SWIM and Horizon 2020 Support Mechanism

Working for a Sustainable Mediterranean, Caring for our Future

SWIM-H2020 SM EFH-IL-3

Plastics in EU - Legislation

Presented by:

Mr Paolo MARENGO, Plastic Expert

SWIM and Horizon 2020 SM EFH-IL-3

05.12.2018, Jerusalem, Israel

This Project is funded by the European Union

A word about ACR+

Association of Cities and Regions for sustainable resource management

20+ years of experience

98 members

58 Local & regional authorities

in **23** countries

+1,100 municipalities represented

Some of our members:

+ Join us!

Plastics in EU - Legislation

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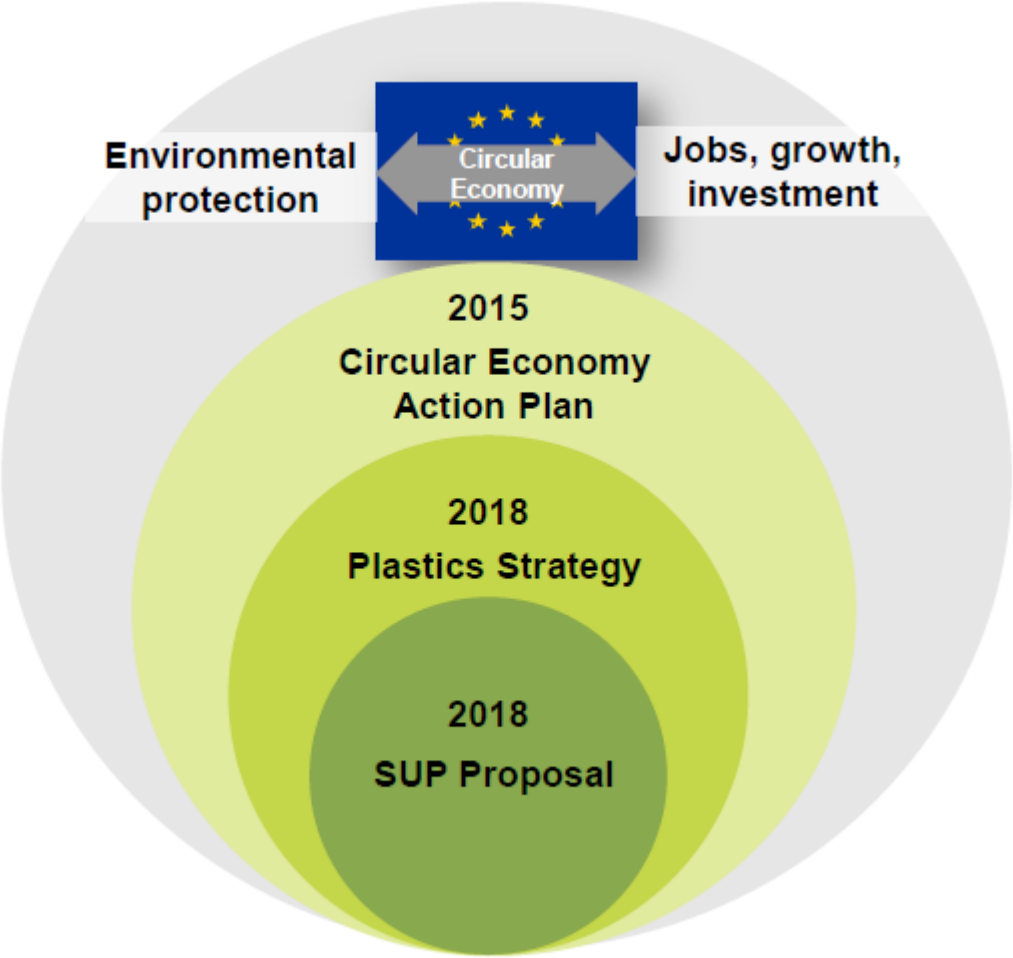
EU Circular Economy Agenda



EU Circular Economy Agenda

The European Commission adopted an ambitious **Circular Economy Package**

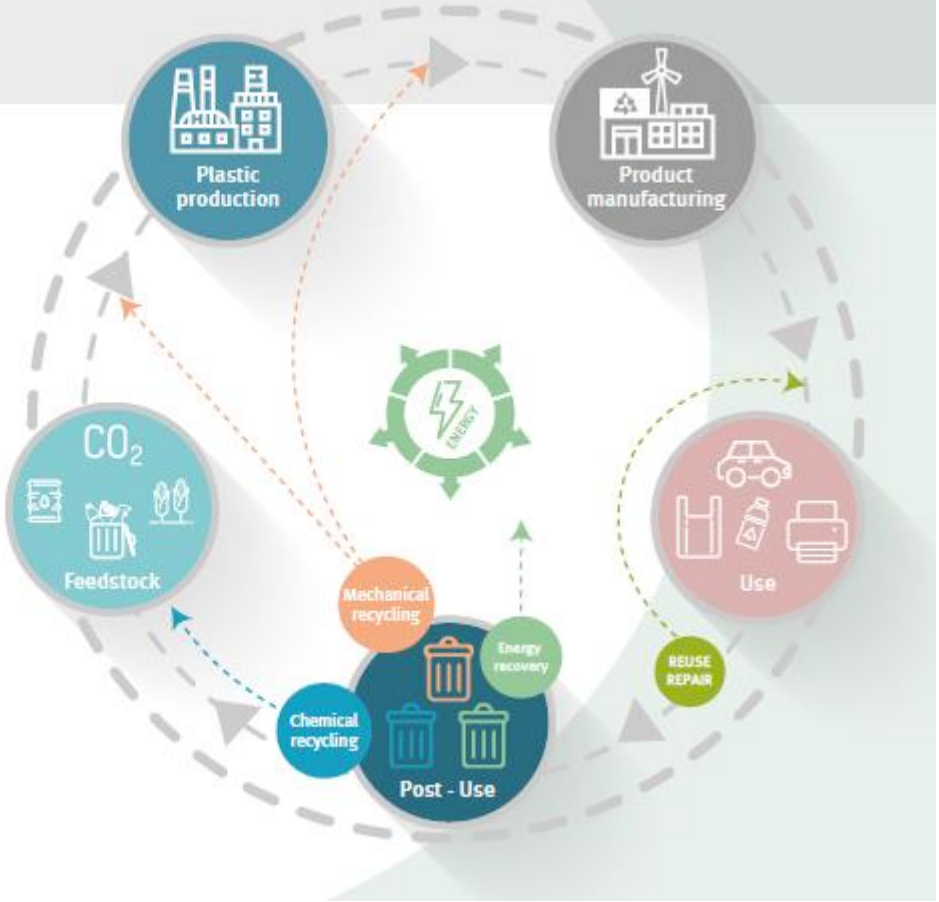
measures

To stimulate Europe's transition towards:

- circular economy
- boost global competitiveness
- foster sustainable economic growth
- generate new jobs

