Country profile

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

Ireland

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 Irish Environmental Protection Agency and the Department of the Environment, Climate and Communications to a questionnaire developed by the EEA and ETC/WMGE. The EEA and ETC/CE would like to thank the Irish authorities for the information provided and for the kind review of drafts of the 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 Ireland. 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 Ireland is at risk of missing the targets for municipal waste and packaging waste set in EU legislation for 2025. In addition, it provides a preliminary assessment of the prospects for meeting the 2035 target for landfilling of municipal waste.

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

1.2 Approach

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

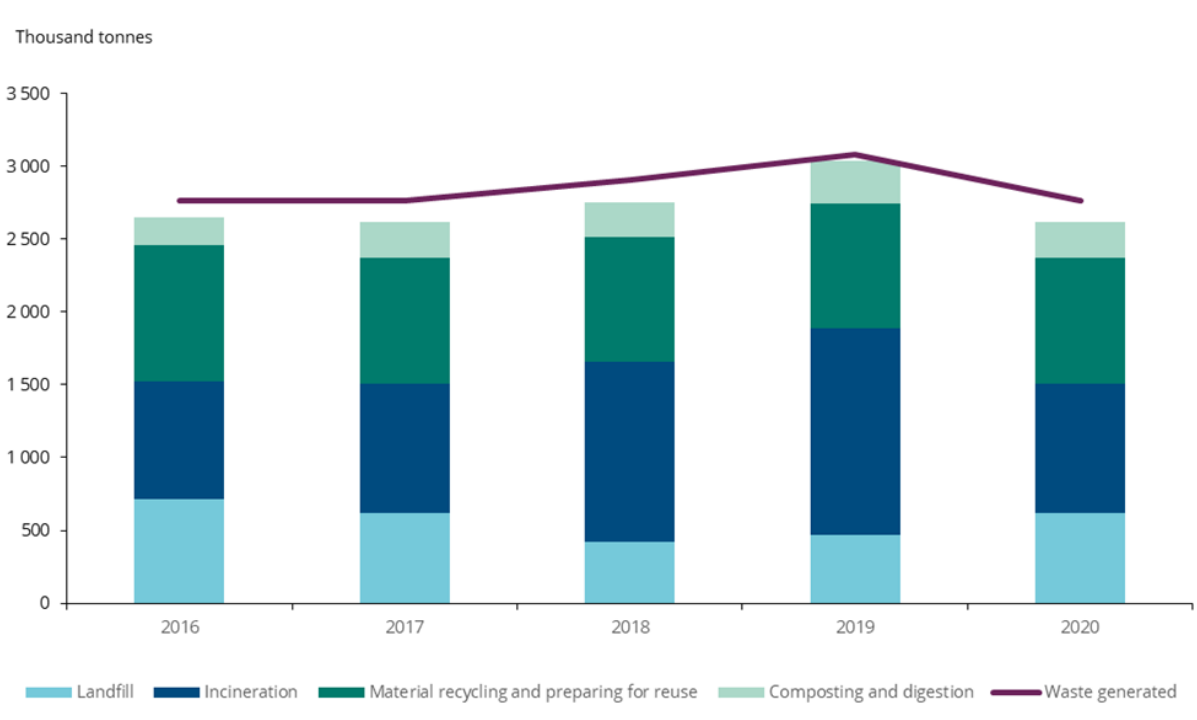
More specifically, chapter 2.1 assesses the likelihood for Ireland to achieve the target to prepare for reuse and recycle at least 55 % of municipal solid waste (MSW) for 2025. Chapter 2.2 assesses the likelihood for Ireland to achieve the overall packaging waste and specific packaging materials' recycling targets for 2025. Chapter 2.3 examines the prospects for Ireland 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

In 2020, Ireland generated an estimated 2.7 million tonnes of municipal waste (Figure 1.1). Municipal waste generation corresponded to 555 kg/cap in 2020, which is above the (estimated) EU average of 505 kg/cap. In 2020, the share of incineration decreased by 14 percentage points compared to the preceding year to 31.8 % of the generated waste. At the same time, the share of landfill increased with 7.2 percentage points. There is a break in the time series of data reported to Eurostat regarding material recycling between 2018 and 2019 (Eurostat, 2022a), therefore the trend can only be analysed before and after this break. The total weight of waste that was sent to material recycling and to composting/digestion only changed marginally between 2017 and 2018, the increase of the incinerated waste share corresponded almost entirely to waste that previously was landfilled (about 205 thousand tonnes) and to newly generated waste volumes (about 144 thousand tonnes). Both in relative and absolute terms, material recycling has gradually decreased in Ireland between 2016 and 2018, from 33.8 % to 29.2 %. During the same period, the share of municipal waste that is composted/digested has increased from 6.9 % to about 8.4 % of the total generated waste, with a pronounced 30% increase of the total absolute weight composted observed between 2016 and 2017. Between 2019 and 2020 material recycling increased by 3.7 percentage points from 27.8 % to 31.5 %. In the same period shares to composting/digestion decreased by 0.7 percentage points from 9.6 % to 8.9 %.

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



Note: break in time series for 'Material recycling and preparing for reuse' in 2019; Eurostat estimates for 2020

Source: Eurostat (2022a)

Legal Framework

In September 2020, Ireland transposed the relevant EU Waste Directives into national legislation. The following Directives were transposed:

- Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste, has been transposed by Statutory Instrument No. 321 of 2020 (Minister for Communications, Climate Action and Environment, 2020a);
- Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste, has been transposed by Statutory Instrument No. 323 of 2020 (Minister for Communications, Climate Action and Environment, 2020c);
- Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste, has been transposed by Statutory Instrument No. 322 of 2020 (Minister for Communications, Climate Action and Environment, 2020b);

A Waste Advisory Group (OECD, 2021), engaging diverse stakeholders, contributed to the development of Ireland's National Waste Policy 2020–2025, A Waste Action Plan for a Circular Economy (Department of Communications, Climate Action and Environment, 2020). This policy provides a roadmap for Ireland transitioning to a circular economy. It includes the following targets:

- Halve food waste by 2030;
- Introduce a deposit and return scheme for plastic bottles and aluminium cans;
- Ban certain single-use plastics from July 2021;
- Introduce a levy on disposable coffee cups;
- Apply green criteria and circular economy principles in all public procurement;
- Introduce a waste recovery levy to encourage recycling;
- Ensure all packaging to be reusable or recyclable by 2030.

Waste management plan(s)

The Waste Action Plan for a Circular Economy (Department of Communications, Climate Action and Environment, 2020) is aligned to the EU Waste Directives and the 2020 Circular Economy Action Plan.

Ireland's first Whole of Government Circular Economy Strategy 2022-2023 *Living More, Using Less* was launched in December 2021 (Department of the Environment, Climate and Communications, 2021c). The purpose of this high-level, all-of-government strategy is to set a course for Ireland to transition toward circularity across all sectors and at all levels of government.

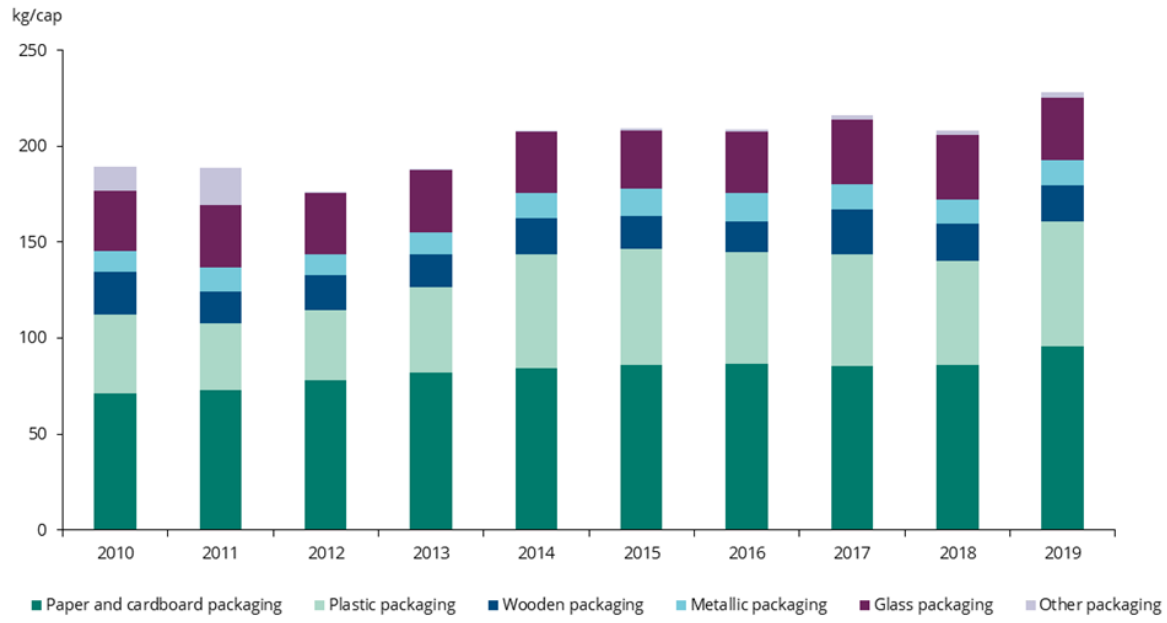
Ireland's National Waste Prevention Programme (NWPP) has been running since 2004. Led by the Irish EPA, it aims to support waste prevention and resource efficiency in a collaborative effort from households, businesses, and other sectors. The Waste Action Plan for a Circular Economy included a commitment to reconfigure the NWPP to make it Ireland's Circular Economy Programme. The National Circular Economy Programme 2021-2027 incorporates and builds upon the NWPP to support national-level, strategic programmes to prevent waste and drive the circular economy in Ireland (Environmental Protection Agency, 2021c).

A new National Waste Management Plan, prepared in accordance with Directive 2018/851, is currently being developed and is expected to be published for consultation in quarter 2 of 2022 and the final Plan adopted in quarter 4 of 2022.

