Plastics – the Facts 2018

An analysis of European plastics production, demand and waste data

PlasticsEurope
Association of Plastics Manufacturers

Plastics – the Facts

is an analysis of the data related to the production, demand and waste management of plastic materials. It provides the latest business information on production and demand, trade, recovery as well as employment and turnover in the plastics industry. In short, this report gives an insight into the industry's contribution to European economic growth and prosperity throughout the life cycle of the material.

The data presented in this report was collected by PlasticsEurope (the Association of Plastics Manufacturers in Europe) and EPRO (the European Association of Plastics Recycling and Recovery Organisations). PlasticsEurope's Market Research and Statistics Group (PEMRG) provided input on the production and the demand of plastic raw materials. Conversio Market & Strategy GmbH helped assess waste collection and recovery data. Official statistics from European or national authorities and waste management organisations have been used for recovery and trade data, where available. Research or expertise from consultants completed gaps.

Figures cannot always be directly compared with those of previous years due to changes in estimates. Some estimates from previous years have been revised in order to track progress, e.g. for use and recovery of plastics across Europe over the past decade.

All figures and graphs in this report show data for EU-28 plus Norway and Switzerland, which is referred to as Europe for the purposes of abbreviation –other country groups are explicitly listed.

Circularity at the heart of Europe's economic transformation

The European Commission aims at transforming Europe into a more circular and resource efficient economy. PlasticsEurope fully supports this objective and believes plastic materials can help to achieve it.

It is widely recognised that plastics have a crucial role to play in delivering a more sustainable future. Through their unique combination of light-weight, durability and other intrinsic properties, plastic materials already contribute to reduce GHG emissions making a more efficient use of our resources across a range of different sectors and everyday applications. As a result of their versatility and capacity for innovation, our materials are also invariably best placed to support breakthrough sustainable technologies in areas such as sustainable mobility, smart and efficient building, sustainable agriculture, food conservation or in the healthcare and medical sector, to name only a few.

However, challenges relating to littering and end-of-life options for certain types of plastics waste —especially packaging waste— must be addressed if the material is to achieve its fullest potential in a circular and resource efficient economy.

It is in this spirit of commitment to future generations, that PlasticsEurope has decided to set a series of ambitious targets and initiatives up to 2030 that are focussed on the key areas of preventing leakage of plastics into the environment, improving resource efficiency and increasing recycling and reuse rates.

With its Voluntary Commitment "Plastics 2030", PlasticsEurope is advancing the plastics industry's role to a next level of engagement, recognising that this transformation will only take place through solutions put into reality and through the regulatory support of the EU institutions.

“Plastics 2030”: making Circularity and Resource Efficiency a Reality

The Plastics 2030 Voluntary Commitment focuses on preventing leakage of plastics into the environment, on improving resource efficiency and the circularity of plastic packaging applications.

Overarching goals

1. **Prevent leakage** of plastics into the environment.
2. Improve **resource efficiency**.
3. Improve **circularity** of plastic packaging.

Targets

- By increasing engagement inside and outside our industry.
- By accelerating innovation in the full life cycle of products.
- By reaching in 2040 100% reuse, recycling and/or recovery of all plastic packaging in the whole EU.
  In 2030: 60% reuse and recycling of all plastic packaging.

All play a role in a circular economy

Building and construction

Electronics

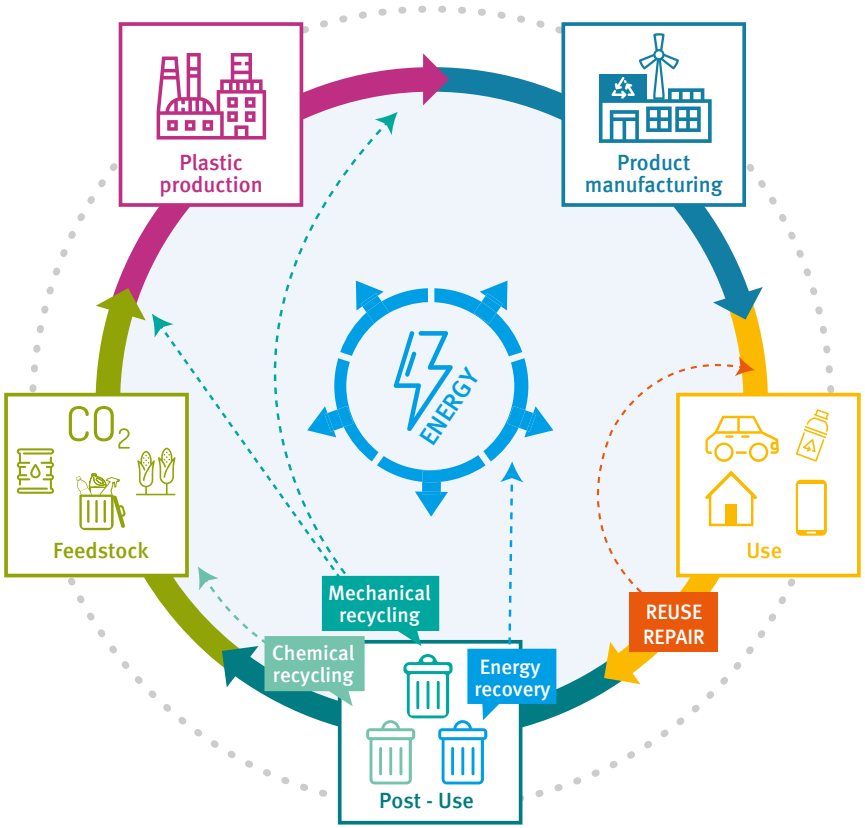
Light-weight vehicles

Health

Packaging

Energy

Different plastics for different products



Plastics make a very **efficient use of resources,** especially during **the use phase**

At the end of their life, **PLASTICS** are still very **valuable resources** that can be transformed into **new feedstock** or into energy

“Plastics 2030”: making Circularity and Resource Efficiency a Reality

General commitments

Prevent the leakage of plastics into the environment

- Prevent littering: identification and littering prevention solution of most found items into the environment.
- Prevent pellet loss:

Operation Clean Sweep®

www.opcleansweep.eu

Improve resource efficiency and circularity of plastics

- Accelerate research of alternative feedstocks.
- Product Life Cycle Inventory: update of datasets every three years.
- Extension of waste data collection, including new data on circularity of plastics.
- Eco-design guidelines for plastic packaging finalised by 2020.
- Support standardisation for quality standards for sorted plastics.

Global Initiatives

Global Plastics Alliance
Marine Litter Solutions:
355 projects in 47 countries.

MARINE LITTER SOLUTIONS

www.marinelittersolutions.com

World Plastics Council
Support of global initiatives
and cooperation with UNEP, G7/G20.

WORLD PLASTICS COUNCIL

www.worldplasticscouncil.org

Sector-specific commitments

PCEP POLYOLEFIN Circular Economy Platform

- Development of packaging design guidelines and assessment protocols according to the principles of the Circular Economy.
- Innovation and standardisation to increase the recyclability of polyolefin packaging.
- EU wide quality standards for pre-sorted plastic waste, harmonisation of test methods for recycled plastic materials and certification of plastic recycling operations.
- Innovation & development of end-use markets to stimulate reuse and encourage demand for recycled plastics.
- Stimulating innovation to improve recycling, conversion technologies and reuse.

Styrenics Circular Solutions

- Develop technologies to recycle PS/EPS back into original applications.
- Collaborate with value chain to improve collection and sorting systems for packaging waste.
- Create an independent structure to finance promising technologies.
  www.styrenics-circular-solutions.com

Vinyl Circular Solutions

- Within the framework of VinylPlus (www.vinylplus.eu) further advance and increase safe and quality PVC recycling for all PVC applications.
- Continue developing eco-efficient PVC packaging materials, increasing shelf life of the packed products.

Reporting

Monitoring the progress of the voluntary commitment.

Action plan and time-based performance indicators.

Yearly evaluation provided by independent committee.


CONTRIBUTION
TO EUROPEAN
SOCIETY

Key figures of the European plastic industry

The European plastic industry includes plastics raw materials producers, plastics converters, plastics recyclers and plastics machinery manufacturers in the EU28 Member States.

Over 1.5 million people

The plastic industry gives direct employment to more than 1.5 million people in Europe

Close to 60,000 companies

An industry in which close to 60,000 companies operate, most of them SME's

More than 350 billion euros

The European plastic industry had a turnover of 355 billion euros in 2017

17 billion euros

The European plastic industry had a trade balance of more than 17 billion euros in 2017*

* Data including only plastics raw materials producers and plastics converters

More than 30 billion euros

The European plastic industry contributed to 32.5 billion euros to public finances and welfare in 2017

PUBLIC FINANCES

MULTIPLIER EFFECT

x2.4 in GDP and almost x3 in jobs

The European plastic industry has a multiplier effect of 2.4 in GDP and almost 3 in jobs*

* The European House Ambrosetti study, data for Italy, 2013

7th in Europe

The European plastic industry ranks 7th in Europe in industrial value added contribution. At the same level as the pharmaceutical industry* and very close to the chemical industry

