Plastics & Circular Economy

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3rd Environment Journalists meeting, Barcelona
November 14th, 2018

PlasticsEurope
Association of Plastics Manufacturers

Who we are?

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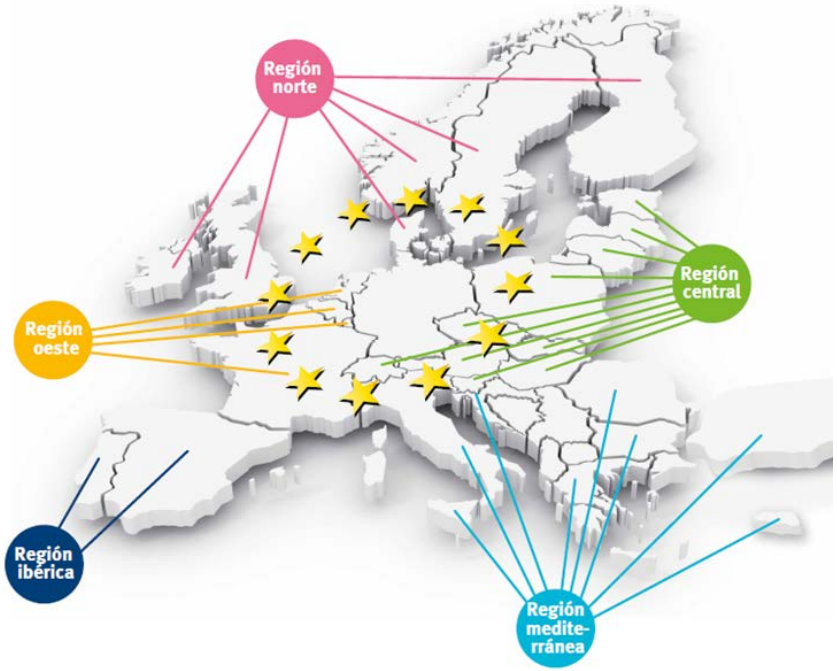

And many more: http://www.plasticseurope.org/plastics-industry/our-members.aspx

Objectives

- Promote the use of life-cycle thinking
- Support an innovation friendly environment
- Demonstrate how plastics contribute to improving the quality of life of Society

Plastics: not just one material

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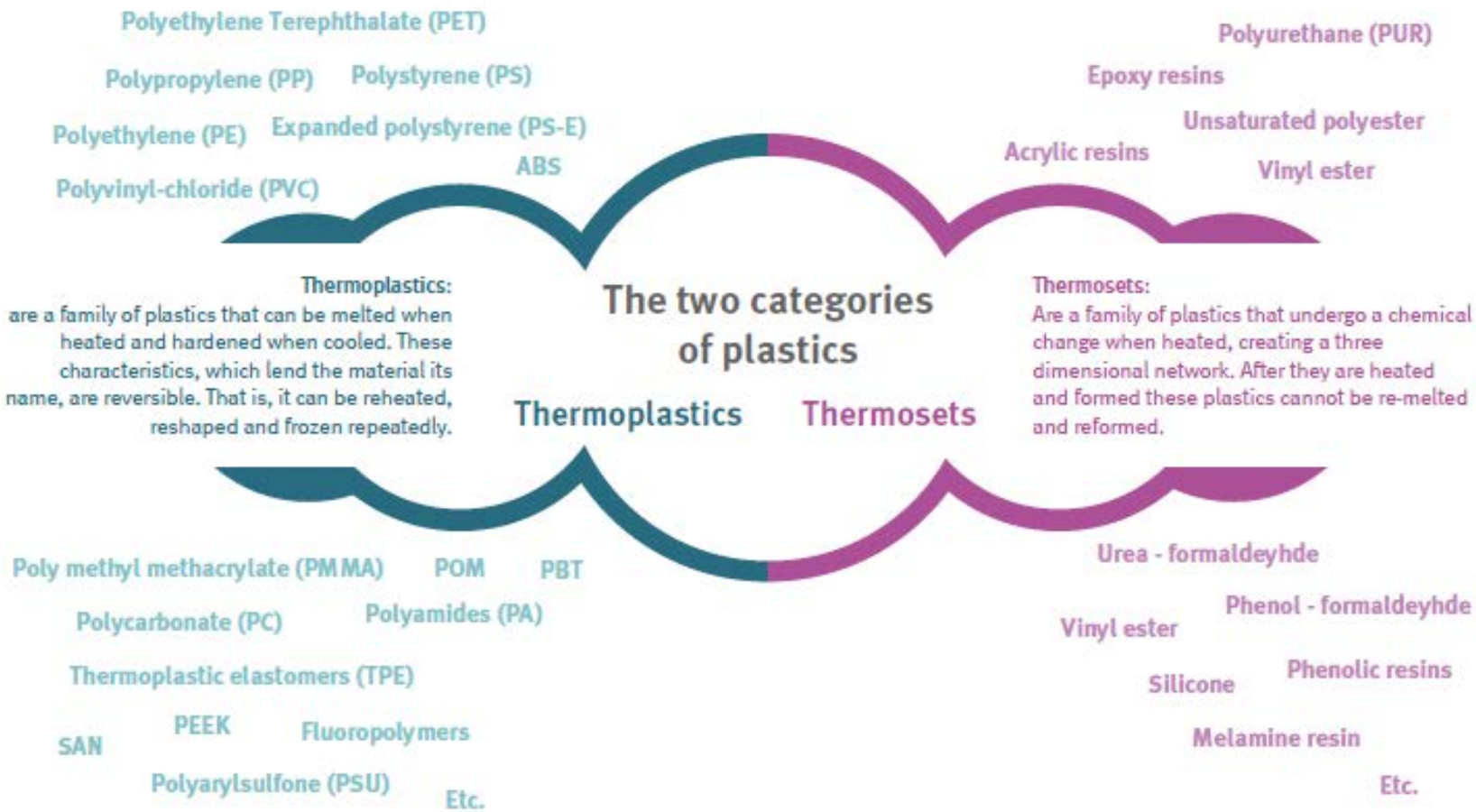
Discovering the wide family of plastics