EU Circular Economy Agenda

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



Source: Plastics – the Facts 2017, PlasticsEurope

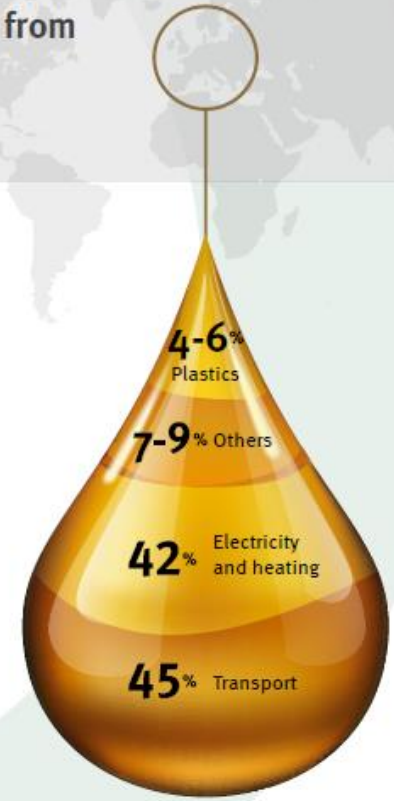
EU Circular Economy Agenda

What are plastics, where do they come from

Plastics aren't just one material. Plastics are a family of hundreds of different materials with a wide variety of properties. They are designed to meet the needs of each single application in the most efficient manner.

Plastics materials are organic materials that can be either fossil fuel based or bio based. Both types of plastic materials are recyclable and it is possible to produce bio-degradable plastics with both types of feedstocks.

Currently, most plastics materials are derived from fossil feedstocks such as natural gas, oil or coal. However, it is important to stress that only 4 to 6% of all the oil and gas used in Europe is employed in the production of plastic materials.



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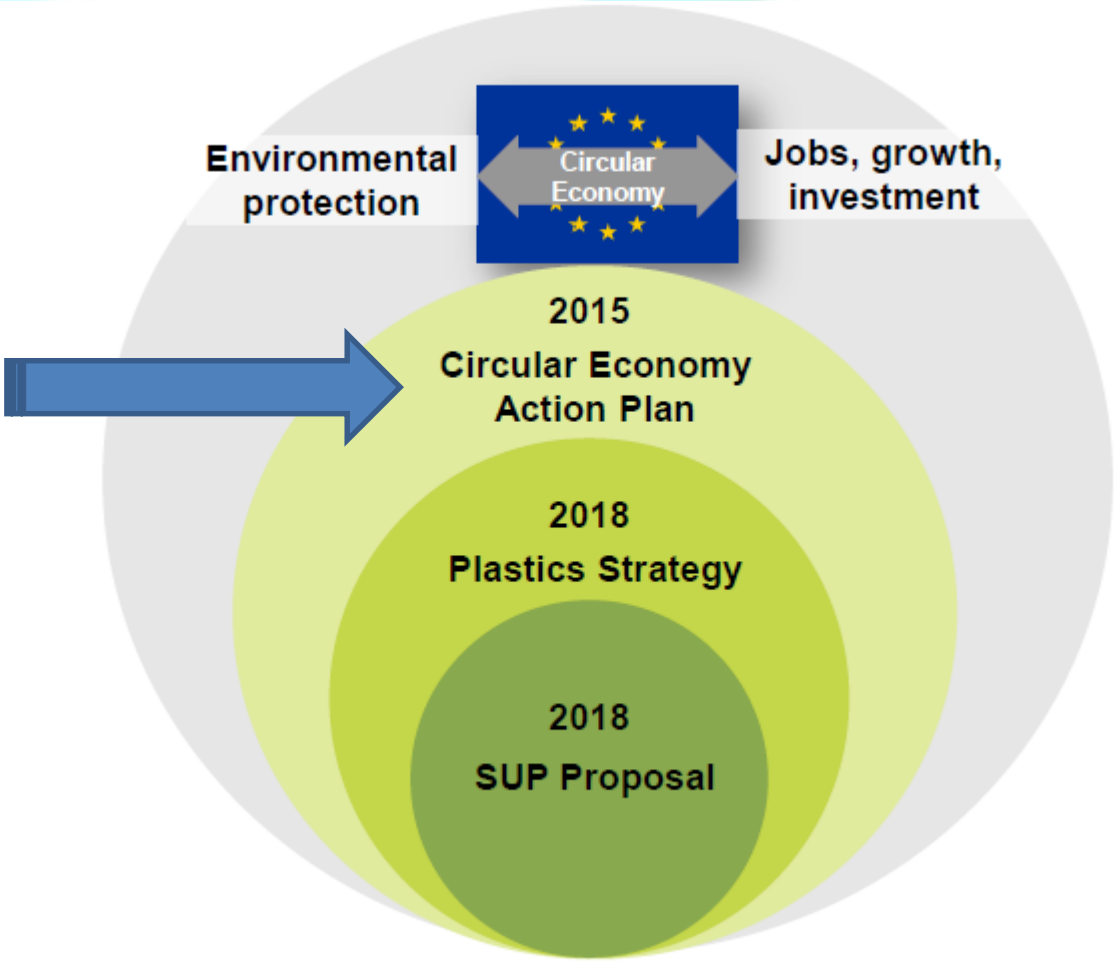
Source: Plastics – the Facts 2017, PlasticsEurope

EU Circular Economy Agenda



EU Circular Economy Package

EU Circular Economy Package adopted 2 December 2015

›EU Action Plan for the Circular Economy

›Legislative Proposals on Waste: (WFD, PPWD, Landfill, ELVs, batteries, WEEE)

»A strategy on plastics in the circular economy, addressing issues of recyclability, and the Sustainable Development Goals target for significantly reducing marine litter

»Funding: €650 million (Horizon 2020), €5.5 billion (structural funds)

»Actions to reduce food waste

»Development of quality standards for secondary raw materials

»Ecodesign (promote reparability, durability and recyclability of products, in addition to energy efficiency)

»Revised Regulation on fertilisers

»Actions on water reuse

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EU Circular Economy Action Plan – Priority Sectors

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Legislative Proposals on Waste: (WFD, PPWD, Landfill, ELVs, batteries, WEEE)

Agreement in December 2017

→ **New EU waste legislation in force since July 2018**

EU legislators strike early morning deal on waste

By Paola Tamma | EURACTIV.com

Montag, 18. Dezember 2017 16:44:10 (updated: Montag, 5. Februar 2018 15:31:51)