* Measured by gross value added at factor prices, 2013

INDUSTRIAL VALUE ADDED

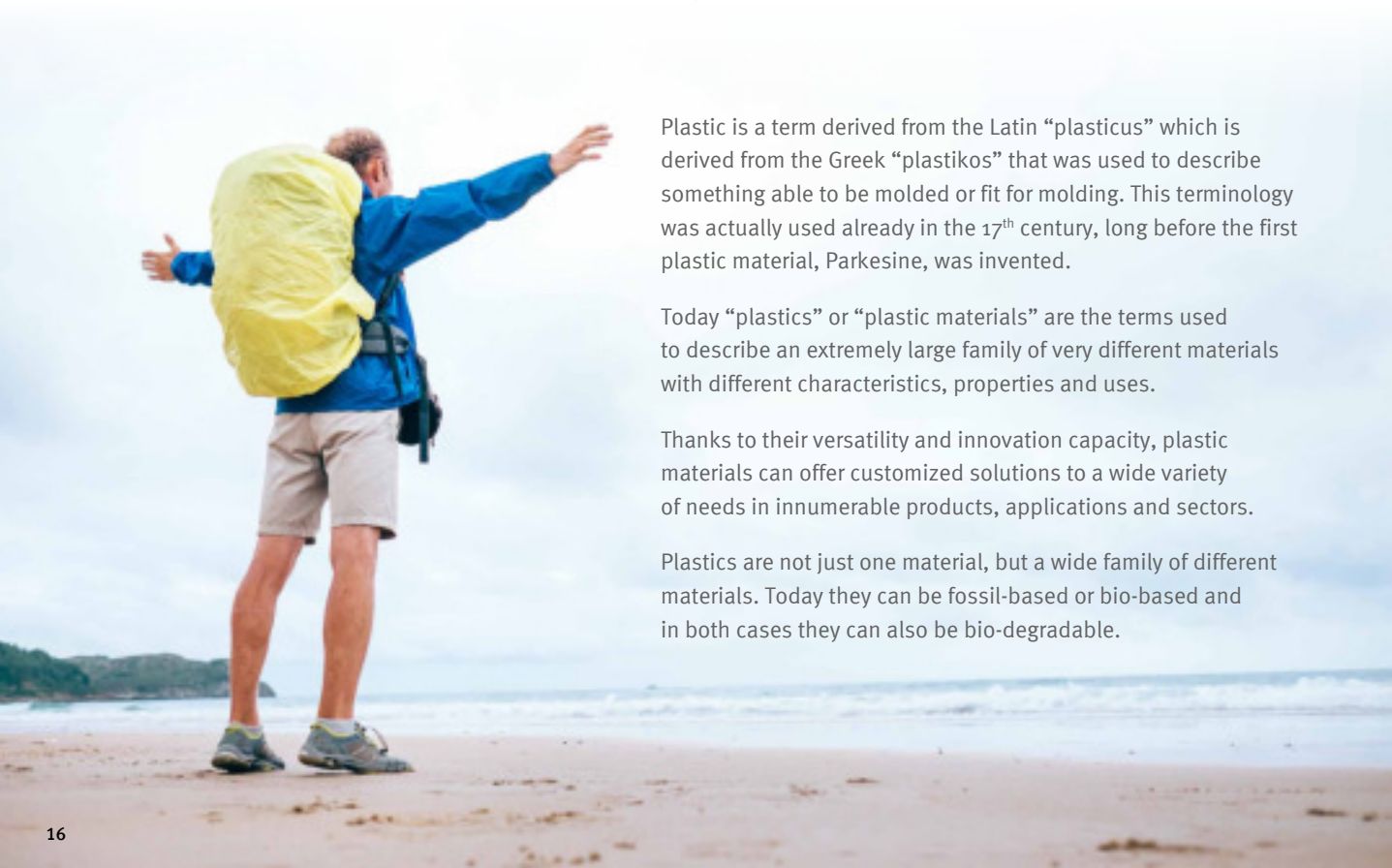
RECYCLING

Over 8.4 million tonnes

In 2016, over 8.4 million tonnes of plastic waste were collected in order to be recycled inside and outside the EU


MARKET
DATA

Plastic or Plastics?



Plastic is a term derived from the Latin “plasticus” which is derived from the Greek “plastikos” that was used to describe something able to be molded or fit for molding. This terminology was actually used already in the 17th century, long before the first plastic material, Parkesine, was invented.

Today “plastics” or “plastic materials” are the terms used to describe an extremely large family of very different materials with different characteristics, properties and uses.

Thanks to their versatility and innovation capacity, plastic materials can offer customized solutions to a wide variety of needs in innumerable products, applications and sectors.

Plastics are not just one material, but a wide family of different materials. Today they can be fossil-based or bio-based and in both cases they can also be bio-degradable.

Discovering the wide family of plastics

The plastics' family is composed of a great variety of materials designed to meet the very different needs of thousands of end products.

The two categories of plastics

Thermoplastics

are a family of plastics that can be melted when heated and hardened when cooled. These characteristics, which lend the material its name, are reversible. That is, it can be reheated, reshaped and frozen repeatedly.

- Polyethylene (PE)
- Polypropylene (PP)
- Polyvinyl-chloride (PVC)
- Polyethylene Terephthalate (PET)
- Polystyrene (PS)
- Expanded polystyrene (EPS)
- ABS
- SAN
- Polyamides (PA)
- Polycarbonate (PC)
- Poly methyl methacrylate (PMMA)
- Thermoplastic elastomers (TPE)
- Polyarylsulfone (PSU)
- Fluoropolymers
- PEEK
- POM
- PBT
- Etc.

Thermosets

are a family of plastics that undergo a chemical change when heated, creating a three dimensional network. After they are heated and formed these plastics cannot be re-melted and reformed.

- Polyurethane (PUR)
- Unsaturated polyester
- Epoxy resins
- Melamine resin
- Vinyl ester
- Silicone
- Phenol - formaldeyhde
- Urea - formaldeyhde
- Phenolic resins
- Acrylic resins
- Etc.

World and EU plastics production data

The world plastic* production almost reached 350 million tonnes in 2017.

Source: PlasticsEurope Market Research Group (PEMRG) / Conversio Market & Strategy GmbH

EUROPE

(EU28+NO/CH)

2016	2017
60 million tonnes	64.4 million tonnes

WORLD

2016	2017
335 million tonnes	348 million tonnes

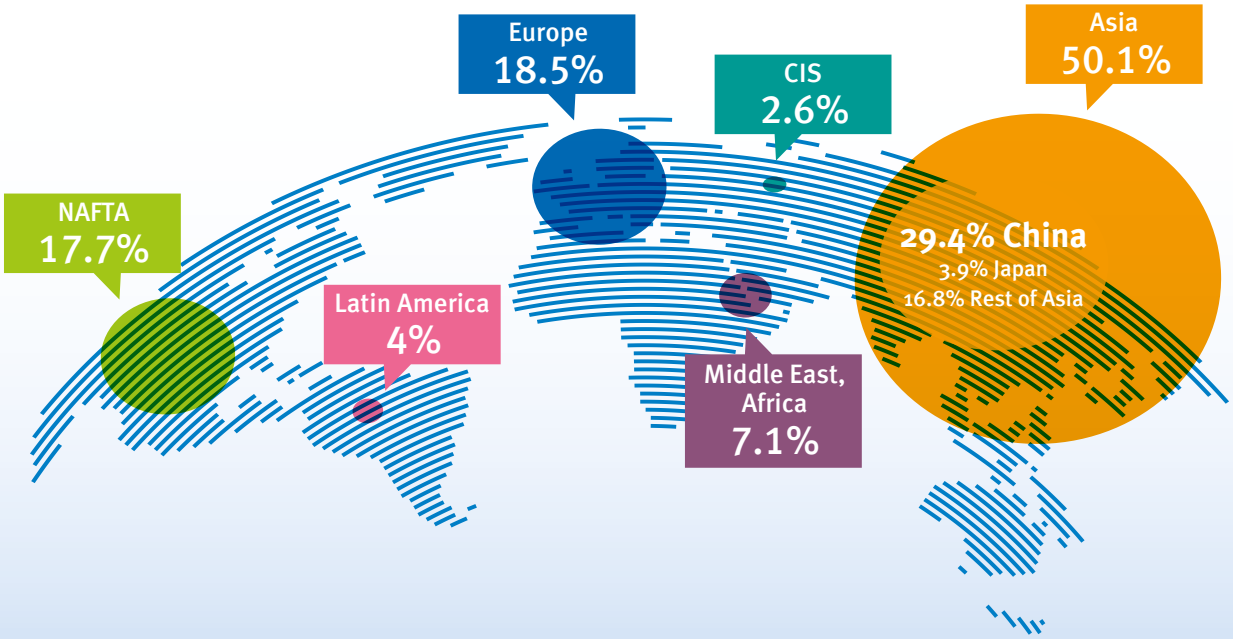
Includes thermoplastics, polyurethanes, thermosets, elastomers, adhesives, coatings and sealants and PP-fibers.
Not included PET-, PA- and polyacryl-fibers.

Distribution of global plastics production

China is the largest producer of plastics, followed by Europe and NAFTA.

World plastics* production: 348 million tonnes.

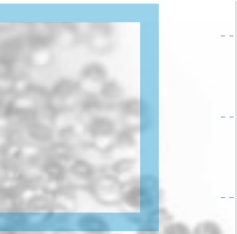
Source: PlasticsEurope Market Research Group (PEMRG) / Conversio Market & Strategy GmbH

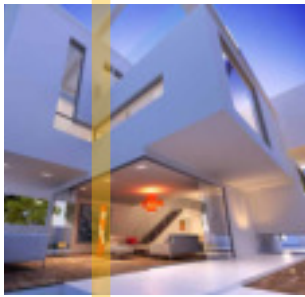


*Includes thermoplastics, polyurethanes, thermosets, elastomers, adhesives, coatings and sealants and PP-fibers.
Not included PET-, PA- and polyacryl-fibers.

A positive trade balance of more than 17 billion euros in 2017

Source: Eurostat

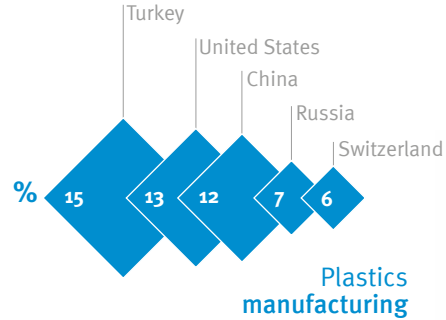




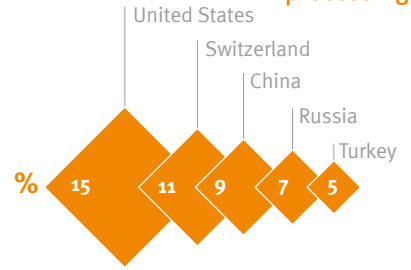
Top Extra EU trade partners in value

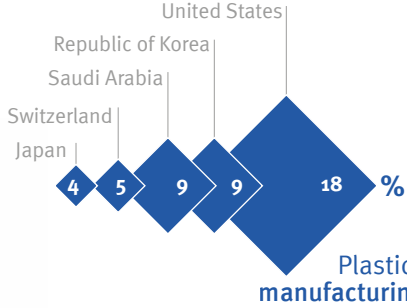
The European plastic industry has good and long-standing trading relationship with many countries.

