

PLASTICS RECYCLING INDUSTRY FIGURES 2024

MAPPING OF
INSTALLED
CAPACITIES



PLASTIC RECYCLING INDUSTRY'S TURNOVER DROPS BY 5.5%



850
companies



13.5 million tonnes
installed capacity



€8.6 billion
turnover



30.000
employees

This report provides an overview of key developments in plastics recycling input capacity across Europe in 2024, offering insights into **market pressures** and **structural challenges** affecting the sector. Figures reveal that the deep competitiveness crisis affecting the European plastics recycling sector continued to aggravate throughout 2024.

The market downturn in 2024 is being driven by several factors: persistently high prices of raw materials, rising production and electricity costs and unregulated cheaper imports. These pressures have led to decreased capacity utilisation and reduced operating margins for recyclers, threatening the very survival of the sector.

For the first time, both the total volume of input plastics material and the recyclates produced decreased in 2024, compared to the previous year. The trend was directly driven by low demand, declining capacity utilisation, and the closure of recycling facilities across Europe, pushing the total volume of recyclates produced down from 7.7 million tonnes to approximately 7.5. **This is reflected in the significant decline in the industry's turnover for the second year in a row: from €9.1 billion in 2023 to €8.6 billion in 2024, a drop of 5.5%.¹**

More than 850 companies have been actively recycling plastics in EU27+3² during 2024. However, over the year, recycling facilities equivalent to around 300 kilotonnes closed down - marking the largest reduction in existing operational capacity the sector has ever experienced.

Looking at the targets set by the Packaging and Packaging Waste Regulation (PPWR), the accelerating loss of established recycling capacity, which new capacities alone cannot offset, points to a worrying trend.

The total installed recycling capacity in 2024 amounted to 13.5 million tonnes - falling short of the 6% yearly growth that would be required to reach the 2030 and 2040 targets set by the PPWR.

Reversing the downward trend within the European plastics industry is highly dependent on swift action from policymakers. Harmonised legislative frameworks, together with efficient enforcement mechanisms, targeted investments and fair competition, are a must to secure a future for circular economy in Europe³.

1. Plastics Recycling Industry Figures 2023: <https://www.plasticsrecyclers.eu/publications/>

2. EU27+3 refers to the 27 European Union Member States plus Norway, Switzerland and United Kingdom.

3. Strategic Recommendations for a Resilient and Circular Plastic Value Chain in Europe: <https://www.plasticsrecyclers.eu/publications/>

UNFAVOURABLE MARKET CONDITIONS LEAD TO GROWING STOCK LEVELS FOR RECYCLERS

In 2024, the installed recycling capacity for PO films plateaued at approximately 3.5 million tonnes, as planned investments and expansions were counterbalanced by unfavourable market conditions. Despite this downturn, PO films accounted for 26% of the total installed plastics recycling capacity in Europe.

PET remained the second-largest polymer in terms of recycling capacity, with a slight increase from 3.2 to 3.3 million tonnes in 2024: 0.1 million tonnes of this capacity were dedicated to tray recycling, and the rest to beverage bottles. While both new investments and capacity utilisation showed moderately positive trends for this polymer, recyclers reported growing stock levels of rPET pellets due to the surge in low-priced imports from outside the EU. This not only represents a threat to the targets stipulated in the Single Use Plastics Directive⁴, but also to the competitiveness of locally produced material.

The strain of these market pressures is especially evident for food-contact rPET, which is subject to strict safety and quality standards required by EU legislation. To ensure the protection of citizens' health, it is essential that imported materials comply with the same requirements – which are necessary to level the playing field for European recyclers.

