

CALL FOR EVIDENCE FOR AN IMPACT ASSESSMENT

This document aims to inform the public and stakeholders on the Commission's future legislative work so they can provide feedback on the Commission's understanding of the problem and possible solutions, and give us any relevant information that they may have, including on possible impacts of the different options.

TITLE OF THE INITIATIVE	Measures aiming to reduce the presence in the environment of unintentionally released microplastics from tyres, textiles and plastic pellets
LEAD DG (RESPONSIBLE UNIT)	DG ENV, UNIT B 1 SUSTAINABLE PRODUCTION, PRODUCTS & CONSUMPTION DG GROW, UNIT G 1 TOURISM, TEXTILES DG GROW, UNIT I 2 MOBILITY DG GROW, UNIT I 3 GREEN AND CIRCULAR ECONOMY
LIKELY TYPE OF INITIATIVE	Legislative initiative
INDICATIVE TIMETABLE	adoption Q4 2022
ADDITIONAL INFORMATION	Microplastics (europa.eu)

This document is for information purposes only. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described, including its timing, are subject to change.

A. Political context, problem definition and subsidiarity check

Political context

The [European Green Deal](#) (EGD), the new [Circular Economy Action Plan](#) (CEAP) and the [EU Plastics Strategy](#) announce measures to tackle pollution from microplastics (small plastic pieces of less than 5 mm) that are intentionally added to products (e.g. cosmetics, detergents, paints) and those that are unintentionally released into the environment (from e.g. tyres and synthetic textiles). The [EU Action Plan 'Towards Zero Pollution for Air, Water and Soil'](#) states that by 2030 the EU should reduce plastic litter at sea by 50% and microplastics by 30%. The [EU Biodiversity Strategy for 2030](#) singles out pollution as one of the five main direct drivers of biodiversity loss. For the [Commission's Group of Chief Scientific Advisors](#), "although the currently-available evidence suggests that microplastic pollution at present does not pose widespread risk to humans or the environment, there are significant grounds for concern and for precautionary measures to be taken".

The problem is significant: for example, between 200 000 and 500 000 tonnes of synthetic fibres from textiles are released into the marine environment each year globally¹. Aside closing the knowledge gaps related to the risk and occurrence of microplastics in the environment, drinking water and foods, the announced measures intend to :

- Restrict intentionally added microplastics and tackle pellets taking into account the [ECHA² opinion](#);
- Develop labelling, standardisation, certification and regulatory measures on unintentional release of microplastics, including to increase the capture of microplastics at all relevant stages of products' lifecycle;
- Further develop and harmonise methods to measure unintentionally released microplastics, especially from tyres and textiles, and deliver harmonised data on microplastics concentrations in seawater.

This initiative addresses unintentionally released microplastics. It will be developed in coordination with other new and ongoing initiatives, notably: 1) the review of the [Industrial Emissions](#), [Urban Waste Water Treatment](#) and [Marine Strategy Framework](#) Directives, and revision of [lists of pollutants affecting surface and ground waters](#); 2) the evaluation of the [Sewage Sludge](#) Directive as to the presence of microplastics in sludge and its subsequent use on agriculture fields; 3) the development of the [EU strategy for sustainable textiles](#) design and manufacturing; 4) the development of the [Sustainable Product Initiative](#). Intentionally added microplastics are addressed in a separate initiative (as a Commission Regulation amending the REACH Regulation, based on an opinion by ECHA) proposing restrictions on intentionally added microplastics. Microplastics resulting from the fragmentation of macroplastics are addressed by existing EU policy and legislation³ and are outside of the scope of this initiative.

Problem the initiative aims to tackle

¹ Sherrington, 2016; Ellen MacArthur Foundation, 2017.

² [European Chemicals Agency](#)

³ In particular, the EU Plastics Strategy (COM(2018)28); Directive 2019/904 on the reduction of the impact of certain plastic products on the environment; Directive 94/62/EC on packaging and packaging waste.

