Country profile

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

France

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European Environment Agency

Contents

Acknowledgements

This assessment has been prepared by the ETC/WMGE and the successive ETC/CE under guidance of the European Environment Agency and with inputs from a consortium led by Rambøll Group under contract with the European Commission. It builds to a large extent on the answers provided by the Ministry for the Ecological Transition/CGDD/SDES (Commissariat général au développement durable (CGDD) / Service des données et études statistiques (SDES)) in March 2021 to a questionnaire to a questionnaire developed by the EEA and ETC/WMGE. The EEA and ETC/CE would like to thank the French authorities for the information provided and for the kind review of drafts of this assessment in 2021 and May 2022.

1 Introduction

1.1 Background and purpose

The Waste Framework Directive 2008/98/EC (as amended by Directive (EU) 2018/851) includes a target to recycle and prepare for reuse, by 2025, 55 % of municipal waste generated. The Packaging and Packaging Waste Directive (94/62/EC as amended by Directive (EU) 2018/852) includes targets for the recycling of packaging waste, both in total and by material, to be achieved by 2025. The Landfill Directive (1999/31/EC as amended by Directive (EU) 2018/850) requires to limit the landfilling of municipal waste to 10 % of the generated municipal waste by 2035. The Directives also foresee that the European Commission, in cooperation with the European Environment Agency, publishes early warning reports on the Member States' progress towards the attainment of the targets, including a list of Member States at risk of not attaining the targets within the respective deadlines, three years ahead of the target dates. This assessment is a contribution from the EEA to the early warning reports according to Article 11b Waste Framework Directive and Art. 6b Packaging and Packaging Waste directive.

This document is an early warning assessment for France. 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 France is at risk of missing the targets for municipal waste and packaging waste set in EU legislation for 2025. In addition, it provides a preliminary assessment of the prospects for meeting the 2035 target for landfilling of municipal waste.

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

1.2 Approach

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

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

1.3 Country profile – context parameters

Municipal waste generation and treatment

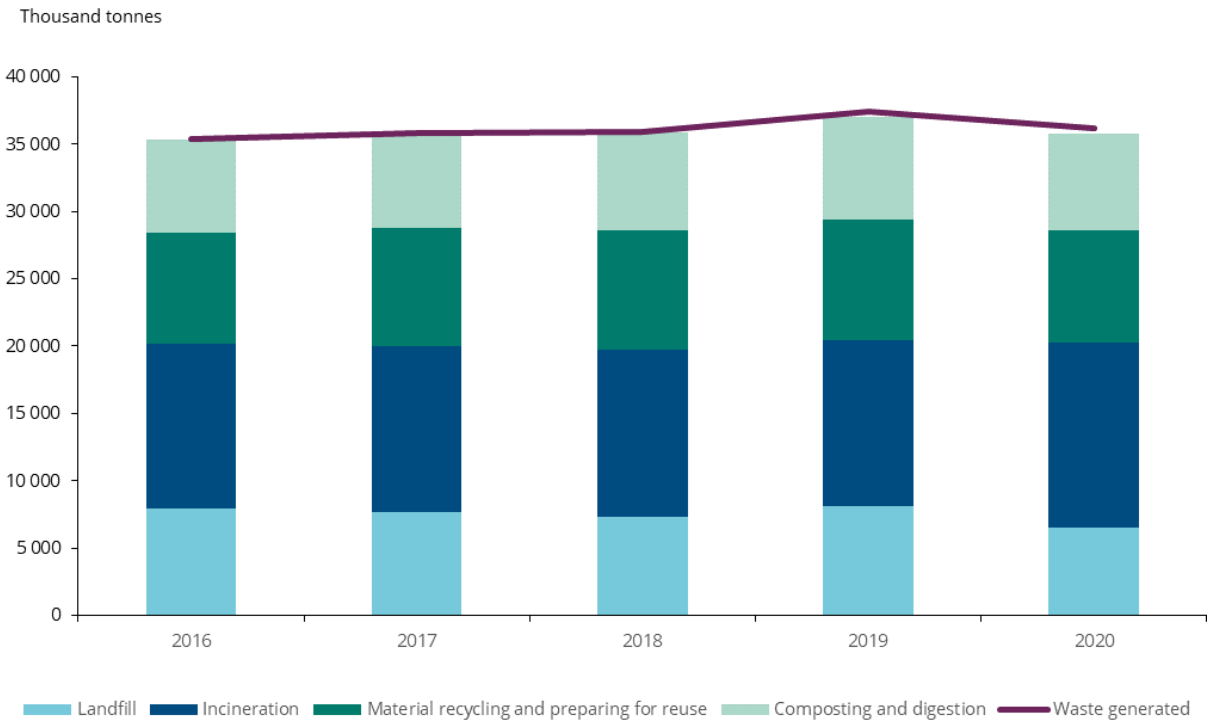
Municipal waste generation in France has remained rather stable over the past ten years. In 2020 the country generated 36.1 million tonnes of municipal waste (Figure 1.1). This corresponds to 537[1] kg/cap in 2020, which is above the (estimated) EU average of 505 kg/cap for the same year. The municipal waste generation data for 2020 include bio-waste that is recycled at source (home-composted).

Over the past five years, the recycling rate has decreased by 0.2 percentage points. French authorities have, however, indicated that 2019 and 2020 data are on a broader scope than in the preceding years: they include private collection, not just public waste management service collection, and recycling includes home composting and metal recovery from incineration bottom ash. On the other hand, the calculation point for recycling was chosen as close as possible to the point where a recycled material is produced, by only accounting for material that leaves the processing facilities. The recycling rate lies currently at 42.7 %. This is due to a number of effective measures, including a landfill ban and a disposal tax diverting waste to recycling.

The country has a relatively high level of incineration of municipal waste generated, which has been stagnating at about 35 % during the period 2016 – 2019, has gone up in 2020 to 38.1 %. France's recycling rate has been steadily increasing from 42.9 % in 2016 to 45.1 % in 2018, however going down since then. In 2020 the recycling rate stands at 42.7 %. In parallel, the landfilling rate has decreased from 22.4 % in 2016 to 18.1 % in 2020.

[1] Provisional estimate, this figure has been revised but not yet officially released by EUROSTAT.

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



Note: Data for 2016 flagged as Eurostat estimates; data for 2018 and 2020 flagged as Eurostat estimates and provisional

Source: Eurostat (2022a)

Legal Framework

In France, the *Code de l'environnement* groups together legal texts relating to environmental law. Waste management is regulated in Book V, which repeals and replaces all the decrees, by regulatory articles that take up their content (Code de l'environnement, 2000).

Until 2007 the heart of waste management legislation was the law n°92-646 of 13 July 1992 on the elimination of waste and on installations classified for environmental protection, aiming at, inter alia, reducing waste generation, promoting material or energy recovery and banning landfilling of untreated waste (Loi No 92-646, 1992). This law did not specify any quantitative targets, except for the landfill ban of untreated waste to be enforced by 2002. In 1993 a landfill tax was introduced and since 2002 there has been a ban on landfilling of untreated waste. In 2008, an escalator for both landfill and incineration tax was introduced (EEA, 2016).

Starting in 2007, a waste management strategy has been developed with a comprehensive stakeholder engagement process, known as the *Grenelle Environnement* process in France. The results of this consultation process, involving representatives from government, local authorities, industry, unions, professional associations and non-governmental organizations, were the basis of the new legislative framework with specific waste management targets at the national level. In 2009, the law n°2009-967 of 3 August 2009 on the implementation of the *Grenelle de l'environnement*, known as the first Grenelle Law, was implemented. The key points of this law included, inter alia, the reduction of the generation of household and similar waste by 2014, the reduction of waste sent to landfill or incineration by 2012 and the implementation of economic instruments, such as pay-as-you-throw schemes by 2014. Quantitative targets of this law included, amongst others, an increase of recycling

rates of household and similar waste of 35% by 2012 and 45% by 2015, and recycling rates of 75% for non-household waste (excluding construction and demolition and agriculture) (Loi n° 2009-967, 2009).

In France, there is a strong national focus on extended producer responsibility (EPR) schemes to promote recycling in particular sectors. The principle of EPR was first applied to household packaging waste in 1993. Starting from 2001, the scope of EPR has been continuously extended to a range of other product categories and material streams, such as WEEE, end-of-life vehicles (ELVs) and tires, batteries, printed/graphic paper, textiles, furniture, household healthcare products and so on. Since 2016 there is even an EPR scheme for leisure boats (Agence de la transition écologique (ADEME), 2020).
EPR schemes are also key in law n° 2015-992 of 17 August 2015 on the energy transition for green growth, (re)defining France's waste and circular economy policy. It aims to move from the management of waste to a better management of resources and establishes a waste prevention target to cut household waste production by 10 % of 2010 levels by 2020 (Loi n° 2015-992, 2015). This law also contains a number of measures designed to reach this target: it makes planned obsolescence illegal, obliges food retailers to donate unsold goods to charity to reduce food waste and in general strongly promotes waste prevention. This law also establishes waste recycling targets for the period from 2020 to 2025, namely 55 % and 65 % respectively of all non-hazardous non-inert waste; it extends separate collection to all organic waste by 2025 for all producers, including households.

Since 2016, professionals are obliged to sort at source and separately collect five waste streams: plastics, paper, glass, wood and metal. This obligation was introduced by the decree of 10 March 2016 (Décret n° 2016-288 du 10 mars 2016, 2016). Since 16 July 2021, construction and demolition professionals are obliged to sort at source and separately collect seven waste streams: paper, metal, plastic, wood, glass, mineral fractions and plaster. This obligation was introduced by the decree n°2021-950 of 16 July 2021 (Décret n° 2021-950 du 16 juillet 2021, 2021). This decree also introduces the obligation of source separation and separate collection of textile waste from 1 January 2025 for all professionals (Ministry for the Ecological Transition/ CGDD / SDES, 2021)**.** Because of the focus on separate collection, mechanical biological treatment (MBT) of waste is declared obsolete and excluded from any new public financing for MBT installations. For incineration, treatment capacities should not increase and their energy efficiency should improve, partly through phasing out installations without energy recovery by 2025 (Loi n° 2015-992, 2015).

In 2016, France also adopted a decree stating that landfill capacities should be reduced by 30 % by 2020 compared to their 2010 levels, and by 50 % by 2025. Incineration is, with the new decree, to be reduced by 25 % by 2020 and halved by 2025/2026. The decree also stipulates that waste management plans must identify shared facilities for collecting and treating bio-waste from households, businesses and farms (Décret n° 2016-811 du 17 juin 2016, 2016).

The ambitious roadmap for the circular economy adopted in April 2018 sets out some of the steps that need to be taken to promote sustainable design, reuse, repair and recycling. The roadmap aims to decrease resource use and consumption by 30 % by 2030, halve the amount of non-hazardous waste landfilled by 2025, introduce the ambitious target of 100 % plastics recycling by 2025 and create 300 000 new jobs. Through EPR schemes, producers will be obliged to inform consumers about a product's lifespan, and repairability based on a specific new index (EC, 2019c). In March 2018, France's Ministry for Solidarity and Ecology Transition created the Green Transition Accelerator (AcTE), a think tank that brings together companies, training centres and representatives of employers' organisations and trade unions. AcTEs' goal is to promote green growth, support innovation, realise the circular economy and ensure climate plans are implemented. Policies and activities supporting the transition

to a circular economy transition have become increasingly popular also in the administrative regions, complementing the central government's action (EC, 2019c).