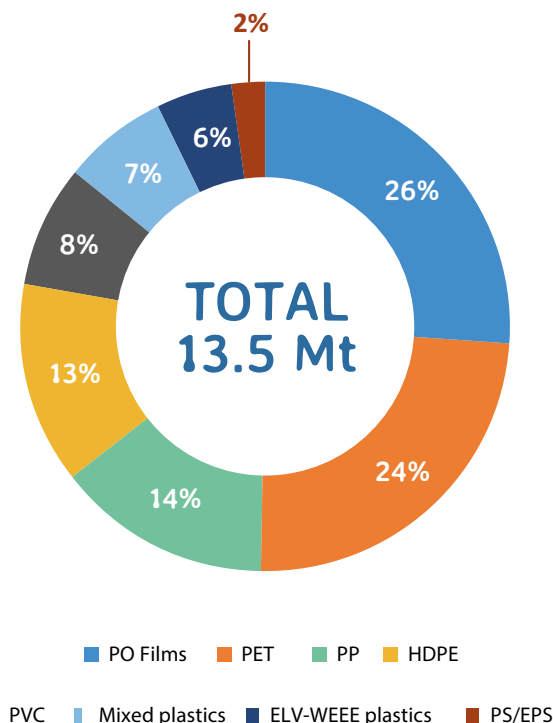
Rigid PP and HDPE recycling capacities remained stable in 2024, at around 1.8 million tonnes for PP and 1.75 million tonnes for HDPE - representing roughly 14% and 13% of total capacity, respectively. In 2024, PP recyclers reported slightly better operational performance and more investment activity compared to HDPE.

PVC capacity held steady at around 1.1 million tonnes, while mixed plastics closed the year with around 1 million tonnes. The ELV-WEEE plastics segment showed a positive trajectory, reaching nearly 0.8 million tonnes in 2024. This increase was supported by better turnover and capacity utilisation. The PS-EPS segment also remained stable compared to 2023, with a combined capacity of around 220 kilotonnes, equally split between the two resins.

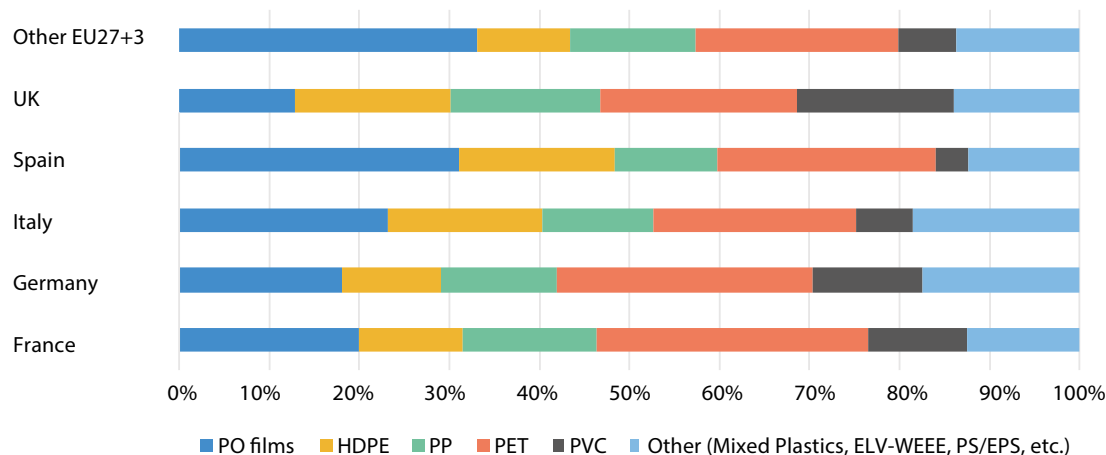
When examining the broader picture, input volumes and recyclates produced in 2024 followed different trends across polymers. While PET, PP and ELV-WEEE showed modest increases of up to 5%, other streams faced setbacks. LDPE recorded a decline of around 5% in both input and output volumes, and the situation was even more challenging for HDPE, where production and turnover fell by 5-10%, with some facilities reporting losses exceeding 10%.