Microplastics are widespread in the environment and a cause of growing concerns. Their small size facilitates ingestion by organisms at the base of different food chains. They can bio-accumulate through the food chains and can also absorb and transport organic contaminants e.g. persistent organic pollutants. Microplastics can contain a complex mixture of chemicals, which may subsequently be released in the environment and constitute new routes of exposure for organisms. Their ubiquity in oceans, soils and air is amplifying concerns about their negative effects on vulnerable eco-systems (e.g. coral reefs, deep seas, polar regions) and biodiversity (all marine life from plankton to large marine mammals have been found affected by microplastic pollution). Potential risks to human health through ingestion or inhalation are being explored⁴. The growing evidence on microplastics presence in seafood, salt, honey, fruits, and drinking water could undermine consumer confidence with devastating economic consequences. The economic impact on activities such as fishing and tourism is vast.

This initiative aims to correct the following market and regulatory failures, and highlight relevant knowledge gaps:

- 1. Absence of market incentives for operators to take measures to reduce unintentional microplastics releases in the environment.** This is also due to the complexities of the releases (i.e. several factors influencing such releases for each source) and of the value chains (several actors playing a certain role in the releases). Voluntary approaches are limited and have achieved little to no reduction so far. On textiles, the Cross Industry Agreement and the European Committee for Standardization are working on test methods to determine the release, identification and evaluation of microplastics from textiles during manufacture and use. The agreement does not foresee any action to reduce releases. On tyres, the European tyre industry created a Task Force on Tyre Abrasion Test Feasibility to develop a standard on tyre abrasion. On pellets, to date, [Operation Clean Sweep](#) – a guidance developed by the European plastic industry since 2015 – remains a voluntary instrument involving mainly producers and lacking incentives for effective application and third-party assessment. Future reduction measures should apply to the entire supply chain.
- 2. Absence of EU comprehensive approach to unintentionally released microplastics,** even if specific legislation with partial objectives in relation to microplastics exists (Marine Strategy Framework Directive, Fertilising Products Regulation, Drinking Water Directive). This situation may lead to incomplete or incoherent policy against plastic pollution.
- 3. Knowledge gaps.** Risks and occurrence of microplastics in the environment, drinking water and foods still need to be explored. Methods for sampling, processing, data analysis and reporting are not sufficiently harmonised. Most recently, under the recast Drinking Water Directive, the Commission was tasked with developing a harmonised method to measure microplastics in drinking water in the next 3 years⁵. Under Horizon 2020, a coordination and support action on harmonising procedures for plastics pollution monitoring and assessment was launched⁶.
- 4. Incomplete information reducing ability to choose sustainable products and handle them sustainably.** Consumers do not have access to complete and trustworthy information allowing purchasing decisions consistent with the importance they give to greener products, such as textiles and tyres with lower microplastic emissions. Actors in the value chain also lack information about who handles plastic products such as pellets responsibly.
- 5. Market fragmentation:** Some Member States and regional entities including Regional Sea Conventions⁷ are considering or implementing measures to address microplastic pollution. Microfibre filters for new washing machines will be obligatory in France by 2025, even though there are those who warn of the potential risk of consumers washing such filters and releasing microplastics to wastewater. Each pellet operator in France will have to implement procedures to prevent pellet losses in the environment by 2022, and to adopt effective equipment by 2023. The position of companies applying reduction measures is weakened by competition from companies that do not apply such measures. Companies trading across borders face additional costs to meet different requirements on different markets, where they exist.

It is likely that without EU action, the problem would worsen. With plastic production and consumption expected to increase in the next years, consequences for the environment would multiply accordingly, and risks to human health would increase due to microplastic accumulation. The economic impact would also grow and the position of 'responsible' companies would be weakened further. The environmental, health and economic grounds for action are therefore clear.

