

How does EU Ecolabel address plastic-related environmental issues?

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Background & EU Policy

6 facts on Plastics

Global production



Steel: 1,800 Mt
Concrete: 4,100 Mt
Coal: 8,000 Mt

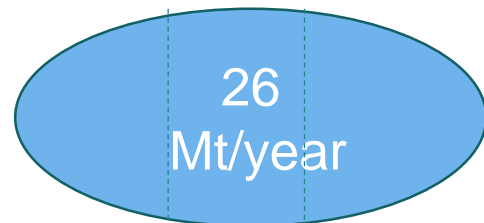
Global CO₂ emissions



Plastics in oceans globally

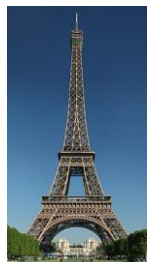


EU Waste generation



30% recycling
31% landfill
39% incineration

2600 x



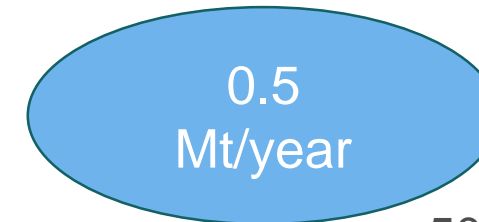
Microplastics release EU



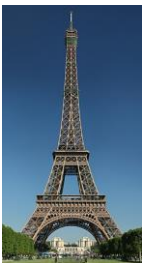
30 x



Plastics in oceans EU

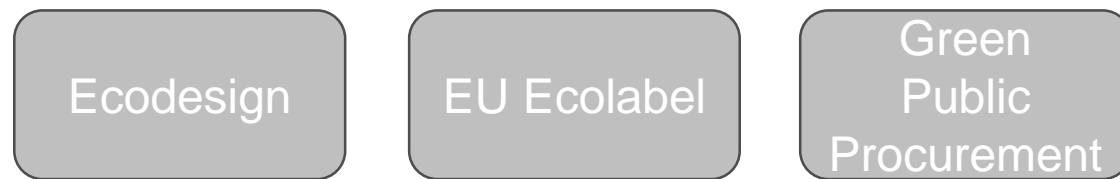


50 x



Plastics & EU Policy

- Plastic is an important and very present material in our economy and daily lives
- Plastics have multiple functions that help tackle a variety challenges
- In terms of environmental impact caused by plastics, there is high improvement potential in production processes, use and end of life management of plastics
- European Product Policy can help tackle those environmental impacts



How does EU Ecolabel address plastic-related environmental issues?

