement to capture higher shares of the generated bio-waste and plastic wastes but also to some extent paper and cardboard and glass.

As a result of the MSW recycling rate calculation, also material specific recycling rates have been composed in Finland. A similar logic to the capture rate calculation above has been used (rejects are not excluded) (Ministry of the Environment, 2021d). In 2019, the material specific recycling rates were calculated as:

- Paper and cardboard: 57 %
- Metals: 82 %
- Glass: 69 %
- Plastic: 18 %
- Bio-waste: 48 %
- Wood: 57 %
- WEEE: 78 %

(Statistics Finland and Teittinen, 2019)

The differences in figures (especially concerning wood) may stem from the assumptions made regarding the MSW composition and the quantity of different fractions in mixed municipal waste and in solid recovered fuel of municipal origin (Ministry of the Environment, 2021d).

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 Finland 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).

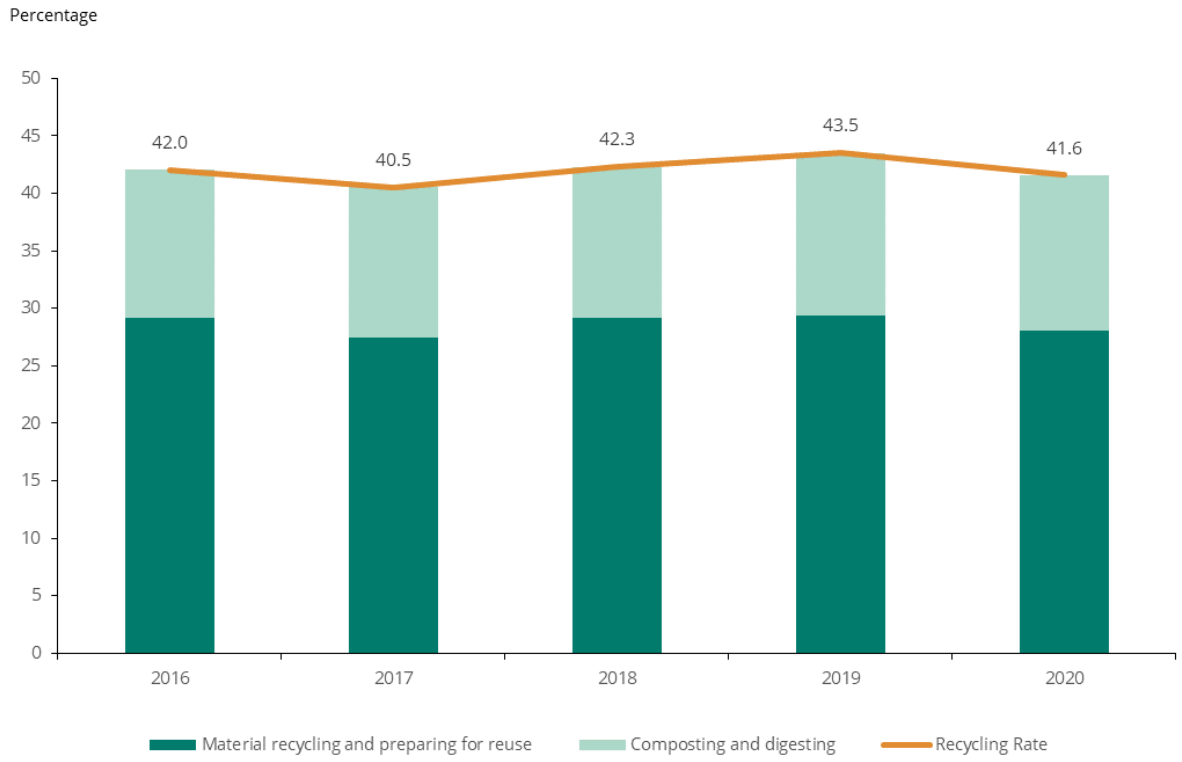
2.1.1 Current situation and past trends

SRF MSWR-1.1: Distance to target

The overall recycling rate of Finland has remained rather stable between 2016 and 2020 (Figure 2.1).

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

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



Source: Eurostat (2022b)

The actual distance to the target for the most recent data point is a key factor determining the likelihood of meeting/not meeting the target. The closer the Member State is to the target already, the more likely that the target will be met. For Finland, the recycling rate is 41.6 % in 2020, which is 13.4 percentage points below the target for 2025. Meeting the target will require an average increase of 2.7 percentage points annually in the period between 2020 and 2025, requiring a stepping up in pace compared to the average 0.1 percentage point annual decrease in the previous five-year period (2016-2020).

However, the data used for this analysis are based on a different methodology than the calculation rules for the target. In 2018-2019, a preliminary assessment to estimate the impact of the new calculation rules as defined in Commission Implementing Decision (EU) 2019/1004 was carried out in Finland. The result of this rough assessment was that the application of the new calculation rules (EC, 2019b) would decrease the MSW recycling rate by 5 percentage points (from 42 % to 37 % in the reference year 2016), although it was noted that the method used likely overestimated the magnitude of the change (Statistics Finland, 2019; Ministry of the Environment, 2021d). As no newer estimate is available at the time of writing of this assessment, it is assumed that the same reduction applies for the 2020 data.

Summary result

Distance to target > 15 percentage points	Based on currently available data, Finland's recycling rate lies at 41.6 %, so the distance to the 2025 target is 13.4 percentage points. However, the application of the new calculation rules is estimated to decrease the recycling rate by 5 percentage points, leading to an approximate recycling rate of 36.6 % or 18.4 percentage points below the target.
Robustness of the underlying information	In this analysis the recycling rate is calculated based on Eurostat data on waste generation and treatment. The new calculation rules could lead to lower calculated recycling levels. Finland has preliminarily assessed the influence of the new calculation rules on the recycling rate and estimated a drop by 5 percentage points for reference year 2016, and the same reduction is assumed for 2020 in this assessment.

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

The recycling rate (RR) (past trend) over the last five years shows a small decrease with 0.4 percentage points (Figure 2.1). This indicates that the efforts made over the last years to increase recycling in Finland have not been effective enough. Both the absolute amount of recycled waste and the generation of municipal solid waste has increased steadily over the last five years.

In the 2019 Environmental Implementation Review (EC, 2019c), some general reasons behind the low recycling rate were listed. Separate collection of waste from the rural areas in Finland, characterised by low population density, has not been prioritised due to low waste collection volumes achieved and long distances between different properties. Furthermore, in more suburban areas door-to-door separate collection has not been in focus either, while at the same time the responsibilities within the EPR schemes were seen as fragmented. In recent years, also the repeatedly changed roles and responsibilities of the municipalities have caused uncertainty as well as lack of investment. (EC, 2019c)

More efficient separate collection practices and a significant increase in recycling of bio-waste in particular are seen as the key measures by the Finnish government to achieve the 55 % recycling rate by 2025. In the reform of the Finnish waste legislation, the obligation for separate collection of

packaging waste and bio-waste is broadened. By July 2022, a mandatory door-to-door separate collection system has been introduced to all household properties with at least five apartments located in built-up areas, as well as mandatory door-to-door collection of non-household bio-waste and packaging waste. In addition, a network of 1 000 regional reception points for packaging waste will serve households not benefitting from door-to-door collection. In 2024, separate collection of bio-waste will become mandatory for all household properties located in built-up areas with more than 10 000 inhabitants. Regional collection points for textile waste will be organised at the latest in 2023. (Ministry of the Environment, 2021b) See more information in Section 2.1.4.

Other important measures of the revised Waste Act (Government of Finland, 2021i) is that the municipalities will become responsible for tendering and organising the transportation of all separately collected waste from the properties, abolishing the current possibility of municipalities to shift this responsibility to individual property owners. Municipalities and producers of packaging will now organise the separate collection of residential packaging waste in collaboration. In addition, PROs must unite and have a collective responsibility for the producers' obligations concerning all packaging materials. Producer responsibility is extended to international online sales in all product groups (Finnish online sales domestic was covered by the EPR already). (Ministry of the Environment, 2021b)

Summary result

RR < 45 % and increase in last 5 years < 10 percentage points	The recycling rate has decreased by 0.4 percentage points from 42 % in 2016 to 41.6 % in 2020. For Finland, the application of the new calculation rules would indicate an estimated recycling rate of 36.6 %. The process needs to be accelerated to achieve the target. However, the recycling rate in 2025 will also be affected by the waste reform and the mandatory source separation requirements.
Robustness of the underlying information	There are no breaks in the time series data. Finland has preliminarily assessed the influence of the new calculation rules on the recycling rate and estimated a drop by 5 percentage points.

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.

Finland has transposed the amended Waste Framework Directive into national law in November 2021, so with a delay of more than 12 months (Ministry of the Environment, 2021c).

Summary result

Transposition with delay of > 12 months	The transposition was finalised in November 2021.
Robustness of the underlying information	Reliable information provided by the Ministry of the Environment.

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.

According to the Finnish authorities (Ministry of the Environment, 2021d), the recycling policy for MSW is the responsibility of the following authorities and stakeholders:

- The Ministry of the Environment (MoE) is responsible for preparing national waste legislation and waste plan and participates in the preparation of waste policies such as taxes and other economic instruments, technological innovations, support of investments, and product design. The MoE also guides, monitors and develops operations related to waste prevention and management;
- Regional State Administrative Agencies (AVIs) grant environmental permits for significant waste treatment facilities, such as landfills, incineration plants, large-scale waste recovery or final treatment plants, and hazardous waste treatment sites. The environmental permits for smaller-scale waste management activities are granted by municipal environment protection authorities;
- The Municipal Waste Management Authorities (municipalities) are responsible for organising the collection and management of household waste and similar waste generated in public administration and service activities of municipalities. It is the duty of municipalities to, for example, set municipal regulations, organise separate collection and recycling, as well as treatment of mixed wastes, bio-waste and other wastes using other instruments such as PAYT schemes, define waste fees based on the PAYT schemes, and provide waste guidance (including waste prevention guidance) for households. A municipality may transfer some of its duties concerning waste management to a municipal waste management company owned by many municipalities in the same area. The option to transfer the responsibility to arrange municipal waste collection from the municipality to the owner of the property has been recently partly abolished and now is only an option for residual waste, while door-to-door separate collection of recyclables is always the responsibility of the municipalities;
- The responsibility of public organisations and economic operators in trade and industry (companies) is to organise separate collection and management of municipal solid waste they generate that does not fall under the municipal responsibility;
- The centres for economic development, transport and the environment (ELY Centres), and the municipal environmental protection committee are the general supervisory authorities responsible for supervising and inspecting compliance with the provisions of the legislation. The ELY Centre of Pirkanmaa is the national supervisory authority regarding all EPR systems including packaging, paper, EEE and batteries.

The competent waste management authorities and their responsibilities are defined in the Waste Act (Government of Finland, 2021i). The duties of authorities are also clarified in the joint website of Finland's environmental administration. According to the Waste Act (Government of Finland, 2021i), supervisory authorities have certain tools to secure compliance with the provisions of the waste legislation, they can give specified administrative orders to individual responsible entities that may be enforced by conditional fines in cases the non-compliance is continued. For municipalities (or entity to which the municipality has transferred the waste management duties) this includes, for example, non-compliance with the arrangement of the specified separate collection coverage of recyclable waste, which is set as the service level required to reach the recycling targets set in the waste legislation. Requirements for sorting at source by companies and separate collection of non-household recyclables from municipal waste are enforced using the same mechanism. However, there are no mandatory recycling targets at the municipal level in place and accordingly no direct consequences (fines) if the recycling targets are not met, although it was one of the recommendations given in the previous early warning report.

Breach or negligence of legal standards in the waste legislation can be judged as (minor) criminal offences leading to fines. In case of severe environmental pollution described in the Criminal Code, the responsible entity can be sentenced to fines or prison. (Ministry of the Environment, 2021d)

In Finland, waste monitoring is carried out at national level. However, Finland has assessed the recommendation of setting recycling or residual waste targets at the municipal level during the preparation of the revision of the Waste Act (Government of Finland, 2021i). The measure was not considered feasible, as the responsibility to organise municipal solid waste management in Finland is fragmented between municipalities, public organisations and economic operators in trade and industry, and packaging, paper, and electrical and electronic equipment (EEE) PROs, and therefore in practice municipalities do not have full control over the municipal waste. In addition, the current regional and waste-specific statistics were not seen as adequate to facilitate setting specific regional targets. However, studies are ongoing to bring together regional data on household waste amounts and recycling rates in an equal manner across the country. Certain difficulties, however, exist in using regional or local waste data, caused by, for example, varying practices in organising waste management and shipments across regions that can lead to either inadequate information on waste streams or overlaps in the data. Thus, the Ministry of the Environment (2021d) considers regional data as suitable to develop an understanding of different waste streams and their trends within different areas rather than to compare the region's and municipalities' performance. The revised NWP contains a measure aiming at removing barriers for setting regional recycling targets over the next few years (Ministry of the Environment, 2022b).

The support mechanisms in place, as described by the Finnish authorities, are mostly focused on increasing knowledge on recycling via reports, guidelines, and campaigns, which also aim to improve the national recycling rate. Furthermore, seminars and other education or trainings are organised. Collaboration between authorities, municipalities and other stakeholders is organised by the MoE. Municipalities and their waste management companies work in active collaboration and exchange information and best practices. It is also possible for municipal as well as private waste companies to apply for investment aid for circular economy projects from Business Finland, which is the Finnish government organisation for innovation funding and trade, travel and investment promotion. The implementation of the NWP is monitored annually by means of quantitative indicators on municipal wastes and biodegradable wastes, reflecting the development of recycling.[1] (Ministry of the Environment, 2021d).