Packaging waste generation and treatment

In Ireland, more than 1 million tonnes of packaging waste were generated in 2019, corresponding to 228 kg/cap which is significantly above the EU average of 177 kg/cap. The total weight of packaging waste generation per capita reached a new all-time high in 2019. The distribution over the different material categories varied considerably over the last decade, with less packaging categorised as other packaging, while the shares of plastic and paper and cardboard packaging increased by 7 and 4 percentage points respectively. The packaging waste generation reported by Ireland is presented in Figure .

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



Note: Break in time series in 2019 for paper and cardboard and plastic packaging

Source: Eurostat (2022b)

Capture rates for recyclables

The capture rate is a good performance indicator of the effectiveness of the separate collection system. The capture rate is calculated by dividing the separately collected weight of a certain material for recycling by the weight of the material in total municipal waste.

Data on the volumes of separately collected material streams were provided by the Irish authorities (Environmental Protection Agency, 2021e). It is important to note that the data include both households and non-household sources. The calculated capture rates are presented in Table 1.1.

Table 1.1 Capture rates for different waste fractions in Ireland

	Residual waste composition (%)([b])	Residual waste composition (tonnes)([a])	Separately collected amounts (tonnes) ([b])	Materials in total MSW (tonnes)	Capture rates (%)
Reference year	2018	2018	2018		
Mixed municipal waste, total		1 768 000			
Paper and cardboard	19%	335 920	393 879	729 799	54 %
Metals	3%	53 040	21 033	74 073	28 %
Glass	2%	35 360	123 270	158 630	78 %
Plastic	15%	265 200	115 070	380 270	30 %
Bio-waste	23%	406 640	213 528	620 168	34 %
Textiles	14%	247 520	10 727	258 247	4 %
Wood	1%	17 680	60 597	78 277	77 %

([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 the Environmental Protection Agency (2021e)

([b]) Source: As reported in the EEA-ETC/WMGE questionnaire by the Environmental Protection Agency (2021e)

Capture rates in Ireland vary between 78 % for glass, and 4 % for textiles, evidencing an important potential for improving the separate collection rates.

2 Success and risk factors likely to influence future performance

2.1 Target for preparing for reuse and recycling of municipal waste

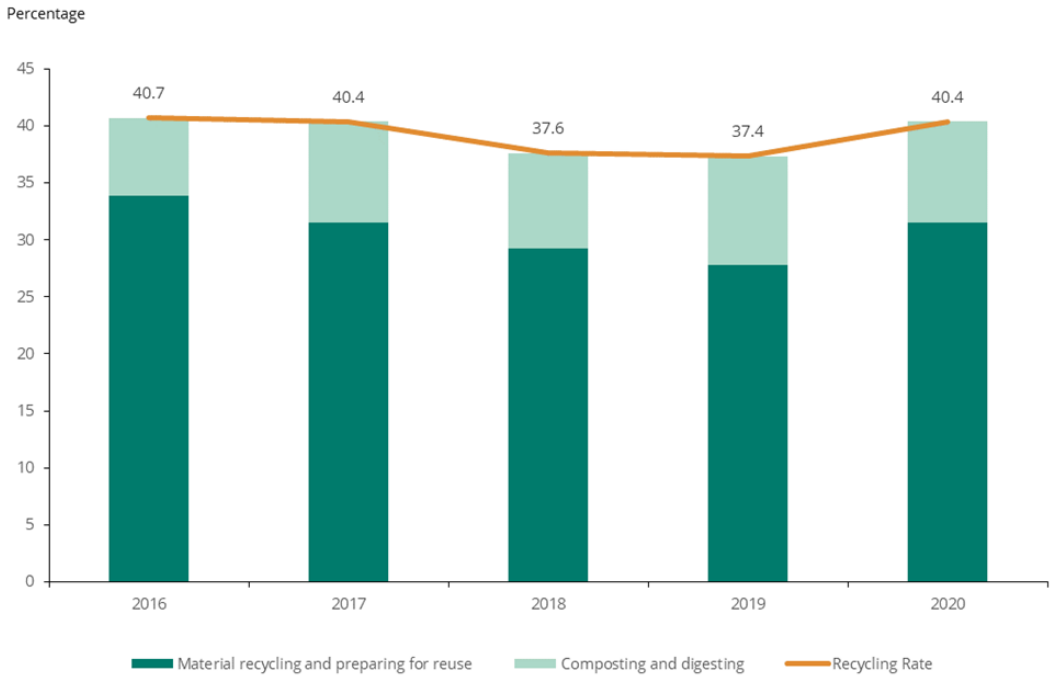
This chapter aims at assessing the prospects of Ireland to achieve the **55% preparing for reuse and recycling target** for municipal waste in 2025. For a detailed description of the methodology followed, the development of success/risk factors and their impact on recycling, please consult the methodology 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 Ireland has been quite stable over the past five years, and stands at 40.4 % in 2020 (Figure). In this analysis the recycling rate is calculated by dividing the summed amounts of recycling of materials and of composting/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 Ireland between 2016 and 2020, in percentage



Note: Break in time series for Material recycling and preparing for reuse in 2019. 2020 data are flagged as estimates

Source: Eurostat (2022a)

The actual distance to the target for the most recent data point is a key factor determining the likelihood of meeting/not meeting the target. The closer the Member State is to the target already, the more likely that the target will be met. For Ireland, the recycling rate is 40.4 % in 2020, which is 14.6 percentage points below the target of 55 %.

It is noted that in Ireland, incineration refers to energy recovery (R1) only. This R1 activity includes co-incineration of solid recovery fuel, burning of refuse derived fuel in municipal incinerators, use of wood as a fuel, and use of edible oils and fats in biodiesel processing (Eurostat, 2017). Irish authorities anticipate a decrease in plastic and paper recycling rates as a consequence of the exclusion from reporting of the corresponding volumes that are co-incinerated in cement kilns (Environmental Protection Agency, 2021e).

Irish authorities (Environmental Protection Agency, 2021e) have assessed how the new calculation rules for the recycling rates for municipal waste and packaging waste will affect the recycling rates. Until now, the calculation method 1[1] had been used by Irish authorities for reporting on WFD target compliance (Eunomia, 2018), putting Ireland's municipal waste recycling rate at 51 % in 2018 and 53 % in 2019 (Environmental Protection Agency, 2021d). However, the future WFD target reporting will use a calculation methodology that is more comparable with method 4[1] and the OECD/Eurostat Municipal Waste Indicator classification, therefore these data have been used in this assessment (Figure). It is expected that reported recycling rates may decrease by between 10 and 15% (relative), i.e. an absolute reduction from 38% to between 32 and 34% with the new calculation rules (Environmental Protection Agency, 2021e). A few other Member States have also provided quantified estimates indicating how the application of the new reporting rules would influence the recycling rate (compared to the data reported to Eurostat under the Joint Eurostat/OECD questionnaire), resulting in reductions between 3.8 and 13 percentage points, and on average 5.5-6.7 percentage points.

Therefore, while the precise effect of the new calculation method is still unsure, a conservative effect of a reduction by 5 percentage points is assumed for this assessment.

[1] Member States were allowed to choose one out of the four following calculation methods to show compliance with the 2020 target (European Union, 2011):

- Method 1: Recycling rate of paper, metal, plastic and glass household waste, in %=Recycled amount of paper, metal, plastic and glass household waste/Total generated amount of paper, metal, plastic and glass household waste
- Method 2: Recycling rate of household and similar waste, in %=Recycled amount of paper, metal, plastic and glass waste and other single waste streams from households or similar waste stream/Total generated amount of paper, metal, plastic and glass waste and other single waste streams from households or similar waste
- Method 3: Recycling rate of household waste in %=Recycled amount of household waste/Total household waste amounts excluding certain waste categories
- Method 4: Recycling rate of municipal waste, in %=Municipal waste recycled/Municipal waste generated

Summary result

Distance to target > 15 percentage points	Based on currently available data, Ireland's recycling rate is 40.4 %, 14.6 percentage points below the 2025 target. Considering however the impact of the new calculation rules, we assume a reduction with 5 percentage points for this assessment, resulting in an estimated recycling rate of 35.4 %, 19.6 percentage points below the target.
Robustness of the underlying information	The currently available data do not yet reflect the calculation rules applicable to the 2025 target. While the precise effect of the use of the new calculation method is still unsure, a relative reduction of 10 to 15 % is anticipated by Irish authorities. A recycling rate below the currently reported one would not change the assessment.

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

For Ireland, the recycling rate shows a decline between 2016 and 2018. Between 2019 and 2020 there is an increase in recycling rate of 3 percentage points, resulting in a recycling rate of 40.4 % in 2020 (Figure 2.1).

With the aim to positively influence the municipal waste recycling rates, Irish authorities have launched a website (https://www.mywaste.ie/) to provide information and support to the public and the waste industry, and organize regular meetings of established working groups integrated by State and regulatory authorities and industry bodies (Environmental Protection Agency, 2021e).

Summary result

RR < 45% and increase in last 5 years < 10 percentage points	The recycling rate has increased by 3 percentage points between 2019 and 2020. For Ireland the application of the new calculation rules would result in an estimated recycling rate of 35.4 %.
Robustness of the underlying information	There is a break in time series data between 2018 and 2019. The currently available data does not yet reflect the calculation rules applicable to the target.

2.1.2 Legal instruments

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

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

In September 2020, Ireland transposed the relevant EU Waste Directives into national legislation. Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste, has been transposed by Statutory Instrument No. 323 of 2020 (Minister for Communications, Climate Action and Environment, 2020c).

Summary result

Transposition with a delay of less than 12 months	Directive (EU) 2018/851 was transposed in September 2020, with a minor delay with respect to the deadline on the 5 July 2020
Robustness of the underlying information	Full information on the progress of the legislative process is publicly available. Credible information received from the European Commission (status as of 12 November 2021)

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

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

Under the Irish Waste Directive Regulations, responsibilities for meeting municipal solid waste recycling targets have been assigned to the Minister, Environmental Protection Agency and Local Authorities. Waste collection companies have the obligation to separately collect municipal waste. As part of the Waste Action Plan for a Circular Economy (Department of the Environment, Climate and Communications, 2021a), municipal waste recycling targets will be incorporated as conditions of waste collection permits.