In February 2020, the AGEC law on the fight against waste and on the circular economy (Loi n° 2020-105, 2020) was adopted. It contains a large range of measures with relevance for municipal waste and packaging waste, and it partly transposes the EU waste legislation amendments adopted in 2018. Several new measures foster the reuse and prevention of waste and recycling, including measures that aim to make sorting of waste more efficient, and phasing out single-use plastics.

The AGEC Law strengthens the framework of EPR channels and has included several provisions related to packaging and eco-modulation. It obliges Producer Responsibility Organisations (PROs) to participate in national collection targets for the recycling of plastic bottles for beverages, to contribute to achieve the national target of 5% of reused packaging placed on the market in 2023, and to reinforce the modulation of EPR contributions to encourage the integration of plastics from recycling, while penalizing signs and markings likely to lead to confusion about the sorting rules. The implementation of new EPR obligations, (e.g. for catering packaging and industrial and commercial packaging), the extension of sorting instructions etc. are expected to help increase recycling rates for packaging and municipal waste (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

As part of the transposition of Law No. 2020-105, Decree N° 2021-1199 on the conditions for the disposal of non-hazardous waste in non-hazardous waste storage facilities and in non-hazardous waste incineration facilities was published in September 2021. More specifically, this decree, with the addition of a ministerial order (Arrêté du 16 septembre 2021), defines 1) recoverable non-hazardous waste for which landfilling is progressively prohibited and 2) the modalities for justifying compliance with sorting obligations to be able to dispose of non-hazardous waste in landfills or incineration plants. The first measure takes into account the deployment of EPR channels on French territory and the evolution of source separation. The share of recoverable waste sent to landfill as defined in the draft decree will therefore decrease over time, following the entry into force of these various measures (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Waste management plan(s)

The National Waste Management Plan (NWMP) of France was legally adopted in October 2019 by the Ministry for Ecological Transition and Solidarity (Plan National de Gestion des Déchets, 2019) and updated in January 2020. This is the first National Waste Management Plan for France. This national plan complements the regional system provided for by the NOTRe law (Loi portant nouvelle organisation territoriale de la République), through more detailed regional waste prevention and management plans, which are under revision in most regions.

Currently, 18 regional WMPs are being updated, covering most regions. The NOTRe law, passed in 2015, makes WMPs and WPPs the responsibility of the regions. The content of the regional plans is specified in a Decree issued in 2016 and includes, *inter alia,* provisions for regional Circular Economy (CE) action plans.

The application period of the National WMP starts in 2019; the evaluation of the WMP will be carried out within the deadlines set by the Waste Framework Directive and it will be revised if necessary. No end date is provided in the plan with regard to the application period.

Article L.541-11-1 of the Environment Code provides for the Minister responsible for the environment to draw up national prevention and management plans for certain categories of waste, the list of

which is drawn up by decree by the Council of State, on the basis of their degree of harmfulness or their particular management characteristics. To date, these provisions have not been implemented for any type of waste. However, it should be noted that there is an inventory of waste containing PCBs (Articles R.543-26 and following of the Environment Code).

The plan covers all types of waste with dedicated sections for targeted waste streams.

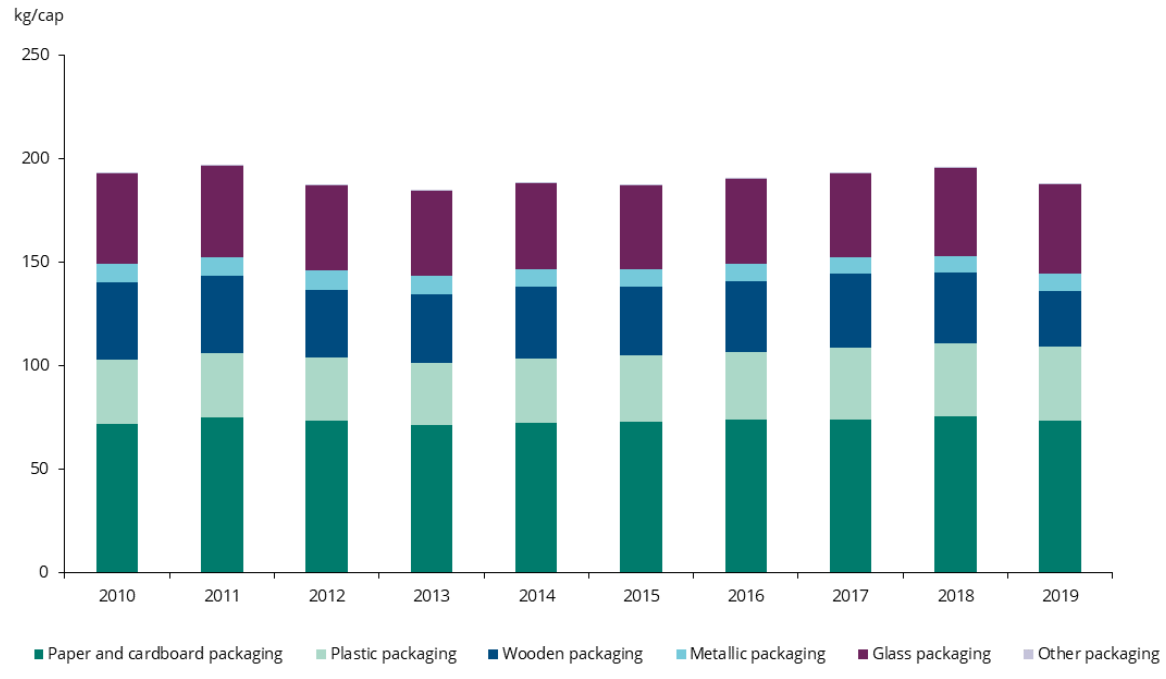
The WMP aims at gradually extending the sorting instructions to all plastic packaging throughout the country before 2022, with a view, as a priority, to their recycling, taking into account the prerequisites resulting from the experimentation with the extension of the instructions sorting of plastic packaging initiated in 2011. Furthermore, the WMP aims to increase the quantity of waste subject to recovery in the form of material, especially organic, by directing these towards recovery channels, respectively, 55 % in 2020 and 65 % in 2025 of non-hazardous non-inert waste, measured by weight, and to recover 70 % of the waste from the building and public works sector in the form of material in 2020. All the targets are integrated into the French Environmental Code.

As regards packaging, the WMP sets a target of 100 % separate collection for household plastic packaging by 2025.

Packaging waste generation and treatment

In France, 12.6 million tonnes (187 kg/cap) of packaging waste were generated in 2019, which is above the EU average of 177 kg/cap. Packaging waste generation decreased by 3 % from 193 kg/cap in 2010 to 187 kg/cap in 2019 (Figure 1.2).

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



Source: Eurostat (2022b)

France has traditionally reported rather high levels of recycling for most types of packaging waste fractions. Overall packaging waste recycling levels stood at over 50 % already in 2004. In more recent years, packaging waste recycling has been stable, but slightly below 70 %, mainly driven by paper and

cardboard, metals and glass packaging recycling. Wooden packaging is stagnating at about 30 %. However, the year 2018 represents an exception with a recycling rate of 55.6 %. Plastic packaging recycling stands at the lowest level, compared with the other fractions at 26.9 % in 2019.

The high historical levels of packaging waste recycling can be explained by the fact that household packaging waste was the first sector to implement the principle of EPR as early as 1992 in France (Agence de la transition écologique (ADEME), 2020).

Capture rates for recyclables

The capture rate is a good performance indicator of the effectiveness of the separate collection system. The capture rate is calculated by dividing the separately collected weight of a certain material for recycling by the weight of the material in total municipal waste. For France, Table 1.1 shows the calculated capture rates for different waste fractions.

Table 1.1 Capture rates for different waste fractions in France

	Residual waste composition (%)([b])	Residual waste composition (tonnes)([a])	Separately collected amounts (tonnes) ([b])	Materials in total MSW (tonnes)	Capture rates (%)
Reference year	2019	2019	2019		
Mixed municipal waste, total		16 610 681			
Paper and cardboard	15 %	2 494 924	860 177	3 355 101	26 %
Metals	3 %	571 407	588 044	1 159 451	51 %
Glass	5 %	888 671	2 154 514	3 043 185	71 %
Plastic	15 %	2 440 109	43 639	2 483 748	2 %
Bio-waste	33 %	5 441 659	5 298 609	10 740 268	49 %
Textiles	4 %	661 105	126 177	787 282	16 %
Wood	0.3 %	53 154	1 237 355	1 290 509	96 %
Co-mingled dry recyclables	Included in the above	-	2 994 439	-	-

([a]) Note: Share of material in residual waste (household waste only) multiplied with the amount of residual waste in 2018 as reported in the questionnaire by the Ministry for the Ecological Transition/ CGDD / SDES (2021)

([b]) Source: As reported in the EEA-ETC/WMGE questionnaire by the Ministry for the Ecological Transition/ CGDD / SDES (2021)

The capture rates for municipal waste fractions amount to 49 % for bio-waste (see also section 2.1.7), 71 % for glass, 16 % for textiles and 96 % for wood. In addition, capture rates are calculated as 2 % for plastic, 26 % for paper and cardboard, and 51 % for metals, but these capture rates only refer to those materials that are collected as mono-fractions, while paper and cardboard, plastics and metals are to a large extent collected commingled and then sorted. This means that the capture rates for these three materials are likely much higher but challenging to quantify.

The capture rates indicate that there is especially room for improvement to capture higher shares of the generated textile wastes, but also to some extent bio-waste and glass, while no conclusion is possible for plastics, metals and paper/cardboard.

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 France to achieve the **55 % preparing for reuse and recycling target** for municipal waste in 2025. For a detailed description of the methodology followed, the development of success/risk factors and their impact on recycling, please consult the methodology report (ETC/CE & ETC/WMGE, 2022) .

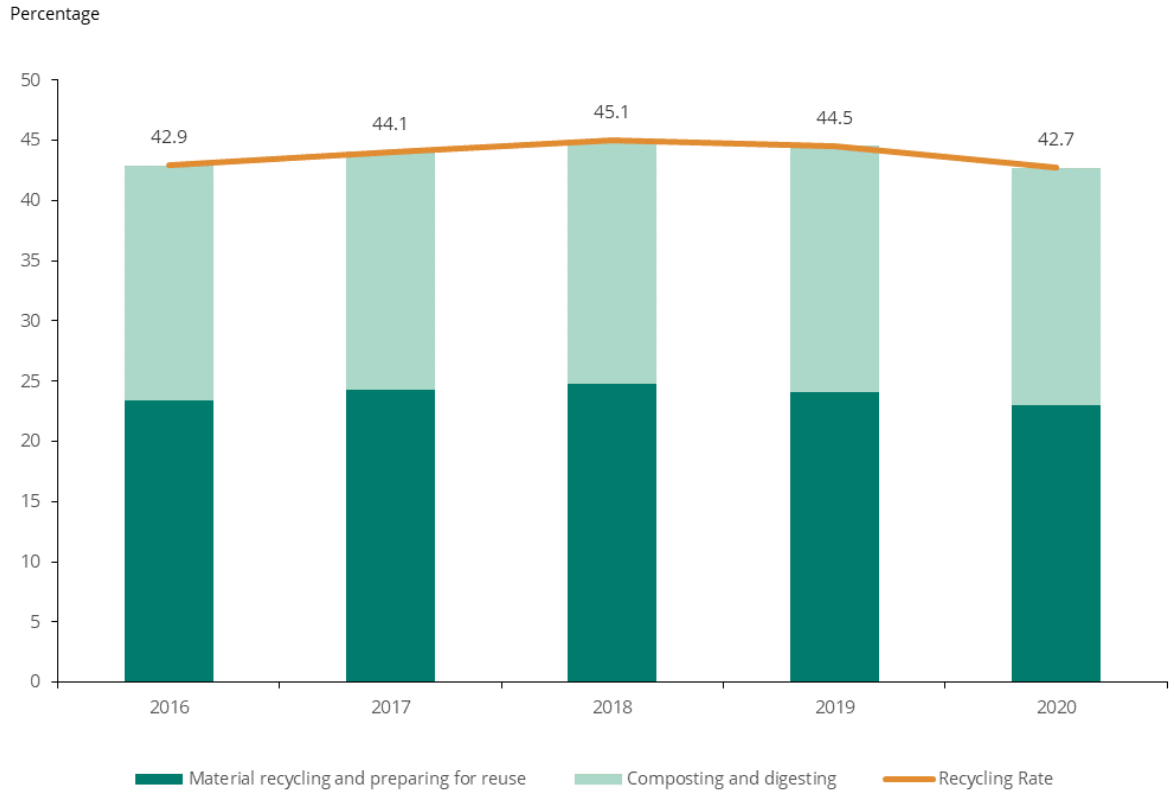
2.1.1 Current situation and past trends

SRF MSWR-1.1: Distance to target

The overall recycling rate of France shows a small increase between 2016 and 2019, but went down again after that and lies at 42.7 % in 2020 (Figure 2.1). As already explained in section 1.3, the figures corresponding to 2019 and 2020 are, however, not entirely comparable with the data for the previous years, although no break of series has been flagged in the corresponding Eurostat database.