Source: Eurostat

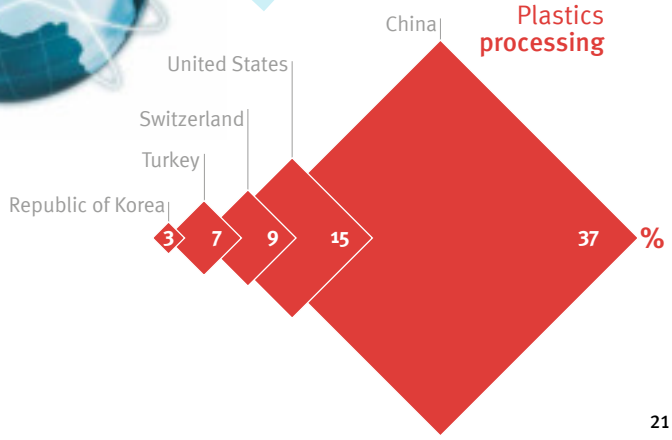


2017 Extra EU Exports





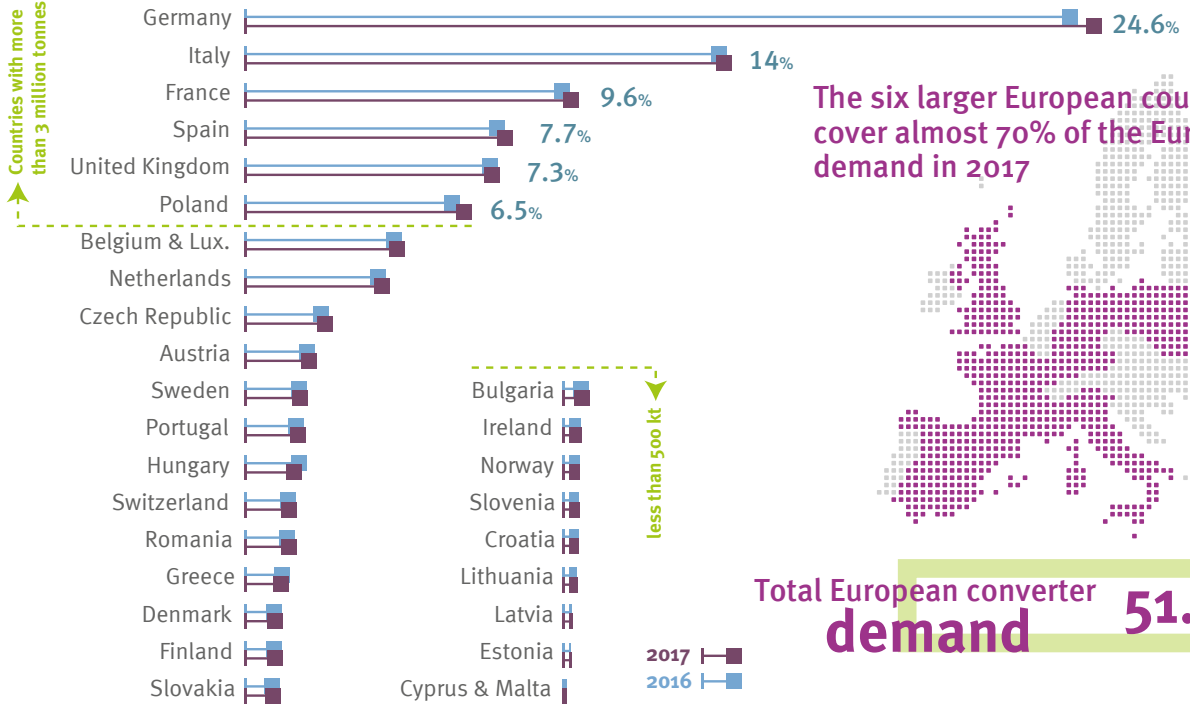
2017 Extra EU Imports



European plastic converter demand per country

European plastic converter demand includes plastic materials (thermoplastics and polyurethanes) and other plastics (thermosets, adhesives, coatings and sealants). Does not include: PET fibers, PA fibers, PP fibers and polyacryls-fibers.

Source: PlasticsEurope Market Research Group (PEMRG) and Conversio Market & Strategy GmbH



The six larger European countries cover almost 70% of the European demand in 2017

Total European converter demand **51.2 m t**

Plastic converter demand main market sectors

Distribution of European (EU28+NO/CH) plastic converter demand by segment in 2017.

Source: PlasticsEurope Market Research Group (PEMRG) and Conversio Market & Strategy GmbH

Total converter demand 51.2 m t

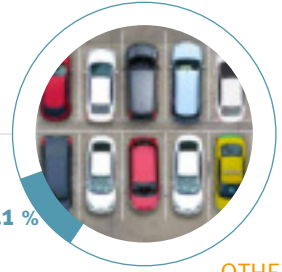
PACKAGING

39.7 %

BUILDING & CONSTRUCTION

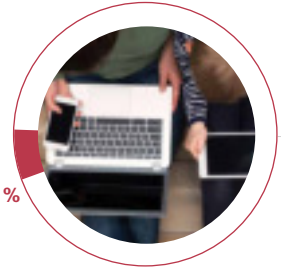
19.8 %

AUTOMOTIVE



10.1 %

ELECTRICAL & ELECTRONIC



6.2 %

HOUSEHOLD, LEISURE & SPORTS

4.1 %

AGRICULTURE

3.4 %

OTHERS

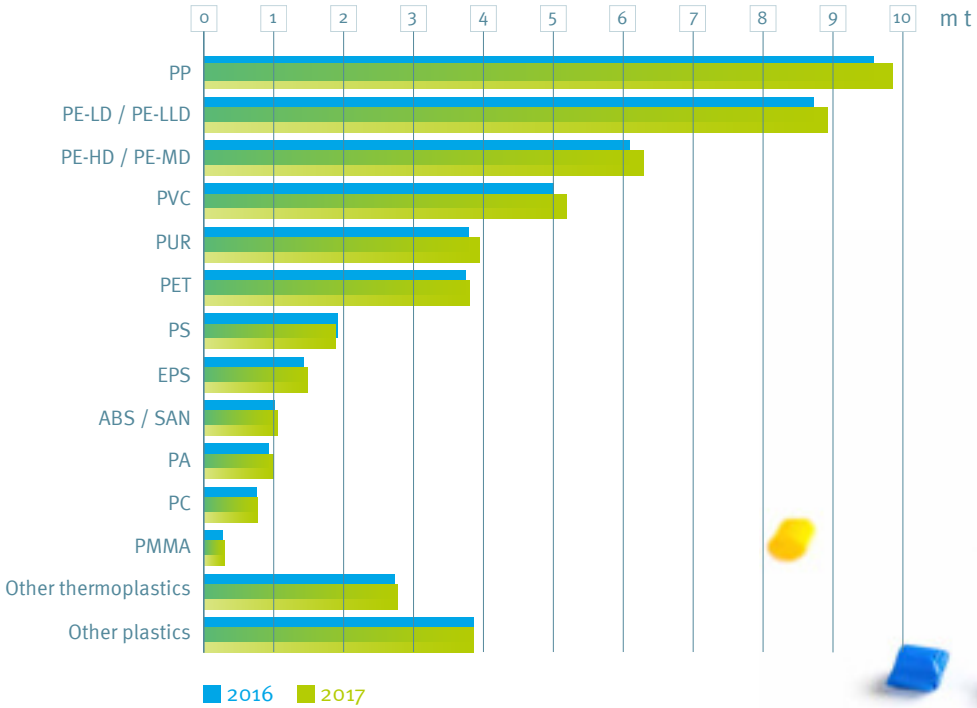
medical equipment, plastic furniture and furniture equipment, technical parts used for mechanical engineering or machine-building, etc.

16.7 %

Plastic converter demand by resin type

Distribution of European (EU28+NO/CH) plastic converter demand by resin type in 2017.

Source: PlasticsEurope Market Research Group (PEMRG) and Conversio Market & Strategy GmbH



51.2 m t

Total converter demand

European plastic converter demand by polymer types in 2017

Data for EU28+NO/CH.

Source: PlasticsEurope Market Research Group (PEMRG) and Conversio Market & Strategy GmbH

PP
19.3%

Food packaging, sweet and snack wrappers, hinged caps, microwave containers, pipes, automotive parts, bank notes, etc.

OTHERS
19%

Hub caps (ABS); optical fibres (PBT); eyeglasses lenses, roofing sheets (PC); touch screens (PMMA); cable coating in telecommunications (PTFE); and many others in aerospace, medical implants, surgical devices, membranes, valves & seals, protective coatings, etc.

PE-LD
PE-LLD
17.5%

Reusable bags, trays and containers, agricultural film (PE-LD), food packaging film (PE-LLD), etc.

PE-HD
PE-MD
12.3%

Toys, (PE-HD, PE-MD), milk bottles, shampoo bottles, pipes, houseware (PE-HD), etc.

PVC
10.2%

Window frames, profiles, floor and wall covering, pipes, cable insulation, garden hoses, inflatable pools, etc.

PUR
7.7%

Building insulation, pillows and mattresses, insulating foams for fridges, etc.

PET
7.4%

Bottles for water, soft drinks, juices, cleaners, etc.

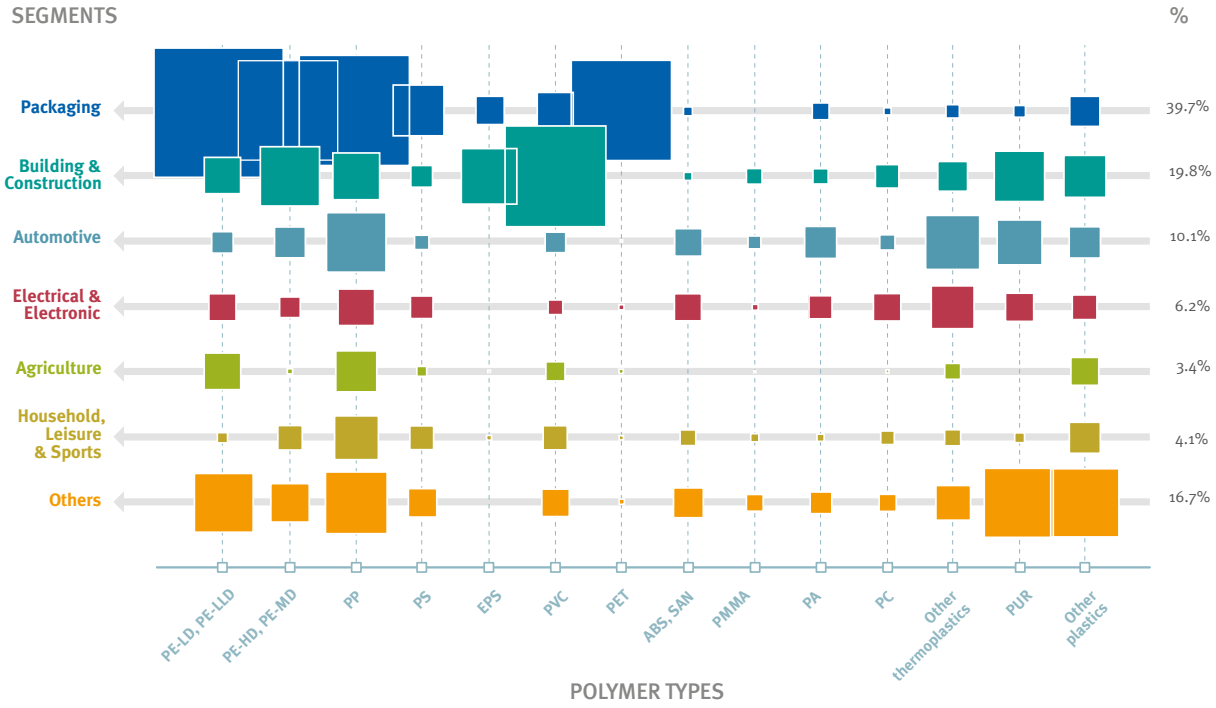
PS, EPS
6.6%

Eyeglasses frames, plastic cups, egg trays (PS); packaging, building insulation (EPS), etc.

European plastic converter demand by segments and polymer types in 2017

Data for EU28+NO/CH.

