

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



Norway 

April 2024

Contents

- Contents 2
- Acknowledgements 3
- 1 Introduction 4
 - 1.1 Background and purpose 4
 - 1.2 Approach 4
 - 1.3 Member State profile – context parameters 4
 - Municipal waste generation and treatment 4
 - Legal Framework 5
 - Waste management plan(s) 6
 - Packaging waste generation and treatment 6
 - Capture rates for recyclables 7
- 2 Success and risk factors likely to influence future performance 8
 - 2.1 Target for preparing for reuse and recycling of municipal waste 8
 - 2.1.1 Current situation and past trends 8
 - 2.1.2 Legal instruments 9
 - 1.1.1 Economic instruments 11
 - 1.1.2 Separate collection system 13
 - 2.1.3 Extended producer responsibility (EPR) and similar schemes 17
 - 2.1.4 Treatment capacity for bio-waste 18
 - 2.2 Target for the recycling of packaging waste 20
 - 2.2.1 Current situation and past trends 20
 - 2.2.2 Legal instruments 23
 - 2.2.3 Economic instruments 24
 - 2.2.4 Separate collection system 26
 - 2.2.5 Extended producer responsibility (EPR) and similar schemes 29
 - 2.3 Target on landfill of municipal waste 31
 - 2.3.1 Current situation and past trends 31
- 3 Conclusion 33
 - 3.1 Prospects for meeting the recycling target for municipal solid waste 33
 - 3.2 Prospects for meeting the recycling targets for packaging waste 34
 - 3.3 Prospects of meeting the landfill of municipal waste target 36
- List of abbreviations 37
- References 38
- Annex 1 Detailed scoring of success and risk factors 40

Acknowledgements

This draft assessment was prepared by the ETC/CE under guidance of the European Environment Agency. It builds to a large extent on the answers provided by the Norwegian Environment Agency in August 2023 to a questionnaire developed by the European Environment Agency and ETC/CE, a follow-up interview with representatives of the Norwegian Environment Agency, the Ministry of Climate and Environment, and the EFTA Surveillance Authority (ESA), as well as written comments and information provided by the Norwegian Environment Agency in response to the draft version of this assessment. The European Environment Agency and ETC/CE would like to thank the Norwegian authorities for the information provided.

1 Introduction

1.1 Background and purpose

This document is an early warning assessment for Norway. 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 Norway is at risk of missing the targets for municipal waste and packaging waste set in EU legislation, as incorporated into the Agreement on the European Economic Area (EEA Agreement), for 2025. In addition, it provides an early assessment of the prospects for meeting the 2035 target for landfilling of municipal waste.

1.2 Approach

The assessment follows a methodology developed by the European Environment Agency and ETC/CE throughout 2020 (ETC/WMGE, 2021), which was slightly adapted to be applied to the European Economic Area EFTA states in 2023 (ETC CE, 2023). This methodology uses a set of quantitative and qualitative success and risk factors affecting recycling performance. The assessment is largely based on the information provided by Norway in the reply to a European Environment Agency-ETC/CE questionnaire as well as on available information from Eurostat and other relevant sources.

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

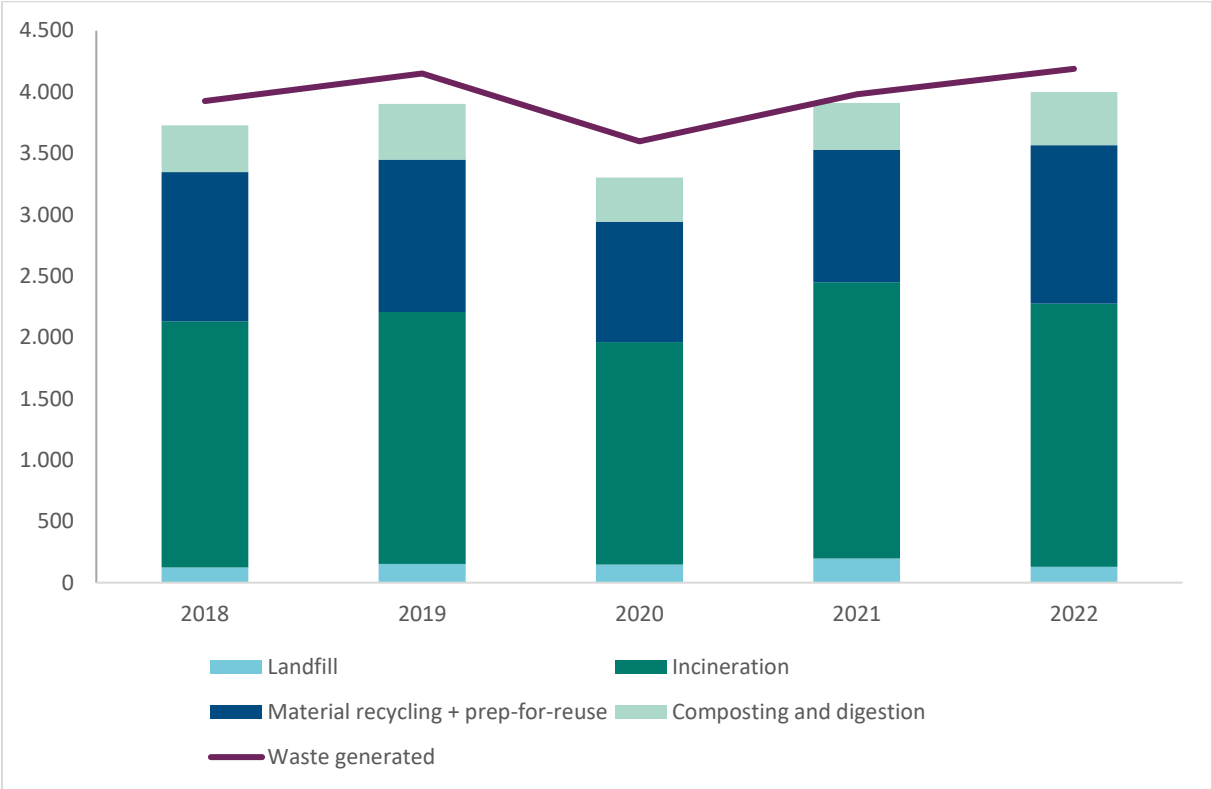
1.3 Member State profile – context parameters

Municipal waste generation and treatment

Despite a dip in 2020, Norway's municipal waste generation has increased with 7 % over the past five years (Figure 1.1). In 2022, the country generated 4.2 million tonnes of municipal waste, which corresponds to 768 kg/cap in 2022, which is well above the (estimated) EU average of 513 kg/cap in the same year.

The shares of the various waste treatment options have stayed quite stable over the past five years. Norway relies strongly on incineration, with around half of all municipal waste going to incineration, while around 30 % is diverted towards material recycling. The share of municipal waste that goes to composting and digestion has remained stable at around 10 %. Norway's landfilling rate was 3.1 % in 2022. Since 2020 the data includes MSW from other sources than households and the lower amounts in 2020 are due to the Covid-19 pandemic (Eurostat, 2022). Since reference year 2020, Norway reports according to Commission Implementing Decision 2019/1004.

Figure 1.1 Municipal waste generation and treatment in Norway between 2018 and 2022, in thousand tonnes



Note: Revised data submitted to Eurostat by the Norwegian Environment Agency but not yet published were used for 2020 and 2021

Source: Eurostat (2024), Norwegian Environment Agency (2023a)

Legal Framework

European Economic Area EFTA States, including Norway, are obliged to meet the targets for the recycling and preparation for reuse of municipal waste set out in the Waste Framework Directive (WFD), the packaging waste recycling targets of the Packaging and Packaging Waste Directive (PPWD) and the target on the landfilling of municipal waste defined in the Landfill of Waste Directive (LWD) within the same deadlines as the EU Member States. The Joint Committee Decisions (JCDs) incorporating these acts and amendments thereto into the European Economic Area Agreement (by virtue of which the acts are made applicable to Norway) do not provide for any derogations or adaptations to those targets for the European Economic Area EFTA States, including Norway.

In Norway, the main legislation that regulates municipal waste is the Norwegian Waste Regulation which implements the WFD (Ministry of Climate and Environment, 2004) and the Norwegian Pollution Control Act (Ministry of Climate and Environment, 1981).

The Waste Regulation was changed as from 1 January 2023 for separate collection and sorting, and material recovery of bio-waste and plastic waste. A suggestion to revise the Waste Regulation regarding separate collection and material recovery and preparing for reuse for paper and cardboard, glass and metal packaging and textile waste, in order to be further compliant with the targets set out in the WFD, is currently in public consultation. The requirements are set to come into force as of January 2025 (Norwegian Environment Agency, 2023).

Packaging and packaging wastes are regulated in Chapters 6 (Return systems for beverage packaging) and 7 (Packaging and packaging waste) of the Norwegian Waste Regulation (Ministry of Climate and Environment, 2004). The changes to the PPWD by Directive (EU) 2018/852 were implemented in the Norwegian Waste Regulation in May 2022, following incorporation of Directive (EU) 2018/852 into the European Economic Area Agreement (see more details in Section 2.2.2). Since 2018, Norway requires a mandatory membership in EPR schemes for producers that place on the market at least 1,000 kg per year of one type of packaging material. Before 2018 this was on a voluntary basis. For beverages packaging, there is a deposit return system in place (Norwegian Environment Agency, 2023).

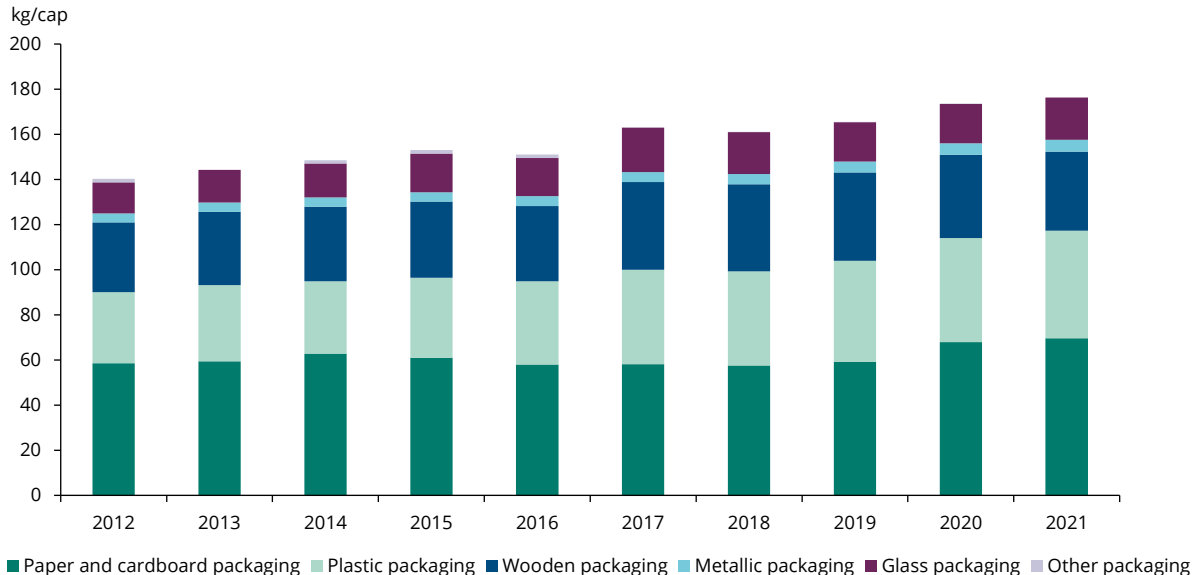
Waste management plan(s)

European Economic Area EFTA States have to issue one or several waste management plans, covering their entire geographical territory, in line with Art. 28 WFD. The waste plan 2020-2025 was published in 2019 and has been drawn up based on Article 28 of the WFD. It describes waste quantities, the status of handling different types of waste, and the most important treatment and recycling facilities in Norway. The plan also describes the need for changes in the waste infrastructure, based on EU requirements for preparation for reuse and material recycling. Also included in the waste plan is a waste prevention programme, as required by Article 29 of the WFD (Miljødirektoratet, 2019).