Plastics & EU Policy

2018

Plastics
Strategy

2019

Single Use
Plastics
Directive

2019

EU Green
Deal

2020

Circular
Economy
Action Plan

2020

Chemicals
Strategy

2021

Zero
Pollution
Action Plan

Plastics & EU Policy

2018

Plastics Strategy

Key actions

Improving economics and quality of plastics recycling

Curbing plastic waste and littering

Design for Recyclability

Demand for recycled plastics

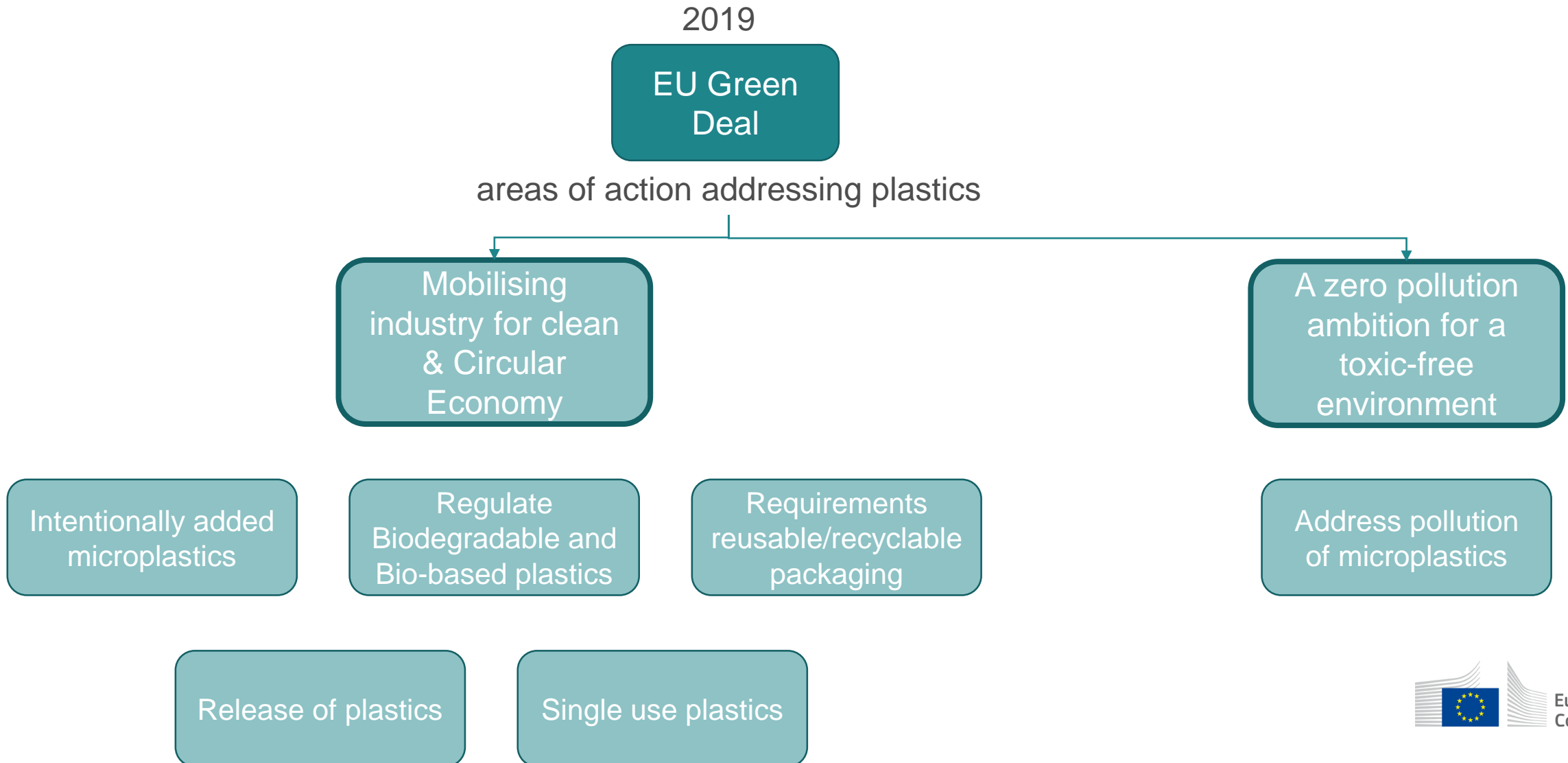
Better separate collection & sorting

Prevent plastic waste

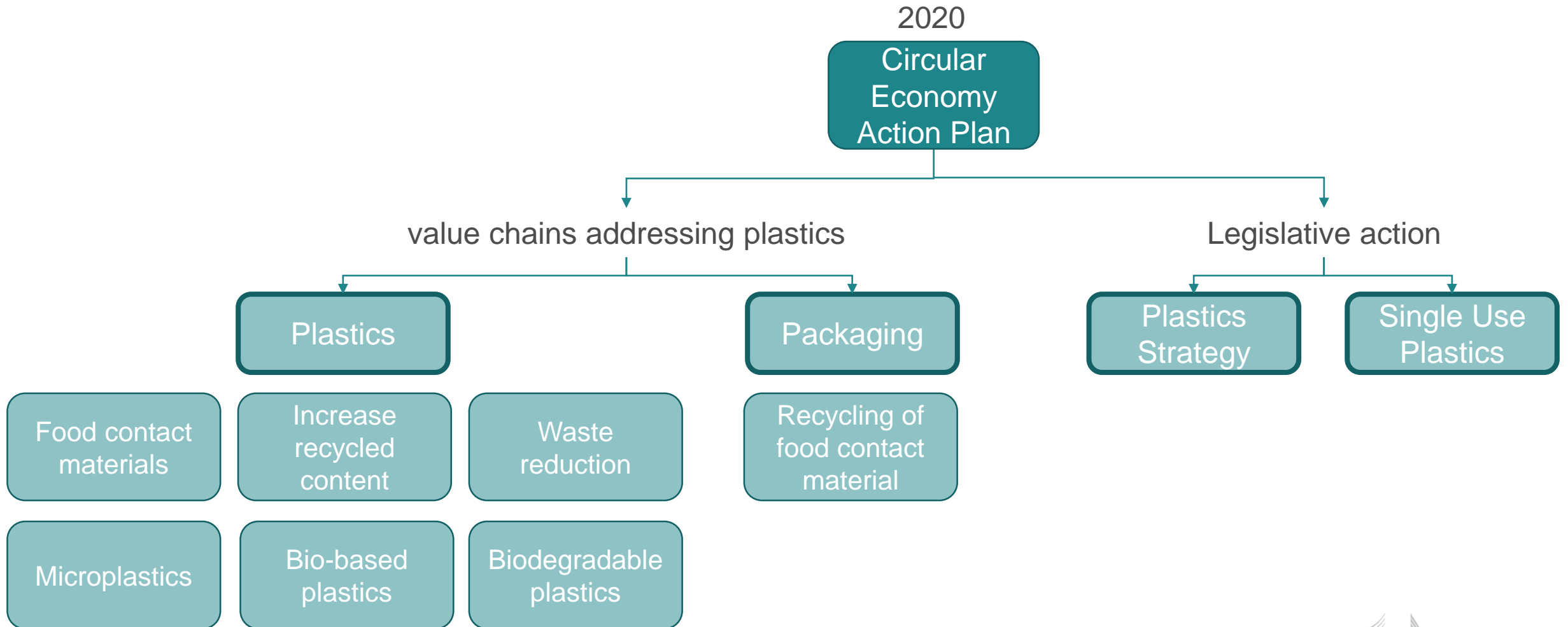
Regulation for biodegradable plastics

Microplastics

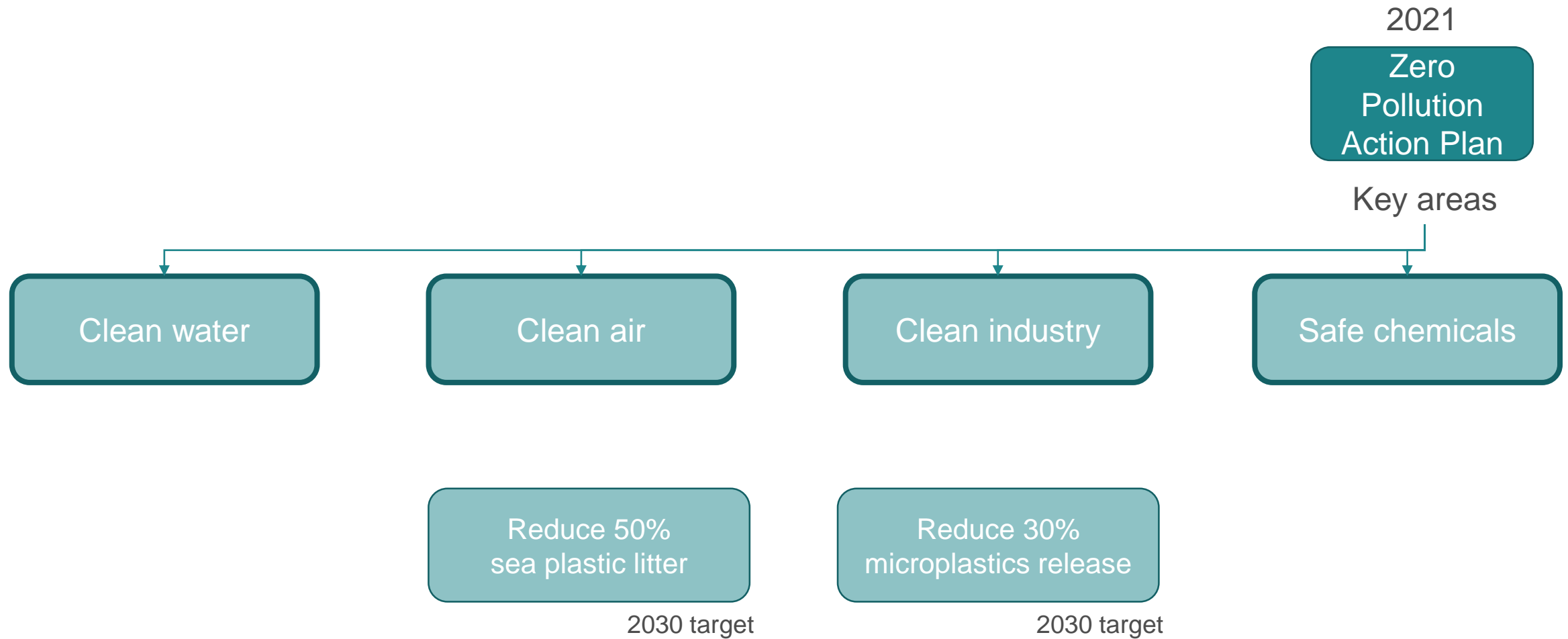
Plastics & EU Policy



Plastics & EU Policy



Plastics & EU Policy



Plastics & EU Policy

Key plastic-related topics in EU Policy

1. Reduce amount of plastic-related **waste**

2. Increase amount of plastic **recycling**

3. Tackle plastic-related **emissions**

4. Reduce **single-use** plastic products

5. Ensure safety of **food contact** plastics

6. Regulate **biodegradable & bio-based** plastics

7. Increase **recycled content** in plastic products

8. Address impact of **microplastics**

