

Measures to reduce microplastics impact on the environment

ECOS response to call for evidence

Brussels, January 2021

ECOS welcomes the initiative from the Commission to reduce the presence in the environment of unintentionally released microplastics. Microplastics release and accumulation are ramping up at a dramatic scale, and the EU should take significant steps to address and stop this stream of plastic pollution with mandatory regulatory actions.

Rightly so, the document recognises that *“the environmental, health and economic grounds for action are (...) clear”* and *“it is likely that without EU action, the problem would worsen”*. We agree that *“voluntary approaches are limited and have achieved little to no reduction so far”* and have proven to be largely insufficient to address the issue.

Decades of scientific research on the negative impacts of microplastics are more than enough to justify **ambitious and legally binding policy measures at EU level to fight microplastics pollution at source**. Microplastics are pervasive, chronic, persistent, transboundary pollutants with proven harmful impacts on environment, biodiversity, and public health. The EU needs to give full effect to the **prevention and precautionary principles** and take as a **legal basis the principles of the environmental policy** (articles 191 to 193 of the Treaty of the Functioning of the European Union).

Scope of the initiative

The initiative proposed by the EC should be more ambitious to boost a reduction at source. **Prevention and upstream/reduction at source** are the fundamental strategies to stop microplastics pollution and should be further reinforced, rather than focus on damage control measures.

An integrated regulatory approach - including changes in product design, production processes, and/or practices at supply chain level - is needed with complementary measures across all responsible sectors.

This is why we recommend an **EU wide approach tackling all the different sources of microplastics**. Overcoming plastic pollution means tackling both macro- and microplastic with mandatory measures across all sources. Other primary and secondary microplastics to be addressed are: microplastic pollution from the breakdown of plastic used in agriculture; geotextiles, paints (including marine paints) and road markings; medical (covid) waste and face masks; artificial turf, microplastic-contaminated wastewater, including its use on agricultural fields, etc.

Moreover, ECOS recommends that the initiative provides:

- A **harmonized definition of microplastics** with the REACH restriction, where aspects like no lower limit, the inclusion of (bio)degradable polymers and of water-soluble and liquid polymers should be included.
- **EU source specific emission reduction targets with clear mandatory timeline.**
- Measures to address the **toxicity of microplastics' additives**, also increasing transparency and traceability on products, materials, and ingredients.
- **The environmental costs of microplastic pollution needs to be accounted for and included in the price.** More stringent measures such as introducing **compulsory environmental risk assessment for all products containing plastics** requiring mitigating actions obliging producers to contribute proportionally to tackle the microplastics issue (including via extended producer responsibility).
- **Evaluate and consider the environmental cost of microplastics in all compartments.** The roadmap needs to recognize and consider negative externalities, including costs related to air quality, environment/marine pollution, and public health, food security, etc.
- Ultimately, to effectively decrease the risk and impact linked with microplastic pollution on the environment, the volume of plastic production needs to be reduced.

Specific comments on the text:

- *"Further develop and harmonise methods to measure unintentionally released microplastics, especially from tyres and textiles, and deliver harmonised data on microplastics concentrations in seawater".* Besides focusing on seawater, it is important to include all environmental compartments (sediment, biota, water, soil, and air, etc.).
- It is not only the "absence of market incentives to take measures to reduce the microplastics release in the environment", but rather the lack of mitigation measures and design failures. These aspects need to be included as well.

Further recommendations

Tyres:

- Reduce road transport (passenger and freight) and speed limit to limit microplastic release.
- Introduce **mandatory minimum requirement on tyre abrasion** included in the **type approval regulation** (threshold limits for microplastic release from tyres, to be increased over time) or its possible iteration (in case of a merger between ELVD and type-approval legislation). Define a legal threshold for tyre wear to exclude most wearing tyres from the EU market, with intermediate increments.



- Addition of **tyre abrasion on tyre labelling** without delay & establish a suitable test method at the latest **by 2023**. Address **tyre design**, such as tread patterning, carcass, tread stiffness and tread area, and investigate tyre tread material, such as polymer, filler and additive types and concentrations. At a later stage, the toxicity of the released particles should be integrated in the tyre abrasion rating on the tyre label as well.
- Tyre wear is proven hazardous for the environment. The EU regulatory initiative should **progressively ban problematic chemicals in tyres** such as zinc, cadmium, benzothiazole, chlorinated paraffins, bisphenols, PAH and 6PPD, etc. and promote **alternatives**.
- The measures should be broadened to capture **additional sources such as emissions brake, brake pad dust and road abrasion** with specific prevention steps.
- **Retreated tyres only an option if SVHC free**, which is not currently the case.
- Investigate the environmental impacts of recycled tyre use.
- Quantify the negative externalities from tyre wear particles – including costs related to air quality, environmental pollution, and public health, but also WWTP sludge, street sweeping, sludge from gullies, etc. Define health and environmental impact modelling for tyre emissions to define the upper and lower limits (and intermediate increments).
- Real-life sampling of tyres wear and tear, measurement for the amount of chemical components for testing, and publication of test results in a public, easily accessible database.