Packaging waste generation and treatment

In Norway, 950,522 tonnes (176 kg/cap) of packaging waste were generated in 2021, which is less than the (estimated) EU average of 188 kg/cap. The total packaging waste generation per capita has increased steadily by 17.2 % since 2012, with an increase in all packaging waste fractions. Especially the share of plastics packaging waste generation has increased, with 50.2 % during the same time period (Figure 1.2).

Figure 1.2 Packaging waste generation in Norway between 2012 and 2021, in kg per capita



Source: Eurostat (2023c), data for 2021 provided by the Norwegian Environment Agency to the EEA but not yet published by Eurostat.

Capture rates for recyclables

The capture rate is a good performance indicator of the effectiveness of the separate collection system. For this report, the capture rate has been calculated by dividing the separately collected weight of a certain material for recycling by the weight of the material in total municipal waste. Based on data from the Norwegian Environment Agency (2023) on residual waste composition and separate collection amounts, the calculated capture rates for different waste fractions are calculated as the share of separately collected fraction to the total generation of that material. For Norway the separate collection capture rates are presented in Table 1.1 below.

Table 1.1 Capture rates for different waste fractions in Norway

| | Residual waste composition (%) ^(a) | Amount of materials present in residual waste (tonnes) ^(b) | Amount of separately collected materials (tonnes) ^(c) | Amount of materials present in total municipal waste | Capture rate (%) |
|------------------------------|---|---|--|--|------------------|
| Reference year | 2021 | | | | |
| Mixed municipal waste, total | | 1 927 135 | | | |
| Paper and cardboard | 11% | 154 171 | 593 013 | 747 184 | 79% |
| Metals | 5.4% | 52 33 | 224 528 | 276 561 | 81% |
| Glass | 3.9% | 80 940 | 127 221 | 208 161 | 61% |
| Plastic | 3.8% | 283 289 | 144 252 | 427 541 | 34% |
| Bio-waste | 19% | 680 279 | 487 259 | 1 167 538 | 42% |
| Textiles | 1.4% | 115 628 | 29 292 | 144 920 | 20% |
| Wood | 1.8% | 7 709 | 61 235 | 68 944 | 89% |
| WEEE | 2.6% | 26 980 | 97 269 | 124 249 | 78% |

(b) **Note:** Share of material in residual waste multiplied with the amount of residual waste in 2022 as reported by the Norwegian Environment Agency in 2024

(a) **Source:** As reported in the European Environment Agency-ETC/CE questionnaire by the Norwegian Environment Agency, 2023

(c) **Source:** Provided by the Norwegian Environment Agency to the EEA by email dated 3 April 2024

The capture rates show that there is especially room for improvement of separate collection rates of textiles, plastics, bio-waste and glass.

2 Success and risk factors likely to influence future performance

2.1 Target for preparing for reuse and recycling of municipal waste

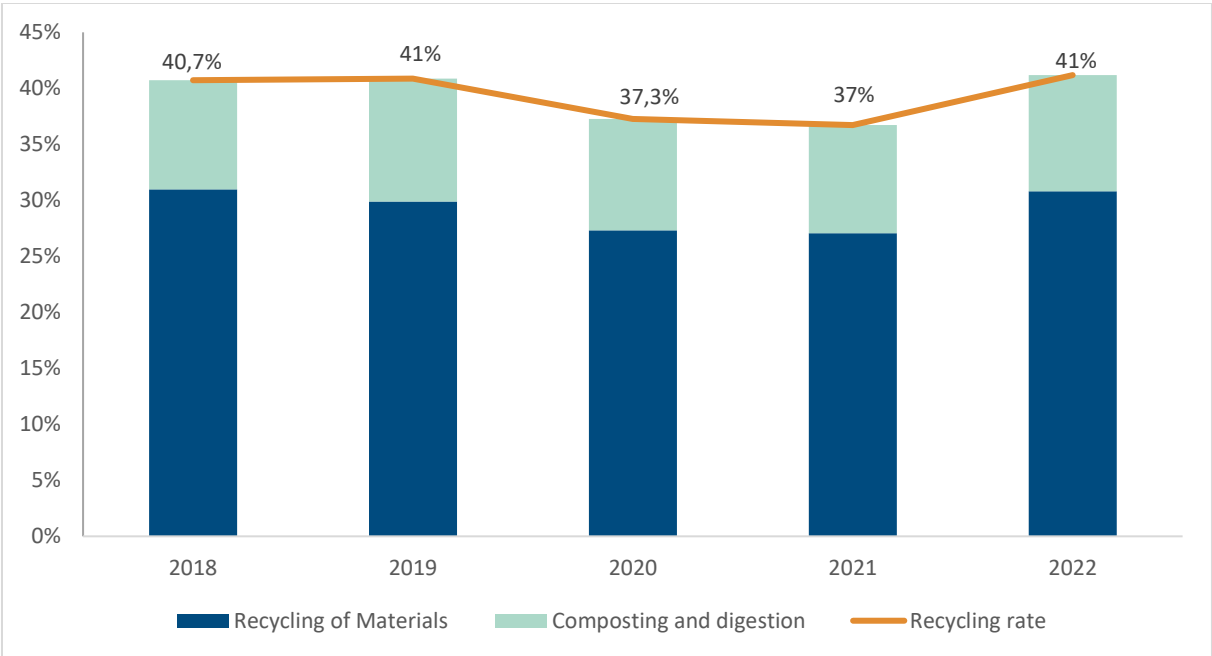
This chapter aims at assessing the prospects of Norway to achieve the **55 % preparing for reuse and recycling target** for municipal waste in 2025. For a detailed description of the methodology followed, the development of success/risk factors and their impact on recycling, please consult the Methodology report (ETC/WMGE, 2021) and the 2023 addendum (ETC CE, 2023).

2.1.1 Current situation and past trends

2.1.1.1 SRF MSWR-1.1: Distance to target

The overall recycling rate of Norway remained quite stable between 2018 and 2022 and stands at 41 % in 2022 (Figure 2.1). In this analysis the recycling rate is calculated based on the Eurostat data set “Municipal waste by waste management operations [env_wasmun]”; by dividing the summed amounts of recycling of materials, preparing for reuse and of composting and digestion, by the total generated amounts. The decrease in 2020 and 2021 can be explained by a change in the reporting methodology to the new calculation rules defined in the Commission Implementing Decision (EU) 2019/1004 while the data published by Eurostat for 2022 are preliminary and the new reporting rules are not yet applied to those (data according to the new rules have to be reported by 30 June 2024 and were therefore not yet available for this assessment).

Figure 2.1 Recycling rate in Norway between 2018 and 2022, in percentage



Note: For 2020 and 2021, data provided by the Norwegian Environment Agency were used that were submitted to Eurostat, but not yet published

Source: Eurostat (2024) , Norwegian Environment Agency (2023a)

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 country is to the target already, the more likely that the target will be met. For Norway, the recycling rate was 41 % in 2022, which is 14 percentage points below the 2025 target of 55 %. However, as the available data for the year 2022 did not yet follow the new calculation rules, an effect of a reduction with 5 percentage points is assumed for this assessment.

Summary result

| | |
|---|---|
| Distance to target > 14 percentage points | Based on currently available data, Norway’s recycling rate lies at 41 %, so the distance to the 2025 target is 14 percentage points. Considering, however, the likely impact of the new calculation rules, we assume a reduction with 5 percentage points for this assessment, resulting in an estimated recycling rate of 36 %, well below the target. |
| Robustness of the underlying information | There is a break in the time series data. The Norwegian authorities report that Norway applied the new calculation rules for 2020. Updated data for 2020 and 2021 were provided by the Norwegian Environment Agency. These data are not yet published by Eurostat. |

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

The recycling rate over the last five years (2018-2022) shows a very small increase of 0.3 percentage points (Figure 2.1), indicating that the efforts made over the last years to increase recycling in Norway have not been effective enough.

The data for 2020 and 2021 follow the new reporting rules and are therefore not directly comparable to the data for 2018-2019 and 2022..

Summary result

| | |
|--|--|
| RR < 46% and increase in last 5 years < 10 percentage points | The recycling rate increased by just 0.3 percentage points in the period 2018-2022. For Norway, reporting according to the new rules would result in an estimated recycling rate of 36 % for 2022. |
| Robustness of the underlying information | There is a break in the time series data. Norway reported according to the new calculation rules for the year 2020 and 2021. Data for 2020 and 2021 were submitted by the Norwegian Environment Agency. These data are not yet published by Eurostat. For the year 2022 however the reported data are not according to the new rules and are thus comparable to data for 2018, therefore the trend can be calculated for 2018 to 2022. |

2.1.2 Legal instruments

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

Timely transposition of the WFD, as amended by Directive (EU) 2018/851 (revised WFD), into national law within the foreseen period is key for a waste management system in line with EU requirements and the European Economic Area Agreement.

Following the incorporation of the revised WFD into the European Economic Area Agreement by JCD No 318/2021, which entered into force on 1 August 2022, Norway notified the EFTA Surveillance Authority (ESA) of its national implementing measures on 15 November 2022. Norway indicated that the national implementing legislation entered into force on 1 August 2022, which is also the compliance date for the revised WFD under the European Economic Area Agreement.

Summary result

| | |
|--|---|
| Transposition without delay | Norway implemented the revised WFD on time. |
| Robustness of the underlying information | Credible information received from ESA. |

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

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

In Norway, municipalities are not directly responsible for meeting the targets. However, they have targets for sorting out / separately collecting a certain proportion of certain types of waste according to the Norwegian Waste Regulation (which is currently under revision). For example, municipalities shall achieve a rate of separate collection of food waste of 55 % in 2025, increasing to 70 % in 2035, and they have to ensure that garden and park waste is separated at source. The separately collected / sorted waste shall be sent to recycling operations. The Norwegian Environment Agency conducts inspections related to the municipalities' duties related to these targets. Should these inspections reveal non-compliance, municipalities may be imposed to correct the situation. (Norwegian Environment Agency, 2023).

Moreover, there is a documentation obligation for the various responsible entities, such as municipalities, organisations or businesses that generate municipal waste or use agricultural plastic, waste treatment facilities and exporters of waste. The Norwegian Environment Agency carries out inspections at waste treatment facilities that have permits from the Norwegian Environment Agency, as well as inspections of exporters. The other responsible entities are inspected by the county governor. The county governor also carries out inspections with regard to the municipalities' compliance to the obligations (Norwegian Environment Agency, 2023).

The Waste Regulations do not stipulate any requirements as to which measures or instruments the municipality must use to ensure that the municipality meets the sorting requirement. Therefore, it is up to the municipality to decide what is needed to be able to secure a sufficient proportion of sorted waste. There are various instruments the municipality can use, such as information campaigns and guidance to residents in the municipality about the possibilities for source separation and what should be sorted where, differentiating waste fees or the analysis of sorted waste (Miljødirektoratet, 2023b). The costs associated with implementing the municipality's requirements for sorting and material recycling must be paid by households through the 'municipal waste fee'. For plastic packaging waste, collection, sorting, material recycling and other treatment are financed by the producers via the producer responsibility scheme for plastic packaging (Miljødirektoratet, 2023b).

