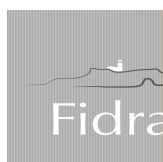


TINY PLASTIC, BIG PROBLEM

THE CASE FOR PREVENTING
PELLET POLLUTION.



May 2023

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RETH!NK PLASTiC

Recommendations for Effective EU Plastic Pellet Regulations

The exponential expansion of the production of raw plastic materials since 2005 has resulted in increased waste generation and over 170 trillion plastic particles in the world's oceans¹. Virtually all plastic products are derived from plastic pellets, flakes and powders (hereinafter referred to simply as pellets), meaning the transboundary shipment of pellets has also drastically expanded. Due to pellets' size and current handling across the supply chain, they often end up in the environment and are one of the largest sources of primary microplastic pollution. In response, the European Union (EU) should take all necessary steps to regulate plastic pellets across the plastic supply chain and effectively reduce the amount of pellets that end up in the environment.

An avoidable threat to our health and environment

Pellet pollution causes serious harm to the environment; they serve as vectors for toxic biological and chemical contaminants traveling up the food chain and posing a threat to human health². Voluntary agreements from industry, like Operation Clean Sweep, have committed to zero loss of pellets since 1991 and yet, after over three decades of broken promises, pellet pollution continues virtually unabated. As new pellets contribute to the oceanic microplastic pollution smothering the seabed, transporting harmful bacteria across the globe in currents, poisoning marine animals and littering beaches, older pellets continue to degrade and fragment. Plastic pellet pollution is entirely avoidable, and the EU should view regulation as an easy solution to microplastic pollution. It is time for EU-mandated measures across the entire supply chain.

Evidence of pellet pollution, evidence of insufficient preventative action

The precautionary principle is enshrined in the Treaty on the Functioning of the European Union and national legislation. The principle enables decision-makers to adopt measures to prevent harm to human health and the environment, even if they lack industry-produced data showing the number of pellets lost. There is significant evidence of pellet pollution across Europe.

Every European country participating in the community science project Great Nurdle Hunt has found pellets³. The EU should refrain from allowing industry to stall meaningful action and instead adopt robust EU pellet regulation that ensures management systems of best practices and control measures are applied throughout the entire supply chain to prevent pellet pollution.

A legislated supply chain approach can reduce emissions by 95%

The EU has already committed, in the European Green Deal, to lead policy through ambitious action plans and legislation. To reduce plastic in the environment by 30% by 2030⁴, the EU should start with a source that has a straightforward solution. Research by Eunomia shows that effective regulation of plastic pellets through a mandatory supply-chain approach will result in a 95% reduction in emissions. Further, the study found the supply chain approach is more cost-efficient, less administratively burdensome, established among industry and promotes a level playing field and industry standard across the EU and beyond⁵.

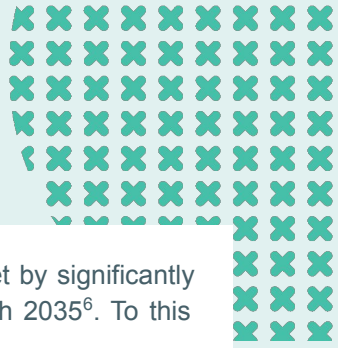
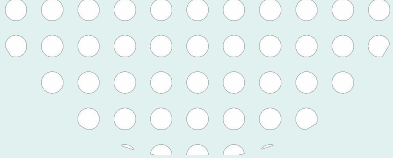
¹ Eriksen, et al., *A growing plastic smog, now estimated to be over 170 trillion plastic particles afloat in the world's oceans—Urgent solutions required* (2023), available [here](#).

² See for example, Rodrigues, et al., *Colonisation of plastic pellets (nurdles) by E. coli at public bathing beaches* (2019), available [here](#) and IPEN, *Plastic pellets found on beaches all over the world contain toxic chemicals* (2021), available [here](#).






³ FIDRA, *Nurdle Pollution Map*, available [here](#).

⁴ Zero pollution action plan for water, air and soil (2021) and Circular Economy Plan.


⁵ Eunomia and ICF, *Investigating Options for Reducing Releases in the Aquatic Environment of Microplastics Emitter by (But Not Intentionally Added In) Products* (Final Report, 23 February 2018).



If ambitious enough, an EU pellet regulation can help achieve the EU's zero emission target by significantly reducing a primary source of microplastic pollution – approximately 600,000 tonnes through 2035⁶. To this end, it should contain strong provisions on:

-  Mandatory and comprehensive reporting
 -  Transparency and traceability
 -  Clear obligations on operators to implement best practices and management, subject to minimum requirements and applicable across the supply chain, including transportation
 -  Complementary measures to support compliance and enforcement
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In addition, as a complement to domestic action, the EU should also work to address pellet pollution at the international level in two concrete ways.

- **International Maritime Organization (IMO).** The IMO is considering proposals to regulate the handling of pellets during shipping, including mandatory packaging and safe stowage requirements⁷. Pellet loss during shipping is far too common, and due to their small size and buoyancy, once pellets are lost at sea, only 40-70% are recovered⁸. Several high-profile spills have occurred recently, including the French beaches littered this year and the 2020 North Sea spill that impacted Denmark, Norway and Sweden⁹. The EU should support and advocate for more strong options than are currently being pursued at IMO.
 - **Intergovernmental Negotiating Committee (INC).** During ongoing negotiations on a global plastic treaty under United Nations Environment Assembly (UNEA) Resolution 5/14, the EU has called to “[l]imit the releases of microplastics,” further “stress[ing] the need for the future instrument to include measures to reduce [the] unintended release of microplastics” that “could include, for example, measures to minimize the risk of leakages of plastic pellets from production, handling and transport and release of unintentional microplastics.” The EU should continue advocating for pellet pollution measures in the global plastics treaty.
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Taken together, the EU has a unique opportunity to spearhead industry-wide transformation and reduce pellet pollution, starting with an EU pellet regulation and then through continued advocacy for actions at the international level.

For more information on the supply chain approach in the EU, please read [Our Ocean Needs Actions Not Promises Towards a Regulatory Approach to Prevent Plastic Pellet Loss in the EU](#)¹⁰.



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⁶ Ibid.

⁷ CE Delft and Fauna & Flora, *Preventing spills of plastic pellets: a feasibility analysis of regulatory options*, available [here](#).

⁸ Gard.no, *Marine plastic pollution – are nurdles a special case for regulation?* (2022), available [here](#).

⁹ *Plastic Giants Polluting Through The Backdoor: The Case For A Regulatory Supply-Chain Approach To Pellet Pollution* (2020), available [here](#).

¹⁰ *Our Ocean Needs Actions Not Promises Towards a Regulatory Approach to Prevent Plastic Pellet Loss in the EU* (2019), available [here](#).

