Country profile

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

Netherlands

June 2022

European Environment Agency

Contents

Acknowledgements

This draft assessment has been 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 Rijkswaterstaat (RWS) to a questionnaire developed by the EEA and ETC/WMGE. The EEA and ETC/CE would like to thank the Dutch 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 the Netherlands. 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 the Netherlands 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 the Netherlands 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 the Netherlands to achieve the overall packaging waste and specific packaging materials' recycling targets for 2025. Chapter 2.3 examines the prospects for the Netherlands 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

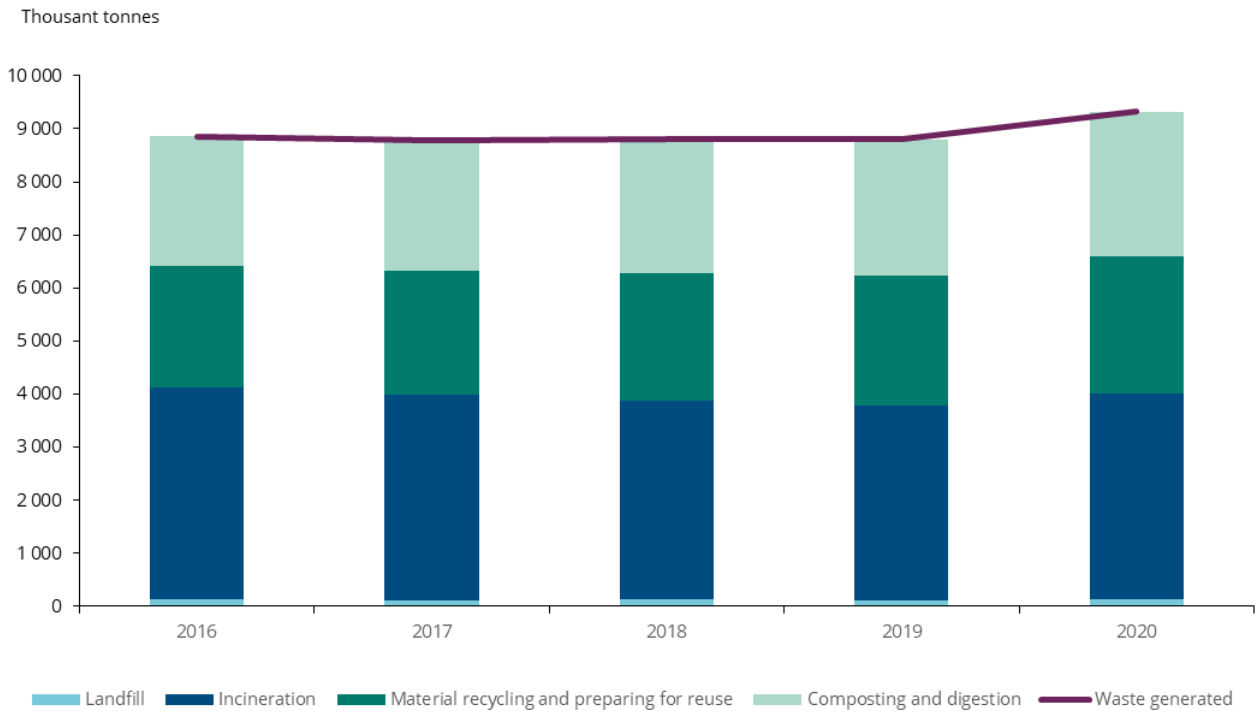
The Netherlands is a frontrunner in recycling in Europe, having managed over the last years to divert more than half of the municipal solid waste (MSW) generated to recycling. A landfill ban covers numerous waste streams (materials) and a disposal tax incentivises recycling.

The National Waste Management Plan (NWMP) introduced a new target for the collection of household waste in 2020. At least 75 % should be separately collected, with a maximum of 100 kg residual household waste generated per person per year (ETC/WMGE, 2016). The latter target corresponds to around 20 % municipal waste generated, based on 2018 waste generation data, which means that the two targets combined, take into account potential increase in waste generation and work complementarily.

The Netherlands generated a stable amount of municipal waste during the period 2016-2019 of almost 9 million tonnes. However, in 2020 the total amount increased by 5.8 %, bringing it up to 9.3 million tonnes (Figure 1.1). This corresponds to 534 kg/cap in 2020, which is above the (estimated) EU average of 505 kg/cap and a significant increase compared to 2019. The increase in 2020 was a result of the COVID situation: working at home, no visits of restaurants and cleaning up the barns and attics (Rijkswaterstaat, 2022b).

The country has a high level of incineration, which has been slowly decreasing the past years and stood at 41.8 % in 2020. The Netherlands also has a high and slowly increasing recycling rate of 56.8 % in 2020, and a minimal landfilling rate of 1.4% which has been stable during the period 2016-2020.

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



Source: Eurostat (2022a)

Legal Framework

In August 2020, The Netherlands was still in the process of transposing the EU Waste Directives. Most of the Directive (EU) 2018/850 content has become part of the central environmental law (Wet Milieubeheer), the Dutch National Waste Management Plan and the Dutch Action Plan to implement a circular economy by 2050. Currently, the Dutch National Waste Prevention Plan, as well as the National Waste Management Plan, is being updated because of the changes in the European Waste Framework Directive that came into force on 5 July 2020 (EEB, 2020).

In order to divert waste from landfill and incineration, the country has implemented an incineration and landfilling tax for companies. In both cases, the amounts to cover the taxes are 32.63 EUR/t of waste for 2020 (Belastingsdienst, 2022). In case of municipality waste, every household is required to pay a waste tax. The amount of tax differs for each municipality. The reason for this tax is to divert waste from landfill and incineration, but in addition it is to pay for the gathering, sorting and processing of waste by the municipality (Vang-hha, 2022). For commercial as well as for household waste, it is a requirement to sort waste into categories that can be easily recycled, such as glass, paper or plastics. In addition, the Netherlands prohibits sending waste to a landfill site when there is a good recycling option available. These prohibitions are laid down in the *Besluit stortplaatsen en stortverboden afvalstoffen*. Currently, there are 45 categories of waste that are not allowed to be sent to a landfill site and have to be processed by other means, such as recycling. The Dutch government also provides a lot of tax benefits, financial incentives and funds to companies that are contributing to a circular economy and recycling (RVO, 2022).

The Directive (EU) 2018/851 was transposed into national legislation through:

- Amendment of the Environmental Management Act (Wet Milieubeheer);
- Decree implementing the revised WFD;
- Regulation implementing the revised WFD;
- The country has updated its Waste Prevention Management Plan (underneath *Beleidsstukken 2015*) and its National Waste Management Plan (NWMP) (Afvalpreventieprogramma, 2022)(LAP3, 2021).

Waste management plan(s)

The second amendment to the National Waste Management Plan (NWMP) 2017-2029 *Smarter use of raw materials* (Landelijk afvalbeheerplan 2017-2029 - Slimmer omgaan met grondstoffen) of the Netherlands was adopted by the Ministry of Infrastructure and Water Management on 11 January 2021 and entered into force on 2 March 2021 (Government Gazette 2021, no. 5129).

Pursuant to Article 10.3 of the Environmental Management Act, the Minister of Infrastructure and the Environment draws up a waste management plan once every six years, in accordance with Article 30 of the Waste Framework Directive. The NWMP covers both household and industrial waste, and has dedicated paragraphs for targeted waste streams (e.g. bio-waste, textile, paper and cardboard, etc.). Additionally, sectoral plans including minimum standards and information on cross-border transport are available for 85 waste streams (Sectorplannen LAP 3, 2021). Their application period is 2017-2023.

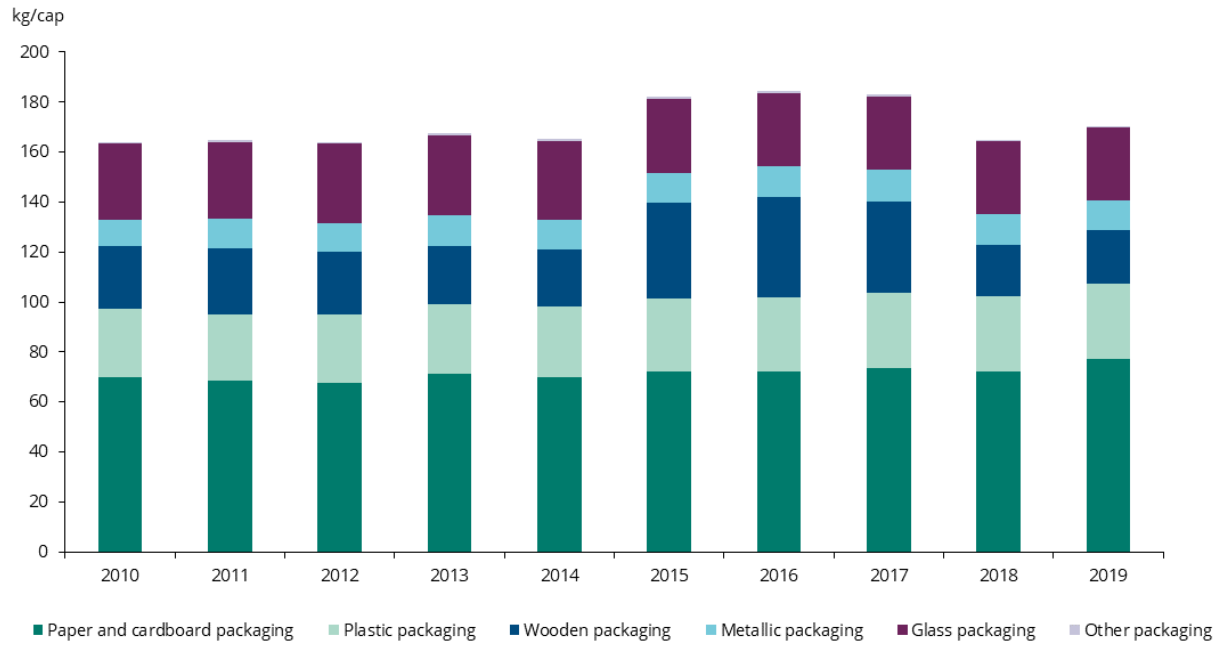
The plan provides a set of measures to be implemented by the municipalities to improve separate household waste collection, such as pay-as-you-throw systems, reverse collection benchmarking between municipalities. Reverse collection refers to a system where only separated waste is collected door-to-door while residual (mixed) waste needs to be brought to the collection points by the citizens. However, the responsibility on the planning of separate collection schemes is devolved to municipalities.