Summary result

| | |
|--|--|
| Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets | Responsibilities are defined and support mechanisms for municipalities are in place, as well as mandatory targets for separate collection / sorting at municipal level. However, there are no direct consequences (such as fees) for the municipalities if the targets are not met. There are, however, duties for the municipalities to have knowledge about, and documentation of compliance with the duties. In addition, inspections are conducted at the municipalities, and should these inspections reveal non-compliance they may be imposed to correct the situation. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

1.1.1 Economic instruments

2.1.2.3 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 2021, Norway landfilled 3.1 % of the municipal waste generated. There is no landfill tax in place, however, since 2009 Norway applies a ban on the landfilling of biodegradable waste. There are some exemptions with regard to the landfill ban, more specifically for street refuse, contaminated soil and contaminated mud masses, sieve material and sand capture waste from sewage treatment plants and sewage sludge that does not meet the quality requirements for fertilisers. The pollution authority can, in special cases, allow landfilling of other biodegradable waste (Norwegian Environment Agency, 2023).

There are currently no changes in the process regarding the landfill ban or introducing landfill taxes (Norwegian Environment Agency, 2023). A landfill tax was recently proposed by the Norwegian Environment Agency. The Ministry is now evaluating this proposal.

Summary result

| | |
|--|--|
| Ban in place for landfilling residual or biodegradable waste | There is a ban on the landfilling of biodegradable waste in place. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.1.2.4 SRF MSWR-3.2: Taxes on municipal waste incineration

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

Norway strongly relies on waste incineration and almost half of the municipal waste generated is currently being incinerated. Since 2022, Norway applied an incineration tax of NOK 192 which increased to NOK 238 in 2023 (corresponding to EUR 20.7) per tonne of CO₂ on all waste that contains fossil materials. (Norwegian Environment Agency, 2023).

It was decided that as of 2023, there would be different rates (replacing the rate specified above) depending on whether or not the incinerator is subject to the ETS (Emissions Trading System). The

incineration tax for emissions from incineration plants (waste-to-energy plants) that deliver energy to the industry and are part of the ETS system (3 plants) would be NOK 95 (corresponding to EUR 8.3) per tonne of CO₂ and NOK 476 (corresponding to EUR 41.5) per tonne of CO₂ for emissions from other waste incinerators that are not subject to the ETS (15 plants) (Norwegian Environment Agency, 2023). However, the differentiated rates did not come into effect in 2023. There were discussions on whether to consider all incineration plants as being subject to the ETS, but this will not be the case before 2028 (Norwegian Environment Agency, 2023).

In 2024, the rates are NOK 176 (corresponding to EUR 15.2) per tonne of CO₂ for emissions from waste subject to quota pursuant to the Greenhouse Gas Emission Trading Act, and NOK 882 (corresponding to EUR 76.1) per tonnes CO₂ for emissions from waste not subject to quota (Finansdepartementet, 2023). The tax for waste resulting in emissions not subject to quotas, will escalate to NOK 2,000 (2020 value) per tonne CO₂ in 2030 (Norwegian Environment Agency, 2023).

The tax is calculated by multiplying the amount of waste delivered to the incineration facility (measured in tonnes) by a factor of 0.5498. This translates into a tax of NOK 96.8 per tonne of waste (subject to quota) and NOK 484.9 per tonne of waste (not subject to quota). However, the incineration facilities may apply for a facility-specific factor instead of using this factor, assessed by the Norwegian Environment Agency (The Norwegian Tax Administration, 2023).

For waste exported for incineration, there is no tax in place, however, there is a fee of NOK 13 400 (corresponding to EUR 1156) which needs to be paid for consents to exports of notifiable waste, including waste for incineration (Norwegian Environment Agency, 2023).

Summary result

| | |
|--|--|
| Taxes > 7 EUR/t, with escalator | Norway has a tax on waste incineration in place of NOK 96.8 per tonne of waste incinerated (corresponding to EUR 12 rescaled based on purchasing power parities) for waste subject to quota and NOK 484.9 per tonne of waste incinerated (corresponding to EUR 59.8 rescaled based on purchasing power parities) for waste not subject to quota. The latter escalates to NOK 1100 in 2030. (Eurostat, 2023a) |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.1.2.5 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.

The Norwegian Environment Agency estimates that most municipalities have a form of PAYT (based on bin volume or weight, or on collection frequency), however, the exact population coverage is unclear (Norwegian Environment Agency, 2023).

Section 34 in the Norwegian Pollution Control Act states that "municipalities should set differentiated fees, where this can contribute to waste reduction and increased recycling. The pollution authority can set regulations on the calculation of the fees" (Ministry of Climate and Environment, 1981). Norway is in the process of changing the Pollution Control Act, to make PAYT mandatory. A proposal has recently

been subject to a public hearing and the tentative timing for implementation is foreseen in 2024 (Miljødirektoratet, 2022).

Summary result

| | |
|---|---|
| PAYT scheme implemented in some regions / municipalities (50-80% covered) and firm plans for rolling out to at least 80% of the population. | Although the exact coverage is not known, the Norwegian Environment Agency estimates that most municipalities have a form of PAYT. There are plans to make a PAYT system mandatory in 2024. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

1.1.2 Separate collection system

2.1.2.6 SRF MSWR-4.1: Convenience and coverage of separate collection systems for the different MSW 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 km², bring points with a density of < 5 per km², civic amenity site) for assessing the degree of convenience, and differentiates between cities (densely populated), towns and suburbs (intermediate densely populated) and rural (thinly populated areas). It then calculates which share of the population is served by which type of system. The assessment is done on a material basis and taking into account the different materials according to their average share in municipal waste. This is described in more detail in the methodology (ETC/WMGE, 2021).

For Norway, according to the most recent data, the percentage of households living in cities is 23 %, in towns and suburbs 58 % and in rural areas 18 % (Eurostat, 2023b).

Although there is a general guidance on the separate collection of metal, glass, plastic and paper in the Pollution Control Act, currently at national level there is no mandatory separate collection of the four waste types (Ministry of Climate and Environment, 1981; Norwegian Environment Agency, 2023b). However, Norway has set up various systems to separately collect paper and cardboard, metals, plastics, glass and bio-waste. According to the Norwegian authorities, paper and cardboard and beverage cartons are collected co-mingled for the 95 % of the population served by door-to-door collection. At municipal recycling stations, paper and cardboard are collected separately or co-mingled. Also glass and metal packaging are collected co-mingled, either by door-to-door collection or by distributed bring systems. In several regions, covering 28.2 % of the population, residual waste, plastic packaging and food waste are collected in the same bin, but in different coloured bags. Food waste is separately collected door-to-door for 57.2 % of the population. For 15 % of the population, there is no separate collection of food waste, and for 1 % no separate collection of plastic packaging waste. Garden waste is mostly collected via bring points, covering 72.8 % of the population. For 26.1 % of the population, garden waste is separately collected door-to-door. A limited number of municipalities also uses coloured bags for the collection of paper and cardboard. The coloured bags are sorted out in central sorting facilities by optical sorting technology (Norwegian Environment Agency, 2023, 2023b).

In some municipalities, plastics and metal packaging are sorted out from the residual waste in central sorting facilities. For plastics this applies to 12.5 % of the population and for metal packaging to 6.5 % of the population. This only happens under controlled circumstances (e.g. dry residual waste). Studies

have shown that this provides a good quality of separate materials, comparable to the quality from separate collection. This is done in two facilities only (Norwegian Environment Agency, 2023, 2023b).

Door-to-door collection is more common in rural areas in Norway than in cities, due to a lack of space in city centres. Glass and metal packaging are currently mainly collected via bring points in urban areas. Although there is a Regulation to collect glass and metals packaging door-to-door, the Regulation is not yet adopted. The Norwegian authorities assume that some large cities will have problems with this Regulation in their city centres (Norwegian Environment Agency, 2023).

Textile waste from households is usually not collected separately, and most of this fraction ends up in the residual waste (Norwegian Environment Agency, 2023b). About 90 % of textiles that are collected separately, are collected via bring points that are mainly operated by non-profit or charity organisations (Norwegian Environment Agency, 2023).

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

Table 2.1 Characterisation of the collection system in Norway

| | Cities (densely populated areas) | | | | | Town and suburbs (intermediate density areas) | | | | | Rural areas (thinly populated areas) | | | |
|--|-------------------------------------|------------------------------|--|--|-----------------------|--|------------------------------|--|--|-----------------------|---|------------------------------|-------------|-----------------------|
| | Door-to-door - separate | Door-to-door - co-mingled | Bring point (>5 per km ²) | Bring point (<5 per km ²) | Civic amenity site | Door-to-door - separate | Door-to-door - co-mingled | Bring point (>5 per km ²) | Bring point (<5 per km ²) | Civic amenity site | Door-to-door - separate | Door-to-door - co-mingled | Bring point | Civic amenity site |
| Mixed/residual waste | xx | | | | | xx | | | | | xx | | | |
| Paper and Cardboard | xx | | | | | xx | | | | | xx | | | |
| Ferrous metals | | x | xx | | x | | x | xx | | x | | xx | x | x |
| Aluminium | | x | xx | | x | | x | xx | | x | | xx | x | x |
| Glass | | x | xx | | | | x | xx | | | | xx | x | |
| Plastic | xx | | | | | xx | | | | | xx | | | |
| Bio-waste | | | | | | | | | | | | | | |
| food | xx | | | | | xx | | | | | | | | |
| garden | x | | | x | xx | x | | | x | xx | | | x | xx |
| Textiles | | | | xx | | | | | xx | | | | xx | |
| Wood | | | | | xx | | | | | xx | | | | xx |
| WEEE | | | | xx | | | | | xx | | | | xx | |
| Composite packaging | xx | | | | | xx | | | | | xx | | | |
| Other (please specify): Old medicines | | | | | | | | | | | | | | |

Note: xx: dominant system; x: other significant systems. If the systems vary between municipalities, the largest city can be used as proxy. Grey cells are considered as ‘high convenience’.

Source: Norwegian Environment Agency (2023a, 2023b) based on data from 2021

Summary result

| | | |
|---------------------|---|--|
| Paper and cardboard | A high share of the population is covered by high convenience collection services | Door-to-door collection is the dominant system. |
| Metals | A high share of the population is covered by high convenience collection services | Bring points are the dominant system in cities and towns and suburbs. In rural areas, door-to-door collection is the dominant system. Metal packaging is collected door-to-door co-mingled with glass packaging. |
| Plastics | A high share of the population is covered by high convenience collection services | Door-to-door collection is the dominant system. |

| | | |
|--|---|---|
| Glass | A high share of the population is covered by high convenience collection services | Bring points are the dominant system in cities and towns and suburbs. In rural areas, door-to-door collection is the dominant system. Glass packaging is collected door-to-door co-mingled with metal packaging. |
| Bio-waste | A high share of the population is covered by high convenience collection services | Door-to-door collection is the dominant system for food waste, covering 57.2 % of the population. In addition, 28.2 % of the population is covered by door-to-door collection of food waste in coloured plastic bags that are collected via the residual waste but optically sorted in a waste-sorting facility. For garden waste, bring points are the dominant collection system. |
| Wood | A low share of the population is covered by high convenience collection services | Only lower service level collection points are in place. |
| Textiles | A low share of the population is covered by high convenience collection services | Only lower service level collection points are in place. |
| WEEE | Medium convenience collection services dominate | WEEE is collected through take-back systems at retailers and via civic amenity sites. |
| Robustness of the underlying information | | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. Norway has very good information about the prevalence of the types of separate collection systems and quantitative data about their coverage of the population. |

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

The Norwegian authorities indicate that there is a proposal to introduce mandatory separate collection of paper and cardboard, metals and glass as of January 2025. These fractions would be collected door-to-door by municipalities, and would have minimum targets for sorting output. The proposal has been in public hearing, and the Ministry is currently processing the final proposal with the objective of making the final steps of implementation as soon as possible (Norwegian Environment Agency, 2023). The same proposal includes a requirement for mandatory separate collection of textiles as from January 2025 (Miljødirektoratet, 2023a). However, the convenience and coverage is to be decided by the municipalities.