Summary result

Unclear responsibilities but clearly defined enforcement mechanisms and a good set of support mechanisms for meeting the recycling targets	Responsibilities are well defined although fragmented between different actors. Administrative fines act as enforcement mechanism for non-compliance with arrangement of specific waste management services or non-compliance with sorting at source for companies. Support mechanisms for municipalities are in place.
Robustness of the underlying information	Credible information received from the Finnish authorities through the EEA-ETC/WMGE questionnaire.

[1] https://www.ymparisto.fi/fi-FI/Kulutus_ja_tuotanto/Jatteet_ja_jatehuolto/Jatesuunnittelu/Valtakunnallisen_jatesuunnitelman_seuranta

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.

According to the Waste Tax Act (Government of Finland, 2020a), a tax is due for landfilling any wastes specified in the appendix to the Act, including municipal solid waste and residual waste from mechanical treatment of waste. The tax amounted at 90 FIM/t, corresponding to around 15 EUR/t, in 1996. After that, the tax has increased in several steps, but since 1 January 2016, the tax has remained at 70 EUR/t.

The MoE has recently published a report concerning the taxation of the waste that is landfilled (Laine-Ylijoki et al., 2020). The results showed that, in addition to the increase in the amount of the landfill tax, the tax base should be broadened to include more waste codes or all waste in the waste list. The impacts of broadening the tax base have been further studied in a project during 2021-2022. The taxation changes will be assessed based on the results of this study. (Ministry of the Environment, 2022a)

In the Government Decree on Landfills 331/2013 (Government of Finland, 2021c) Finland introduced a landfill ban on biodegradable and other organic waste containing more than 10 % of organic substances (measured as total organic carbon (TOC) or loss on ignition (LOI)), which is applied since 1 January 2016. There are certain exemptions to the landfill ban on biodegradable and other organic waste described in the Decree. According to the Finnish authorities, these exemptions have not been widely applied to municipal waste. This can be also seen from the statistics, as the share of municipal waste that is landfilled is currently less than 1 %. (Ministry of the Environment, 2021d)

Summary result

Ban in place for landfilling residual or biodegradable waste	Finland has a landfill tax in place of 70 EUR/t (corresponding to 55.4 EUR/t rescaled based on purchasing power parities (Eurostat, 2020a)). A landfill ban on biodegradable and other organic waste applies since 2016.
Robustness of the underlying information	The information is based on the Finnish waste legislation.

SRF MSWR-3.2: Taxes on municipal waste incineration

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

Waste incineration is the most common method for the treatment of municipal solid waste in Finland. In 2019, Finland incinerated 56 % of the generated municipal waste. Finland has ten waste incineration plants and 24 co-incineration plants. In addition, one incineration plant and one co-incineration plant are under construction. Finland has rapidly increased waste incineration capacity; most of the capacity was built after 2012. The current incineration capacity of the ten plants is around 1.9 million tonnes per year (which corresponds approximately to 60 % of generated MSW), and the utilisation rate of combustion capacity is around 90 %. (Bröckl et al., 2021) The capacities are calculated according to the treated amounts. The actual capacity specifically available for MSW incineration is not precisely known as the plants' environmental permits also allow incineration of other waste such as C&DW and industrial waste. According to the latest estimates (in 2021) the current incineration capacity is able to treat the mixed municipal waste generated in Finland. Due to the agreements between

municipalities and incineration plants there might occasionally be need for waste export as well. (Ministry of the Environment, 2022b)) The total annual capacity of co-incineration plants is around 1 million tonnes, but MSW is only seldomly incinerated in these plants. (Ministry of the Environment, 2021d, 2022a)

In order to meet the preparing for reuse and recycling targets for municipal waste, Finland will have to reduce the amount of mixed municipal waste sent to incineration. This is likely to create a situation where the capacity exceeds the amounts of mixed municipal waste generated, requiring measures to discourage incineration. It seems that the Finnish policy has favoured waste incineration, as Finland has no incineration tax in place (EEA, 2016). No additional taxation changes are planned on incineration either. (Ministry of the Environment, 2021d) The Prime Minister's Office has recently published a study concerning the impacts of waste incineration taxation and voluntary agreements (government's Green Deal programmes) on CO_2 emissions and the Circular Economy. It concluded that at the analysed tax levels, a waste incineration tax would not lead to considerable recycling or climate effects. (Bröckl et al., 2021) Therefore, the aim is to start preparing a government's Green Deal for the waste sector, including also the incinerators, which would target to increase the recycling rate and simultaneously reduce CO_2 emissions from waste incineration. If this proves ineffective or no Green Deal is prepared, Finland will consider imposing a waste incineration tax again or including waste incineration in the Emissions Trading System (ETS) (Ministry of the Environment, 2021d).

Summary result

No incineration taxes	Finland has no tax on waste incineration.
Robustness of the underlying information	The information is based on the Finnish waste legislation.

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

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

According to the Finnish Ministry of the Environment, 100 % of the population is covered by a PAYT system. The basis for the PAYT is laid down in the Waste Act (Government of Finland, 2021i). Finland has a PAYT system for household waste throughout the country based on waste type, container emptying frequency, and container volume. Generally, volume-based systems can be described as a weak type of PAYT. For municipal wastes from other sources than households, both weight-based systems, and a system based on collection frequency and the size of the container are used, but the coverage of PAYT in these cases is not known. (Ministry of the Environment, 2021d)

Summary result

PAYT scheme fully rolled out (to at least 80 % of the population)	100 % of the population is covered by PAYT schemes in Finland.
Robustness of the underlying information	Credible information received from the Finnish authorities through the EEA-ETC/WMGE questionnaire.

2.1.4 Separate collection system

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

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

In Finnish municipalities, door-to-door collection of packaging waste and bio-waste from households and municipal services is organised according to the requirements laid down in the national waste legislation or by stricter requirements stated in the municipal waste management regulations. The number of households in a property defines whether door-to-door separate collection is obligatory. Door-to-door collection of certain recyclables has been mainly used in urban apartment blocks with at least 10-20 apartments, but during the past few years many municipalities have been extending it to cover also more thinly inhabited areas, and smaller properties. Other households, e.g. single-house dwellings for which door-to-door separate collection of recyclables is not mandatory, are served by bring points for certain recyclables while residual waste is collected door-to-door. (Ministry of the Environment, 2021d) For instance, the Helsinki Region Environmental Services (HSY), servicing around 22 % of the Finnish population, started the separate collection of bio-waste, metals, as well as carton, glass and plastic packaging waste from all properties with at least five apartments in 2021 (HSY, 2021). In addition, printed paper (such as newspaper, letters, printing paper) falls under producer responsibility and is in principle separately collected door-to-door from each property. However, this does not apply to single-family housing areas or sparsely populated areas where the PROs have organised the collection of paper at bring points. (Environment.fi, 2019)

The obligation to separately collect is described in the Waste Act (Government of Finland, 2021i), covering all waste and waste holders. In addition, PROs are responsible for organising bring point collection of household packaging waste across Finland. The current minimum service requirements are laid down in the Government Decree on Packaging and Packaging Waste (518/2014) (Government of Finland, 2014). Today, PROs shall provide a minimum of 1 850 separate collection points for glass, metal, and fibre packaging waste (at least 1 collection point in each urban settlement with >500 residents), and a minimum of 500 separate collection points for plastic packaging waste (at least 1 collection point in each urban settlement with >10 000 residents). Currently there are more than 670 collection points for plastic packaging waste nationwide organised by PROs. In addition, municipalities may organise supplementary bring point collection and deliver packaging waste collected to PROs. More detailed and tightened requirements are, however, set in the recent amendments of Government Decrees. (Ministry of the Environment, 2021d)

Producers must arrange and finance a certain amount of collection points throughout Finland also for other EPR-covered products, so minimum collection requirements are in place for WEEE and batteries as well. (Ministry of the Environment, 2021d)

Metal packaging waste is typically collected with other small-sized household metal waste (according to the composition study by (Jokinen et al., 2019), the amount of metal packaging was 36 % in bring

point collection and 47 % in door-to-door collection in 2019), whereas other glass, plastics, and cardboard wastes than packaging are typically not collected separately (regional collection points for non-packaging plastic waste and glass/ceramic waste exist in some municipalities). However, the revision of the waste legislation will encourage co-mingled collection of packaging and non-packaging materials. (Ministry of the Environment, 2021d)

The obligation to sort recyclable waste at source is described in the waste legislation, both for households and business, services and administration. The requirements can be specified in the environmental permits for companies. The collection of sorted packaging waste is usually included in the companies' waste management services, tailored by private waste collectors. The system works rather well at least for bigger companies. PROs may also have tailor-made collection services for companies generating larger packaging waste amounts.

The mandatory separate collection for packaging waste and bio-waste at non-households was introduced in the new Waste Decree (Government of Finland, 2021g). The new requirements apply from July 2022. Producers have certain commitments to organise the reception of non-household packaging waste, WEEE and waste batteries and to take care of their management free of charge. In case of packaging waste, this means that producers need to organise a sufficient amount of reception points for separately collected non-household packaging waste throughout Finland. (Ministry of the Environment, 2021d, 2022a) Companies have to pay for and organise themselves the transport of the packaging waste from their premises to the reception points or directly to recycling operators in case this is agreed with the producers. (Finnish Packaging Recycling RINKI Ltd, 2021b)

The existing system seems to work well and efficiently, and no radical changes were made in preparation of the new waste legislation. (Ministry of the Environment, 2021d) However, one exception applies for non-household printed paper where the producers have been responsible to organise door-to-door collection in densely populated areas.

Table 2.1 gives an overview of the collection system in Finland.

Table 2.1 Characterisation of the current collection system in Finland

	Cities (densely populated areas)					**Towns and suburbs** (intermediate density areas)					**Rural areas** (thinly populated areas)			
	Door-to-door - separate	Door-to-door - co-mingled	Bring point (>5 per km²)	Bring point (<5 per km²)	Civic amenity site	Door-to-door - separate	Door-to-door - co-mingled	Bring point (>5 per km²)	Bring point (<5 per km²)	Civic amenity site	Door-to-door - separate	Door-to-door - co-mingled	Bring point	Civic amenity site
Residual waste	xx				x	xx				x	xx		x	x
Paper and Cardboard packaging	xx		x	x	x	x		xx	x	x	x		xx	x
Ferrous metals	xx		x	x	x	x		xx	x	x	x		xx	x
Aluminium	xx		x	x	x	x		xx	x	x	x		xx	x
Glass packaging	xx		x	x	x	x		xx	x	x	x		xx	x
Plastic packaging	xx		x	x	x	x		xx	x	x	x		xx	x
Bio-waste	xx					xx								
Food	xx					xx								
garden					xx					xx				x
Textiles				xx	x				xx	x			xx	x
Wood					xx					xx				xx
WEEE			xx		xx				xx	xx			xx	xx
Composite packaging	xx		x		x	xx		x	x		x		xx	x
Beverage containers (deposit system)			xx	xx				xx	xx				xx	
Big items and other, not suitable for door-to-door collection					xx					x				x
Paper (newspaper, printing paper etc.)	xx		x	x	x	xx		x	x	x			xx	x

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

Source: Ministry of the Environment, 2021d

The table above shows that currently, door-to-door separate collection is the dominant system for paper and cardboard packaging in cities, towns and suburbs; in rural areas bring points are dominant. For metals, plastic packaging, and glass packaging door-to-door separate collection is the dominant system in cities; in towns and suburbs and in rural areas bring points are dominating. For food waste, door-to-door collection is the dominant system in cities, towns and suburbs, whereas in rural areas, no bio-waste collection systems are in place, but households can apply for lower frequency of residual waste collection when practicing home composting and thereby save on fees. Garden waste is only collected at civic amenity sites. Textile waste is collected at civic amenity sites around Finland, moreover also low-density bring point systems are in use for reusable clothes arranged by charity organisations. Waste wood is only collected at civic amenity sites. In addition, Finland has a wide coverage of separate collection for non-packaging paper waste, covered by the EPR for printed paper. (Ministry of the Environment, 2021d; Suomen Kiertovoima ry, 2022) For textile waste there are trials for collection of waste clothes and household textiles, but there are quality requirements and all textiles are not yet accepted (HSY, 2022)

According to the Waste Act (Government of Finland, 2021i), small household WEEE (<25 cm) can be returned free of charge to the retail shops of distributors without an obligation to purchase a new product. Large WEEE can either be returned to the civic amenity sites free of charge or to retail shops of distributors on a one-to-one basis. Regular (1-2 times per year) collection campaigns with temporary collection points for free take-back of WEEE are also arranged by municipalities. Other

collection services for WEEE include safe return and destruction of small IT appliances via the postal service in collaboration with the PRO and recyclers and pick-up services to households (upon charge). (Ministry of the Environment, 2021d)

Door-to-door collection is the dominant way to collect residual waste throughout Finland. Big items, garden waste and other materials that are not suitable for door-to-door collection are collected at civic amenity sites. In addition, seasonal mobile collection and pick-up services are available in many municipalities. Composite packaging is separated based on their main material type and collected accordingly. In addition, Finland has a nationwide deposit system for beverage containers, which is set in the waste legislation.