Basis for EU action

⁴ According to a study published in the journal Environmental Science and Technology, humans may be consuming anywhere from 39,000 to 52,000 microplastic particles a year. With added estimates of how much microplastic might be inhaled, that number is more than 74,000. Environ. Sci. Technol. 2019, 53, 12, 7068–7074

⁵ Article 13, paragraphe 6 of Directive (EU) 2020/2184.

⁶ [EUROpean quality Controlled Harmonization Assuring Reproducible Monitoring and assessment of plastic pollution | EUROqCHARM Project | Fact Sheet | H2020 | CORDIS | European Commission \(europa.eu\)](#)

⁷ [Agenda Item 1 \(ospar.org\)](#)

Legal basis
Articles 192 (environment) and 114 (functioning of the internal market) of the Treaty on the Functioning of the EU provide the legal basis for EU action, and will be chosen depending on the content of the possible measure(s).
Practical need for EU action
Environmental pollution from microplastics is transboundary so that unintentional emissions from one Member State can contribute to pollution in another. Pellet losses (chronic leaks and accidental losses) or unintentional emissions from synthetic textiles and tyres during manufacture or use can cause cross-border environmental pollution via air, soil or water pathways. In the absence of EU action, there is a risk of a proliferation of measures, which could harm the internal market. Harmonised EU measures could bring economies of scale, reduced regulatory/administrative burden and a level playing field amongst responsible operators.
B. Objectives and policy options
<p>Achieving a climate neutral and circular economy requires the mobilisation of our industry. The plastics industry has started the shift to a more sustainable model but remains too 'linear' i.e. too many single-use products, disposed of as waste and too many emissions released through the full product life cycle. Reduction at source remains a key challenge. The initiative aims to reduce unintentional microplastics releases into the environment, lowering environmental pollution and potential risks to human health. It addresses the largest microplastics contributors in the current European context (nearly 2/3 of total emissions⁸) i.e. 1) tyre abrasion, 2) pre-production plastic pellets during their entire life-cycle and 3) synthetic textiles during their entire life cycle. Where reduction at source is not possible or sufficient, measures at later stages of the life cycle may be explored, possibly in combination with EPR⁹ schemes. Measures for consideration could include:</p> <p>For tyre abrasion:</p> <ul style="list-style-type: none"> • Ecodesign requirements including new materials and the development of a standard on tyre abrasion • Exploring the potential of retreated tyres • Exploring links with vehicle type, vehicle maintenance, road characteristics and driver behaviour including the influence of autonomous driving systems on microplastics emissions • Increasing capture of microplastics including via green infrastructure <p>For plastic pellet losses:</p> <ul style="list-style-type: none"> • Further developing existing voluntary approaches pioneered by industry via Operation Clean Sweep • Introducing mandatory staff training and labelling of pellet containers and tanks as harmful for the environment • Introducing a regulatory system of liability and compensation obligations to remediate environmental damage caused by pellet losses • Introducing a regulatory system requiring the entire supply chain to adhere to best practice measures to prevent pellet losses, including third-party, independent auditing and certification <p>For synthetic textiles:</p> <ul style="list-style-type: none"> • Ecodesign requirements including using new materials such as biodegradable yarns • Improving manufacturing processes including pre-washing of clothes, before they are placed on the market • Establishing rules to make producers responsible for intervening before products can become waste, such as take back schemes • Facilitating recycled content or remanufacturing • Applying filters or other technical solutions to washing machines, washer-dryers and tumble-dryers • Applying technologies to avoid mixing microplastics with sludge in waste water treatment plants • Setting minimum sustainability and/or information requirements, and labelling products according to their level of microplastics emission • Developing voluntary approaches by industry <p>These options, or combinations of options, will be assessed against a 'business as usual' baseline scenario to identify the best approach. In doing so, particular attention will be given to operational feasibility, minimizing related administrative burdens and facilitating implementation and enforcement. Particular attention will be paid also to coherence with existing and new EU policy instruments or initiatives as described above. Requirements linked to environmental aspects along the value chain will also be carefully assessed, including in the context of WTO¹⁰ rules. The EU will continue to foster international cooperation with a view to strengthen the joint action needed.</p>
C. Likely impacts

⁸ Annual estimated emissions (tonnes): 33.834 for textiles, 503.586 for tyres, and 92.259 for pellets (EUNOMIA modelling, 2018).