The estimated installed chemical recycling capacity in Europe accounted for 190 kilotonnes in 2024, but yearly growth fell short of expectations, as the lack of legal transparency around calculation methods, high operating costs, and insufficient investments caused projects to be postponed or cancelled.

4. Directive (EU) 2019/904: <https://eur-lex.europa.eu/eli/dir/2019/904/oj/eng>



RECYCLING CAPACITY DISTRIBUTION UNDER PRESSURE IN THE EU27+3



In 2024, the stagnation experienced by the European plastics recycling industry led to **minor changes in how capacity is distributed across EU27+3** top five countries. Germany maintained its position as the country with the highest installed plastics recycling capacity, with approximately 2.5 million tonnes. Spain followed with an estimated 2 million tonnes, Italy with over 1.5 million tonnes, and the United Kingdom and France reported capacities ranging between 1 and 1.5 million tonnes each. Poland and the Netherlands followed, with recycling capacities ranging between 0.5 and 1 million tonnes.

Spain continues to hold a significant share of PO films recycling with over 0.6 million tonnes, followed by Germany, Poland and Italy. Across EU27+3, commercial and industrial packaging accounts for approximately half of the total input sent to PO film recyclers, with household packaging accounting for 30%, while agricultural films and other sectors represent around 20%.

For HDPE and PP rigids, Germany and Spain maintain the highest recycling capacities. These countries also process more tonnages of HDPE and PP rigid waste stemming from commercial and industrial packaging sources, compared to other countries. For this stream, non-packaging applications — such as building and construction, agri-

culture, furniture and leisure goods — represent a minor share of the input material.

Germany leads in installed PET washing capacity, with approximately 0.7 million tonnes, followed by Spain with around 0.5 million tonnes, and Italy and France between 0.3 and 0.35 million tonnes each. Notably, around 75% of PET waste generated in the EU is recycled in the same country where it originates, the highest share among all polymers.

Other polymers hold smaller shares in terms of installed recycling capacity with the top five countries holding 70% of the total PVC capacity. The ELV-WEEE segment is led by the United Kingdom, France and Germany in terms of capacity. One third of the infrastructure is devoted to plastics from ELV, another third to small domestic appliances (SDA), one fifth to cooling freezing appliances (CFA), and the remainder allocated to other electronic waste streams.

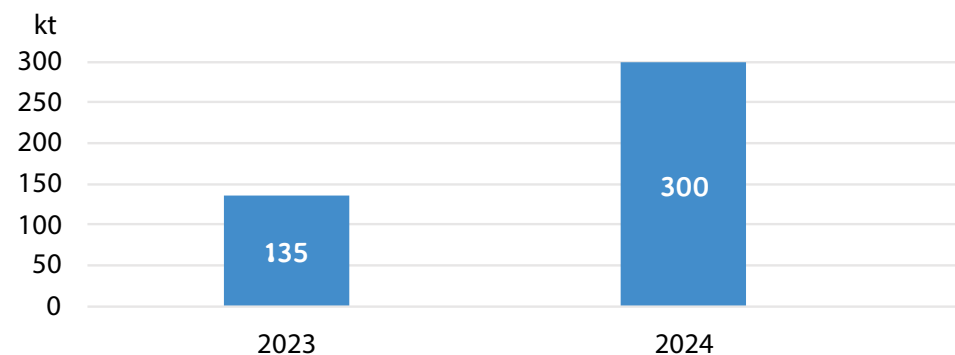
In terms of PS and EPS, Spain and Germany host the largest infrastructures devoted to the recycling of these polymers, with input materials primarily originating from packaging, especially from the dairy sector.

Overall, it is estimated that post-consumer material comprises about 85% of all input to recyclers across all the streams, i.e. flexible, rigid and technical polymers, with pre-consumer input making up the remainder.