Examining capture rates for recyclables gives an overview of the effectiveness of the whole collection system for the different materials (see Section 1.3). For metals and wood, the calculated capture rates lie already at good level (for metals 80 %, and wood 81 %), probably because metal packaging waste is typically collected with other small-sized household metal waste and according to Ministry of the Environment (2021d) also due to well-performing DRS for aluminium packaging (96 % collection rate), as well as the main source for wooden packaging waste is not from households. Glass, plastics, and cardboard wastes not from packaging are not separately collected, which partly explains their lower capture rates (60 % for paper and cardboard, 66 % for glass, and 21 % for plastic waste). In addition, although door-to-door or collection points are already dominant for all packaging waste fractions (except for wood), the effects of the extension of coverage of door-to-door collection recently introduced in the revised waste legislation is not reflected in the statistics yet but is likely to increase the capture rates in the coming years. The capture rate for bio-waste is 47 %, reflecting the lack of separate collection in rural areas and housing areas with smaller properties. Moreover, according to the Ministry of the Environment (2021d), also inadequate sorting efficiency in some areas with door-to-door separate collection affects the capture rate of bio-waste.

The legal minimum standards for separate collection schemes of the relevant material streams as set in the revised waste legislation are:

- **Paper/cardboard waste, plastic waste:**

A minimum of 1 000 regional bring points for the separate collection of packaging waste to areas without door-to-door collection, organised by PROs as of July 2023. Currently, PROs shall provide a minimum of 1 850 separate collection points for fibre packaging waste in a way that there is at least 1 collection point in each population centre with >500 residents, and a minimum of 500 separate collection points for plastic packaging waste in a way that there is at least 1 collection point in each population centres with >10 000 residents.

For companies or public organisations located in population centres or specific areas of service, tourism, or work-places generating > 5 kg of waste per week, sorting at site and separate collection is mandatory as of July 2022. (Until now, there has been no mandatory separate collection.)

Municipalities must organise a sufficient number of local reception points for paper/cardboard waste and plastic waste, such as collection at civic amenity sites. The required number is not specified but takes into account of the population density and other local conditions as well as the quantity and nature of waste.

- **Metal and glass waste:**

A minimum of 1 000 regional bring points for packaging waste to areas without door-to-door collection, organised by PROs as of July 2023. Currently, PROs shall provide a minimum of 1 850 separate collection points for glass and metal packaging waste in a way that there is at least one collection point in each population centre with > 500 residents.

For companies or public organisations situated in population centres or specific areas of service, tourism or work-place generating > 2 kg of waste per week, sorting at site and separate collection is mandatory as of July 2022. Until now, there has been no mandatory separate collection.

Municipalities must organise a sufficient number of local reception points for metal and glass waste, such as collection at civic amenity sites. The required number is not specified but takes into account of the population density and other local conditions as well as the quantity and nature of waste.

- **Bio-waste:**

A door-to-door collection for housing properties with at least five apartments located in population centres with more than 200 inhabitants is mandatory as of July 2022.

For companies or public organisations situated in population centres or specific areas of service, tourism or work-place generating > 10 kg of bio-waste per week, sorting at site and separate collection is mandatory as of July 2022. (Until now, there has been no mandatory separate collection.)

Municipalities must organise a sufficient number of local reception points for garden waste, such as collection at civic amenity sites. The required number is not specified but takes into account of the population density and other local conditions as well as the quantity and nature of waste.

- **Waste wood:**

A sufficient nationwide separate collection of wood waste is to be organised for wood waste generated in households as of 2022. For wood packaging waste, the producers need to organise a sufficient number of reception points throughout Finland.

- **Textile waste:**

By 2023, municipalities must organise a sufficient number of local reception points for textile waste, such as collection at civic amenity sites. The required number is not specified but takes into account of the population density and other local conditions as well as the quantity and nature of waste.

- **Large discarded items, harzardous waste (specified by waste category):**

Municipalities must organise a sufficient number of local reception points for these wastes, such as collection at civic amenity sites. The required number is not specified but takes into account of the population density and other local conditions as well as the quantity and nature of waste.;

Summary result

Paper and cardboard	A high share of the population is covered by high convenience collection services	For paper and cardboard packaging waste and printed paper, door-to-door collection is the dominant system in cities. In towns, suburbs and rural areas bring point systems are dominating.
Metals	A high share of the population is covered by high convenience collection services	Metal packaging waste is typically collected with other small-sized household metal waste. Door-to-door collection is the dominant system in cities. In towns, suburbs and rural areas bring point systems are dominating.

Plastics	A high share of the population is covered by high convenience collection services	Door-to-door collection is the dominant system in cities. In towns, suburbs and rural areas bring points are dominating. The collection targets packaging waste and there is almost no separate collection of non-packaging plastic waste (except on experimental or voluntary basis in some municipalities).
Glass	A high share of the population is covered by high convenience collection services	Door-to-door collection is the dominant system in cities. In towns, suburbs and rural areas bring point systems are dominating. The collection targets packaging waste.
Bio-waste	A medium share of the population is covered by high convenience collection services	For food and bio-waste, door-to-door collection is the dominant system in cities, towns and suburbs, whereas in rural areas there are no separate collection systems in place and home-composting is rather common. For garden waste, only civic amenity site collection is available, but the share of garden waste is low compared to food waste (only around 14 % of all bio-waste generated).
Wood	A low share of the population is covered by high convenience collection services	Only collection at civic amenity sites is available. For wood packaging waste there are reception terminals organised by the producer
Textiles	A low share of the population is covered by high convenience collection services	Low density bring point collection is dominating for reusable textiles by charity organisations complemented with collection at civic amenity sites. There are also trials for collection of waste textiles.
WEEE	Medium convenience collection services dominate	Take-back schemes at retailers and collection at civic amenity sites are the dominant collection systems, supported by e.g. semi-regular bring point collection and collection from premises. However, no door-to-door collection is provided.
Robustness of the underlying information		Credible information received from the Finnish 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

The revised Waste Decree (Government of Finland, 2021f) sets new minimum service requirements for separate collection for households and non-household sources. In addition, the revised Waste Act (Government of Finland, 2021i) regulates that the door-to-door collection of household packaging waste shall be organised in collaboration with the municipalities and packaging PROs. The responsibility of a municipality would be to arrange the door-to-door collection and PROs would pay 80 % of the waste costs arising from the waste management of separately collected packaging waste to the municipalities. A municipality should take this compensation fully into account when waste charges for separately collected packaging waste are set. The proposed model would also encourage (but not oblige) co-mingled collection of packaging and non-packaging wastes of the same material. (Ministry of the Environment, 2021d)

PROs only need to compensate for the collection obliged in the Waste Decree (Government of Finland, 2021f), which means that if municipalities organise door-to-door collection in areas where it is not required according to the Decree, e.g. to increase recycling of municipal waste, municipalities shall

cover the costs arising themselves through waste fees. In case an agreement on collaboration between municipalities and producers cannot be reached, PROs are entitled to take full operational responsibility over packaging waste collection after a transition period of three years, which would basically lead to full operational producer responsibility. The 80 % share relates to the design of the scheme and is set to incentivise collaboration between PROs and municipalities. For municipalities, collaboration with producers gives an opportunity to carry out the collection of all household municipal waste as a whole. In turn, PROs get 20 % "discount" when collaborating with municipalities. If producers were responsible for all of collection costs, they would not have extra incentives to collaborate with municipalities and this would create an unforeseeable regulatory environment. PROs have no incentive to do or pay more than what is obliged in legislation. Municipalities, on the contrary, may have such ambitions. Still, the above described possibility of ending collaboration gives an incentive to municipalities to organise door-to-door collection in a cost-efficient manner. Since PROs will be responsible also for the packaging waste from increasing online sales and free riding, applying only 80 % cost-responsibility helps to keep at least some sort of a level playing field. In addition, as door-to-door collection of packaging waste is not completely free for households, inducement to dump mixed waste into packaging waste containers gets reduced, and some incentive for households to minimise the generation of packaging waste is kept up. (Ministry of the Environment, 2021d)

The revised legislation will encourage co-mingled collection of packaging and non-packaging wastes. However, the focus of the system is on achieving a high quality feedstock for recycling in order to maximise recycling rates. (Ministry of the Environment, 2021d)

The legal minimum standards for separate collection schemes of the relevant material streams as set in the revised waste legislation are:

- **Paper/cardboard waste, plastic waste:**

A door-to-door collection for housing properties with at least five apartments located in population centres with more than 200 inhabitants. Requirement to become applicable in July 2023. Until recently, door-to-door collection of certain recyclables has been mainly used in urban apartment blocks with at least 10-20 apartments.

For printed paper no changes are planned. The amount of paper put on the market has decreased significantly during the past years, e.g. from 295 000 to 170 000 tonnes between 2016-2020, which has also affected waste generation and recycling volumes. Currently, printed paper is separately collected door-to-door or at bring points.

- **Metal and glass waste:**

A door-to-door collection for housing properties with at least five apartments located in population centres with more than 200 inhabitants. Requirement to become applicable in July 2023. Until recently, door-to-door collection of certain recyclables has been mainly used in urban apartment blocks with at least 10-20 apartments.

- **Bio-waste:**

As of July 2024, a separate collection system for all housing properties located in population centres with more than 10 000 inhabitants will be introduced. As of July 2022, door-to-door collection for housing properties with at least five apartments located in population centres with more than 200 inhabitants is mandatory. Before that, door-to-door collection of certain recyclables has been mainly used in urban apartment blocks with at least 10-20 apartments

- **Textile waste:**

A sufficient network of regional reception points for household textile wastes organised by municipalities. Requirement to become applicable from the beginning of 2023. No firm plans are available yet, but most likely bring point collection will be used. A pilot plant for textile recycling was opened in 2021 and currently accepts textile waste from the industry (Rester

Oy, 2021) Finland has ambitions to develop the collection, sorting out and refining processes of also household end-of-life textiles (Telaketju, 2022)

- **Waste wood:**

No further changes foreseen.

- **WEEE:**

No changes planned.

- **Other:**

A sufficient number of reception terminals for non-household packaging waste, and packaging waste collected by municipalities or private waste transport companies must be organised by producers. Until now, there has been a minimum of 30 terminals (see Section 2.2.5). Due to expanded door-to-door-collection, it was decided to diminish the amount of bring points in areas serviced by door-to-door collection to avoid overlapping of the two systems. A network of 1 000 reception points was considered to be appropriate in areas without door-to-door collection. The bring points are located across the whole country based on the population densities of different areas. (Ministry of the Environment, 2021d)

There are varying practices regarding to maximum distances to the collection points, and the service level and the organisation of collection in rural areas is regulated separately in material-specific government decrees for each product. The PROs' fulfilment of these regulations is supervised by a supervisory authority (Pirkanmaa ELY Centre). In practice, the distance to the collection point should not exceed the distance to the nearest shop selling similar kind of products. (Ministry of the Environment, 2021d)

The new door-to-door collection requirement for packaging waste from household properties with at least five apartments in built-up areas will cover around 50 % of the Finnish population (Parliament of Finland, 2021). In practice, this means that the remaining 50 % of the population will be served by bring points only, although also their service level should be increased to enable better recycling rates in the future. In addition, as described above, it is proposed that the amount of reception points would be decreased from the current 1 850 to 1 000, which would lead to a reduced coverage of bring points. However, the Ministry of Environment estimates the overall service level will increase due to the increased coverage of door-to-door collection. The proposed collection system for bio-waste (including the possibility for home composting) would cover around 65 % of the population with the new door-to-door collection system coverage of household properties with at least five apartments that are located in built-up areas and for all properties located in built-up areas with more than 10 000 inhabitants. (Parliament of Finland, 2021) It also seems that many municipalities have already utilised or are likely to utilise the option of organising separate collection more extensively than the minimum requirement set out in the Government decree. In addition, home composting is rather common in rural areas. This means that in practice door-to-door separate collection/home composting of bio-waste and door-to-door separate collection of packaging waste will cover more that 65 % of the population in the coming years.

The effect of the proposed collection system on the recycling rate has been analysed during the revision of the waste legislation. Based on the analysis, with the chosen method described above (combined with higher sorting efficiency), an increase of 8 percentage points can be achieved to the MSW recycling rate calculated using the new calculation rules (with an estimated reject rate of 1 percentage points taken into account) (LCA Consulting, 2020a) As described in Section 2.1.1, it is estimated that the application of the new calculation rules would decrease the recycling rate by 5 percentage points (from 42 % to 37 % in the reference year 2016) (Statistics Finland, 2019; Ministry of the Environment, 2021d), which means that the proposed collection system alone is not effective enough to reach the recycling target for 2025. The Ministry of the Environment will monitor the

impacts of the revised waste legislation on separate collection to recycling rates. New measures will be taken as necessary to increase the recycling rate. These measures include for example increasing advice on sorting, setting regional targets, expanding mandatory requirements for separate collection and, as a last resort, centralised waste sorting. (Ministry of the Environment, 2022a) Development of sorting and recycling is to be closely monitored and tightening up separate collection requirements or setting down other measures, such as taxes or voluntary agreements with operators, can be used to speed up recycling trends if necessary.

In the previous early warning report (Eunomia, 2018) it was recommended that Finland should perform an *Extension of the existing obligations to sort recyclables and bio-waste from households to cover buildings with any number of flats (without a de-minimis); equal application of the obligations to buildings with multiple flats in built-up areas and individual households in suburban and rural areas. Highly rural areas may need some form of exemption.* Although Finland has plans to improve the coverage of separate collection within the next three years, these plans are still mostly focused on built-up (urban) areas and cover mostly housing properties with at least five apartments.