Textiles:

- **Reduce the volume** of textiles being produced and placed on the market. **Set an EU-wide binding quantitative target for material use and consumption footprint reduction** with specific objectives for textile products.
- Set **mandatory minimum Ecodesign requirements at the EU level**:
 - **set maximum thresholds on microplastics release for textile products and limit its release** throughout the life cycle of textiles (**production, use, and end-of-life**).
 - set criteria to select less microplastic shredding fabrics and low impact manufacturing techniques during design, production to prevent microplastic release during production and use.
 - ensure that products are less prone to microplastics wear through design, choice yarns, and the way of spinning and weaving and manufacture processes.
 - EU requirements, supported by standards to indicate maximum allowed amounts of microplastic release from textiles during production, the use phase, and the end-of-life phase are a strategic tool.
 - Limit microplastic release throughout the lifecycle and assess the environmental impacts of particularly problematic manufacturing techniques also looking at cutting, dyeing, and printing.
 - Mandate the reduction of the amount of microplastics emitted by both **industrial wet treatments, industrial and consumer washing and drying (through design and filters)**.
- Set Ecodesign requirements, in the context of the Sustainable Product Policy Framework, to incentivise the use of materials made from toxic-free and 100% biodegradable yarns (in real life conditions).
- Explore the potential of **industrial pre-washing** of new textiles and garments.



- Mandate the use of **filters to capture microplastics released throughout the manufacturing process** (including specifically during cutting, dyeing, printing stages). Ensure that washing and drying appliances for domestic and industrial use are equipped with filters.
- Set up **EPR systems** for textile products to address **microplastic shedding through eco-modulated fees**.
- Incentivise practices based on the **reuse** of fabrics and textile products.
- Include a **mandatory microplastics warning label** highlighting the presence of plastic in textile products and the environmental and toxic impact of microplastics to inform buying decision, similar to the SUP marking on sanitary towels (pads), tampons, wet wipes, tobacco products, beverages cup¹.
- Include additional information on microplastic shedding when communicating the results of a PEF profile, as the PEF methodology currently does not cover microplastics,

Pellets:

- **Mandatory regulatory system requiring the entire supply chain** to adhere to best practice measures to stop pellet losses, supported by including third-party, independent auditing and certification.
- Mandate public disclosure of data and progress reports and **mandatory third-party independent auditing in place**.
- Set an annual independent audit of companies on implementation of pellet loss prevention measures and reporting.
- Mandatory reporting requirements on types and tonnage of pellets being used, handled, or transported and lost by the entire supply chain.
- Mandate the implementation of handling, storage, and transportation best practices for the whole plastic supply chain, with yearly staff training to prevent pellet loss.
- Introduce mandatory visual materials on site and **labeling on all pellet packaging** and containers stressing environmental and toxic impact of pellet spills and the importance of responsible handling.
- Restrict the use of unsealed or flexible, non-robust containers. Regulate to prevent overloading of cargo ships and mandate the storage of pellet containers below deck.
- Mandate the containment of all pellet handling sites (including plastic production and recycling facilities).
- Require the use of filtering and capture systems to prevent leaks in facilities and all points of spillage risks at every stage of the plastic pellet life cycle.
- Ban the use of plastic granules, flakes, or pellets in the open environment (school playgrounds or sports pitches).

¹ https://ec.europa.eu/environment/topics/plastics/single-use-plastics/sups-marking-specifications_en



Additional sources:

- Phase out the use of synthetic polymers and intentionally added microplastics in agriculture and horticulture.
- Promote sustainable alternatives to plastic mulch and other soil-polluting microplastics, such as synthetic geotextiles. Develop measures to secure an adequate maintenance and the use of toxic free geotextiles.
- Set reduction targets for microplastic release from effluent and by-products (fat, sludge) and regulatory requirements to achieve zero emissions of microplastics in the longer run
- Set legal obligations for frequent control of wastewater treatment plants and sludge handling by public authorities.
- Regulate and prevent the release of microplastics in greywater for all ships and vessels.
- Monitor microplastics in wild and farmed fish and seafood.
- Promote ecodesign for fishing gear with low impact and durable materials, leasing options and deposit schemes.
- Mark and track fishing gear to discourage discarding and mandate the reporting of lost gear to public authorities.
- Legislate to ensure that all buildings have microplastic filtering systems installed between the greywater and sewage systems.
- Phase out synthetic foam polymers which release microplastics throughout their lifecycle.
- Set targets and promote reusable, packaging-free options.

We look forward to continuing to play an active role in the stakeholder engagement around this important upcoming initiative.