⁹ Extended Producer Responsibility.

¹⁰ World Trade Organization

Likely economic impacts

EU measures would promote a more efficient single market for products with lower microplastics emissions across the EU while encouraging EU operators to innovate and exploit first mover advantages. Measures to reduce negative effects on the environment (e.g. changes to material, design or manufacturing processes for textiles and tyres, changes to how pellets are handled for the pellet industry) may result in extra short-term costs for producers and/or retailers that can be expected to fall over time due to learning and economies of scale. Current costs borne by economic operators due to the negative effects of microplastic pollution (e.g. mitigating measures, clean-up activities, legal actions, EPR) can also be expected to fall over time due to more durable products on the market and better use of resources. Better information along value chains is expected to facilitate enforcement by public authorities of new and existing product related legislation, helping ensure a level-playing field for sustainable manufactured and imported products.

Some policy options may lead to new administrative costs for economic operators involved in placing products on the EU market. However, measures at the EU level may actually lead to simplifications for economic operators active on several national markets. Some measures may also include new administrative costs for public authorities involved in applying any new legislation. Such implementation costs will also depend on the availability of IT tools, secondary data, helpdesk and training.

Likely social impacts

Better information along value chains may (further) boost demand for sustainable products, with associated benefits in growth and jobs globally. Costs borne by communities due to the negative effects of microplastic pollution (as described above) should decrease as more durable products enter the market.

Likely environmental impacts

The intervention will aim to decrease the occurrence, concentration and negative environmental effects of microplastics pollution. As such, measures will contribute greatly to the overall goals of the European Green Deal while also contributing to the achievement of the Sustainable Development Goals, especially SDG 12 on responsible consumption and production, 13 on climate action, 14 on life below water, and 15 on life on land.

Fundamental Rights

Depending on the options chosen, the initiative could contribute to achieving a number of objectives in the Charter of Fundamental Rights of the EU e.g. fair and just working conditions, environmental and consumer protection.

D. Better regulation instruments

Impact assessment

An impact assessment (IA) will investigate options and associated impacts against a 'business as usual' baseline. Particular attention will be given to operational feasibility, legislative simplicity and administrative costs, to facilitating implementation and enforcement, as well as to coherence with existing and new EU policy instruments or initiatives. Consideration will be given to whether what is required is a new legislative initiative or a different instrument. It will also identify any potential impact that such policy instruments may have on third countries.

Consultation strategy

Several tools will be used to consult stakeholders as part of the Commission's information gathering activities:

- A 12-week **online public consultation** available in all official languages of the EU. The questionnaire will comprise general questions intended for all stakeholders and questions seeking more specialised information from experts including plastics producers/processors, trade associations, brand owners/retailers, consumers, recyclers, research and academia, non-governmental organisations, public authorities, certification and standardization bodies.
- **Workshops:** All interested stakeholders will be able to participate in dedicated online workshops. A workshop will be organised for the competent authorities in the Member States.
- **Interviews:** Relevant stakeholders will be interviewed to verify information collected from different sources.

Why we are consulting?

The consultation will be accessible to all stakeholders to allow everyone to express views about a possible policy to tackle microplastic pollution. In addition, the consultation will be used to collect additional information about sources, monitoring, known initiatives to limit emissions and potential measures to abate emissions.

Target audience

The Commission intends to consult the public and stakeholders with more technical knowledge. These include – in addition to the relevant plastic value chains, national competent authorities in the Member States, the Regional Sea Conventions around Europe, civil society and consumer organisations, certification bodies and monitoring organisations, academia, research and think tanks and the wider EU public.