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

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



Note : Data for 2016 flagged as Eurostat estimates; data for 2018 and 2020 flagged as Eurostat estimates and provisional

Source: Eurostat (2022a)

The actual distance to the target for the most recent data point is a key factor determining the likelihood of meeting/not meeting the target. The closer the Member State is to the target already, the more likely it becomes that the target will be met. For France, the recycling rate is 42.7 % in 2020, which is 12.3 percentage points away from reaching the targets of 55 %. Furthermore, the data reported to Eurostat, which are used in the current assessment, include metals recovered from incineration residues and bio-waste recycled at source.

However, the data used for this analysis are not yet fully in line with the new calculation rules, as defined in the Commission Implementing Decision (EU) 2019/1004 (EC, 2019b), that will modify the recycling measurement point. A few Member States have provided quantified estimates indicating how the application of the new reporting rules would influence the recycling rate (compared to the data reported to Eurostat under the Joint Eurostat/OECD questionnaire), resulting in reductions between 3.8 and 13 percentage points, and on average 5.5-6.7 percentage points. While the effect in France will depend on the influence of the change of the recycling measurement point, a reduction with 5 percentage points is assumed for this assessment, bringing the recycling rate down to 37.7 % in 2020. This assumption results in a change of the assessment for this SRF.

Summary result

Distance to target > 15 percentage points	Based on the currently available data, France's recycling rate was 42.7 % in 2020, 12.3 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 a recycling rate of 37.7 %, 17.3 percentage points below the target.
Robustness of the underlying information	The currently available Eurostat data for France do not yet reflect the calculation rules applicable to the target. However, a recycling rate which would be 5 percentage points below the currently reported one (due to correction for the new rules), leads to a lower evaluation score for this SRF.

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

The recycling rate over the past five years shows a decrease from 42.9 % in 2016 to 42.7 % in 2020 (Figure 2.1), a small drop of 0.2 percentage points. Meeting the 2025 target will require a significant increase in pace as compared to the average yearly improvement over the previous five-year period.

More efficient separate collection practices with a special focus on plastics, a significant increase in recycling of bio-waste and a significant increase in the landfill tax are seen as the key measures to achieve the 55 % recycling rate by 2025 by the French government. Moreover, new EPR schemes are being developed, such as EPR for professional packaging, sports and leisure items, do-it-yourself items, construction and demolition products and materials, etc.

Summary result

RR < 45% and increase in last 5 years < 10 percentage points	The recycling rate has decreased by 0.2 percentage points over the past five years. For France the application of the new calculation rules would result in an estimated recycling rate of 37.7 %.
Robustness of the underlying information	There are no breaks in the time series data. The recycling rate is likely to change once the new calculation rules will be applied.

2.1.2 Legal instruments

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

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

Although 44 national transposition measures have been communicated by France (EUR-LEX, 2021a), as of May 2022, the revised Waste Framework Directive has not yet been fully transposed into national law.

Summary result

No full transposition yet	The revised Waste Framework Directive has not yet been fully transposed into national law.
Robustness of the underlying information	The information has been provided by the European Commission and reflects the status of November, 12th 2021.

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

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

The French state is the only one responsible for achieving the objectives set out in the Environmental Code, mostly being transposed from European Directives (Code de l'environnement, 2000). These national objectives must be broken down at the regional level, by drafting regional waste prevention and management plans which every regional Council must adopt, as described in L. 541-13 and R. 541-16 and the following articles of the Environmental Code. Decisions taken by local authorities must be in line with the framework defined in the regional waste management plan (cf. article L. 541-15) (Code de l'environnement, 2000).

A number of *obligations of means* are defined for other stakeholders, meaning that they have to do the best they can do for a specific goal, but without the guarantee that this goal will be reached. The State promulgates, for example, the establishment of EPR schemes by legislative and regulatory means and defines by decree the specifications of the PROs. Depending on the model chosen, an obligation of results may be included in the specifications. Private actors are in charge of waste collection and treatment by legislative and regulatory means. If local authorities decide to delegate their powers, they can define responsibilities for these private players by contractual means (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

With respect to achieving the recycling rates of MSW and packaging waste the responsibilities are divided between

- the central State, namely the Ministry for the Ecological Transition, the Ministry of the Interior, the Ministry of Territorial Cohesion and Relations with Territorial Communities and ADEME, the French Environment Agency;
- the territorial authorities, namely the regional Council, the community of municipalities, the urban communities or metropolitan areas and municipalities; and
- the PROs.

PROs, created within the framework of EPR, aim to prevent and manage the production of specific waste streams. The EPRs created for household packaging, graphic papers, furniture, textiles, specific diffuse waste, sports and leisure articles, WEEE, sanitary textiles, etc. have an influence on the recycling rate of packaging and municipal solid waste.

There are two operating models of PROs depending on the sector:

- Contributing or financial PROs collect eco-contributions from producers and redistribute them to local authorities which collect and sort this waste. This model is applied e.g., for household packaging and graphic paper waste;
- Operational PROs collect eco-contributions from producers and use these funds to contract itself with service providers who collect and treat waste.

PROs, as included in their specifications, have an obligation of means and results. This obligation is included in the specifications of the PRO (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

The central State through the ministries and ADEME provides support to local authorities and private actors via financial support (e.g. calls for projects from ADEME, recovery plan). Further, it provides training materials and resources to local authorities, such as *Waste and key figures* by ADEME.

The state services, ADEME and the regional directorate for the environment, planning and housing (DREAL) provide technical support to local authorities. DREALs also influence the recycling rate by ensuring compliance with regulations in classified facilities for environmental protection, that is, waste sorting centres, incineration plants, landfills, etc., through inspections. The regions are supporting local authorities by setting waste management visions and goals (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

The local authorities draw up municipal waste prevention programs indicating the waste reduction objectives and the measures put in place to achieve them. They also set up awareness-raising actions for citizens and private actors. They are also financially supported by the European Regional Development Fund. The PROs provide also financial and/or organizational support for the collection and treatment activities (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

If a PRO does not take enough actions in view of what is asked in the specifications, it can be fined under article L. 541-9-5 of the Environmental Code. If inefficient, the PRO can receive a formal notice to undertake the necessary actions (article L. 541-9-6 of the Environmental Code).

The fines referred to in article L. 541-9-5 are mainly applicable to producers that do not comply with their EPR obligations. These provisions are enforced and have been supplemented by article 294 of the Law n° 2021-1104 of 22 August 2021.

The local authorities cannot be fined if they do not take enough action. However, they will be penalised through a higher taxation if municipal waste prevention programmes or other local actions do not achieve to limit the generated waste volumes (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

In summary, responsibilities are well defined, although responsibilities to organize MSW management are somewhat fragmented. In addition, support mechanisms are in place.

Summary result

Clearly defined responsibilities and good set of support tools but weak/no enforcement mechanisms for meeting the recycling targets	Responsibilities are defined and support mechanisms are in place, but there seem to lack motivating enforcement mechanisms towards the responsible entities if the targets are not met.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

2.1.3 Economic instruments

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

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

Since 2002, there is a ban on landfilling of untreated waste in place in France. According to the NAF ITEC/2017/0961 it is considered that the obligation of pre-treatment before landfill is fulfilled by the obligation of sorting at source. Source separated waste collected for recycling, and waste originating from municipalities and economic actors, who do not have source separation schemes in place, is banned from landfilling. Exceptional authorisations can be issued by the prefect under specific circumstances where landfill is the most beneficial situation (e.g. for corpses of animals which have

died in a fire in a building containing asbestos, and which are contaminated by asbestos) (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

In France, the general tax on polluting activities (Taxe Générale sur les Activités Polluantes or TGAP) is applied to landfilling. In 2020 a broad range of different landfill rates for different types of landfills was in place in mainland France and Corsica.

- 152 EUR/t for non-authorized landfills or non-authorized waste in authorized landfills (A); [2] The maximum fee is intended to penalize the illegal operation of an unauthorized waste disposal site.
- 25 EUR/t in authorized landfills with 75 % energy recovery from captured biogas (B);
- 35 EUR/t in authorized bioreactor landfill cells with biogas recovery (C);
- 18 EUR/t for bioreactor landfills with 75 % energy recovery from captured biogas (D);
- and 42 EUR/t for other authorized landfills.

During the discussions on the finance bill which is voted on each year, the annual increase of this tax is decided. All rates (B-D), except for (A), will be increased to 65 EUR/t by 2025 and for category A landfills the rate will be 175 EUR/t (Code des douanes, 2019) (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Summary result

Ban in place for landfilling residual or biodegradable waste	In France there is a ban on landfilling of untreated waste in place. The landfill tax rates depend on the type of landfill. For most types of landfill, the tax is higher than 30 EUR/t, except for authorized landfills and bioreactor landfills that achieve 75 % energy recovery from captured biogas The landfill tax will be further increased by 2025.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

SRF MSWR-3.2: Taxes on municipal waste incineration

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

In France, the general tax on polluting activities (Taxe Générale sur les Activités Polluantes or TGAP) is also applied to incineration activities. During the discussions on the finance law which is voted on each year, the annual increase of this tax is decided (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

The incineration tax was implemented in 2009 and increased from 7 EUR/t in 2009 to 14 EUR/t in 2015. However, incineration with energy recovery and high energy efficiency are subject to a tax break (1.5 EUR/t in 2009 to 3 EUR/t in 2015) (EEA, 2016). It is worth noting that more than 90 % of all operators subject to the incineration tax benefit from the tax break, potentially reducing the strength of the instrument. A substantial increase in the TGAP for thermal treatment facilities is planned, again with the aim of making reuse and material recovery more competitive. Thus, in 2025, the rates will be

[2] Non-authorized once they are identified, they are subject to :

- an administrative procedure to lead to their regularization, either by obtaining an authorization, or by closure with measures (restoration, containment of waste, etc)
- possibly, a penal procedure
- possibly, a tax adjustment with application of the increased TGAP

between EUR 7.5 and EU 25 per tonne of waste (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Summary result

Yes, taxes > 7 EUR/t([a]) with escalator	France has an incineration tax in place, which was increased from 7 EUR/t in 2009 to 14 EUR/t in 2015 (corresponding to 12.3 EUR/t rescaled based on purchasing power parities) and further increases each year.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

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

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

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

In France, only about 9 % of the population is covered by PAYT charging systems (Ministry for the Ecological Transition/ CGDD / SDES, 2021). According to ADEME, the majority of these systems (84 %) relate to the frequency of collection and could be categorised as 'weak' as the economic incentive to sort waste at source is not very visible, while in some areas households are charged based on the weight (10 %) or volume (5 %) of collected waste. Some also use pre-paid waste bags (Ministry for the Ecological Transition/ CGDD / SDES, 2021)

Summary result

Only experimental PAYT (less than 50% of the population covered)	Only 9 % of the population is covered by PAYT charging systems.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

2.1.4 Separate collection system

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

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

France's authorities indicate that residual waste is collected door-to-door across the country. Paper and cardboard, ferrous metals and aluminium are collected mainly co-mingled door-to-door in cities,

towns and suburbs, but also via nearby bring points and civic amenity sites. For paper and cardboard there are also nearby bring points. In voluntary drop-off centres (civic amenity sites), paper and cardboard are collected separately, and plastics with metals. In rural areas these fractions are collected similarly via co-mingled door-to-door collection, via nearby bring points and civic amenity sites.