To support the public and waste industry and to provide information on waste management, state authorities operate the MyWaste.ie website. In addition, regular meetings of established working groups are held between State and regulatory authorities and industry bodies.

The information on enforcement mechanisms that was provided by the Irish authorities mainly referred to packaging waste. Ireland has however revised its approach to waste enforcement in recent years. This includes the establishment of three Waste Enforcement Regional Lead Authorities (WERLAs) with responsibility for coordinating waste enforcement actions within regions; setting priorities and common objectives for waste enforcement; and ensuring consistent enforcement of waste. The work of the WERLAs is overseen by a National Steering Committee which includes representatives from a wide range of regulatory and law enforcement authorities. A 2018 European Council report on waste enforcement in Ireland (Directorate-General for Justice and Home Affairs, 2018) noted many examples of best practices to be shared with other Member States.

Summary result

Clearly defined responsibilities and enforcement mechanisms but no/weak support tools for meeting the recycling targets	At present, there are no defined consequences if the responsible entities do not take sufficient action to meet the non-packaging municipal waste targets, and support mechanisms are limited. In three regions, Waste Enforcement Regional Lead Authorities (WERLAs) have been established, with responsibility for coordinating waste enforcement actions within each region.
Robustness of the underlying information	Information provided by Irish authorities through the EEA-ETC/WMGE questionnaire and during the revision of drafts of the assessment.

2.1.3 Economic instruments

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

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

In Ireland, a landfill levy of EUR 75 per tonne of waste is in place since 2013. No bans on the landfilling of residual municipal waste or biodegradable waste have been informed (Environmental Protection Agency, 2021e). An exemption is in place for *stabilised waste arising from the biological treatment of the biodegradable fraction of municipal waste, to which fraction sewage sludge may have been added*

and which has undergone a separation process to remove plastic, metal or other non-organic material from the stabilised waste (Minister for Communications, Climate Action and Environment, 2019).

Under the European Union (Landfill) Regulations 2020 (Minister for Communications, Climate Action and Environment, 2020a), Ireland has committed to put in place the necessary measures to ensure that:

- from 2020 the biodegradable municipal waste going to landfills is reduced to below 35 % of the total amount (by weight) of biodegradable municipal waste produced in 1995;
- by 2035 the amount of municipal waste landfilled is reduced to 10 % or less of the total amount of municipal waste generated (by weight).

These measures might include additional taxes and/or bans for landfilling residual- or biodegradable waste.

There is a commitment in the Waste Action Plan for a Circular Economy (Department of Communications, Climate Action and Environment, 2020), which establishes Ireland's National Waste Policy 2020-2025, to introduce a waste recovery levy at EUR 5 per tonne. Additionally, the existing landfill levy of EUR 75 per tonne will be increased by EUR 5 per tonne of waste in tandem with the introduction of such waste recovery levy, as to maintain an incentivised price structure. This levy is already provided for in the Circular Economy, Waste Management (Amendment) and Minerals Development (Amendment) Bill 2022 which is due to be enacted by the end of June 2022. Another commitment is to ban textiles from the general waste bin, landfill and incineration.

Summary result

Taxes > 30 EUR/t([a])	In Ireland, a landfill levy of 75 EUR/t (corresponding to 55.1 EUR/t rescaled based on purchasing power parities) of waste is in place since 2013, without an escalator. The existing landfill levy will be increased by EUR 5 per tonne of waste, in tandem with the introduction of a waste recovery levy of an equal amount, as to maintain an incentivised price structure.
Robustness of the underlying information	The provided information is contained in publicly available legislation.

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

SRF MSWR-3.2: Taxes on municipal waste incineration

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

No incineration taxes are in place in Ireland yet (Environmental Protection Agency, 2021e), but the Circular Economy Bill 2021 (Department of the Environment, Climate and Communications, 2021a) projects progress to be made on this topic.

There is a commitment in the Waste Action Plan for a Circular Economy (Department of Communications, Climate Action and Environment, 2020), which establishes Ireland's National Waste Policy 2020-2025, to introduce a waste recovery levy at EUR 5 per tonne to be applied to, among other, the (co-)incineration of MSW. This levy is already provided for in the Circular Economy, Waste Management (Amendment) and Minerals Development (Amendment) Bill 2022 which is due to be enacted by the end of June 2022.

Summary result

No incineration taxes or taxes < 7 EUR/t	No incineration taxes are in place in Ireland. An incineration tax of EUR 5/t will be introduced in June 2022.
Robustness of the underlying information	Credible information provided by Irish authorities through the EEA-ETC/WMGE questionnaire.

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

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

In Ireland, all households with door-to-door collection are covered by PAYT charging systems. Different types of PAYT systems are used. Flat-rate fees for kerbside household waste collection have been phased out in the whole country in 2018. Thereto, the permits of all household waste collectors were amended by, among other measures, including the obligation of pricing structures for residual waste collection to contain a weight-based and/or per lift fee. Additionally, where fees are charged for the collection of recyclables, food waste and bio-waste, the fees should be lower than those applied for the collection of residual household waste.

A Household Waste Collection Price Monitoring Group (PMG) monitors the transition to a nation-wide implementation to PAYT collection systems. The monthly reports of the PMG can be found at gov.ie (Department of the Environment, Climate and Communications, 2021b). Currently eight different service plans are available in the companies that are monitored:

- e-tag;
- Per lift charge, including a weight allowance, plus per kg charge for excess weight above allowance;
- Service charge plus charge per lift per bin;
- Service charge plus charge per lift per bin plus per kg excess charge;
- Service charge plus per kg charge;
- Service charge plus weight band charge;
- Service charge, charge per lift per bin plus per kg weight charges
- Service charge, including a weight allowance, plus per kg charge for excess weight above allowance

(Environmental Protection Agency, 2021e)

Summary result

PAYT scheme fully rolled out (to at least 80% of the population)	In Ireland, 100 % of the population is covered by PAYT collection systems
Robustness of the underlying information	Credible information provided by Irish authorities through the EEA-ETC/WMGE questionnaire.

2.1.4 Separate collection system

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

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

For Ireland, according to the most recent data, the percentage of households living in cities is 43.08%, in towns and suburbs 22,01% and in rural areas 34.91% (Eurostat, 2021).

In Ireland, waste management planning is the responsibility of local authorities, as established under Part II of the Waste Management Act, 1996. The Regional Waste Management Plans that are currently in force, implement the national and EU waste policy, and address waste prevention, generation, collection, and treatment over the period 2015-2021. A new National Waste Management Plan is currently being developed by the Regional Waste Management Planning Offices (Environmental Protection Agency, 2021e). The new Plan, prepared in accordance with Directive 2018/851, is expected to be published for public consultation in quarter two of 2022 and the final Plan is expected to be adopted in quarter four of 2022 (EC, 2022).

Table gives an overview of the collection system in Ireland. The collection systems used in Ireland do not distinguish between packaging waste and non-packaging waste (Environmental Protection Agency, 2021e).

Table 2.1 Characterisation of the collection system in Ireland

	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 km^2)	Bring point (<5 per km^2)	Civic amenity site	Door-to-door - separate	Door-to-door - co-mingled	Bring point (>5 per km^2)	Bring point (<5 per km^2)	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
Paper and Cardboard		xx			x		xx			x		xx		x
Ferrous metals		xx			x		xx			x		xx		x
Aluminium		xx		x	x		xx		x	x		xx	x	x
Glass	x			xx	x	x			xx	x	x		xx	x
Plastic		xx			x		xx			x		xx		x
Bio-waste	xx				x	xx				x				x
Food														
Garden														
Textiles				xx	x				xx	x			xx	x
Wood					xx					xx				xx

	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
WEEE				xx	xx				xx	xx			xx	xx
Composite packaging		xx			x		xx			x		xx		x
Bulky waste	x				xx	x				xx	x			xx
Mattresses	x				xx	x				xx	x			xx
Household hazardous waste (eg paints, detergents)					xx					xx				xx

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

Source: Environmental Protection Agency (2021e)

Taking this into account, Ireland shows good national coverage with respect to highly convenient door-to-door collection systems for packaging and non-packaging of all types of materials, including glass and biowaste. Glass is mainly collected at bring points, that often also receive aluminium cans. Packaging consisting of ferrous metals, aluminium, plastic, paper & cardboard and composite materials are usually collected commingled. Except for households located in rural and semi-rural areas, bio-waste is collected door-to-door as a separate fraction. Nevertheless, in 2019, only 48 percent of Irish households have access to a dedicated bin for bio-waste, the so-called *brown bin* (Environmental Protection Agency, 2022a). This implies that a majority of Ireland's municipal bio-waste is not yet separately collected and recycled. In the whole country, all material fractions −including bio-waste, textiles and composite packaging−, can also be dropped off at civic amenity sites. Dedicated bring points have been installed for textiles. Civic amenity sites are the main receivers of wood, mattresses, household hazardous waste and bulky waste. The majority of WEEE is collected via retailers, with civic amenity sites the second preferred collection route for WEEE.

There is currently no quantified information available about the convenience and coverage of current separate collection systems for the different waste fractions.

Summary result

Paper and cardboard	A high share of the population is covered by high convenience collection services	Co-mingled door-to-door collection systems are used with high coverage across the country. Paper and cardboard can also be dropped off at civic amenity sites.
Metals	A high share of the population is covered by high convenience collection services	Co-mingled door-to-door collection systems are used with high coverage across the country. Ferrous metals and aluminium cans can also be dropped off at civic amenity sites. Aluminium cans are also received at low-density bring points.