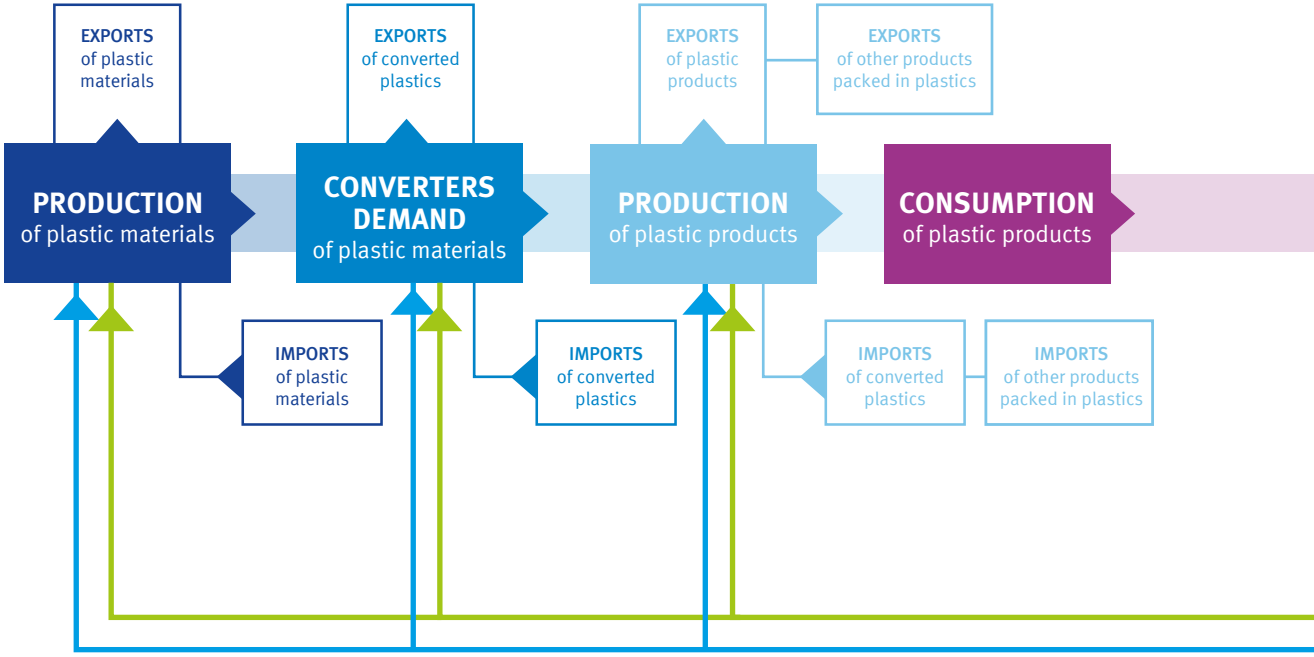
Source: PlasticsEurope Market Research Group (PEMRG) and Conversio Market & Strategy GmbH




FROM WASTE TO
RESOURCE

Understanding the life cycle of plastic products

In order to understand the life cycle of plastic products it is important to understand that not all plastic products are the same and not all have the same service life.



Some plastic products have a shelf life of less than one year, some others, have a lifespan of more than 15 years and some have a service life of 50 years or even more. Thus, from production to waste, different plastic products have different life cycles and this is why the volume of collected waste cannot match, in a single year, the volume of production or consumption.

LIFE SERVICE
OF PLASTIC PRODUCTS

The service life of plastic products goes from less than 1 year to 50 years or more

PLASTIC WASTE generation

Plastic become waste at the end of their service life

NON COLLECTED WASTE

COLLECTED WASTE

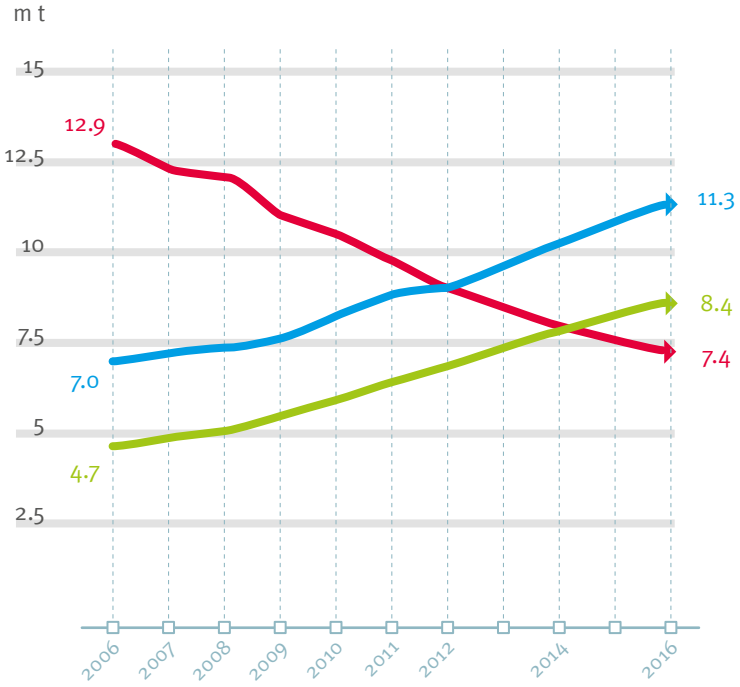
RECYCLING	ENERGY RECOVERY	LANDFILL
31.1%	41.6%	27.3%

Data for EU28+ NO/CH

In ten years, plastic waste recycling has increased by almost 80%

From 2006 to 2016 the volumes of plastic waste collected for recycling increased by 79%, energy recovery increased by 61% and landfill decreased by 43%.

2006-2016 evolution of plastic waste treatment (EU28+NO/CH)



Recycling +79%

Energy recovery +61%

Landfill -43%

Total waste collected

2016 27.1 m t

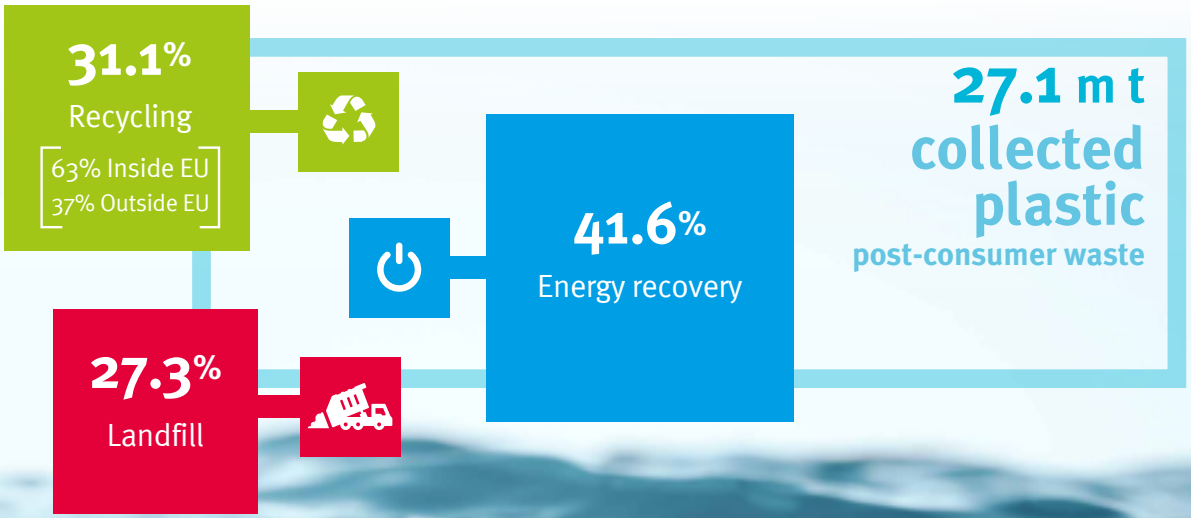
+11%

24.5 m t 2006

In 2016, for the first time, recycling overtook landfill

In 2016, 27.1 million tonnes of plastic waste were collected through official schemes in the EU28+NO/CH in order to be treated. And for the first time, more plastic waste was recycled than landfilled.

Plastic post-consumer waste treatment in 2016 (EU28+NO/CH)

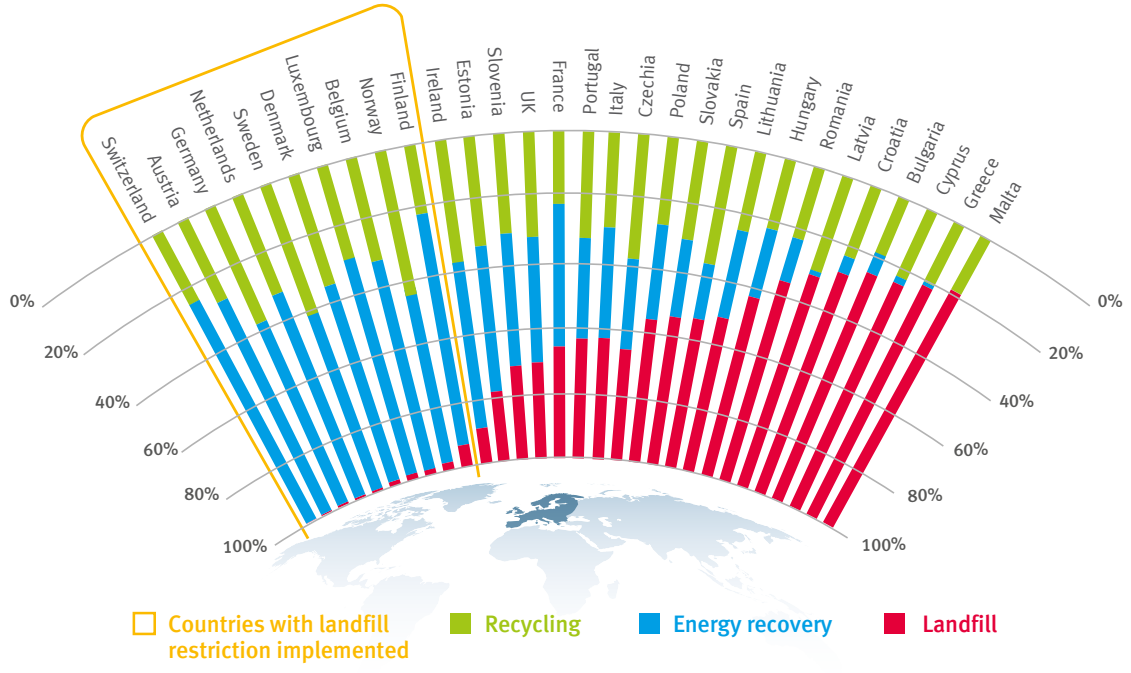


Landfill bans foster higher recycling rates

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

Source: Conversio Market & Strategy GmbH

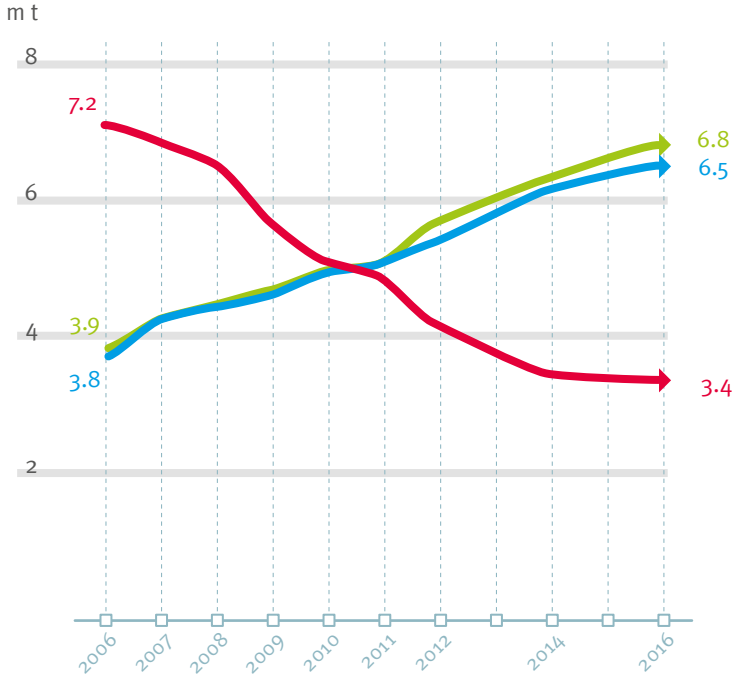
Plastic **post-consumer waste rates** of recycling, energy recovery and landfill per country in 2016