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



Key Figures of the European plastics industry

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

Data: 2017. Sources: PlasticsEurope, Eurostat, PlasticsEurope Market Research Group (PEMRG).

World production of plastics and geographical distribution

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- Plastics World production 335 million tons in 2016
- Plastics European production 60 million tons in 2016
- China is the largest single producer and Asia = 50% of global production

European Plastic Converter demand in 2016

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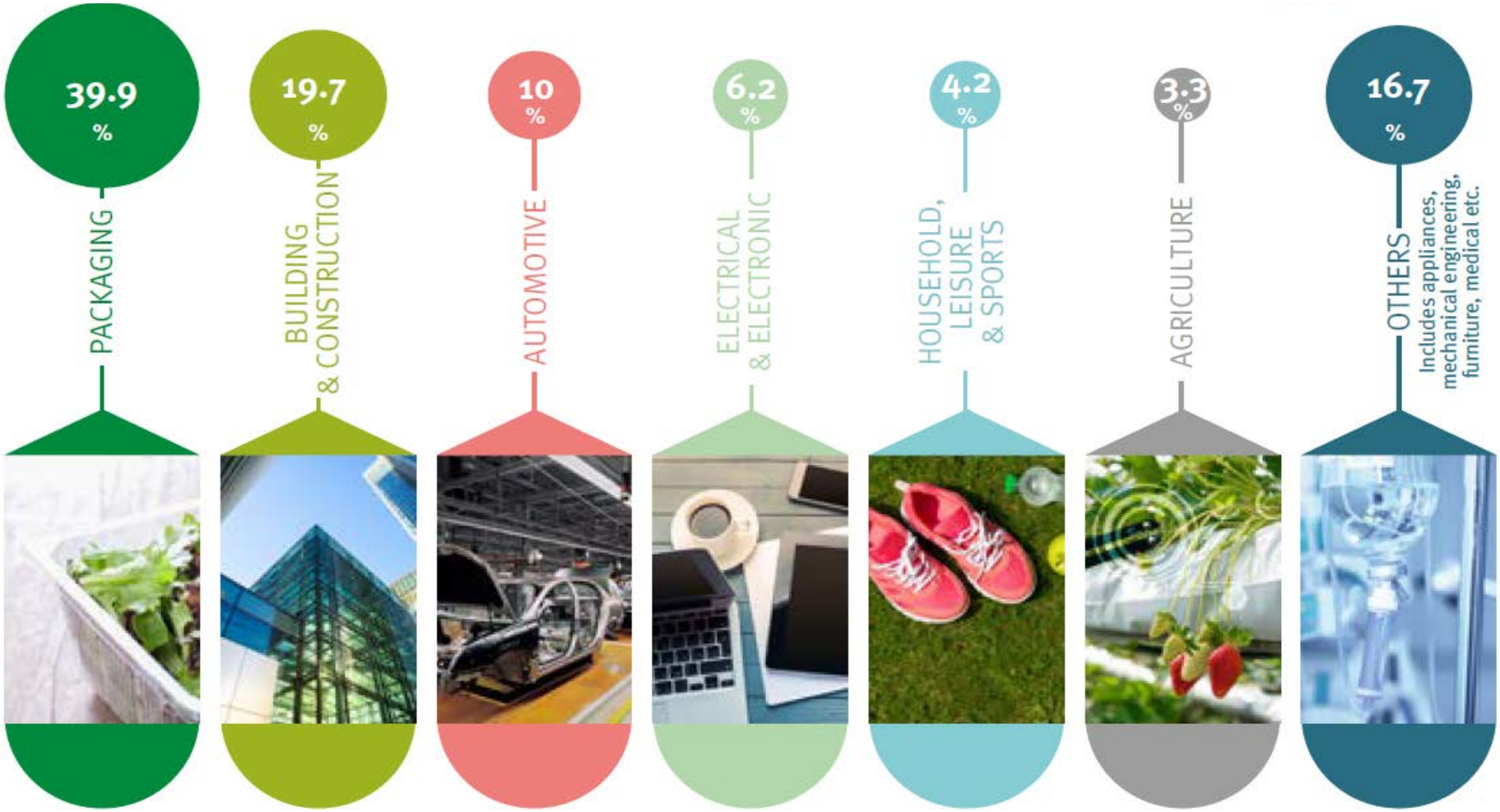
49.9 million tons