UNPRECEDENTED LOSS OF ESTABLISHED RECYCLING CAPACITY

In 2024, plastics recycling facilities representing approximately 0.3 million tonnes of capacity were shut down, more than doubling the figure recorded in 2023. Of the total capacity that closed since 2023, PO films and PET account for 25% each. These are followed by HDPE and PP at 15%, respectively, and the rest of polymers covering 20%. Half of the lost capacities originated in the Netherlands and the United Kingdom. Key contributing factors include rising operational costs, particularly energy costs, and the lack of competitiveness of European recyclates compared to virgin plastics and low-priced imports from outside Europe. Current prospects suggest that these closures could more than triple by the end of 2025 in comparison to the 0.14 million tonnes estimated in 2023.

To meet future demand and advance circularity objectives, it is essential to further develop plastics recycling infrastructure across Europe — both in absolute and per capita terms. Improvements are needed across the entire value chain, including design for recycling, higher collection rates, efficient sorting systems, and investments in high-performing recycling technologies. These must be supported by fair market conditions and uniformly applied legislative requirements for all materials placed on the European market, including imports.

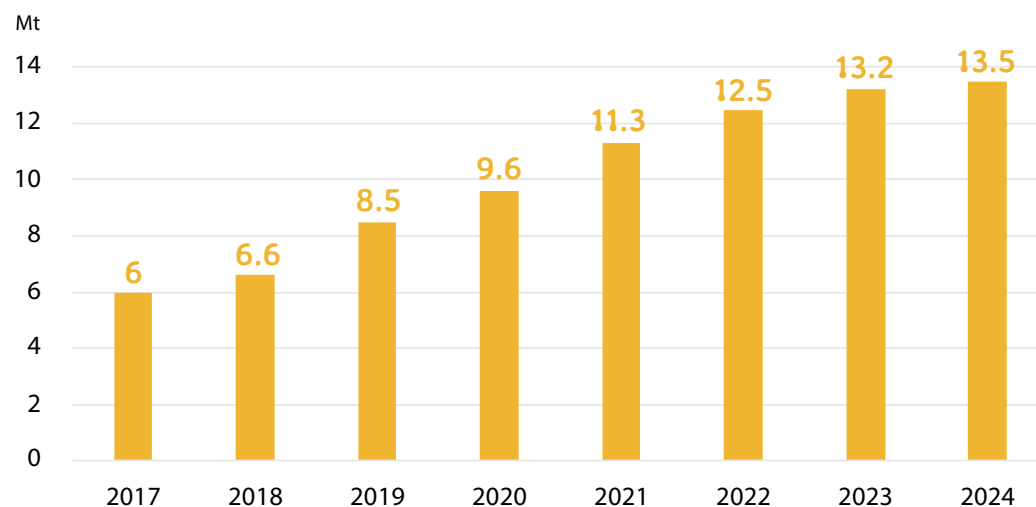


EUROPE'S PLASTICS RECYCLING GROWTH HITS THE BREAKS

2024 marked the first year of an industry stall for plastics recycling in EU27+3 due to persistently challenging market conditions. This standstill was accompanied by a decline in both total input and output volumes at recycling facilities.

The share of imported polymers increased from 15% in 2020 to 24% in 2024 reflecting Europe's increasing dependence on external supply. Meanwhile, exports of plastic waste from the EU rose by 15% compared to the previous year and by 36% compared to 2022. This data suggests that more plastic waste is being shipped abroad rather than processed domestically, contributing to a significant decrease in capacity utilisation among European plastics recyclers. In response to this surge, several anti-dumping investigations were launched in 2024 to address the uncontrolled flow of imports. Yet imported materials continue to enter the EU market.

2024 marked a turning point for plastics recycling in Europe. Less waste is recycled, more waste is exported, and the industry is struggling to maintain its competitiveness. These developments underscore the urgent need for coordinated, structural reforms across the entire plastic value chain and immediate action from policymakers. **Without swift and collaborative intervention, the progress made in plastics recycling during the past years is at risk of reversal, threatening both the environment and Europe's economic resilience and competitiveness.**





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