Summary result

Paper and cardboard	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	A high share of the population is already covered by high convenience collection points. The revised waste legislation mandates the expansion of separate collection and to include non-packaging in the system, it can be considered a firm plan for further improving the system.
Metals	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	A high share of the population is already covered by high convenience collection points. The revised waste legislation mandates the expansion of separate collection and to include non-packaging in the system, it can be considered a firm plan for further improving the system.
Plastics	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	A high share of the population is already covered by high convenience collection points. The revised waste legislation mandates the expansion of separate collection and to include non-packaging in the system, it can be considered a firm plan for further improving the system.
Glass	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	A high share of the population is already covered by high convenience collection points. The revised waste legislation mandates the expansion of separate collection and to include non-packaging in the system, it can be considered a firm plan for further improving the system.
Bio-waste	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	As of July 2024, municipalities will have to extend door-to-door collection of bio-waste to all housing properties located in population centres with more than 10 000 inhabitants.
Wood	No firm plans to improve the convenience and coverage	No changes foreseen.

Textiles	There are plans to improve the collection service but unclear plan for implementation	No firm plans available yet but municipalities are in the process of increasing the number of collection points, preparing for mandatory collection in 2023.
WEEE	No firm plans to improve the convenience and coverage	No changes planned.
Robustness of the underlying information		Credible information received from the Finnish 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 Producer Responsibility Organisation (PRO) that producers report correctly.

In Finland, EPR applies to all packaging. The producer responsibility obliges packaging producers and importers, with a net revenue exceeding EUR 1 million, to handle the waste management of packaging materials put on the market. Companies can do this either by joining the PRO, or by taking care of the treatment themselves (reporting to the ELY Centre of Pirkanmaa required), or by establishing a PRO together with other packaging producers. There are five accepted PROs for packaging in Finland= Mepak-Recycling Ltd (metals), Puupakkausten Kierrätys PPK Oy (wood), Suomen Keräyslasiyhdistys ry (glass), Suomen Kuitukierrätys Oy (fibre packaging), and the Finnish Plastics Recycling Ltd (plastic). They have a joint service operator, Finnish Packaging Recycling RINKI Ltd, that organises the execution of producer responsibility for packaging. According to the revised Waste Act, the scope of EPR needs to cover all packaging materials in the future (Ministry of the Environment, 2021d).

The ELY Centre of Pirkanmaa is the national authority supervising the compliance of producer responsibility, with the exception of Åland, where the Government of Åland is the supervising authority. ELY compiles the official packaging statistics inducing the packaging quantities, reuse and recycling rates from the data reported by RINKI and other organisations. The statistics are not comprehensive, as they do not take into account packaging that ends up in Finland through passenger imports and foreign online shopping, packaging from producers and importers that are not registered as a member of a producer responsibility organisation or have a turnover of less than EUR 1 million, or some part of the figures of Åland. (Ymparisto.fi, 2020) The exceptions considering free riders and companies with a turnover of less than EUR 1 million will be removed in the upcoming revision of the Waste Act in 2022 (Ministry of the Environment, 2021d). The Åland figures of packaging waste are largely part of Finnish figures as for instance the amount of packaging of the deposit system in Åland is included in the Finnish packaging statistics..

In Åland, Producer responsibility Åland Ab (Proans) acts as a PRO for packaging and reclaimed paper. Proans reports the packaging quantity data to the Government of Åland that acts as the supervisory authority. (Proans, 2021) The Finnish waste statistics partly include data on Åland (representing 0.5 % of Finland's population) (Ministry of the Environment, 2021d).

Although waste resulting from foreign online sales has so far been excluded from the current EPR system, producers were obliged to collect these wastes also. However, in the new Waste Act (Government of Finland, 2021i) following measures to regulate online sales are enacted:

- All foreign online sellers, both in EU and non-EU countries, of certain products under EPR (e.g. EEE, batteries, packaging, paper) selling products directly to Finnish users, are seen as producers and have to meet similar EPR obligations as producers operating from Finland. Similarly to other producers, online sellers shall join the PRO (or appoint an authorised representative);
- EEE online sellers (and in future also online sellers of SUP products) must appoint an authorised representative to fulfil their EPR obligations (based on WFD and SUPD);
- Marketplace operators are allowed to fulfil EPR requirements on behalf of online sellers (in case authorised by online seller) by appointing an authorised representative or joining the PRO;
- Other foreign operators comparable to producers are also allowed to join the EPR scheme;
- Also authorised representative has shall join the PRO, but is not allowed to establish such, and;
- Finnish online sellers selling their products to other countries, shall fulfil their EPR obligations in the country in question. (Ministry of the Environment, 2021d)

Some Member States have laid down direct obligations to marketplaces located in their territory. Laying down obligations to marketplaces located in other Member States is not possible. As there are no Finnish-based marketplaces yet, such obligations would not be suitable in Finland. (Ministry of the Environment, 2021d)

Increased resources to the supervisory authority have been assigned as a result of the new obligations to foreign online sellers and increased reporting requirements, which also causes a need for more effective supervision of free riding. (Ministry of the Environment, 2021d)

RINKI collects registration fees and an annual customer fee based on the price list and the company's previous years' packaging volume. In addition, material specific recycling fees are collected based on companies' previous years' packaging volume (Table 2.2). (Finnish Packaging Recycling RINKI Ltd, 2021a) The Finnish Ministry of the Environment reports that currently only recyclability is taken into account in fee modulation. Thus, there are different fees in place for different paper and cardboard packaging, metal packaging, plastic packaging and wood packaging. In addition, a lower fee applies for B2B plastic and metal packaging compared to consumer packaging. (Ministry of the Environment, 2021d)

Table 2.2 Fees applied for packaging by RINKI.

Material group	Material	Recycling fee 2021 (excl. VAT), in Euro per tonne	
		Consumer packaging	B2B packaging
Fibre	Corrugated cardboard packaging	11.00	11.00
	Industrial wrapping and sacks	-	17.00
	Industrial cores	-	17.00
	Carton and paper packaging	73.00	73.00
	Carton liquid packaging	143.00	143.00
Plastic	Plastic packaging	234.00	84.00
Metal	Aluminium packaging	126.00	26.00
	Tinplate packaging	126.00	26.00
	Steel packaging	26.00	26.00
Glass	Glass packaging (non-deposit)	98.00	98.00
Wood	Stamped FIN, EUR and EPAL pallets, rental pallets, cable reels	-	1.95
	Other wooden pallets and other wooden packaging	2.60	2.60
Other	Other packaging	0.00	0.00

Source: Finnish Packaging Recycling RINKI Ltd, 2021

However, new requirements for fee modulation have been introduced in the revised waste legislation. For example, principles for fee modulation are laid down in the new Waste Act (Government of Finland, 2021i), and further specified in the Packaging Waste Decree (Government of Finland, 2021g). According to these, PROs must develop more detailed criteria for each packaging material type. Producers will have an annual responsibility to report used fee modulation to the supervisory authority, and PROs need to make a self-monitoring plan, where the principles for eco-modulation and the plan on their continuous development shall be included. PROs must fulfil the fee modulation requirements from the beginning of 2023**.** (Ministry of the Environment, 2021d)

Summary result

No advanced fee modulation based on the criteria for assessment.	There is no advanced fee modulation according to the assessment criteria, but it will be required by law from 2023.
Robustness of the underlying information	Credible information received from the Finnish authorities through the EEA-ETC/WMGE questionnaire.

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.

Separate collection of bio-waste will be mandatory from July 2022 according to the revised waste legislation. The Finnish government has identified a need for new biogas treatment plants due to the planned increase of separate collection of bio-waste introduced in the revised Waste Act (Government of Finland, 2021i), and because the old composting plants are closed. New treatment plants for bio-waste are in the planning phase and some are under construction. (Ministry of the Environment, 2021d)

The Finnish Ministry of the Environment reports separately collected bio-waste amounted to 464 267 tonnes in 2019 (Ministry of the Environment, 2021d). The treatment volume in 2020 was 444 000 tonnes (Eurostat, 2022b), indicating a slightly lower treatment volume than separate collection for bio-waste. The total generation of bio-waste within total municipal waste, including separately collected bio-waste and bio-waste present in the residual waste fraction, was 988 270 tonnes (calculated based on data provided by Ministry of the Environment (2021d)).

The Finnish authorities do not report a specific available capacity for the treatment of bio-waste. The nominal capacity for the treatment of bio-waste is not specified as many biogas plants treat not only bio-waste from municipal sources but also bio-waste from agriculture and industry. The available known capacity (400 thousand tonnes per year) (Ministry of the Environment, 2021d) represents only around 40 % of the total bio-waste generated.

In 2021, four biogas plants have been built with a total treatment capacity of approximately 100 thousand tonnes. For the period 2022-2025, there are known ongoing investments in the establishment or expansion of at least nine biogas plants. The ministry estimates these investments to increase the total bio-waste treatment capacity to approximately 700–800 thousand tonnes in total, leading to a treatment capacity for bio-waste of approximately 70–80 %. (Ministry of the Environment, 2021d) The additional capacity demand for bio-waste treatment capacity to reach the recycling targets for MSW would be around 290 000-370 000 tonnes (Ministry of the Environment, 2022b). However, existing biogas plants are not operating at full capacity and therefore the need for new treatment plants may be lower (Ministry of the Environment, 2022a)

The issue of long transport distances challenges the sustainability and cost-efficiency of the separate collection of recyclables, including bio-wastes in Finland. Significant increase in collection costs is reported to occur in case the door-to-door collection of bio-waste is extended to sparsely populated areas and detached houses. Therefore, in sparsely populated areas residents are advised by municipalities to home-compost. In addition, garden waste is collected at civic amenity sites. (Ministry of the Environment, 2021d)

Summary result

Bio-waste capacity below 80 % of generated municipal bio-waste but firm plans to close the gap	The nominal capacity is not known, but the MoE estimates investments will significantly increase the capacity and be sufficient to treat all separately collected bio-waste after the extension of separate bio-waste collection.
Robustness of the underlying information	The available treatment capacity is not dedicated to municipal bio-waste treatment only, and therefore the sufficiency of the current capacity to treat generated municipal bio-waste cannot be estimated.

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.

Finland has strict requirements on the quality of the compost. Finland has a national standard for compost quality, complemented with a quality management system for the production of compost. (EEA, 2020) The quality system works on a voluntary-basis and is directed to professional treatment plants producing fertilizers (Ministry of the Environment, 2021d). Compost quality and control is regulated in the Finnish Fertiliser Products Act (539/2006) (Government of Finland, 2021b), the Decree of the Ministry of Agriculture and Forestry on Fertiliser Products (Finnish Ministry of Agriculture and Forestry, 2011) and the Decree of the Ministry of Agriculture and Forestry on Activities Concerning Fertiliser Products and Their Control (Finnish Ministry of Agriculture and Forestry, 2012). Citizens are allowed to home-compost only if this is enabled in municipal regulations, and a notification to competent municipal authority shall be made beforehand. The revised Waste Decree includes minimum requirements for home composting. In addition, guidance to home composting are given by municipal waste management operators. (Ministry of the Environment, 2021d)

Summary result

Legally binding national standards for compost/digestate quality in place, and quality management system in place	A legally binding national standard and a quality management system are in place in Finland, as well as minimum requirements for home composting.
Robustness of the underlying information	Based on information provided by the Finnish authorities to the EEA in 2019 as contribution to the EEA's report on bio-waste (EEA, 2020).

2.2 Target for the recycling of packaging waste

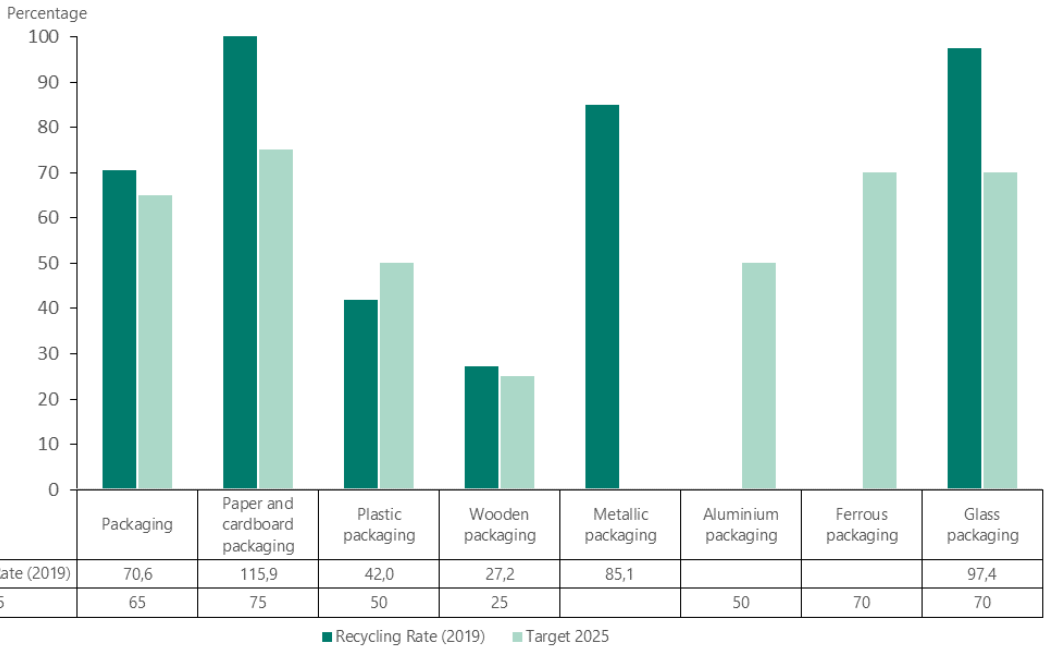
This chapter aims at assessing the prospects of Finland to achieve the **65 % recycling target for packaging waste** in 2025 as well as the **material specific packaging waste recycling targets** (50 % of plastic; 25 % of wood; 70 % of ferrous metals; 50 % of aluminium; 70 % of glass; 75 % of paper and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