9. Reduce presence of harmful **chemicals** in plastics

The EU Ecolabel

The EU Ecolabel



Key facts

- The official European Union voluntary label for environmental excellence guiding consumers and procurers towards sustainable goods and services
- Established in 1992 - Regulation (EC) 66/2010
- The only EU-wide ISO 14024 Type 1 Ecolabel
- Criteria address 10-20% best goods/services on the market in terms of environmental performance
- Guarantee high quality products
- Social aspects addressed where appropriate
- Managed by the European Commission and the Member States.
- It can be awarded to non-EU products placed on the EU market



The EU Ecolabel

Product categories

- 23 product categories (products & services)



Cleaning



Coverings



Displays



Gardening



Mattresses



Furniture



Textiles



Personal care



Paints



Lubricants



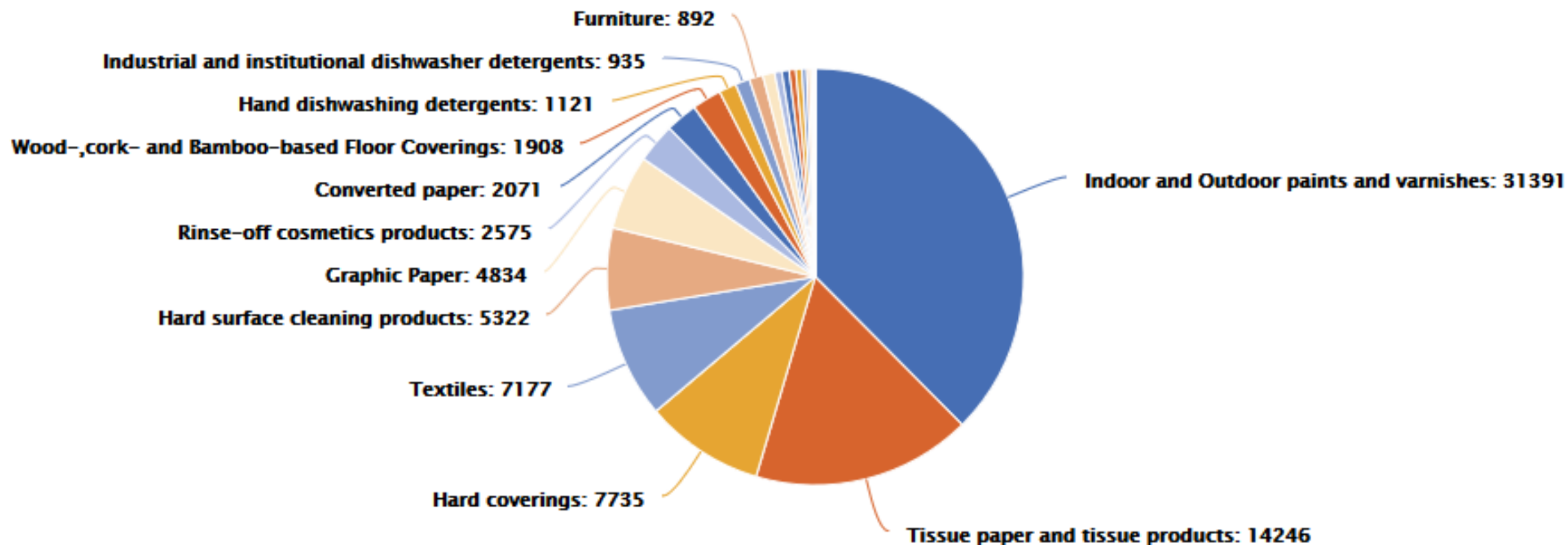
Paper



The EU Ecolabel

Product categories

- 83,590 products awarded with EU Ecolabel



The EU Ecolabel



Useful information

- The EU Ecolabel Product Catalogue:

<http://ec.europa.eu/ecat/>

- Application process and fees:

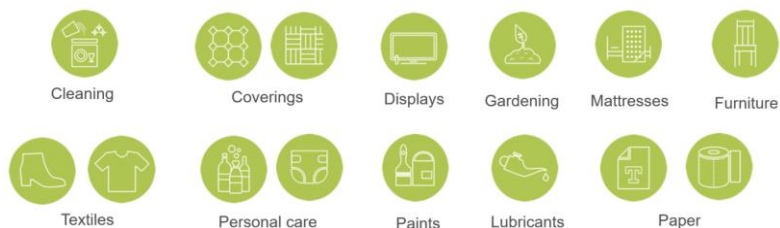
<https://ec.europa.eu/environment/ecolabel/how-to-apply-for-eu-ecolabel.html>

Plastics & the EU Ecolabel

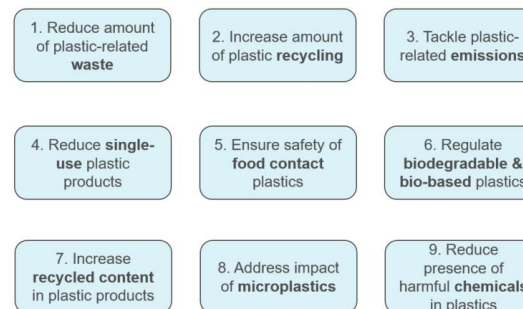
Plastics & The EU Ecolabel

How does EU Ecolabel address plastic-related issues?

- Methodology



Identify plastic-related criteria in
of 23 product groups



Classify plastic-related criteria
according to 9 key topics

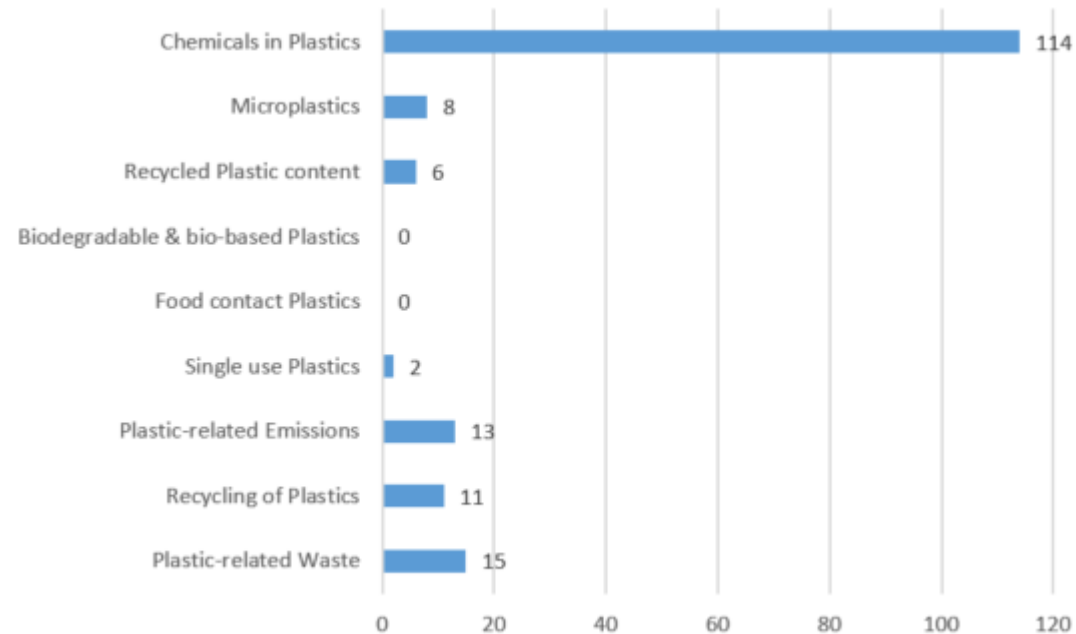


Compare criteria in
different products

Plastics & The EU Ecolabel

Total number of criteria and Key plastic concepts

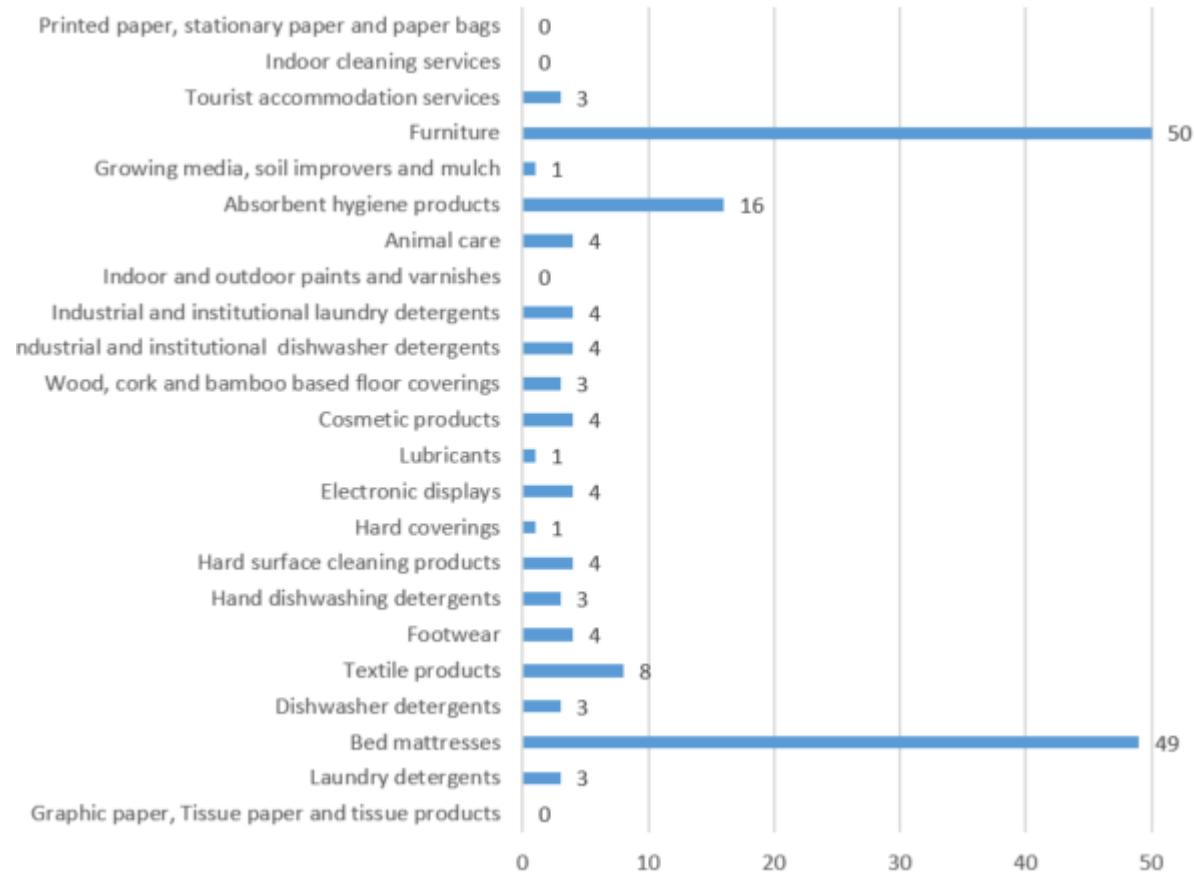
- Total number of plastic-related criteria in 23 product groups: 169