Summary result

| | | |
|--|---|--|
| Paper and cardboard | N/A (for countries in which a very high share of the population is already covered by high convenience collection services) | |
| Metals | N/A (for countries in which a very high share of the population is already 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) | |
| Glass | N/A (for countries in which a very high share of the population is already covered by high convenience collection services) | |
| Bio-waste | N/A (for countries in which a high share of the population is already covered by high convenience collection services) | |
| Wood | No firm plans to improve the convenience and coverage | |
| Textiles | Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline | The final proposal for a mandatory separate collection of textile waste as from January 2025, is currently being processed by the Ministry with the objective of making the final steps of implementation "as soon as possible". |
| WEEE | No firm plans to improve the convenience and coverage | |
| Robustness of the underlying information | | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.1.3 Extended producer responsibility (EPR) and similar schemes

2.1.3.1 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:

1. recyclability, for example differentiating between PET and PS, between different colours of PET, or between 100% cardboard boxes and laminated beverage cartons;
2. 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;
3. recycled content; and
4. if there is a transparent compliance check by the PRO that producers report correctly.

In Norway there are EPR systems in place for packaging waste from household and non-household sources. However, there is no (advanced) fee modulation in use (Norwegian Environment Agency, 2023) except for in the deposit return system Infinitum (Infinitum, 2024).

The Norwegian Environment Agency supports fee modulation for packaging, but sees a need to harmonize the arrangement with the rest of European Economic Area states and the upcoming EU Packaging and packaging waste regulation.

In 2022-2023, the Norwegian Environment Agency reviewed and proposed improvements for EPR in Norway, and how the EPR schemes can become more efficient, more robust and support the circular economy. One of the recommendations is that the fee must be differentiated in a way that promotes circularity where it is an important supplement to other regulatory requirements such as design requirements. Preparation for reuse must be included in the calculations of the rate of preparation for reuse and recycling for the producer responsibility schemes (PROs). The Norwegian Environment Agency also suggests amendments to make sure that the PROs are not hindering reuse or preparation for reuse (Norwegian Environment Agency, 2023).

Summary result

| | |
|--|--|
| No advanced fee modulation in place | There is currently no advanced fee modulation in Norway. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.1.4 Treatment capacity for bio-waste

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

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

The overall residual waste in Norway amounted to 1.9 million tonnes in 2021. The reported share of bio-waste in residual waste is 19 %, meaning that a total of 680,279 tonnes of bio-waste is present in residual waste (Norwegian Environment Agency, 2023). Adding the volumes reported as separately collected bio-waste in 2021 of 516,000 tonnes, this results in an overall amount of generated bio-waste of 1,167,538 tonnes, excluding home-composted amounts. This suggests that about 42 % of bio-waste was captured for recycling in 2021.

According to the Norwegian authorities, there is a capacity of approximately 600,000 tonnes available for the treatment of separately collected municipal bio-waste (Norwegian Environment Agency, 2023). This capacity is lower than the capacity which is considered sufficient in this assessment, namely 80 % of total generated bio-waste or 934,030 tonnes (80 % of 1,167,538 million tonnes). However, the Norwegian authorities report that there are several biogas treatment facilities planned or under development and therefore expect that the treatment capacity will increase in the coming years.

Summary result

| | |
|---|--|
| Bio-waste treatment capacity below 80% of generated municipal bio-waste but firm plans to close the gap | The bio-waste treatment capacity is below 80 % of total generated municipal bio-waste. However, there are several biogas facilities planned or under development to increase the treatment capacity. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.1.4.2 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 preset quality for the product.

The 'Regulation on organic fertilizers' (Forskrift om gjødselvarer mv. av organisk opphav) sets requirements for compost and digestate, such as a maximum amounts of heavy metals, plastics, glass and other foreign objects, sanitization, stabilisation, etc. (Ministry of Health and Care Services et al., 2003).

There is no Quality Management System in place for compost/digestate (Norwegian Environment Agency, 2023).

Summary result

| | |
|---|--|
| Legally binding national standards for compost/digestate quality but no quality management system | Norway has national standards for compost/digestate quality. There is no quality management system in place. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2 Target for the recycling of packaging waste

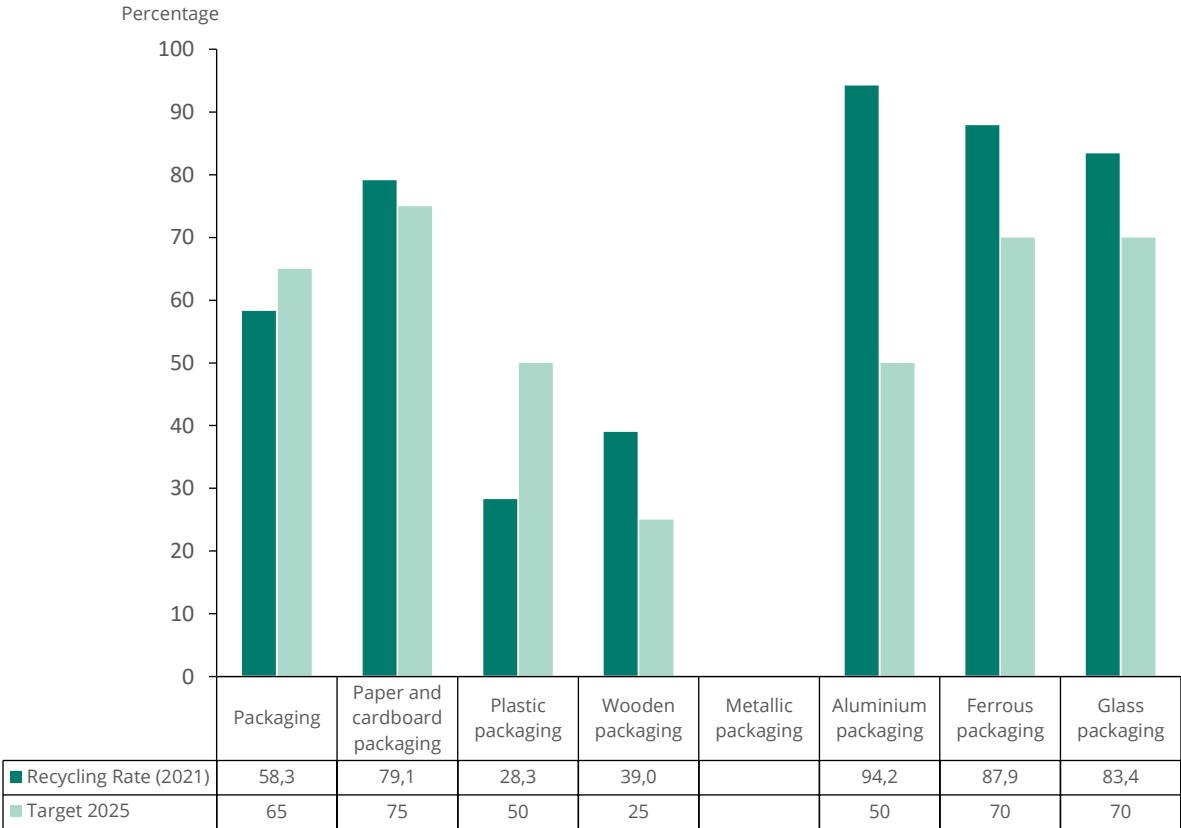
This chapter aims at assessing the prospects of Norway to achieve the **65 % recycling target for packaging waste** in 2025 as well as the **material specific packaging waste recycling targets** (50 % of plastic; 25 % of wood; 70 % of ferrous metals; 50 % of aluminium; 70 % of glass; 75 % of paper and 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/WMGE, 2021) and the 2023 addendum (ETC CE, 2023).

2.2.1 Current situation and past trends

2.2.1.1 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 provided by the Norwegian Environment Agency as the latest data year was not yet published by Eurostat at the time of this assessment. The latest available data refers to 2021. Packaging waste data for Norway for reference year 2021 have been reported according to the new reporting rules as defined in the Commission Implementing Decision (EU) 2019/665 and incorporated into the European Economic Area Agreement by Joint Committee Decision No 173/2022 (EU, 2022; Norwegian Environment Agency, 2023). The performance of Norway for 2021 is illustrated in Figure 2.2.

Figure 2.2 Packaging recycling rates for Norway in 2021, in percentage



■ Recycling Rate (2021) ■ Target 2025

Source: Norwegian Environment Agency (2023b), EU (2018)

For Norway, the reported total recycling rate for packaging waste is 6.7 percentage points below the 2025 target of 65 %. Paper and cardboard, wood, ferrous metals, aluminium and glass packaging reach the 2025 target. For plastics packaging, the distance to target is 21.7 percentage.

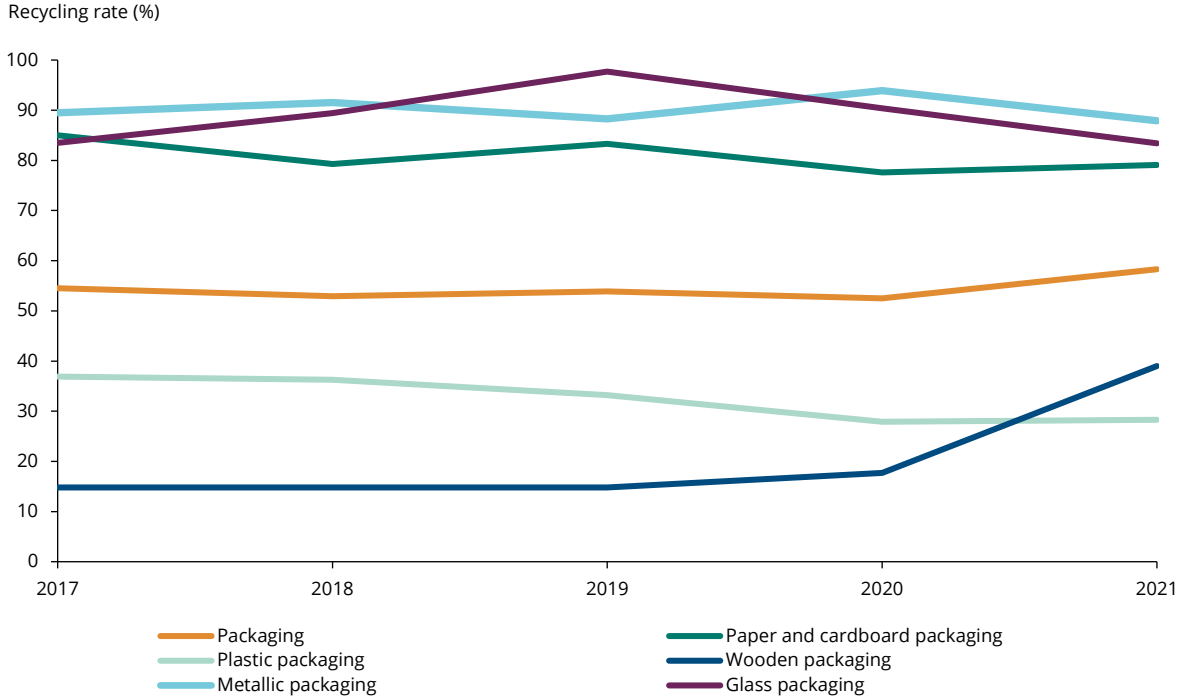
Summary result

| | | |
|--|---------------------------------------|---|
| Total packaging | 4 - 14 percentage points below target | Norway reports a recycling rate of 58.3 %, 6.7 percentage points below the 2025 target. |
| Paper and cardboard packaging | Target exceeded | Norway reports a recycling rate of 79.1 %, 4.1 percentage points above the 2025 target. |
| Ferrous metals packaging | Target exceeded | Norway reports a recycling rate of 87.9 %, 17.9 percentage points above the 2025 target. |
| Aluminium packaging | Target exceeded | Norway reports a recycling rate of 94.2 %, 42.2 percentage points above the 2025 target. |
| Glass packaging | Target exceeded | Norway reports a recycling rate of 83.4 %, 13.4 percentage points above the 2025 target. |
| Plastics packaging | > 14 percentage points below target | Norway reports a recycling rate of 28.3 %, 21.7 percentage points below the 2025 target. |
| Wooden packaging | Target exceeded | Norway reports a recycling rate of 39 %, 14 percentage points above the 2025 target. |
| Robustness of the underlying information | | The Norwegian authorities report that Norway applied the new calculation rules for 2021. Data used for this analysis were provided by the Norwegian Environment Agency. |

