

Waste management country profile

with a focus on municipal and packaging waste

Romania

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Key messages

- The waste generation in Romania shows a declining trend over the past 12 years, while GDP was increasing, so there is a clear sign of decoupling of waste generation from economic growth.
- Romania is considered to be at risk of not meeting the 2025 targets for the recycling of packaging waste and the preparing for reuse and recycling of municipal waste, as well as the 2035 landfill target.
- Romania has not made progress on improving its municipal waste preparing for reuse and recycling rate in the period 2010-2022, which was still only 12% in 2022. Romania still relies heavily on landfilling, with a landfill rate of 74% in 2022.
- There is a need to improve and extend the separate collection of both packaging and municipal waste, including bio-waste, properly incentivise separation at source, and further disincentivise landfilling. Data quality issues regarding packaging waste need to be addressed, however, some improvements in data quality have been initiated recently.

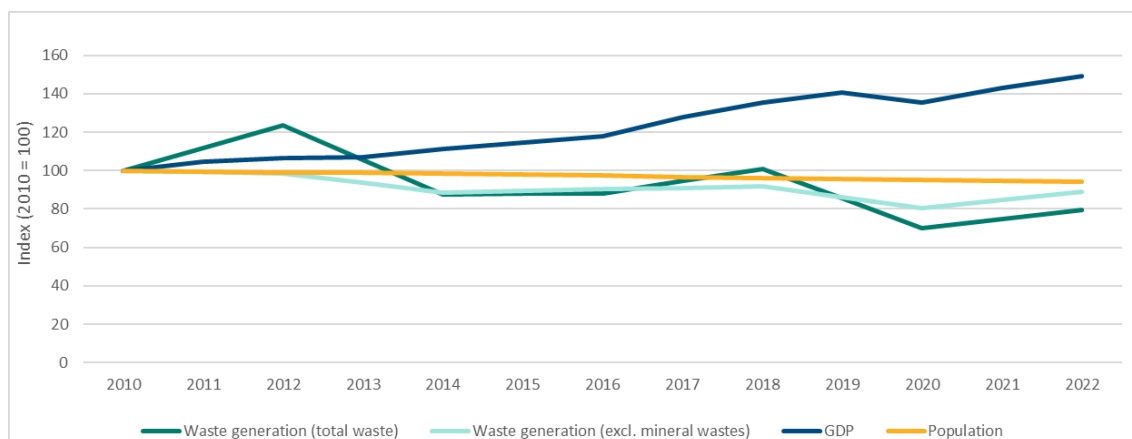
Trends in waste generation and treatment

Total waste generation

The total amount of waste generated has decreased in Romania over the past 12 years (Figure 1). This trend is primarily driven by the by far largest waste category - other mineral wastes - which is mainly generated in the mining and quarrying sector.

The trend is similar for total waste excluding major mineral wastes. Within this category, the largest waste fractions are combustion wastes, recyclable wastes, and mixed ordinary wastes, and the trend seems to be mainly influenced by a decrease in combustion waste, which nearly halved from 2018 to 2020, followed by an increase towards 2022. Romania's GDP showed steady growth throughout the period with a drop in 2020, most likely due to the Covid-19 outbreak. Meanwhile, the population slightly decreased during the same period. There is an indication of decoupling between economic growth and waste generation.

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



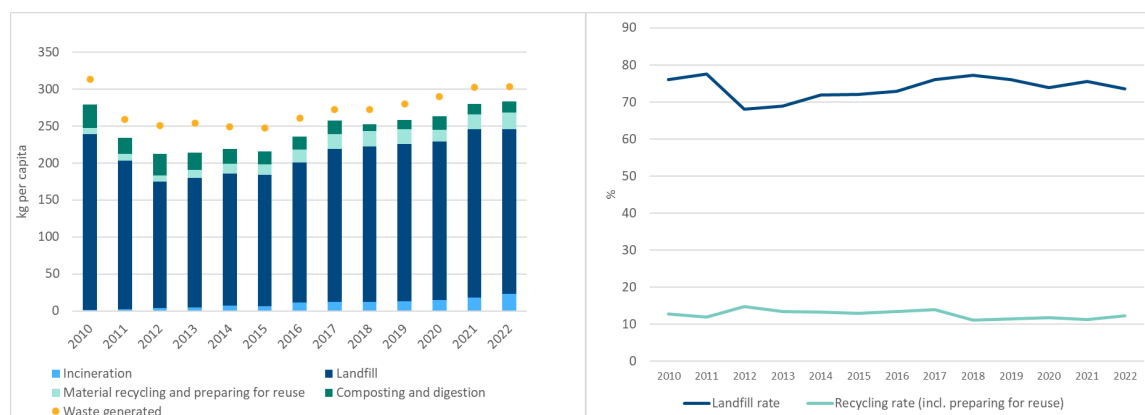
Source: Eurostat (2024b, 2024c, 2024g)

