Waste management country profile

with a focus on municipal and packaging waste

France

March 2025







Key messages

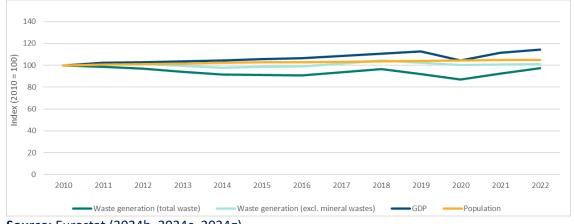
- The generation of total waste largely followed the trend in economic growth, with a slight decoupling at the beginning of the period. The total waste excluding major mineral wastes has stayed at the same level since 2010.
- France seems to be on track to meet the 2025 target for total packaging waste recycling and the 2035 target for municipal waste landfilling. France is considered to be at risk of missing the 2025 target for the preparing for reuse and recycling of municipal waste, and for the recycling of plastic packaging waste.
- France has made minor progress in improving its municipal waste preparing for reuse and recycling rate, while at the same time, the landfill rate went down by a few percentage points.
- France would benefit from an improved and extended separate collection system and more effective economic incentives for citizens to sort waste at source.
- France plans to improve its separate collection practices, with a special focus on bio-waste and plastics, and to increase the landfill tax. The results of these measures remain to be seen.

Trends in waste generation and treatment

Total waste generation

The total amount of waste generated in France fluctuated over the last 12 years (Figure 1). This trend is primarily driven by the largest waste categories, namely soils and mineral waste from construction and demolition. Excluding major mineral wastes results in stabilisation of the overall waste generation. This is mainly due to an opposite trend in the largest waste categories, namely mixed waste and recyclable wastes. More specifically, mixed waste generation decreased while the generation of recyclable wastes slightly increased. France's GDP showed steady growth but dropped significantly in 2020, most likely due to the Covid-19 outbreak, and total waste generation followed suit. Overall, there appears to be only a slight decoupling between economic growth and waste generation, but since around 2016, total waste generation has followed the GDP's trend.

Figure 1 Generation of waste (total and excluding major mineral wastes), population and economic development, 2010-2022



Source: Eurostat (2024b, 2024c, 2024g)

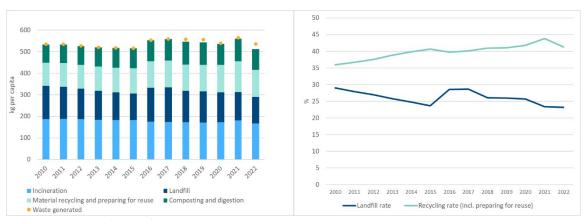
Note: Waste generation data for odd years are interpolated.

In 2022, 345 million tonnes of waste were generated in France, nearly the same as in 2018. In 2020, the Covid-19 pandemic led to a decrease in waste in all economic sectors, mainly in industry and construction, while household waste increased because of lockdowns and remote working. The increase after 2020 can be primarily attributed to increased waste generated in the construction sector. (Eurostat, 2024c)

Municipal waste

Municipal waste generation in France decreased between 2010 and 2016 (Figure 2, left). After an increase in 2016, due to the broadening of the reporting scope and changes in the collection of treatment data, the generation of waste per capita remained relatively stable. In 2022, the country generated 535 kg/cap of municipal waste, which is very close to the (estimated) EU-27 average of 513 kg/cap.

Figure 2 Municipal waste management (left) and rates of recycling (incl. preparing for reuse) and landfill (right), 2010-2022



Source: Eurostat (2024e)

Note: There is a break in series in 2016. Starting from 2016, treated amounts are directly derived from a survey of treatment facilities instead of collectors. As of the reference year 2020, new reporting rules apply for calculating recycled municipal waste pursuant to the targets laid down in Article 11.2(c-e) of Directive 2008/98/EC. However, it is unclear based on the information available whether these new reporting rules have been implemented in France yet.

The recycling rate of municipal waste has slightly increased over the past years from 36% in 2010 to 41% in 2022 (Figure 2, right), which is slightly below the (estimated) EU-27 average of 49% in the same year. The incineration rate in France remained stable, standing at 31% in 2022. In the same period, the landfill rate decreased from 29% to 23% in 2022.

