

Linking Academy to Industry.

Training program: modules

- Eco-design & novel manufacturing processing
 - New materials and biomaterials
 - Citizen and Consumer Engagement
 - Residue management and valorisation









Plastic recycling: current situation in Europe







PLASTIC POST-CONSUMER WASTE TREATMENT

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29.1 Mt

Collected plastic post-consumer waste

2016

39%

Plastic waste extra-EU exports

2018

Source: PlasticsEurope







In 2018, 29.1 million tonnes of plastic waste were collected in the EU28+NO/CH in order to be treated. Plastic waste exports outside the EU have decreased by 39% from 2016 to 2018.





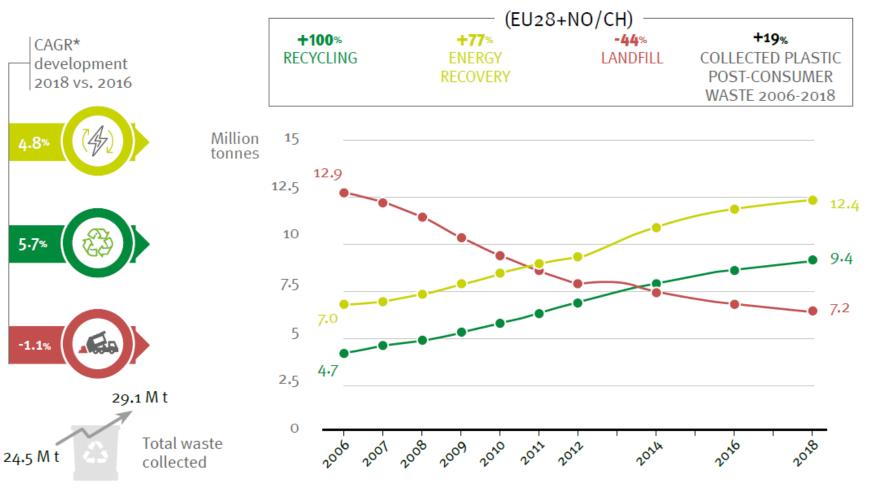


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PLASTIC POST-CONSUMER WASTE TREATMENT

Since 2006, the amount of plastic waste sent to recycling has doubled. However, 25% of plastic post-consumer waste was still sent to landfill in 2018

Recycling can be inside and outside the EU)



* Compound Annual Growth Rate is the mean annual growth rate over a specific period of time



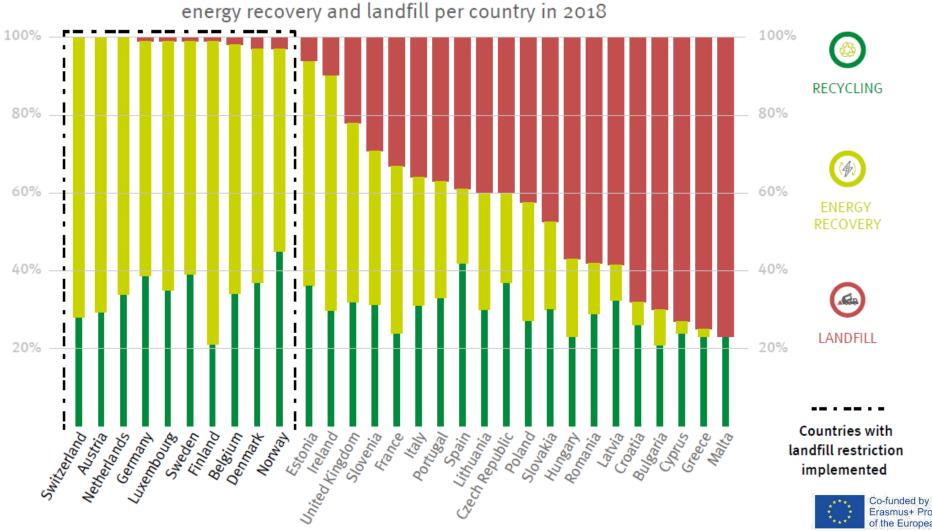




PLASTIC POST-CONSUMER WASTE TREATMENT

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Countries with landfill restrictions of recyclable and recoverable waste have, on average, higher recycling rates of plastic post-consumer waste.



Plastic post-consumer waste rates of recycling,





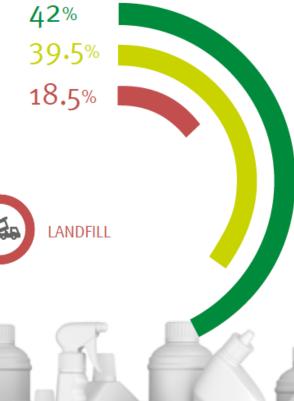


PLASTIC PACKAGING POST-CONSUMER WASTE TREATMENT

Plastic PACKAGING* waste treatment in 2018 (EU28+NO/CH)

In 2018, 17.8 million tonnes of plastic postconsumer packaging waste were collected in order to be treated.