2.2.1.2 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 for packaging waste” [TEN00063] (latest data year: 2020) is used, combined with 2021 data provided by the Norwegian Environment Agency. The recycling trends for packaging waste by material in Norway are illustrated in Figure 2.3.

Figure 2.3 Trend in packaging waste recycling rates in Norway between 2017 and 2021, in percentage



Source: Eurostat (2023c), Norwegian Environment Agency (2023b), EU (2018)

In Norway, there was a slight increase in total packaging recycling rate in the past five years, from 54.5 % in 2017 to 58.3 % in 2021. However, the recycling rate of plastics packaging decreased during that time period, from 36.9 % to 28.3 %. In addition, also the recycling rate of paper and cardboard decreased with 5.9 percentage points to 79.1 %. However, despite the decrease, the recycling rate of paper and cardboard packaging still exceeds the target of 75 %. The recycling rate of metallic packaging slightly decreased with 1.6 percentage points, from 89.5 % in 2017 to 87.9 % in 2021. On the other hand, the recycling rate for wooden packaging increased significantly from 14.8 % in 2017 to 39 % in 2021.

Summary result

| | | |
|-------------------------------|---|---|
| Total packaging | RR > 56%, and increase in last 5 years < 10 percentage points | The recycling rate increased by 7 percentage points over the past five years and is 58.3 % |
| Paper and cardboard packaging | RR > 75 % | The recycling rate decreased by 7 percentage points over the past five years and is 79.1 % |
| Ferrous metals packaging | RR > 70 % | For metallic packaging, the recycling rate decreased by 1.6 percentage points over the past five years and is 87.9 % for ferrous metals and 94.2 % for aluminium packaging. |
| Aluminium packaging | RR > 50 % | |
| Glass packaging | RR > 70 % | The recycling rate slightly decreased by 0.1 percentage point over the past five years and is 83.4 % |
| Plastics packaging | RR < 41 % and increase in last 5 years < 10 percentage points | The recycling rate decreased by 8.6 percentage points over the past five years and is 28.3 % |

| | | |
|--|--|--|
| Wooden packaging | RR > 21% and increase in last 5 years > 5 percentage points, | The recycling rate increased by 24.2 percentage points over the past five years and is 39 % |
| Robustness of the underlying information | | The trends over time seem to be robust as there are no breaks in time series indicated. Separate data for aluminium and ferrous metals packaging is only available since reference year 2019. Data for 2021 were provided by the Norwegian Environment Agency. |

2.2.2 Legal instruments

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

Timely transposition of the PPWD, as amended by Directive 2018/852 (revised PPWD), into national law within the foreseen period is key for a waste management system in line with EU/European Economic Area requirements.

Following the incorporation of the revised PPWD into the European Economic Area Agreement by JCD No 296/2021, which entered into force on 30 October 2021, Norway notified ESA of its national implementing measures on 15 June 2022. Norway indicated that the national implementing legislation entered into force on 10 June 2022, which is more than six months after the compliance date for the revised PPWD under the European Economic Area Agreement.

Summary result

| | |
|---|--|
| Transposition with a delay of less than 12 months | Norway's implementing legislation of the revised PPWD entered into force on 10 June 2022, which is eight months after the compliance date. |
| Robustness of the underlying information | Credible information received from ESA. |

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

Responsibilities for meeting the targets, and support and enforcement mechanisms with respect to packaging waste are described in Chapters 6 and 7 of the Norwegian Waste Regulation. This Regulation gives producers and Producer Responsibility Organisations (PROs) the responsibility to collect, receive and treat packaging waste and meet the recycling targets as set in the Regulation.

The producer or PRO has a reporting obligation to the Norwegian Environment Agency and must prepare an annual report with an overview of measures, developments in the amount of packaging in tonnes and in percentage change from the previous year, as well as further plans for waste prevention. The PROs also support the producers with education on packaging regulations, reporting to the authority and organise workshops or webinars on packaging, recycling, waste prevention and packaging optimization. The Norwegian Environment Agency may issue more detailed guidelines for waste prevention and stipulate more detailed reporting requirements. The Norwegian Environment Agency also controls the compliance with the provisions as set in the Regulation (Ministry of Climate and Environment, 2004), follows up the yearly reports from the PROs and makes sure that the PROs have plans for reaching the targets and other duties laid down in the Norwegian regulations. Enforcement is risk-based where the fines depend on the time the inspectors use. The fines are defined in Chapter 39 of the Pollution Control Act (Ministry of Climate and Environment, 1981).

Summary result

| | |
|--|--|
| Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets | Responsibilities are defined as well as recycling targets and the fines for non-compliance. There is also a good set of support mechanisms in place. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2.3 Economic instruments

2.2.3.1 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 1.1.1 in more detail, Norway has a ban on the landfilling of biodegradable waste.

Summary result

| | |
|--|--|
| Ban in place for landfilling residual or biodegradable waste | There is a ban on the landfilling of biodegradable waste in place. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2.3.2 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 1.1.1 in more detail, Norway has a tax on waste incineration in place of NOK 96.8 per tonne of waste incinerated for waste subject to quota and NOK 484.9 per tonne of waste incinerated for waste not subject to quota. The latter escalates to NOK 1100 in 2023.

Summary result

| | |
|--|--|
| Taxes > 7 EUR/t, with escalator | Norway has a tax on waste incineration in place of NOK 96.8 per tonne of waste incinerated (corresponding to EUR 12 rescaled based on purchasing power parities) for waste subject to quota and NOK 484.9 per tonne of waste incinerated (corresponding to EUR 59.8 rescaled based on purchasing power parities) for waste not subject to quota. The latter escalates to NOK 1100 in 2030. (Eurostat, 2023a) |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2.3.3 SRF P-3.3: Packaging taxes

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

In Norway, there is a tax on beverage packaging as a measure to prevent littering and ensure increased collection and recycling. The tax, which is to be paid to the government, is divided into a base tax and an environmental tax. The tax is regulated in the Regulation on excise duties and the rates are decided by the Norwegian parliament annually (Ministry of Finance, 2001; Norwegian Environment Agency, 2023).

The basic charge is a flat charge that applies if the beverage packaging cannot be reused in its original form, i.e. all single-use bottles and cans. For reusable bottles, the base tax is not to be paid (Norwegian Environment Agency, 2023).

The environmental tax applies to all bottles and cans up to four litres. The fee is reduced depending on the return rate of beverage packaging that are collected by an approved EPR-systems for beverages packaging. The return share must be at least 25 % in order to receive this reduction. If the return rate is 95 % or higher, the fee is waived.

The return share is determined by the Norwegian Environment Agency and applies to all the members of each return system (PRO).

Summary result

| | |
|--|--|
| Packaging taxes in place | Norway has packaging taxes in place. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2.3.4 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.

Norway has a PAYT system in place for residual waste. The Norwegian Environment Agency estimates that most municipalities have a form of PAYT (volume or weight based, or on collection frequency), however, the exact population coverage is unclear (Norwegian Environment Agency, 2023).

Summary result

| | |
|---|---|
| PAYT scheme implemented in some regions / municipalities (50-80% covered) and firm plans for rolling out to at least 80% of the population. | Although the exact coverage is not known, the Norwegian Environment Agency estimates that most municipalities have a form of PAYT. There are plans to make a PAYT system mandatory in 2024. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2.3.5 SRF P-3.5: Deposit-return systems

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

The deposit-return system is described in Chapter 6 (Return systems for beverage packaging) of the Norwegian Waste Regulation. The scope is limited to packaging (bottles, cans, carton) of liquid beverages. The deposit-return systems are on a voluntary base only and need to be approved by the

Norwegian Environment Agency. Prerequisite of approval is a minimum return rate of 25 % and that the packaging goes to reuse or recycling (Ministry of Climate and Environment, 2022; Norwegian Environment Agency, 2023).

There are no plans to change the current deposit-return systems for beverage packaging.

Summary result

| | | |
|--|--|--|
| Aluminium drink cans | Voluntary DRS for nearly all drink cans | A voluntary DRS covering most of aluminium cans, supported by strong economic incentives to join the system. Due to the beverages packaging taxes described in SRF P-3.3 the attendance from the producers is nearly 100 %. |
| Plastic bottles | Voluntary DRS for nearly all drink bottles | A voluntary DRS covering most of plastic drink bottles, supported by strong economic incentives to join the system. Due to the beverages packaging taxes described in SRF P-3.3 the attendance from the producers is nearly 100 %. |
| Plastic crates | Voluntary DRS for some plastic crates | The grocery industry has a return/reuse system for crates for fresh food and the DRS for glass bottles also has a return/reuse system for the plastic crates used for transporting. This system is not a part of the regulations but is organised by the producers themselves. |
| Glass bottles | Voluntary DRS for some glass bottles | In Norway there are some voluntary deposit systems for beverage glass packaging in place for the HORECA-market. |
| Wooden packaging | Voluntary DRS for some wooden packaging | There are voluntary DRSs in place for some types of wooden packaging. |
| Robustness of the underlying information | | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2.4 Separate collection system

2.2.4.1 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. The methodology assumes that these sources are of similar size, but if the country provides information on the shares of household/non-household waste generation, this can be used to modify the weighting factors. For assessing the convenience and coverage of separate collection systems for households, the same methodology is used here as described in section 0.

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

For packaging waste from non-household sources, there is no mandatory separate collection except for plastics packaging. There are fees in case of non-compliance (Norwegian Environment Agency, 2023).