2.2.1 Current situation and past trends

SRF P-1.1 Distance to target

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

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



	Packaging	Paper and cardboard packaging	Plastic packaging	Wooden packaging	Metallic packaging	Aluminium packaging	Ferrous packaging	Glass packaging
Recycling Rate (2019)	70,6	115,9	42,0	27,2	85,1			97,4
Target 2025	65	75	50	25		50	70	70

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

According to the packaging waste statistics by Eurostat (Eurostat, 2022c), in 2019, the overall packaging waste recycling rate was 70.6 %. Finland has reported a recycling rate of 115.9 % for paper and cardboard, and the reported rate for glass packaging recycling is 97.4 % in 2019. As described in Section 2.1.5, statistics may underestimate the waste generation as they only cover the packaging put on the market by the PRO members, but recovery companies treat also the packaging that is not included in the statistics of packaging put on the market (Eurostat, 2022a). This then leads to the overestimation of the recycling rates, especially noteworthy when assessing the high recycling rates

of paper and cardboard as well as glass packaging. According to the Ministry of the Environment (2021d), the high recycling rate of glass may be caused by underestimation of waste generation and because the amount put-on-market has been growing slower than the amount discarded, meaning that part of glass waste originates from old storages. For metals, the reported rates do not make a distinction between ferrous metals and aluminium, but the total recycling rate for metals (85.1 %) exceeds the higher recycling target (70 % for ferrous metals). Metal packaging is typically collected with other small-sized household metal waste, but the RR includes only the amount of separately collected metal packaging calculated using waste composition analysis (Ministry of the Environment, 2021d). The recycling rates for plastic packaging (42 %) and wooden packaging (27.2 %) stand at significantly lower levels than the other packaging materials. For plastic packaging, the distance to target is 8.0 percentage points, and for wooden packaging it exceeds the target by 2.2 percentage points. The reason for the low recycling rate of plastic packaging waste may stem from the immaturity of the separate collection system, which was established only in 2016. According to the Ministry of the Environment (2021d), plastic packaging recycling has increased by 80 % since the collection system was established, and the growth is still expected to continue in the coming years. With regard to wooden packaging, the separate collection is efficient, but the recycling creates challenges as there is a great deal of cleaner wood material available for recycling in Finland, and due to long distances, the export to other countries is expensive.

As described in Section 2.1.5, the current statistics do not take into an account of packaging that end up in Finland through passenger imports and foreign online shopping, packaging from producers and importers that are not registered as a member of a producer responsibility organisation or have a turnover of less than EUR 1 million, or some figures of Åland. As of the revision of the waste legislation in 2021, all packaging put on the market have to be included in the statistics. According to the estimate by Jokinen et al. (2015), the amount put on the market is actually around 15 % higher than reported in the statistics, of which free riders represent the share of 9 %, companies with turnover less than EUR 1 million 4 %, and passenger import and foreign online sales around 2 %. Based on this and the packaging and online sales amounts in 2019, the Ministry of the Environment (2021d) has created a rough estimate on the effect of non-reported packaging on the RR of each material:

- Glass packaging: decrease by 13.9 percentage points;
- Plastic packaging: decrease by 6.7 percentage points;
- Paper and cardboard packaging: decrease by 18.8 percentage points;
- Metal packaging: decrease by 12.1 percentage points;
- Wooden packaging: decrease by 3.9 percentage points;
- All packaging: decrease by 10.7 percentage points.

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 Ministry of the Environment (2021d) has also estimated the impact of the application of the new calculation rules. According to the preliminary estimates, the application of the new calculation rules (change in calculation point) would decrease the RR for packaging wastes by 1 to 5 %, and for different material categories as follows:

- Glass packaging: decrease by 1-2 percentage points;
- Plastic packaging: decrease by 5-10 percentage points;
- Paper and cardboard packaging: decrease by 1 percentage points;
- Metal packaging from deposit system: decrease by 1-2 percentage points;
- Metal packaging from non-deposit system: decrease by 0-1 percentage points;
- Wooden packaging: no effect.

In addition, the Ministry has combined the effect of the new calculation rules and non-reported packaging POM on the recycling rate for 2019, as follows:

- Glass packaging: decrease by 6-7 percentage points, from 97 to 91-92 %;
- Plastic packaging: decrease by 11-17 percentage points, from 42 % to 25-31 %;
- Paper and cardboard packaging: decrease by 28 percentage points, from 116 % to 88 %;
- Metal packaging: decrease by 9-10 percentage points, from 85 % to 75-76 %;
- Wooden packaging: decrease by 4 percentage points, from 27 % to 23 %;
- All packaging: decrease by 13-17 percentage points, from 71 % to 54%-58 %.

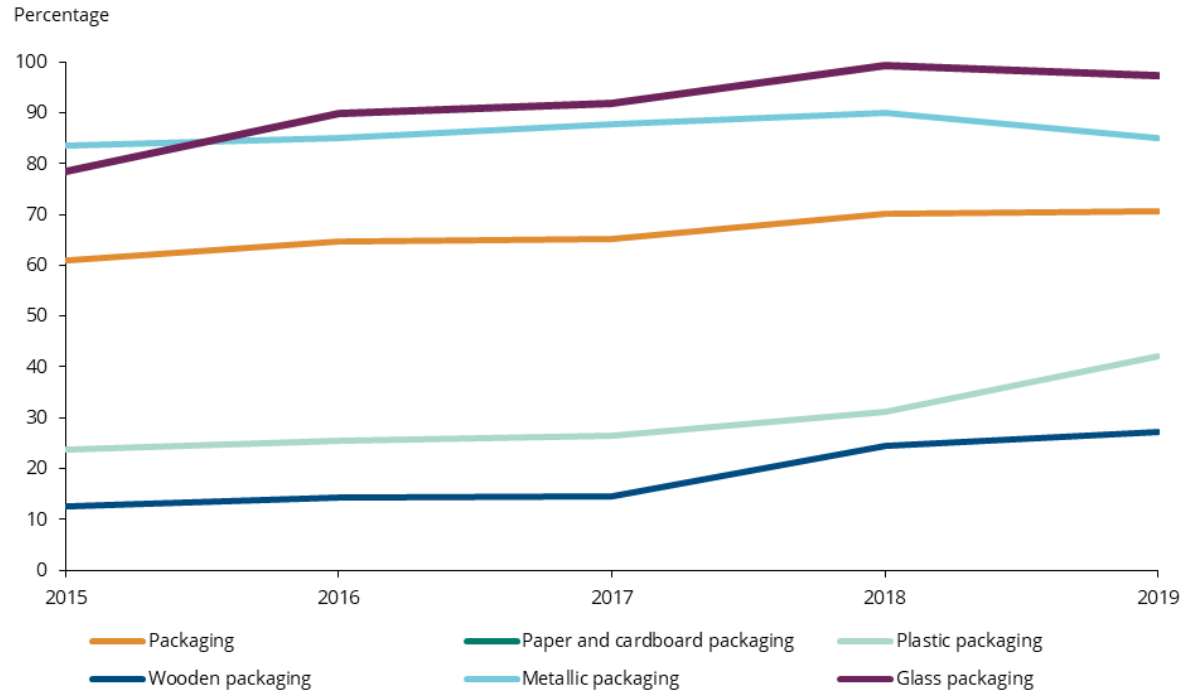
Summary result

<table>
<tr><td>Total packaging</td><td>5-15 percentage points below target</td><td>Finland reports a recycling rate of 70.6 %. However, taking into account losses in the recycling plants, and correcting for generated packaging currently not included in the reported data, it is expected that the recycling rate would drop to 54–58 %, 7-11 percentage points below the 2025 target.</td></tr>
<tr><td>Paper and cardboard packaging</td><td>Target exceeded</td><td>Finland reports a recycling rate of 115.9 %. However, taking into account losses in the recycling plants, and correcting for generated packaging currently not included in the reported data, it is expected that the recycling rate would drop to 87.9 %, 12.9 percentage points above the 2025 target.</td></tr>
<tr><td>Ferrous metals packaging</td><td>Target exceeded</td><td rowspan="2">Distance to the target assessment for ferrous metals and aluminium packaging is estimated as no data yet exists for ferrous metals and aluminium separately. Finland reports a recycling rate of 85.1 % for metallic packaging. However, taking into account losses in the recycling plants, and correcting for generated packaging currently not included in the reported data, it is expected that the recycling rate would drop to 75-76 %, 5-6 percentage points above the 2025 target for ferrous metals and 25-26 percentage points above the 2025 target for aluminium.</td></tr>
<tr><td>Aluminium packaging</td><td>Target exceeded</td></tr>
<tr><td>Glass packaging</td><td>Target exceeded</td><td>Finland reports a recycling rate of 97.4 %. However, taking into account losses in the recycling plants, and correcting for generated packaging currently not included in the reported data, it is expected that the recycling rate would drop to 91-92 %, 21-22 percentage points above the 2025 target.</td></tr>
<tr><td>Plastic packaging</td><td>> 15 percentage points below target</td><td>Finland reports a recycling rate of 42 %. However, taking into account losses in the recycling plants, and correcting for generated packaging currently not included in the reported data, it is expected that the recycling rate would drop to 25-31%, 19-25 percentage points below the 2025 target.</td></tr>
<tr><td>Wooden packaging</td><td>< 5 percentage points below target</td><td>Finland reports a recycling rate of 27.2 %. However, taking into account losses in the recycling plants, and correcting for generated packaging currently not included in the reported data, it is expected that the recycling rate would drop to 23.2 %, 1.8 percentage points below the 2025 target.</td></tr>
<tr><td colspan="2">Robustness of the underlying information</td><td>Finland has assessed the effect of the new calculation rules and non-reported packaging POM on the recycling rates. This assessment is based on information provided by the Finnish authorities through the EEA-ETC/WMGE questionnaire.</td></tr>
</table>

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 Finland are illustrated in Figure 2.3.

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



Source: Eurostat (2022d)

The overall packaging recycling rate has steadily increased in Finland over the past five years. However, in 2019 only a very small increase of less than 1 % appeared. In addition, an increasing trend appears in all packaging waste categories, indicating longstanding efforts towards packaging recycling in Finland. However, it should be noted that since 2014, Finland has constantly reported recycling rates above 100 % for paper and cardboard due to underreporting of generated packaging waste amounts, which results in overestimated recycling rates. In addition, the rate for glass packaging recycling has increased significantly and is close to 100 % in 2019. According to Eurostat (2022a), in 2015-2016 some of the separately collected glass packaging waste was reported under the category other recovery instead of recycling as it was used as a construction material due to its inadequate quality for recycling. This circumstance has an impact on the recycling rates in 2015 - 2016 but does not explain the overall increasing trend.

In 2016, the collection of household plastic packaging started in Finland and a mechanical plastics recycling facility was opened in Riihimäki. Since then, a considerable increase has occurred in plastics recycling rates every year, explaining most of the increase in 2019. In addition, due to the efforts by the producers, the recycling rates of B2B plastics packaging have also increased. (Eurostat, 2022a) The PRO of plastic packaging, Finnish Plastics Recycling, has made considerable efforts on helping companies to find means of recycling plastic waste instead of leading it to energy recovery. In addition, extensive public campaigns promoting plastic recycling have been organised. A program called *Path*

2025 aims to reach the new recycling targets set in the EU. Finnish Plastics Recycling has also employed a recycling coach to help companies increase the recycling of plastic packaging wastes. (Ministry of the Environment, 2021d)

Summary result

Total packaging	RR > 55%, and increase in last 5 years < 10 percentage points	The recycling rate increased by 9.7 percentage points over the past five years and is estimated to be at 54 – 58 % taking into account losses in the recycling plants and correcting for generated packaging currently not included in the reported data.
Paper and cardboard packaging	RR > 75 %	The recycling rate increased by 4.3 percentage points over the past five years and is estimated to be at 87.9 % taking into account losses in the recycling plants and correcting for generated packaging currently not included in the reported data.
Ferrous metals packaging	RR > 70 %	The recycling rate increased by 1.6 percentage points over the past five years and is estimated to be at 75 - 76 % taking into account losses in the recycling plants and correcting for generated packaging currently not included in the reported data.
Aluminium packaging	RR > 50 %	
Glass packaging	RR > 70 %	The recycling rate increased by 19 percentage points over the past five years and is estimated to be at 91 - 92 % taking into account losses in the recycling plants and correcting for generated packaging currently not included in the reported data.
Plastics packaging	RR < 40% and increase in last 5 years > 10 percentage points	The recycling rate increased by 18.3 percentage points over the past five years and is estimated to be at 25 – 31 % taking into account losses in the recycling plants and correcting for generated packaging currently not included in the reported data.
Wooden packaging	RR > 20 % and increase in last 5 years > 5 percentage points	The recycling rate increased by 14.7 percentage points over the past five years and is estimated to be at 23.2 % taking into account losses in the recycling plants and correcting for generated packaging currently not included in the reported data.
Robustness of the underlying information		The trends over time seem to be robust as there are no breaks in time series indicated. No information is available for separate trends for ferrous metal and aluminium packaging.

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.

Finland has transposed the amended PPWD into national law in November 2021 (Ministry of the Environment, 2021c).

Summary result

Transposition with delay of > 12 months	The transposition was finalised in November 2021.
Robustness of the underlying information	Reliable information provided by the Ministry of the Environment.

