

Waste management country profile

with a focus on municipal and packaging waste

Italy

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Key messages

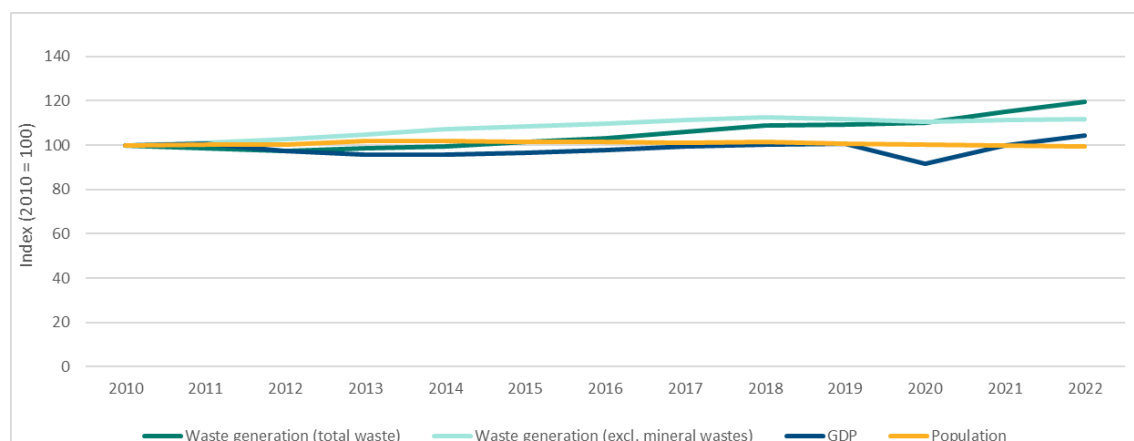
- Waste generation in Italy shows an increasing trend while the GDP remained rather stable. Hence, there are no clear signs of decoupling between waste generation and economic growth.
- Italy made continuous progress both on increasing recycling and reducing landfilling of municipal waste since 2010. The already high recycling rate of packaging waste could be improved further.
- Italy is considered to be on track to meet the 2025 recycling target for total packaging waste and the 2025 target for preparing for reuse and recycling of municipal waste.
- In 2022, Italy recycled 71% of its packaging waste and 53% of its municipal waste. Data reported according to the reporting rules related to the 2025 preparing for reuse and recycling target indicate a slightly lower performance in 2022 for municipal waste, so Italy needs further efforts to increase recycling of municipal waste.
- While not considered at risk of missing the 2035 target for the landfilling of municipal waste, Italy needs to further divert waste from landfilling towards recycling. The current landfill tax level is rather low compared to the average level of landfill taxes applied in the EU-27 Member States.

Trends in waste generation and treatment

Total waste generation

The total amount of waste generated in Italy has increased over the past 12 years (Figure 1). This trend is mainly driven by mineral waste from construction and demolition. The trend is similar for total waste excluding major mineral wastes. This trend in the generation of total waste excluding major mineral wastes is mostly driven by recyclable wastes. Italy's GDP stagnated throughout the considered timeframe, apart from a decrease in 2020, most likely due to the Covid-19 outbreak. In general, waste generation increased while GDP and population remained rather stable, hence there are no clear signs of decoupling waste generation from economic growth.

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



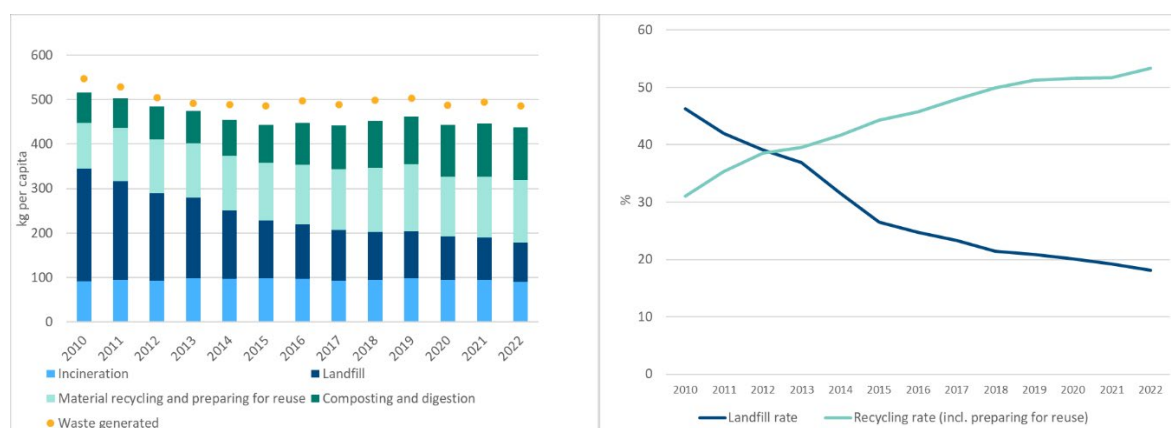
Source: Eurostat (2024b, 2024c, 2024g)