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

Plastics EU converter demand by country

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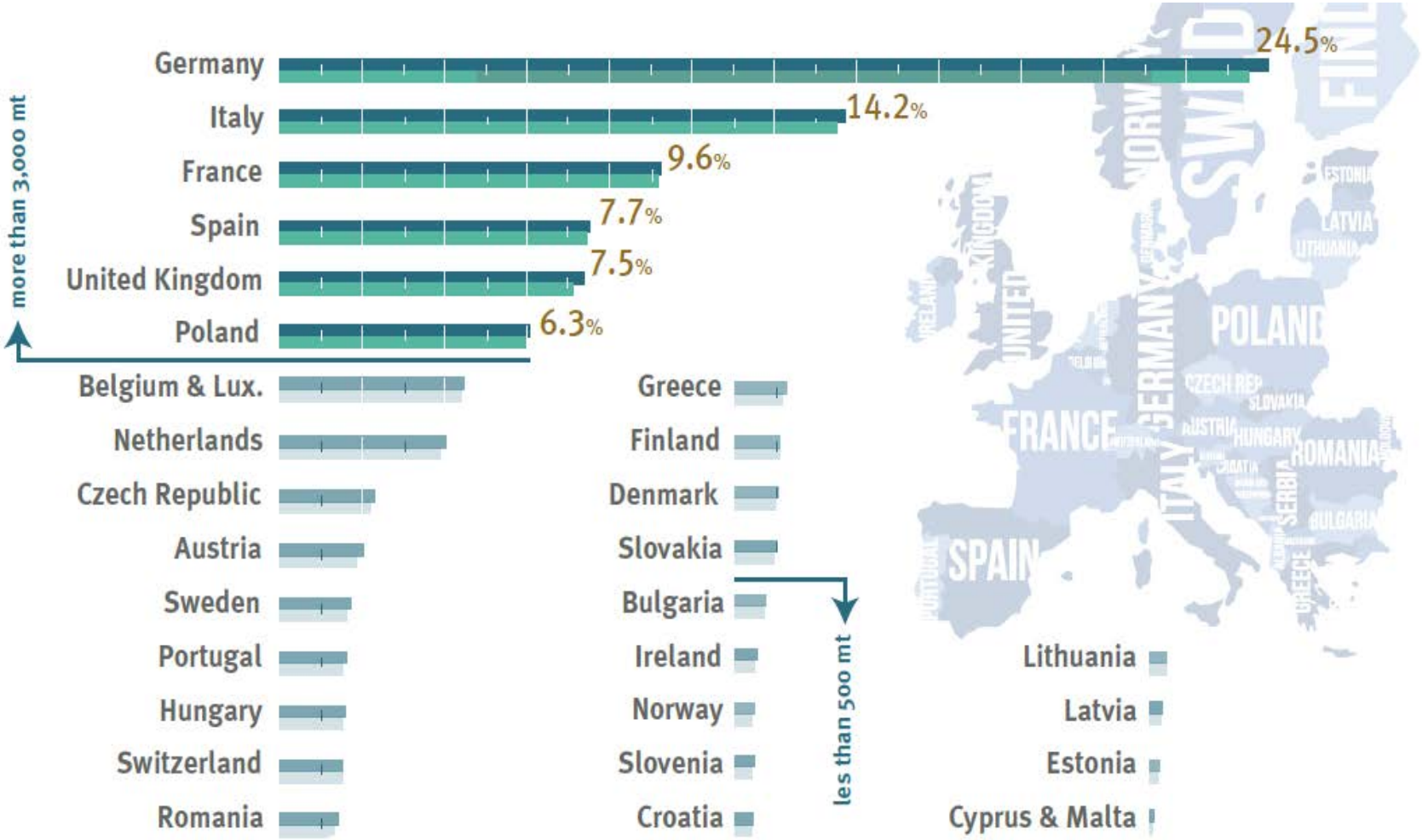

49.9 mt The six larger European countries and the Benelux cover almost 80% of the European demand in 2016

2016
2015

What do we mean by plastics?