As regards packaging waste, the NWMP refers to the Packaging Management Decree 2014 and the Packaging Management Regulations, as well as to Sectoral plan 41, that includes the packaging policy (LAP3, 2021).

Packaging waste generation and treatment

In the Netherlands, 3 million tonnes (170 kg/cap) of packaging waste were generated in 2019, slightly below the EU average of 177 kg/cap. Packaging waste generation per capita increased by 10 % since 2010, with an increase in all materials but wood and glass (Figure 1.2).

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



Source: Eurostat (2022b)

Capture rates for recyclables

The capture rate is a good performance indicator of the effectiveness of the separate collection system. The capture rate is calculated by dividing the separately collected weight of a certain material for recycling by the weight of the material in total municipal waste. For the Netherlands, the calculated capture rates for different waste fractions, were calculated based on numbers for household waste only (i.e. excluding the non-household part of municipal waste) due to lack and uncertainty in data. Table 1.1 shows the calculated capture rates for different waste fractions.

Table 1.1 Capture rates for different waste fractions in The Netherlands

	Residual waste composition (%, as received)([b])	Residual waste composition (tonnes)([a])	Separately collected amounts (tonnes)([b])	Materials in total MSW (tonnes)	Capture rates (%)
Reference year	2018-2020	2019	2019		
Mixed municipal waste, total		3 796 000			
Paper and cardboard	19 %	721 240	838 639	1 559 879	54 %
Metals	3.9 %	148 044	79 794	227 838	35 %
Glass	5 %	18 980	357 177	546 977	65 %
Plastic	12 %	455 520([a])	327 033	782 553	42 %
Bio-waste	31 %	1 176 760	2 036 477	3 213 237	63 %
Textiles	5.6 %	212 576	86 030	298 606	29 %
Wood	2.2 %	83 512	497 974	298 606	86 %

([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 Rijkswaterstaat (2021). The waste composition rates give the shares of these components as they are found. Extra moisture and dirt is within these rates, and the 12% plastics is not dry and clean plastics.

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

This indicates that there is especially room for improvement to capture higher shares of the generated plastic and textile wastes but also to some smaller extent bio-waste, paper and cardboard and glass.

Regarding metals, besides the amounts collected separately, 130 000 tonnes of ferrous metals and 47 000 tonnes of non-ferrous metals were extracted for recycling out of the bottom ashes from incineration plants in 2020, and some additional plastics are separated from the residual waste for recycling.

2 Success and risk factors likely to influence future performance

2.1 Target for preparing for reuse and recycling of municipal waste

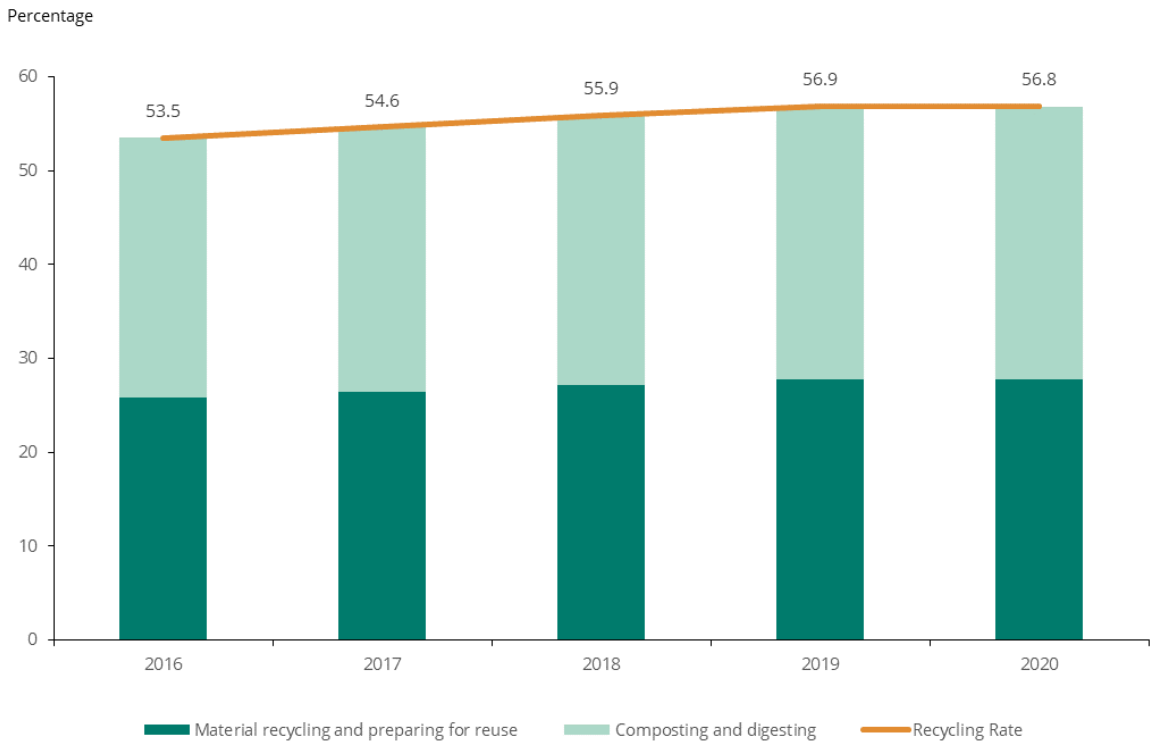
This chapter aims at assessing the prospects of the Netherlands to achieve the **55 % preparing for reuse and recycling target** for municipal waste in 2025. A detailed description of the methodology followed, the development of success/risk factors and their impact on recycling is available in the methodology 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 the Netherlands shows a moderate increase from 53.5 % in 2016 to 56.8 % in 2020 (Figure 2.1). In this analysis the recycling rate is calculated by dividing the summed amounts of recycling of materials and of composting and digestion by the total generated amounts. The data source used is the Eurostat data set *Municipal waste by waste management operations [env_wasmun]* (following the OECD/Eurostat Joint Questionnaire); Data reported by Member States according to Article 10.2(a) of the Waste Framework Directive are not used for this assessment as the reporting methods differ by Member State, resulting in a lack of comparability between Member States. The data source used here is assumed to be the best available proxy, given that data in accordance with the rules on the calculation of the attainment of the targets as defined in Article 11a are not yet available.

Figure 2.1 Recycling rate in the Netherlands between 2016 and 2020, in percentage



Source: Eurostat (2022a)

The actual distance to the target for the most recent data point is a key factor determining the likelihood of meeting/not meeting the target. The closer the Member State is to the target already, the more likely it becomes that the target will be met. For the Netherlands, the recycling rate is 56.8 % in 2020, which is already above the 2025 target of 55 %.

However, the data used for this analysis are based on a different methodology than the calculation rules for the target. The impact of the application of the new calculation rules to the recycling rate has not been quantified yet by the Dutch authorities. A few Member States have provided quantified estimates indicating how the application of the new reporting rules would influence the recycling rate (compared to the data reported to Eurostat under the Joint Eurostat/OECD questionnaire), resulting in reductions between 3.8 and 13 percentage points, and on average 5.5-6.7 percentage points. While the effect depends on how Netherlands currently reports the data, an effect of a reduction with 5 percentage points is therefore assumed for this assessment, bringing the recycling rate down to 51.8 %. However, this assumption does not result in a change of the assessment for this SRF. The Dutch authorities indicate that the first rough calculations show a recycling rate for household waste of 52.5% based on the new calculation rules (Rijkswaterstaat, 2022b).

Summary result

Distance to target < 5 percentage points	Based on currently available data, the recycling rate of the Netherlands was 56.8 % in 2020, 1.8 percentage points above the 2025 target. Considering, however, the possible impact of the new calculation rules, a reduction with 5 percentage points is assumed for this assessment, resulting in an estimated recycling rate of 51.8 %, slightly below the target.
Robustness of the underlying information	The currently available data do not yet reflect the calculation rules applicable to the 2025 target. The Dutch authorities have not yet firmly quantified the influence of the new calculation rules on the recycling rate (at the time of writing this assessment). However, also a recycling rate which would be 5 percentage points below the currently reported one would not change the assessment for this SRF.

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

The recycling rate over the last five years shows a moderate increase with 3.3 percentage points (Figure 2.1). This indicates a steady but slow improvement, however, from an already high level. In addition, the country is still active in introducing new supportive measures for further increasing recycling levels.

Summary result

RR > 50 % and increase in last 5 years < 5 percentage points	The recycling rate has increased by 3.3 percentage points from 2015 to 2020. For the Netherlands, the application of the new calculation rules would indicate an estimated recycling rate of about 51.8 % in 2020, so meeting the 55% target appears achievable in consideration of the past trend.
Robustness of the underlying information	There is no break in the time series data. The currently available data do not yet reflect the calculation rules applicable to the target.

2.1.2 Legal instruments

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

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

The Netherlands has transposed the amended WFD into national law on 29 January 2021, with a delay of less than 12 months after the deadline of 5 July 2020.

Summary result

Transposition with a delay of less than 12 months	The Netherlands has transposed the amended WFD into national law, but with a delay of almost 7 months.
Robustness of the underlying information	Information provided by 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.