Member states must transpose new rules by 2020

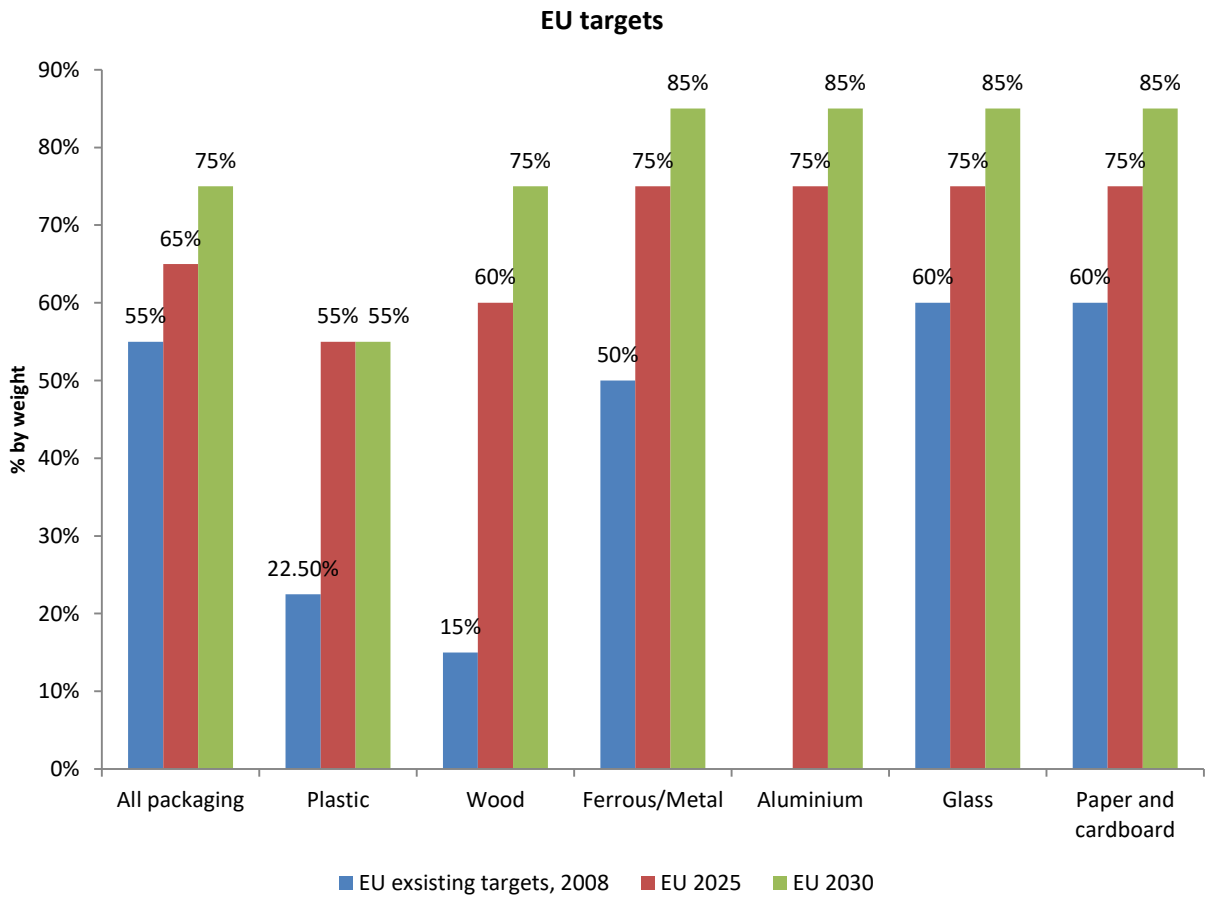
New EU waste legislation:

The **adopted new legislation on waste** sets clear **targets by 2030**

The percentages have to be considered **"by weight"**

New EU packaging waste legislation:

The **adopted new legislation on packaging waste** sets clear **targets by 2025 and 2030**



New EU waste legislation:

The **adopted new legislation on waste** sets clear **targets and long-term path:**

- economic instruments to discourage landfilling
- harmonised calculation methods for recycling rates
- **promote re-use and stimulate industrial symbiosis**
- Economic incentives for producers to put **greener products on the market**

New EU waste legislation:

Seperate Collection

- Seperate collection mandatory for at least:
  Plastics, glas, metal, paper, bio-waste (by 2023), **hazardous waste and textiles** (by 2025)

New EU waste legislation:

Economic instruments and EPR

- WFD includes list of **economic instruments proposed to support the waste hierarchy**
- **EPR mandatory** for all packaging as of end 2024
- **Harmonised minimum requirements for EPR schemes**

New EU waste legislation:

Further important changes

- **Strengthening of waste prevention**
  - Food waste reduction
  - Fight (marine) littering
- Ensure decontamination of waste before / during recycling to **ensure high quality recycling**
- **Separately collected waste may not be incinerated** unless incineration provides a better environmental result
- **Waste handlers have access to information** on substances of very high concern through a database set up by ECHA

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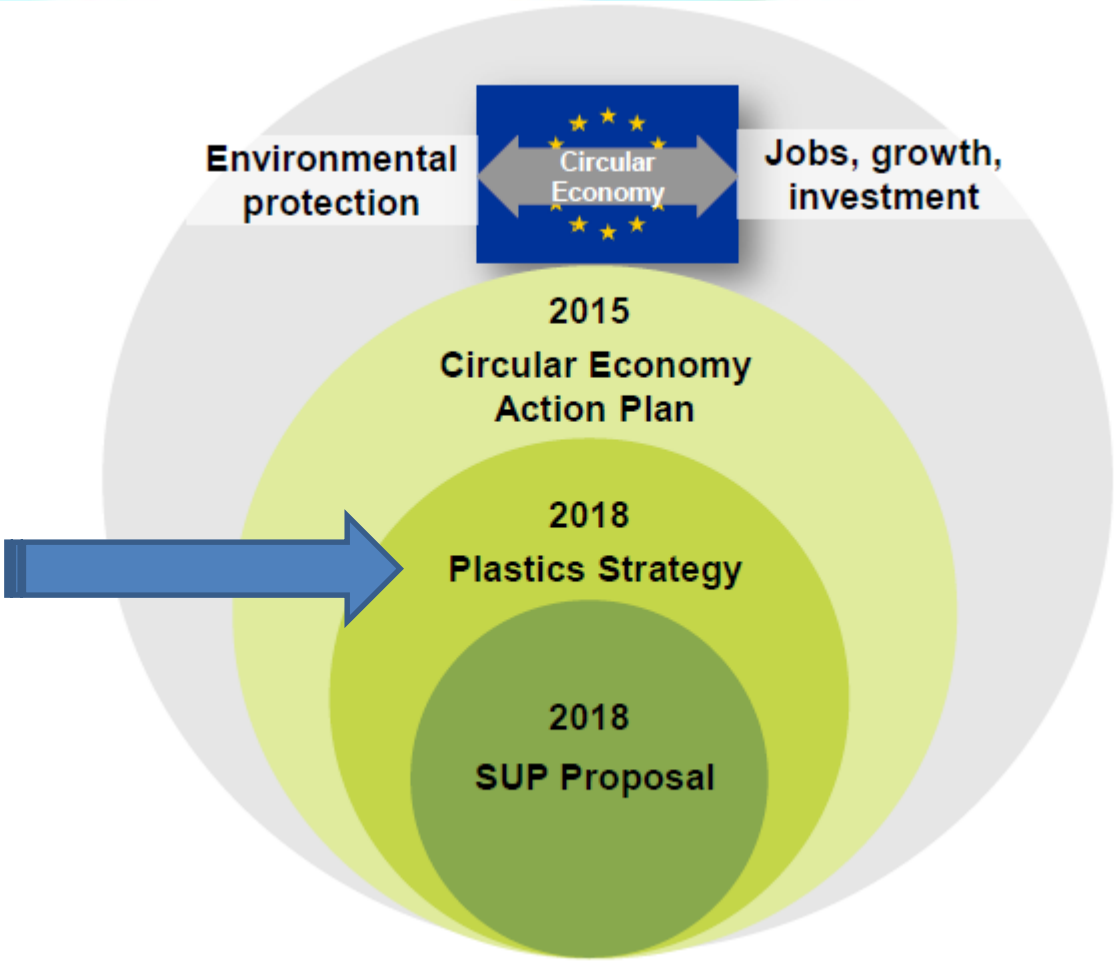

EU Plastics Strategy

EUROPEAN COMMISSION

Brussels,16.1.2018

COM(2018) 28 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

A European Strategy for Plastics in a Circular Economy

{SWD(2018) 16 final}

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1. Introduction

Plastic is an important and ubiquitous material in our economy and daily lives. It has multiple functions that help tackle a number of the challenges facing our society. Light and innovative materials in cars or planes save fuel and cut CO2 emissions. High-performance insulation materials help us save on energy bills. In packaging, plastics help ensure food safety and reduce food waste. Combined with 3D printing, bio-compatible plastic materials can save human lives by enabling medical innovation.