In ten years, plastic packaging recycling has increased by almost 75%

Source: Conversio Market & Strategy GmbH

2006-2016 evolution of plastic **PACKAGING*** waste treatment (EU28+NO/CH)



Recycling **+74%**

Energy recovery **+71%**

Landfill **-53%**

Total plastic waste collected

2016 16.7 m t

+12%

14.9 m t 2006

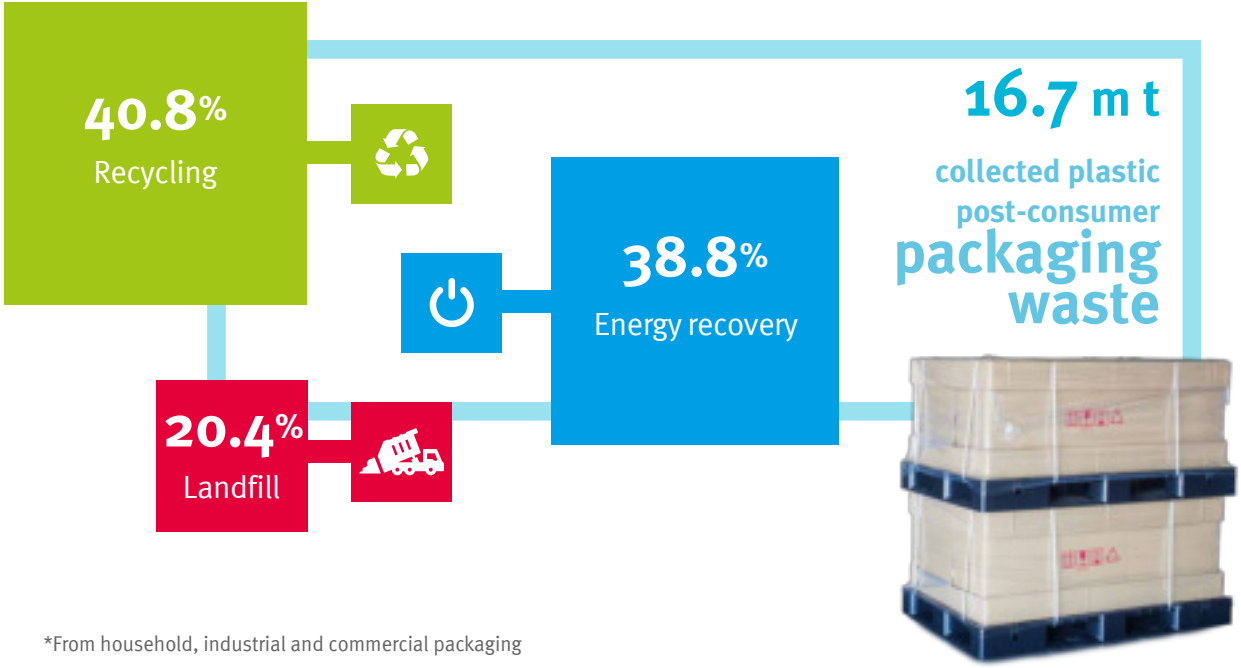
*From household, industrial and commercial packaging

Recycling is the first option for plastic packaging waste

In 2016, 16.7 million tonnes of plastic packaging waste were collected through official schemes in order to be treated.

Source: Conversio Market & Strategy GmbH

Plastic **PACKAGING*** waste treatment in 2016 (EU28+NO/CH)



*From household, industrial and commercial packaging

Most countries have plastic packaging recycling rates above 35%

In 2016, 19 countries had plastic packaging recycling rates higher than 35%. Two countries achieved a recycling rate of 50% or more (Germany and Czechia).

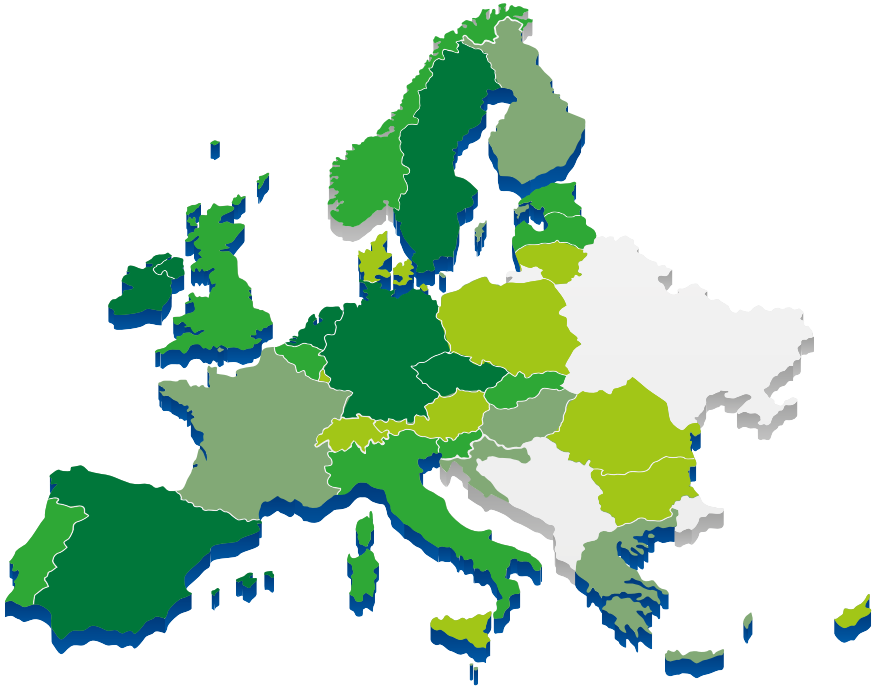
Plastic **PACKAGING** recycling rates across Europe

More than **45%**

From **40 to 45%**

From **30 to 40%**

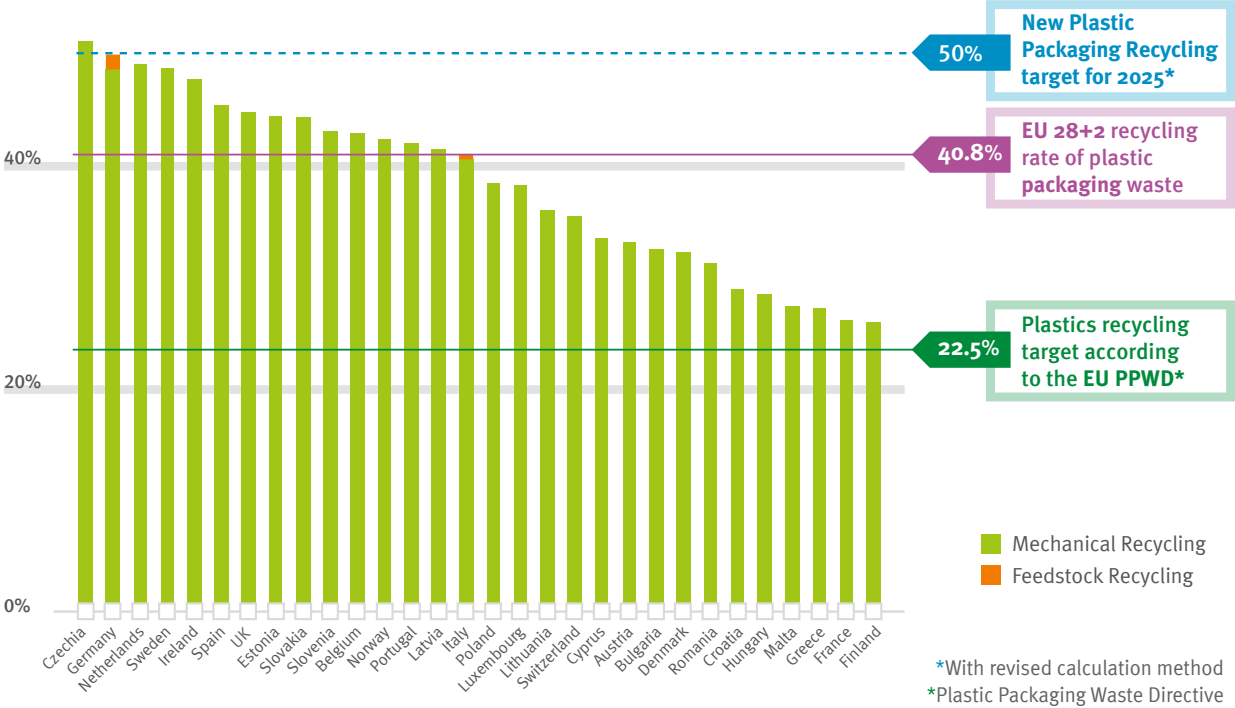
Less than **30%**



EU plastic packaging recycling rate is close to 41%

In 2016, the total EU recycling rate for plastic packaging waste was 40.8%, well above the requested 22.5% of the EU Packaging Waste Directive.

Plastic **PACKAGING** recycling rate per country in 2016



*With revised calculation method
*Plastic Packaging Waste Directive


WASTE DATA
MAIN EU
COUNTRIES

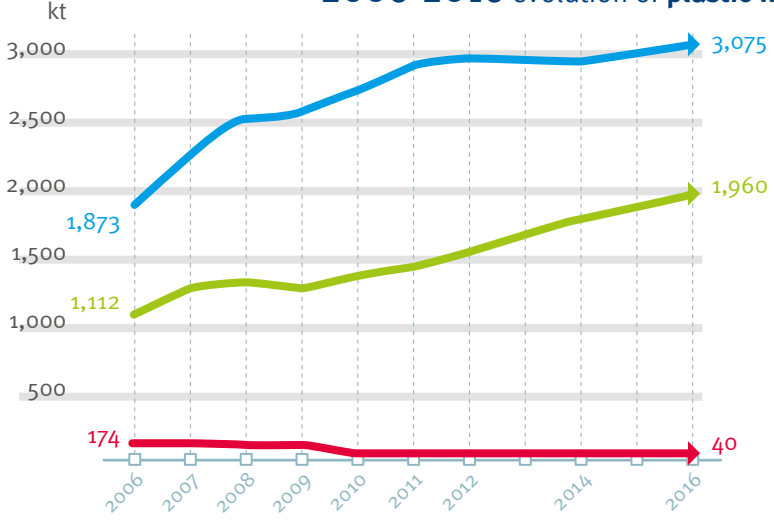
Plastic waste treatment in Germany

In 2016, 5.1 million tonnes of plastic post-consumer waste were collected through official schemes in order to be treated.
From 2006 to 2016, the volumes for recycling increased by 76%, energy recovery increased by 64% and landfill decreased by 77%.