Note: Waste generation data for odd years are interpolated.

Municipal waste

Romania's municipal waste generation has slightly increased in recent years (Figure 2, left). In 2022, Romania generated 303 kg/cap of municipal waste, which is significantly below 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: 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 Romania yet.

Romania has a low recycling rate of 12% in 2022, which is significantly below the (estimated) EU-27 average of 49%. The trend has stagnated since 2010. The landfill rate was 74% in 2022, with no progress made since 2010 (Figure 2, right).

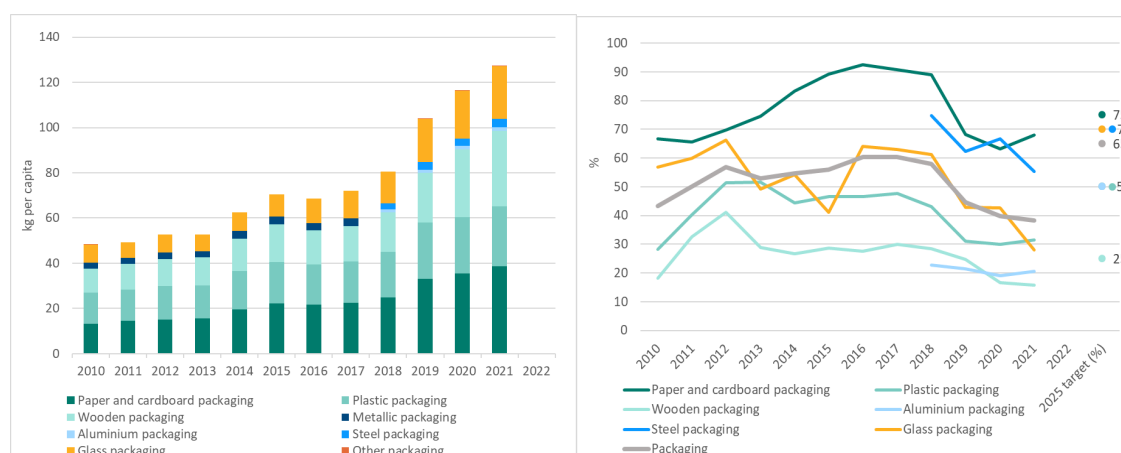
Romania has also reported data to show compliance with the preparing for reuse and recycling target of 55% for 2025, as laid down in the Waste Framework Directive. The difference between these (provisional) data, following the reporting obligation of the Waste Framework Directive, and the data shown in Figure 2 (voluntary reporting) is below 1 percentage point for the preparing for reuse and recycling rate both in 2021 and 2022. The 2022 data according to this reporting obligation are still awaiting validation by Eurostat (Eurostat, 2024d).

One key reason explaining the low recycling rate is Romania's low composting and anaerobic digestion rate, as Romania does not have enough capacity for the separate collection and adequate treatment of bio-waste (EC, 2023). The estimated current capacity for composting or digesting separately collected bio-waste would only be able to treat about 27% of the generated amount (estimated to be about 1.7 million tonnes) (ETC/CE, 2022). The incineration rate in Romania is low but increasing, currently standing at 8%.

Packaging waste

Romania's packaging waste generation has increased in recent years (Figure 3, left), especially since 2017. It increased from 72 kg/cap in 2017 to 127 kg/cap in 2021, which is still significantly below the (estimated) EU-27 average of 189 kg/cap in the same year ⁽¹⁾.