Plastics & The EU Ecolabel

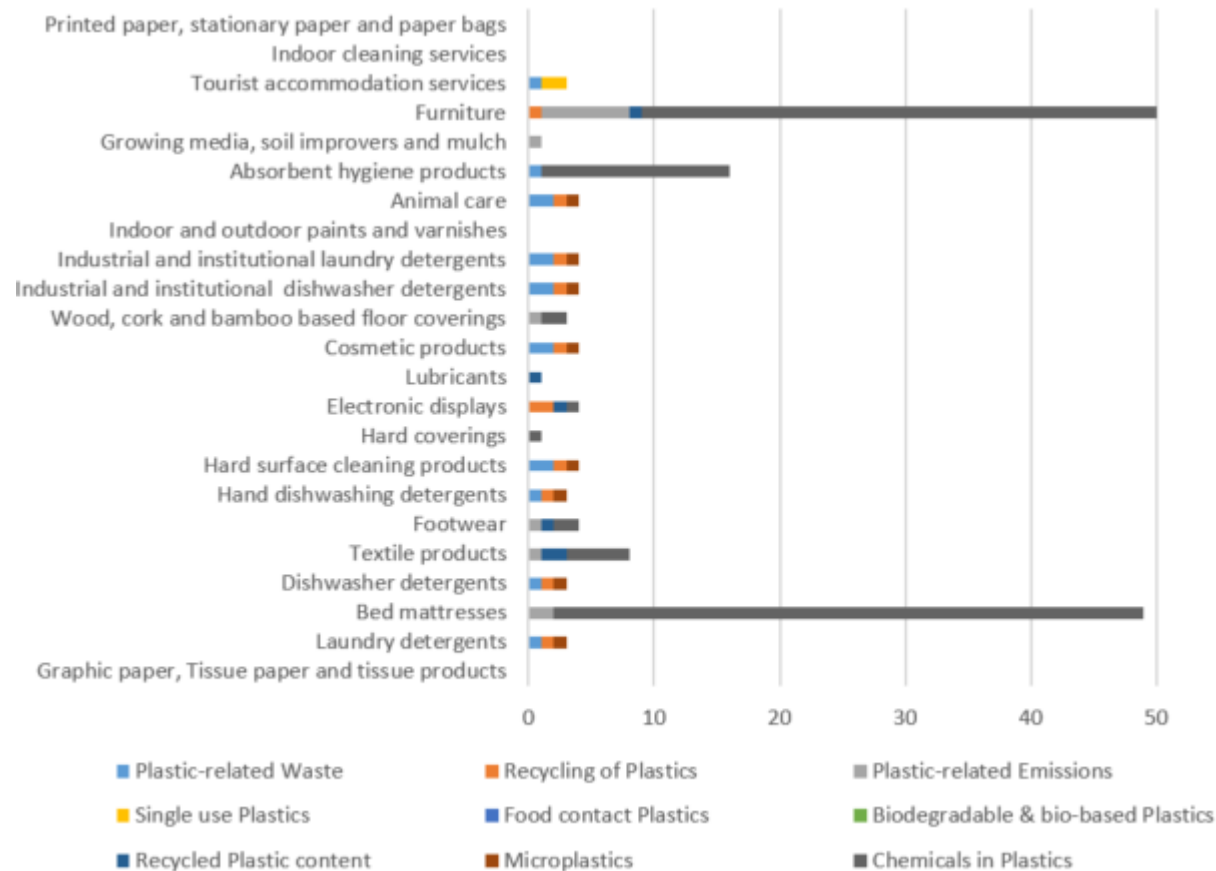
Total number of criteria and Product groups

- Product groups with more plastic-related criteria: Furniture and Bed mattresses



Plastics & The EU Ecolabel

Total number of criteria and Product groups



How does EU Ecolabel
address...

... the reduction of
plastic-related waste?

1. Reduction of Plastic-related waste

Laundry detergents	Dishwasher detergents	Hand dishwashing detergents	Hard surface cleaning products	Industrial and institutional dishwasher detergents	Industrial and institutional laundry detergents	Cosmetics	Animal care	Absorbent hygiene products	Tourist accommodation services
Weight Utility Ratio (WUR)	Weight Utility Ratio (WUR)	Weight Utility Ratio (WUR)	Weight Utility Ratio (WUR)	Weight Utility Ratio (WUR)	Weight Utility Ratio (WUR)	Packaging Impact Ratio (PIR)	Packaging Impact Ratio (PIR)	Manufacturing plants of synthetic polymers should have integrated waste management plan	Adequate containers for waste separation by guests shall be available in the rooms
			Exemption of WUR if Packaging is part of a Take-back system	Exemption of WUR if Packaging is part of a Take-back system	Exemption of WUR if Packaging is part of a Take-back system	Primary packaging in direct contact with contents	Primary packaging in direct contact with contents		

1. Reduction of Plastic-related waste

Weight Utility Ratio



Hand dishwashing detergent

Mass of packaging < 2.4 g/wash



Laundry detergents (gel)

Mass of packaging < 1.4 g/kg laundry

How does EU Ecolabel
address...