Plastic **post-consumer** waste treatment in 2016

5.1 m t collected plastic **post-consumer** waste

2006-2016 evolution of **plastic waste treatment**



Recycling **+76%**

Energy recovery **+64%**

Landfill **-77%**

Total waste collected

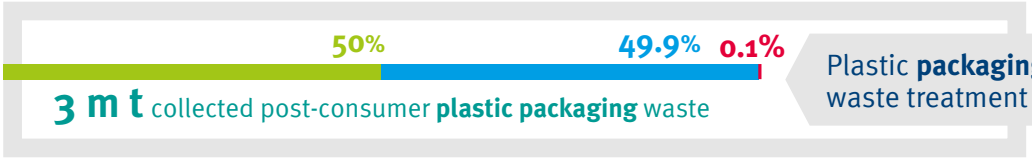
2016 5,076 kt

+41%

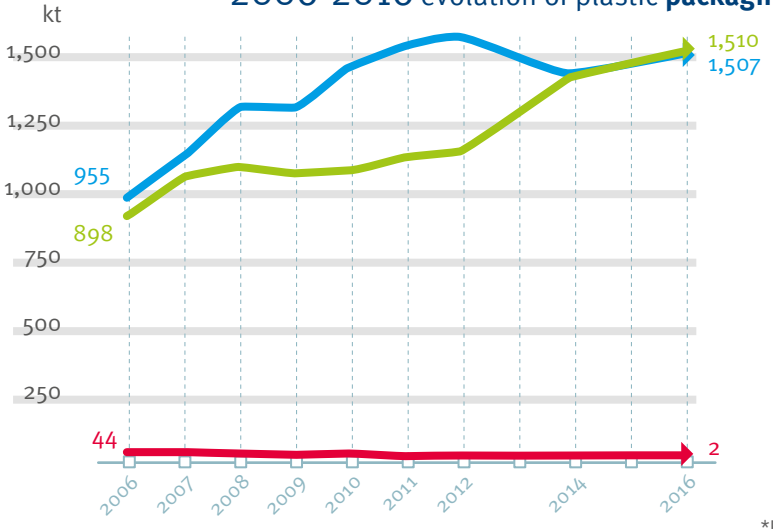
3,599 kt 2006

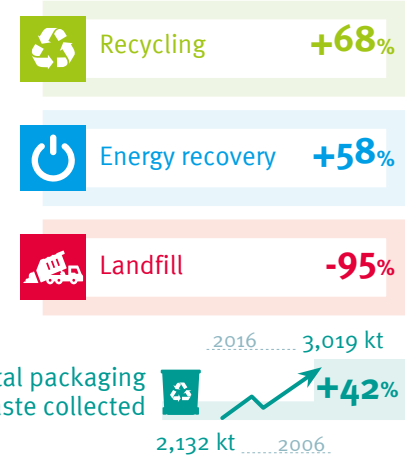
Plastic PACKAGING waste treatment in Germany

In 2016, 3 million tonnes of plastic post-consumer packaging* waste were collected through official schemes in order to be treated. From 2006 to 2016, the volume of plastic PACKAGING waste collected for recycling increased by 68%, and landfill decreased by 95%.



2006-2016 evolution of plastic **packaging** waste treatment





*From household, industrial and commercial packaging

Plastic waste treatment in UK

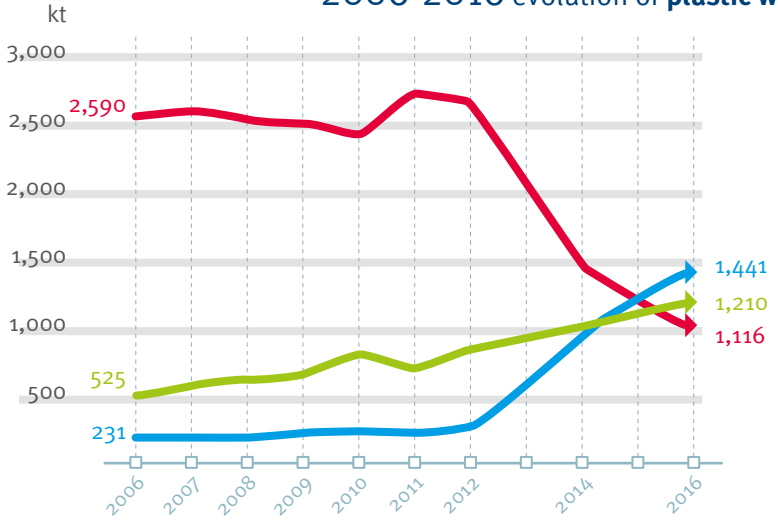
In 2016, 3.8 million tonnes of plastic post-consumer waste were collected through official schemes in order to be treated.
From 2006 to 2016, the volumes for recycling increased by x2.3, energy recovery increased by x6.2 and landfill decreased by 57%.

Plastic **post-consumer** waste treatment in 2016

32.1% 38.3% 29.6%

3.8 m t collected plastic **post-consumer** waste

2006-2016 evolution of **plastic waste treatment**



Recycling **x2.3**

Energy recovery **x6.2**

Landfill **-57%**

Total waste collected

2016 3,767 kt

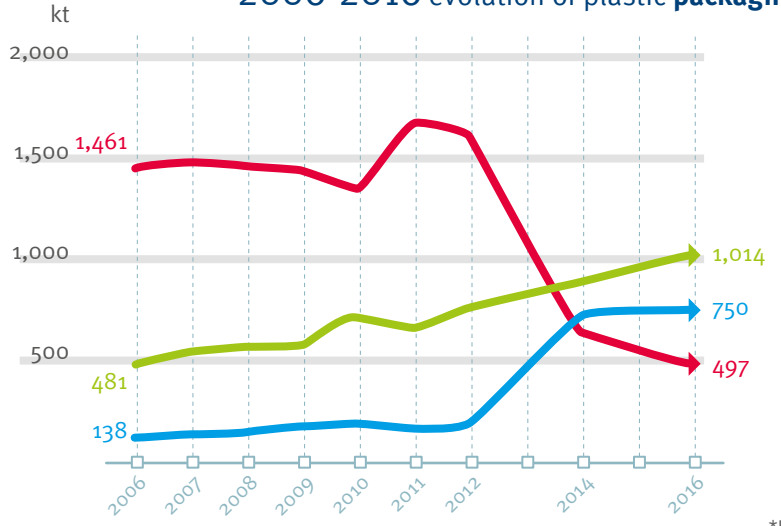
+13%

3,346 kt 2006

Plastic PACKAGING waste treatment in UK

In 2016, 2.3 million tonnes of plastic post-consumer packaging* waste were collected through official schemes in order to be treated. From 2006 to 2016 the volume of plastic PACKAGING waste collected for recycling increased by x2.1 and landfill decreased by 66%.

2006-2016 evolution of plastic **packaging** waste treatment



Recycling	x2.1
Energy recovery	x5.4
Landfill	-66%

Total packaging waste collected: 2016 2,261 kt; +9%; 2,080 kt 2006

*From household, industrial and commercial packaging

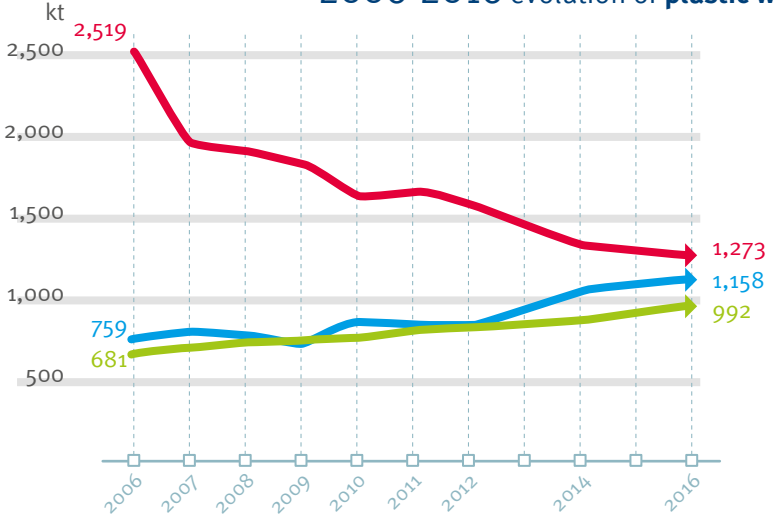
Plastic waste treatment in Italy

In 2016, 3.4 million tonnes of plastic post-consumer waste were collected through official schemes in order to be treated.
From 2006 to 2016, the volumes for recycling increased by 46%, energy recovery increased by 53% and landfill decreased by 49%.

Plastic **post-consumer** waste treatment in 2016

3.4 m t collected plastic **post-consumer** waste

2006-2016 evolution of **plastic waste treatment**



Recycling **+46%**

Energy recovery **+53%**

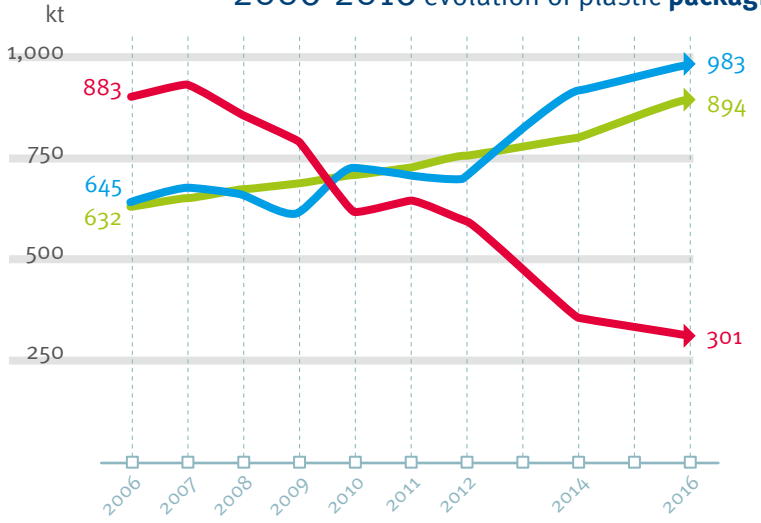
Landfill **-49%**

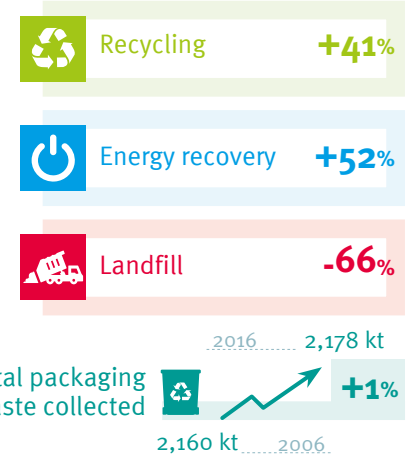
Total waste collected: 2016 3,423 kt; 3,357 kt 2006; **+2%**

Plastic PACKAGING waste treatment in Italy

In 2016, 2.2 million tonnes of plastic post-consumer packaging* waste were collected through official schemes in order to be treated. From 2006 to 2016, the volume of plastic PACKAGING waste collected for recycling increased by 41%, and landfill decreased by 66%.