In the EEA-ETC/WMGE questionnaire, the Dutch authorities stated that the recycling policy for MSW is the responsibility of the following authorities:

- National authority: (re)defining the targets and broad waste management policies;
- Municipalities: implementing the national targets on municipal scale, specify national policies into each municipality's conditions, setting out the way of collecting the waste from households and making sure the collected waste is treated in the right way.

This means that the duty of care for the collection and treatment of household waste lies mainly with the municipalities. Furthermore, it is stated that for municipalities there are no direct consequences imposed by the national government in case the targets are not met by a municipality. Indirect consequences of suboptimal waste management result in higher costs and therefore higher fees for the inhabitants.

A national program (VANG – from waste to resources) is in place which supports municipalities to improve their performance. This program started in 2015 with a duration untill at least 2025. It includes a lot of tools: sharing good practises, customization of specific support, monitoring, training, financial support for pilot projects, starting large scale studies on unknown areas, benchmarking, communication etc. The VANG program consists of two parts: one covering municipal waste and one covering commercial and businesses waste. For the latter a goal of halving the amount of waste by 2022 (compared to 2014/2015) is set.

In the Netherlands, the national government is mainly responsible for setting the framework of municipal waste management policy, but the responsibility for its implementation lies with municipalities that are anyway the ones directly in charge of collecting waste from households. The national government provides support in the form of information and research and other tools for the municipalities to more easily increase recycling. However, specific obligations for the municipalities

are lacking, for example the recycling target is not translated into binding (uniform or differentiated) targets for the municipalities and the national government has no enforcement tools at hand for municipalities lagging behind. Instead, through a series of national measures (e.g. disposal taxes), the government aims to make low recycling levels uneconomic and unattractive (through peer pressure and inter-municipal competition). In summary, responsibilities are well defined and support mechanisms for municipalities are in place. The high recycling rates achieved in the Netherlands indicate that these mechanisms have worked. However, there are no direct consequences for the responsible authorities if the targets are not met. Therefore, it can be argued that the municipal waste management governance functions in a somewhat suboptimal manner.

Summary result

Clearly defined responsibilities and good set of support tools but weak/no enforcement mechanisms for meeting the recycling targets	Responsibilities are defined and support mechanisms for municipalities are in place, but there are no direct consequences for the responsible municipal authorities if the targets are not met.
Robustness of the underlying information	Credible information received through an interview with national authorities.

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 the Netherlands there is a landfill ban in place since 1995 on 35 waste streams, including combustible and biodegradable waste (Total Organic Carbon (TOC) > 5 %), thus banning the landfilling of mixed municipal waste. Since 2018, the ban applies to over 60 waste streams (Koninkrijksrelaties, 2022).

Furthermore, the Netherlands introduced a disposal tax in 1995. This tax was repealed in 2012 and reintroduced in 2015. The waste disposal tax, which is adjusted yearly, is the same for landfill and incineration. In 2020 this tax was 32.63 EUR/t, in 2021 this was 33.15 EUR/t, and currently (2022) the tax is set at 33.58 EUR/t of waste. The tax is levied on all Dutch waste to be landfilled or incinerated, also on waste that is exported from the Netherlands for landfill or incineration in other countries (Ministerie van Algemene Zaken, 2015).

The disposal tax in the Netherlands is equal for any type of disposal (landfilling or incineration) and its level is adjusted annually. There are no specific guidelines or formula for estimating the level of the tax, but the government assesses it based on its effectiveness. The national authorities claim that in broad terms (depending on the material concerned and the geographical location of the municipality), the tax is sufficient for making recycling an economically more attractive option. In this way, the disposal tax in the Netherlands, including its annual readjustment mechanism, fulfils its purpose.

The ban and disposal tax contributed to driving the landfill rate of municipal waste down, and it has been less than 2 % of the generated municipal waste since 2007.

Summary result

Ban in place for landfilling residual or biodegradable waste	The Netherlands has banned the landfilling of mixed municipal waste and applies in 2022 a landfill tax of 33.58 EUR/t (corresponding to 28.8 EUR/t rescaled based on purchasing power parities (Eurostat, 2020)), with an annual adjustment mechanism in place.
Robustness of the underlying information	Credible information received through the EEA-ETC/WMGE questionnaire.

SRF MSWR-3.2: Taxes on municipal waste incineration

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

In the Netherlands, the disposal tax is equal for both landfilling and incineration (33.58 EUR/t). The tax is also levied on waste that is exported from the Netherlands for landfill or incineration in other countries (Ministerie van Algemene Zaken, 2015) and thus equally discourages exporting of residual municipal waste for incineration or landfilling. Similarly, also outputs from MBT or sorting plants going to incineration are subject to the levy.

The Netherlands strongly rely on incineration for the disposal of mixed municipal waste, incinerating 42 % of the generated municipal waste in 2019. However, reliance on incineration has been slowly decreasing although it is unclear what the influence of the tax was in this development. As the analysis showed for the previous SRF, the Netherlands utilizes the incineration tax successfully in economically discouraging incineration of municipal waste.

Summary result

Taxes > 18 EUR / t([a])	In 2022, the Netherlands had an incineration tax of 33.58 EUR/t (corresponding to 28.8 EUR/t rescaled to purchase power parities) in place.
Robustness of the underlying information	Credible information received through the EEA-ETC/WMGE questionnaire.

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

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

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

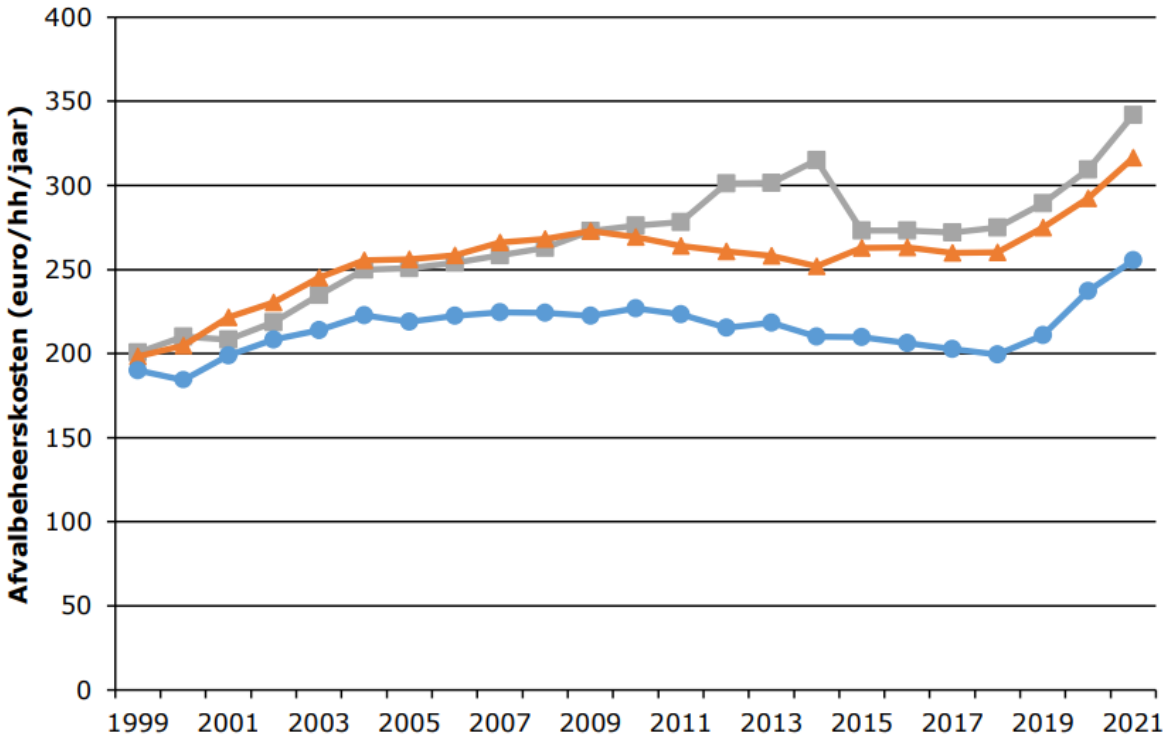
In the Netherlands 50 % of the municipalities use a system for PAYT, which corresponds to a population coverage of 37 %. PAYT is mainly applied in small, non-urban municipalities in the Netherlands. The tariffs are mainly based on volume, frequency and/or weight. Most municipalities apply a system based on volume and frequency; another frequently applied system is based on volume (Table 2.1) (Rijkswaterstaat, 2022a).

Table 2.1 Overview of PAYT schemes in the Netherlands in 2021

Tariffing system	Municipalities (%) (number of municipalities)	Households (%)	Average number of households per municipality
Volume	3.4 (12)	3.1	20 228
Volume and frequency	23.3 (82)	16.7	15 707
Expensive bag	10.2 (36)	8.4	18 108
Expensive bag and number of persons	2.3 (8)	1.2	11 232
Weight	0.9 (3)	0.5	12 648
Weight and frequency	3.2 (11)	2.7	18 210
Weight, frequency and number of persons	0.3 (1)	0.1	11 450
Volume, frequency and number of persons	6.8 (24)	4.5	14 517
Total PAYT	**50.4 (177)**	**37.3**	**16 221**
Number of persons	44.8 (158)	57.0	27 871
Fixed tariff	4.8 (17)	5.8	26 135

In general, the cost for waste disposal decreases in municipalities where a PAYT system is applied, due to less residual waste.

Figure 2.2 - Evolution of costs per household per year for waste management per tariffing system



Note: blue: PAYT; orange: number of persons; grey: fixed
Source: Rijkswaterstaat (2022)

Summary result

Less than 50% of the population covered by PAYT	Less than 50 % of the population is covered by PAYT schemes in the Netherlands.
Robustness of the underlying information	The Dutch authorities provided detailed quantitative information 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 the Netherlands, according to the most recent data, the percentage of households living in cities is 58.4%, in towns and suburbs 32.07 % and in rural areas 9.52 % (Eurostat, 2021).