France has also reported data to show compliance with the preparing for reuse and recycling target of 55% for 2025, as laid down in the Waste Framework Directive. The difference between these (provisional) data, following the reporting obligation of the Waste Framework Directive, and the data shown in Figure 2 (voluntary reporting) is below 1 percentage point for the preparing for reuse and recycling rate, both in 2021 and in 2022. The 2022 data according to this reporting obligation are still awaiting validation by Eurostat (Eurostat, 2024d). Household and similar waste are collected by the Service Public de Prévention et de Gestion des Déchets (SPGD; the public service for waste prevention and management). In 2021, it included market waste, street cleaning waste, and public parks and gardens waste collected by

the SPGD, but it excluded waste collected by other entities, such as Producer Responsibility Organisations (PRO) (¹). More details about the amount of wastes, composition and destination collected by the SPGD are available in Annex 1.

The Anti-Waste law for a Circular Economy fixed a goal of 10% of household and similar waste admitted in non-hazardous waste centres in 2035, which implies a goal of only 3.3 million tonnes of this waste going to landfill in 2035 (compared to 6.9 million tonnes in 2021).

Packaging waste

France's packaging waste generation has remained relatively stable since 2010 (Figure 3, left). The country generated 188 kg/cap in 2022, which is very close to the (estimated) EU-27 average of 186 kg/cap in the same year (²).

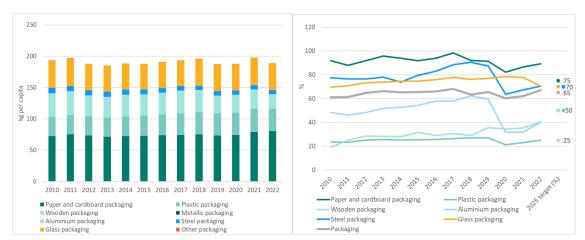


Figure 3 Packaging waste generation (left) and recycling rates (right), 2010-2022

Source: Eurostat (2024f)

Note: There is a break in series for the recycling rate of paper and cardboard in 2020. As of the reference year 2020, the rules for calculating recycled packaging waste have changed, pursuant to Article 6a of Directive 94/62/EC. France has applied these new calculation rules since the reference year 2020 (Eurostat, 2024a).

France's overall packaging waste recycling rate stands at 67.2% in 2022. The overall recycling rate is mainly influenced by paper and cardboard and glass packaging as these constitute the largest fractions. In 2020, there was a notable drop in cardboard and paper, metallic, and plastic packaging recycling rates, most likely influenced by the Covid-19 pandemic (Eurostat, 2024a) and the move to the new calculation rules. France reported steel and aluminium packaging separately already since 2010. Paper and cardboard, glass, and steel packaging had the highest recycling rates in 2022, exceeding the 2025 recycling targets, while the recycling rates of plastic and aluminium packaging need considerable improvement.

France reported the following material-specific recycling rates for the reference year 2022 (Fouque, E. (ADEME) and Fayolle, D. (AJBD), 2023; Eurostat, 2024f):

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⁽¹⁾ https://filieres-rep.ademe.fr/eco-organismes

⁽²⁾ The EU-27 average might be influenced by the situation that not all Member States already fully apply the reporting rules for packaging waste as defined in the Commission Implementing Decision 2019/665.

Ferrous metals: 70.5%Aluminium: 40.1%

• Wood: 40.6%

Paper and cardboard: 89.4%

Plastic: 25.2%Glass: 81.2%

Policies in place to encourage waste prevention measures and to increase recycling

Legislative framework and waste management plans

Waste management is implemented in French law by means of different ordinances and decrees. After the introduction of the National Waste Management Plan (NWMP) in 2019, which was updated in January 2020, France adopted its Anti-Waste law for a Circular Economy in 2020 ('La loi anti-gaspillage pour une économie circulaire', AGEC) (Loi n° 2020-105, 2020). Regional waste management plans and waste prevention plans complement the national plan.

More specifically, the Anti-Waste law for a Circular Economy (Loi n° 2020-105, 2020) stipulates to achieve the equivalent of 60% of household waste tonnage in 2030 being directed to reuse and recycling (Article 4) and states to ban marketing of all single-use plastic packaging by 2040 (Article 7). Furthermore, the NWMP sets a target of 100% separate collection for household plastic packaging by 2025.

Waste prevention policies

The previous National Waste Prevention Programme (NWPP) for 2014-2020 was evaluated by the French National Environmental Authority (EEA, 2023b). According to the evaluation, municipal waste generation had decreased but not enough to achieve the programme's goal of a reduction of 7%. The evaluation concluded that there is satisfactory progress in areas such as extending the lifespan of products, reducing the generation of biological waste, local management of organic waste, and combatting food waste, as well as limited progress in other areas including the implementation of Extended Producer Responsibility (EPR), preventing the generation of construction waste, and the use of economic instruments to support prevention (Autorité environnementale, 2020).