Note: Waste generation data for odd years are interpolated.

Municipal waste

Italy's municipal waste generation shows a slight decrease over the 2010-2022 period, generating 486 kg/cap of municipal waste in 2022, which is slightly below the (estimated) EU-27 average of 513 kg/cap (Figure 2, left).

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



Source: Eurostat (2024e)

Note: As of 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 the EU Waste Framework Directive (2008/98/EC). However, the data in Figure 2 do not follow these new reporting rules.

Italy's preparing for reuse and recycling rate for municipal waste increased significantly, from 31% in 2010 to 53% ⁽¹⁾ in 2022 (Figure 2, right), which is very close to the (estimated) EU-27

⁽¹⁾ While compliance with the 2020 recycling target of the WFD is not assessed here, it is noted that Italy uses calculation method 2 of Commission Implementing Decision 2011/753/EU to show compliance with the target to recycle 50% of household/municipal waste according to the Waste

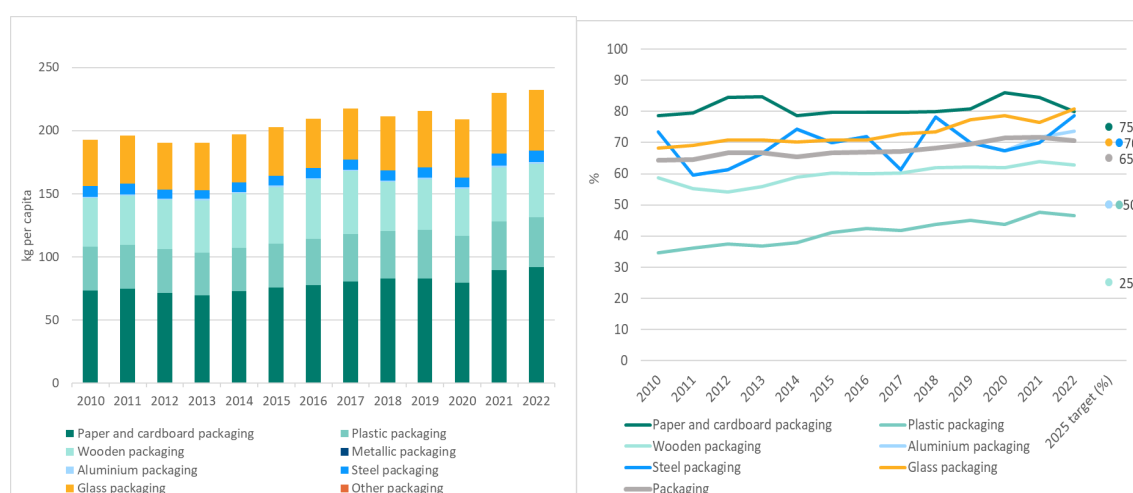
average of 49% in the same year. At the same time, the landfill rate in Italy significantly decreased over the last 12 years, from 46% in 2010 to 18% in 2022 (Figure 2, right), indicating that this decrease in landfilling is the result of an increasing recycling rate. The incineration rate in Italy remained quite stable over the past years and stands at 19% in 2022.

The data shown in Figure 2 differ from the data reported by the Italian authorities to show compliance with the preparing for reuse and recycling target of 55% by 2025, as laid down in the Waste Framework Directive. Italy reported a preparing for reuse and recycling rate in response to the target that was in the range of 1 to 5 percentage points below the data shown in Figure 2 for reference years 2021 and 2022. These data are provisional and still awaiting final validation by Eurostat (Eurostat, 2024d).