Glass is collected door-to-door and in bring points in cities and suburbs, and in rural areas via bring points. Plastics are collected via co-mingled door-to-door collection together with paper and cardboard and metals, and in the countryside there are also bring points. Currently, the separate collection is restricted to plastic bottles and flasks in most municipalities, but by the end of 2022, the separate collection of all plastic waste will be mandatory as prescribed by the Law on Anti-Waste for a Circular Economy (AGEC): all plastic packaging will be collected separately, implemented by an extension of the sorting instructions. This required the modernisation of household waste sorting centres in order to be able to sort these different plastic flows and direct them to the appropriate sorting and recycling channel (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Food waste is collected via separate door-to-door collection and bring points in cities and towns and suburbs, and in rural areas via bring points. However, the separate collection of bio-waste is not common in France. Reseau Compost Plus estimated in 2018 that only a share of 9 % of the population was covered by this type of collection (Zero Waste Europe, 2020). By 2025 the separate collection of organic waste will be mandatory for all waste producers, including households and non-household sources (Loi n° 2015-992, 2015).

Garden waste in cities, towns and suburbs is collected mainly via civic amenity sites and in some municipalities via separate door-to-door collection. In rural areas, garden waste is only collected via civic amenity sites. Textiles are mainly collected via civic amenity sites and to some extent also via bring points in cities, towns and suburbs, and rural areas. For WEEE collection both civic amenity sites and bring points are used equally. Wood is collected mainly via civic amenity sites, and in rural areas to some extent also via bring points. Composite packaging is collected door-to-door co-mingled and in rural areas to some extent also via bring points (Ministry for the Ecological Transition/ CGDD / SDES, 2021). Table 2.1 gives an overview of the collection system in France.

Table 2.1 Characterisation of the collection system in France

	Cities (densely populated areas)					**Towns and suburbs** (intermediate density areas)					**Rural areas** (thinly populated areas)			
	Door-to-door - separate	Door-to-door - co-mingled	Bring point (>5 per km²)	Bring point (<5 per km²)	Civic amenity site	Door-to-door - separate	Door-to-door - co-mingled	Bring point (>5 per km²)	Bring point (<5 per km²)	Civic amenity site	Door-to-door - separate	Door-to-door - co-mingled	Bring point	Civic amenity site
Mixed /Residual waste	x					x					x			
Paper and Cardboard		xx	x		x		xx	x		x		x	x	x
Ferrous metals		xx	x		x		xx			x		x	x	x
Aluminium		xx	x		x		xx			x		x	x	x
Glass	x		x			x		x					x	
Plastic		xx					xx					x	x	
Bio-waste														
Food	x (n.c.)		x (n.c.)			x (n.c.)		x (n.c.)					x (n.c.)	
Garden	x (n.c.)				xx	x (n.c.)				xx				x
Textiles				x	xx				x	xx			x	xx
Wood					xx					xx			x	xx
WEEE				x	x				x	x			x	x
Composite packaging		xx					x					x	x	

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'.
n.c. = not common

Source: Ministry for the Ecological Transition/ CGDD / SDES (2021)

Summary result

Paper and cardboard	A high share of the population is covered by high convenience collection services	Co-mingled door-to-door collection and nearby bring points is the dominant system in cities and towns and suburbs in France for collection of paper and cardboard wastes.
Metals	A high share of the population is covered by high convenience collection services	Co-mingled door-to-door collection and nearby bring points is the dominant system in cities and towns and suburbs in France for collection of metal wastes.
Plastics	A high share of the population is covered by high convenience collection services	Plastic waste is collected by high convenience collection points, mainly via co-mingled door-to-door collection in cities, towns and suburbs. However, plastics collection is limited to plastics packaging and in many cases even to plastic bottles and flasks, limiting the amount of plastics captured for recycling.

Glass	A high share of the population is covered by high convenience collection services	Door-to-door collection and nearby bring points is the dominant system in cities and towns and suburbs in France for collection of glass wastes.
Bio-waste	A low share of the population is covered by high convenience collection services	The separate collection of bio-waste is not common in France. In 2018 it was estimated that only 9% of the population was covered by this kind of collection.
Wood	A low share of the population is covered by high convenience collection services	Wood waste is only collected via civic amenity sites, which is considered as a low convenience system.
Textiles	A low share of the population is covered by high convenience collection services	Textile waste is only collected via civic amenity sites and low-density bring points, which are considered as low convenience systems.
WEEE	Medium convenience collection services dominate	Different bring-systems are in place over the whole country, including take-back at retailers and civic amenity sites.
Robustness of the underlying information		Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

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

While for paper and cardboard, metals, plastics, and glass a high share of the population is already covered by high convenience collection points, there is still room for improvement for WEEE, textiles, wood, and bio-waste.

French authorities report that there are no changes planned for WEEE and wood (Ministry for the Ecological Transition/ CGDD / SDES, 2021). With respect to bio-waste, separate collection will be mandatory by 2024. According to the Ministry for the Ecological Transition, the choice of technical solutions for local management and separate collection of bio-waste lies with the local authorities, as this depends very much on the local context, opportunities, and technical solutions already available on the territory. However, the *joint collection decree* (Ministère de la transition écologique and Ministère de l'agriculture et de l'alimentation, 2022) lists the types of waste and packaging that can be collected jointly with source-separated bio-waste. This joint collection is, however, not mandatory. The communities remain free to choose, among the wastes listed in the decree, the wastes that they wish to collect jointly with bio-waste. In addition, ADEME provides guidance on good practices for the local management of bio-waste. There is also a steering committee of actions led by training and certification organizations for the training of master composters etc. Financial support is provided through the calls for projects launched by ADEME in favour of source separation and separate collection of bio-waste. (Ministry for the Ecological Transition/ CGDD / SDES, 2021)

As of 2025, separate collection of textiles will be mandatory for companies, which will likely lead to higher recycling for municipal waste and thus contribute to the 2025 target. (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Although for plastics a high share of the population is already covered by high convenience collection points, currently the separate collection is restricted to plastic bottles and flasks in most municipalities, but by 2022 the separate collection of all plastic waste will be mandatory. For this purpose, a public awareness campaign will be organized to inform citizens about changes in the sorting

instructions for plastic packaging. Moreover, sorting centres will be modernised, which is financially supported by ADEME and the stimulus plan.

Summary result

Paper and cardboard	N/A (for countries already covering a high share of the population by high convenience points)	A high share of the population is already covered by high convenience collection points.
Metals	N/A (for countries already covering a high share of the population by high convenience points)	A high share of the population is already covered by high convenience collection points.
Plastics	Firm plans to cover a high share of the population by high convenience collection points	A high share of the population is already covered by high convenience collection points. But the collection which had been limited to bottes and flasks so far will be extended to all plastics. This plan does however not affect the convenience and coverage of the already existing plastic collection systems, although widening their materials' scope.
Glass	N/A (for countries already covering a high share of the population by high convenience points)	A high share of the population is already covered by high convenience collection points.
Bio-waste	There are plans to improve the collection service but unclear plan for implementation	Bio-waste separate collection will become mandatory by 2024. The choice of technical solutions for the local management and separate collection of biowaste is left to local authorities with substantial support provided by the central authorities.
Wood	No firm plans to improve the type and coverage	No changes planned.
Textiles	Firm plans for mandatory separate collection for the non-household part of municipal waste	Separation at source for textiles will be mandatory in 2025 for companies, which will likely lead to an increased recycling for municipal waste.
WEEE	No firm plans to improve the type and coverage	No changes planned.
Robustness of the underlying information		Credible information received from the French authorities through a questionnaire.

2.1.5 Extended producer responsibility (EPR) and similar schemes

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

Within EPR schemes, fee modulation (or eco-modulation) is a system with different fees for different types of packaging material and designs. While basic fee modulation, i.e. different fees for the main material groups, are common, advanced fee modulation can create stronger incentives for packaging producers to design for recycling and thus create favourable conditions for higher recycling rates. The level of advancement of the fee modulation is assessed against four criteria that have been selected as benchmarks for a well-designed eco-modulated fee system:

- recyclability, for example differentiating between PET and PS, between different colours of PET, or between 100 % cardboard boxes and laminated beverage cartons;
- sortability and disruptors, for example a malus for labels/caps/sleeves made of other materials, which are not fitted for the recycling technologies of the main packaging;
- recycled content; and

- if there is a transparent compliance check by the Producer Responsibility Organisation (PRO) that producers report correctly.

In France, since 2012, the fees charged to producers have been modulated according to environmental criteria, rewarding good sorting practices and eco-design (bonus), and penalising packaging which hinders recycling (malus). The criteria are defined by the producers, based on discussions with recyclers (Institute for European Environmental Policy, 2017). For instance, a 50 % penalty (malus) is applied to specific packaging which cannot be recycled or which presents features that hamper the recycling process. A maximum of 100 % penalty applies to packaging which cannot be recovered. Currently a bonus of maximum 24 % is applied to packaging with eco-design features and which is associated with awareness initiatives. So the total fee is calculated based on the fee for weight plus the fee for number of units multiplied with a bonus or malus (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

New eco-modulation tariffs have been introduced for the period 2018-2022, replacing fees per packaging unit by fees per consumer sales unit[3] (CSU) in 2018.

The AGEC law of 10 February 2020 has strengthened the framework of EPR channels and has included several provisions related to packaging and eco-modulation (Loi n° 2020-105, 2020). It obliges PROs to participate in national collection targets for the recycling of plastic bottles for beverages, to contribute to achieve the national target of 5 % of reused packaging placed on the market in 2023, and to reinforce the modulation of EPR contributions to further encourage the integration of recycled plastics, while penalising signs and markings are likely to lead to confusion about the sorting rules (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Monitoring of producers' activities is ensured through annual reports and activity reports, including information on collection and recycling rates, and tonnages put on the market. Producers' declarations are then regularly cross-checked to those of local authorities to check for coherence. This monitoring system provides a valuable tool to predict future quantities of waste that will need sorting in the future, and their characteristics (Institute for European Environmental Policy, 2017)

Summary result

There is advanced fee modulation for at least two of the main packaging fractions([a]) AND fee modulation for one packaging fraction meets three assessment criteria	For paper and cardboard, plastics, ferrous metals, aluminium, glass and composite packaging, fee modulation is applied taking into account recyclability and sortability. In addition, for paper and cardboard and plastics, fee modulation also builds on recycled content. Proper monitoring is ensured.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

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

[3] A CSU is a unit of packaged product that a consumer can purchase separately from others. Parcel and steward packaging are considered to be CSUs, e.g., a bottle of wine, a laptop or a tray of strawberries.