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The use phase – the biggest savings

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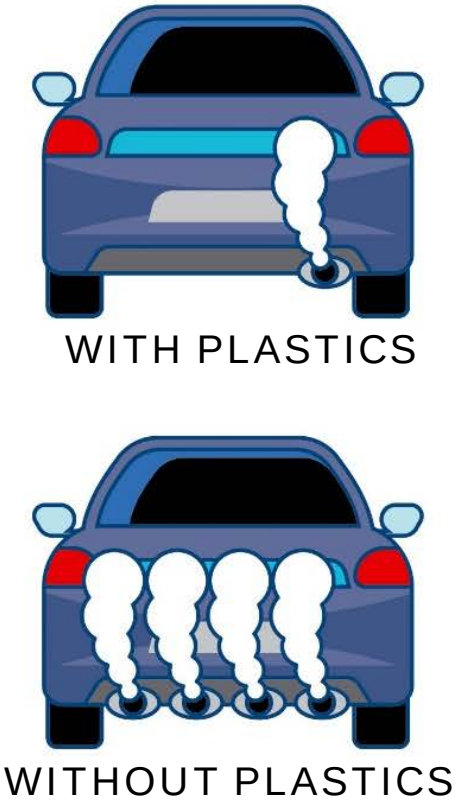
Plastic insulation materials end up saving **250** times more energy than what is used to produce them.



Overall environmental impact of using plastics is four times lower than if plastics were not used

Innovative multi-layered food packaging can extend shelf life significantly while reducing spoilage and waste

Plastics Waste Management in Europe

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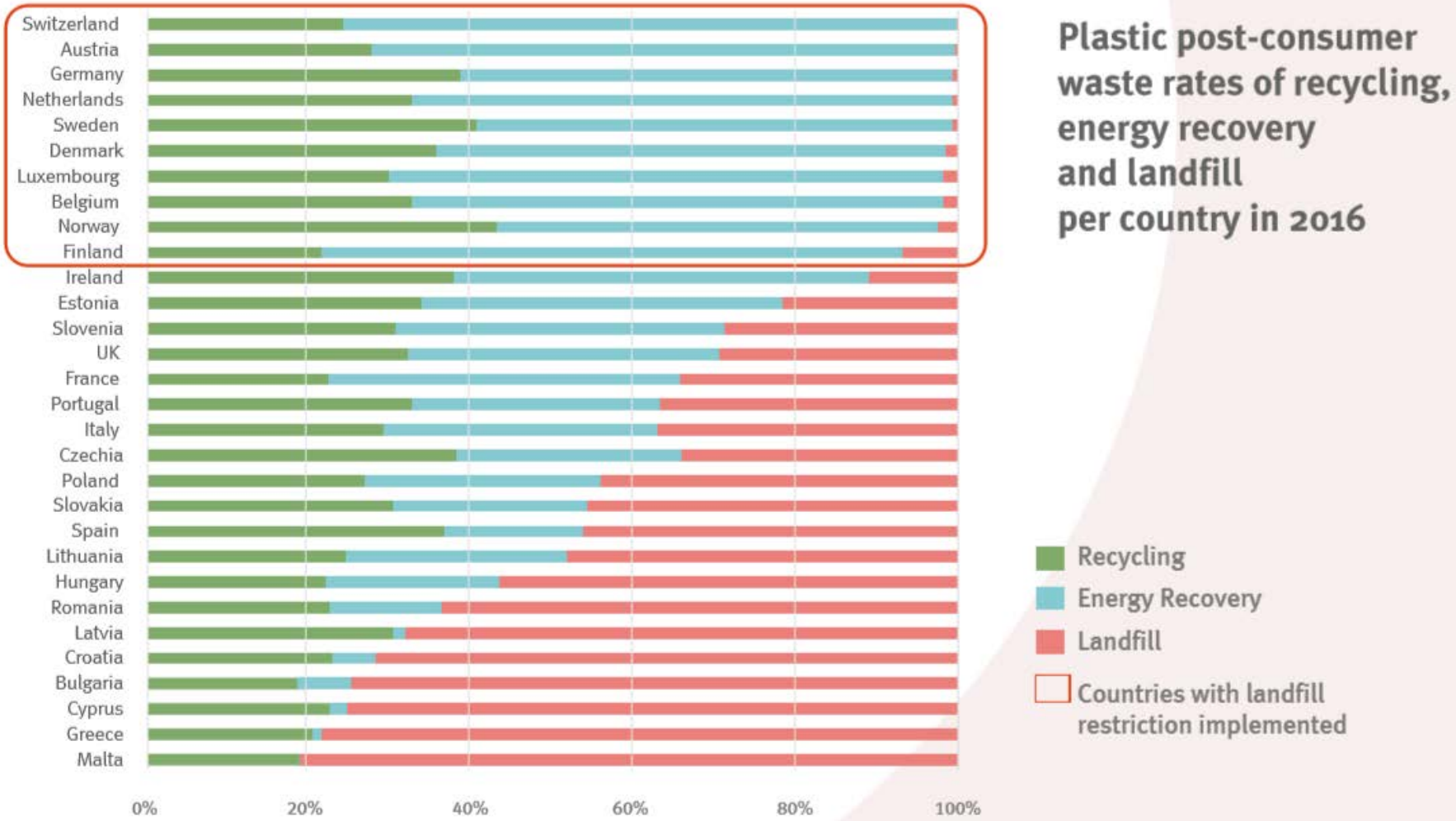