Packaging waste

Italy's packaging waste generation significantly increased since 2010 (Figure 3, left). The country generated 232 kg/cap in 2022, which is significantly above 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: As of reference year 2020, the rules for calculating recycled packaging waste have changed, pursuant to Article 6a of Directive 94/62/EC. Italy is applying the new calculation rules since reference year 2020 (Eurostat, 2024a).

Italy's overall packaging waste recycling rate shows a small increase between 2010 and 2022, reaching 71% in 2022. The recycling rate is mainly driven by paper and cardboard, and glass packaging waste which represent the highest shares of packaging waste combined with high recycling rates. Plastic packaging waste recycling shows the strongest increase between 2010 and 2022. Until 2020, Italy reported the same recycling rate for aluminium and steel packaging, thereafter they differ and the recycling rate for steel is higher than for aluminium.

Framework Directive Art. 11(2a). According to calculation method 2, Italy achieved a recycling rate of 55.5% in 2022 (ISPRA, 2024).

⁽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.

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

Legislative framework and waste management plans

In September 2020 the Italian Government published four Legislative Decrees that bring into force provisions of the 2018 European Directives of the so-called European Circular Economy Package. The changes in the national legal framework are expected to impact waste management, especially for Extended Producer Responsibility (EPR) schemes, municipal waste, packaging and packaging waste (ETC/CE, 2022).

Italian regions can issue environmental regulations, including the regulation of waste management activities. An example is the separate collection of municipal waste, including hazardous waste, food-borne waste and waste of vegetable and animal products. Municipalities within so-called optimal management areas (*Ambito Territoriale Ottimale* or ATO) organise municipal waste collection and management in line with the area plans. (ETC/CE, 2022)

Italy adopted a national waste management plan on 24 June 2022. This responds to the priority actions recommended by the European Commission (EC, 2022) regarding the implementation of a national waste management programme and to ensure that waste management plans are in line with the Waste Framework Directive.

Waste prevention policies

Italy's National Waste Prevention Programme (NWPP) (*Programma Nazionale di Prevenzione dei Rifiuti*), covering the period 2013 to 2020, was the country's first waste prevention programme (EEA, 2023b). A new NWPP is currently under development (ISPRA, 2024). There is no information indicating how the overall programme was monitored or evaluated, nor the frequency of the evaluations or other requirements (EEA, 2023b).

Additionally, in 2022, the National Strategy for Circular Economy was approved in Italian law and signals a shift in the Italian legislative framework towards prioritising waste prevention and reuse (EEA, 2023b).

The aim of the NWPP 2013-2020 was to decouple the environmental impacts of waste from economic growth, prioritising six key waste streams: food and organic waste, construction and demolition waste, hazardous waste, paper waste, packaging waste, and waste from electrical and electronic equipment and batteries (EEA, 2023b).

For each waste prevention measure, at least one indicator monitors the progress of implementation. For example, indicators for packaging waste include the number of information campaigns that promote tap water consumption over bottled water, the number of programmes implemented encouraging tap water use, and the installation of public water fountains. (EEA, 2023b)

The NWPP 2013-2020 outlined the following quantitative targets for waste prevention to reach by 2020, compared to 2010 levels (EEA, 2023b):

- attain a 10% reduction in the ratio of hazardous waste from industrial and economic activities (non-municipal waste) generated to GDP unit, and

- reach a 5% reduction in the ratio of non-hazardous waste from industrial and economic activities (non-municipal waste) generated to GDP unit.

The waste streams addressed by these targets include a broad range of wastes from agriculture, industry, construction and demolition, and other activities.

Throughout 2020 to 2022, several Ministerial Decrees were issued to promote reuse in public procurement, by setting minimum environmental criteria. Such criteria were set for interior furnishings, collective catering, and events, obliging waste service providers to promote reuse. For example, the initiative on interior furnishings aims to encourage the supply and use of rental services while extending the useful life of interior furnishings through ecodesign principles. (EEA, 2023b)

Based on the 2021 data submitted to the EEA in response to the Commission Implementing Decision (EU) 2021/19 (EEA, 2024), Italy reused:

- 13 933 tonnes of textiles,
- 63 434 tonnes of electrical and electronic devices, and
- 119 067 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).

Policies to encourage separate collection and recycling

Overall, glass, plastic and metal packaging waste in Italy is collected through bring points or door-to-door. However, non-packaging waste of the same materials are collected on demand or they can be dropped off at civic amenity sites. Wood from packaging and construction waste is usually collected at civic amenity sites. Paper and cardboard, either packaging or non-packaging, are collected jointly (ETC/CE, 2022).