A packaging unit is a component of the packaging that can be separated from the product when it is consumed or used by the household. All corking or closing elements (detachable caps, lids, lids, elements of blisters without pre-cut, etc.) are considered as full packaging units and must be declared separately (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

2.1.6 Treatment capacity for bio-waste

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

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

The overall residual waste as reported by France's authorities amounts to 16.6 million tonnes in 2019. The reported share of bio-waste in residual waste is 33 %, meaning that a total of 5.44 million tonnes of bio-waste is present in residual waste. The amount of home-composted bio-waste is estimated at 1.7 million tonnes. Adding the volumes reported as separately collected bio-waste in 2017 of 5.3 million tonnes, results in an overall amount of generated bio-waste of 10.7 million tonnes, or 12.4 million tonnes if the home-composted amounts are included. Another 306 000 tonnes (2018) of bio-waste are extracted from residual waste treated in MBT plants to produce compost from MBT (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

The exact available treatment capacity for bio-waste in France is unknown (Ministry for the Ecological Transition/ CGDD / SDES, 2021). But in 2019, 7.4 million tonnes of bio-waste were composted or digested, including 1.7 million tonnes home-composted (Eurostat, 2022a), which means that the capacity is at least 60 %.

France's authorities report that the sorting errors, the cost for collection and treatment, and the reluctance of communities and the limited acceptance of compost by the population are the major issues hampering the collection and treatment of municipal bio-waste (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Summary result

Bio-waste treatment capacity below 80% of generated municipal bio-waste and no plans to extend capacity, or no capacity information available	No exact capacity information is available, but it is estimated that a treatment capacity for about 60 % of generated bio-waste is available.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire, but data on treatment capacity is not available and is therefore estimated for the assessment.

SRF MSWR-6.2: Legally binding national standards and Quality Management System for compost/digestate

To create a market for compost and digestate, compost should be of a good quality for use as a soil improver or fertilizer. Legally binding standards provide guarantees regarding the quality of the compost/digestate produced. A quality management system aims at addressing different elements of a production process to ensure a stable and high-quality output (product) which helps toward reaching a defined quality for the product.

France has mature national standards for compost quality embedded in national legislation and a quality management system in place (EEA, 2020).

Summary result

Legally binding national standards for compost/digestate quality in place, and quality management system in place	France reported having mature national standards for compost quality embedded in national legislation and a quality management system in place.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

2.2 Target for the recycling of packaging waste

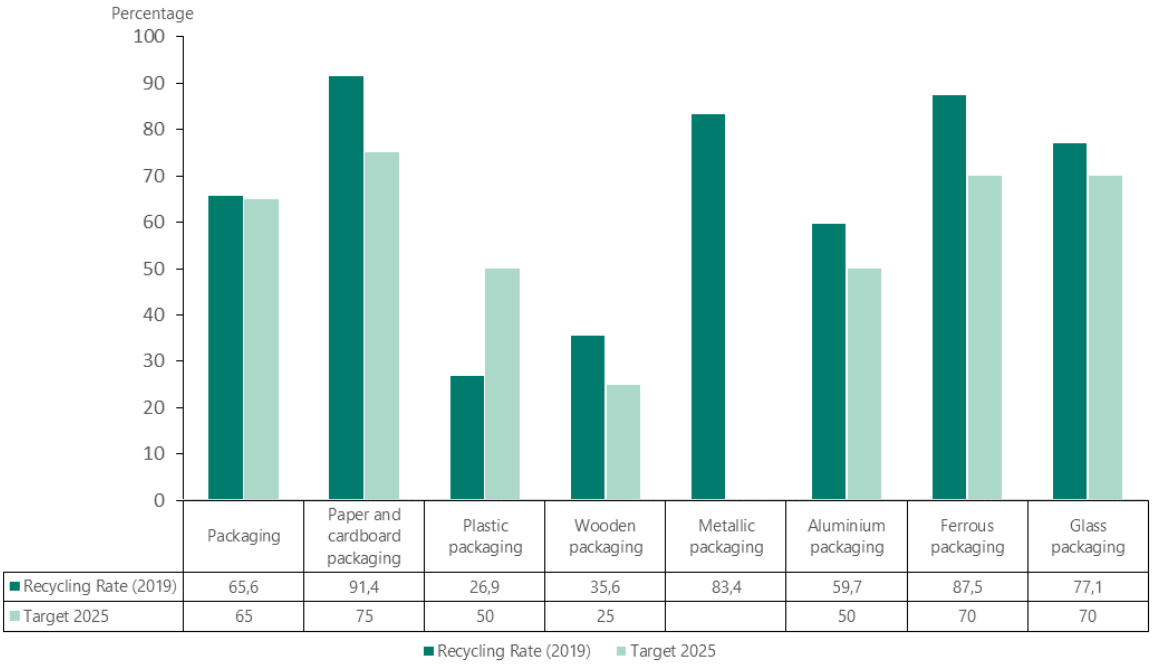
This chapter aims at assessing the prospects of the France to achieve the **65 % recycling target for packaging waste** in 2025 as well as the **material specific packaging waste recycling targets** (50 % of plastic; 25 % of wood; 70 % of ferrous metals; 50 % of aluminium; 70 % of glass; 75 % of paper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

2.2.1 Current situation and past trends

SRF P-1.1 Distance to target

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

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



	Packaging	Paper and cardboard packaging	Plastic packaging	Wooden packaging	Metallic packaging	Aluminium packaging	Ferrous packaging	Glass packaging
Recycling Rate (2019)	65,6	91,4	26,9	35,6	83,4	59,7	87,5	77,1
Target 2025	65	75	50	25		50	70	70

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

In France, the reported recycling rates for reference year 2019 of nearly all packaging waste materials lie above the 2025 targets. The only exception is a comparatively low plastic recycling rate of 26.9 %, being at about 22.1 percentage points below the 2025 target of 50 %. This is due to the fact that the EPR schemes do not cover all plastic packaging product types in all parts of the country, they do not cover non-household plastic packaging waste and there is no deposit-return scheme for any plastic packaging. However, France plans on making separate collection for household plastic packaging mandatory by the end of 2022 and to expand collection to all plastic waste.

However, the recycling rates presented are based on the calculation rules of the Commission Decision C(2005)854 and will likely differ from the recycling rates to be reported according to the calculation rules laid down in Commission Implementing Decision 2019/665. Application of the new reporting rules will only be mandatory by 2022 for the 2020 data. France has not yet assessed the impact of the new calculation rules on the recycling rates. There are a few signs that the recycling rates could be lower than currently reported once the new calculation are applied: 1) The current reporting of the amounts of packaging generated does not take into account possible underreporting due to, e.g., free-riding, online sales or amounts below de minimis thresholds; 2) the reporting of recycled amounts according to the new calculation rules requires deducting losses within the recycling plants, while the available data does not systematically account for these losses. ADEME is currently assessing the impact of the new calculation method. The preliminary results seem to indicate a decrease of the recycling rates which vary depending of the considered material (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

As a matter of sensitivity analysis, to assess what the impact of these new calculation rules could be (change in calculation point), losses in recycling plants found in literature (EXPRA, 2014) are applied to the packaging recycling rates as reported for reference year 2019:

- Paper and cardboard packaging: decrease by 10 %, from 91.4 % to 82.3 %
- Metal packaging: decrease by 14 %, from 87.5 % to 75.3 % (note that due to lack of separate data, the same reduction is assumed for both ferrous metals and aluminium in the assessment below)
- Glass packaging: decrease by 5 %, from 77.1 % to 73.2 %
- Plastic packaging: decrease by 21 %[4], from 26.9 % to 21.2 %
- Wooden packaging: decrease by 11 % from 35.6 % to 31.7 %
- Total packaging: Calculated based on the amounts of each packaging material generated and recycled in 2019, the recycling rate would drop from 65.6 % to 59.1%.

Taking these possible recycling rates into account, the distance to the recycling target for total packaging is likely to be larger when the new calculation rules will be applied, namely between 5 and 15 percentage points, while for the fractions of packaging waste the assessment would not change as the margins are large enough.

Summary result

Total packaging	5 - 15 percentage points below target	France reports a recycling rate of 65.6 %. However if the new calculation rules are applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 59.1 %, 5.9 percentage points below the 2025 target.
Paper and cardboard packaging	Target exceeded	France reports a recycling rate 91.4 %. However if the new calculation rules are applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 82.3 %, 7.3 percentage points above the 2025 target.

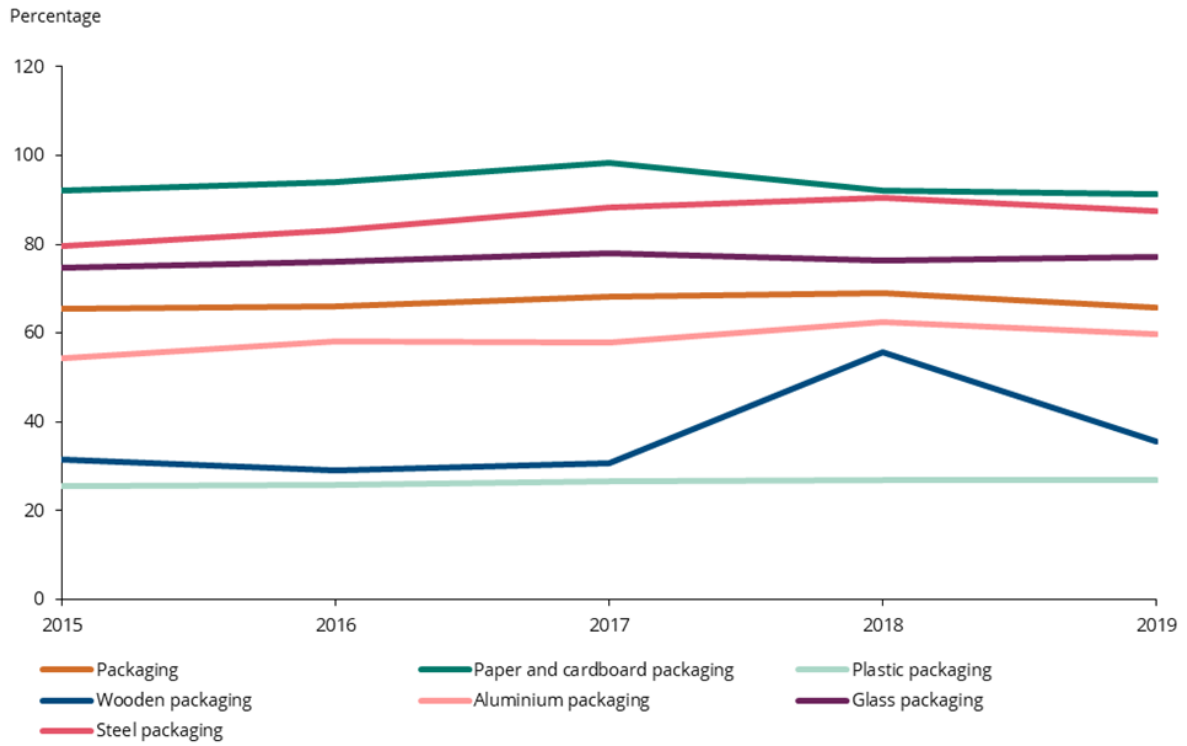
[4] This is the weighted recycling loss taking into account the 29 % recycling loss for packaging waste from household sources (66 %) and the 5 % recycling loss for packaging waste from commercial sources (33 %).