2006-2016 evolution of plastic **packaging** waste treatment





*From household, industrial and commercial packaging

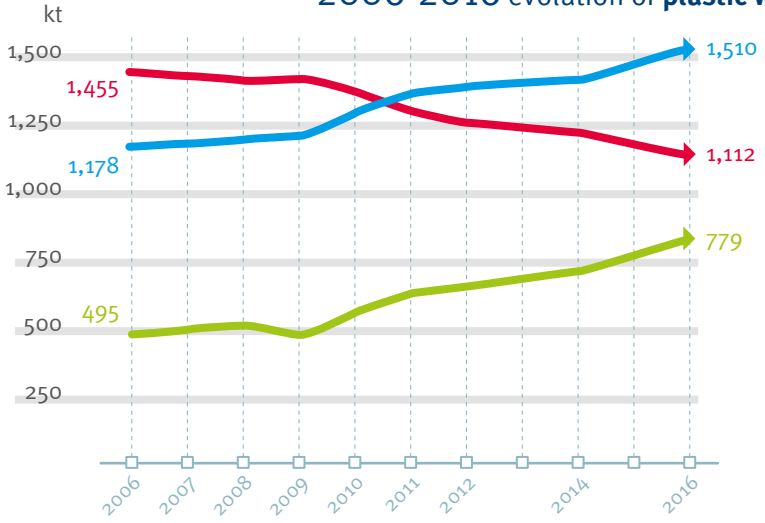
Plastic waste treatment in France

In 2016, 3.4 million tonnes of plastic post-consumer waste were collected through official schemes in order to be treated.
From 2006 to 2016, the volumes for recycling increased by 57%, energy recovery increased by 28% and landfill decreased by 24%.

Plastic **post-consumer** waste treatment in 2016

3.4 m t collected plastic **post-consumer** waste

2006-2016 evolution of **plastic waste treatment**



Recycling **+57%**

Energy recovery **+28%**

Landfill **-24%**

Total waste collected

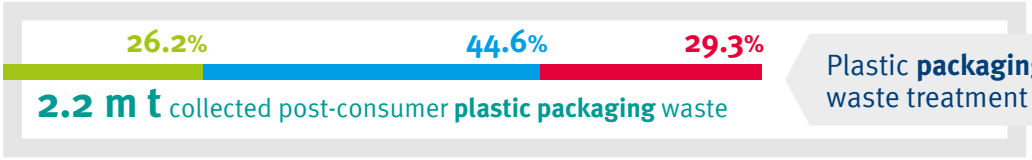
2016 3,401 kt

+9%

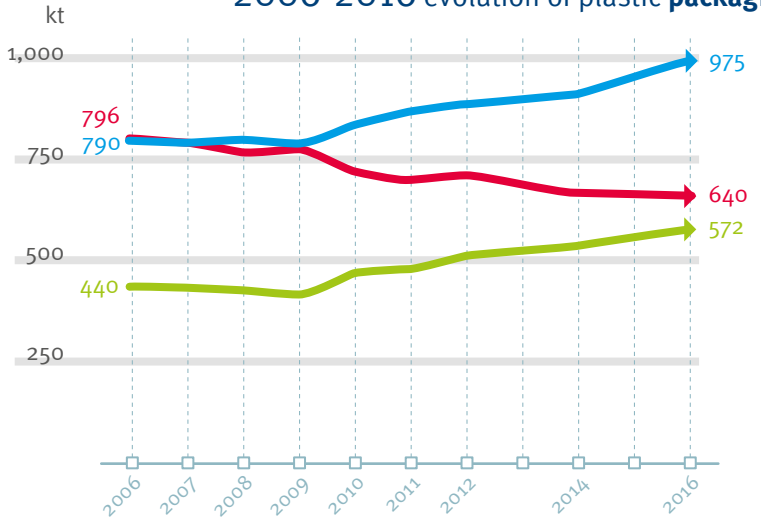
3,128 kt 2006

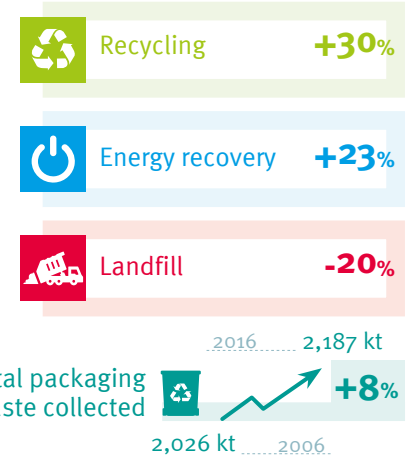
Plastic PACKAGING waste treatment in France

In 2016, 2.2 million tonnes of plastic post-consumer packaging* waste were collected through official schemes in order to be treated. From 2006 to 2016, the volume of plastic PACKAGING waste collected for recycling increased by 30% and landfill decreased by 20%.



2006-2016 evolution of plastic **packaging** waste treatment



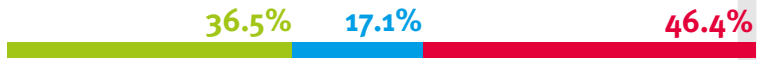


*From household, industrial and commercial packaging

Plastic waste treatment in Spain

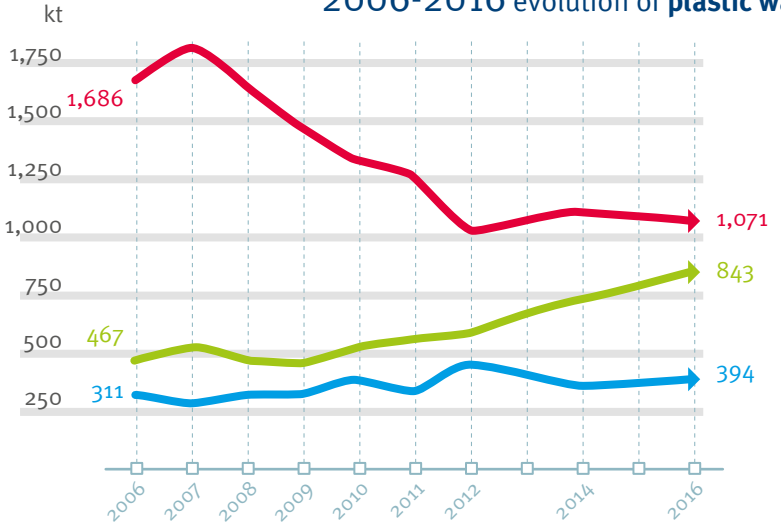
In 2016, 2.3 million tonnes of plastic post-consumer waste were collected through official schemes in order to be treated.
From 2006 to 2016, the volumes for recycling increased by 81%, energy recovery increased by 27% and landfill decreased by 36%.

Plastic **post-consumer** waste treatment in 2016



2.3 m t collected plastic **post-consumer** waste

2006-2016 evolution of **plastic waste treatment**



Recycling **+81%**

Energy recovery **+27%**

Landfill **-36%**

Total waste collected

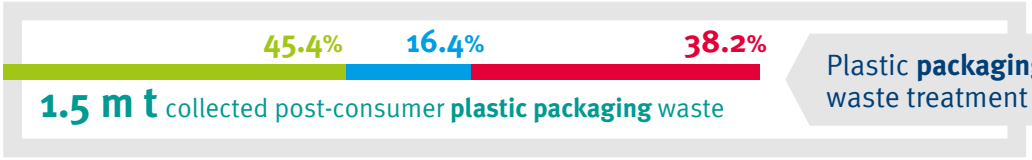
2,476 kt 2006

-7%

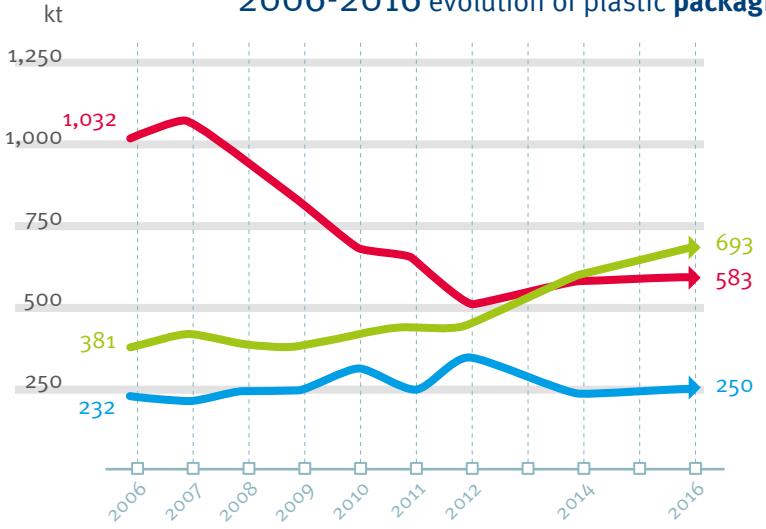
2016 2,308 kt

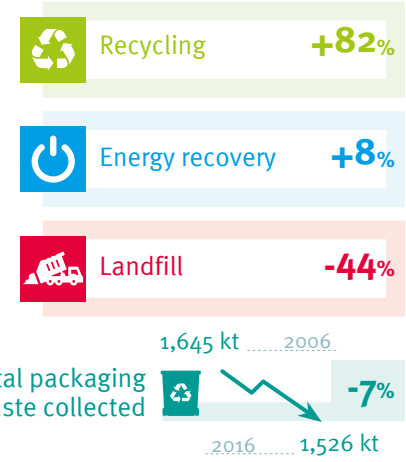
Plastic PACKAGING waste treatment in Spain

In 2016, 1.5 million tonnes of plastic post-consumer packaging* waste were collected through official schemes in order to be treated. From 2006 to 2016, the volume of plastic PACKAGING waste collected for recycling increased by 82%, and landfill decreased by 44%.



2006-2016 evolution of plastic **packaging** waste treatment



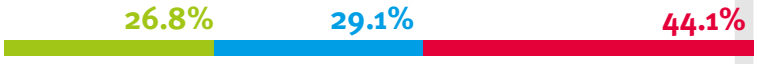


*From household, industrial and commercial packaging

Plastic waste treatment in Poland

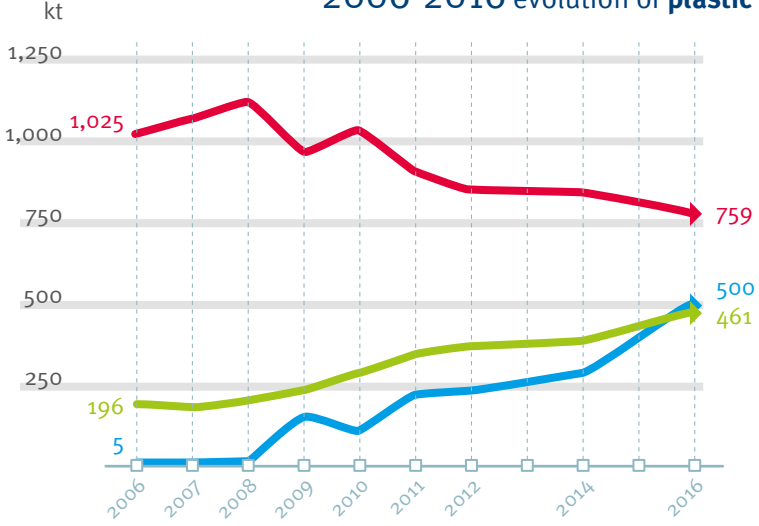
In 2016, 1.7 million tonnes of plastic post-consumer waste were collected through official schemes in order to be treated.
From 2006 to 2016, the volumes for recycling increased by x2.4, energy recovery increased by x100 and landfill decreased by 26%.