... the increase of
plastics recycling?

2. Increase amount of Plastics recycling

Laundry detergents	Dishwasher detergents	Hand dishwashing detergents	Hard surface cleaning products	Industrial and institutional dishwasher detergents	Industrial and institutional laundry detergents	Cosmetics	Animal care	Electronic displays	Furniture
Plastic packaging designed to facilitate recycling	Plastic packaging designed to facilitate recycling	Plastic packaging designed to facilitate recycling	Plastic packaging designed to facilitate recycling	Plastic packaging designed to facilitate recycling	Plastic packaging designed to facilitate recycling	Plastic packaging designed to facilitate recycling	Plastic packaging designed to facilitate recycling	Plastic parts > 25g shall be marked according to Standards	Plastic parts > 100 g shall be marked according to Standards

2. Increase amount of Plastics recycling

Packaging design & Parts marking



Dishwasher detergents

“Plastic packaging shall be designed to facilitate effective recycling by avoiding material contaminants and incompatible materials. The label or sleeve, closure and coatings shall not comprise certain materials”



Laundry detergents (gel)



Electronic displays

“Plastic parts with a mass greater than 25 g shall be marked in accordance with ISO 11469 and ISO 1043”

How does EU Ecolabel
address...

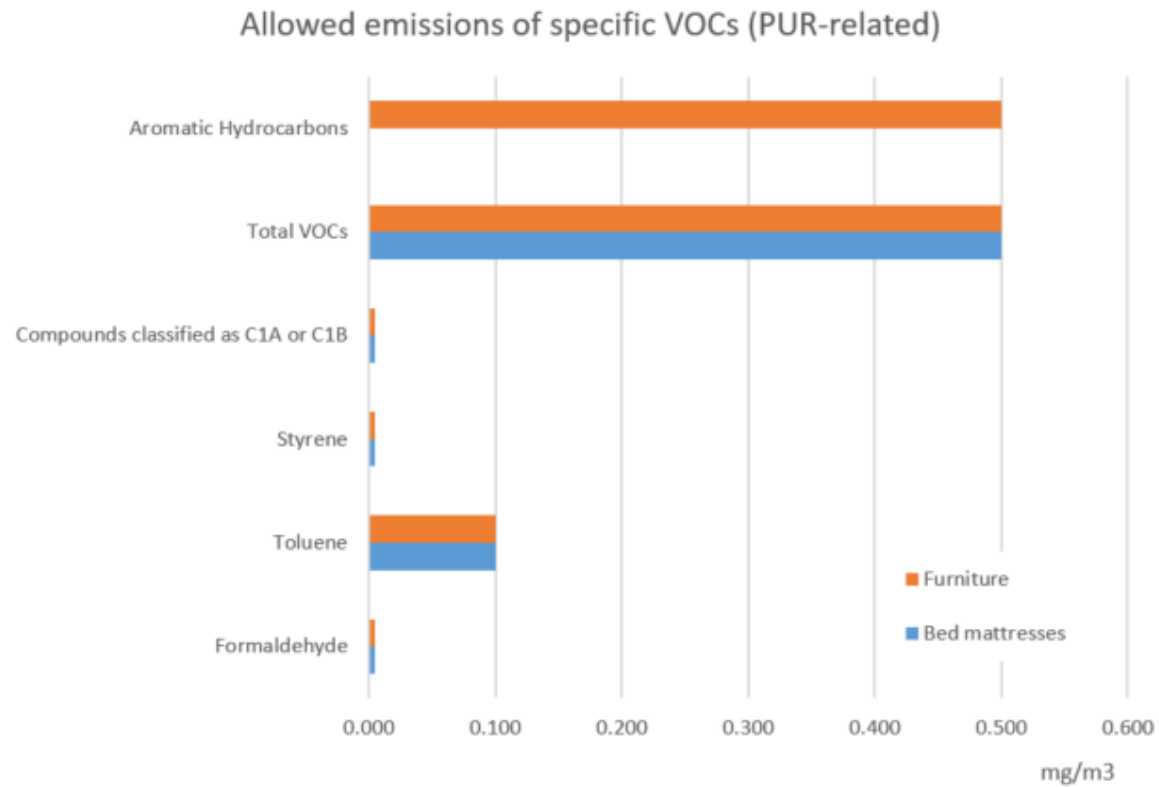
...plastic-related
emissions?

3. Tackle Plastic-related emissions

Bed mattresses	Textile products	Furniture	Wood, cork and bamboo based floor coverings	Footwear	Growing media, soil improvers and mulch
<p>Latex foam. Total VOCs < 0.5 mg/m³</p>	<p>Polyester production during manufacturing. PET chips. Total VOCs < 1.2 g/kg</p>	<p>PUR foam. Formaldehyde < 0.005 mg/m³ Toluene < 0.1 mg/m³ Styrene < 0.005 mg/m³ C1A or C1B < 0.005 mg/m³ Total VOCs < 0.5 mg/m³ Aromatic HC < 0.5 mg/m³</p>	<p>Formaldehyde emissions. < 50 % of threshold allowing to classify as E1, as defined in EN 13986</p>	<p>Processing of synthetic rubber. Chemical Oxygen Demand. COD < 150 mg/l</p>	<p>Content of plastic > 2 mm < 0.5% dry weight</p>
<p>PUR foam. Formaldehyde < 0.005 mg/m³ Toluene < 0.1 mg/m³ Styrene < 0.005 mg/m³ C1A or C1B < 0.005 mg/m³ Total VOCs < 0.5 mg/m³</p>	<p>Polyester production during manufacturing. Filament fibre. Total VOCs < 10.3 g/kg</p>				

3. Tackle Plastic-related emissions

Emissions of Volatile Organic Compounds



How does EU Ecolabel
address...

