

Methodology for the EEA's 'Early warning' assessments – Landfill of municipal waste target



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Cover design: EEA
Cover image: generated by A.I.
Layout: ETC CE

Version: 1

Publication Date December 2025

EEA activity Circular Economy and Resource Use

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ETC CE coordinator: Vlaamse Instelling voor Technologisch Onderzoek (VITO)

ETC CE partners: Banson Editorial and Communications Ltd, česká informační agentura životního prostředí (CENIA), Collaborating Centre on Sustainable Consumption and Production (CSCP), Istituto Di Ricerca Sulla la Crescita Economica Sostenibile, Istituto Superiore per la Protezione e Ricerca Ambientale, IVL Swedish Environmental Research Institute, Norion Consult, Università Degli Studi Di Ferrara (SEEDS), German Environment Agency (UBA), Teknologian Tutkimuskeskus VTT oy, Wuppertal Institut für Klima, Umwelt, Energie gGmbH, World Resources Forum Association.

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Acknowledgements

This methodology has been developed by the European Topic Centre on Circular economy and resource use (ETC CE) under the guidance of the European Environment Agency (EEA).

The ETC CE and EEA would like to thank the European Environment Information and Observation Network (Eionet) and the European Commission (DG Environment, DG Sante and the Joint Research Centre) for their valuable comments to a draft version of this document.

Introduction

This document describes the methodology for assessing the 27 Member States' and 3 EEA-EFTA States' prospects of meeting the target to landfill not more than 10 % of municipal waste generated by 2035. Article 5(b) of the Landfill Directive foresees an early warning report to be produced by 2032, therefore the methodology used here is based on a shorter and simplified methodology compared to the early warning assessments for the targets on municipal waste, packaging waste and food waste that have to be met by 2030.

The methodology uses a set of 'success/risk factors' (SRFs). An SRF is assumed to influence the probability of meeting the target. For each SRF, the robustness of the underlying data/information will be assessed qualitatively. Regarding numeric reported data, the EEA will rely on Eurostat's quality checking and validation process.

The assessment of each SRF is done through threshold values or qualitative assessment categories that categorize each factor into green, orange or red:

on track target reached favourable	additional effort needed medium uncertain	unfavourable highly uncertain no information
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The risk assessment should indicate whether a country is at risk of not meeting the target. The 'total score' is the sum of the individual scores of each SRF, where the assessment of each SRF results in 2 points (green), 1 point (orange) or 0 points (red), depending on the assessment of the SRF. As the 'distance to the target' is considered to have a higher impact on meeting the target, this SRF gets the weight of 5, the other two SRFs are weighted with factor 1. A MS is considered to be 'not at risk' if its score is 50% or more of this maximum score. A MS is considered to be 'at risk' if its score is less than 50% of this maximum score. Table 1 illustrates how the final overall risk is calculated.

Table 1: Mock-up of how the final overall risk is calculated (general approach)

Relevant success and risk factors	Assessment result	Points	Weight of the SRF	Score
SRF 1		2	1	2
SRF 2		2	2	4
SRF 3		0	1	0
SRF 4		1	1	1
SRF 5		2	1	2
...
...
Total score (= sum of scores of all relevant SRFs)				9
Maximum score (= highest total possible score of all relevant SRFs)				12
Assessment score (= total score divided by the maximum score)				75%
Final overall risk	Not at risk if assessment score > or = 50% of maximum score			Not at risk
	At risk if assessment score < 50% of maximum score			

The early warning methodology is not intended to evaluate compliance with specific legal obligations imposed on economic operators or Member States in the Landfill Directive.

1 Current situation and past trends

1.1 SRF L-1.1 Distance to target

Description and relevance

The distance to the target – max. 10% of municipal waste generated is landfilled by 2035 – is assessed. The distance to the target at the most recent data point is a key factor in assessing the likelihood of meeting it. Generally, the closer a Member State is to the target, the higher the probability of achievement, assuming current trends continue.

Source

Reported data according to the Landfill Directive (1999/31/EC as amended by Directive 2018/850/EU) and Commission Implementing Decision (EU) 2019/1885.

Assessment

Landfill rate ≤ 10 percentage points	Landfill rate 10 - 20 percentage points	Landfill rate > 20 percentage points OR Data according to reporting rules not available
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Weight

5

Considerations for the assessment

MS may apply for a derogation from the landfill target if they meet the conditions set out in Article 5(6) of the Landfill Directive (Estonia, Greece, Croatia, Latvia, Malta, Romania and Slovakia). However, the deadline for such applications is at the end of 2033 and therefore this option is not taken into account in the early warning assessments before 2033.