In 2016, for the first time, recycling overcame landfill

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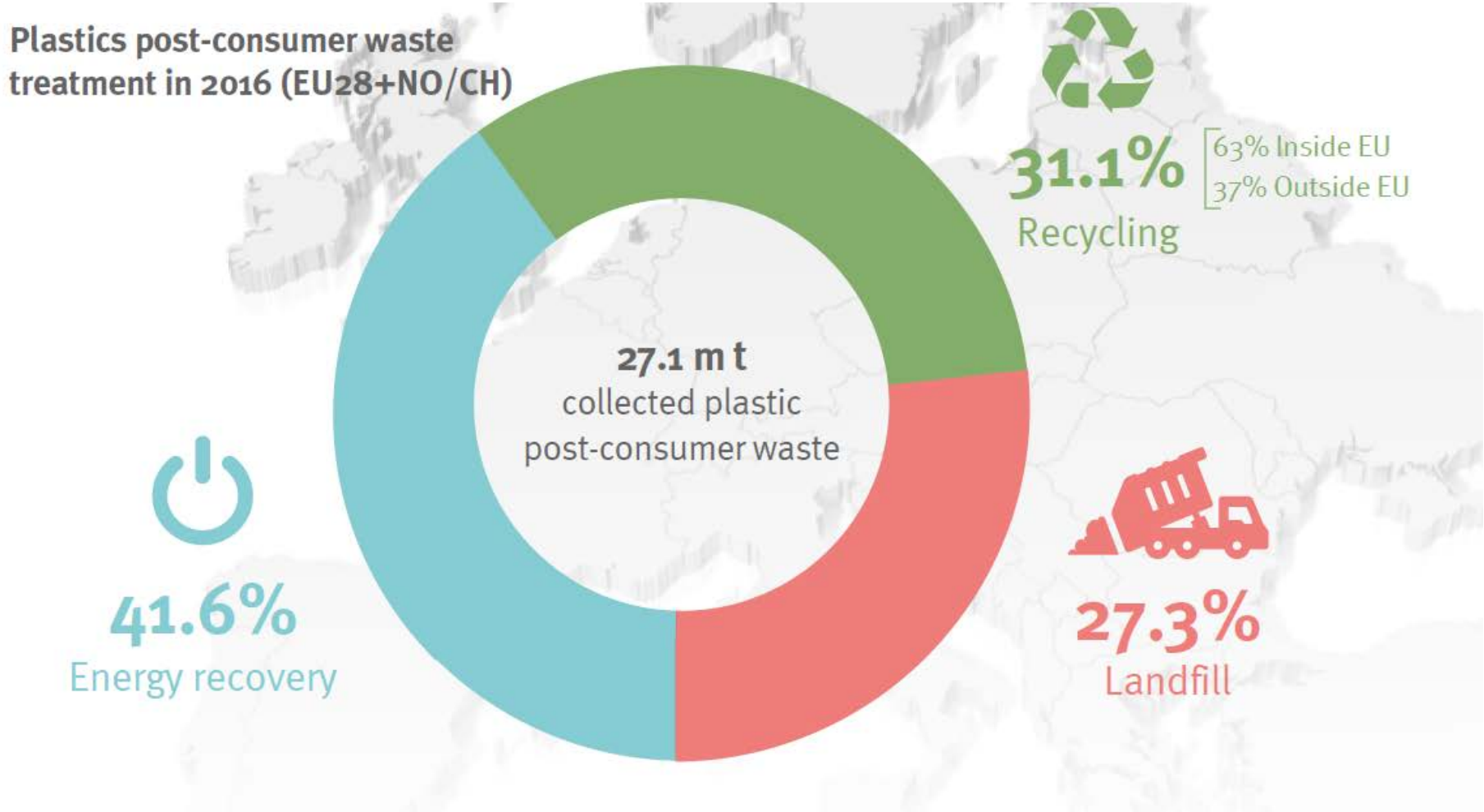
- In 2016, 27.1 million tones of plastic waste were collected through official schemes in the EU28+NO/CH in order to be treated. And for the first time, more plastic waste was recycled than landfilled.



The Challenge: prevent plastics leakage into the environment

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Plastics are too Valuable to be wasted! They are a Valuable Resource

Poor Waste management systems

Inadequate Behavior

Improper use of landfills

Marine Litter is a global problem

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Solutions

- 80% of marine litter comes from land > Close the tap on land
- +50% coming from 5 Asian countries* > Global cooperation