The current NWPP for the period 2021-2027 (Le ministère de la Transition écologique et de la Cohésion des territoires, 2023) is a stand-alone strategic document focusing on waste prevention. It addresses the design of products and measures for extended use, practices for reduced consumption, and actions to engage key stakeholders. Compared to other Member States, France's programme stands out for the comprehensive description of planned waste prevention actions (Collet, 2023). Nevertheless, no specific budget for the implementation of the programme is indicated. The programme consists of five key areas, with specified subtargets and indicators to monitor progress. Priority waste streams are household waste, food waste, and waste from consumer products, as well as waste from economic activities, mainly from the building and public sectors (Le ministère de la Transition écologique et de la Cohésion des territoires, 2023) (EEA, 2023b). The programme's quantitative targets include:

- a 15% reduction of household waste per capita by 2030 compared to 2010,
- a 5% decrease in waste from economic activities by 2030 compared to 2010,

- achieving a share of 5 and 10%, respectively, of reused packaging on the market in 2023 and 2027,
- reducing food waste in food distribution and collective catering by 50% in 2025 compared to 2015 levels,
- reducing food waste across consumption, production, processing, and commercial catering by 50% in 2030 compared to 2015 levels,
- ending single-use plastic packaging sales by 2040, and
- reducing single-use plastic beverage bottles on the market by 50% by 2030 compared to 2010.

The NWPP includes several measures to promote reuse which have already been implemented. The 2020 Anti-Waste law for a Circular Economy established two new funds for repair and reuse, launched in January 2023. One fund supports the repair of products which have gone out of warranty, offering consumers reduced costs at certified repair shops. The other fund supports associations and enterprises promoting reuse practices. The funds have been established and financed by existing EPR organisations. Another measure implemented since 2021 is the repairability index for electronic and electrical devices. The index requires producers to disclose repairability information and grade the repairability of a product on a scale of 1 to 10. Indicators for follow-up include the number of product categories subjected to the repairability index. Starting in 2024, the repairability index evolved into a durability index, providing information not only on repairability but also on product robustness (Le ministère de la Transition écologique et de la Cohésion des territoires, 2023).

According to 2021 data reported to the EEA in response to Commission Implementing Decision (EU) 2021/19 (EEA, 2024), France reused:

- 3 937 tonnes of textiles,
- 16 228 tonnes of electrical and electronic devices, and
- 35 372 tonnes of furniture.

It should be noted that these data have been reported for the first time. As the reporting process matures, it is expected that these data will strengthen but for now, caution is advised in drawing insights from the dataset. More information about the interpretation and limitations of the dataset is available (EEA, 2024). Specific aspects related to the initial reuse reporting for France can be found in the Annex to the EEA document 'Reuse flows according to the implementing decision (EU) 2021/19.

Policies to encourage separate collection and recycling

In France, residual waste and most recyclable waste fractions are collected door-to-door. However, plastics collection is limited to plastic packaging. Additionally, recyclable fractions are collected via bring points, as is food waste, and at civic amenity sites (Ministry for the Ecological Transition/CGDD/SDES, 2021). Starting in 2025, separate collection of bio-waste will become mandatory for all waste producers including households and non-household sources (Loi n° 2015-992) (ETC/CE, 2022). This aligns with one of the European Commission's (EC) priority recommendations to improve the separation and collection of bio-waste at source (EC, 2023a).

So far, only 9% of the French population is covered by a pay-as-you-throw system for waste collection. The fees charged are mainly based on the frequency of collection, giving a weak

economic incentive for citizens to sort waste at source. (Ministry for the Ecological Transition/CGDD/SDES, 2021; EEA, 2023) Hence, the EC recommends expanding the pay-as-you-throw system to encompass the entire population, thereby providing additional incentives (EC, 2023).

The recycling rate of plastic packaging waste is the lowest out of all packaging materials (Figure 3). Despite high coverage and convenience levels for the collection of plastic packaging waste, the collected volumes are limited because separate collection is restricted in most municipalities to plastic bottles and flasks. In addition, there are no deposit-return systems (DRS) in place, however, for plastic drink bottles these are under discussion. Consequently, the European Commission's early warning report highlights that separate collection systems should be extended and improved, especially for plastic waste (EC, 2023). Legislative changes were implemented in 2022, mandating the separate collection of all plastic packaging and an extension and simplification of the sorting instructions and process for citizens (Ministry for the Ecological Transition/CGDD/SDES, 2021). The effect of these measures remains to be seen.