Plastics	A high share of the population is covered by high convenience collection services	Co-mingled door-to-door collection systems are used with high coverage across the country. Plastics can also be dropped off at civic amenity sites. In September 2021, soft plastics were permitted to be collected in the mixed dry recyclable waste bin, as opposed to the residual waste bin.
Glass	A high share of the population is covered by high convenience collection services	Glass is mainly received at low-density bring points with good coverage across the country. Less frequently, door-to-door collection systems are in place for glass as a separate fraction. Glass can also be dropped off at civic amenity sites
Bio-waste	A medium share of the population is covered by high convenience collection services	Door-to-door separate collection systems for bio-waste are in place across the country, except for rural and semi-rural areas. Bio-waste can also be dropped off at civic amenity sites across the whole country.
Wood	A low share of the population is covered by high convenience collection services	Wood waste is mainly collected at civic amenity sites or via private skip hire, which is less convenient for citizens.
Textiles	A low share of the population is covered by high convenience collection services	Textile waste is mainly collected at low-density bring points. Textiles can also be dropped off at civic amenity sites across the whole country, and charity shops are also an important outlet for clothing suitable for re-use.
WEEE	Medium convenience collection services dominate	WEEE is collected both at low-density bring points (retailers) and civic amenity sites.
Robustness of the underlying information		Credible information received from the Irish 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

By the third quarter of 2022, Ireland plans to introduce Deposit Return Systems (DRS) for aluminium beverage cans and PET bottles up to 3 litres in size. The Waste Action Plan for a Circular Economy (Department of Communications, Climate Action and Environment, 2020), Ireland's National Waste Policy for the period 2020 to 2025, includes a number of measures aimed at improving waste sorting at source in high-rise buildings. Additionally, means will be examined to ensure segregated waste receptacles are provided by commercial premises for customers, among other measures.

A Food Waste Recycling Working Group has been established to progress actions to improve household food waste segregation and awareness in Ireland. Pilot initiatives have included roll out of a number of kitchen caddy packs that make it easier for householders to manage their food waste close to the source of generation, improve waste segregation and help reduce contamination (Government of Ireland, 2021).

There are plans in development to increase awareness among citizens in 2022 with the aim of positively impacting WEEE collections rates.

Summary result

Paper and cardboard	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
Metals	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	By Q3 of 2022, a DRS will be introduced for aluminium beverage cans.
Plastics	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	By Q3 of 2022, a DRS will be introduced for PET bottles up to 3 litres in size. In September 2021, soft plastics were permitted to be collected in the mixed dry recyclable bin, as opposed to the residual bin. It will be examined how segregated waste and recycling bins using uniform labelling could be provided on streets, and at public events and festivals (Department of Communications, Climate Action and Environment, 2020)
Glass	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
Bio-waste	There are plans to improve the collection service but unclear plan for implementation	Ireland's Waste Action Plan for a Circular Economy commits to expanding brown bin collection, and introduce segregation in commercial sector. A Food Waste Recycling Working Group has been established to progress actions to improve household food waste segregation and awareness in Ireland. A Food Waste Recycling Pilot Project has been published in 2020.
Wood	No firm plans to improve the convenience and coverage	
Textiles	There are plans to improve the collection service towards but unclear plan for implementation	Plans to formalise the Civic Amenity Structure in Ireland to improve textile collection are in the early stages of development. Textiles will be banned from the general waste bin (Department of Communications, Climate Action and Environment, 2020)
WEEE	No firm plans to improve the convenience and coverage	There are plans in development to increase awareness on WEEE collection among citizens.
Robustness of the underlying information		Information provided by the Irish authorities (Environmental Protection Agency, 2021e)

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 penalty 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.

Repak is the Irish EPR system in place for both household and commercial/industrial packaging. Repak is an environmental not-for-profit organisation, set up in 1997 to help member businesses meet their legal obligation to recycle the plastic, paper, metal, glass and wood packaging they place on the Irish market. Repak has over 3 400 members, whose fees fund household recycling bins, bottle banks, civic amenities and business back-door waste nationwide. (Repak, 2021b)

It has been required for collective EPR schemes to modulate the financial contributions paid by producers by 2023. This obligation is part of the Repak Plastic Packaging Recycling Strategy 2018-2030 (Repak, 2018). The first eco-modulated fees were introduced in 2021. They are material specific and applicable to non-recyclable plastic packaging. Other modulation criteria, such as durability, reusability etc., will be considered at a later stage. Fee modulation required producer inputs as to build an evidential basis in order to secure a fee structure with higher per tonne fees for those materials that bring higher costs at end-of-life. For 2021, the fee for recycled plastics (such as pots, trays, tubs, foils and bottles) was fixed at EUR 114.32 per tonne, compared to EUR 175 per tonne for non-recycled plastics

Repak has developed a packaging design guide (Repak, 2021c) in order to provide insights of the impact of design on recycling processes and to support members to improve packaging recyclability. The guide also contains the Repak's fee modulation categories for plastic groupings. An update on the eco-modulation fees has been published recently, outlining the priorities for 2021, which include the provision of support to Repak members adversely impacted by Covid-19, and the practical implementation of fee modulation and the net necessary cost, as from 1 July 2021, among other (Repak, 2021a).of

Summary result

Fee modulation meets less than two assessment criteria	The Irish PRO for packaging, Repak, has introduced fee modulation for plastic packaging, that meets the assessment criteria of recyclability.
Robustness of the underlying information	Credible information provided by Irish authorities (Environmental Protection Agency, 2021e) and from packaging PRO documents

2.1.6 Treatment capacity for bio-waste

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

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

The Irish EPA informs that only 48 % of Irish households had access to a dedicated bin for bio-waste, the so-called *brown bin* (Environmental Protection Agency, 2022a). This implies that a majority of Ireland's municipal bio-waste is not yet separately collected and recycled. Irish authorities have

decided to introduce measures to increase the quantity of municipal bio-waste collected and recycled in the coming years, especially in view of the requirement from the revised Waste Framework Directive (EU) 2018/851 for member states to implement separate collection of bio-waste from the end of 2023 onwards. In 2019, 295 000 tonnes of municipal bio-waste were accepted for composting or anaerobic digestion in Ireland. These figures do not include (i) home composting estimates, (ii) facilities which only treated their own waste, (iii) waste imported to Ireland for treatment, and (iv) organic fines, arising from the pre-treatment of residual waste, accepted for biostabilisation. The figure includes bio-waste that was transferred to facilities in Northern Ireland. Overall, almost one-third of Ireland's municipal bio-waste was exported to Northern Ireland for treatment in 2019. More favourable gate fees in Northern Ireland are attributed as the main driver for this trend. Of all bio-waste received for treatment, 55 % was composted rather than digested. Municipal bio-waste accounted for 56 % of all waste accepted for composting/anaerobic digestion in 2019 (528 000 tonnes), the rest corresponding to bio-waste from agriculture, waste management facilities and water treatment. (Environmental Protection Agency, 2021b)

Organic waste collected in the brown bin accounted for 10 % of all household waste managed in 2019 (159 000 tonnes). In 2018, still only 137 032 tonnes of bio-waste were separately collected from households in Ireland by the brown bin. An additional 76 496 tonnes of bio-waste were separately collected from non-household sources in 2018. Approximately 31 000 tonnes of this separately collected bio-waste was comprised of municipal waste that mainly originates from garden and park waste, and street cleaning residues.

Currently, about 34 % of the organic fraction of MSW generated in Ireland is separately collected. At the same time, bio-waste accounts for 23 % of the total volume of mixed residual waste collected in Ireland (2018 reference), which represents an additional 406 640 tonnes of bio-waste. (Environmental Protection Agency, 2021e)

The current capture rate of the total potential generation of bio-waste (food + garden) in Ireland is estimated to be about 34 % (Table 1.1). For food waste alone, the capture rate is only 8 % (Zero Waste Europe, 2020).

The total authorised capacity for composting and anaerobic digestion, in 2019, was 569 000 tonnes, not including home-composting (Environmental Protection Agency, 2022b). The Waste Action Plan for a Circular Economy (Department of Communications, Climate Action and Environment, 2020) includes the commitment to realise the Anaerobic Digestion (AD) and composting potential of the food waste resource. The Action Plan emphasises that AD and composting provide opportunities for regional development with benefits for communities through sales of locally generated energy and compost.

Summary result

Bio-waste treatment capacity below 80% of generated municipal bio-waste and no plans to extend capacity	In 2019, 528 000 tonnes of bio-waste were accepted for composting/digestion in Ireland, of which 56% or 295,000 tonnes corresponded to municipal bio-waste. In 2018, 213 528 tonnes of municipal bio-waste were reported to be separately collected from both households and non-household sources. With an authorised capacity of 569 000 tonnes, this indicates a spare capacity of 133 000 tonnes, that could be used to treat about 32% of the 406 640 tonnes of bio-waste that is currently being collected as part of the mixed MSW.
Robustness of the underlying information	Data on accepted volumes and capacities from official EPA websites. No firm plans to extend capacity were informed.

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.

Ireland has developed and implemented compost quality management and assurance schemes (EEA, 2020). The National Standard Authority of Ireland has published the Irish Standard (IS 441:2011) on compost, which '*specifies quality requirements for compost produced from source segregated, separately collected, biodegradable materials including biodegradable municipal waste'* (National Standard Authority of Ireland, 2011). A national Compost Quality Assurance Scheme (CQAS 441) is in place since 2012 (Certification Europe, 2012).

There are, however, no national end-of-waste criteria for compost and digestate derived from source-separated materials. Therefore, recently, a quality standard for digestate has been developed, together with an update for the current Irish standard on compost (IS 441:2011). The same study also recommends *a strategy for defining national end-of-waste criteria for compost and digestate*, compliant with a Quality Assurance Scheme that is monitored by a quality assurance organisation, by implementing either bio-waste ordinance legislation or a national fertilizer regulation. (Foster and Prasad, 2021)

Summary result

Legally binding national standards for compost/digestate quality in place, and quality management system in place	There is an Irish Standard (IS 441:2011) on compost, and a national Compost Quality Assurance Scheme (CQAS 441) is in place. The study *Development of Quality Standards for Compost and Digestate in Ireland* (Foster and Prasad, 2021) proposes to update the current standard on compost, to implement a quality standard for digestate, and to define national end-of-waste criteria for compost and digestate.
Robustness of the underlying information	Credible information from reliable and authorized sources.