Considerations for the assessment

Specific for the EEA-EFTA States: Due to delays inherent in the EEA Agreement, the new reporting rules enter into force later in time for the EEA EFTA States than for the EU Member States. The EEA EFTA States will therefore be assessed based on the reporting rules legally in force at the time of the assessment, or upcoming reporting rules in case of voluntary reporting.

1.2 SRF L-1.2 Past trend in municipal solid waste landfill rate

Description and relevance

Has the landfill rate (landfilled MSW as share of generated MSW) of the MS over the past five years been stagnating or increasing, and how does it relate to the current landfill rate? The closer the MS is to the target, the lower the pace toward the target will probably be. This SRF helps to better understand the dynamics of the landfill rate.

Source

Reported data (municipal waste landfilled and generated) according to the Landfill Directive (1999/31/EC as amended by Directive 2018/850/EU) and Commission Implementing Decision (EU) 2019/1885.

Assessment

Landfill rate in 2024 < 20% and decrease in last 5 years ≥ 5 percentage points OR Landfill rate in 2024 < 25% and decrease in last 5 years ≥ 10 percentage points OR Landfill rate in 2024 ≤ 10%	Landfill rate in 2024 < 20% and decrease in last 5 years < 5 percentage points OR Landfill rate in 2024 < 25%, and decrease in last 5 years < 10 percentage point, OR Landfill rate in 2024 ≥ 25% and decrease in last 5 years ≥ 15 percentage points	Landfill rate in 2024 ≥ 25% and decrease in last 5 years < 15 percentage points OR Data according to reporting rules not available
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Weight

1

Considerations for the assessment

This SRFs assumes an availability of five data points in accordance with the EC's Implementing Decision 2019/1885. However, in case less such data points are available, the threshold values in the assessment can be adjusted taking into account the number of available data points, with a minimum of three consecutive years without a break in time series.

1.3 SRF L-1.3 Diversion of biodegradable municipal solid waste from landfill

Description and relevance

Delay in meeting previous targets generally increases the risk for not meeting future targets. This SRF therefore assesses compliance with the target laid down in Article 5(2)(c) of the EU Landfill Directive to reduce the amount of biodegradable municipal waste landfilled to 35% of biodegradable municipal waste generated in 1995. The target had to be met in 2016, but the following MS have been granted an extension of the target deadline to 2020: Bulgaria, Croatia, Czechia, Estonia, Greece, Latvia, Lithuania, Malta, Poland, Portugal, Slovakia, Slovenia, and Iceland.

Source

Member States' reporting to the European Commission.

Assessment

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 2020 for MS with a derogation) OR Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has been achieved with a delay		Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has still not been achieved OR No data reported
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Weight

1

2 Economic instruments

2.1 SRF L-2.1 Taxes and/or ban for landfilling residual or biodegradable waste

Description and relevance

Bans or taxes on the landfilling of residual municipal waste or biodegradable municipal waste, as well as on the landfilling of sorting residues or mechanical biological treatment (MBT) outputs discourage landfilling. This creates economic incentives for diversion of waste from landfill. Taxes can be more effective if the tax level is increasing over time (escalator), especially when starting from a low level, giving operators certainty for planning. Application of an escalator is therefore rated positively. This SRF evaluates current landfill bans and landfill taxes. The latter are evaluated against the average landfill tax applied across the EU.

Source

[EEA Country profiles](#) (last update 2025). Update through questionnaire.

Assessment

Ban, or landfill tax* > 43 EUR/t with escalator OR Landfill tax* > 55 EUR/t	Landfill tax* > 43 EUR/t	Landfill tax* < 43 EUR/t OR No landfill tax or ban
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*Rescaled based on purchasing power parities

Weight

1

Considerations for the assessment

To allow meaningful comparison of landfill taxes across MS and assessing against a common threshold, taking into account different average income levels, the tax is rescaled to the EU27 average using the ‘comparative price levels’ from Eurostat (TEC000120). This is done by dividing the tax by the comparative price level per MS for the year for which the tax is available and multiplying by 100 (EU27 average). The landfill tax or ban relevant for mixed municipal waste or MBT output will be used for the assessment.

3 List of abbreviations

BMW	Biodegradable municipal waste
EEA	European Environment Agency
EC	European Commission
ETC CE	European Topic Centre on Circular Economy and Resource Use
MS	(EU) Member States (European Union)
MSW	Municipal solid waste
SRF	Success/risk factor
WFD	Waste Framework Directive
Questionnaire	One of the key sources for collecting information mentioned in the methodology is a questionnaire to MS, designed by the EEA and ETC CE to collect information on a voluntary basis.

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