



EU initiative on unintentionally released microplastics


DG Environment
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The issue

Microplastics = “**small solid particles composed of synthetic polymers that are non-degradable and less than 5mm in size**”

(European Chemicals Agency)

- Microplastics are:
 - ✓ ubiquitous, persistent and accumulate
 - ✓ transported by wind, snow and rain, and traveling across entire continents
 - ✓ found in soil, air and waters, plants, animals, human diet and drinking water, in the Antarctic and on the Everest
- They can transport and absorb other organic contaminants.
- Global plastic waste flow into the ocean is estimated to be 11 million tons in 2016 (of which 11% of the mass are microplastics) and is forecasted to increase up to 29 million tons per year in 2040
- In the EU (supporting study): 825 067 – 1 836 618 tons/year in the EU



The political mandate

- [2018 EU Plastics Strategy](#) acknowledges the risks posed by microplastics and advocates innovative solutions targeting the different sources.
- [New Circular Economy Action Plan](#), the Commission commits to addressing the presence of microplastics in the environment by:
 - restricting **intentionally added microplastics** in products (e.g. cosmetics, detergents, fertilizers, artificial infill) (see the REACH restriction).
 - addressing **unintentional releases of microplastics** by developing labelling, standardisation, certification and regulatory measures; harmonising methods for measuring unintentionally releases of microplastics, closing the gaps on scientific knowledge related to the risks and occurrence of microplastics in the environment, drinking water and foods.
- The **EU's zero pollution [action plan](#)** proposes that, by 2030, the EU should reduce by 50% plastic litter at sea and by 30% microplastics released into the environment.

Political Mandate

- Letter of intent of the European Commission to the European Parliament for 2022:
 - “Legislative proposal to reduce the release of microplastics in the environment and to restrict the addition of microplastics to product”.

Filling the gap to tackle plastics pollution

Macroplastics

- waste legislation
- SUP Directive



Intentionally added microplastics to products

- Eg cosmetics, detergents, fertilizers coating
- Towards a ban through REACH restriction dossier: by 2023

Possible reduction in microplastics emissions of approx. 500 thousand tonnes over 20 years

Unintentional releases of microplastics

- Resulting from the use of a product, for instance abrasion or fragmentation.

Sources of unintentional release of microplastics

- Originally determined as most important sources:
 - **Pellets:** small granules that are intermediate raw material to manufacture plastic items
 - **Tyres**
 - **Textiles - clothes**
- Three additional sources identified in the 'draft IA study' and by stakeholders:
 - **Paints:** marine paints, road markings, architectural paints, ...
 - **Geotextiles:** used in construction e.g. for building roads, coastal & flooding protection
 - **Soluble films in detergent capsules** for laundry and dishwashers

6 sources releases in the environment in the EU

(updated figures from 'draft IA study')

| Source | Quantity (tons/year) |
|---|-------------------------|
| Paints | 482 000 |
| Tyres | 450 000 |
| Pellets | 134,260 – 198,190 |
| Textiles | 1,649 – 61,078 |
| Geotextiles | 6,000-19,750 |
| Detergent capsules | 18 009 |
| <i>For reference, in the marine environment (IA SUPD, 2018)</i> | |
| <i>Microplastics</i> | <i>75 000 – 300 000</i> |

Total emissions from the 6 sources: 750 909 – 1 702 518 (90% of the total sources)

Pew & Systemiq, Breaking the Plastic Wave (2020)

Globally terrestrial and ocean leakage, and still rising:

All plastics:

42 million ton, 2016

Microplastics:

4,4 million ton, 2016

Four sources of microplastics considered: tyre abrasion, production pellets, textiles, personal care products

Links with other regulatory initiatives

- **Upcoming Euro 7:** Review clause to include tyre abrasion limits. Ongoing study on tyre abrasion test method
- **Tyre Labelling Regulation:** delegated acts possible regarding a label on mileage and abrasion
- Review of Regulation on **ecodesign for washing machines and washer-dryers (2025)** to consider requirements for reducing micro-plastics, such as filters
- **Textile Strategy, Textile labelling regulation**
- **Revision of the Waste Framework Directive**
- **Revision Urban Waste Water Treatment Directive**
- **Ecodesign for Sustainable Products Regulation**
- **Revision of Detergent Regulation**
- **Revision of Construction Products Regulation**

International Context

- 5th United Nations Environment Assembly adopted (March 2021):
“End Plastic Pollution: towards an international legally binding instrument”
 - Preamble highlights that “*plastic pollution includes microplastics*”.
- => The intergovernmental negotiating committee (INC) will have to consider how to address microplastics in a forthcoming global agreement.

Open Public Consultation – general results

- 410 replies : EU Citizens (65%), Academic/Research Institutions (18%), Businesses (12%).
- 47% of EU Citizens agree with the hazardous nature of microplastic emissions, 14% EU Citizens somewhat agree.
- Overwhelming agreement among all stakeholders to undertake action at all levels of authority.
- All respondents agree with legislation and almost all agree with voluntary measures (73%) and international action (96%)
- General agreement on buying a variety of products if they're sustainable but more expensive.

Impact assessment on possible measures

- Evaluate actions along the value chain: source – use – end-of-life
- Several DGs involved to coordinate with existing and new initiatives
- 10 stakeholder workshops and one MS workshop took place
- An extra workshop to take place on 12th December to discuss potential measures for pellets

=> Possible legislative proposal in 2023

refuse



share



reuse



return
&
collect



sort



recycle



Learn more about the plastics and the circular economy:

[Circular economy action plan \(europa.eu\)](https://european-council.europa.eu/media/en/press-communications/pages/2018-06-14-Circular-economy-action-plan) & [Plastics \(europa.eu\)](https://ec.europa.eu/euro-observatory/en/observatory/plastics)



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