2.2 Target for the recycling of packaging waste

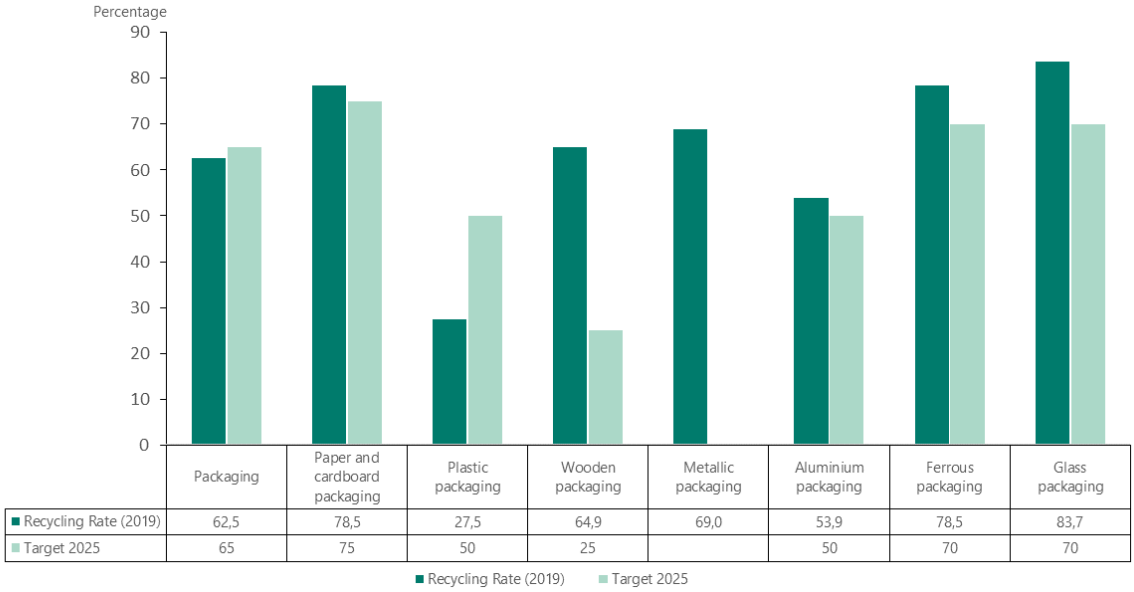
This chapter aims at assessing the prospects of Ireland to achieve the **65 % recycling target for packaging waste** in 2025 as well as the **material specific packaging waste recycling targets** (50 % of plastic; 25 % of wood; 70 % of ferrous metals; 50 % of aluminium; 70 % of glass; 75 % of paper and 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 Ireland to Eurostat in accordance with Commission Decision 2005/270/EC as last amended by the Commission Implementing Decision 2019/665 (EC, 2019), published in the dataset *Recycling rates of packaging waste for monitoring compliance with policy targets, by type of packaging [env_waspacr].* For 2019, Ireland applied the new calculation rules according to the Commission Implementing Decision 2019/665. The calculation points referred to in Article 6c(1)(a) are corrected for non-target materials, thus excluding rejected material of the recycling facilities. The performance of Ireland for 2019 is illustrated in Figure .

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



	Packaging	Paper and cardboard packaging	Plastic packaging	Wooden packaging	Metallic packaging	Aluminium packaging	Ferrous packaging	Glass packaging
Recycling Rate (2019)	62,5	78,5	27,5	64,9	69,0	53,9	78,5	83,7
Target 2025	65	75	50	25		50	70	70

Source: Eurostat (2022c), EU (2018)

In 2019, Ireland already exceeded the recycling targets for all packaging materials except plastic packaging. At a current recycling rate of 27.5% the distance-to-target for plastic packaging waste is 22.5 percentage points. Ireland uses waste analyses for determining packaging waste generated, as opposed to put-on-market data. This approach tends to overestimate the generated amounts compared to the method based on put-on-market data.

The Irish Extended Producer Responsibility Organization, Repak Ltd, is reported to engage with online retailers, making them accountable for the packaging they place on the Irish market. However, authorities admit there is a significant portion of overseas online retailers who continue to not contribute to the cost of recycling the packaging they place on the Irish market. Ireland's Programme for Government and the National Waste Action Plan for a Circular Economy confirm that self-compliance as an option under EPR will end in order to facilitate the mandatory introduction of EPR for all packaging producers and to give liability to all producers with respect to the eco-modulation of fees. (Environmental Protection Agency, 2021e).

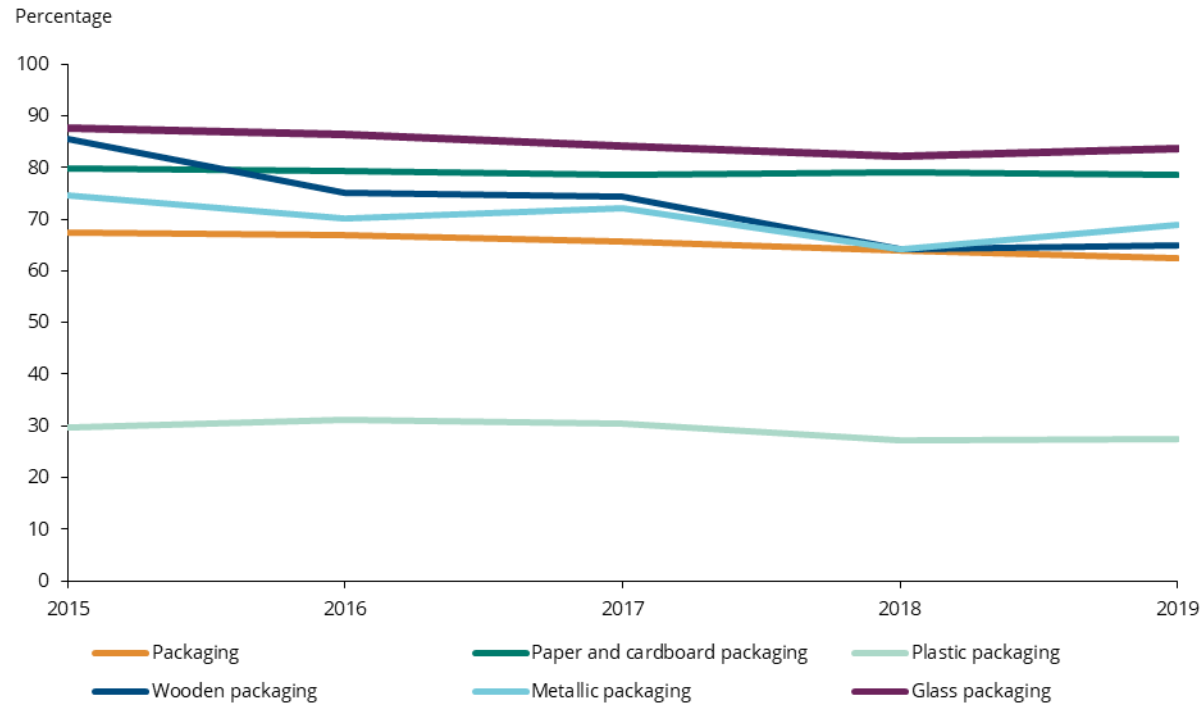
Summary result

Total packaging	< 5 percentage points below target	Ireland reports a recycling rate of 62.5 % applying the new calculation rules, 2.6 percentage points below the target.
Paper and cardboard packaging	Target exceeded	Ireland reports a recycling rate of 78.5 % applying the new calculation rules, 3.5 percentage points above the target.
Ferrous metals packaging	Target exceeded	Ireland reports a recycling rate of 78.5 % applying the new calculation rules, 8.5 percentage points above the target.
Aluminium packaging	Target exceeded	Ireland reports a recycling rate of 53.9 % applying the new calculation rules, 3.9 percentage points above the target.
Glass packaging	Target exceeded	Ireland reports a recycling rate of 83.7 % applying the new calculation rules, 13.7 percentage points above the target.
Plastics packaging	> 15 percentage points below target	Ireland reports a recycling rate of 27.5 % applying the new calculation rules, 22.5 percentage points below the target.
Wooden packaging	Target exceeded	Ireland reports a recycling rate of 64.9 % applying the new calculation rules, 39.9 percentage points above the target.
Robustness of the underlying information		The assessment is based on the 2019 packaging waste data. Ireland is one out of four member states that reported data according to the new calculation rules. The recycling rates are estimated based on estimations by the Irish authorities and published literature. The assessment may be considered robust. A best estimate of packaging waste generated in Ireland is obtained by combining information about packaging waste recovered with an estimate of packaging waste in residual waste that may be either sent for recovery or disposal. The accuracy of Irish statistical methods has improved significantly with the number of waste characterisation surveys available. Irish authorities use waste data to estimate generation figures and so free-riding on EPR obligations is captured (e.g. waste resulting from online sales) unlike countries that rely on placed on the market information (Environmental Protection Agency, 2021e).

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 Ireland are illustrated in Figure .

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



Note: Ireland reported separate data for aluminium and steel packaging for the first time in 2018. For paper and cardboard packaging and plastic packaging there is a break in time series in 2019.

Source: Eurostat (2022c)

In Ireland, packaging recycling rates for all materials have declined over the five-year period between 2015 and 2019. Marginal decreases are observed for paper and cardboard with a decline in recycling rate of 1.2 percentage points. The recycling rate plastics declined by 2.2 percentage points, for glass packaging by 3.9 percentage points and for metallic packaging by 5.6 percentage points. The recycling rate for wood has declined more severely by 20.5 percentage points. The decline of the wooden packaging recycling rate was significant between 2015 to 2016 and between 2017 to 2018. With this respect, it is to be noted that a bio-mass power plant in Northern Ireland started operations in December 2015, and that in the following year, another facility also increased the input of wood. Both factors led to a significant increase in 2016 in wooden packaging being sent to energy recovery instead of recycling. In 2017, the generation of wooden packaging waste increased, following a detailed survey of wood recycling and recovery at pallet merchants.