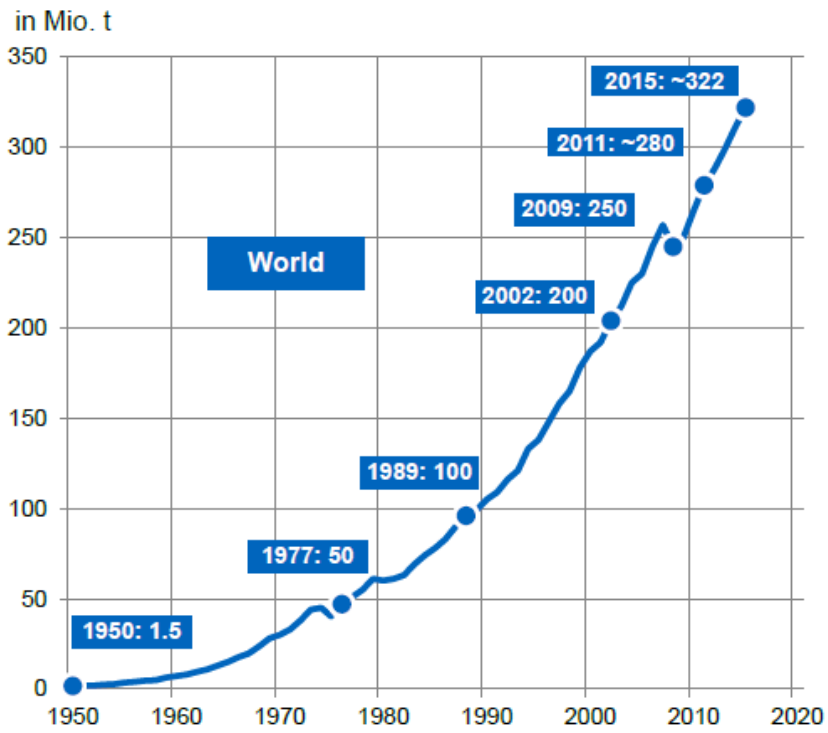
EU Plastics Strategy

- Fostering the durability of plastics
- Making the reuse and recycle of plastics easier
- Making the separate collection of plastics easier
- Sobstitute the use of plastic for other materials where possible
- Avoid the landfilling of plastics

Plastics challenges

World
Plastics Production 1950 – 2015

PlasticsEurope
Association of Plastics Manufacturers



- Plastics are a global success story.
- Continuous growth for more than 50 years.
- Plastics production ramped up from 1.5 Mio. t in 1950 to ~322 Mio. t in 2015. In 2015 global plastic's production grew by 3.4% compared to 2014.
- Compound Annual Growth Rate (CAGR) from 1950 to 2015 is about 8.6%.

Includes Thermoplastics, Polyurethanes, Thermosets, Elastomers, Adhesives, Coatings and Sealants and PP-Fibers. Not included PET-, PA- and Polyacryl-Fibers
Source: PlasticsEurope Market Research Group (PEMRG) / Consultic Marketing & Industrieberatung GmbH

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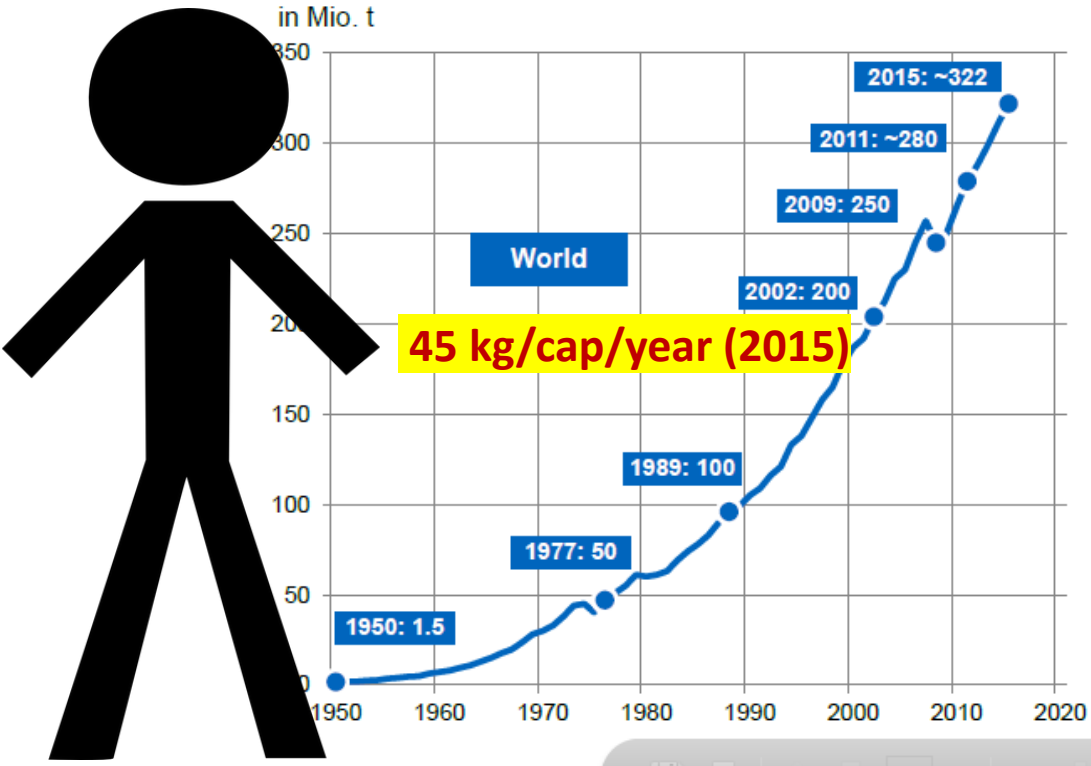