In order to encourage the recovery of municipal waste, separate collection has been part of the Dutch national strategy for many years. In 2014, the Netherlands had set a national goal for 2020 of 75 % of waste separation of household waste which replaced the previous Dutch recycling target for household waste of 60 % for 2015, thus going beyond the target of the 2008 WFD. Numbers for 2019 show that the waste separation rate increased (from 50 % in 2014) to 60 % and that for residual waste the rate decreased to 180 kg per inhabitant per year (being a decrease of 60 kg per inhabitant since 2014). Realising the 2020 ambitions therefore has become out of reach.

Each separate collection system in the Netherlands is unique because each municipality can design the separate collection system itself by means of the municipality ordinance [NL WMB 1979]. Civic amenities exist in each municipality and collect paper and cardboard, glass, plastics, metal, asbestos, tires, construction and demolition waste, bitumen, pressure bottles, waste electrical and electronic equipment (WEEE), cooking oil and fat, plaster, large household waste, sand and clay, wood, residual household waste, small chemical waste, recyclables, mattresses, polystyrene foam, garden waste and textiles.

Throughout municipalities, the largest differences can be found between door-to-door collection and bring points. In large cities bring points are more common than door-to-door collection. In towns and smaller cities with space for separate waste containers, door-to-door collection is preferred. Co-mingled collection in the Netherlands is in place mostly for (1) plastics, metals and beverage cartons, (2) plastics and beverage cartons, or (3) glass and metals. Separate collection of bio-waste is established in almost all municipalities and within almost all neighbourhoods. For high-rise buildings, separate collection of bio-waste was not applied in 2019-2020 as a deviation, but based on the result of a scientific study on the collection of household waste in high-rise buildings (Langeveld et al., 2020), the separate collection is reintroduced, and within a few years every household has to separate bio-waste.

In recent years, the success of separate collection of several waste fractions has started to fade, which could jeopardise the future attainment of EU waste targets. The Netherlands does not oblige separate collection for several waste fractions but allows the application of post-sorting these waste fractions from the residual waste. The waste fractions concerned are packaging waste, plastics, metal and composite waste. Post-sorting is not allowed for bio-waste, paper and cardboard, textiles and glass.

The Netherlands reports that the dominant system for separate collection of paper and cardboard, ferrous metals, aluminium, plastics, bio-waste and composite packaging is high-density collection (and low-density bring points and/or civic amenity sites are offered on top of the high convenience service), whereas for glass, garden waste, textiles and wood the dominant system is low-density collection.

Additionally, almost all metals that are not collected separately are sorted and collected from the bottom ashes from incineration plants, and sent to recycling.

Table 2.2 gives an overview of the collection system in the Netherlands. This table shows that the collection system per fraction is similar in cities, towns and suburbs and in rural areas, so all citizens receive a similar service.

Table 2.2 Characterisation of the collection system in the Netherlands

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

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

Source: Rijkswaterstaat (2021)

The separately collected amounts per waste fraction are summarized in Table 2.3.

Table 2.3: Separate collection volumes, 2019, in tonnes

Fraction	Volume
Paper and cardboard	838 639
Ferrous metals and aluminium	79 794
Glass	357 177
Plastic (other than packaging)	28 033
Bio-waste	2 036 477
Textiles	86 030
Wood	497 974
WEEE	86 196
Composite packaging (including plastic packaging)	340 706
Other	730 371

Summary result

Paper and cardboard	A high share of the population is covered by high convenience collection services.	Door-to-door separate collection and bring points are the main collection system, both for cities, towns and suburbs, and rural areas. Civic amenity sites are offered as an extra option on top of the regular system.
Metals	A high share of the population is covered by high convenience collection services.	Ferrous metals and aluminium are collected door-to-door (co-mingled), by bring points and at civic amenity sites, both for cities, towns and suburbs and rural areas. Civic amenity sites are offered as an extra option on top of the regular system.
Plastics	A high share of the population is covered by high convenience collection services.	Plastic is collected door-to-door (co-mingled with metals and composites) and by bring points, both for cities, towns and suburbs and rural areas. Civic amenity sites are offered as an extra option on top of the regular system.
Glass	A high share of the population is covered by high convenience collection services	For glass, the dominant collection system is bring points, both in cities, towns and suburbs and rural areas.
Bio-waste	A high share of the population is covered by high convenience collection services	The dominant collection system all over the country for bio-waste is door-to-door separate collection.
Wood	A low share of the population is covered by high convenience collection services	Wood is only collected at civic amenity sites.
Textiles	A low share of the population is covered by high convenience collection services.	The dominant collection system is bring points, although there is also door-to-door collection in cities.
WEEE	Medium convenience collection services dominate	The dominant collection systems are bring points (take back at retailers) and civic amenity sites.
Robustness of the underlying information		The information can be considered robust, and was provided by the national authorities in response to the questionnaire by the EEA and ETC/WMGE and during the review of this assessment in April 2022.

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

The Dutch authorities report ambitions to improve the current separate collection systems. The biggest change is expected from the will of the municipalities to increase the separate collection in areas with high-rise buildings. In almost all these areas the collection of bio-waste was (re)introduced, combined with a better infrastructure for at least paper, glass and textiles. The national authorities are examining additional options on how to improve bio-waste collection in such buildings, including delivering in-house waste compartments and stimulating behavioural change. Several municipalities have tested different options, and the results have been evaluated (Langeveld et al., 2020). Since 2020 a firm policy programme for circular textiles is enrolled to make sure more textiles are collected, reused and recycled (Circle Economy, 2020).

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)	A high share of the population is covered by high convenience collection services. In areas with high-rise buildings better infrastructure will be provided for at least paper, glass and textiles.
Metals	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	A high share of the population is covered by high convenience collection services.
Plastics	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	A high share of the population is covered by high convenience collection services.
Glass	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	A high share of the population is covered by high convenience collection services. In areas with high-rise buildings better infrastructure will be provided for at least paper, glass and textiles.
Bio-waste	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	A high share of the population is covered by high convenience collection services, and there are firm plans to extend separate collection to the whole population, including high-rise buildings which were exempted in 2019-2020.
Wood	No firm plans to improve the convenience and coverage	No changes planned.
Textiles	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	In areas with high-rise buildings better infrastructure will be provided for at least paper, glass and textiles. Since 2020 a firm policy programme for circular textiles is available.
WEEE	No firm plans to improve the convenience and coverage	No changes planned.
Robustness of the underlying information		Information received through questionnaire from national authority. Additional information might alter the result to the better.

2.1.5 Extended producer responsibility (EPR) and similar schemes

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

Within EPR schemes, fee modulation (or eco-modulation) is a system with different fees for different types of packaging material and designs. While basic fee modulation, i.e. different fees for the main material groups, are common, advanced fee modulation can create stronger incentives for packaging

producers to design for recycling and thus create favourable conditions for higher recycling rates. The level of advancement of the fee modulation is assessed against four criteria that have been selected as benchmarks for a well-designed eco-modulated fee system:

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

In the Netherlands, EPR applies to all packaging, and only one producer responsibility organisation (PRO), 'Afvalfonds Verpakkingen', is in charge. Afvalfonds Verpakkingen applies fee modulation between material groups, as well as according to plastic type (Table 2.4) (Afvalfonds verpakkingen, 2021b). Each rate is based on the costs for collection and recycling of the respective packaging material. In addition, it applies a fixed amount of general system costs for each material type. These are, for example, costs for monitoring, prevention of litter and the Knowledge Institute for Sustainable Packaging (KIDV). The rates for the waste management contribution are therefore based on what it costs in total per material type to comply with the producer responsibility. The processing costs and revenues of the different types of material sometimes differ greatly. For example, the costs for the collection and processing of glass can be largely financed by the proceeds from the recyclable glass shards. That is why the rate for glass packaging is much lower than that for plastics, which has high costs. Costs and revenues are administered for each material type. Any shortages or surpluses will be settled in the future rate. The fees are based on the Waste Management Contribution Agreement for Packaging (Afvalbeheersbijdrageovereenkomst Verpakkingen/ABBO) and are binding (Afvalfonds verpakkingen, 2021a).

Since 2019, it is possible for packaging producers/importers to apply for a reduced fee for rigid plastics, if the packaging can be properly sorted and recycled with a positive market value (Table 2.4). The conditions for eligibility for the reduced rate are included in a separate arrangement (see (KIDV, 2022) for more detail).

Table 2.4 Fees applied for packaging by Afvalfonds Verpakkingen

Material	Fee - 2021 (EUR/kg) excl. VAT
Glass	0.056
Paper/Cardboard	0.022
Plastics, regular fee	0.670
Plastics, reduced fee	0.410
Biodegradable plastics	0.670
Aluminium	0.110
Other metals	0.230
Wood	0.020
Other materials	0.020
General fee (company can't or won't specify the material)	0.770
Beverage cartons	0.470
Bottles in a deposit system	0.020
Plastic bottle > 0.75 l without deposit	0.25 a bottle

Source: Afvalfonds verpakkingen (2021b)

Afvalfonds Verpakkingen publishes annual monitoring reports. These reports also include detailed information about data collection and verification as well as reporting about applied and planned improvements in the monitoring (see e.g. (Monitoring Verpakkingen, 2018)).

Summary result

At least one packaging fraction([a]) has an advanced fee modulation that meets at least two assessment criteria	Advanced fee modulation is applied for plastics, taking into account recyclability and sortability and compliance but not recycled content. In addition, the PRO performs transparent compliance checks on the data provided by all involved actors.
Robustness of the underlying information	The fee structure as well as criteria for the reduced fee for plastics packaging is transparent and publicly available.