In 2018, a second municipal waste incinerator in Ireland reached full capacity, allowing for increased energy recovery. At the same time, a further decrease is observed of volumes of packaging waste sent for recycling. (Eurostat, 2020b).

Summary result

Total packaging	RR > 55%, and increase in last 5 years < 10 percentage points	The recycling rate decreased by 5.0 percentage points over the past five years and is estimated at 62.4 % applying already the new recycling rules (taking into accounts losses[2] in the recycling plants).
Paper and cardboard packaging	RR > 75%	The recycling rate decreased by 1.2 percentage points over the past five years and is estimated at 78.5 % applying already the new recycling rules (taking into accounts losses in the recycling plants).
Ferrous metals packaging	RR > 70%	The recycling rate increased by 8.5 percentage points over the past five years and is estimated at 78.5 % applying already the new recycling rules (taking into accounts losses in the recycling plants).
Aluminium packaging	RR > 50%	The recycling rate increased by 3.9 percentage points over the past five years and is estimated at 53.9 % applying already the new recycling rules (taking into accounts losses in the recycling plants).
Glass packaging	RR > 70%	The recycling rate decreased by 3.9 percentage points over the past five years and is estimated at 83.7 % applying already the new recycling rules (taking into accounts losses in the recycling plants).
Plastics packaging	RR < 40% and increase in last 5 years < 10 percentage points	The recycling rate decreased by 2.2 percentage points over the past five years and is estimated at 22.5 % applying already the new recycling rules (taking into accounts losses in the recycling plants).
Wooden packaging	RR > 25%	The recycling rate decreased by 20.5 percentage points over the past five years and is estimated at 64.9 % applying already the new recycling rules (taking into accounts losses in the recycling plants).
Robustness of the underlying information		For paper and cardboard packaging and plastic packaging there is a break in time series in 2019. The five-year trend data are only available for total metals, not for aluminium and steel packaging separately. As the targets are already reached for both packaging waste streams the trend has no impact on the calculation of this SRF.

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.

[2] For other packaging, a loss of 10 % is assumed for the calculation.

Ireland has transposed Directive (EU) 2018/852 amending directive 1994/62/EC on packaging and packaging waste. The corresponding law, Statutory Instrument No. 322/2020, was published in the 'Iris Oifigiúl', number 70 of 2020, on 1 September, almost 2 months after the deadline of 5 July 2020. (Minister for Communications, Climate Action and Environment, 2020b)

Summary result

Transposition with a delay of less than 12 months	Directive (EU) 2018/852 was transposed in September 2020, with a minor delay with respect to the deadline on the 5 July 2020
Robustness of the underlying information	Full information on the progress of the legislative process is publicly available. Credible information received from the European Commission (status as of 12 November 2021)

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

The national legislation (Office of the Attorney General, 2021) places obligations on packaging producers for achieving the packaging waste targets. Repak Ltd are approved to act as the national packaging compliance scheme for producers who choose to fulfil their packaging EPR obligations collectively (Minister for the Environment, Community and Local Government, 2014). The terms and conditions of the approval include target attainment, success factors and corrective actions, are laid out in an Approval Document.

Implementation and enforcement of the Packaging Regulations is the responsibility of the Local Authority. The Regulations provide for the prosecution of an offence and for the penalties associated with such a prosecution. Offenders are liable on summary conviction to fines, imprisonment, or both. More details of fixed payment notices for breaches of certain provisions of the Packaging Regulations are contained in specific legislation (Minister for the Environment, Community and Local Government, 2016).

In the event of breaches of material conditions, the granted Repak Ltd approval can be revoked by the Department of Environment, Climate and Communications (DECC), or corrective actions, such as increased spending by Repak on education and awareness and additional training for key personnel and directors, can be imposed. The Approval document also contains Success Factors that are used to measure the performance of Repak during the period of the approval. These factors are considered upon receipt of any subsequent application for re-approval. (Environmental Protection Agency, 2021e)

Summary result

Clearly defined responsibilities and enforcement mechanisms but no/weak support tools for meeting the recycling targets	Clearly defined responsibilities and enforcement mechanisms are in place in Ireland, established in the Statutory Instruments (S.I.) 282 of 2014, 373 of 2016 and 322 of 2020. However, there are no support tools for improving recycling performance
Robustness of the underlying information	Legal texts are publicly available. Official PRO website information.

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, Ireland has a national landfill levy of EUR 75 per tonne of waste is in place since 2013, without escalator. New measures to decrease the landfilling of (biodegradable) municipal waste are being developed, that might include additional taxes and/or bans.

Summary result

Taxes > 30 EUR/t([a])	In Ireland, a landfill levy of 75 EUR/t (corresponding to 55.2 EUR/t rescaled based on purchasing power parities) of waste is in place since 2013, without escalator.
Robustness of the underlying information	The provided information is contained in publicly available legislation

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

SRF P-3.2: Taxes on municipal waste incineration

Taxes on incineration of residual waste can help to discourage strong reliance on residual waste treatment and thus support recycling. As described in Section 2.1.3 in more detail, no incineration taxes are in place in Ireland. There is, however, a commitment in the Waste Action Plan for a Circular Economy (Department of Communications, Climate Action and Environment, 2020) to introduce a *waste recovery levy* at EUR 5 per tonne to be applied to, among other, the (co-)incineration of MSW. The corresponding Bill is due to be enacted in June 2022.

Summary result

No incineration taxes	No incineration taxes are in place in Ireland. An incineration levy < 7 EUR/t will be introduced in June 2022.
Robustness of the underlying information	Credible information received through the EEA-ETC/WMGE questionnaire

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, Ireland has established a national levy of EUR 0.22 per plastic bag, also known as the Environmental Levy on Plastic Bags or the E-Levy on Plastic Bags (Revenue, 2021).

There is a commitment in the national waste policy document Waste Action Plan for a Circular Economy (Department of Communications, Climate Action and Environment, 2020) to introduce new environmental levies on single-use disposable items, such as coffee cups and food packaging and containers, where more sustainable alternatives are available and affordable. The Circular Economy, Waste Management (Amendment) and Minerals Development (Amendment) Bill 2022 will give the Minister for the Environment, Climate and Communications the power to introduce such levies, and in due course to prohibit the placing on the market of these products. The Bill is currently before Parliament and is due to be enacted by end June 2022. The first environmental levy, on single use hot drinks cups, is due to be introduced before the end of 2022. Furthermore, as part of the implementation of the EU Circular Economy Action Plan the introduction of a virgin plastic levy is being considered. (Environmental Protection Agency, 2021e)

Summary result

No packaging taxes	Ireland applies taxes for plastic carrier bags only, excluding other packaging forms and materials. Thus, this tax will not have an impact on reducing total packaging waste generation, influencing the choice of packaging materials, or encouraging recyclability and eco-design. Currently, Ireland only has a levy on plastic bags, of EUR 0.22 per bag. New environmental levies on single-use disposable items, such as coffee cups and food packaging and containers are foreseen to be introduced from the end of 2022.
Robustness of the underlying information	Credible information received from the Irish authorities through the EEA-ETC/WMGE questionnaire and from the official tax authority website.

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.

Irish authorities have indicated that the whole population is covered by PAYT collection systems. No information was provided on PAYT systems in place that specifically target packaging waste. Nevertheless, the revised permit conditions state that the fee that is charged for the collection of recyclable waste shall be lower than the fees applied for the collection of residual household waste. (Environmental Protection Agency, 2021e)

Summary result

PAYT scheme fully rolled out (to at least 80% of the population)	In Ireland, 100 % of the population is covered by PAYT collection systems
Robustness of the underlying information	Credible information received 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.

No DRS is currently in place in Ireland. However, a producer-led and -funded DRS will be introduced in 2022, which will collect PET bottles up to 3 litres in size, and aluminium beverage cans. (Environmental Protection Agency, 2021e)

Summary result

Aluminium drink cans	No DRS for drink cans	From 2022, a new DRS will cover aluminium beverage cans
Glass drink bottles	No DRS for drink bottles	No DRS systems are in place in Ireland
Plastic drink bottles	No DRS for drink bottles	From 2022, a new DRS will cover PET bottles up to 3 litres in size
Plastic crates	No DRS for plastic crates	No DRS systems are in place in Ireland
Wooden packaging	No DRS for wooden packaging	No DRS systems are in place in Ireland
Robustness of the underlying information		Credible information received from the Irish 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.

From the information provided by the Irish authorities (Environmental Protection Agency, 2021e), it is concluded that Ireland shows good national coverage with respect to highly convenient door-to-door collection systems for packaging of all types of materials. Packaging glass is, however, mainly collected at bring points that often also receive aluminium cans. Packaging consisting of ferrous metals, aluminium, plastic and composite materials are usually collected co-mingled. In the whole country, all material packaging (including composite packaging), can also be dropped off at civic amenity sites. It is noted that the collection systems used in Ireland do not distinguish between packaging waste and non-packaging waste.