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



Source: Eurostat (2024f)

Note: There are no data available for 2022. There is a break in the time series indicated for 2019. As of the reference year 2020, the rules for calculating recycled packaging waste have changed, pursuant to Article 6a of Directive 94/62/EC. The new reporting rules have been applied in Romania from the reference year 2020 onwards (Eurostat, 2024a).

In 2021, the overall recycling rate for packaging waste was 38%, which is significantly below the (estimated) EU-27 average of 64% in the same year. The packaging waste recycling rate has fluctuated between 40-60% throughout 2010-2021 (Figure 3, right). The recycling rate is mainly driven by paper and cardboard packaging and wooden packaging recycling, as these are the largest packaging waste fractions. However, there are data quality issues regarding packaging waste (ETC/CE, 2022). There is a large discrepancy between the low recycling rate for municipal waste and the moderate recycling rate for packaging waste, thus, the datasets on municipal waste and packaging waste indicate inconsistency (ETC/CE, 2022). Recently, improvements to the data collection and quality assurance system have been initiated (e.g. external auditing of EPR schemes) (ETC/CE, 2022).

In 2018, national legislation on packaging and packaging waste (Law 249/2015) underwent important changes (Eurostat, 2024a), which led to a break in the time series indicated for the reference year 2019. These changes resulted in a strong increase in the recorded packaging waste generated while the recycled volumes stayed relatively stable (Eurostat, 2024f), leading to a drop in the recycling rates for all packaging materials.

⁽¹⁾ 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

Overall, the Romanian waste legislation follows the EU waste legislation. The EU waste management legislation has been transposed into national law through a number of laws, including Government Emergency Ordinance 92/2021 on the waste regime; Government Emergency Ordinance 195/2005 on environmental protection; the Sanitation Law 101/2006 setting objectives, organisation and obligations for the administrative territorial units; the Environment Fund on defining economic instruments for (inter alia) waste management and landfill diversion, as well as provisions for administration of the fund; and various other legal norms, covering specific waste streams such as packaging, waste electrical and electronic equipment (WEEE), batteries, tyres, single-use plastics, and deposit-return systems.

Romania's National Waste Management Plan (NWMP) and National Waste Prevention Programme (NWPP) are valid until 2025 (ETC/CE, 2022).

Waste prevention policies

Romania's current National Waste Prevention Programme (NWPP) 2018-2025 is integrated into the National Waste Management Plan (NWMP) in a separate chapter (Chapter V) (Government of Romania, 2018). The programme aims to establish a strategic direction in developing measures for waste prevention. The objective of the NWPP is specified into three strategic objectives, focusing on the prevention of household waste, packaging waste and wastes from the wood processing, chemical, metallurgical and steel industries.

. There is no information about a dedicated budget for the implementation of the NWPP.

The priority waste streams for prevention are food and organic waste, construction and demolition waste, hazardous waste, household and municipal waste, paper and cardboard waste, packaging waste, WEEE and batteries, and manufacturing waste (EEA, 2023b; Government of Romania, 2018).

Quantitative waste prevention targets are specified along with proposed indicators for follow-up:

- reducing household waste per capita by 10% by 2027 compared to 2017, and
- decoupling packaging waste generation from economic growth (i.e. the increase of packaging waste should be at least 10% lower than GDP growth in the period 2017-2025).

To reduce household waste, food waste is addressed in public procurement, by raising awareness and date-marking of food, and through an introduction of waste prevention topics in pre-university education (EEA, 2023b).

In 2018, Romanian Law 217/2016 on Food Waste Reduction was established to reduce food waste throughout the food supply chain. The law simplifies the donation of surplus food. Several food waste prevention projects have been initiated such as the 'Food Bank' project aimed to redistribute food waste in three cities in Romania. (EEA, 2023b)

Actions to target a reduction of packaging waste are established through design, redesign and optimisation of packaging using fewer resources. (EEA, 2023b)

The National Waste Management Programme (NWMP) 2014-2020 was the first national document addressing waste prevention, though the impacts of these measures have not been evaluated yet. Information regarding budget or financial incentives is not specified for the current NWPP 2018-2025. (EEA, 2023b)

Romania has not reported any data for reuse of textiles, furniture, electrical and electronic equipment, and construction and building materials according to Commission Implementing Decision (EU) 2021/19 for the year 2021 by the reporting deadline. (EEA, 2024)