...single-use plastics?

Reduce single-use Plastics

Tourist Accommodation Services

Food single dose packages



“No single dose packages for non-perishable food stuffs shall be used for food services”

Disposable toiletries



“Disposable toiletries items shall not be available to guests in rooms unless they are requested”

How does EU Ecolabel
address...

...plastic recycled
content in products?

7. Increase in recycled Plastic content

Textile products	Furniture	Electronic displays	Lubricants	Footwear
Nylon fibres. > 20% recycled content	Plastic parts in product > 30% recycled content	Plastic parts in product. > 10% recycled content	Plastic in packaging. > 25% recycled content	Plastic in packaging. > 80% recycled content
PET fibres. Filament fibres. > 20% recycled content Staple fibres. > 50% recycled content				

Plastics & The EU Ecolabel

Minimum threshold of Recycled content Plastic



Furniture

“The average recycled content of plastic parts shall be at least 30%”



Footwear

“Plastic used for the final packaging shall be made of at least 80% recycled material”

How does EU Ecolabel
address...

... the impact of
microplastics?

8. The impact of Microplastics

	Laundry detergents	Dishwasher detergents	Hand dishwashing detergents	Hard surface cleaning products	Industrial and institutional dishwasher detergents	Industrial and institutional laundry detergents	Cosmetics	Animal care
Microplastics	0%	0%	0%	0%	0%	0%	0%	0%



How does EU Ecolabel
address...

... the presence of
harmful chemicals in
products?

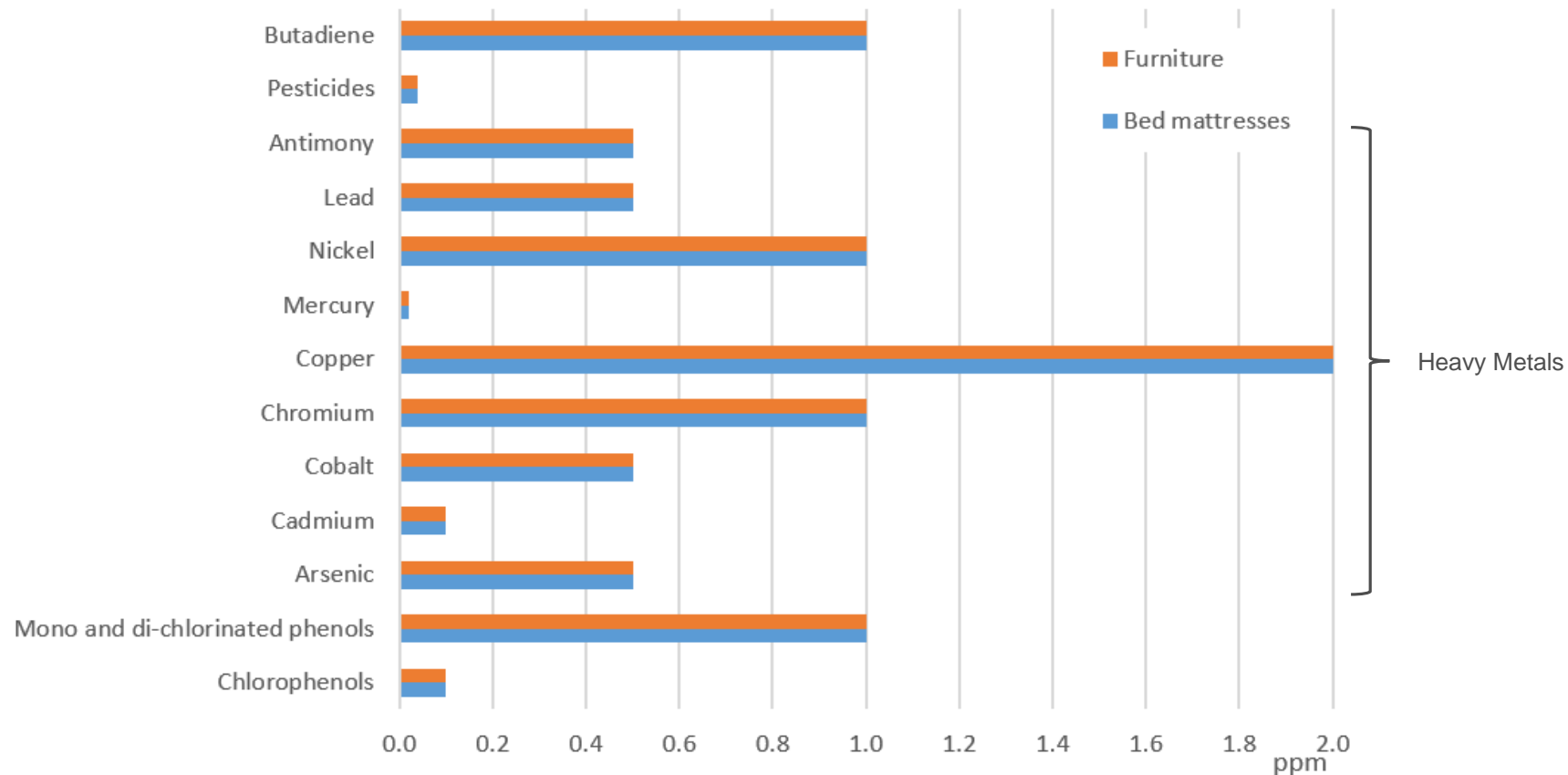
9. The presence of harmful chemicals in Plastics