Separation at source is mandatory for non-household packaging. Fee modulation is applied to paper, cardboard, plastics, ferrous metals, aluminium, glass, and composite packaging based on recyclability and sortability. For paper, cardboard, and plastics, it also considers recycled content. France does not apply packaging taxes. (ETC/CE, 2022)

France might benefit from the introduction of additional support tools for Producer Responsibility Organisations (PRO) to increase packaging recycling and the implementation of enforcement mechanisms for responsible entities might be beneficial if targets are not met (ETC/CE, 2022). Additionally, the European Commission highlights the necessity for support in preparing municipal waste for reuse and implementing reuse systems for packaging (EC, 2023).

In 2020, the 'Recyclability, recycling and reincorporation of materials' strategy (Government of France, 2021) was launched as part of the France Relance recovery plan (Government of France, 2020). It aims to improve the performance of the secondary raw materials markets by identifying obstacles and action levers to be put into place at the different stages of the recycling value chain:

- recyclability of products placed on the market,
- collection and sorting of end-of-life products,
- production of recycled raw materials, and
- reincorporation of recycled raw materials into new products.

It addresses the challenges of five materials: plastics, composite materials, textiles, paper/cardboard, and strategic metals. EUR 370 million of public funds will support innovation for the circular economy over the period 2021-2027. It follows the EUR 500 million financial support already mobilised as part of the circular economy component of the France Relance plan over the period 2021-2022.

Extended Producer Responsibility (EPR)

France is a pioneer in implementing Extended Producer Responsibility (EPR) schemes. This principle was initially applied to household packaging waste as early as 1992, contributing to high packaging recycling rates (Figure 3, right). Subsequently, the principle of EPR was extended to other product categories and material streams:

- Apparel, household linen and footwear
- Batteries and accumulators
- Building construction products and materials
- Chemical products
- Electrical and electronic equipment
- Furnishing elements
- Home improvement and gardening goods
- Household packaging and graphic papers
- Lubricants
- Medical sharps for homecare patients
- Professional packaging
- Sports and recreational boats
- Sporting and recreational goods
- Tobacco products
- Toys
- Tyres
- Unused medicines
- Vehicles

More information, including the respective Producer Responsibility Organisations (PRO), is available at the website <u>Les éco-organismes</u>. Producers related to an EPR have to prevent and manage their products when they become waste. To do so, they can either use an individual system or collective structures called eco-organisms. PROs are approved by public authorities, and they need to respect collection, reuse, and recycling targets set in decrees. They are financed by the producers of the EPR they belong to. In 2021, 9.4 Mt of waste were collected by the EPRs.

By 2025, there should be 23 EPRs covering close to all consumer goods. The Anti-Waste law for a Circular Economy requires these EPRs to put into place a Reuse fund and a Reparation fund. A Reparation fund has already been put into place for the electric and electronic equipment EPR.

Policies and instruments to discourage landfilling or incineration

France has a ban on the landfilling of waste collected for recycling and waste originating from municipalities and economic actors without source separation schemes. France also levies a landfill tax with rates between 30 and 175 EUR/tonne depending on the type of landfill and type of waste. This range lies close to or is considerably higher than the EU-27 average of EUR 39-46/tonne (EEA, 2023a). The landfill tax will be further increased by 2025. (ETC/CE, 2022)

An incineration tax has been in place since 2009, which has increased throughout the years (ETC/CE, 2022). A substantial increase of this 'Taxe Générale sur les Activités Polluantes' (TGAP) for thermal treatment facilities is planned with the aim of making reuse and material recovery more competitive. In 2025, the rates will be increased to between 7.5 and 25 EUR/tonne, depending on the energy efficiency of the incineration plant. (Ministry for the Ecological Transition/CGDD/SDES, 2021)

End-of-waste status

Another policy applied in France for supporting recycling is the application of end-of-waste status for certain waste types. The principles of the procedure for end-of-waste status in France are described in Article L.541-4-3 of the Environmental Code. Since 2014, France has published

10 Ministerial decrees setting criteria for end-of-waste status, the latest being published in 2024 and setting criteria for pyrolysis oil resulting from the pyrolysis of plastic waste destined for material recovery within a petrochemical installation.