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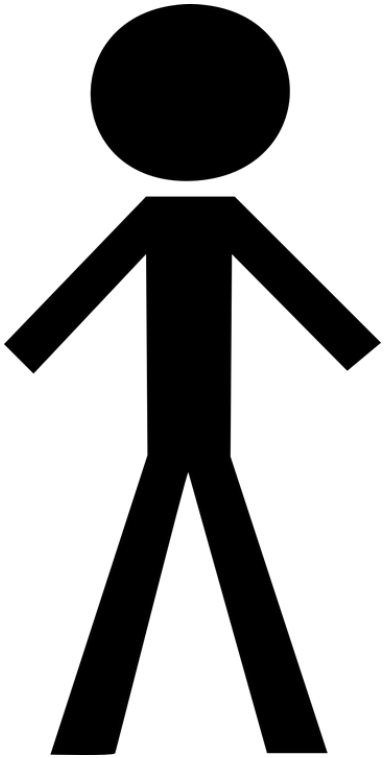
Source: PlasticsEurope Market Research Group (PEMRG) / Consultic Marketing & Industrieberatung GmbH

Plastics challenges

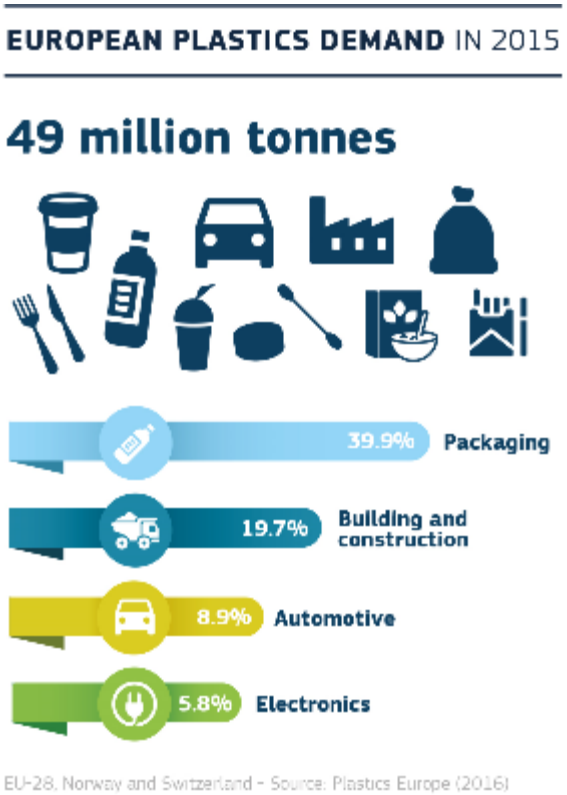
Globally

Source: European Commission – Infographic on Plastic Waste:
http://ec.europa.eu/environment/waste/pdf/plastic_waste_factsheet.pdf

Plastics challenges



100 kg/cap/year (2015)



Source: European Commission – Infographic on Plastic Waste:
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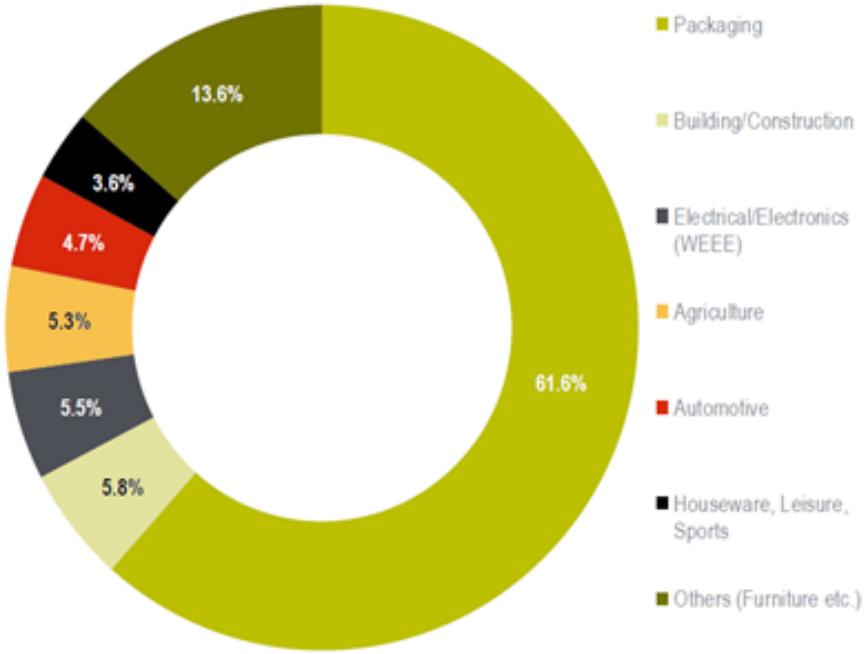
Plastics challenges

Total post-consumer plastic waste by application



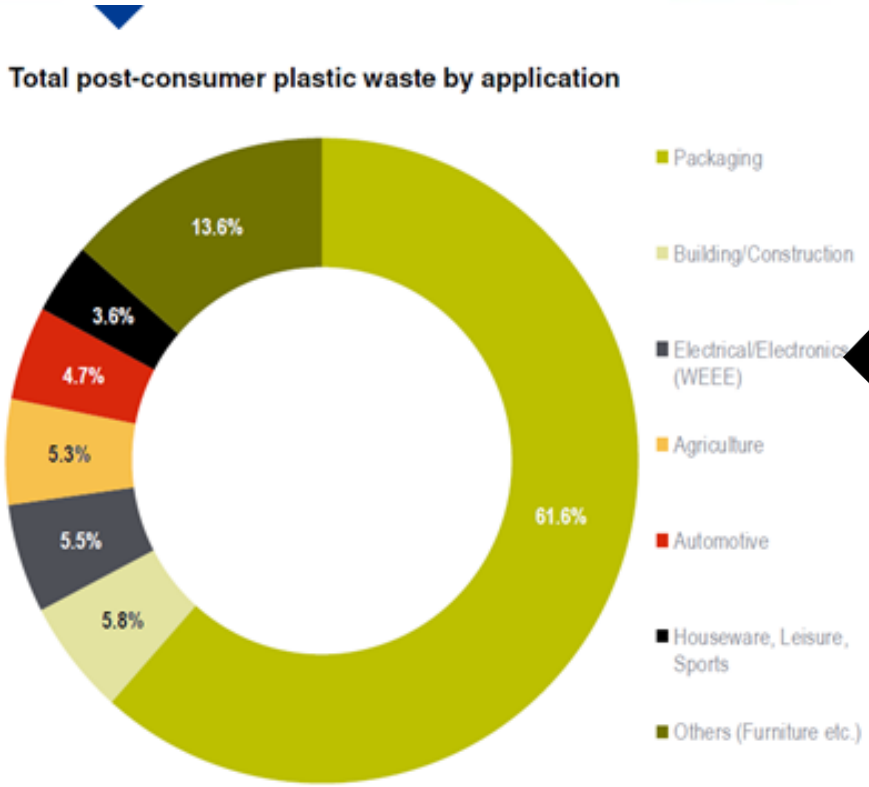
Source: Conversio

- The chart shows the total generation of post-consumer plastic waste by substantial applications for 28 EU countries + Norway and Switzerland.
- The total volume of available post-consumer waste arising in 2016 was about **27.1 million tons** (compared to 25.8 million in 2014).
- **About 62%** of plastics end-user waste is generated from **packaging collection.**
- **Other applications** follow significant behind with shares of 4% - 6% e.g. Building and Construction, Electrical/ Electronics (WEEE), Automotive, Agriculture etc