Summary result

| | | |
|--|---|--|
| Paper and cardboard packaging | 1. Packaging waste from households A high share of the population is covered by high convenience collection services | |
| | 2. Packaging waste from non-household sources Separation at source is not mandatory for non-household paper and cardboard packaging waste | |
| Ferrous metals packaging | 1. Packaging waste from households A high share of the population is covered by high convenience collection services | |
| | 2. Packaging waste from non-household sources Separation at source is not mandatory for non-household ferrous metals packaging waste | |
| Aluminium packaging | Packaging waste from households A high share of the population is covered by high convenience collection services | |
| Glass packaging | 1. Packaging waste from households A high share of the population is covered by high convenience collection services | |
| | 2. Packaging waste from non-household sources Separation at source is not mandatory for non-household glass packaging waste | |
| Plastics packaging | 1. Packaging waste from households A high share of the population is covered by high convenience collection services | |
| | 2. Packaging waste from non-household sources Separation at source is mandatory for non-household plastics packaging waste | |
| Wooden packaging | Packaging waste from non-household sources Separation at source is not mandatory for non-household wooden packaging waste | |
| Robustness of the underlying information | | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

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

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

Concrete plans are needed to improve the convenience and coverage of separate collection. This SRF is only relevant for MS and materials that do not score 'green' in SRF P-4.1.

The assessment is done on a material basis, and summing up the scores of the different materials according to their average share in packaging waste¹. Again, the material specific assessment considers packaging waste from both household and non-household sources.

In 2023, the Norwegian Environment Agency has submitted a proposal for consultation for a revised Chapter 10a of the Waste Regulations. The proposal concerns requirements for sorting, separate collection and material recycling or preparation for reuse of paper and cardboard, glass and metal packaging for both household waste and commercial/industrial waste similar to household waste. The main purpose is to increase material recycling. The new requirements would apply from 1 January 2025. With this proposal, the Norwegian Environment Agency expects that the proportion of household waste and similar waste from non-household sources that is recycled or prepared for reuse, will increase by approximately 1.5 percentage points in 2035 (Miljødirektoratet, 2023a). The proposal has been on public hearing, and the Ministry is currently processing the final proposal with the objective of making the final steps of implementation as soon as possible (Norwegian Environment Agency, 2023).

Summary result

| | | |
|-------------------------------|---|--|
| Paper and cardboard packaging | 1. Packaging waste from households N/A (for countries in which a high share of the population is already covered by high convenience collection services) | |
| | 2. Packaging waste from non-household sources Firm plans to introduce mandatory sorting at source for non-household paper and cardboard packaging waste | |
| Ferrous metals packaging | 1. Packaging waste from households N/A (for countries in which a high share of the population is already covered by high convenience collection services) | |
| | 2. Packaging waste from non-household sources Firm plans to introduce mandatory sorting at source for non-household ferrous metals packaging waste | |
| Aluminium packaging | Packaging waste from households N/A (for countries in which a high share of the population is already covered by high convenience collection services) | |
| Glass packaging | 1. Packaging waste from households | |

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

| | | |
|--|---|--|
| | N/A (for countries in which a high share of the population is already covered by high convenience collection services) | |
| | 2. Packaging waste from non-household sources Firm plans to introduce mandatory sorting at source for non-household glass packaging waste | |
| Plastics packaging | 1. Packaging waste from households N/A (for countries in which a high share of the population is already covered by high convenience collection services) | |
| | 2. Packaging waste from non-household sources N/A (for countries already having mandatory separation at source) | |
| Wooden packaging | Packaging waste from non-household sources No firm plans to introduce mandatory separation at source for non-household wooden packaging waste | |
| Robustness of the underlying information | | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2.5 Extended producer responsibility (EPR) and similar schemes

2.2.5.1 SRF P-5.1: Coverage of EPR schemes

In Norway, EPR applies to both household and non-household packaging. Since 2018, Norway requires a mandatory membership in EPR schemes for all packaging while this was only on a voluntary basis before this date (Norwegian Environment Agency, 2023).

Summary result

| | |
|--|--|
| All main packaging fractions* are covered by EPR schemes, covering household and non-household packaging | In Norway all main packaging fractions are covered by EPR schemes, covering household and non-household packaging. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

*Paper and cardboard, ferrous metals, aluminium, glass, plastic

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

As explained in Section 2.1.3, 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 2.1.3

In Norway there are EPR systems in place for packaging waste from household and non-household sources. However, there is no (advanced) fee modulation in use (Norwegian Environment Agency, 2023).

Summary result

| | |
|--|--|
| No advanced fee modulation in place | There is no advanced fee modulation in Norway. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities in response to the questionnaire by the European Environment Agency and ETC/CE. |

2.2.5.3 SRF P-5.3 Material specific EPR assessment

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

Summary result

| | | |
|---|--|---|
| SRF P-5.3.1 EPR scheme for Paper and cardboard packaging waste | EPR scheme covering household and non-household packaging, but no advanced fee modulation applied | Norway has an EPR scheme in place covering household and non-household 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, but no advanced fee modulation applied | Norway has an EPR scheme in place covering household and non-household 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, but no advanced fee modulation applied | Norway has an EPR scheme in place covering household and non-household packaging for aluminium packaging waste. |
| SRF P-5.3.4 EPR scheme for Glass packaging waste | EPR scheme covering household and non-household packaging, but no advanced fee modulation applied | Norway has an EPR scheme in place covering household and non-household packaging for glass packaging waste. |
| SRF P-5.3.5 EPR scheme for Plastic packaging waste | EPR scheme covering household and non-household packaging, but no advanced fee modulation applied | Norway has an EPR scheme in place covering household and non-household packaging for plastic packaging waste. |
| SRF P-5.3.6 EPR scheme for Wooden packaging waste | EPR scheme covering all non-household packaging | Norway has an EPR scheme in place covering non-household packaging for wood packaging waste. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities through the European Environment Agency-ETC/CE questionnaire. | |

2.3 Target on landfill of municipal waste

2.3.1 Current situation and past trends

2.3.1.1 SRF LF-1.1: Distance to target

The LWD (1999/31/EC), as amended by Directive (EU) 2018/850 (revised LWD), sets a target in Art. 5(5) to reduce, by 2035, the amount of municipal waste landfilled to 10 % or less of the total amount of municipal waste generated (by weight). The revised LWD was incorporated into the European Economic Area Agreement by JCD No 84/2022, which entered into force in the European Economic Area EFTA States on 19 March 2022. The target therefore applies to the European Economic Area EFTA states accordingly.

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 Norway was 3.1 % in 2022 (Figure 2.4).

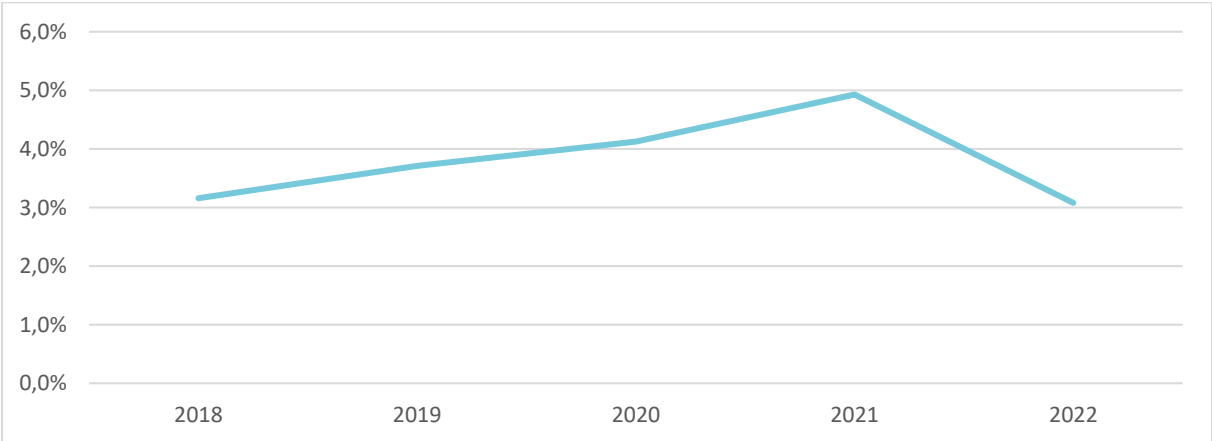
Summary result

| | |
|--|--|
| Target exceeded | The target is exceeded in Norway, with an overall landfilling rate of 3.1 % in 2022. |
| Robustness of the underlying information | The data is derived from Eurostat and is considered to be rather robust. |

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

Over the past five years, the overall landfilling rate Norway has decreased by 0.1 percentage point, from 3.2 % to 3.1 % (Figure 2.4). The increase in 2020/2021 is strongly influenced by the fact that 2020 is the first reference year for which Norway is reporting data to Eurostat according to Annex II of Commission Implementing Decision 2019/1885. For 2020 and 2021, data provided by the Norwegian Environment Agency was used which was submitted to Eurostat but not yet published. Data for 2022 is provisional and does not yet fully correspond to the new reporting rules of Commission Implementing Decision 2019/1885.

Figure 2.4 Landfilling in Norway between 2018 and 2022, in percentage



Note: For 2020 and 2021, data provided by the Norwegian Environment Agency was used which was submitted to Eurostat but not yet published

Source: Eurostat (2023b), Norwegian Environment Agency (2023a)

Summary result

| | |
|--|--|
| Landfill rate in 2021 < 10 % | The landfill rate has decreased with 0.1 percentage point in the period 2018-2022 and stands at 3.1 % in 2022. |
| Robustness of the underlying information | The data is derived from Eurostat and is considered to be rather robust. For 2020 and 2021, data provided by the Norwegian Environment Agency was used which was submitted to Eurostat but not yet published |

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

According to Art. 5(2)(c) of the LDW, the States had to ensure that by 2016, biodegradable municipal waste going to landfills is reduced to 35 % of the total amount (by weight) of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available. This target applies to the European Economic Area EFTA states accordingly.²

Norway reported to have landfilled 255 tonnes of biodegradable municipal waste in 2021. Although this is more than the 151 tonnes of biodegradable municipal waste landfilled in 2020, this is still far below 1 % of the total amount of biodegradable municipal waste produced in 1995 (Norwegian Environment Agency, 2023).

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 | Norway has reported a landfill rate of far below 1 % of the total amount (by weight) of biodegradable municipal waste produced in 1995, and performs therefore well within the target. |
| Robustness of the underlying information | Credible information received from the Norwegian authorities through the European Environment Agency-ETC/CE questionnaire. |

² Directive 1999/31/EC was incorporated into the EEA Agreement by JCD No 56/2001, which entered into force on 1 April 2002.