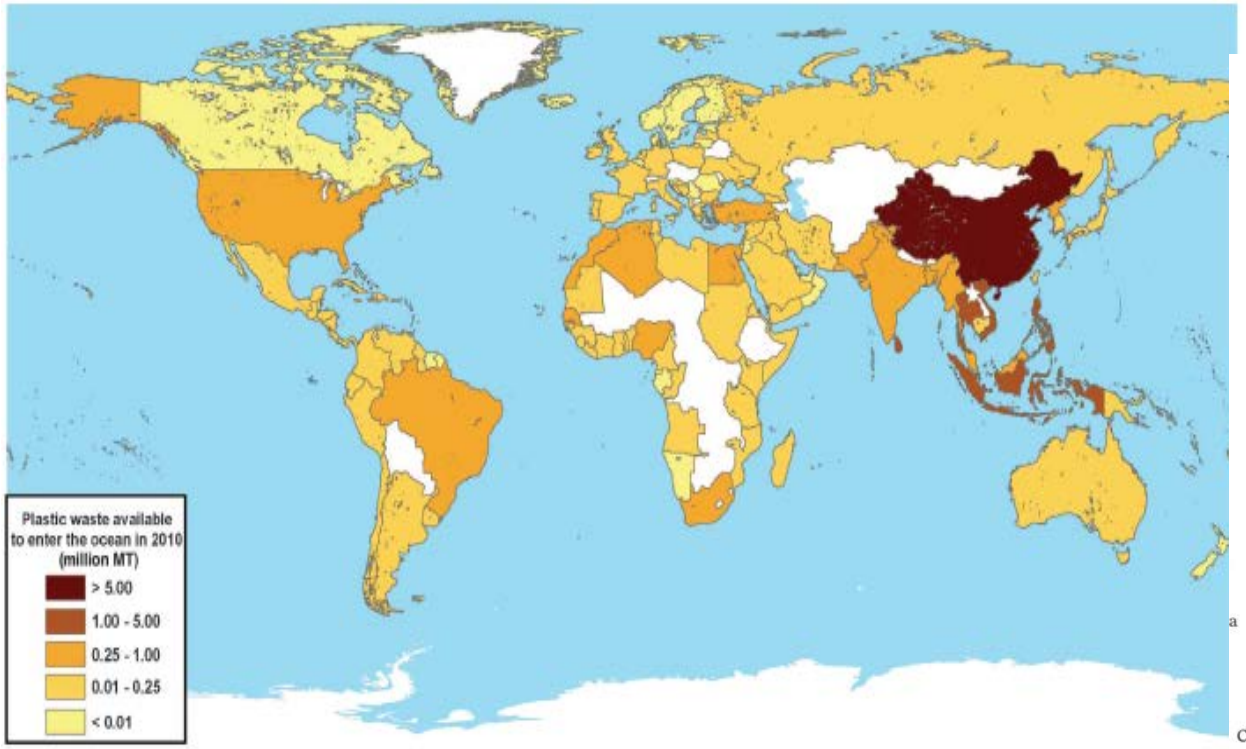

Fig. 1. Global map with each country shaded according to the estimated mass of mismanaged plastic waste [millions of metric tons (MT)] generate in 2010 by populations living within 50 km of the coast. We considered 192 countries. Countries not included in the study are shaded white.

		Población costera	Residuos plásticos mal gestionados		Residuos plásticos en el mar
		Millones de habitantes	Toneladas métricas por año	% del total	Toneladas métricas por año
China	1	262,9	8.820.000	27,7	1.320.000 - 3.530.000
Indonesia	2	187,2	3.220.000	10,1	480.000 - 1.290.000
Filipinas	3	83,4	1.880.000	5,9	280.000 - 750.000
Vietnam	4	55,9	1.830.000	5,8	280.000 - 730.000
Sri Lanka	5	14,6	1.590.000	5,0	240.000 - 640.000
Tailandia	6	26,0	1.030.000	3,2	150.000 - 410.000
Egipto	7	21,8	970.000	3,0	150.000 - 390.000
Malasia	8	22,9	910.000	2,9	140.000 - 370.000
Nigeria	9	27,5	850.000	2,7	130.000 - 340.000
Bangladesh	10	70,9	790.000	2,5	120.000 - 310.000
Sudáfrica	11	12,9	630.000	2,0	90.000 - 250.000
India	12	187,5	600.000	1,9	90.000 - 240.000
Argelia	13	16,6	520.000	1,6	80.000 - 210.000
Turquía	14	34,0	490.000	1,5	70.000 - 190.000
Paquistán	15	14,6	480.000	1,5	70.000 - 190.000
Brasil	16	74,7	470.000	1,5	70.000 - 190.000
Myanmar	17	19,0	460.000	1,4	70.000 - 180.000
Marruecos	18	17,3	310.000	1,0	50.000 - 120.000
Corea del Norte	19	17,3	300.000	1,0	50.000 - 120.000
EE.UU.	20	112,9	280.000	0,9	40.000 - 110.000