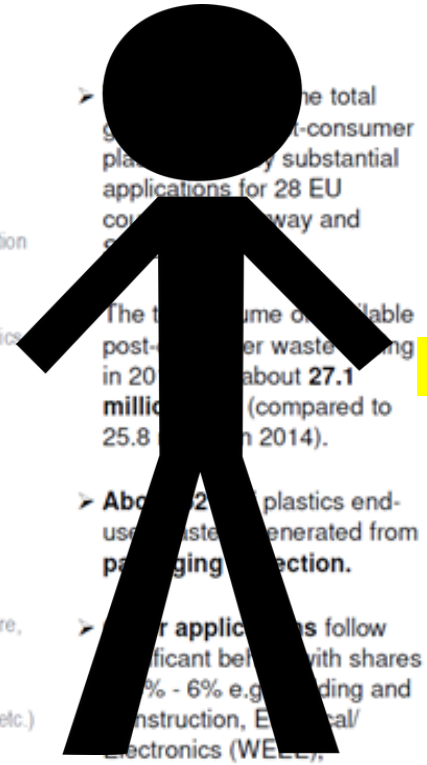
Plastic Waste (2016): 27.1 milion tons

Source: European Commission – Infographic on Plastic Waste: http://ec.europa.eu/environment/waste/pdf/plastic_waste_factsheet.pdf

Plastics challenges



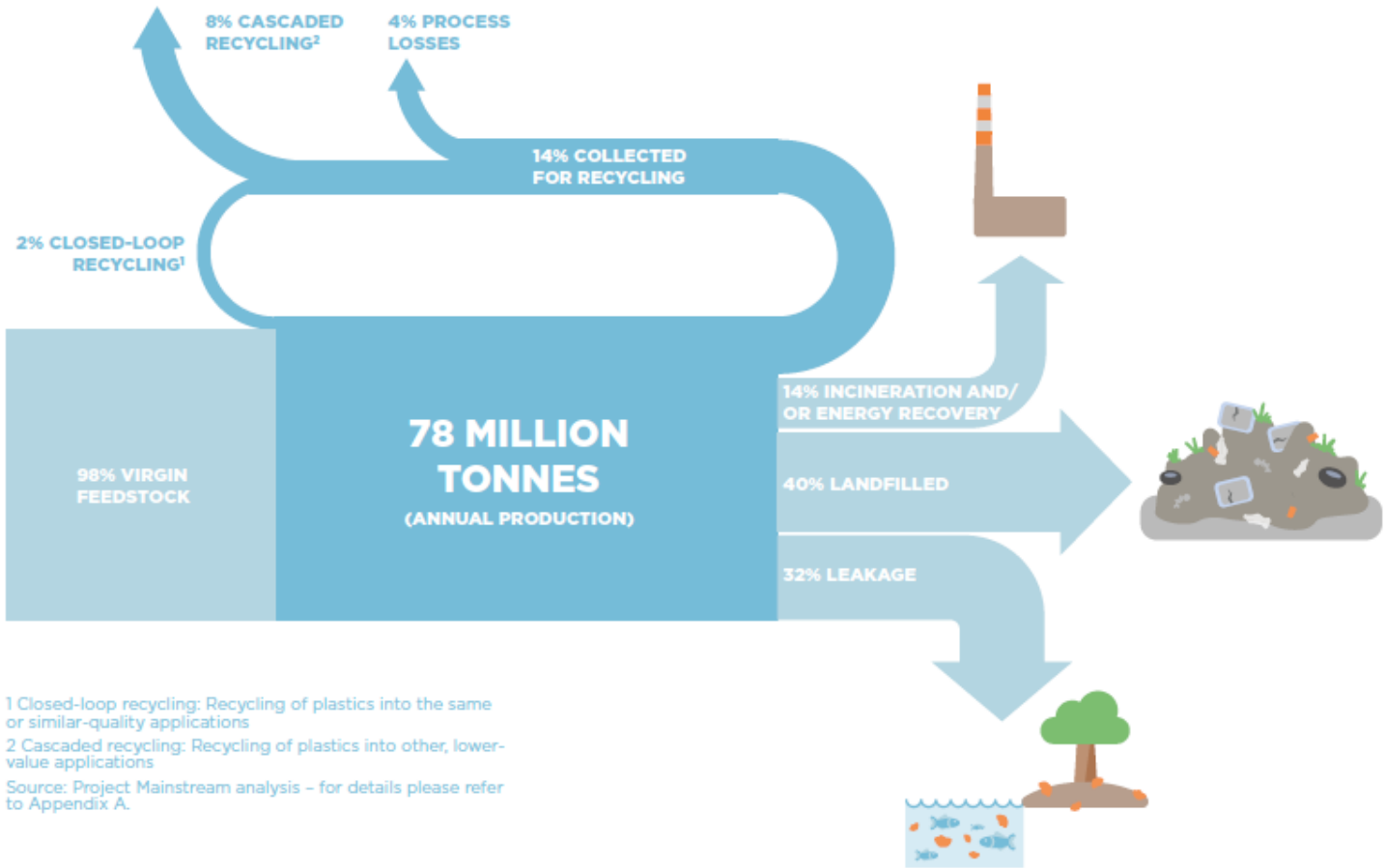
Source: Conversio



50 kg/cap/year (2016)

Source: European Commission – Infographic on Plastic Waste: http://ec.europa.eu/environment/waste/pdf/plastic_waste_factsheet.pdf