Summary result

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

Ferrous metals packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	The whole population of Ireland is covered by high convenience collection services
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household ferrous metals packaging waste	In Ireland, separation at source is mandatory for non-household ferrous metals packaging waste
Aluminium packaging	**Packaging waste from households** A high share of the population is covered by high convenience collection services	The whole population of Ireland is covered by high convenience collection services
Glass packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	The whole population of Ireland is covered by high convenience collection services
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household glass packaging waste	In Ireland, separation at source is mandatory for non-household glass packaging waste
Plastics packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	The whole population of Ireland is covered by high convenience collection services
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household plastic packaging waste	In Ireland, separation at source is mandatory for non-household ferrous metals packaging waste
Wooden packaging	**Packaging waste from non-household sources** Separation at source is mandatory for non-household wooden packaging waste	In Ireland, separation at source is mandatory for non-household wooden packaging waste
Robustness of the underlying information		Credible information received from the Irish authorities through the EEA-ETC/WMGE questionnaire

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

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

Concrete plans are needed to improve the convenience and coverage of separate collection. This SRF is only relevant for MS and materials that do not score 'green' in SRF P-4.1. The assessment is done on a material basis, and summing up the scores of the different materials according to their average share in packaging waste[3]. Again, the material specific assessment considers packaging waste from both household and non-household sources.

In this respect, no firm plans to improve the type and coverage of separate collection for packaging waste, with clear responsible entities and defined targets and timeline, were informed by the authorities (Environmental Protection Agency, 2021e).

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

Summary result

Paper and cardboard packaging	**1. Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source)	
Ferrous metals packaging	**1. Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source)	
Aluminium packaging	**Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	By Q3 of 2022, a DRS will be introduced for aluminium beverage cans
Glass packaging	**1. Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source)	
Plastics packaging	**1. Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	By Q3 of 2022, a DRS will be introduced for PET bottles up to 3 litres in size. In September 2021, soft plastics were permitted to be collected in the mixed dry recyclable bin, as opposed to the residual bin It will be examined how segregated waste and recycling bins using uniform labelling could be provided on street, and at public events and festivals (Department of Communications, Climate Action and Environment, 2020)
	2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source)	
Wooden packaging	**Packaging waste from non-household sources** N/A (for countries already having mandatory separation at source)	
Robustness of the underlying information		Credible information received through the EEA-ETC/WMGE questionnaire

2.2.5 Extended producer responsibility (EPR) and similar schemes

SRF P-5.1: Coverage of EPR schemes

Repak is the Irish EPR system in place for both household and commercial/industrial packaging. Repak is an environmental not-for-profit organisation, set up in 1997 to help Member businesses meet their legal obligation to recycle the plastic, paper, metal, glass and wood packaging they place on the Irish market. Repak has over 3 400 Members, whose fees fund household recycling bins, bottle banks, civic amenities and business back-door waste nationwide. (Repak, 2021b)

Summary result

All main packaging fractions([a]) are covered by EPR schemes, covering household and non-household packaging	In Ireland, Repak Ltd act as the national packaging compliance scheme for producers who choose to fulfil collectively their packaging EPR obligations with respect to plastic, paper, metal, glass and wood packaging.
Robustness of the underlying information	Information was received from the Irish authorities in response to the EEA and ETC/WMGE questionnaire.

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

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

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

In Ireland, basic fee modulation, i.e. different fees for the main packaging material groups, is a long-standing practice. The first eco-modulated fees were introduced for plastic and composite packaging in 2021. The fees for non-recycled plastics and composites are adjusted in a phased basis. From 1 July 2021, fees for non-recyclable plastic increased to EUR 175 per tonne. Further increase will come into effect in 2022 reaching the current 80 % net necessary cost estimation of EUR 271 per tonne by 2023. Fees are subject to annual approval by the Board of Repak. (Repak, 2021d)

Summary result

Fee modulation meets less than two assessment criteria	The Irish PRO for packaging, Repak, has introduced fee modulation for plastic packaging in 2021, that meets the assessment criteria of recyclability
Robustness of the underlying information	Credible information provided by Irish authorities (Environmental Protection Agency, 2021e) and from packaging PRO documents

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	Ireland has an EPR scheme in place covering household and non-household paper and cardboard packaging, but with no or only basic fee modulation
SRF P-5.3.2 EPR scheme for Ferrous metals packaging waste	EPR scheme covering household and non-household packaging	Ireland has an EPR scheme in place covering household and non-household metal packaging, but with no or only basic fee modulation.
SRF P-5.3.3 EPR scheme for Aluminium packaging waste	EPR scheme covering household and non-household packaging	
SRF P-5.3.4 EPR scheme for Glass packaging waste	EPR scheme covering household and non-household packaging	Ireland has an EPR scheme in place covering household and non-household glass packaging, but with no or only basic fee modulation.
SRF P-5.3.5 EPR scheme for Plastic packaging waste	EPR scheme with fee modulation meeting less than two assessment criteria	Ireland has an EPR scheme in place covering household and non-household plastic packaging, with a fee modulation that meets the assessment criteria of recyclability.
SRF P-5.3.6 EPR scheme for Wooden packaging waste	EPR scheme covering all non-household packaging	In Ireland, separation at source is mandatory for all non-household wooden packaging waste.
Robustness of the underlying information		Credible information provided by Irish authorities and from packaging PRO documents

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 Ireland was 22.5 % in 2020 (calculated based on (Eurostat, 2022a)).

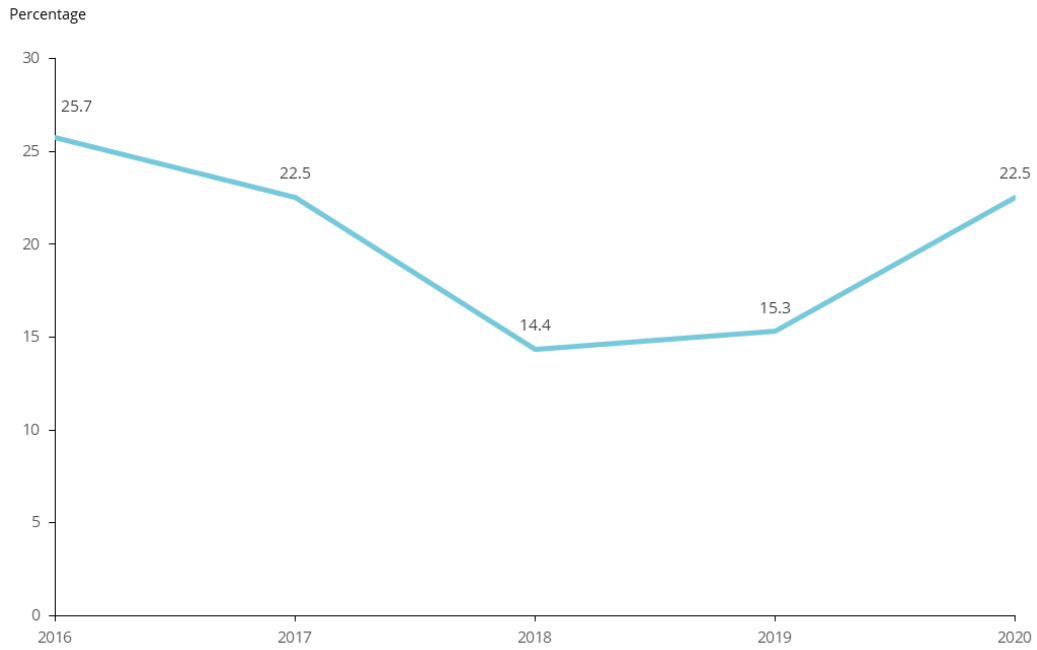
Summary result

Distance to target 10 – 20 percentage points	Based on currently available data, Ireland's landfill rate lies at 22.5 %, so the distance to the 2035 target is 12.5 percentage points.
Robustness of the underlying information	The data are derived from Eurostat and are considered to be robust. However, the reported landfill rate might increase once the new calculation rules laid down in the Commission Implementing Decision (EU) 2019/1885 are 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

The overall landfilling rate in Ireland has dropped since 2016, when more than a quarter of the total generated waste volume was landfilled (Figure). In 2017, a second waste incineration plant started operation in Ireland, allowing for a sharp decline in the amount of municipal solid waste going to landfill, from 25.7 % in 2016 to 14.4 % in 2018. The new plant currently produces 60 megawatts of electricity, from the incineration of 600 000 tonnes of waste. Dublin City Council has made an application to increase the waste capacity at this facility by an additional 90 000 tonnes (Kilraine, 2021). The corresponding planning permission was granted in December 2021, for the increased capacity of 690 000 tonnes per year. However, as of 2019, the amount of municipal solid waste going to landfill has significantly increased again to 22.5 % in 2020.

Figure 2.4 Landfilling in Ireland between 2016 and 2020, in percentage



Source: Eurostat (2022a)

Note: 2020 data are flagged as estimates

Summary result

Landfill rate in 2020 < 25%, and decrease in last 5 years < 10 percentage points	Over the past five years, the distance to target only reduced with 3.2 percentage points, due to an increase in landfill rate in 2019 and 2020.
Robustness of the underlying information	The data is derived from Eurostat and is considered to be robust. However, the reported landfill rate might increase once the new calculation rules laid down in the Commission Implementing Decision (EU) 2019/1885 will be applied. Based on the available information, it is currently not possible to quantify the impact of the new calculation rules on the landfill rate.

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

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

Under the European Union (Landfill) Regulations 2020 (Minister for Communications, Climate Action and Environment, 2020a) Ireland has committed to putting in place the necessary measures to ensure that:

i. from 2020 the biodegradable municipal waste going to landfills is reduced to below 35 % of the total amount (by weight) of biodegradable municipal waste produced in 1995
and
ii. by 2035 the amount of municipal waste landfilled is reduced to 10 % or less of the total amount of municipal waste generated (by weight).

In 1995, 1.3 million tonnes of biodegradable municipal waste were landfilled in Ireland. In 2020, Ireland reported still 189 943 tonnes of biodegradable municipal waste disposed, equivalent to 16 % of the 1995 figure. In 2021, that number further decreased to 109 384 tonnes of biodegradable municipal waste landfilled, equivalent to 9 % of the 1995 figure. (Environmental Protection Agency, 2021a)

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	In 2020, 16 % of the 1995 amount of biodegradable waste was landfilled in Ireland, well below the 35 % target. In 2021, that number further reduced to only 9 % of the amount of BMW landfilled in 1995.
Robustness of the underlying information	National waste authority's website information.