*Source: Jambeck study, University of Georgia, USA

Microplastics in the marine environment worldwide

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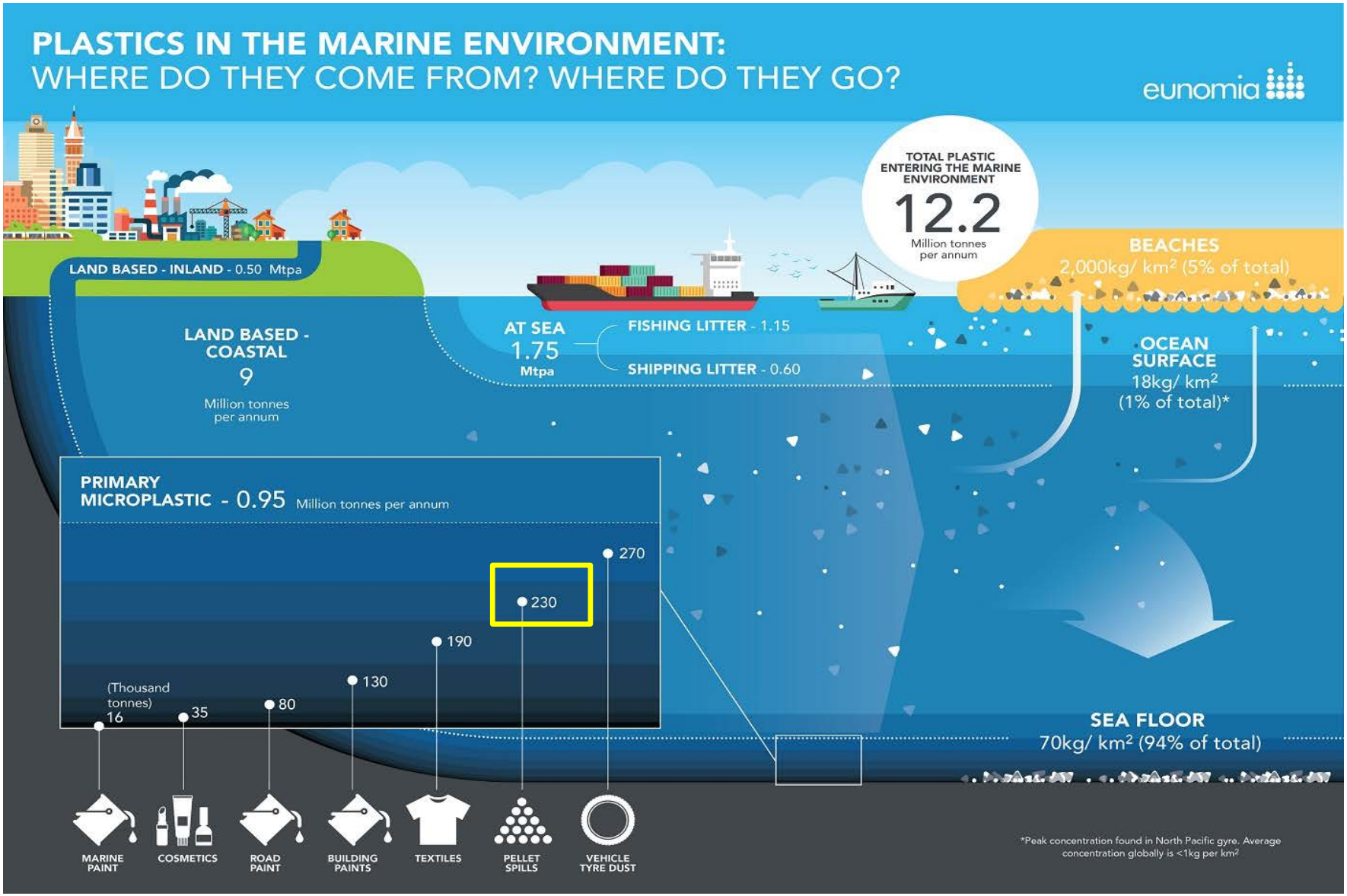

Source: Eunomia, Plastics in the marine environment

How do we fight against marine litter?

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By working in three areas:

Harness Global Action

Harnessing global action

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WORLD PLASTICS COUNCIL

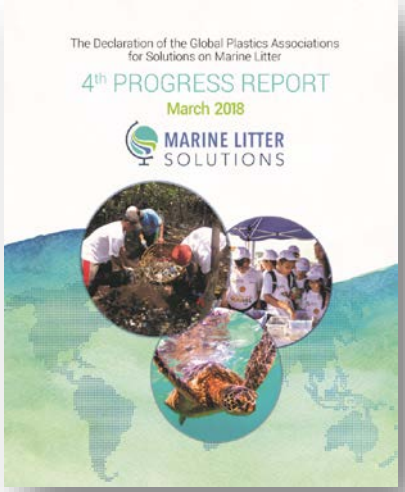
Global Plastics Alliance

MARINE LITTER SOLUTIONS

Operation Clean Sweep®

Create open dialogue forums

- The Global forum for Plastics Producers industry. Engaging in finding solutions to Marine Litter and improving waste
- Global Plastics Industry engagement for Solutions on Marine Litter
- Plastics value-chain programme to achieve **zero pellet loss**
- i.e. PolyTalk conferences with key stakeholders: policy makers, NGOs, consumer organisations and industry



74 Signatories
40 Countries
355 Projects

PolyTalk 2018

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IdentiPlast 2019

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identiPlast® 2019

14th International Conference
on the Recycling and Recovery of Plastics

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Conscious design through the full life cycle

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Full Life Cycle Thinking: key to foster resource efficient ecodesign and innovation

Raising awareness is key

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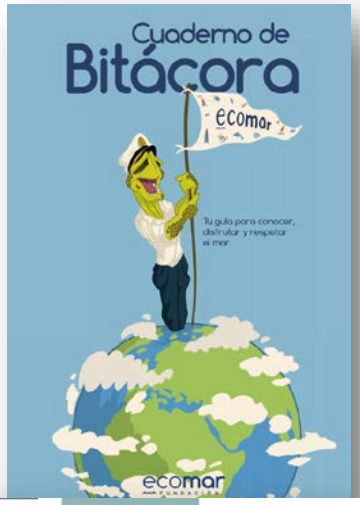

Environmental program for youngsters: 15.000 children/year

Citizen's decalogue against marine litter: 94 entities under the umbrella of the MoEnv.