Plastics challenges: GLOBAL FLOWS OF PLASTIC PACKAGING MATERIALS IN 2013



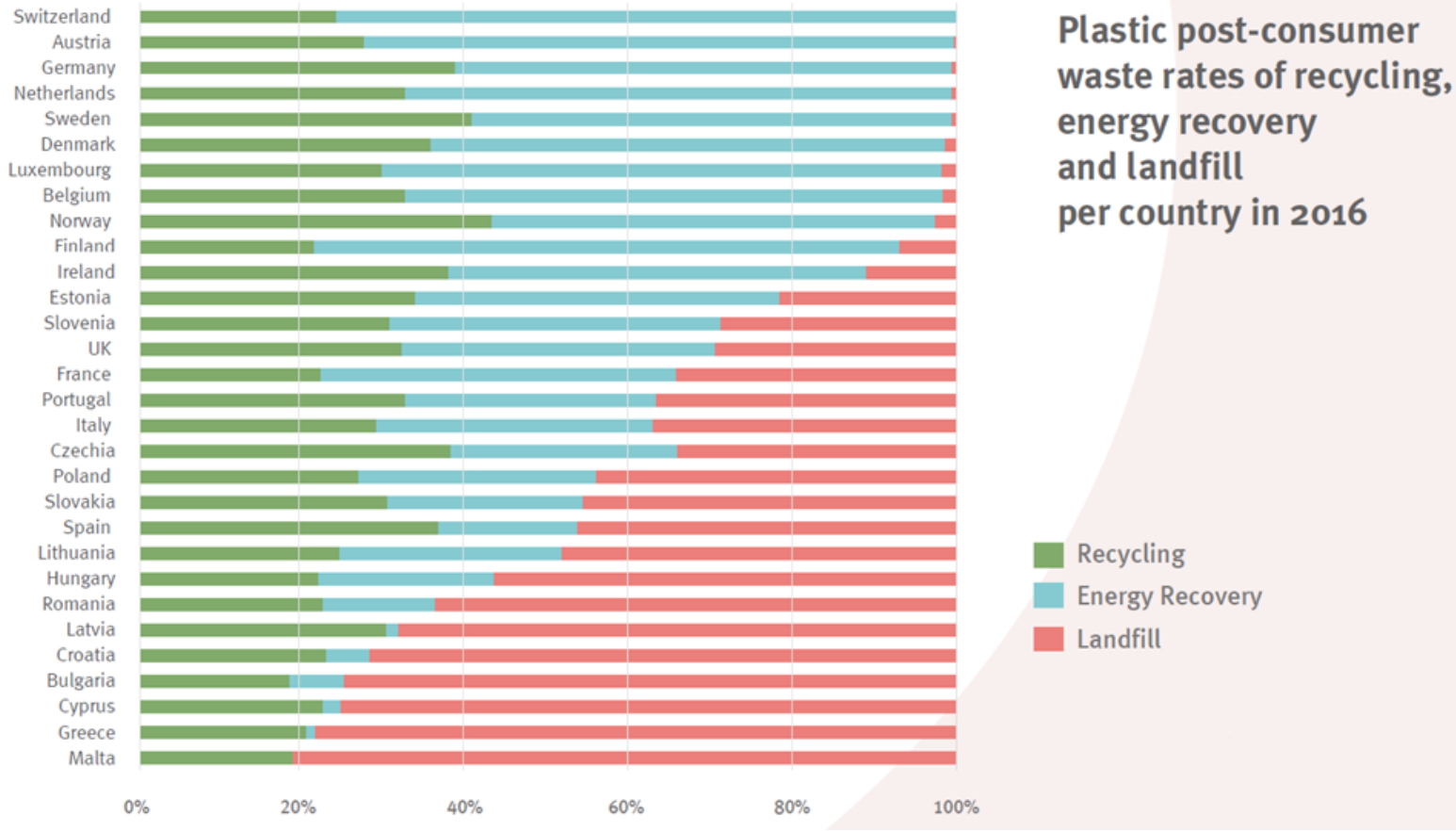
1 Closed-loop recycling: Recycling of plastics into the same or similar-quality applications

2 Cascaded recycling: Recycling of plastics into other, lower-value applications

Source: Project Mainstream analysis – for details please refer to Appendix A.

Source: THE NEW PLASTICS ECONOMY
RETHINKING THE FUTURE OF PLASTICS, ELLEN MACARTHUR FOUNDATION (2016)

Plastics challenges: plastic post-consumers



Source: Plastics Europe, 2018

Turning challenges into opportunities: A vision for a circular plastics economy

By 2030

All plastics packaging placed on the EU market is either reusable or can be recycled in a cost-effective manner.

More than half of plastics waste generated in Europe is recycled.

Plastic Recycling capacity has increased fourfold since 2015, leading to the creation of 200 000 new jobs, spread all across Europe.

Turning challenges into opportunities: A vision for a circular plastics economy

By 2030

Substances hampering recycling processes have been replaced or phased out.

Demand for recycled plastics in Europe has grown four-fold, providing a stable flow of revenues for the recycling sector and job security for its growing workforce.

Cut CO2 emissions, in line with commitments under the Paris Agreement.

The way forward: turning vision into reality

Photo Credit: Shutterstock/lassedesignen

Improve the economics and quality of plastics recycling

All **plastic packaging** will be reusable or recyclable by 2030

Boost the **market for recycled plastics**

Curb plastic waste and littering

Actions on **SUP** and **microplastics**

Drive investments and innovation towards circular solutions

Strategic Research Innovation Agenda for Plastics (2018)

Harness global action

Support to multilateral initiatives on plastics

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The way forward: turning vision into reality

Ambitious **set of EU Measures and Timeline**:

1. Improving the economics and quality of plastics recycling
2. Curbing plastic waste and littering
3. Driving innovation and investment towards circular solut
4. H

Photo Credit: Shutterstock/lassedesignen

Expand and improve the separate collection of plastic waste, to ensure quality inputs to the recycling industry

Expand and modernise the EU's sorting and recycling capacity;

Create viable markets for recycled and renewable plastics.

Source: Ellen MacArthur Foundation (2016)

The way forward: turning vision into reality

Photo Credit: Shutterstock/lassedesignen

Ambitious **set of EU Measures and Timeline**:

1. Improving the economics and quality of plastics recycling
2. Curbing plastic waste and littering
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4. H

Preventing plastic waste in our environment

Establishing a clear regulatory framework for plastics with biodegradable properties

The rising problem of microplastics

The way forward: turning vision into reality

Photo Credit: Shutterstock/lassedesignen

Ambitious **set of EU Measures and Timeline**:

1. Improving the economics and quality of plastics recycling
2. Curbing plastic waste and littering
3. Driving innovation and investment towards circular solutions
4. Harness

Advanced sorting, chemical recycling and improved polymer design can have a powerful effect

Alternative feedstocks, including bio-based feedstocks and gaseous effluents

EU research funding will support all these efforts

Public authorities need to invest in extended and improved separate collection. Well-designed Extended Producer Responsibility (EPR) schemes

The way forward: turning vision into reality

Photo Credit: Shutterstock/lassedesignen

Ambitious **set of EU Measures and Timeline**:

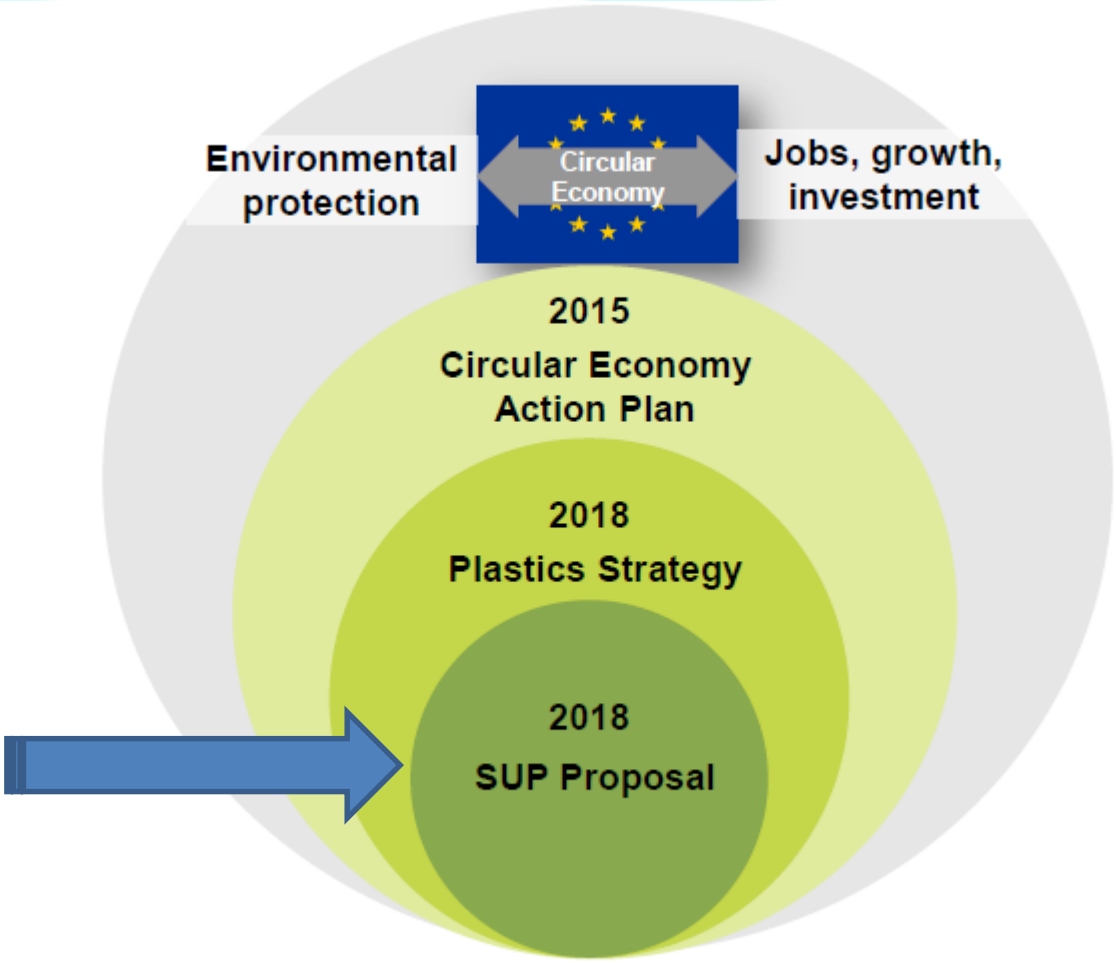
1. Improving the economics and quality of plastics recycling
2. Curbing plastic waste and littering
3. Driving innovation and investment towards circular solutions
4. Harnessing global action