17.8 Mt Collected plastic post-consumer packaging waste











PLASTIC PACKAGING POST-CONSUMER WASTE TREATMENT



2018 data show a positive trend for recycling, however more than 18% of the waste is still sent to landfill.

2006-2018 evolution of plastic PACKAGING* waste treatment (EU28+NO/CH) CAGR** development +19% **+92**% +84% -54% 2018 vs. 2006 RECYCLING **ENERGY** LANDFILL COLLECTED PLASTIC RECOVERY POST-CONSUMER WASTE 2006-2018 Million tonnes 2 17.8 M t 14.9 M t Total waste collected



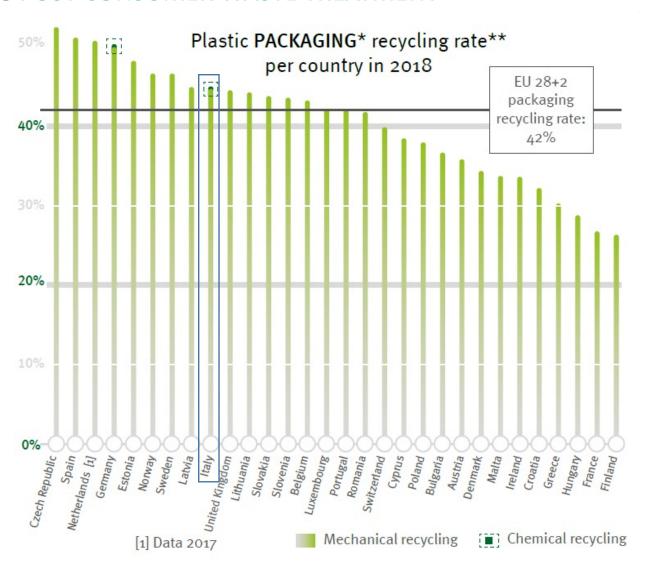




PLASTIC PACKAGING POST-CONSUMER WASTE TREATMENT

Recycling rates of plastic packaging waste in Europe range between 26% and 52%.

This wide range can be explained by differences in collection schemes, available infrastructure and consumer behaviour.



On average, the 42% recycling of plastic packaging represents an increase of 1.2 points versus 2016, in particular thanks to improved waste collection.

The new Directive (EU) 2018/852 on Packaging and Packaging Waste sets higher recycling targets per material (50% for plastic packaging by 2025 and 55% by 2030), together with a new calculation method of recycling performances.





Plastic really recycled in EU



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END-OF-LIFE PRODUCTS

COLLECTION

Collection of end-of-life plastic products from separate and mix waste streams

FIRST SORTING

Separation of waste by type of material (plastics, aluminium, tinplate, cardboard, paper, etc.) and then by type of polymer

RECYCLED POLYMERS ALSO CALLED RECYCLATES



EXTRUSION

Plastics flakes are finally converted into homogenous pellets ready to use in the manufacture of new products

SHREDDING

Plastics are ground into smaller pieces

WASHING

Shredded plastics are washed to remove dust and dirt

SECOND SORTING AND CONTROL

Plastics are sorted again and controlled before sent to extrusion

In 2019, close to 5 million tonnes of plastic recyclates were produced in European recycling facilities.



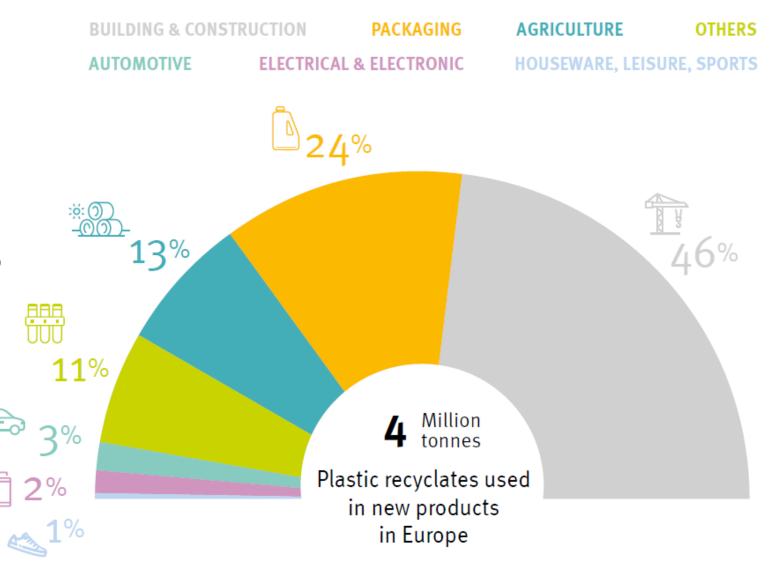


Plastic really recycled in EU



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In 2018, from the 5 million tonnes of plastic recyclates produced in Europe, 80% re-entered the European economy in order to manufacture new products. The rest was exported outside Europe to re-enter other regions of the world's economies.







PACKALL

PackAlliance:

European alliance for innovation training & collaboration towards future packaging

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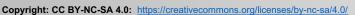












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