Foster efficient waste management practices

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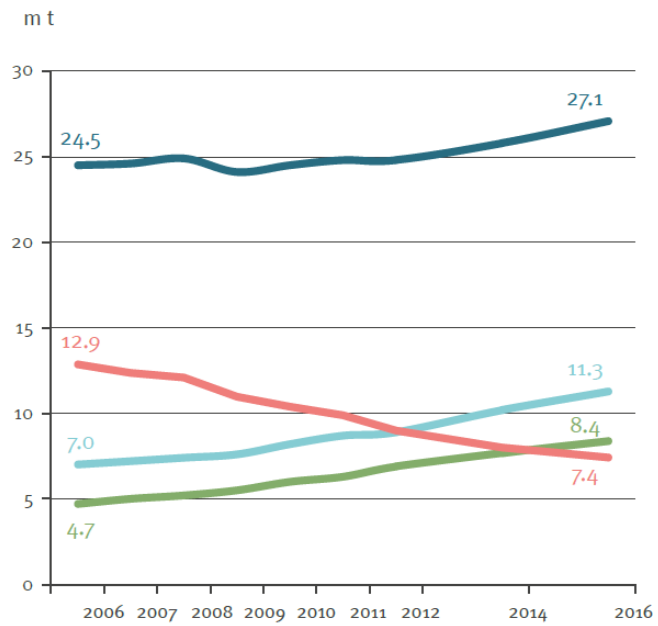
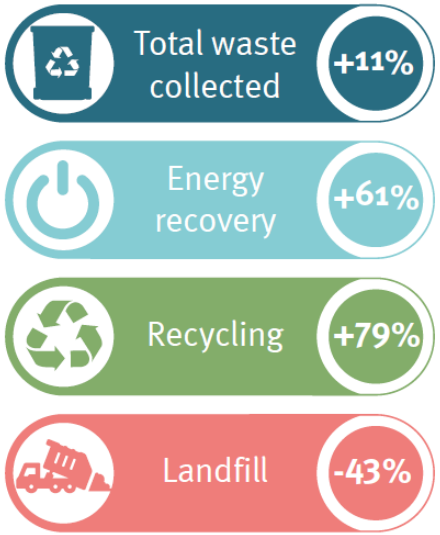
Zero plastics to landfill: a key objective to achieve the recovery of all plastic waste.

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 plastics waste treatment (EU28+NO/CH)



Landfills, do not allow the most efficient use of plastics and are a source of littering.

Specific industry action to prevent pellet losses

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Operation Clean Sweep®: program of the plastics value chain to achieve **Zero pellet lost**

Operation Clean Sweep®

PlasticsEurope's target is to have 100% of its member companies producing pellets sign the OCS pledge by the end of 2018.

PlasticsEurope Voluntary Commitment to increase circularity of plastics

PlasticsEurope welcomes EC's Plastics Strategy and its vision for a circular & resource efficient Europe

The ambitious strategy provides the industry with a challenging opportunity that should be well-used

Shared objectives with the EC:

1. Preventing plastic leakage into the environment
2. Increase of recycling and re-use
3. Innovation and investments
4. Drive global action

PlasticsEurope's contribution to the joint vision of the Strategy

https://www.plasticseurope.org/en/focus-areas/strategy-plastics

Voluntary Commitment Plastics 2030: ambitious targets

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- Prevent the leakage of plastics into the environment:
  - New research on most found plastic items into the environment
  - Operation Clean Sweep® signed by 100% of our members by 2018 Operation Clean Sweep®
- Reach in 2040: 100% reuse, recycling and/or recovery of all plastic packaging
  - In 2030: 60% reuse and recycling of all plastic packaging
- Accelerate innovation in the full life cycle of products
- Increase engagement inside and outside our industry

Conclusions

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- ✓ Plastics are used in many different applications because of their versatility which helps to meet societal needs.
- ✓ They help to achieve energy savings and to reduce food waste, thus they contribute significantly to the reduction of CO_2 emissions.
- ✓ They must be correctly managed at the end of their service life.
- ✓ We are firmly committed to the principle that **plastics do not belong in the world's oceans and should not be littered** - plastics should be responsibly produced, used, reused, recycled and recovered.

ZERO PLASTICS TO THE OCEAN

Plastics are a precious resource that must be contained at all stages of its lifecycle

www.plasticseurope.org

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