Plastic **post-consumer** waste treatment in 2016



1.7 m t collected plastic **post-consumer** waste

2006-2016 evolution of **plastic waste treatment**



Recycling **x2.4**

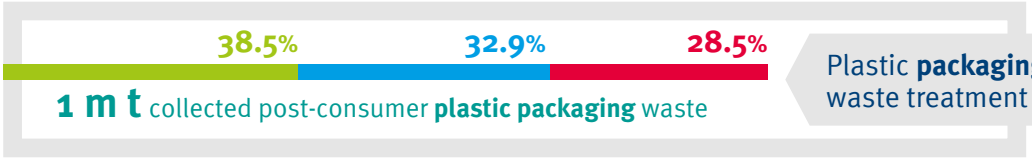
Energy recovery **x100**

Landfill **-26%**

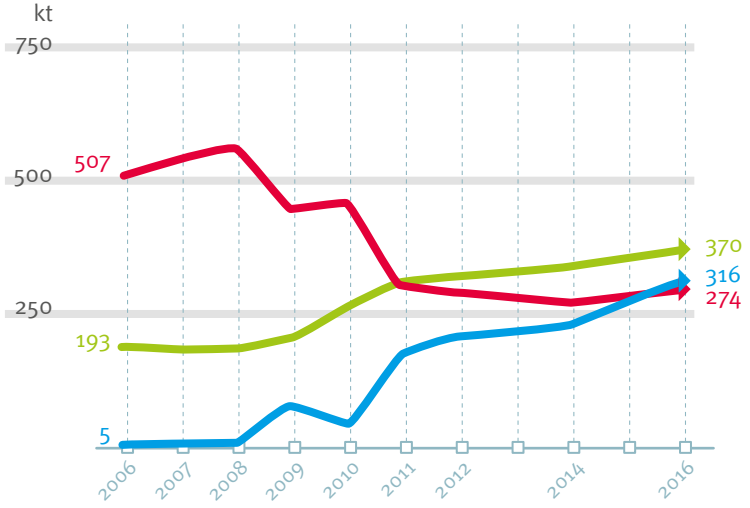
Total waste collected: 1,226 kt (2006) → 1,720 kt (2016) **+40%**

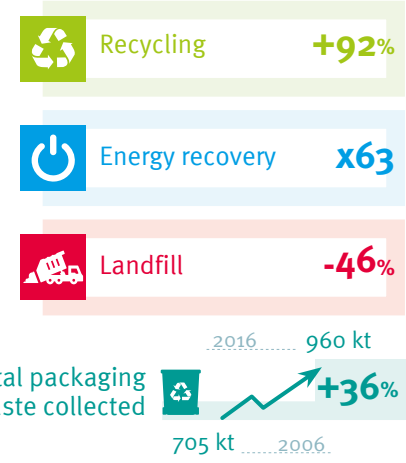
Plastic PACKAGING waste treatment in Poland

In 2016, 1 million tonnes of plastic post-consumer packaging* waste were collected through official schemes in order to be treated. From 2006 to 2016, the volume of plastic PACKAGING waste collected for recycling increased by 92%, and landfill decreased by 46%.



2006-2016 evolution of plastic **packaging** waste treatment





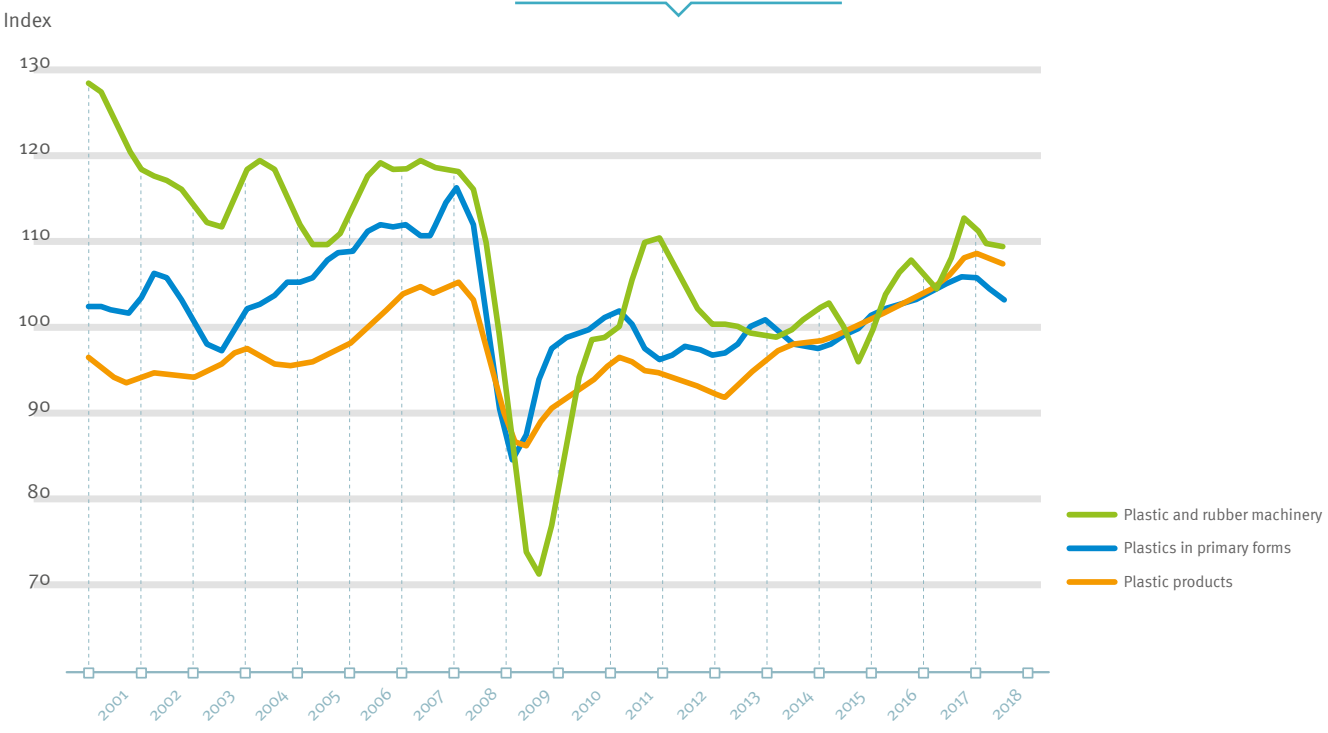
*From household, industrial and commercial packaging

SNAPSHOT
AND OUTLOOKS

In 2018, production in all plastics sectors fell after a strong growth in the previous year

Plastics industry production in EU28 index (2015=100, trend cycle & seasonally adjusted data).

Source: Eurostat

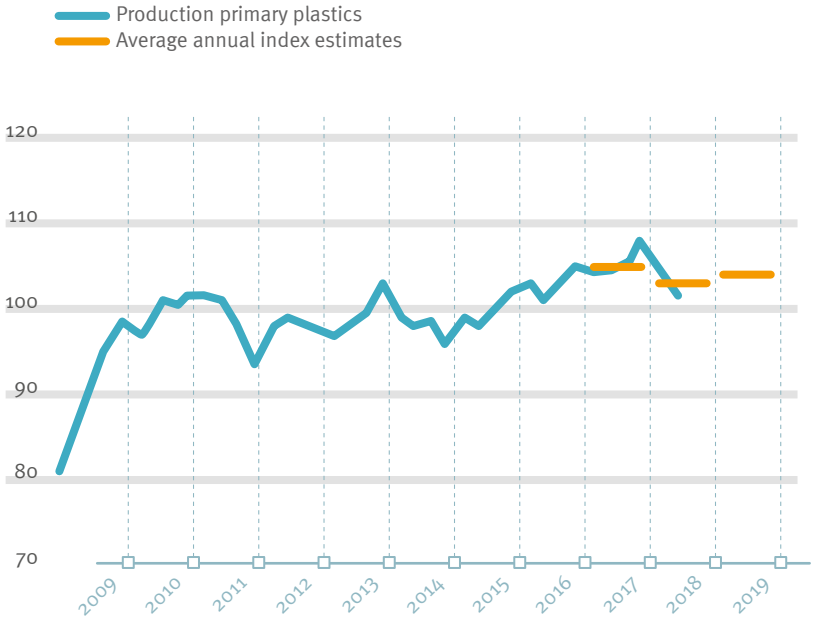


Forecast: after a strong growth in the previous year, a period of consolidation set in 2018

Production of primary plastics, EU28.

Index 2015=100 on a quarterly basis; seasonally and working day adjusted; annual average.

Source: Eurostat



Estimate 2018: -1.5%

Estimate 2019: +0.5%

In 2019, the production will show a slight increase compared to 2018

Glossary of terms

ABS	Acrylonitrile butadiene styrene resin
ASA	Acrylonitrile styrene acrylate resin
bn	billion
CH	Switzerland
CIS	Commonwealth of Independent States
Conversio	Conversio Market & Strategy GmbH
EU	European Union
EPRO	European Association of Plastics Recycling and Recovery Organisations
EPS	Polystyrene, expandable
ETP	Engineering Thermoplastics
GDP	Gross domestic product
kt	Kilotonnes
m t	Million tonnes
NAFTA	North American Free Trade Agreement
NO	Norway
Other plastics	Thermosets, adhesives, coatings and sealants
PA	Polyamides
PBT	Polybutylene terephthalate
PC	Polycarbonate
PE	Polyethylene
PEEK	Polyetheretherketone
PE-HD	Polyethylene, high density
PE-LD	Polyethylene, low density
PE-LLD	Polyethylene, linear low density
PE-MD	Polyethylene, medium density
PEMRG	PlasticsEurope Market Research Group
PET	Polyethylene terephthalate
Plastic materials	Thermoplastics + Polyurethanes
PMMA	Polymethyl methacrylate
POM	Polyoxymethylene
PP	Polypropylene
PS	Polystyrene
PTFE	Polytetrafluoroethylene
PUR	Polyurethane
PVC	Polyvinyl chloride
SAN	Styrene-acrylonitrile copolymer
Thermoplastics	Standard plastics (PE, PP, PVC, PS, EPS, PET (bottle grade)) + Engineering plastics (ABS, SAN, PA, PC, PBT, POM, PMMA, Blends, and others including High Performance Polymers)
Thermosets	Urea-formaldehyde foam, melamine resin, polyester resins, epoxy resins, etc.

PlasticsEurope
Association of Plastics Manufacturers

PlasticsEurope is one of the leading European trade associations with centres in Brussels, Frankfurt, London, Madrid, Milan and Paris. We are networking with European and national plastics associations and have more than 100 member companies, producing over 90% of all polymers across the EU28 member states plus Norway, Switzerland and Turkey. The European plastics industry makes a significant contribution to the welfare in Europe by enabling innovation, creating quality of life to citizens and facilitating resource efficiency and climate protection. Close to 1.6 million people are working in more than 60,000 companies (mainly small and medium sized companies in the converting sector) to create a turnover of 355 bn EUR per year.

www.plasticseurope.org

epro
European Association Of Plastics Recycling & Recovery Organisations

EPRO is a pan-European partnership of specialist organisations that are able to develop and deliver efficient solutions for the sustainable management of plastic waste, now and for the future. EPRO members are working to optimise national effectiveness through international co-operation: by studying successful approaches, evaluating different solutions and examining obstacles to progress. By working together EPRO members can achieve synergies that will increase efficient plastics recycling and recovery. Currently 19 organisations in 14 European countries, South Africa and Canada are represented in EPRO.

www.epro-plasticsrecycling.org

11-2018

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