3 Conclusion

This risk assessment indicates whether Norway is at low, medium or high 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 Norway, only the SRFs relevant to Norway are taken into account to define the maximum score. Norway 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

| | |
|------------------------------------|--|
| 49 % of maximum points | Based on the provided information and the analysis done, it is concluded that Norway is at risk for not meeting the MSW recycling target in 2025. |
| Current situation and past trends: | <p>The recycling rate was 41 % in 2022., which is 14 percentage points below the 2025 target Considering, however, the impact of the new calculation rules, we assume a reduction with 5 percentage points for this assessment, resulting in an estimated recycling rate of 36 %, 19 percentage points below the target of 55 %. The recycling rate has remained rather stable between 2018 and 2022. Data for data years 2020 and 2021 are not comparable to earlier years due to the change in methodology, adopting the new EU reporting rules in 2020. Data for 2022 are preliminary and do not yet take into account the new reporting rules.</p> |
| Legal instruments: | <p>The amended WFD has been entered into national law with no delay.</p> <p>Responsibilities are defined and support mechanisms for municipalities are in place, as well as mandatory sorting/separate collection targets at municipal level. However, there a no direct consequences such as fines for the municipalities if the targets are not met. There are, however, duties for the municipalities to have knowledge about, and documentation of compliance with the duties. In addition, inspections are conducted at the municipalities, and should these inspections reveal non-compliance they may be imposed to correct the situation.</p> |
| Economic instruments: | <p>There is a ban on the landfilling of biodegradable waste in place.</p> <p>Norway has a tax on waste incineration in place of NOK 96.8 per tonne of waste incinerated (corresponding to EUR 12 rescaled based on purchasing power parities) for waste subject to quota and NOK 484.9 per tonne of waste incinerated (corresponding to EUR 59.8 rescaled based on purchasing power parities) for waste not subject to quota. The latter escalates to NOK 1100 in 2030Although the exact coverage is not known, the Norwegian</p> |

| | |
|--|--|
| | Environment Agency estimates that most municipalities have a form of PAYT. There are plans to make a PAYT system mandatory in 2024. |
| Separate collection systems: | <p>Door-to-door collection is the dominant system for bio-waste (food waste), paper and cardboard and plastics. For glass and metal packaging, bring points are the dominant system in cities and towns and suburbs. In rural areas, door-to-door collection is the dominant system. Glass and metal packaging are collected door-to-door co-mingled. For wood and textiles, only lower service level collection points are in place. WEEE is collected through take-back systems at retailers and via civic amenity sites</p> <p>There are plans to introduce a mandatory separate collection of paper and cardboard, metals and glass as of January 2025. These fractions will be collected door-to-door by municipalities, and they will have minimum targets for sorting output. However, the final decision and deadline still has to be decided by the Ministry. As of January 2025, there will also be a mandatory separate collection of textiles covering the whole population, but the type of collection system is decided by the municipalities.</p> |
| Extended producer responsibility: | EPR schemes are in place for all packaging materials from households and non-households. There is no fee modulation in place. |
| Bio-waste treatment capacity and quality management: | <p>The bio-waste treatment capacity is below 80 % of total generated municipal bio-waste, but there are firm plans to increase capacity.</p> <p>A legally binding national standard is in place, however a quality management system for compost/digestate is not.</p> |

3.2 Prospects for meeting the recycling targets for packaging waste

| | | |
|-----------------------------------|--|-------------|
| 66 % of maximum points | Based on the provided information and the analysis done, it is concluded that Norway is not at risk for not meeting the 65 % recycling target for packaging waste in 2025 | |
| 87 % of maximum points | Paper and cardboard | Not at Risk |
| 87 % of maximum points | Ferrous metals packaging | Not at Risk |
| 91 % of maximum points | Aluminium packaging | Not at Risk |
| 82 % of maximum points | Glass packaging | Not at Risk |
| 49 % of maximum points | Plastics packaging | At Risk |
| 74 % of maximum points | Wooden packaging | Not at Risk |

| | |
|------------------------------------|---|
| Current situation and past trends: | The total packaging recycling rate is 58.3 % in 2021, 6.7 percentage points below the 2025 target. The total packaging recycling rate has increased by 7 percentage points over the past 5 years. |
| Legal instruments: | <p>The amended PPWD has been entered into national law with a delay of 8 months.</p> <p>Responsibilities are defined as well as recycling targets and the fines for non-compliance. There are also support mechanisms in place.</p> |
| Economic instruments: | <p>There is a ban on the landfilling of biodegradable waste in place.</p> <p>Norway has a tax on waste incineration in place of NOK 96.8 per tonne of waste incinerated (corresponding to EUR 12 rescaled based on purchasing power parities) for waste subject to quota and NOK 484.9 per tonne of waste incinerated (corresponding to EUR 59.8 rescaled based on purchasing power parities) for waste not subject to quota. The latter escalates to NOK 1100 in 2030 Norway has packaging taxes in place.</p> <p>Although the exact coverage is not known, the Norwegian Environment Agency estimates that most municipalities have a form of PAYT. There are plans to make a PAYT system mandatory in 2024.</p> <p>There are only voluntary deposit systems for beverage packaging in place.</p> |
| Separate collection systems: | <p>For packaging waste from household sources, a high share of the population is covered by high convenience collection services.</p> <p>For packaging waste from non-household sources, there is no mandatory separate collection except for plastics packaging.</p> <p>There are plans to introduce a mandatory separate collection of paper and cardboard, metals and glass packaging as of January 2025. However, the final decision and deadline still has to be decided by the Ministry of Climate and Environment.</p> |
| Extended producer responsibility: | <p>In Norway all main packaging fractions are covered by EPR schemes, covering household and non-household packaging.</p> <p>There is no fee modulation in place.</p> |

3.3 Prospects of meeting the landfill of municipal waste target

| | |
|---|--|
| <p style="text-align: center;">100 % of maximum points</p> | <p>Based on the provided information and the analysis done, it is concluded that Norway 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.</p> |
| <p>Current situation and past trends:</p> | <p>The landfilling rate for municipal waste was 3.1 % in 2022, decreasing from 3.2 % in 2018.</p> |
| <p>Diversion of biodegradable municipal waste from landfill</p> | <p>Norway has reported a landfilling rate far below 1 % of the total amount (by weight) of biodegradable municipal waste produced in 1995, and performs therefore well within the target.</p> |

List of abbreviations

| Abbreviation | Name |
|---------------------|--|
| CE | Circular economy |
| DRS | Deposit Return System |
| EC | European Commission |
| EEA | EEA can stand for 'European Environment Agency' or 'European Economic Area'. In order to avoid confusion, the abbreviation is not used here. |
| EEE | Electrical and electronic equipment |
| EFTA | European Free Trade Association |
| EPR | Extended producer responsibility |
| ESA | EFTA Surveillance Authority |
| ETC/CE | European Topic Centre / Circular Economy and Resource Use |
| ETC/WMGE | European Topic Centre / Waste and Materials in a Green Economy |
| ETS | Emissions Trading System |
| MS | Member state |
| MSW | Municipal solid waste |
| PAYT | Pay-as-you-throw |
| PET | Polyethylene terephthalate |
| pp | Percentage point |
| PPWD | Packaging and Packaging Waste Directive |
| PRO | Producer Responsibility Organisation |
| PS | Polystyrene |
| RR | Recycling rate |
| SRF | Success and risk factor |
| WEEE | Waste Electric and Electronic Equipment |
| WFD | Waste Framework Directive |

References

ETC CE, 2023, *Methodology for the EEA's input to the 'Early warning' Assessment – Addendum for the application to the EFTA States*, ETC CE working paper, European Topic Centre Circular Economy and Resource Use (https://www.eionet.europa.eu/etcs/etc-ce/products/etc-ce-products/methodology-for-the-early-warning-assessment-related-to-certain-waste-targets/early-warning-methodology_addendum_efta_final.pdf) accessed 5 December 2023.

ETC/WMGE, 2021, *Methodology for the Early warning assessment related to certain waste targets*, ETC/WMGE Working Paper, European Topic Centre on Waste and Materials in a Green Economy (<https://www.eionet.europa.eu/etcs/etc-wmge/products/etc-reports/methodology-for-the-early-warning-assessment-related-to-certain-waste-targets>) accessed 29 April 2021.

EU, 2018, Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste (Text with EEA relevance) (OJ L).

EU, 2022, 'DECISION OF THE EEA JOINT COMMITTEE No 173/2022', *Official Journal of the European Union*.

Eurostat, 2022, Country specific notes on municipal waste September 2022, (<https://circabc.europa.eu/ui/group/b01d2930-990e-44fb-9121-a9a6b00a1283/library/f07f555f-0bde-4ed5-9cea-a1106395eb67/details>) accessed 20 November 2023.

Eurostat, 2023a, 'Comparative price levels' (<https://ec.europa.eu/eurostat/databrowser/view/TEC00120/default/table>) accessed 16 November 2023.

Eurostat, 2023b, 'Household characteristics by degree of urbanisation' (https://ec.europa.eu/eurostat/databrowser/view/HBS_CAR_T315_custom_7461615/default/table?lang=en) accessed 14 September 2023.

Eurostat, 2023c, 'Packaging waste by waste management operations [env_waspac]' (https://ec.europa.eu/eurostat/databrowser/view/ENV_WASPAC_custom_842634/default/table?lang=en) accessed 4 September 2023.

Eurostat, 2024, 'Municipal waste by waste operations [env_wasmun]' (https://ec.europa.eu/eurostat/databrowser/view/ENV_WASMUN/default/table) accessed 9 February 2024.

Finansdepartementet, 2023, 'Avgiftssatser 2024', Regjeringen.no (<https://www.regjeringen.no/no/tema/okonomi-og-budsjett/skatter-og-avgifter/avgiftssatser-2024/id2997383/>) accessed 19 March 2024.

Infinitem, 2024, 'Producers' (<https://infinitem.no/producers/>) accessed 19 March 2024.

Miljødirektoratet, 2019, *Avfallsplan 2020-2025* (<https://www.miljodirektoratet.no/globalassets/publikasjoner/m1582/m1582.pdf>) accessed 13 September 2023.

Miljødirektoratet, 2022, 'Nye krav til kildesortering av avfall', Miljødirektoratet/Norwegian Environment Agency (<https://www.miljodirektoratet.no/aktuelt/nyheter/2022/juli-2022/nye-krav-til-kildesortering-av-avfall/>) accessed 14 September 2023.

Miljødirektoratet, 2023a, 'Forslag til forskrift om endring i avfallsforskriften (utsortering, innsamling, forberedelse til ombruk og materialgjenvinning av enkelte avfallstyper) - Miljødirektoratet' (<https://www.miljodirektoratet.no/hoeringer/2023/juni-2023/forslag-til-forskrift-om-endring-i-avfallsforskriften-utsortering-innsamling-forberedelse-til-ombruk-og-materialgjenvinning-av-enkelte-avfallstyper/>) accessed 22 September 2023.

Miljødirektoratet, 2023b, 'Oppfyllelse av utsorteringskravene', Miljødirektoratet/Norwegian Environment Agency (<https://www.miljodirektoratet.no/ansvarsomrader/avfall/for-myndigheter/utsortering-og-materialgjenvinning-av-avfall/oppfyllelse-av-utsorteringskravene/>) accessed 13 September 2023.

Ministry of Climate and Environment, 1981, 'Pollution Control Act', Government.no (<https://www.regjeringen.no/en/dokumenter/pollution-control-act/id171893/>) accessed 13 September 2023.

Ministry of Climate and Environment, 2004, 'Forskrift om gjenvinning og behandling av avfall (avfallsforskriften)' (https://lovdata.no/dokument/SF/forskrift/2004-06-01-930/**) accessed 13 September 2023.

Ministry of Climate and Environment, 2022, 'Regulations on recycling and treatment of waste (Waste Regulations) - Chapter 6. Return systems for packaging of beverages - Lovdata' (https://lovdata.no/dokument/SF/forskrift/2004-06-01-930/KAPITTEL_6#KAPITTEL_6) accessed 21 September 2023.

Ministry of Finance, 2001, 'Forskrift om særavgifter' (<https://lovdata.no/dokument/SF/forskrift/2001-12-11-1451>) accessed 16 November 2023.

Ministry of Health and Care Services, et al., 2003, 'Forskrift om gjødselvarer mv. av organisk opphav - Lovdata' (<https://lovdata.no/dokument/SF/forskrift/2003-07-04-951>) accessed 14 November 2023.

Norwegian Environment Agency, 2023a, Annual reporting of municipal waste to Eurostat for reference years 2020 and 2021.

Norwegian Environment Agency, 2023b, *Questionnaire to EFTA States for providing information for the Early Warning analyses & follow-up call : Norway.*

Norwegian Environment Agency, 2023c, *Reporting under Article 10(6) of the Waste Framework Directive.*

The Norwegian Tax Administration, 2023, 'Waste incineration tax', The Norwegian Tax Administration (<https://www.skatteetaten.no/en/business-and-organisation/vat-and-duties/excise-duties/about-the-excise-duties/avfallsforbrenning/>) accessed 14 November 2023.