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

2.1.6 Treatment capacity for bio-waste

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

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

The Netherlands reports a significantly higher capacity for bio-waste treatment (2.5 million tonnes) than the annual amount of bio-waste separately collected (1.5 million tonnes in 2019). In the EEA-ETC/WMGE questionnaire, the Netherlands reports that 31 % of the residual household waste is bio-waste. The total waste generation in 2018 in the Netherlands is 8.8 million tonnes, of which 42 % is residual waste sent to incineration. This implies that the amount of bio-waste ending up in incineration is approximately 1 million tonnes. The available bio-waste treatment capacity would thus in theory be able to absorb the bio-waste currently disposed of with residual waste. The capacity examination with respect to municipal bio-waste treatment is complicated. Composting and anaerobic digestion plants normally receive waste from various sources, for example municipal and agricultural sources. Therefore, the available capacity within a country does not correspond unilaterally to capacity for municipal bio-waste treatment.

Depending on the functional configuration of each plant, it might be possible to determine what is the upper quantity limit for receiving municipal bio-waste, but this data is missing for the Netherlands. This consideration, however, should be taken into account, as increased separately collected municipal bio-waste might be in competition with other waste suitable for composting or anaerobic digestion, which might hinder efforts to increase separate collection of bio-waste.

Summary result

Enough bio-waste treatment capacity for 80% of generated municipal bio-waste	In theory, the Netherlands has more than enough capacity to treat all generated bio-waste.
Robustness of the underlying information	It is not clear if the available capacity is dedicated to municipal bio-waste treatment only.

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.

The Netherlands has a strong focus on the quality of the collected bio-waste, due to strict requirements on the quality of the compost. The Netherlands has a national standard for compost quality, complemented with a voluntary Quality Management System for the certification of compost (EEA Biowaste report, 2020).

Compost can be certified under a voluntary industry initiative. This *Keurcompost* standard is a voluntary standard, demanded for by the market with requirements that go beyond the regular legal requirements. These include for example processing requirements (time-temperature), quality system requirements, and requirements in relation to the impurities in compost (differentiated between glass, stones and other impurities). It is not clear how much of the produced compost from municipal bio-waste is certified through the voluntary certification scheme.

Summary result

Legally binding national standards for compost/digestate quality in place, and quality management system in place	A legally binding national standard and a quality management system are in place in the Netherlands.
Robustness of the underlying information	The information is robust, but there is no information about how much of the compost is covered by the quality management system.

2.2 Target for the recycling of packaging waste

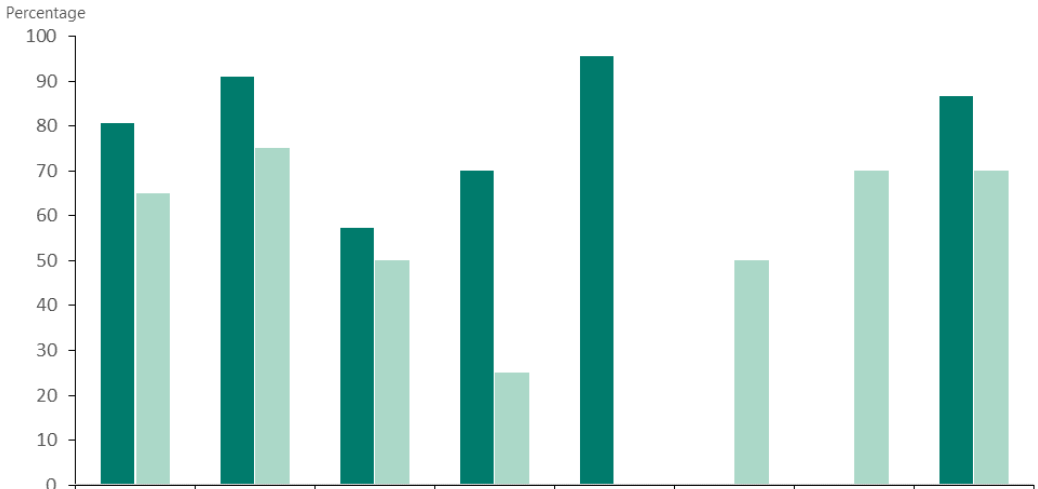
This chapter aims at assessing the prospects of the Netherlands to achieve the **65 % recycling target for packaging waste** in 2025 as well as the **material specific packaging waste recycling targets** (50 % of plastic; 25 % of wood; 70 % of ferrous metals; 50 % of aluminium; 70 % of glass; 75 % of 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 the Netherlands to Eurostat in accordance with Commission Decision 2005/270/EC as last amended by the Commission Implementing Decision 2019/665 (EC, 2019), published in the dataset *Recycling rates of packaging waste for monitoring compliance with policy targets, by type of packaging [env_waspacr].* The latest available data refer to 2019. The performance of the Netherlands for 2019 is illustrated in Figure 2.3.

Figure 2.3 Packaging recycling rates for the Netherlands in 2019, in percentage



	Packaging	Paper and cardboard packaging	Plastic packaging	Wooden packaging	Metallic packaging	Aluminium packaging	Ferrous packaging	Glass packaging
Recycling Rate (2019)	80.7	91.0	57.2	70.1	95.6			86.6
Target 2025	65	75	50	25		50	70	70

Note: No data are available for ferrous and aluminium packaging separately, only for metallic packaging

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

For the Netherlands, the reported recycling rates for total packaging as well as all individual materials exceed the targets. For metals, the reported rates do not make a distinction between ferrous metals and aluminium, but the total recycling rate for metals exceeds the highest recycling requirement (70 % for ferrous metals) with a large margin.

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

No specific studies on the impact of the new calculation rules for recycling target on the Dutch packaging waste recycling rates have been completed yet, but studies for different fractions (plastics, metals, paper) are in progress.

Table 2.5 Impact of changing calculation method on recycling rates

	Recycling rate in 2017 according to old/current calculation method	Recycling rate in 2017 according to new calculation method
Plastic	50 %	35-39 %
Paper and cardboard	87 %	87 %
Glass	86 %	71-76 %
Metals	78 %	74-75 %
Wood	73 %	73 %

Source: WUR (2020a), WUR (2020b)

Available studies report a reduction of the recycling rate of about 25 % for plastic, 15 % for glass and 5 % for metals, and no impact for paper and cardboard (Table 2.5). For wood, the study concludes that the new calculation method will hardly affect the 2017 recycling rate. If the same loss rates are applied to the reported 2019 data, the expected impact on the recycling rate for packing waste in 2019 is estimated to be as follows:

- Plastic packaging waste by 25 % from 57.2 % to 42.9 %
- Metal packaging waste by 5 %from 95.6 % to 90.8 %
- Glass packaging waste by 15 % from 86.6 % to 73.6 %
- Total packaging: Calculated based on the amounts of each packaging material generated and recycled in 2019, the recycling rate would drop from 80.7 % to 76.6 %.

The Netherlands has several country-specific recycling targets for different packaging materials, as listed in Table 2.6.

Table 2.6 Overview of Dutch recycling targets

	Recycling rate
Total packaging	70 %
Glass packaging	2021: 70% 2030: 75%
Paper and cardboard packaging	85 %
Aluminium packaging	60 %
Ferrous metal packaging	80 %
Plastic packaging	2021: 40 % 2022: 42 % 2023: 44 % 2024: 47 % 2025: 50 % 2030: 55 %
Wooden packaging	30 %

Summary result

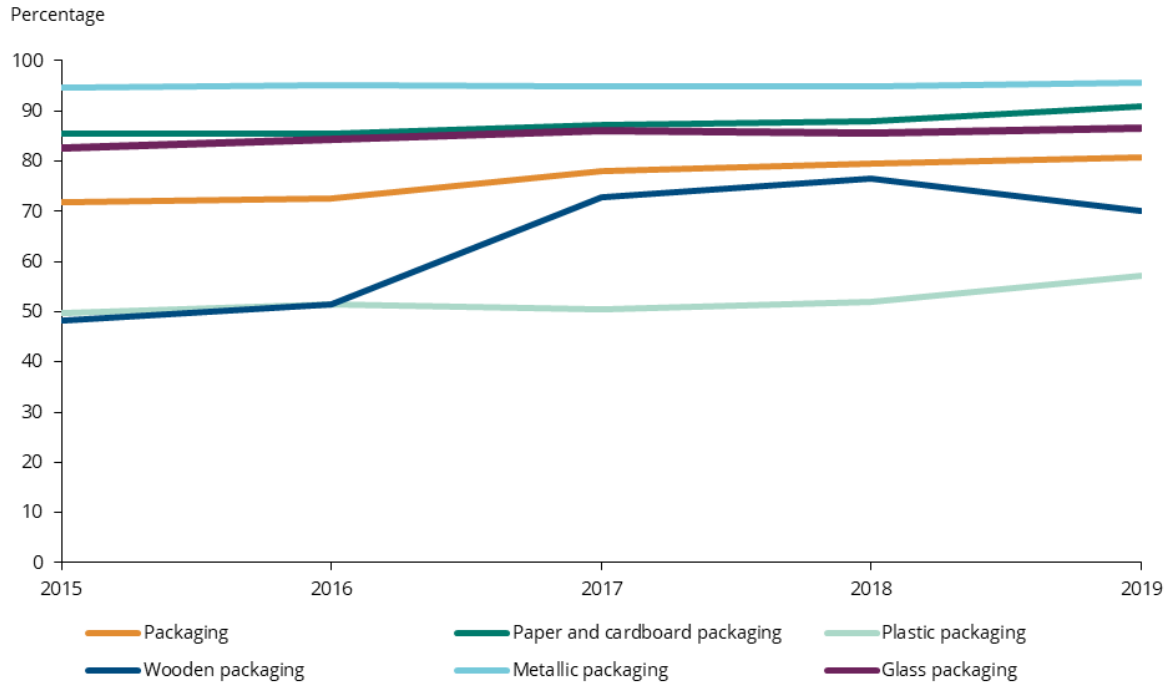
Total packaging	Target exceeded	The Netherlands report a recycling rate 80.7 %. If the estimated loss rate provided by the Netherlands is applied (taking into account losses in the recycling plants) the estimated recycling rate would drop to 76.6 %, 11.6 percentage points above the target.
Paper and cardboard packaging	Target exceeded	The Netherlands report a recycling rate of 91.0 %. The new calculation method is expected not to affect the recycling rate for paper and cardboard.
Ferrous metals packaging	Target exceeded	The Netherlands report a recycling rate of 95.6 % for metallic packing. If the estimated loss rate provided by the Netherlands is applied (taking into account losses in the recycling plants) the estimated recycling rate would drop to 90.8 %, respectively 20.8 and 40.8 percentage points above the target for steel and aluminium.
Aluminium packaging	Target exceeded	
Glass packaging	Target exceeded	The Netherlands report a recycling rate of 86.6 %. If the estimated loss rate provided by the Netherlands is applied (taking into account losses in the recycling plants) the estimated recycling rate would drop to 73.6 %, 3.6 percentage points above the target.
Plastics packaging	5 - 15 percentage points below target	The Netherlands report a recycling rate of 57.2 %. If the estimated loss rate provided by the Netherlands is applied (taking into account losses in the recycling plants) the estimated recycling rate would drop to 42.9 %, 7.1 percentage points below the target.
Wooden packaging	Target exceeded	The Netherlands report a recycling rate of 70.1 %. The new calculation method is expected not to affect the recycling rate for wood.
Robustness of the underlying information		The Netherlands have assessed the effect of the new calculation rules on the recycling rates. This assessment is based on this information. No data is available for ferrous metals and aluminium separately. Distance to the target assessment for ferrous metals and aluminium packaging is estimated.