In Italy, it is estimated that 14% of the population is covered by different types of pay-as-you-throw systems, while the majority of the population pays waste taxes based on the surface area of the housing and the number of occupants (ISPRA, 2024). In some cases, the pay-as-you-throw systems are shared by multiple households which is the case in condominiums. The systems in use are based on taxes and fees, covering both residual waste and separately collected waste (ETC/CE, 2022).

The Italian Extended Producer Responsibility (EPR) system for packaging covers both household and non-household packaging. In Italy, a well-designed eco-modulated fee system (called environmental contribution) is used for paper and cardboard packaging, cellulose-based composite packaging and plastic packaging, while only basic fee modulation is applied to ferrous metals, aluminium and glass packaging.

Currently, Italy has no mandatory deposit-return systems (DRS) in place. However, there is a voluntary deposit-return system for glass packaging from shops, bars, and restaurants, the so-

called VAR (*Vuoto a Rendere*). This system promotes the return of empty mineral water and beer bottles to manufacturers for reuse. It started as experimental in 2017 but is now common practice (ISPRA, 2024). Italy has a tax to be levied on non-recycled single-use plastic packaging of 0.45 EUR/kg that is planned to enter into force in July 2026.

Italy's separate collection system shows room for improvement, especially in certain areas of the country where poor performance lowers the national average practice (ISPRA, 2024).

Policies and instruments to discourage landfilling or incineration

Italy has a nationwide tax for the landfilling of residual waste, introduced by Law 549/1995 and revised by Law 62/2005, however, each region decides yearly the amount of the tax which is applied on their territory. The tax varies between EUR 5.17 per tonne and 25.82 EUR/t, which is considerably lower than the EU-27 average of EUR 39-46 per tonne (EEA, 2023a). Its upper value has not changed since 1995 and there is no escalator mechanism in place nor planned (ETC/CE, 2022). The Legislative Decree No. 152/2006 established a separate collection target of 65% for Italy, which should be achieved by the end of 2012 at the Optimal Territorial Area (ATO) level, generally represented by provinces, or at the municipality level. If this target is not reached, the Area Authority must pay an additional 20% to the landfill tax (EEA, 2023a). The European Commission identified a need for Italy to harmonise and increase the regional landfill tax rates as a priority action in the Environmental Implementation Review 2022 (EIR) (EC, 2022).

Italy has a tax on waste incineration at incineration plants without energy recovery for municipal solid waste, for residues from sorting, recycling and composting plants, and for sludge (EEA, 2023a). This tax, at a level of EUR 5.16 per tonne, is the lowest tax on waste incineration among the ten countries across Europe applying waste incineration taxes (EEA, 2023a).

Prospects for meeting the targets on recycling and landfilling

In the EEA's early warning assessment (ETC/CE, 2022), Italy was considered to be on track to meet the 2025 targets for the preparing for reuse and recycling of municipal waste (55%), total packaging waste recycling (65%), and all recycling targets regarding packaging material, except for plastic packaging. In 2022, the preparing for reuse and recycling rate of municipal waste was 53%, but the provisional reported recycling rate in response to the 2025 target – still awaiting validation by Eurostat – was in the range of 1 to 5 percentage points lower (Eurostat, 2024d). Therefore, Italy needs further efforts to reach the 2025 target. The reported Italian recycling rate for total packaging waste was 71% in 2022, well above the 2025 target of 65%. While Italy was considered to be on track to meet the 2035 target to reduce landfilling of municipal waste to 10% or less of the generated amount, the country still needs to decrease its landfill rate by 8 percentage points in order to meet the target (ETC/CE, 2022). Consequently, the European Commission did not issue any policy recommendations for waste management performance for Italy.

During the last decade, Italy has made considerable progress in diverting waste from landfilling to recycling, yet efforts are required to meet the 2035 landfill target. The Commission's Environmental Implementation Review 2022 (EIR) emphasised that there is no progress made in Italy regarding the harmonisation of the low level of regional landfill taxes, and low progress on closing irregular landfills. The importance of signing and ratifying outstanding international agreements was emphasised as well. Therefore, recommended priority actions are focused on

harmonising and increasing regional landfill tax rates and closure of non-compliant landfills (EC, 2022).

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