Annex 1 Detailed scoring of success and risk factors

Assessment sheet - Recycling target for municipal waste

MS Norway

Date April-24

| SRF | | Assessment result | Weight | Score |
|--|---|--|--------|-------|
| Current situation and past trends | | | | |
| MSWR-1.1 | Distance to target | Distance to target > 14 percentage points or no data reported | 5 | 0 |
| MSWR-1.2 | Past trends in municipal solid waste recycling rate | RR < 46% and increase in last 5 years < 10 percentage points | 1 | 0 |
| Legal instruments | | | | |
| MSWR-2.1 | Timely transposition of the revised WFD into national law | Transposition without delay | 1 | 2 |
| MSWR-2.2 | Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms | Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets | 1 | 2 |
| Economic instruments | | | | |
| MSWR-3.1 | Taxes and/or ban for landfilling residual or biodegradable waste | 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 | PAYT scheme fully rolled out (to at least 80% of the population) OR Implemented in some regions / municipalities (50-80% covered) and firm plans for rolling out to at least 80% of the population | 1 | 2 |
| Separate collection systems | | | | |
| MSWR-4.1 | Convenience and coverage of separate collection systems for the different household waste fractions | | | |
| | Paper and cardboard | A high share of the population is covered by high convenience collection services | 0,46 | 0,92 |
| | Metals | A high share of the population is covered by high convenience collection services | 0,08 | 0,16 |
| | Plastics | A high share of the population is covered by high convenience collection services | 0,28 | 0,56 |
| | Glass | A high share of the population is covered by high convenience collection services | 0,18 | 0,36 |
| | Bio-waste | A high share of the population is covered by high convenience collection services | 0,84 | 1,68 |
| | Wood | A low share of the population is covered by high convenience collection services | 0,06 | 0 |
| | Textiles | A 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 | 0 |

| | | | | |
|--|-----------|---|------|---|
| | Metals | N/A (for countries in which a very high share of the population is already covered by high convenience collection services) | 0 | 0 |
| | Plastics | N/A (for countries in which a very high share of the population is already covered by high convenience collection services) | 0 | 0 |
| | Glass | N/A (for countries in which a very high share of the population is already covered by high convenience collection services) | 0 | 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 | No advanced fee modulation OR fee modulation meets less than two assessment criteria | 1 | 0 |
| Bio-waste treatment capacity and quality management | | | | |
| MSWR-6.1 | Capacity for the treatment of bio-waste | Bio-waste capacity below 80% of generated municipal bio-waste but firm plans to close the gap | 1 | 1 |
| MSWR-6.2 | Legally binding national standards and Quality Management System for compost/digestate | Legally binding national standards for compost/digestate quality but no quality management system | 1 | 1 |
| Total score | | | | 15,78 |
| Maximum score | | | | 32,16 |

49%

Assessment sheet - Recycling target for packaging waste

MS Norway

Date

April-24

| SRF | | Assessment result | Weight | Score |
|--|--|--|--------|-------|
| Current situation and past trends | | | | |
| P-1.1 | Distance to target - Overall packaging | 4 - 14 percentage points below target | 5 | 5 |
| | Distance to target - Paper and cardboard packaging | < 4 percentage points below target, or target exceeded | 5 | 10 |
| | Distance to target - Ferrous metals packaging | < 4 percentage points below target, or target exceeded | 5 | 10 |
| | Distance to target - Aluminium packaging | < 4 percentage points below target, or target exceeded | 5 | 10 |
| | Distance to target - Glass packaging | < 4 percentage points below target, or target exceeded | 5 | 10 |
| | Distance to target - Plastics packaging | > 14 percentage points below target, or no data reported | 5 | 0 |
| | Distance to target - Wooden packaging | < 4 percentage points below target, or target exceeded | 5 | 10 |
| P-1.2 | Past trends in packaging waste recycling rate | RR > 61% and increase in last 5 years < 5 percentage points, or RR > 56%, and increase in last 5 years < 10 percentage points, or RR < 56% and increase in last 5 years > 10 percentage points | 1 | 1 |
| | Past trends in paper and cardboard packaging recycling | RR > 71% and increase in last 5 years > 5 percentage points, or RR > 66% and increase in last 5 years > 10 %, or RR > 75% | 1 | 2 |
| | Past trends in ferrous metals packaging recycling | RR > 66% and increase in last 5 years > 5 percentage points, or RR > 61% and increase in last 5 years > 10 %, or RR > 70% | 1 | 2 |
| | Past trends in aluminium packaging recycling | RR > 46% and increase in last 5 years > 5 percentage points, or RR > 41% and increase in last 5 years > 10 %, or RR > 50% | 1 | 2 |

| | | | | |
|-----------------------------|---|---|---|---|
| | Past trends in glass packaging recycling | RR > 66% and increase in last 5 years > 5 percentage points, or RR > 61% and increase in last 5 years > 10 %, or RR > 70% | 1 | 2 |
| | Past trends in plastic packaging recycling | RR < 41% and increase in last 5 years < 10 percentage points | 1 | 0 |
| | Past trends in wooden packaging recycling | RR > 21% and increase in last 5 years > 5 percentage points, or RR > 16% and increase in last 5 years > 10 %, or RR > 25% | 1 | 2 |
| Legal instruments | | | | |
| P-2.1 | Timely transposition of the revised Packaging and Packaging Waste Directive into national law | Transposition with a delay of less than 12months | 1 | 1 |
| P-2.2 | Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms | Clearly defined responsibilities, enforcement and good set of support mechanisms for meeting the recycling targets | 1 | 2 |
| Economic instruments | | | | |
| P-3.1 | Taxes and/or ban for landfilling residual or biodegradable waste | 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 | Packaging taxes in place | 1 | 2 |

| | | | | |
|------------------------------------|---|--|---|---|
| P-3.4 | Pay-as-you-throw (PAYT) system | PAYT scheme fully rolled out (to at least 80% of the population) OR Implemented in some regions / municipalities (50-80% covered) and firm plans for rolling out to at least 80% of the population | 1 | 2 |
| P-3.5 | Deposit-return systems for aluminium drink cans | Mandatory for some or voluntary DRS for nearly all drink cans | 1 | 1 |
| | Deposit-return systems for glass drink bottles | No or voluntary DRS for some drink bottles | 1 | 0 |
| | Deposit-return systems plastic drink bottles | Mandatory for some or voluntary DRS for nearly all drink bottles | 1 | 1 |
| | Deposit-return systems for plastic crates | No or voluntary DRS for some plastic crates | 1 | 0 |
| | Deposit-return systems for wooden packaging | No or voluntary DRS for some wooden packaging | 1 | 0 |
| Separate collection systems | | | | |
| P-4.1 | Convenience and coverage of separate collection systems for the different packaging waste fractions | | | |
| | Paper and cardboard packaging (household) | A high share of the population is covered by high convenience collection services | 1 | 2 |
| | Paper and cardboard packaging (non-household) | Separation at source is not mandatory for non-household paper and cardboard packaging waste | 1 | 0 |
| | Ferrous metals packaging (household) | A high share of the population is covered by high convenience collection services | 1 | 2 |
| | Ferrous metals packaging (non-household) | Separation at source is not mandatory for non-household ferrous metals packaging waste | 1 | 0 |
| | Aluminium packaging | A high share of the population is covered by high convenience collection services | 2 | 4 |
| | Glass packaging (household) | A high share of population is covered by high convenience collection services | 1 | 2 |
| | Glass packaging (non-household) | Separation at source is not mandatory for non-household glass packaging waste | 1 | 0 |
| | Plastics packaging (household) | A high share of the population is covered by high convenience collection services | 1 | 2 |
| | Plastics packaging (non-household) | Separation at source is mandatory for non-household plastic packaging waste | 1 | 2 |
| | Wooden packaging | Separation at source is not mandatory for non-household wooden packaging waste | 2 | 0 |
| P-4.2 | Firm plans to improve the convenience and coverage of separate collection systems for the different packaging waste fractions | | | |

| | | | | |
|--|--|---|-----|---|
| | Paper and cardboard (household) | N/A (for countries in which a high share of the population is already covered by high convenience collection services) | 0,5 | 0 |
| | Paper and cardboard (non-household) | Firm plans to introduce mandatory sorting at source for non-household paper and cardboard packaging waste | 0,5 | 1 |
| | Ferrous metals packaging (household) | N/A (for countries in which a high share of the population is already covered by high convenience collection services) | 0,5 | 0 |
| | Ferrous metals packaging (non-household) | Firm plans to introduce mandatory sorting at source for non-household ferrous metals packaging waste | 0,5 | 1 |
| | Aluminium packaging | N/A (for countries in which a high share of the population is already covered by high convenience collection services) | 1 | 0 |
| | Glass packaging (household) | N/A (for countries in which a very high share of the population is already covered by high convenience collection services) | 0,5 | 0 |

| | | | | |
|---|--|---|-----|---|
| | Glass packaging (non-household) | Firm plans to introduce mandatory sorting at source for non-household glass packaging waste | 0,5 | 1 |
| | Plastics packaging (household) | 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) | No firm plans to introduce mandatory separation at source for non-household plastic packaging waste | 0,5 | 0 |
| | Wooden packaging | No firm plans to introduce mandatory separation at source for non-household wooden packaging waste | 1 | 0 |
| Extended producer responsibility (EPR) and similar schemes | | | | |
| P-5.1 | Coverage of EPR schemes | All main packaging fractions* are covered by EPR schemes, covering household and non-household packaging | 1 | 2 |
| P-5.2 | Fee modulation in EPR schemes for packaging | No fee modulation OR fee modulation meets less than two assessment criteria | 1 | 0 |
| P-5.3 | Material specific EPR assessment - Paper and cardboard packaging waste | EPR scheme covering household and non-household packaging | 1 | 1 |
| | Material specific EPR assessment - Ferrous metals packaging waste | EPR scheme covering household and non-household packaging | 1 | 1 |
| | Material specific EPR assessment - Aluminium packaging waste | EPR scheme covering household and non-household packaging | 1 | 1 |
| | Material specific EPR assessment - Glass packaging waste | EPR scheme covering household and non-household packaging | 1 | 1 |

| | | | | |
|---|---|---|---|---------------------|
| | Material specific EPR assessment - Plastics packaging waste | 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 | | | | 21,73 |
| | | | | Maximum score 33,14 |

66%

Paper and cardboard recycling target

| | | | |
|--|--|--------------------|--------------|
| | | Total score | 27,00 |
| | | Maximum score | 31,00 |

87%

Ferrous metals packaging recycling target

| | | | |
|--|--|--------------------|--------------|
| | | Total score | 27,00 |
| | | Maximum score | 31,00 |

87%

Aluminium packaging recycling target

| | | | |
|--|--|--------------------|--------------|
| | | Total score | 29,00 |
| | | Maximum score | 32,00 |

91%

Glass packaging recycling target

| | | | |
|--|--|--------------------|--------------|
| | | Total score | 27,00 |
| | | Maximum score | 33,00 |

82%

Plastics packaging recycling target

| | | | |
|--|--|--------------------|--------------|
| | | Total score | 17,00 |
| | | Maximum score | 35,00 |

49%

Wooden packaging recycling target

| | | | |
|--|--|--------------------|--------------|
| | | Total score | 25,00 |
| | | Maximum score | 34,00 |

74%

Assessment sheet - Target for landfilling of municipal waste

MS Norway

Date April-24

| 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%