Ferrous metals packaging	Target exceeded	France reports a recycling rate 87.5 %. However if the new calculation rules are applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 75.3 %, 5.3 percentage points above the 2025 target.
Aluminium packaging	Target exceeded	France reports a recycling rate 59.7 %. However if the new calculation rules are applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 59.1 %, 1.3 percentage points above the 2025 target.
Glass packaging	Target exceeded	France reports a recycling rate 77.1 %. However if the new calculation rules are applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 73.2 %, 3.2 percentage points above the 2025 target.
Plastics packaging	> 15 percentage points below target	France reports a recycling rate 26.9 %. However if the new calculation rules are applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 21.2 %, 28.8 percentage points below the 2025 target.
Wooden packaging	Target exceeded	France reports a recycling rate 35.6 %. However if the new calculation rules are applied (taking into account losses in the recycling plants), the estimated recycling rate would drop to 31.7 %, 6.7 percentage points above the 2025 target.
Robustness of the underlying information		The assessment is limited by the fact that the recycling rates for 2019 reported by France to Eurostat do not yet reflect the new calculation rules, and the impact of the new calculation rules has therefore been estimated based on literature.

SRF P-1.2: Past trend in Packaging Waste Recycling

The development of the historical trend in the recycling rate indicates previous efforts towards packaging waste recycling. In this analysis the recycling rate reported in the Eurostat dataset *Recycling rates of packaging waste for monitoring compliance with policy targets, by type of packaging [env_waspacr]* (latest data year: 2019) is used. The recycling trends for packaging waste by material in France are illustrated in Figure 2.3.

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



Source: Eurostat (2022c)

The recycling rates for all packaging slightly increased over the past five years. Only for paper and cardboard there is a slight decrease of 0.6 percentage points.

Summary result

Total packaging	RR > 55%, and increase in last 5 years < 10 percentage points	The recycling rate increased by 0.1 percentage points over the past five years and is estimated at 59.1 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Paper and cardboard packaging	RR > 75%	The recycling rate decreased by 0.6 percentage points over the past five years and is estimated at 82.3 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Ferrous metals packaging	RR > 70%	The recycling rate increased by 7.8 percentage points over the past five years and is estimated at 75.3 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Aluminium packaging	RR > 50%	The recycling rate increased by 5.4 percentage points over the past five years and is estimated at 51.3 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Glass packaging	RR > 70%	The recycling rate increased by 2.3 percentage points over the past five years and is estimated at 73.2 % if the new calculation rules would be applied (taking into account losses in the recycling plants).

Plastics packaging	RR < 40% and increase in last 5 years < 10 percentage points	The recycling rate increased by 1.4 percentage points over the past five years and is estimated at 21.2 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Wooden packaging	RR > 25%	The recycling rate increased by 4.0 percentage points over the past five years and is estimated at 31.7 % if the new calculation rules would be applied (taking into account losses in the recycling plants).
Robustness of the underlying information		The assessment is limited by the fact that the recycling rates for 2019 reported by France to Eurostat do not yet reflect the new calculation rules, and the impact of the new calculation rules has therefore been estimated based on literature.

2.2.2 Legal instruments

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

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

As of May 2022, France has not yet fully transposed the revised Packaging and Packaging Waste Directive into national law. However 21 individual transposition measures have been communicated to the European Commission (EUR-LEX, 2021b).

Summary result

No full transposition yet	As of May 2022, the revised Packaging and Packaging Waste Directive has not yet been fully transposed into national law.
Robustness of the underlying information	The information has been provided by the European Commission (status as of 12 November 2021).

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

Responsibilities for meeting the targets, and support and enforcement mechanisms with respect to packaging waste are described in detail in section 2.1.2 under SRF MSWR-2.2. Additionally, with respect to plastic packaging waste, a new frame for the collection and recycling has been introduced in the updated specifications for the PRO, in order to accelerate the recycling of plastic packaging streams, linked with the extension of collection to all plastic resins by the end of 2022 (Ministère de la transition écologique et al., 2022) (Ministère de la Transition Écologique et Solidaire and Ministère de la Cohésion des Territoires et des Relations avec les Collectivités Territoriales, 2022). One of the goals of the corresponding decree is to entrust the streams of resins that are hard to recycle to the PRO for consolidation and improving their sorting and their recycling in the next years.

Summary result

Clearly defined responsibilities and enforcement mechanisms but no/weak support tools for meeting the recycling targets	Responsibilities are defined and support mechanisms are in place, and there are direct consequences for the PROs if the targets are not met. No support tools to PROs for increasing recycling performance, other than financial support for responding to the extension of the plastic packaging collection scope as from the end of 2022.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

2.2.3 Economic instruments

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

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

As described in Section 2.1.3, France has different rates of landfill taxes in place, and an increase of the tax has been decided. Since 2002 there is a ban on landfilling of untreated waste in place. Moreover, source separated waste collected for recycling and waste from municipalities and economic actors which do not have source separation schemes in place is banned from landfilling.

Summary result

Ban in place for landfilling residual or biodegradable waste	In France there is a ban on landfilling of untreated waste in place. The landfill tax rates depend on the type of landfill. For most types of landfill, the tax is higher than 30 EUR/t, except for authorized landfills and bioreactor landfills that achieve 75 % energy recovery from captured biogas The landfill tax will be further increased by 2025.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

SRF P-3.2: Taxes on municipal waste incineration

Taxes on incineration of residual waste can help to discourage strong reliance on residual waste treatment and thus support recycling. As described in Section 2.1.3 in more detail, France has an incineration tax in place which was increased from 7 EUR/t in 2009 to 14 EUR/t in 2015, and a further increase of the tax has been decided.

Summary result

Yes, taxes > 7 EUR/t([a]) with escalator	France has an incineration tax in place, which was increased from 7 EUR/t in 2009 to 14 EUR/t in 2015 (corresponding to 12.3 EUR/tonne rescaled based on purchasing power parities) and further increases each year.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

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

SRF P-3.3: Packaging taxes

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

According to the information available, France does not have a packaging tax in place.

Summary result

No packaging taxes	No packaging taxes in place.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

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

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

The PAYT system is described in detail under SRF MSWR-3.3.

Summary result

Only experimental PAYT (less than 50% of the population covered)	Only 9 % of the population is covered by PAYT charging systems.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

SRF P-3.5: Deposit-return systems

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

At the moment, in France there are no DRSs in place. As the French government has pledged to recycle 100 % of its plastic by 2025, a DRS for plastic bottles is under discussion. According to the AGEC law, reflections are in progress, and a decision is planned in 2023 on the implementation of deposit systems for reuse and recycling of beverage bottles. For the moment, there are no plans to introduce a deposit (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Summary result

Aluminium drink cans	No DRS for drink cans	
Glass drink bottles	No DRS for drink bottles	
Plastic drink bottles	No DRS for drink bottles	There are discussions to introduce a DRS for plastic bottles.
Plastic crates	No DRS for plastic crates	
Wooden packaging	No DRS for wooden packaging	
Robustness of the underlying information		Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

2.2.4 Separate collection system

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

As a large part of packaging waste comes from households, separate collection systems for households and similar sources are a key condition for achieving high recycling rates of packaging waste and for collecting recyclables at adequate quality. Generally, the more convenient and accessible these systems are for their users, the better results they can deliver. The material specific assessment considers packaging waste from both household and non-household sources. For assessing the convenience and coverage of separate collection systems for households, the same methodology is used here as described in section 2.1.4.

The separate collection system for households is described in detail under SRF MSWR-4.1 in section 2.1.4.

Although the coverage and convenience level for the collection of plastic packaging waste is high, it has to be noted that the volumes of separately collected plastic packaging are limited because not all types of packaging are currently separately collected; for now separate collection is restricted in most municipalities to plastic bottles and flasks. Also, there is no DRS in place. However, France plans on extending the separate collection of plastic waste in 2022.

Summary result

Paper and cardboard packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection points	A high share of the population is covered by high convenience collection points for all packaging wastes. Separation at source is mandatory for non-household packaging wastes.
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household paper and cardboard packaging waste	
Ferrous metals packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection points	
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household ferrous metals packaging waste	
Aluminium packaging	**Packaging waste from households** A high share of the population is covered by high convenience collection services	
Glass packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection points	
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household glass packaging waste	
Plastics packaging	**1. Packaging waste from households** A high share of the population is covered by high convenience collection services	
	2. Packaging waste from non-household sources Separation at source is mandatory for non-household plastic packaging waste	

Wooden packaging	**Packaging waste from non-household sources** Separation at source is mandatory for non-household wooden packaging waste	
Robustness of the underlying information		Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

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

Concrete plans are needed to improve the convenience and coverage of separate collection. This SRF is only relevant for MS and materials that do not score 'green' in SRF P-4.1. The assessment is done on a material basis, and summing up the scores of the different materials according to their average share in packaging waste[5]. Again, the material specific assessment considers packaging waste from both household and non-household sources.

To increase the capture rate and thereby the recycling rate for plastics packaging, the sorting instructions for household packaging will be extended to all plastic packaging by 2022, including plastic films and trays (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Further sorting instructions and bin colours will be gradually harmonized by 2025: it will then be easier to identify the appropriate bin or container throughout France (Ministère de la Transition écologique, 2021).

Summary result

Paper and cardboard packaging	**1. Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	This SRF is not relevant for France, since the coverage and convenience level for the collection of packaging waste from households is high and the separate collection for non-households is mandatory for all fractions.
	2. Packaging waste from non-household sources N/A (for countries already having mandatory sorting at source)	
Ferrous metals packaging	**1. Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory sorting at source)	
Aluminium packaging	**Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	

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

Glass packaging	**1. Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory sorting at source)	
Plastics packaging	**1. Packaging waste from households** N/A (for countries in which a very high share of the population is already covered by high convenience collection services).	
	2. Packaging waste from non-household sources N/A (for countries already having mandatory sorting at source)	
Wooden packaging	**Packaging waste from non-household sources** N/A (for countries already having mandatory sorting at source)	
Robustness of the information		Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

2.2.5 Extended producer responsibility (EPR) and similar schemes

SRF P-5.1: Coverage of EPR schemes

Eco-Emballages, now CITEO, is a collective EPR scheme for household packaging waste in France. It was implemented by the first French PRO which was founded in 1992 as a response to a packaging decree issued in France in the same year. In May 2017, a new PRO, LÉKO, was approved and was initially expected to enter the packaging compliance scheme market in January 2018. However, LÉKO has started operations three years late, leaving CITEO as the only PRO in operation during the 2018 to 2020 period of the 2018-2022 agreement (Ministère de la Transition écologique, 2021).

In France, there are EPR schemes in place for packaging waste from households, including paper and cardboard packaging, ferrous metals packaging, aluminium packaging, glass packaging and plastic and composite packaging. Packaging materials from non-household sources will be reportedly included as of 2025 for all materials (Ministry for the Ecological Transition/ CGDD / SDES, 2021) and, for packaging intended for catering professionals, the principle of EPR should be implemented from 2023.