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

In the EEA-ETC/WMGE questionnaire, the Finnish authorities stated that the recycling policy for packaging wastes is the responsibility of the following authorities and stakeholders:

- The ELY Centre of Pirkanmaa is the national authority directing and promoting the performance of the producer responsibility tasks referred to in the Waste Act and the regulations issued on the basis thereof. For example, the ELY approves producers and PROs in the producer register based on their applications for approval and compiles the official packaging statistics inducing the packaging quantities, reuse and recycling rates from the data reported by RINKI and other packaging producers and reports them to Eurostat. The Government of Åland is the supervisory authority for Åland;
- Packaging producers and PROs (see Section 2.1.5 for more information) shall fulfil the requirements laid down in the Waste Act (e.g. organise separate collection and achieve the recycling targets set);
- Municipalities (and their waste management companies) may organise the door-to-door collection of packaging wastes as well as complementary bring point collection in rural areas;
- Waste transport companies collect and transport packaging wastes (also the waste collected on behalf of municipalities);
- Finnish Packaging Recycling RINKI Ltd is a non-profit service operator for packaging PROs. It takes care of e.g. bring point collection of household packaging waste and reception terminals for business packaging waste and for packaging waste collected door-to-door from households;
- Suomen Palautuspakkaus Oy (PALPA) runs the deposit-based return system (DRS) for beverage packaging. PALPA is responsible that the requirements laid down in Government Decree on a return system for beverage containers (526/2013) are met. (Ministry of the Environment, 2021d)

PROs are responsible for organising packaging waste management. PROs are required to organise bring point collection of household packaging waste and reception terminals for commercial packaging waste for packaging waste collected door-to-door from households. According to the revised Waste Act (Government of Finland, 2021i), the door-to-door collection of household packaging waste shall be organised in collaboration with the municipalities and PROs. The responsibility of a municipality is to arrange the door-to-door collection while PROs pay most of the waste collection costs to the municipality and take care of and pay the waste management and recycling of separately collected packaging. Companies have to pay for and organise themselves the transport of their packaging waste to the reception points. (Ministry of the Environment, 2021d)

According to the Waste Act (Government of Finland, 2021i), supervisory authorities have certain tools to ensure compliance with the provisions of the waste legislation, they can give specified administrative orders to individual responsible entities that may be accompanied by conditional fines in case the non-compliance persists. Producer responsibility free riders can be prohibited to place their products on the market. In addition, free riding or non-compliance with, for example, book-keeping or reporting obligations can lead to fines ranging from EUR 500 – 500 000. Breach or negligence of

legal standards referred in Section 147 in the Waste Act (Government of Finland, 2021i) (e.g. neglecting the producer's obligation to receive discarded products), can be judged as a (minor) criminal offence leading to fines. In case of severe environmental pollution described in the Criminal Code, the responsible entity can be sentenced to fines (or prison, in case of a natural person). The recycling targets are binding for PROs and are monitored separately for each producer organisation. The supervisory authority decides the necessary measures in accordance with the applicable law, in case the recycling targets are not met. For example, tightened requirements for the separate collection network may result as a consequence of a PRO failing to meet its target. (Ministry of the Environment, 2021d)

The support mechanisms for municipalities presented in Section 2.1.2 are also valid for packaging. Furthermore, there are specific support mechanisms in place focused on plastic packaging waste. The Finnish PRO for plastics packaging, Finnish Plastics Recycling Ltd., has launched a program called *Path 2025* aiming to reach the new recycling targets set in the EU. Finnish Plastics Recycling has also employed a recycling coach to help companies increase the recycling of plastic packaging wastes. The Ministry of the Environment is responsible for the Plastics Roadmap for Finland and its measures. The Ministry granted a financing of EUR 1 million for research and development to tackle the plastics problem. In addition, PROs have platforms for collaboration, and the Waste Act (Government of Finland, 2021i) oblige PROs to set up collaboration networks with relevant stakeholders. Some mechanisms presented in the Section 2.1.2, e.g. the measures focused on increasing knowledge on recycling, are also valid for packaging. (Ministry of the Environment, 2021d)

Summary result

Clearly defined responsibilities, enforcement mechanisms and good set of support tools for meeting the recycling targets	Responsibilities are defined and enforcement mechanisms are in place, and a good set of support tools are presented.
Robustness of the underlying information	Reliable information provided by the Ministry of the Environment and stated in waste legislation

2.2.3 Economic instruments

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

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

As described in Section 2.1.3 in more detail, Finland has a landfill ban on biodegradable and other organic waste and a landfill tax. These incentives also affect packaging waste.

Summary result

Ban in place for landfilling residual or biodegradable waste	Finland has a landfill tax in place of 70 EUR/t (corresponding to 55.4 EUR/t rescaled based on purchasing power parities (Eurostat, 2020a)). A landfill ban on biodegradable and other organic waste applies since 2016.
Robustness of the underlying information	The information is based on the Finnish waste legislation.

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, Finland does not have a waste incineration tax.

Summary result

No incineration taxes	Finland has no tax on waste incineration.
Robustness of the underlying information	The information is based on the Finnish waste legislation.

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, Finland has an excise duty on beverage containers that are not included in the deposit-based return and recycling systems, excluding containers made of liquid packaging board (i.e. carton packaging for beverages and other liquid products). Beverage manufacturers and importers are exempted from the tax when joining a deposit-return system. The excise duty is EUR 0.51 per litre of beverage. (Finnish Tax Administration, 2021)

The Ministry of Finance has carried out a preparatory assessment on different alternatives to implement a plastic tax. It did not identify reasons to implement a broad plastic tax or plastic packaging tax. There are already economic instruments in place for plastic packaging, such as EPR and the deposit-based return system. It was considered that a tax limited, for example, to certain single-used plastic (SUP) products could be environmentally reasonable and technically feasible. However, it was concluded that further analysis is needed during the implementation of the SUP directive and especially concerning the requirements to reduce the use of certain SUP products. (Ministry of the Environment, 2021d)

Summary result

Packaging taxes in place	There is an excise duty for beverage containers outside the deposit-based return systems.
Robustness of the underlying information	The information is based on the Finnish tax legislation.

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.

As described in Section 2.1.3 in more detail, the whole Finnish population is covered by PAYT schemes.

Summary result

PAYT scheme fully rolled out (to at least 80% of the population)	100 % of the population is covered by PAYT schemes in Finland.
Robustness of the underlying information	Credible information received from the Finnish authorities through the EEA-ETC/WMGE questionnaire.

SRF P-3.5: Deposit return systems

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

The Finnish DRS is based on the Waste Act (Government of Finland, 2021i) and the system is one of the broadest in the EU. In Finland, voluntary DRS schemes exist for beverage aluminium cans, beverage glass bottles and beverage plastic bottles. According to the Ministry of the Environment (2021d), they cover most of the cans and bottles, but no quantitative data exist, as the exact number of cans and bottles outside the deposit system is not known.

Suomen Palautuspakkaus Oy (PALPA), is by far the largest DRS administrator in Finland, having around 5 000 automatic reverse vending machines across the country. In addition, Lidl has an own DRS for beverage plastic bottles. Companies, schools, and event organisers can return deposit packages via beverage suppliers. The return rates reported by PALPA in 2020 were 94 % for aluminium cans, 92 % for PET-bottles and 87 % for glass bottles (PALPA, 2021). Beverage manufacturers and importers are exempted from the beverage container packaging tax and fees for PROs if they join a DRS. Although the schemes for beverage aluminium cans, glass bottles and plastic bottles act on a voluntary basis, the opportunity for tax exemption creates a strong incentive to join the system. The packaging producers are also exempted from some obligations regarding EPR on packaging if they join a deposit return system. There is also a voluntary system for beverage manufacturers and wholesalers, in which a deposit is paid for some specific plastic crates (transport units). No DRS are in place for wooden packaging, but pallet retailers and recycling operators buy used wooden pallets for repair and reuse. (Ministry of the Environment, 2021d)

Summary result

Aluminium drink cans	Voluntary DRS for nearly all drink cans	A voluntary DRS covering most of the aluminium drink cans, supported by strong economic incentives to join the system.
Glass drink bottles	Voluntary DRS for nearly all drink bottles	A voluntary DRS covering most of the glass drink bottles, supported by strong economic incentives to join the system.
Plastic drink bottles	Voluntary DRS for nearly all drink bottles	A voluntary DRS covering most of plastic drink bottles, supported by strong economic incentives to join the system.
Plastic crates	Voluntary DRS for some plastic crates	A voluntary DRS for plastic trays, dollies and pallets.
Wooden packaging	No DRS for wooden packaging	No DRS in place for wooden packaging.
Robustness of the underlying information		Credible information received from the Finnish authorities through the EEA-ETC/WMGE questionnaire.

2.2.4 Separate collection system

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

As a large part of packaging waste comes from households, separate collection systems for households and similar sources are a key condition for achieving high recycling rates of packaging waste and for collecting recyclables at adequate quality. Generally, the more convenient and accessible these systems are for their users, the better results they can deliver. The material specific assessment

considers packaging waste from both household and non-household sources. For assessing the convenience and coverage of separate collection systems for households, the same methodology is used here as described in Section 2.1.4.

According to Table 2.1 (Section 2.1.4), high convenience collection systems are dominant for paper and cardboard packaging, ferrous metals and aluminium, plastic packaging, and glass packaging in Finland. Waste wooden packaging is only collected at reception terminals organised by the producers or civic amenity sites. This means that Finland has a mandatory system of separate collection for the main packaging materials. In addition, Finland has a nationwide voluntary deposit system for most beverage containers.

Sorting at source of packaging waste originating from companies became mandatory in the revision of the waste legislation. Producers are obliged to organise the reception of non-household packaging waste, which means that producers need to organise a sufficient number of reception points for separately collected non-household packaging waste throughout Finland (see Section 2.2.5). (Ministry of the Environment, 2021d) Businesses and companies have to pay for and organise themselves the transport of the packaging waste from their premises to the reception points (Finnish Packaging Recycling RINKI Ltd, 2021b).

The legal minimum standards for separate collection schemes of the relevant material streams as set in the revised waste legislation, a network of at least 1 000 regional reception points for household packaging waste to areas without door-to-door collection as well as a sufficient number of reception terminals for commercial packaging wastes, and household packaging waste collected by municipalities or private waste carriers, will be organised by PROs. For companies or public organisations situated in built-up areas or specific areas of service, tourism or work-places generating > 5 kg of paper and cardboard or plastic packaging waste, or > 2 kg of metal or glass packaging per week, sorting at site will be mandatory as of July 2022. For wooden packaging waste, the producers must organise a sufficient number of reception points throughout Finland. (Ministry of the Environment, 2021d) See Section 2.1.4 and 2.2.5 for more information.

Summary result

Paper and cardboard packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	Door-to-door or high-convenience collection points are the dominant systems.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household paper and cardboard packaging waste	For companies or public organisations situated in built-up areas or specific areas of service, tourism or work-place generating > 5 kg of waste per week, on site sorting is mandatory.
Ferrous metals packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	Door-to-door or high-convenience collection points are the dominant systems.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household ferrous metals packaging waste	For companies or public organisations situated in built-up areas or specific areas of service, tourism or work-place generating > 2 kg of packaging waste per week, on site sorting is mandatory.

Aluminium packaging	**Packaging waste from households** A high share of the population is covered by high convenience collection services	Door-to-door or high-convenience collection points are the dominant systems. In addition, there is a voluntary DRS in Finland for nearly all beverage cans.
Glass packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	Door-to-door or high-convenience collection points the dominant. In addition, there is a voluntary DRS in Finland for nearly all glass beverage bottles.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household glass packaging waste	For companies or public organisations situated in built-up areas or specific areas of service, tourism or work-place generating > 2 kg of packaging waste per week, on site sorting is mandatory. In addition, there is a voluntary DRS in Finland for nearly all glass beverage bottles, including for non-household beverage packaging.
Plastics packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	Door-to-door or high-convenience collection points are the dominant systems. In addition, there is a voluntary DRS in Finland for nearly all plastic beverage bottles.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household plastic packaging waste	For companies or public organisations situated in built-up areas or specific areas of service, tourism or work-place generating > 5 kg of waste per week, on site sorting is mandatory. In addition, there is a voluntary DRS in Finland for nearly all plastic beverage bottles.
Wooden packaging	**Packaging waste from non-household sources** Separation at source is not mandatory for non-household wooden packaging waste	No detailed mandatory requirements set to non-households to organise sorting at site, although the obligation for PROs to arrange collection points is described in waste legislation and Section 15 of the waste act requires separate collection. Collection systems are in place.
Robustness of the underlying information		The information is based on the Finnish waste legislation and provided by the Ministry of Environment. The mandatory separation at source for non-household packaging is limited as de minimis rules apply, however, the threshold is very low.

Notes: Shares of materials reflects EU-average share of materials in 2018 according to Eurostat (2022c). 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[2]. Again, the material specific assessment considers packaging waste from both household and non-household sources.

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

A mandatory door-to-door separate collection system for packaging waste will be introduced to household properties with at least five apartments located in built-up areas with more than 200 inhabitants by July 2023 (Ministry of the Environment, 2021d). See Section 2.1.4 for more information.