Prospects for meeting the targets on recycling and landfilling

France has made minor progress in improving its municipal waste recycling rate, while at the same time the incineration and landfill rate went down by a few percentage points (Figure 2, right). According to the EEA's early warning assessment, France is considered to be on track to meet the 2025 recycling target for total packaging waste, and the 2035 target for the landfilling of municipal waste. However, the country is considered to be at risk of missing the 2025 targets for the preparing for reuse and recycling of municipal waste, and for the recycling of plastic packaging waste (ETC/CE, 2022). Consequently, the European Commission issued a number of policy recommendations to improve France's waste management performance (EC, 2023):

- Support preparing for reuse of municipal waste and reuse systems for packaging.
- Improve the separation and collection of bio-waste at source and ensure enough dedicated treatment capacity.
- Implement a pay-as-you-throw system, which covers the entire population and gives further incentives to the public to separate waste at source.
- Improve and extend separate collection systems, especially for plastic waste, and ensure that all types of plastic packaging waste are separately collected.

Key measures taken by the French government include the improvement of separate collection practices with a special focus on bio-waste and plastics, and increasing the landfill tax (ETC/CE, 2022).

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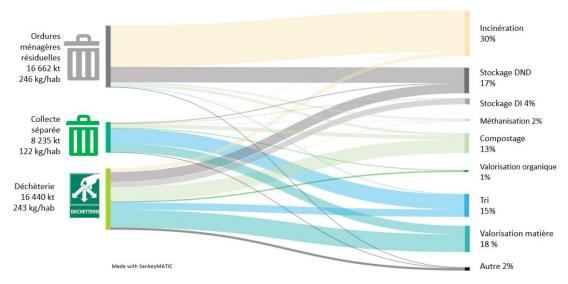
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Annex 1

In 2021, the SPGD has collected 41.3 Mt of waste. Their destination is mapped in Figure A1.

Figure A1: First destination of the flows taken care of by the SPGD in 2021 (Poulain, O. (ADEME) et al., 2023)



Note:

Ordures ménagères résiduelles = residual household waste. Collecte séparée = separate collection. Déchèterie = centre for waste collection. Incinération = incineration. Stockage DND = non-hazardous waste storage centre. Stockage DI = inert waste storage centre. Méthanisation = methanisation. Compostage = composting. Valorisation énergétique = energy recovery. Tri = sorting. Valorisation matière = material recovery. Autre = other.

In 2021, 41.3 million tonnes of household and similar waste have been collected (+6% compared to 2019):

Residual household and similar waste: 40%

Recyclable materials: 20%

Bio-waste: 14%

Hard-to-dispose-of-waste: 13%

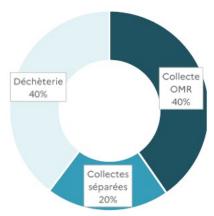
Excavated material and building rubbles: 11%

• Hazardous waste (e.g. WEEE): 1%

Others: 1%

Household and similar waste have been decreasing, by 2 million tonnes in the period 2009 - 2021 (from 51% to 40% of the total) for the benefit of separate collection and waste collection centres.

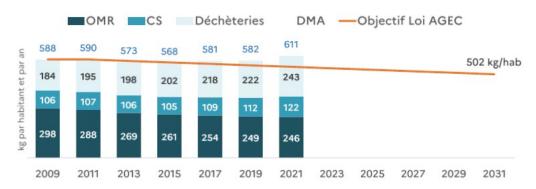
Figure A2: Distribution of household and similar waste collected by SPGD in 2021



Note: Collecte OMR = residual household waste collection. Collectes séparées = separate collections. Déchèterie = centre for waste collection.

In 2021, household and similar waste collected by SPGD represented 611 kg/cap, which represents a 6% increase compared to 2019. The 2015-992 Law on Energy Transition for Green Growth (Energy Transition Law) targeted a 10% reduction of household and similar waste per inhabitant in 2020 compared to 2010. This goal of 550 kg/cap has not been met. The 2020 AGEC (n°2020-105) law has updated this reduction target aiming at a 15% decrease in household and similar waste produced in 2030 compared to 2020 which represents 502 kg/hab (Figure A3).

Figure A3: Perspective of household and similar waste ratios collected by the public service (kg/hab/yr) with the AGEC law goal



Note: OMR = residual household waste. CS = separate collection. Déchèterie = centre for waste collection. DMA = household and similar waste. Objectif loi AGEC = AGEC law goal.

From 2007 to 2021, household and similar waste collected by SPGD has been directed towards material or organic valorisation from 12 to 20 million tonnes. In 2021, 47% of household and similar waste collected by SPGD had been directed towards material valorisation.