To prevent free-riding, a recent French law stipulates that marketplaces will have to verify that the products of which they facilitate the sale have contributed to EPR, and failing that, will have to assume this obligation (Loi n° 2020-105, 2020).

In France, the EPR financial mechanism is developed in such a way that the eco-tax collected from the producers is redistributed at a variable rate per tonne of waste to the municipalities which collect and sort the waste. In accordance with the waste hierarchy, municipalities with higher quantities of recycled waste receive higher subsidies. Both the rate of the eco-tax and the rate of the subsidy are reviewed and audited by the government on a regular basis (EEA, 2016).

Summary result

All main packaging fractions([a]) are covered by EPR schemes but none or only one covers household and non-household packaging	In France, all main packaging fractions are covered by EPR schemes but only targeting household packaging. EPR will be extended to non-household packaging as of 2023 for packaging from catering and 2025 for other professional packaging.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

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

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

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

In France there is eco-modulation for paper and cardboard packaging and plastic packaging considering the four criteria (recyclability, recycled content, sortability and compliance check) in place. For ferrous metals, aluminium, glass and composite packaging fees are modulated based on the criteria recyclability, sortability and compliance check. For wood packaging no eco-modulation is in place (Ministry for the Ecological Transition/ CGDD / SDES, 2021).

Summary result

There is advanced fee modulation in at least two of the main packaging fractions([a]) AND fee modulation for one packaging fraction meets three assessment criteria	In France, for paper and cardboard and plastic packaging there is a fee modulation in place that covers all four criteria. For ferrous metals, aluminium, glass and composite packaging three out of four criteria are covered.
Robustness of the underlying information	Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

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

SRF P-5.3 Material specific EPR assessment

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

Now, there are three PRO operating in France: CITEO, its corporate subsidiary Adelphe, and as mentioned earlier, LéKO, which contributes financially to the collection and recycling of packaging waste. Only Citeo has contracts with municipalities and waste operators. These PRO represent a collective EPR scheme only for household packaging waste, covering all major material fractions.

Summary result

SRF P-5.3.1 EPR scheme for Paper and cardboard packaging waste	EPR scheme covering only household, industrial OR commercial packaging	In France, the EPR scheme only covers household packaging.
SRF P-5.3.2 EPR scheme for Ferrous metals packaging waste	EPR scheme covering only household, industrial OR commercial packaging	In France, the EPR scheme only covers household packaging.
SRF P-5.3.3 EPR scheme for Aluminium packaging waste	EPR scheme covering only household, industrial OR commercial packaging	In France, the EPR scheme only covers household packaging.
SRF P-5.3.4 EPR scheme for Glass packaging waste	EPR scheme covering only household, industrial OR commercial packaging	In France, the EPR scheme only covers household packaging.
SRF P-5.3.5 EPR scheme for Plastic packaging waste	EPR scheme covering only household, industrial OR commercial packaging	In France, the EPR scheme only covers household packaging.
SRF P-5.3.6 EPR scheme for Wooden packaging waste	No EPR scheme	In France, there is no EPR scheme for wood packaging.
Robustness of the underlying information		Credible information received from the French authorities through the EEA-ETC/WMGE questionnaire.

2.3 Target on landfill of municipal waste

2.3.1 Current situation and past trends

SRF LF-1.1: Distance to target

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

Data to show the current rate of landfilling in line with the reporting rules will only be reported by mid-2022. Therefore, this analysis calculates the landfilling rate based on the current Eurostat dataset *Municipal waste by waste management operations [env_wasmun]*; by dividing the amount of landfilled waste by the total amount of waste generated. The overall landfilling rate of France was 18.1 % in 2020.

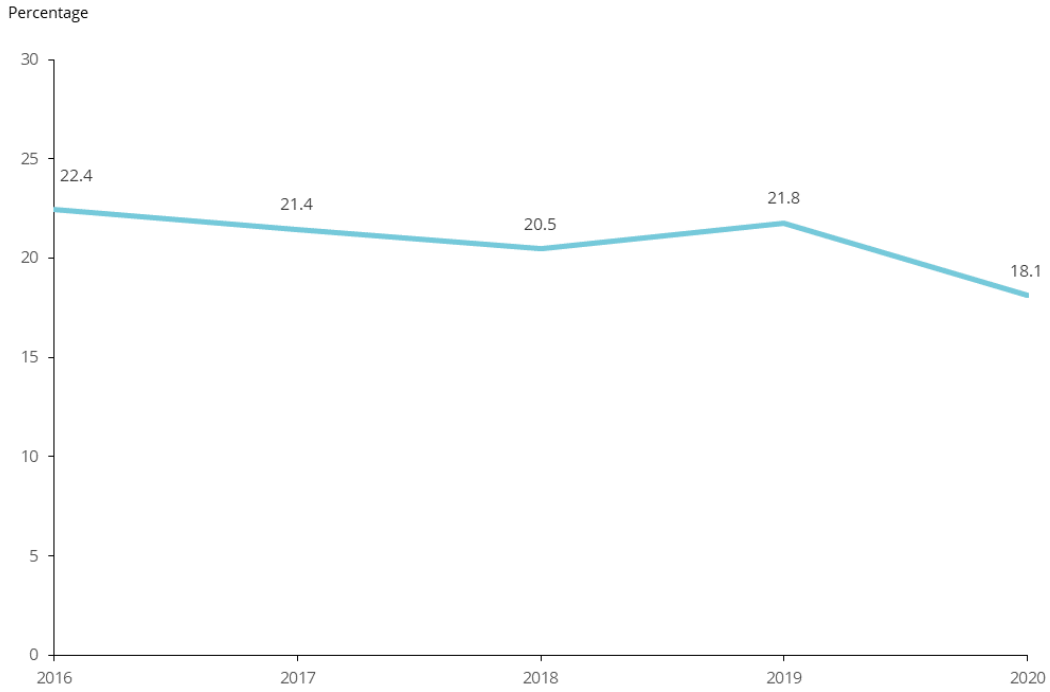
Summary result

Distance to target < 10 percentage points	The landfilling rate of France was 18.1 % in 2020, 8.1 percentage points below the target.
Robustness of the underlying information	The data are derived from Eurostat and are considered to be rather robust. However, the reported landfill rate might increase once the new calculation rules laid down in the Commission Implementing Decision (EU) 2019/1885 will be applied. Based on the available information, it is currently not possible to quantify the impact of the new calculation rules on the landfill rate.

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

Over the past five years, the overall landfilling rate of France has decreased from 22.4 % in 2016 to 18.1 % in 2020 (Figure 2.4).

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



Source: Eurostat (2022a).

Summary result

Landfill rate in 2020 < 20%, and decrease in last 5 years < 5 percentage points,	During the past five years the landfilling rate in France decreased by 4.3 percentage points, from 22.4 in 2016 to 18.1 in 2020.
Robustness of the underlying information	There are no breaks in the time series data.

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

According to Art. 5(2c) of the EU Landfill Directive, Member States had to ensure that by 2016, biodegradable municipal waste going to landfills is reduced to 35 % of the total amount (by weight) of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available.

France generated about 18.6 million tonnes of biodegradable municipal waste in the reference year 1995. In 2016 (and 2017), a volume equivalent to 15 % of the biodegradable municipal waste generated in 1995 was still being landfilled.(EC, 2022)

Summary result

Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has been achieved in 2016 or in the year specified in the derogation where applicable	France has reported 15 % biodegradable waste landfilled (of the total amount of biodegradable municipal waste produced in the reference year) for 2016 and therefore performs well within the target.
Robustness of the underlying information	Based on data officially reported to the European Commission which is in line with otherwise reported statistical data on landfilling of municipal waste.

Conclusion

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

2.4 Prospects for meeting the recycling target for municipal solid waste

35 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that France is **at risk for not meeting the MSW recycling target in 2025**.
Current situation and past trends:	The recycling rate is reported to be 42.7 % in 2020, which is 12.3 percentage points away from reaching the targets of 55 %. Considering the impact of the new calculation rules, the recycling rate would be estimated around 37.7 %, 17.3 percentage points below the target. The recycling rate over the last five years shows a decrease with 0.2 percentage points.
Legal instruments:	The revised Waste Framework Directive has not yet been fully transposed into national law. Responsibilities are defined and support mechanisms are in place, but enforcement mechanisms are suboptimal.
Economic instruments:	France has an incineration tax in place, which was increased from 7 EUR/t in 2009 to 14 EUR/t in 2015 and will increase by 2025. The landfill tax rates depend on the type of landfill and there is an escalator in place. For most types of landfill, the tax is higher than 30/t EUR, except for authorized landfills and bioreactor landfills that achieve 75% energy recovery from captured biogas. There is a ban on landfilling untreated waste. Only 9 % of the population is covered by a Pay-As-You-Throw system.

Separate collection systems:	A high share of the population is covered by high convenience collection services for paper and cardboard, glass and metals. For plastics, a high share of the population is covered by high convenience collection services but not all plastics are targeted. A low share of the population is covered by high convenience collection services for bio-waste, wood and textiles. For WEEE medium convenience collection services dominate. For plastics and textiles there are firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline. For bio-waste there are plans to improve the collection service but the plan for implementation is still unclear. For wood and WEEE there are no plans to improve the collection service.
Extended producer responsibility:	For paper and cardboard, plastics, ferrous metals, aluminium, glass and composite packaging, fee modulation is applied taking into account recyclability and sortability. In addition, for paper and cardboard and plastics, fee modulation also builds on recycled content. Proper monitoring is ensured.
Bio-waste treatment capacity and quality management:	No exact capacity information is available, but it is estimated that a treatment capacity for around 60 % of generated bio-waste is available. France reported having mature national standards for compost quality embedded in national legislation and a quality management system in place.

2.5 Prospects for meeting the recycling targets for packaging waste

53 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that France **is not at risk for not meeting the 65 % recycling target for packaging waste in 2025**	
70 % of maximum score	Paper and cardboard	Not at Risk
70 % of maximum score	Ferrous metals packaging	Not at Risk
66 % of maximum score	Aluminium packaging	Not at Risk
66 % of maximum score	Glass packaging	Not at Risk
26 % of maximum score	Plastics packaging	At Risk
66 % of maximum score	Wooden packaging	Not at Risk
Current situation and past trends:	The total packaging recycling rate, after an estimated correction for the new calculation rules, is 59.1 %, 5.9 percentage points below the 2025 target. The only waste stream with more than 15 percentage points below the target is plastic packaging. The total packaging recycling rate has hardly increased over the past five years. The packaging waste stream of most concern is plastic.	
Legal instruments:	The revised Packaging and Packaging Waste Directive has not yet been fully transposed into national law. Responsibilities are defined and enforcement mechanisms are in place. There are no support tools to PROs for increasing recycling performance, other than financial support for responding to the extension of the plastic packaging collection scope as from the end of 2022.	
Economic instruments:	France does not have a packaging tax in place. There is incineration and a landfill tax with escalator in place. Only 9 % of the population is covered by a Pay-as-you-throw system. There is no mandatory DRS in place.	
Separate collection systems:	The coverage and convenience level for the collection of packaging waste from households is high, and separation at source is mandatory for commercial and industrial packaging waste.	

Extended producer responsibility:	All main packaging fractions are covered by EPR schemes but none for non-household packaging. EPR will however be extended to non-household packaging as of 2023 for packaging from catering and 2025 for all other non-household packaging. Fee modulation is implemented.