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)	A high share of the population is already covered by high convenience collection services.
	2. Packaging waste from non-household sources N/A (for MS in which separation at source for non-households is mandatory)	No changes foreseen
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)	A high share of the population is already covered by high convenience collection services.
	2. Packaging waste from non-household sources N/A (for MS in which separation at source for non-households is mandatory)	No changes foreseen
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)	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)	A high share of the population is already covered by high convenience collection services.
	2. Packaging waste from non-household sources N/A (for MS in which separation at source for non-households is mandatory)	No changes planned.
Plastics packaging	**1. Packaging waste from households** N/A (for countries in which a high share of the population is already covered by high convenience collection services)	A high share of the population is already covered by high convenience collection services.
	2. Packaging waste from non-household sources N/A (for MS in which separation at source for non-households is mandatory)	No changes foreseen

Wooden packaging	**Packaging waste from non-household sources** No firm plans to introduce mandatory separation at source for non-household wooden packaging waste	No changes planned.
Robustness of the underlying information		The information is based on the Finnish waste legislation and provided by the Ministry of Environment 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 Finland, EPR applies to all packaging. There are five accepted PROs for packaging in Finland, having a joint service company, Finnish Packaging Recycling RINKI Ltd, which handles the registration of producers in the PRO, annual fees and the maintenance of the collection network for consumer packaging. A contract with a PRO is made through RINKI and it covers the recycling of packaging that a company puts on the market and collection of consumer packaging, but not the collection of commercial packaging waste, and companies have to pay for and organise themselves the transport of the packaging waste from their premises to the reception points (Finnish Packaging Recycling RINKI Ltd, 2021b) or directly to recycling operators in case this is agreed with producers. The existing system seems to work well and efficiently, and no radical changes to it were made in preparation of the new waste legislation. (Ministry of the Environment, 2021d). RINKI organises the collection network of household packaging waste only, in addition, PROs are required to organise a sufficient number of reception points (in such way that they serve well the acceptance of packaging waste collected from properties) (30 before the revision of the packaging waste decree) for separately collected non-household waste throughout Finland (Ministry of the Environment, 2021d). The amount of reception terminals seems rather low for a large territory like Finland. However, according to a study by LCA consulting (2020b), increasing the amount of reception terminals would not create significant cost benefits for waste producers or collectors. PROs cover the costs of recycling of both household and non-household waste. According to the Finnish authorities, in absence of exact minimum number of reception terminals, the supervisory authority will monitor and ensure that the amount of collection points is sufficient. The authority will get feedback from waste collectors, if the number seems to be too low. So far there has been no complaints concerning the amount of reception terminals. In addition, the amount of reception points is also a part of the agreement of municipalities and producers (household packaging waste collection). This ensures that the number of terminals will be sufficient to serve collection of packaging waste by municipalities all around Finland. (Ministry of the Environment, 2022a)

More details are described in Section 2.1.5.

Summary result

All main packaging fractions([a]) are covered by EPR schemes, covering household and non-household packaging	Finland has EPR schemes in place covering household and non-household packaging for all packaging fractions, but the collection of non-household packaging is not the responsibility of the PRO
Robustness of the underlying information	Credible information received from the Finnish 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.

Summary result

No advanced fee modulation.	There is no advanced fee modulation according to the assessment criteria but will be required by law from 2023.
Robustness of the underlying information	Credible information received from the Finnish authorities in response to the EEA and ETC/WMGE questionnaire.

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.

Summary result

SRF P-5.3.1 EPR scheme for paper and cardboard packaging waste	EPR scheme covering household and non-household packaging	Finland has an EPR scheme in place covering household and non-household packaging for paper and cardboard packaging waste. Some basic fee modulation is applied based on recyclability, but more advanced fee modulation will be required by law from 2023.
SRF P-5.3.2 EPR scheme for ferrous metals packaging waste	EPR scheme covering household and non-household packaging	Finland has an EPR scheme in place covering household and non-household packaging for ferrous metals packaging waste. Some basic fee modulation is applied based on recyclability (lower fee for steel packaging compared to aluminium and tinplate), but more advanced fee modulation will be required by law from 2023.
SRF P-5.3.3 EPR scheme for aluminium packaging waste	EPR scheme covering household and non-household packaging	Finland has an EPR scheme in place covering household and non-household packaging for aluminium packaging waste, but no fee modulation is applied, but more advanced fee modulation will be required by law from 2023.
SRF P-5.3.4 EPR scheme for glass packaging waste	EPR scheme covering household and non-household packaging	Finland has an EPR scheme in place covering household and non-household packaging for glass packaging waste, but no fee modulation is applied, but more advanced fee modulation will be required by law from 2023.

SRF P-5.3.5 EPR scheme for plastic packaging waste	EPR scheme covering household and non-household packaging but without fee modulation	Finland has an EPR scheme in place covering household and non-household packaging for plastic packaging waste, but no advanced fee modulation is applied, but more advanced fee modulation will be required by law from 2023.
SRF P-5.3.6 EPR scheme for wooden packaging waste	EPR scheme covering all non-household packaging	Finland has an EPR scheme in place covering non-household packaging for wood packaging waste, with some basic fee modulation (lower fees for stamped pallets and cable reels than for other wooden pallets and packaging), but more advanced fee modulation will be required by law from 2023.
Robustness of the underlying information		Credible information received from the Finnish authorities through the EEA-ETC/WMGE questionnaire.

2.3 Target on landfill of municipal waste

2.3.1 Current situation and past trends

SRF LF-1.1: Distance to target

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

Data to show the current rate of landfilling in line with the reporting rules will only be reported by mid-2022. Therefore, this analysis calculates the landfilling rate based on the current Eurostat dataset *Municipal waste by waste management operations [env_wasmun]*; by dividing the amount of landfilled waste by the total amount of waste generated. The overall landfilling rate of Finland was 0.5 % in 2020 (calculated based on Eurostat (2022b)).

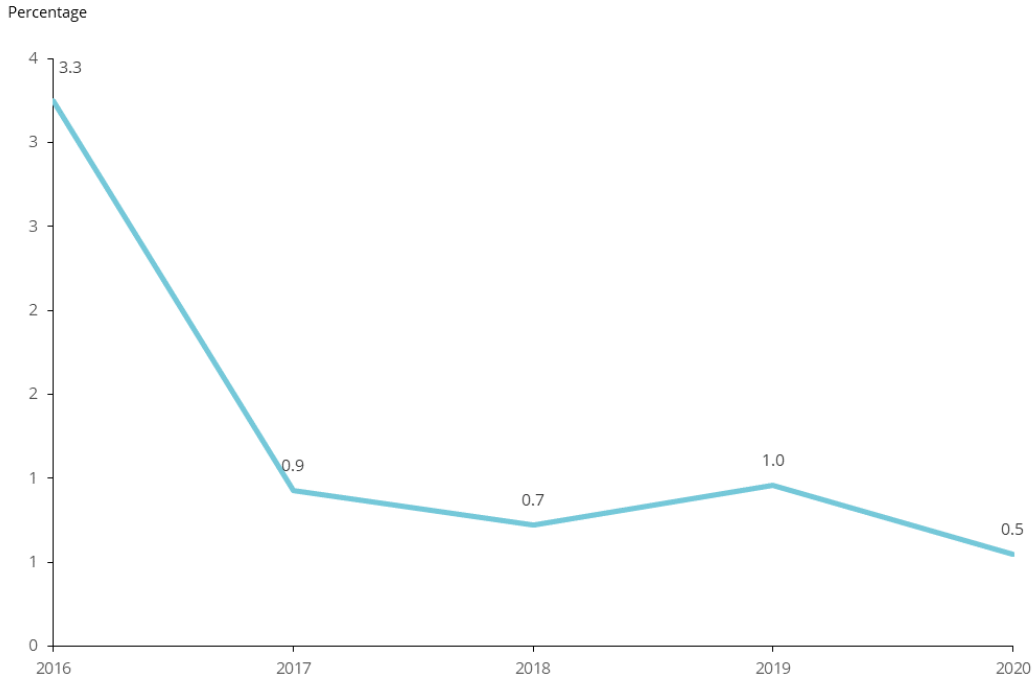
Summary result

Target exceeded	The target is exceeded in Finland, with an overall landfilling rate of 0.5 % in 2020.
Robustness of the underlying information	The data is derived from Eurostat and is 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.

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

Over the past five years, the overall landfilling rate in Finland has decreased from 3.3 % in 2016 to 0.5 % in 2020 (Figure 2.4). The decrease is caused by a landfill ban on biodegradable and other organic waste, which came into force in 2016.

Figure 2.4 - Landfilling in Finland between 2016 and 2020, in percentage



Source: Eurostat (2022b)

Summary result

Landfill rate in 2020 < or = 10%	The landfill rate in 2020 is 0.5 %.
Robustness of the underlying information	There are no breaks in the time series data. The data is derived from Eurostat and is 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.

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 is banned in Finland. In 2019, Finland reportedly landfilled just below 1 % of the total amount of biodegradable municipal waste produced in 1995 (EC, 2022).

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	Finland has reported 3 % biodegradable waste landfilled for 2016, of the total amount (by weight) of biodegradable municipal waste produced in 1995, and 1 % for 2017, 2018 and 2019, and performs therefore well within the target.
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 Finland is at risk of not meeting the targets. The 'total risk' categorisation 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 Finland, only the SRFs relevant to Finland are taken into account to define the maximum score. Finland is considered to be 'not at risk' if its score is more than 50 % 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

38 % **of maximum points**	Based on the provided information and the analysis done, it is concluded that Finland is **at risk for not meeting the MSW recycling target in 2025**.
Current situation and past trends:	The recycling rate was 41.6 % in 2020, which is 13.4 percentage points below the target of 55 %. If the new calculation rules were applied, the recycling rate is estimated to be 36.6 %. The recycling rate remained rather stable over the past 5 years.
Legal instruments:	The amended WFD has been transposed into national law, although with a delay of more than 12 months, in November 2021. Responsibilities are well defined although fragmented between different actors. Administrative fines act as enforcement mechanism for non-compliance with arrangement of specific waste management services or non-compliance with separation at source for companies. Support mechanisms for municipalities are in place.
Economic instruments:	The amount of landfill tax is 70 EUR/t (corresponding to 55.4 EUR/t rescaled based on purchasing power parities). A landfill ban on biodegradable and other organic waste applies since 2016. Finland has no tax on waste incineration. The whole population is covered by volume based PAYT schemes.

Separate collection systems:	For cardboard packaging waste and printed paper, plastics and glass, door-to-door collection is currently the dominant system in cities. In towns, suburbs and rural areas bring point systems are dominating. Metal packaging waste is typically collected with other small-sized household metal waste. Door-to-door collection is the dominant system in cities. In towns, suburbs and rural areas bring point systems are dominating. For food waste, door-to-door collection is the dominant system in cities, towns and suburbs, whereas in rural areas there are no separate collection systems in place and home-composting is rather common. For garden, wood and textile waste, only lower service level collection systems exist. The WEEE collection is considered of medium convenience; take-back schemes at retailers and collection at civic amenity sites are the dominant collection systems, supported by e.g. semi-regular bring point collection and pick-up from households. The revised waste legislation mandates the expansion of separate collection of both bio-waste and packaging and to include non-packaging in the collection system for paper and cardboard, metals, plastics and glass.
Extended producer responsibility:	EPR schemes are in place for all packaging materials from households and non-households. There is some limited fee modulation based on recyclability applied, but the system is not very granular.
Bio-waste treatment capacity and quality management:	The available treatment capacity is not dedicated to municipal bio-waste treatment only, and therefore the sufficiency of the current capacity to treat generated municipal bio-waste cannot be estimated. However, new treatment plants have been constructed and are in construction and the Ministry of the Environment estimates these investments are sufficient to treat approx. 70–80 % of the total bio-waste generated, corresponding to the expected amount of separately collected waste after the extension of separate collection. A legally binding national standard and a quality management system for compost/digestate are in place.

3.2 Prospects for meeting the recycling targets for packaging waste

60 % **of maximum points**	Based on the provided information and the analysis done, it is concluded that Finland is **not at risk for not meeting the 65 % recycling target for packaging waste in 2025**	
83 % of maximum points	Paper and cardboard	Not at Risk
83 % of maximum points	Ferrous metals packaging	Not at Risk
81 % of maximum points	Aluminium packaging	Not at Risk
81 % of maximum points	Glass packaging	Not at Risk
41 % of maximum points	Plastics packaging	At Risk
65 % of maximum points	Wooden packaging	Not At Risk
Current situation and past trends:	The total packaging recycling rate is 71 %, 6 percentage points above the 2025 target. However, taking into account losses in the recycling plants, and correcting for generated packaging currently not included in the reported data, it is likely that the distance to the target exceeds 5 percentage points. It is estimated that the actual recycling rate is at 54–58 % The total packaging recycling rate has increased by 9.7 percentage points over the past five years.	
Legal instruments:	The amended Packaging and Packaging Waste Directive has been transposed into national law, although with a delay of more than 12 months, in November 2021. Responsibilities are defined and enforcement mechanisms are in place, as well as a good set of support tools.	
Economic instruments:	A tax of 70 EUR/t is imposed on landfilled waste (corresponding to EUR 55.4 EUR/t rescaled based on purchasing power parities). A landfill ban on biodegradable and other organic waste applies since 2016. Finland has no tax on waste incineration. There is an excise duty for beverage containers outside the deposit-based return systems. The whole population is covered by volume based PAYT schemes. A voluntary DRS covering most of the aluminium drink cans, plastic drink bottles and glass drink bottles is in place. This system is highly efficient, return rates reported in 2020 were 94 % for aluminium cans, 92 % for PET-bottles and 87 % for glass bottles. In addition, a voluntary DRS exist for plastic trays, dollies and pallets. No DRS for wooden packaging.	

Separate collection systems:	Door-to-door or high-convenience collection points are the dominant systems for paper and cardboard, metals, glass, and plastic packaging waste. For companies or public organisations situated in built-up areas or specific areas of service and tourism, on site sorting is mandatory, although limited as de minimis rules apply. The revision of the waste legislation introduced new requirements on separate collection as of 2022 and an expansion of the door-to-door collection system in 2023.
Extended producer responsibility:	Finland has EPR schemes in place covering household and non-household packaging for all packaging fractions, but the collection of non-household packaging is not the responsibility of the PROs. There is some limited fee modulation based on recyclability, but the system is not very granular.