Bed mattresses	Furniture	Textiles	Hard coverings	Footwear	Electronic displays	Wood, cork and bamboo based floor coverings	Absorbent hygiene products
Latex foam. Limits or restrictions on 13 substances.	Latex. Limits or restrictions on 13 substances.	PET fibres. Sb < 260 ppm	Polyester, Epoxy and Other resins. < 10%	PVC 0%	Plasticisers. < 0.10 % if classified under certain hazards.	Adhesive or resins. Plasticisers. < 0.10%	Plastic components. Limits or restrictions in 11 substances.
PUR foam. Limits or restrictions on 32 substances.	PUR foam. Limits or restrictions on 20 substances.	PUR components. Organotin compounds. 0%		Plasticisers. < 0.10 % if classified under certain hazards.			Plastic components. Limits or restrictions based on 4 hazards classification.
Halogenated organic compounds. 0% as blowing agents	Plastic additives. Limits or restrictions on 5 substances	PET coatings. Sb < 260 ppm					
Plasticizers. 0%	Plasticisers. 0 % if classified under certain hazards.	Coatings, laminates and membranes. Phthalates in polymers < 0.10%					
		Plastic accessories. Phthalates in polymers. 0%					

9. The presence of harmful chemicals in Plastics

Chemicals in Plastics: latex-related

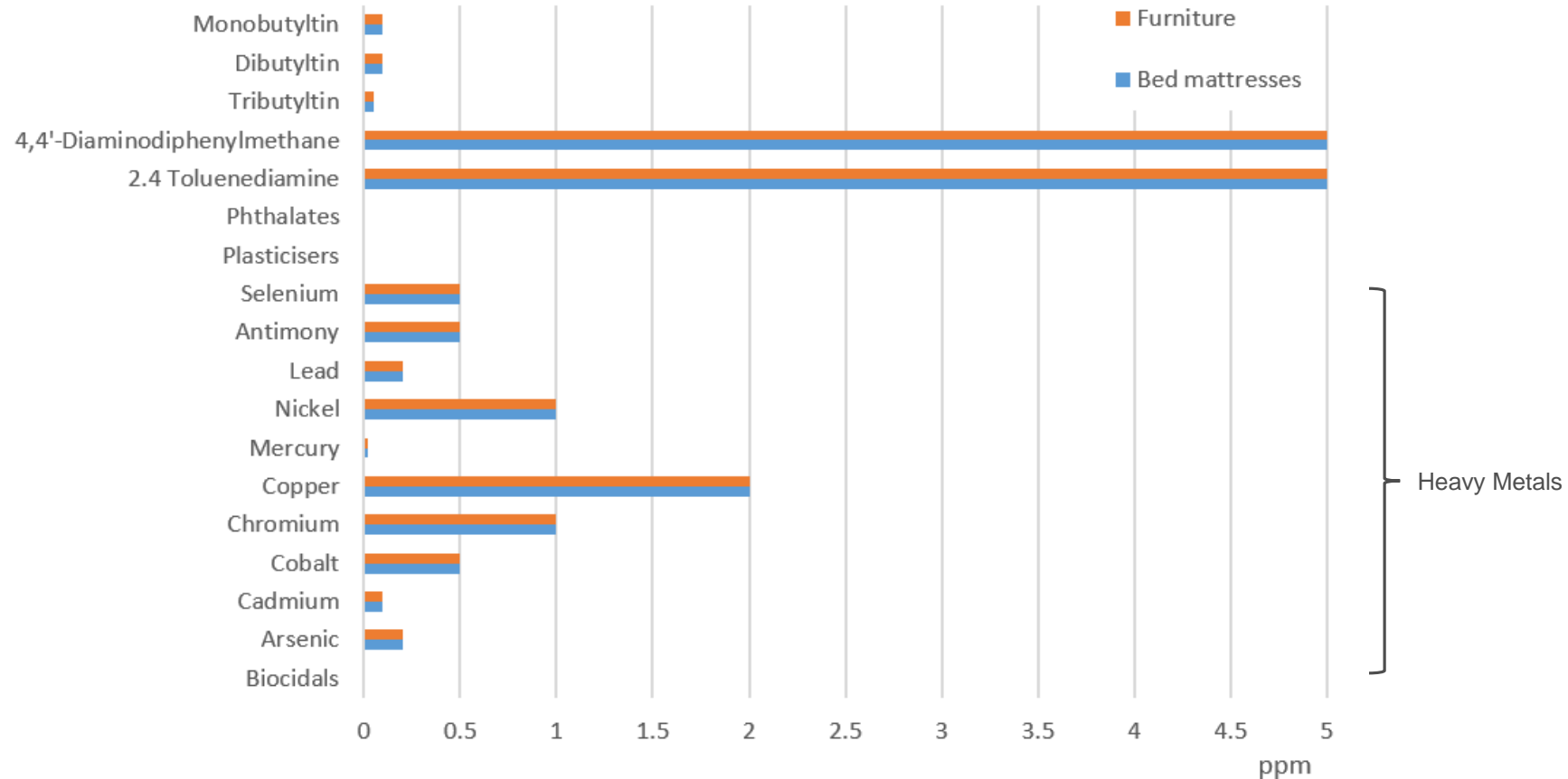
Allowed concentrations of specific substances (Latex-related)



9. The presence of harmful chemicals in Plastics

Chemicals in Plastics: PUR-related

Allowed concentrations of specific substances (PUR related)



Summary and conclusions

The EU Ecolabel...

...reduces plastic related waste

- Optimizing plastics
- Encouraging the adoption waste management systems

...increases the amount of plastic recycling

- Encouraging the use of easy-to-recycle materials in packaging
- Promoting identification of materials at end of life with parts marking

The EU Ecolabel...

...reduces plastic related emissions

- Restricting the release of VOCs and other substances

...reduces the amount of single use plastics

- Banning the use of single use food containers and toiletries

The EU Ecolabel...

...increases the amount of recycled plastic

- Encouraging the use of recycled plastic in products and packaging

...addresses the impact of microplastics

- Banning the use of microplastics in products

...reduces the presence of chemicals in plastics

- Restricting the use of Heavy Metals and other substances
- Restricting the use of biocidals, plasticisers, phthalates

Thank you



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