2.6 Prospects of meeting the landfill of municipal waste target

93 % **of maximum score**	Based on the provided information and the analysis done, it is concluded that France **is not at risk for not meeting the 2035 target to reduce the amount of municipal waste landfilled to 10 % or less of the total amount of municipal waste generated.**
Current situation and past trends:	Over the past five years, the landfilling rate has decreased from 22.4 % in 2016 to 18.1 % in 2019 in France, meaning that the distance to target is 8.1 percentage points, with a slightly decreasing trend, with 4.3 percentage points in total over the past five years.
Diversion of biodegradable municipal waste from landfill:	France has reported 15 % biodegradable waste landfilled for 2016 of the total amount (by weight) of biodegradable municipal waste produced in 1995, and therefore met the target.

List of abbreviations

Abbreviation	Name
ADEME	Agence de la transition écologique (French Environment Agency)
AcTE	Green Transition Accelerator
CEa	Circular Economy
DREAL	Regional directorate for the environment, planning and housing
DRS	Deposit Return System
EC	European Commission
EEA	European Environment Agency
EPR	Extended producer responsibility
ETC/CE	European Topic Centre on Circular Economy and resource use
ETC/WMGE	European Topic Centre on Waste and Materials in a Green Economy
MBT	Mechanical biological treatment
MS	Member state
MSW	Municipal solid waste
NOTRe	Nouvelle Organisation Territoriale de la République
NWMP	National Waste Management Plan
PAYT	Pay-as-you-throw
PPWD	Packaging and Packaging Waste Directive
PRO	Producer Responsibility Organisation
R&D	Research and development
RR	Recycling rate
SRF	Success and risk factor
WEEE	Waste Electric and Electronic Equipment
WFD	Waste Framework Directive

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Annex 1 Detailed scoring of success and risk factors

Assessment sheet - Recycling target for municipal waste

MS France

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
MSWR-1.1	Distance to target	Distance to target > 15 percentage points or no data reported	5	0
MSWR-1.2	Past trends in municipal solid waste recycling rate	RR < 45% and increase in last 5 years < 10 percentage points	1	0
Legal instruments				
MSWR-2.1	Timely transposition of the revised WFD into national law	Transposition with delay of > 12 months, or no full transposition yet	1	0
MSWR-2.2	Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms	Clearly defined responsibilities and good set of support tools but weak/no enforcement mechanisms for meeting the recycling targets OR Unclear responsibilities but clearly defined enforcement mechanisms and a good set of support tools for meeting the recycling targets OR Clearly defined responsibilities and enforcement mechanisms but no/weak support tools for meeting the recycling targets	1	1
Economic instruments				
MSWR-3.1	Taxes and/or ban for landfilling residual or biodegradable waste	Ban, or landfill tax > 30 EUR/t* with escalator, or landfill tax > 45 EUR/t	1	2
MSWR-3.2	Taxes on municipal waste incineration	Taxes > 7 EUR/t* with escalator, or tax > 18 EUR/t	1	2
MSWR-3.3	Pay-as-you-throw (PAYT) system	No or less than 50% of the population covered by PAYT	1	0

Separate collection systems				
MSWR-4.1	Convenience and coverage of separate collection systems for the different household waste fractions			
	Paper and cardboard	A high share of the population is covered by high convenience collection services	0.46	0.92
	Metals	A high share of the population is covered by high convenience collection services	0.08	0.16
	Plastics	A high share of the population is covered by high convenience collection services	0.28	0.56
	Glass	A high share of the population is covered by high convenience collection services	0.18	0.36
	Bio-waste	A low share of the population is covered by high convenience collection services	0.84	0
	Wood	A low share of the population is covered by high convenience collection services	0.06	0
	Textiles	A low share of the population is covered by high convenience collection services	0.06	0
	WEEE	Medium convenience collection services dominate	0.04	0.04
MSWR-4.2	Firm plans to improve the convenience and coverage of separate collection systems for the different household waste fractions			
	Paper and cardboard	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.23	0
	Metals	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.04	0
	Plastics	Firm plans to improve the separate collection system, with clear responsible entities and defined targets and timeline	0.14	0.28
	Glass	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.09	0
	Bio-waste	There are plans to improve the collection service but unclear plan for implementation	0.42	0.42
	Wood	No firm plans to improve the convenience and coverage	0.03	0
	Textiles	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	There is an advanced fee modulation for at least two of the main packaging fractions* AND fee modulation for one packaging fraction meets three assessment criteria	1	2
Bio-waste treatment capacity and quality management				
MSWR-6.1	Capacity for the treatment of bio-waste	Bio-waste treatment capacity below 80% of generated municipal bio-waste and no plans to extend capacity, or no capacity information available	1	0
MSWR-6.2	Legally binding national standards and Quality Management System for compost/digistate	Legally binding national standards for compost/digestate quality in place, and quality management system in place	1	2
			Total score	**11.80**
			Maximum score	33.28
				35%

Assessment sheet - Recycling target for packaging waste

MS France

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
P-1.1	Distance to target - Overall packaging	5 - 15 percentage points below target	5	5
	Distance to target - Paper and cardboard packaging	< 5 percentage points below target, or target exceeded	5	10
	Distance to target - Ferrous metals packaging	< 5 percentage points below target, or target exceeded	5	10
	Distance to target - Aluminium packaging	< 5 percentage points below target, or target exceeded	5	10
	Distance to target - Glass packaging	< 5 percentage points below target, or target exceeded	5	10
	Distance to target - Plastics packaging	> 15 percentage points below target, or no data reported	5	0
	Distance to target - Wooden packaging	< 5 percentage points below target, or target exceeded	5	10
P-1.2	Past trends in packaging waste recycling rate	RR > 60% and increase in last 5 years < 5 percentage points, or RR > 55%, and increase in last 5 years < 10 percentage points, or RR < 55% and increase in last 5 years > 10 percentage points	1	1
	Past trends in paper and cardboard packaging recycling	RR > 70% and increase in last 5 years > 5 percentage points, or RR > 65% and increase in last 5 years > 10 %, or RR > 75%	1	2
	Past trends in ferrous metals packaging recycling	RR > 65% and increase in last 5 years > 5 percentage points, or RR > 60% and increase in last 5 years > 10 %, or RR > 70%	1	2
	Past trends in aluminium packaging recycling	RR > 45% and increase in last 5 years > 5 percentage points, or RR > 40% and increase in last 5 years > 10 %, or RR > 50%	1	2
	Past trends in glass packaging recycling	RR > 65% and increase in last 5 years > 5 percentage points, or RR > 60% and increase in last 5 years > 10 %, or RR > 70%	1	2

	Past trends in plastic packaging recycling	RR < 40% and increase in last 5 years < 10 percentage points	1	0
	Past trends in wooden packaging recycling	RR > 20% and increase in last 5 years > 5 percentage points, or RR > 15% and increase in last 5 years > 10 %, or RR > 25%	1	2
Legal instruments				
P-2.1	Timely transposition of the revised Packaging and Packaging Waste Directive into national law	Transposition with delay of > 12 months, or no full transposition yet	1	0
P-2.2	Clearly defined responsibilities for meeting the targets and support and enforcement mechanisms	Clearly defined responsibilities and good set of support tools but weak/no enforcement mechanisms for meeting the recycling targets OR Unclear responsibilities but clearly defined enforcement mechanisms and a good set of support tools for meeting the recycling targets OR Clearly defined responsibilities and enforcement mechanisms but no/weak support tools for meeting the recycling targets	1	1
Economic instruments				
P-3.1	Taxes and/or ban for landfilling residual or biodegradable waste	Ban, or landfill tax > 30 EUR/t* with escalator	1	2
P-3.2	Taxes on municipal waste incineration	Taxes > 7 EUR/t* with escalator, or tax > 18 EUR/t	1	2
P-3.3	Packaging taxes	No packaging taxes	1	0
P-3.4	Pay-as-you-throw (PAYT) system	No or less than 50% of the population covered by PAYT	1	0
P-3.5	Deposit-return systems for aluminium drink cans	No or voluntary DRS for some drink cans	1	0
	Deposit-return systems for glass drink bottles	No or voluntary DRS for some drink bottles	1	0
	Deposit-return systems plastic drink bottles	No or voluntary DRS for some drink bottles	1	0
	Deposit-return systems for plastic crates	No or voluntary DRS for some plastic crates	1	0
	Deposit-return systems for wooden packaging	No or voluntary DRS for some wooden packaging	1	0

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

	Plastics packaging (household)	N/A (for countries in which a very high share of the population is already covered by high convenience collection services)	0.5	0
	Plastics packaging (non-household)	N/A (for countries already having mandatory sorting at source)	0.5	0
	Wooden packaging	N/A (for countries already having mandatory sorting at source)	1	0
Extended producer responsibility (EPR) and similar schemes				
P-5.1	Coverage of EPR schemes	Not all main packaging fractions* are covered by EPR schemes OR All main packaging fractions are covered by EPR schemes but none or only one covers household and non-household packaging	1	0
P-5.2	Fee modulation in EPR schemes for packaging	There is fee modulation in at least two of the main packaging fractions* AND fee modulation for one packaging fraction meets three assessment criteria	1	2
P-5.3	Material specific EPR assessment - Paper and cardboard packaging waste	No EPR scheme or EPR scheme covering only household, industrial OR commercial packaging	1	0
	Material specific EPR assessment - Ferrous metals packaging waste	No EPR scheme or EPR scheme covering only household OR non-household packaging	1	0
	Material specific EPR assessment - Aluminium packaging waste	No EPR scheme or EPR scheme covering only household OR non-household packaging	1	0
	Material specific EPR assessment - Glass packaging waste	No EPR scheme or EPR scheme covering only household OR non-household packaging	1	0
	Material specific EPR assessment - Plastics packaging waste	No EPR scheme or EPR scheme covering only household, industrial OR commercial packaging OR EPR scheme but without fee modulation	1	0
	Material specific EPR assessment - Wooden packaging waste	No EPR scheme or EPR scheme covering only industrial OR commercial packaging	1	0

Total packaging recycling target	**17.00**
Maximum score	32.00
	53%

Paper and cardboard recycling target

Total score	**21.00**
Maximum score	30.00
	70%

Ferrous metals packaging recycling target

Total score	**21.00**
Maximum score	30.00
	70%

Aluminium packaging recycling target

Total score	**21.00**
Maximum score	32.00
	66%

Glass packaging recycling target

Total score	**21.00**
Maximum score	32.00
	66%

Plastics packaging recycling target

Total score	**9.00**
Maximum score	34.00
	26%

Wooden packaging recycling target

Total score	**21.00**
Maximum score	32.00
	66%

Assessment sheet - Target for landfilling of municipal waste

MS France

Date Jun-22

SRF		Assessment result	Weight	Score
Current situation and past trends				
LF-1.1	Distance to target	Distance to target < 10 percentage points, or target exceeded	5	10
LF-1.2	Past trends in municipal solid waste landfill rat	Landfill rate in 2020 < 20% and decrease in last 5 years < 5 percentage points, or Landfill rate in 2020 < 25%, and decrease in last 5 years < 10 percentage points, or Landfill rate in 2020 > 25% and decrease in last 5 years > 15 percentage points	1	1
LF-1.3	Diversion of biodegradable municipal waste from landfill	Target for reducing the amount of biodegradable municipal waste (BMW) landfilled to 35% of BMW generated in 1995 has been achieved in 2016 or in the year specified in the derogation where applicable	1	2
			Total score	**13.00**
			Maximum score	14.00
				93%