3.3 Prospects of meeting the landfill of municipal waste target

100 % **of maximum points**	Based on the provided information and the analysis done, it is concluded that Finland 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 landfilling rate for municipal waste was 0.5 % in 2020, down from 3.3 % in 2016.
Diversion of biodegradable municipal waste from landfill	Finland has reported 3 % biodegradable waste landfilled for 2016, and 1 % for both 2018 and 2019 of the total amount (by weight) of biodegradable municipal waste produced in 1995, and therefore met the 2016 target (35 % reduction).

List of abbreviations

Abbreviation	Name
AVI	Regional State Administrative Agency
B2B	Business to business
GDP	Gross domestic product
CE	Circular economy
C&DW	Construction and demolition waste
DRS	Deposit Return System
EC	European Commission
EEA	European Environment Agency
EEE	Electrical and electronic equipment
ELY Centre	The centre for economic development, transport and the environment
EPR	Extended producer responsibility
ETC/CE	European Topic Centre on Circular Economy and resource use
ETC/WMGE	European Topic Centre on Waste and Materials in a Green Economy
ETS	Emissions Trading System
HSY	Helsinki Region Environmental Services
LOI	Loss on ignition
MBT	Mechanical biological treatment
MoE	Ministry of the Environment
MS	Member state
MSW	Municipal solid waste
MT	Mechanical treatment
NWP	The National Waste Plan
PAYT	Pay-as-you-throw
PET	Polyethylene terephthalate
pp	Percentage point
POM	Put on the market
PPWD	Packaging and Packaging Waste Directive
PRO	Producer Responsibility Organisation
PS	Polystyrene
R&D	Research and development
RR	Recycling rate
SRF	Success and risk factor
SUP	Single-use plastics
WEEE	Waste Electric and Electronic Equipment
WFD	Waste Framework Directive

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Annex 1 Implementation of previous early warning recommendations

In 2018, the European Commission assessed that Finland would be at risk of not meeting the Waste Framework Directive's target to prepare for re-use and recycle at least 50 % of municipal waste, and provided a set of policy recommendations to improve the situation (EC, 2018a). This annex lists the recommendations and a self-assessment of the Finnish authorities on the status of taking them into account.

Recommendations on incentives for municipalities / extended producer responsibility

1) Introduction of mandatory recycling targets for municipalities in line with the national 50 % target, and shift of some responsibility back to the municipalities by:

> *a. setting recycling or residual waste targets at the municipal level, with fines for failure to meet the targets;*
>
> *b. updating the waste information system, as required;*
>
> *c. revising the Waste Act to redefine the responsibilities of the producer responsibility organisations (PROs) and municipalities, to ensure that their services are combined, or coordinated, and that municipalities have the powers to make the necessary system improvements.*

Finland has assessed the recommendation of setting recycling or residual waste targets at the municipal level during the preparation of the revision of the Waste Act. The measure was not considered feasible, as the responsibility to organise municipal solid waste management in Finland is fragmented between municipalities, waste holders, and packaging, paper, and electrical and electronic equipment (EEE) PROs. In addition, the current MSW statistics were not seen adequate to facilitate setting specific regional targets. (Ministry of the Environment, 2021d)

Finland has launched a reform of the waste information system. The new system will be built in phases, and by 2022 the first new functions will be put into operation. (Ministry of the Environment, 2021d) The aim is to build an integrated waste and product information system providing comprehensive and reliable information for the needs of waste statistics, EU reporting, monitoring and control of waste management and the promotion of the circular economy (CE). (Ministry of the Environment, 2021a)

In the revised Waste Act an obligatory collaboration with municipalities and producers of packaging in organising door-to-door separate collection of residential packaging waste is introduced, see Section 2.1.4. for more information. In addition, the transportation of packaging and bio-waste is to be organised by municipalities through tendering processes, which would mean the abolishment of the current possibility of municipalities to shift this responsibility to individual properties. According to the Finnish authorities, this measure would improve the powers of municipalities to arrange the management of municipal solid waste and to make needed systems improvements to it. (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation partly implemented (Ministry of the Environment, 2021d).

2) Introduction of mandatory tri-party contractual arrangements between PROs, municipalities and collection companies to drive cooperation and efficiency savings across all levels of waste services, in order to reduce fragmentation.

In the Waste Act, obligatory contractual arrangements between municipalities and PROs with respect to household packaging waste management are introduced, concerning door-to-door collection of household packaging waste. Private waste collection companies are also part of this arrangement via agreements with municipalities (public tendering) or PROs (contracts), and their role is to act as collection and treatment operators as agreed. (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation implemented (Ministry of the Environment, 2021d).

Recommendations on economic instruments

3) Setting the cost of disposal at a sufficiently high level to incentivise provision of high quality recycling services to the public and use of these services. This could be achieved by:

a. implementing an incineration tax;

b. ensuring PROs pay municipalities for any revenues obtained from the sale of recyclables;

c. creating a mechanism (using surveys of residual waste) to ensure PROs pay an additional fee for the management of packaging in residual waste to the municipalities collecting such waste;

d. implementing country-wide pay-as-you-throw systems, varying their approach (with regard to volume, weight, etc.) depending on the local circumstances.

A recommendation to incentivise provision of high quality recycling services via sufficiently high disposal costs is approached by the following means:

a. Finland has carried out a study concerning the possibilities to implement a waste incineration tax, see Section 2.1.3. for more information.
b. In the collaboration model between municipalities and PROs described above it is required that producers shall compensate waste collection costs to municipalities in accordance with the WFD.
c. At the moment this measure has not been considered feasible, and is not required in the WFD or PPWD either
d. Pay-as-you-throw systems are broadly used by Finnish municipalities already (see Section 2.1.3 for more information). (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation partly implemented (Ministry of the Environment, 2021d).

Recommendations on separate collection

4) Extension of the existing obligations to sort recyclables and bio-waste from households to cover buildings with any number of flats (without a de-minimis); equal application of the obligations to buildings with multiple flats in built-up areas and individual households in suburban and rural areas. Highly rural areas may need some form of exemption.

5) Increasing the roll-out of door-to-door collection.

6) Introduction of obligations for businesses to sort their food wastes, plastic, metals, and paper/card.

The waste decree sets detailed minimum requirements for door-to-door collection of recyclables and bio-waste (Ministry of the Environment, 2021d), see Section 2.1.4 for more information.

The Finnish authorities consider these recommendations implemented (Ministry of the Environment, 2021d).

7) Development of national minimum service standards for waste collection to specify, for example, the type and volume of containers, frequency of collection and type of vehicle used, taking into account the type of housing stock, how rural the area is, typical climate, etc.

Some minimum requirements for the waste collection are laid down in the Waste Decree. Detailed waste collection requirements are set in municipal waste management regulations. A guideline to municipalities on preparation of these requirements has been published. Such practices have also been developed by municipalities and their waste management companies in collaboration. As a result, some guidelines or recommendations have been prepared. (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation partly implemented (Ministry of the Environment, 2021d).

Recommendations on technical support to municipalities

8) Development of a system at national level that provides technical support for municipalities, specifically in the following areas:
a. choosing collection services;
b. service procurement;
c. service management;
d. communication campaigns;
coupled with active sharing of good ideas and practices that can improve efficiency in terms of cost reduction and improvement in performance.

Municipalities and their waste management companies work in active collaboration and exchange information as well as best practices for example with respect to tendering processes, service procurement or communication. The Ministry of the Environment will launch or support projects, especially concerning tendering processes of waste transports, to support the implementation of the new Waste Act. In addition, a national bio-waste campaign is currently ongoing. (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation partly implemented (Ministry of the Environment, 2021d).

Recommendations on communication and awareness-raising programmes

9) Development of a set of national communications materials addressed to the public for use at local level, with clear and consistent messages. These materials should be used as part of awareness-raising campaigns, in leaflets, and at civic amenity sites.

A national bio-waste campaign is currently ongoing. New communications material for different stakeholders will be prepared and published to support implementation of the revised waste legislation. (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation implemented (Ministry of the Environment, 2021d).

Recommendations on longer-term strategic measures

10) Reduction of fragmentation of responsibilities for managing waste streams to make the sector as a whole – not just partitions of the sector – more efficient.

The revised Waste Act introduced a collaboration model between the municipalities and PROs. Additional actions for improved collaboration between municipalities, PROs and private sector will be taken after the revision of the waste legislation is accomplished and the collaboration framework clarified. E.g. a Green Deal for enhanced collaboration between the key stakeholders is under deliberation. Regarding separate collection of municipal waste, the responsibilities will be reduced after the new Waste Act has come into force (see point 11 below). (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation partly implemented (Ministry of the Environment, 2021d).

11) Analysis of the cost and performance implications of taking a 'free-market' approach and considering moving away from this approach if it is found to be costly.

The Finnish authorities presume that in this context the free-market approach stands for the fragmented municipal waste collection, in which responsibility can be transferred from municipality to the owner of the property. The regulation will remain fragmented in future as well. According to the revised Waste Act, municipalities alone are responsible for arranging the collection and transport of *all separately collected municipal waste*, whereas regarding to *mixed waste and septic tank sludge* it is still possible to transfer the responsibility to the owner of the property instead of municipality. This is politically very controversial issue. In the implementing process of the EU waste package, it was proposed that municipalities would be entirely responsible for municipal waste collection and transports, but a large number of critical opinions from the private collection companies were received on the proposal, and as a result the government could not reach an agreement on the issue. Therefore, the final proposal is a political compromise that is founded on highly differing opinions given by different stakeholders and political parties. (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation partly implemented (Ministry of the Environment, 2021d).

12) Consideration of a longer-term strategy and vision for the waste sector, and implementation of a single package of changes to cover a 10- to 15-year period, rather than following a more piecemeal approach to improving legislation and practice in the sector.

The NWP was updated in 2022. In addition, a strategic program to promote a circular economy was published in 2021. In these plans a longer-term vision on development of the waste management as part of development of a CE are presented. The revised Waste Act, and especially collaboration on packaging waste management between municipalities and producers, is a strategic regulatory model

on which basis Finland hopes to move forward in the long term also. (Ministry of the Environment, 2021d)

The Finnish authorities consider this recommendation implemented (Ministry of the Environment, 2021d).

Annex 2 Detailed scoring of success and risk factors

Assessment sheet - Recycling target for municipal waste

MS Finland
Date Jun/22

SRF		Assessment result	Weight	Score
Current situation and past trends				
MSWR-1.1	Distance to target	Distance to target > 15 percentage points or no data reported	5	0
MSWR-1.2	Past trends in municipal solid waste recycling rate	RR < 45% and increase in last 5 years < 10 percentage points	1	0
Legal instruments				
MSWR-2.1	Timely transposition of the revised WFD into national law	Transposition with 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	No incineration taxes or taxes < 7 EUR/t*	1	0
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 medium share of the population is covered by high convenience collection services	0,84	0,84
	Wood	A low share of the population is covered by high convenience collection services	0,06	0
	Textiles	A low share of the population is covered by high convenience collection services	0,06	0
	WEEE	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	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0,23	0,46
	Metals	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0,04	0,08
	Plastics	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0,14	0,28
	Glass	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0,09	0,18
	Bio-waste	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0,42	0,84
	Wood	No firm plans to improve the convenience and coverage	0,03	0
	Textiles	There are plans to improve the collection service but unclear plan for implementation	0,03	0,03
	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	Bio-waste capacity below 80% of generated municipal bio-waste but firm plans to close the gap	1	1
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	**12,75**
			Maximum score	34,00
				38%

Assessment sheet - Recycling target for packaging waste

MS Finland

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 percentage points below target, or target exceeded	5	10
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 > 45% and increase in last 5 years < 5 percentage points, or RR > 40%, and increase in last 5 years < 10 percentage points, or RR < 40% and increase in last 5 years > 10 percentage points	1	1
	Past trends in wooden packaging recycling	RR > 20% and increase in last 5 years > 5 percentage points, or RR > 15% and increase in last 5 years > 10 %, or RR > 25%	1	2
Legal instruments				
P-2.1	Timely transposition of the revised Packaging and Packaging Waste Directive into national law	Transposition with 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	No incineration taxes or taxes < 7 EUR/t*	1	0
P-3.3	Packaging taxes	Packaging taxes in place	1	2
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	Mandatory for some or voluntary DRS for nearly all drink cans	1	1
	Deposit-return systems for glass drink bottles	Mandatory for some or voluntary DRS for nearly all drink bottles	1	1
	Deposit-return systems plastic drink bottles	Mandatory for some or voluntary DRS for nearly all drink bottles	1	1
	Deposit-return systems for plastic crates	No or voluntary DRS for some plastic crates	1	0
	Deposit-return systems for wooden packaging	No or voluntary DRS for some wooden packaging	1	0

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

	Plastics packaging (household)	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.5	0
	Plastics packaging (non-household)	N/A (for countries already having mandatory sorting at source)	0.5	0
	Wooden packaging	No firm plans to introduce mandatory separation at source for non-household wooden packaging waste	1	0
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				**19.36**
			Maximum score	32.32
				60%

Paper and cardboard recycling target

Total score	**25.00**
Maximum score	30.00
	83%

Ferrous metals packaging recycling target

Total score	**25.00**
Maximum score	30.00
	83%

Aluminium packaging recycling target

Total score	**26.00**
Maximum score	32.00
	81%

Glass packaging recycling target

Total score	**26.00**
Maximum score	32.00
	81%

Plastics packaging recycling target

Total score	**14.00**
Maximum score	34.00
	41%

Wooden packaging recycling target

Total score	**22.00**
Maximum score	34.00
	65%

Assessment sheet - Target for landfilling of municipal waste

MS Finland

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%