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 the Netherlands are illustrated in Figure 2.4.

The overall recycling rate for packaging waste in the Netherlands has steadily increased in the past five years. The recycling rates of paper and cardboard, glass, wooden and plastic packaging have increased while metal packaging was stable.

Figure 2.4 Trend in packaging waste recycling rates in the Netherlands between 2015 and 2019, in percentage



Note: The Netherlands reported estimated separate data for aluminium and steel packaging only in 2018

Source: Eurostat (2022b)

Summary result

Total packaging	RR > 65%	The Netherlands reports a recycling rate higher than the 2025 recycling rate (even taking into account the estimated impact of the new calculation rules) and an increase of 13 percentage points during the last five years.
Paper and cardboard packaging	RR > 75%	The recycling rate for paper and cardboard was 91.0 % in 2019. The reported recycling rate increased by 6.6 % in the last five years.
Ferrous metals packaging	RR > 70%	The recycling rate for total metals packaging exceeds both targets with a large margin (91.0 % in 2019 if the estimated impact of the new calculation rules is taken into account), with a steady level above 90 % over the past five years.
Aluminium packaging	RR > 50%	

Glass packaging	RR > 70%	The recycling rate for glass packaging was 74.1 % in 2019 (if the estimated impact of the new calculation rules is taken into account). The reported recycling rate increased by 4.7 % in the last five years.
Plastics packaging	RR > 40% and increase in last 5 years > 10 %	The Netherlands reports a recycling rate (40.2 %), lower than the 2025 recycling target if the estimated impact of the new calculation rules is taken into account. The reported recycling rate increased by 14.9 % in the last five years.
Wooden packaging	RR > 25%	The Netherlands already reports higher recycling (70 %) than the 2025 target and the recycling rate increased by about 45 % in the last five years.
Robustness of the underlying information		The Netherlands have assessed the effect of the new calculation rules on the recycling rates. No information is available for separate trends for ferrous metal and aluminium packaging.

2.2.2 Legal instruments

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

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

The Netherlands has transposed the amended Packaging and Packaging Waste Directive into national law on 1 July 2021, with a delay of less than 12 months after the deadline of 5 July 2020.

Summary result

Transposition with a delay of less than 12months	The Netherlands has transposed the amended Packaging and Packaging Waste Directive into national law with a delay of less than 12 months.
Robustness of the underlying information	The assessment is based on information provided by 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 targets for packaging waste are defined in the Dutch waste management plan and in the Dutch law on packaging waste (Ministerie van Infrstructuur en Waterstaat, 2021). According to information from the Dutch authorities, packaging waste from households and non-household sources are covered by producer responsibility. There is only one producer responsibility organisation (PRO) for packaging operating in the Netherlands, Afvalfonds Verpakkingen. This PRO is responsible for collective producer responsibility and is obliged to meet the targets. The PRO can determine how to implement this requirement.

For packaging waste the national inspectorate enforces and checks whether the targets are met. If not, they can activate administrative fines on the PROs to ensure more efforts reaching the targets. PROs are in charge of the improvement of the collection and treatment of packaging waste. Therefore, municipalities get a fee for their performances (mainly the levels of contamination and interfering substances) on collection of different packaging waste streams and good practices are shared.

Summary result

Clearly defined responsibilities and enforcement mechanisms but no/weak support tools for meeting the recycling targets	The information available indicates that the responsibility for reaching the targets is set on PROs and that there are direct financial consequences if the targets are not met. There are no support tools to facilitate better performance of recycling.
Robustness of the underlying information	Credible information received from the Dutch authorities through the EEA-ETC/WMGE questionnaire.

2.2.3 Economic instruments

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

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

As described in Section 2.1.3 in more detail, the Netherlands has a ban on 60 waste streams and a disposal tax. These incentives also affect packaging waste.

Summary result

Ban in place for landfilling residual or biodegradable waste	The Netherlands has banned the landfilling of mixed municipal waste and applies in 2022 a landfill tax of 33.58 EUR/t (corresponding to 28.8 EUR/t rescaled based on purchasing power parities (Eurostat, 2020)), with an annual adjustment mechanism in place
Robustness of the underlying information	Credible information received from the Dutch authorities through the EEA-ETC/WMGE questionnaire.

SRF P-3.2: Taxes on municipal waste incineration

Taxes on incineration of residual waste can help to discourage strong reliance on residual waste treatment and thus support recycling. As described in Section 2.1.3 in more detail, the Netherlands has a landfill ban on 60 waste streams and a disposal tax that is levied both on incineration and landfill. The tax thus also contributes to make packaging waste recycling economically more attractive.

Summary result

Taxes > 18 EUR/t([a])	In 2022, the Netherlands had an incineration tax of 33.58 EUR/t (corresponding to 28.8 EUR/t rescaled to purchase power parities) in place.
Robustness of the underlying information	Credible information received from the Dutch authorities through the EEA-ETC/WMGE questionnaire.

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

SRF P-3.3: Packaging taxes

Packaging taxes can support the aim to reduce packaging waste generation and/or to influence the choice of packaging materials and encourage recyclability and eco-design. According to the information available, the Netherlands does not apply any taxes on packaging.

Summary result

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

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

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

As described in Section 2.1.3 in more detail, about 36 % of the Dutch population is covered by PAYT schemes.

Summary result

Less than 50% of the population covered by PAYT	Less than 50 % of the population is covered by PAYT in the Netherlands.
Robustness of the underlying information	The Dutch authorities provided detailed quantitative information 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.

In the Netherlands, voluntary schemes exist for glass beer bottles, plastic crates and some wooden packaging. A mandatory deposit return scheme exists for plastic beverage bottles over 1 litre, and from mid-2021 also for plastic beverage bottles smaller than 1 litre. The main aim of this deposit is to reduce littering. The introduction of a mandatory deposit for aluminium drink cans has been announced for 31 December 2022 as the national target for reducing littering of cans by 70-90 % has not been achieved by autumn 2021.

Summary result

Aluminium drink cans	No DRS	Currently there is no DRS for aluminium drink cans but it will be introduced in 2023 as littering reduction target is not achieved.
Glass drink bottles	No DRS for some drink bottles	Only a part of the market is covered by the DRS.
Plastic drink bottles	Mandatory DRS for nearly all plastic drink bottles	From mid-2021 onwards, the deposit applies to both large and small plastic bottles for soda and soft drinks (not for juices and milk)
Plastic crates	Mandatory DRS for nearly all plastic crates	Nearly all plastic crates covered by the DRS.
Wooden packaging	Voluntary DRS for some wooden packaging	DRS for wooden packaging is voluntary and coverage is unclear.
Robustness of the underlying information		Credible information received from the Dutch authorities through a questionnaire and additional online information from Rijksoverheid.

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.

In the Netherlands, packaging waste from households is collected together with non-packaging recyclables by the municipalities, and the municipalities receive financial contributions for packaging collection from the PRO's.

Separate collection for waste collected at non-households (business and companies) is mandatory for several waste fractions such as paper and cardboard, metals, glass, plastic foils, bio-waste. For some of these waste fractions a threshold is applicable, for example for wood (threshold: 3 m^3), plastic foils (threshold: 400 litre). All applicable and relevant information is summarized in a comprehensive online overview to help and guide companies (KVK, 2022).

Summary result

Paper and cardboard packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services.	Door-to-door separate collection and bring points are the main collection system, both for cities, towns and suburbs, and rural areas. Civic amenity site is offered as an extra option on top of the regular system.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household paper and cardboard packaging waste	In the Netherlands it is mandatory for non-households to separate paper and carboard packaging waste at source.
Ferrous metals packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services.	Ferrous metals and aluminium are collected door-to-door (co-mingled), by bring points and at civic amenity sites, both for cities, towns and suburbs and rural areas. Civic amenity sites are offered as an extra option on top of the regular system.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household ferrous metals packaging waste	In the Netherlands it is mandatory for non-households to separate ferrous metals waste at source.
Aluminium packaging	**Packaging waste from households** A high share of the population is covered by high convenience collection services.	Ferrous metals and aluminium are collected door-to-door (co-mingled), by bring points and at civic amenity sites, both for cities, towns and suburbs and rural areas. Civic amenity sites are offered as an extra option on top of the regular system.