3 Conclusion

This risk assessment indicates whether Ireland 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 Ireland, only the SRFs relevant to Ireland are taken into account to define the maximum score. Ireland 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

31% **of maximum score**	Based on the provided information and the analysis done, it can be concluded that **Ireland is at risk for not meeting the MSW recycling target in 2025**.
Current situation and past trends:	Based on currently available data, Ireland's recycling rate is 40.4 %, so the distance to the 2025 target is 14.6 percentage points. However, if a reducing effect by the new reporting rules of 5 percentage points is assumed, this would increase the distance to target to 19.6 percentage points. The recycling rate has increased by 3 percentage points between 2019 and 2020. For Ireland the application of the new calculation rules would result in an estimated recycling rate of 35.4 %. When the new calculation method is applied, the recycling rate is expected to fall by at least 5 percentage points, which will require even more efforts for Ireland to achieve the target.
Legal instruments:	The WFD was transposed into national law with a delay of less than 12 months. At present, there are no defined consequences if the responsible entities do not take sufficient action to meet the non-packaging municipal waste targets, and support tools are limited. In three regions, Waste Enforcement Regional Lead Authorities (WERLAs) have been established, with responsibility for coordinating waste enforcement actions within each region.

Economic instruments:	In Ireland, a landfill levy of 75 EUR/t of waste is in place since 2013, without an escalator. An incineration tax of 5 EUR/t will be introduced in June 2022. 100 % of the population is already covered by PAYT collection systems.
Separate collection systems:	For paper and cardboard, metals and plastics, convenient co-mingled door-to-door collection systems are used with high coverage across the country. However, with respect to bio-waste, in 2019, only 48 % of Irish households had access to a dedicated bin, the so-called brown bin. This implies that a majority of Ireland's municipal bio-waste is not yet separately collected and recycled. Textiles and wood are generally collected at civic amenity sites and low-density bring-points. The majority of WEEE is collected via retailers. Deposit Return Systems (DRS) for aluminium beverage cans and PET bottles are to be introduced in 2022, but no other firm plans to improve the type and coverage of separate collection for the different household waste fractions were indicated. Textiles will be banned from the general waste bin in the near future.
Extended producer responsibility:	An EPR system is in place for plastic, paper/cardboard, metal, glass and wood packaging placed on the Irish market, and has introduced fee modulation for plastic packaging, that meets the assessment criteria of recyclability only.
Bio-waste treatment capacity and quality management:	At present, about 34 % of the organic fraction of MSW generated in Ireland is separately collected. However, bio-waste accounts for 23 % of the total volume of mixed residual waste collected in Ireland, and spare capacity could treat only about 20% of the bio-waste currently within the mixed MSW. There are legally binding standards for compost/digestate quality in place as well as a quality management system.

Prospects for meeting the recycling target for packaging waste

69% **of maximum score**	Based on the provided information and the analysis done, it is concluded that Ireland is **not at risk for not meeting the 65 % recycling target for packaging waste in 2025.**	
73% of maximum score	Paper and cardboard	Not at Risk
73% of maximum score	Ferrous metals packaging	Not at Risk
69% of maximum score	Aluminium packaging	Not at Risk
69% of maximum score	Glass packaging	Not at Risk
26% of maximum score	Plastics packaging	At Risk
72% of maximum score	Wooden packaging	Not at Risk
Current situation and past trends:	The total packaging recycling rate in Ireland in 2019 was only 2.6 percentage points below the 2025 target, applying the new calculation rules. Only the recycling rate for plastics is more than 15 percentage points below the target. Packaging recycling rates for all materials have declined over the five-year period between 2015 and 2019.	
Legal instruments:	Directive (EU) 2018/852 was transposed in September 2020, with a minor delay. Clearly defined responsibilities and enforcement mechanisms are in place, however, there are no support tools for improving recycling performance.	
Economic instruments:	Currently, Ireland only has a levy on plastic bags. New environmental levies on single-use disposable items, such as coffee cups and food packaging and containers are foreseen to be introduced from the end of 2022 There is a landfill tax in place of > 30 EUR/t, but without escalator. An incineration levy will be introduced in June 2022. There are near-term plans to introduce a DRS.	
Separate collection systems:	The whole population is covered by high convenience co-mingled collection services for most packaging materials. Separation at source is mandatory for non-household packaging.	
Extended producer responsibility:	EPR schemes cover both household and non-household packaging. A first fee modulation, for plastic packaging, was introduced in 2021, meeting the assessment criteria of recyclability (only). It is required for EPR schemes to further modulate the contributions paid by producers by 2023.	

3.2 Prospects of meeting the landfill of municipal waste target

57% **of maximum score**	Based on the provided information and the analysis done, it can be concluded that Ireland 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:	Based on currently available data, Ireland's landfill rate lies at 22.5 %, so the distance to the 2035 target is 12.5 percentage points. The distance to target has decreased only by 3.2 percentage points since 2014.
Diversion of biodegradable municipal waste from landfill:	In 2020, only 16 % of the amount of biodegradable municipal waste landfilled in 1995 was still landfilled in Ireland. In 2021, that further decreased to only 9 %.

List of abbreviations

Abbreviation	Name
AD	Anaerobic digestion
DRS	Deposit Return System
EC	European Commission
EEA	European Environment Agency
Eionet	European Environmental Information and Observation Network
EPR	Extended Producer Responsibility
ETC/CE	European Topic Centre on Circular Economy and resource use
ETC/WMGE	European Topic Centre on Waste and Materials in a Green Economy
MBT	Mechanical biological treatment
MSW	Municipal solid waste
MS	Member state
MSW	Municipal solid waste
PAYT	Pay-as-you-throw
PET	Polyethylene terephthalate
PMG	Price Monitoring Group
PPWD	Packaging and Packaging Waste Directive
PRO	Producer Responsibility Organisation
SRF	Success and Risk Factor
WEEE	Waste Electronic and Electric Equipment
WERLAs	Waste Enforcement Regional Lead Authorities
WFD	Waste Framework Directive

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Annex 1 Detailed scoring of success and risk factors

Assessment sheet - Recycling target for municipal waste

MS Ireland

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
MSWR-1.1	Distance to target	Distance to target > 15 percentage points or no data reported	5	0
MSWR-1.2	Past trends in municipal solid waste recycling rate	RR < 45% and increase in last 5 years < 10 percentage points	1	0
Legal instruments				
MSWR-2.1	Timely transposition of the revised WFD into national law	Transposition with a delay of less than 12 months	1	1
MSWR-2.2	Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms	Clearly defined responsibilities 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	Yes, taxes > 30 EUR/t*	1	1
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	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.23	0
	Metals	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.04	0
	Plastics	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.14	0
	Glass	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.09	0
	Bio-waste	There are plans to improve the collection service but unclear plan for implementation	0.42	0.42
	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 treatment capacity below 80% of generated municipal bio-waste and no plans to extend capacity, or no capacity information available	1	0
MSWR-6.2	Legally binding national standards and Quality Management System for compost/digistate	Legally binding national standards for compost/digestate quality in place, and quality management system in place	1	2
			Total score	**10.33**
			Maximum score	33.00
				31%

Assessment sheet - Recycling target for packaging waste

MS Ireland

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
P-1.1	Distance to target - Overall packaging	< 5 percentage points below target, or target exceeded	5	10
	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 < 40% and increase in last 5 years < 10 percentage points	1	0
	Past trends in wooden packaging recycling	RR > 20% and increase in last 5 years > 5 percentage points, or RR > 15% and increase in last 5 years > 10 %, or RR > 25%	1	2
Legal instruments				
P-2.1	Timely transposition of the revised Packaging and Packaging Waste Directive into national law	Transposition with a delay of less than 12months	1	1
P-2.2	Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms	Clearly defined responsibilities 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				
P-3.1	Taxes and/or ban for landfilling residual or biodegradable waste	Taxes > 30 EUR/t*	1	1
P-3.2	Taxes on municipal waste incineration	No incineration taxes or taxes < 7 EUR/t*	1	0
P-3.3	Packaging taxes	No packaging taxes	1	0
P-3.4	Pay-as-you-throw (PAYT) system	PAYT scheme fully rolled out (to at least 80% of the population) OR Implemented in some regions / municipalities (50-80% covered) and firm plans for rolling out to at least 80% of the population	1	2
P-3.5	Deposit-return systems for aluminium drink cans	No or voluntary DRS for some drink cans	1	0
	Deposit-return systems for glass drink bottles	No or voluntary DRS for some drink bottles	1	0
	Deposit-return systems plastic drink bottles	No or voluntary DRS for some drink bottles	1	0
	Deposit-return systems for plastic crates	No or voluntary DRS for some plastic crates	1	0
	Deposit-return systems for wooden packaging	No or voluntary DRS for some wooden packaging	1	0

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

	Plastics packaging (household)	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.5	0
	Plastics packaging (non-household)	N/A (for countries already having mandatory sorting at source)	0.5	0
	Wooden packaging	N/A (for countries already having mandatory sorting at source)	1	0
Extended producer responsibility (EPR) and similar schemes				
P-5.1	Coverage of EPR schemes	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	**22.00**
Maximum score	32.00
	69%

Paper and cardboard recycling target

Total score	**22.00**
Maximum score	30.00
	73%

Ferrous metals packaging recycling target

Total score	**22.00**
Maximum score	30.00
	73%

Aluminium packaging recycling target

Total score	**22.00**
Maximum score	32.00

69%

Glass packaging recycling target

Total score	**22.00**
Maximum score	32.00

69%

Plastics packaging recycling target

Total score	**9.00**
Maximum score	34.00

26%

Wooden packaging recycling target

Total score	**23.00**
Maximum score	32.00

72%

Assessment sheet - Target for landfilling of municipal waste

MS Ireland

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
LF-1.1	Distance to target	Distance to target 10 – 20 percentage points	5	5
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 > 25% and decrease in last 5 years > 15 percentage points	1	1
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	**8.00**
			Maximum score	14.00
				57%