Policies to encourage separate collection and recycling

Romania's separate collection system does not distinguish between household and non-household waste. The separate collection of non-household packaging waste fractions is mandatory. The system relies on bring banks for recyclables. The Romanian legislation lacks a clear definition of the separate collection service to be provided to residents, and no enforcement measures are foreseen. In 2020, the National Environmental Guard identified deficiencies in the implementation of the requirements for waste collection services. More detailed information is not available on the degree of service for separate collection. (ETC/CE, 2022)

Romania has firm plans to increase separate collection services in 2024-2026 for at least bio-waste, wood, WEEE, paper, metal, plastic and glass waste. The capture rates of separate collection are planned to be increased by extending the coverage of the bring point system, establishing civic amenity sites, and providing composting units for households in rural areas. Investments in the infrastructure for separate collection and recycling facilities are supported by the EU through the Recovery and Resilience Facility, and these investments are planned to be put in place by mid-2026 (EU Council, 2023).

In Romania, Extended Producer Responsibility (EPR) applies to the main packaging fractions for both households and non-households. No advanced fee modulation is applied, i.e. fee modulation beyond the broad material categories such as higher fees for difficult-to-recycle plastic types or combinations of materials. Romania does not apply packaging taxes except for plastic carrier bags. A deposit-return system is mandatory for refillable glass bottles only, while there are no deposit-return systems for single-use glass bottles, aluminium drink cans, plastic bottles, plastic crates, and wooden packaging. (ETC/CE, 2022)

In order to incentivise sorting at source, Romania has implemented a volume-based pay-as-you-throw scheme in around two-thirds of the administrative territorial units.

Policies and instruments to discourage landfilling or incineration

In 2019, Romania introduced a ban on the landfilling of recyclables and a landfill tax. The latter was RON 80 per tonne (eq. EUR 16 per tonne) in 2020, without distinction between residual or biodegradable waste. The landfill tax is considerably lower than the average of the EU-27 Member States applying landfill taxes (EUR 39-46 per tonne (EEA, 2023a)). However, there are currently no plans to increase the tax. Romania has no tax on waste incineration, as Romania has no incineration capacity. (ETC/CE, 2022)

Prospects for meeting the targets on recycling and landfilling

Romania has to speed up its progress towards reaching the 2025 target for the preparing for reuse and recycling municipal waste of 55%, the 2025 target for packaging recycling of 65%, and the 2035 target to reduce landfill to 10% of the generated municipal waste (ETC/CE, 2022). Until 2022, Romania has not made progress in improving its municipal waste preparing for reuse and recycling rate, nor in reducing landfilling of municipal waste. The preparing for reuse and recycling rate in 2022 was 12%, while 74% was landfilled. Packaging waste recycling, at 38% in 2021, needs improvement as well.

In the Environmental Implementation Review 2022, the European Commission recommended ensuring the closure and rehabilitation of substandard landfills; taking action against illegal landfills and fly-tipping; improving and extending the separate collection of waste, including for bio-waste; using economic instruments; setting mandatory recycling targets for municipalities; and improving the functioning of Extended Producer Responsibility (EPR) systems, in line with the general minimum EPR requirements (EC, 2022).

In response to the results of the EEA's early warning assessment for Romania (ETC/CE, 2022), the European Commission issued a number of policy recommendations to improve Romania's waste management performance (EC, 2023):

- Support preparing for reuse of municipal waste and reuse systems for packaging.
- Extend the separate collection of waste across the whole country. Improve public awareness and participation in waste separation and waste prevention. Implement economic instruments, such as pay-as-you-throw, and increase the landfill tax to both incentivise separate collection and minimise landfilled waste.
- Further develop waste treatment infrastructure associated with the higher steps of the waste hierarchy. In particular, increase the treatment capacity for bio-waste and support home composting. Promote the use of bio-waste as fertiliser by setting national quality standards for bio-waste.
- Improve the data management system in order to present coherent and verifiable datasets.

Meanwhile, Romania has decided to postpone the deadline for meeting the 2025 target for the recycling of municipal waste by five years, making use of the postponement option in the Waste Framework Directive. (EC, 2024)

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