contribute to achieving the 2030 Sustainable Development Goals

Outside Europe, plastics consumption per capita is growing quickly, most notably in Asia

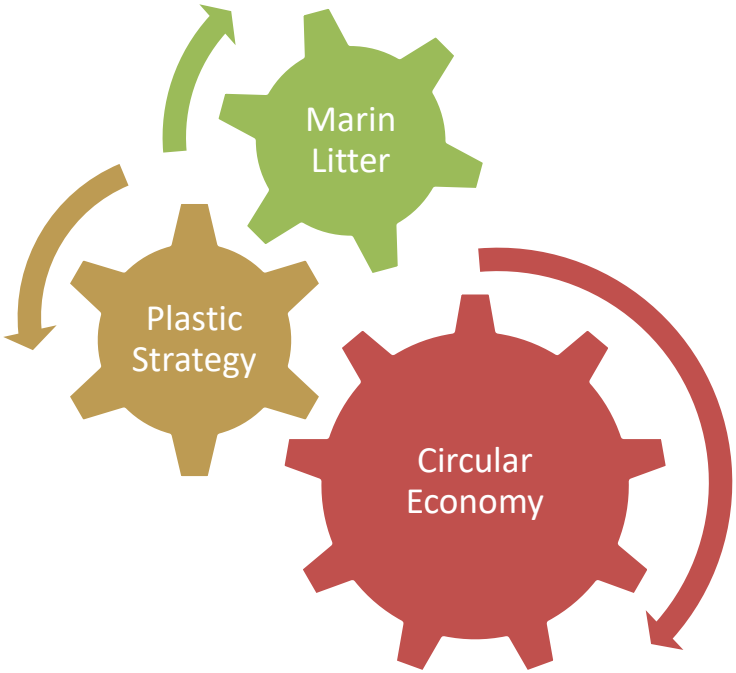
Action to promote best practices worldwide

EU Circular Economy Agenda



Single-use plastics (SUP) Directive Proposal: New EU rules to reduce marine litter

Brussels, 28 May 2018



EU-wide rules to target the 10 single-use plastic products most often found on Europe's beaches and seas, as well as lost and abandoned fishing gear.

Together these constitute **70% of all marine litter items**.

Single-use plastics (SUP) Directive Proposal: action on single-use plastics and fishing gear

Proposal for a ***Directive***

Different measures for **each item** taking into account:
- **consumer behaviour/needs**
- **opportunities for businesses**

Currently discussed

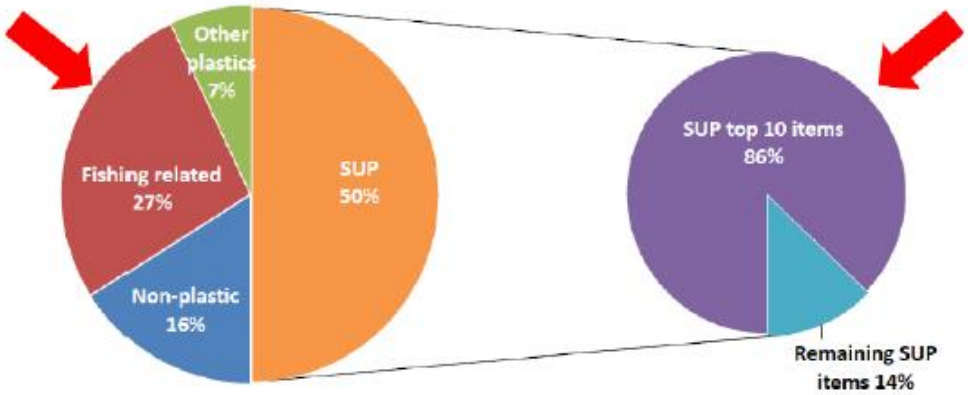
Single-use plastics (SUP) Directive Proposal: New EU rules to reduce marine litter

"Directive on the reduction of the impact of certain plastics products on the environment" – presented on 28 May 2018

THE 10 MOST FOUND SINGLE USE PLASTIC ITEMS ON EUROPEAN BEACHES ACCOUNT FOR 43% OF TOTAL MARINE LITTER

FISHING GEAR REPRESENTS AN ADDITIONAL 27% OF ALL MARINE LITTER

THE COMMISSION IS TAKING ACTION IN THESE TWO AREAS, WHICH REPRESENT 70% OF ALL MARINE LITTER FOUND ON EUROPE'S BEACHES



Single-use plastics (SUP) Directive Proposal: New EU rules to reduce marine litter

Sets of measures:

- Plastic ban of certain products
- Consumption reduction targets
- Obligations for producers
- Collection targets
- Labelling Requirements
- Awareness-raising measures

Single-use plastics (SUP) Directive Proposal: Next steps

Next Steps

- The Commission's proposals has being discussing within the **European Parliament** and **Council** for adoption.

- The Commission urges the other institutions to treat this as a **priority file**, and to deliver tangible results for Europeans before the elections in May 2019.

- Tackling EU-produced **marine litter** is only one part of the world-wide picture. But by taking the lead, the European Union will be in a strong position to drive change at the global level – through the G7 and G20 and through the implementation of the **UN Sustainable Development Goals**.

SWIM and Horizon 2020 Support Mechanism

Working for a Sustainable Mediterranean, Caring for our Future

Thank you for your attention.

www.swim-h2020.eu info@swim-h2020.eu

This Project is funded by the European Union

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For further information

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