Glass packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	For glass, the dominant collection system is bring points, both in cities, towns and suburbs and rural areas.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household glass packaging waste	In the Netherlands it is mandatory for non-households to separate glass packaging waste at source.
Plastics packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services.	Plastic is collected door-to-door (co-mingled with metals and composites) and by bring points, both for cities, towns and suburbs and rural areas. Civic amenity sites are offered as an extra option on top of the regular system.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household plastic packaging waste	In the Netherlands it is mandatory for non-households to separate plastics packaging waste at source.
Wooden packaging	**Packaging waste from non-household sources** Separation at source is mandatory for non-household wooden packaging waste	In the Netherlands it is mandatory for non-households to separate wooden packaging waste at source.
Robustness of the underlying information		Credible information received from the Dutch authorities through the questionnaire from the EEA and ETC/WMGE.

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

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

Concrete plans are needed to improve the type and coverage of separate collection. This SRF is more relevant for 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[1]. Again, the material specific assessment considers packaging waste from both household and non-household sources.

As the Netherlands scores green in all categories this SRF is not relevant (cf SRF P-4.1).

Summary result

Paper and cardboard packaging	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
	N/A (for countries already having mandatory sorting at source)	
Ferrous metals packaging	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
	N/A (for countries already having mandatory sorting at source)	
Aluminium packaging	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	

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

Glass packaging	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
	N/A (for countries already having mandatory sorting at source)	
Plastics packaging	N/A (for countries in which a high share of the population is already covered by high convenience collection services)	
	N/A (for countries already having mandatory sorting at source)	
Wood packaging	N/A (for countries already having mandatory sorting at source)	
Robustness of the underlying information	Credible information received from the Dutch authorities through the questionnaire from the EEA and ETC/WMGE.	

2.2.5 Extended producer responsibility (EPR) and similar schemes

SRF P-5.1: Coverage of EPR schemes

In the Netherlands, EPR applies to all packaging, and only one producer responsibility organisation is in charge, Afvalfonds Verpakkingen, covering household, commercial and industrial packaging. The EPR system covers all packaging materials.

Since 2013, Afvalfonds Verpakkingen has focussed on decreasing the amount of free-riders, i.e. companies putting packaging on the market without reporting to the PRO and without paying fees. For 2017 and 2018, packaging waste put on the market by free-riders was estimated and the amount of packaging waste put on the market has been corrected with an additional 2.4 % (Afvalfonds verpakkingen, 2019).

Summary result

All main packaging fractions([a]) are covered by EPR schemes, covering household and non-household packaging	The Netherlands has an EPR scheme in place covering household, industrial and commercial packaging for all packaging fractions.
Robustness of the underlying information	Credible information received from the Dutch authorities through the EEA-ETC/WMGE questionnaire, and monitoring reports published by Afvalfonds Verpakkingen.

([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

Advanced fee modulation is applied for plastics, taking into account recyclability and sortability but not recycled content. In addition, the PRO performs transparent compliance checks on the data provided by all involved actors.

Summary result

At least one packaging fraction([a]) has an advanced fee modulation that meets at least two assessment criteria	Advanced fee modulation for plastics, taking into account recyclability, sortability and compliance checks.
Robustness of the underlying information	The fee structure as well as criteria for the reduced fee for plastics packaging is transparent and publicly available.

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

SRF P-5.3 Material specific EPR assessment

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

The Dutch scheme covers both household and non-household packaging. The tariffs are however different per material; e.g. a tariff of 0,056 EUR/kg applies for glass for households, while the tariff for non-households is 0,0171 EUR/kg. The difference is typically a factor 2 to 4.

Summary result

SRF P-5.3.1 EPR scheme for Paper and cardboard packaging waste	EPR scheme covering household and non-household packaging	The Netherlands has an EPR scheme in place covering household, industrial and commercial packaging for paper and cardboard packaging waste.
SRF P-5.3.2 EPR scheme for Ferrous metals packaging waste	EPR scheme covering household and non-household packaging	The Netherlands has an EPR scheme in place covering household, industrial and commercial packaging for ferrous metals packaging waste.
SRF P-5.3.3 EPR scheme for Aluminium packaging waste	EPR scheme covering household and non-household packaging	The Netherlands has an EPR scheme in place covering household, industrial and commercial packaging for aluminium packaging waste.
SRF P-5.3.4 EPR scheme for Glass packaging waste	EPR scheme covering household and non-household packaging	The Netherlands has an EPR scheme in place covering household, industrial and commercial packaging for glass packaging waste.
SRF P-5.3.5 EPR scheme for Plastic packaging waste	EPR scheme covering household and non-household packaging, with a fee modulation meeting at least two assessment criteria	For plastics, only the recycled content criteria for fee-modulation is not met.

SRF P-5.3.6 EPR scheme for Wooden packaging waste	EPR scheme covering all non-household packaging	The EPR scheme covers all wooden packaging waste.
Robustness of the underlying information		Robust information provided in response to the questionnaire by the EEA and ETC/WMGE, complemented with reliable on-line information from PRO's.

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 the Netherlands was 1.4 % in 2020 (calculated based on Eurostat (2022a)).

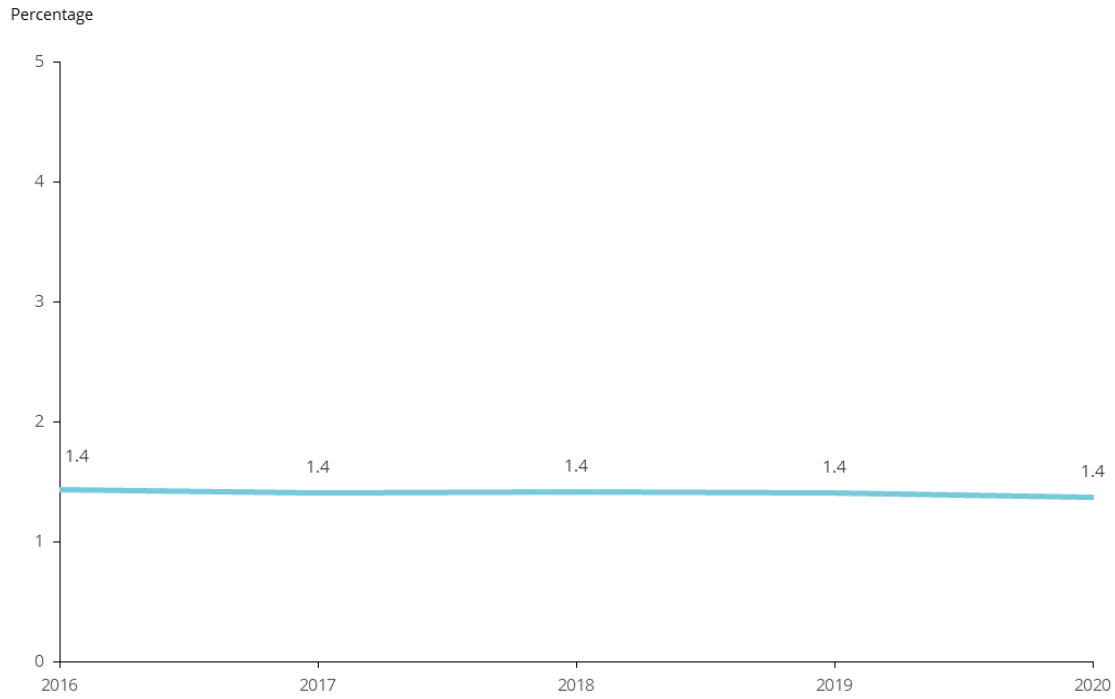
Summary result

Target exceeded	The landfilling rate of The Netherlands was 1.4 % in 2020.
Robustness of the underlying information	The data are derived from Eurostat and are considered to be rather robust. However, the reported landfill rate might increase once the new calculation rules laid down in the Commission Implementing Decision (EU) 2019/1885 will be applied. Based on the available information, it is currently not possible to quantify the impact of the new calculation rules on the landfill rate.

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

Over the past five years, the overall landfilling rate of the Netherlands has been 1.4 % (Figure 2.5).

Figure 2.5 Landfilling in the Netherlands between 2015 and 2019, in percentage



Source: Eurostat (2022a)

Summary result

Landfill rate < 10%	The landfill rate of the Netherlands was 1.4 % throughout the period 2016 to 2020.
Robustness of the underlying information	The data is derived from Eurostat and is considered to be rather robust. There is no break in the time series data.

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

Landfilling of biodegradable municipal waste is banned in the Netherlands.

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	The Netherland has reported 2 % biodegradable waste landfilled for 2016 and 2017 and performs therefore well within the target.
Robustness of the underlying information	Based on officially reported data which is well in line with otherwise reported statistical data on landfilling of municipal waste.

3 Conclusion

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

80 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that the Netherlands is **not at risk for not meeting the MSW recycling target in 2025**.
Current situation and past trends:	Based on currently available data the recycling rate of the Netherlands lies at 56.8 %, 1.8 percentage points above 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 51.8 % slightly below the target. The recycling rate has increased by 3.3 percentage points over the last five years.
Legal instruments:	The Netherlands has transposed the amended WFD into national law, but with a delay of almost 7 months. Responsibilities are defined and support mechanisms for municipalities are in place, but there are no direct consequences for the responsible municipal authorities if the targets are not met.
Economic instruments:	The same tax is applicable for both landfilling and incineration of waste. This tax is for landfilling lower, but for incineration higher than the current average European tax. In the Netherlands 50 % of the municipalities use a system for PAYT, which corresponds to a population coverage of only 37 %.

Separate collection systems:	To foster the recovery of municipal waste, separate collection has been part of the Dutch national strategy for many years. The Netherlands reports that the dominant system for separate collection of paper and cardboard, ferrous metals, aluminium, plastics, glass; bio-waste and composite packaging is high density collection, whereas for garden waste, textiles and wood the dominant system is low-density collection. There is a high share of the population covered by high convenience collection for paper and cardboard, metals, plastics, glass and bio-waste. Only for wood, a low share of the population is covered.
Extended producer responsibility:	In the Netherlands, EPR applies to all packaging, and only one producer responsibility organisation is in charge, Afvalfonds Verpakkingen. The extent of fee modulation being applied to some extent depends on the packaging fraction.
Bio-waste treatment capacity and quality management:	In theory, the Netherlands has more than enough capacity to treat all generated bio-waste.

3.2 Prospects for meeting the recycling targets for packaging waste

78 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that the Netherlands is **not at risk for not meeting the 65 % recycling target for packaging waste in 2025**	
77 % of maximum score	Paper and cardboard	Not at Risk
77 % of maximum score	Ferrous metals packaging	Not at Risk
72 % of maximum score	Aluminium packaging	Not at Risk
72 % of maximum score	Glass packaging	Not at Risk
65 % of maximum score	Plastics packaging	Not at Risk
75 % of maximum score	Wooden packaging	Not at Risk
Current situation and past trends:	For the Netherlands, the recycling rates (taking into account the potential impact of the new calculation rules) for total packaging as well as all individual materials, except plastics packaging, exceed the targets. The overall recycling rate for packaging waste in the Netherlands has steadily, but slightly, increased in the past five years. The recycling rates of glass, metal and plastics packaging have slightly increased while wooden packaging increased significantly, and paper and cardboard was stable.	

Legal instruments:	The Netherlands have transposed the amended PPWD into national law in July 2021, so with a one year delay compared to the transposition deadline of July 2020. The responsibility for reaching the targets is set on a PRO (Afvalfonds Verpakkingen) and there are direct financial consequences if the targets are not met. However, there are no support tools to facilitate better performance of recycling.
Economic instruments:	The Netherlands have banned the landfilling of mixed municipal waste, and applies the same tax rate for both landfilling and incineration. This rate is for landfilling lower and for incineration higher than the respective average European rate. There is no packaging tax applicable.
Separate collection systems:	For all packaging fractions a high share of the population is covered by high convenience services. And separation at source is mandatory for both households and non-households, for all main packaging waste fractions.
Extended producer responsibility:	In the Netherlands, EPR applies to all packaging, and only one producer responsibility organisation is in charge, Afvalfonds Verpakkingen, covering household, commercial and industrial packaging. The EPR system covers all packaging materials. Afvalfonds Verpakkingen applies advanced fee modulation for one packaging fraction, being plastics.

3.3 Prospects of meeting the landfill of municipal waste target

100 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that the Netherlands is **not at risk for not meeting the 2035 target to reduce the amount of municipal waste landfilled to 10 % or less of the total amount of municipal waste generated.**
Current situation and past trends:	The Netherlands has reached the target with an overall landfilling rate of about 1.4 % for several years.
Diversion of biodegradable municipal waste from landfill:	The Netherland has reported 2 % biodegradable waste landfilled for 2016 and 2017 and performs therefore well within the target.

List of abbreviations

Abbreviation	Name
ABBO	Waste Management Contribution Agreement
BMW	Biodegradable Municipal Waste
CAS	Civic Amenity Site
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 / Waste and Materials in a Green Economy
KIDV	KennisInstelling Duurzame Verpakkingen
MBT	Mechanical biological treatment
MSW	Municipal solid waste
NWMP	The National Waste Management Plan
PAYT	Pay-as-you-throw
PET	Polyethylene terephthalate
PPWD	Packaging and Packaging Waste Directive
PRO	Producer Responsibility Organisation
RR	Recycling rate
RR	Recycling rate
RWS	Rijkswaterstaat
SRF	Success and risk factor
TOC	Total organic carbon
VAT	Value Added Tax
WEEE	Waste Electric and Electronic Equipment
WFD	Waste Framework Directive

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Annex 1 Detailed scoring of success and risk factors

Assessment sheet - Recycling target for municipal waste

MS Netherlands

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
MSWR-1.1	Distance to target	Distance to target < 5 percentage points, or target exceeded	5	10
MSWR-1.2	Past trends in municipal solid waste recycling rate	RR > 50% and increase in last 5 years < 5 percentage points, or RR > 45%, and increase in last 5 years < 10 percentage points, or RR < 45% and increase in last 5 years > 10 percentage points	1	1
Legal instruments				
MSWR-2.1	Timely transposition of the revised WFD into national law	Transposition with 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	Ban, or landfill tax > 30 EUR/t* with escalator, or landfill tax > 45 EUR/t	1	2
MSWR-3.2	Taxes on municipal waste incineration	Taxes > 7 EUR/t* with escalator, or tax > 18 EUR/t	1	2
MSWR-3.3	Pay-as-you-throw (PAYT) system	No or less than 50% of the population covered by PAYT	1	0

Separate collection systems				
MSWR-4.1	Convenience and coverage of separate collection systems for the different household waste fractions			
	Paper and cardboard	A high share of the population is covered by high convenience collection services	0.46	0.92
	Metals	A high share of the population is covered by high convenience collection services	0.08	0.16
	Plastics	A high share of the population is covered by high convenience collection services	0.28	0.56
	Glass	A high share of the population is covered by high convenience collection services	0.18	0.36
	Bio-waste	A high share of the population is covered by high convenience collection services	0.84	1.68
	Wood	A low share of the population is covered by high convenience collection services	0.06	0
	Textiles	A 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	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.42	0
	Wood	No firm plans to improve the convenience and coverage	0.03	0
	Textiles	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0.03	0.06
	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	At least one packaging fraction* has an advanced fee modulation that meets at least two assessment criteria	1	1
Bio-waste treatment capacity and quality management				
MSWR-6.1	Capacity for the treatment of bio-waste	Enough bio-waste treatment capacity for 80% of generated municipal bio-waste	1	2
MSWR-6.2	Legally binding national standards and Quality Management System for compost/digistate	Legally binding national standards for compost/digestate quality in place, and quality management system in place	1	2
			Total score	**25.78**
			Maximum score	32.16
				80%

Assessment sheet - Recycling target for packaging waste

MS Netherlands

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	5 - 15 percentage points below target	5	5
	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 %, or RR > 65%	1	2
	Past trends in paper and cardboard packaging recycling	RR > 70% and increase in last 5 years > 5 percentage points, or RR > 65% and increase in last 5 years > 10 %, or RR > 75%	1	2
	Past trends in ferrous metals packaging recycling	RR > 65% and increase in last 5 years > 5 percentage points, or RR > 60% and increase in last 5 years > 10 %, or RR > 70%	1	2
	Past trends in aluminium packaging recycling	RR > 45% and increase in last 5 years > 5 percentage points, or RR > 40% and increase in last 5 years > 10 %, or RR > 50%	1	2
	Past trends in glass packaging recycling	RR > 65% and increase in last 5 years > 5 percentage points, or RR > 60% and increase in last 5 years > 10 %, or RR > 70%	1	2

	Past trends in plastic packaging recycling	RR > 45% and increase in last 5 years > 5 percentage points, or RR > 40% and increase in last 5 years > 10 %, or RR > 50%	1	2
	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	Ban, or landfill tax > 30 EUR/t* with escalator	1	2
P-3.2	Taxes on municipal waste incineration	Taxes > 7 EUR/t* with escalator, or tax > 18 EUR/t	1	2
P-3.3	Packaging taxes	No packaging taxes	1	0
P-3.4	Pay-as-you-throw (PAYT) system	No or less than 50% of the population covered by PAYT	1	0
P-3.5	Deposit-return systems for aluminium drink cans	No or voluntary DRS for some drink cans	1	0
	Deposit-return systems for glass drink bottles	No or voluntary DRS for some drink bottles	1	0
	Deposit-return systems plastic drink bottles	Mandatory DRS for nearly all drink bottles	1	2
	Deposit-return systems for plastic crates	Mandatory DRS for nearly all plastic crates	1	2
	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	At least one packaging fraction* has a fee modulation that meets at least two assessment criteria	1	1
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	EPR scheme covering household and non-household packaging, with a fee modulation meeting at least two assessment criteria	1	1
	Material specific EPR assessment - Wooden packaging waste	EPR scheme covering all non-household packaging	1	2
Total packaging recycling target				**25.00**
			Maximum score	32.00
				78%

Paper and cardboard recycling target

Total score	**23.00**
Maximum score	30.00
	77%

Ferrous metals packaging recycling target

Total score	**23.00**
Maximum score	30.00
	77%

Aluminium packaging recycling target

Total score	**23.00**
Maximum score	32.00
	72%

Glass packaging recycling target

Total score	**23.00**
Maximum score	32.00
	72%

Plastics packaging recycling target

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

Wooden packaging recycling target

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

Assessment sheet - Target for landfilling of municipal waste

MS Netherlands

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
LF-1.1	Distance to target	Distance to target < 10 percentage points, or target exceeded	5	10
LF-1.2	Past trends in municipal solid waste landfill rat	Landfill rate in 2020 < 20% and decrease in last 5 years > 5 percentage points, or Landfill rate in 2020 < 25% and decrease in last 5 years > 10 percentage points or Landfill rate in 2020 < or = 10%	1	2
LF-1.3	Diversion of biodegradable municipal waste from landfill	Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has been achieved in 2016 or in the year specified in the derogation where applicable	1	2
			Total score	**14.00**
			Maximum score	14.00
				100%