Eurosim 2024: Regulating Plastic Pellets



Prepared by Allie Kavalauskas, Emma McCartan, and Ed Fogarty Colgate University



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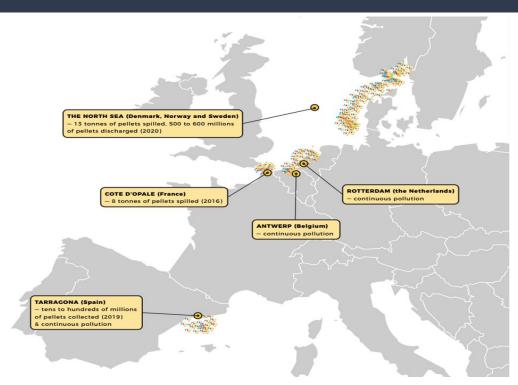
What are plastic pellets?



- Plastic pellets—also known as nurdles or pre-production pellets—are a type of microplastic that form the raw material for many plastic products
 - About 270 million metric tons of plastic is made annually with much of it beginning as a pellet
- Pellets are made from recycled plastic waste, predominantly produced using fossil fuels
- Their small size (under 5mm), shape, and color make them a particular danger to marine ecosystems
 - They are frequently mistaken for krill or fish eggs and ingested
 - They also contain dangerous additives like UV stabilizers that are magnets for toxins and act as a transport medium for toxic substances

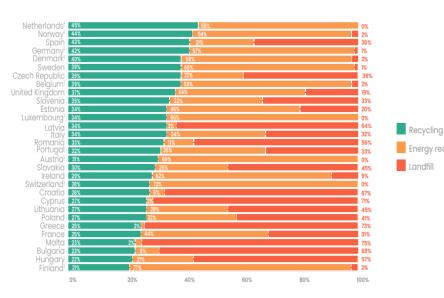
The problem with pellet pollution?

- Pellets are released into the environment at all stages of the supply chain
- Around 10 trillion pellets are carried into waterways each year
- Pellets are extremely difficult to contain and recover once released
- In addition to the problems caused by spills, harm to humans and the environment occurs from the beginning
 - Fossil fuels are extracted to be processed into petrochemicals then pellets



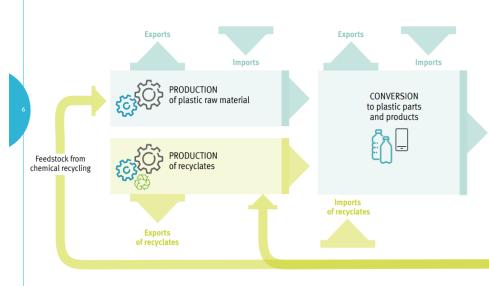
Gravier, Annette, and Gaëlle Haut. "Plastic Giants Polluting Through The Backdoor: The Case For A Regulatory Supply-Chain Approach To Pellet Pollution." Surfrider Foundation Europe. November 2020. https://www.surfrider.eu/wp-content/uploads/2020/11/report-pellet-pollution-2020.pdf.

Post-consumer plastics waste treatment per country in 2020



THE CIRCULARITY OF PLASTICS

In order to increase circularity, it is important to analyse the life cycle of plastics, from production to recycling and closing the loop. The use-phase is critical to understand its life cycle.



Post-consumer plastics waste refers to consumer plastic waste. The countries with the highest levels of recycling of this waste are recycling the waste into products like plastic pellets.

Recycling of plastics across the EU

Energy recovery

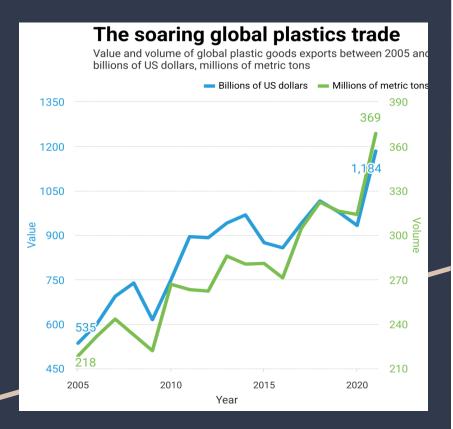
Plastic producers



"Plastic Pellet Pollution." *As You Sow.* Accessed 2 October 2024. https://www.asyousow.org/our-work/circular-economy/plastic-pellets.

- In 2022, high demand for plastic converters was recorded in Germany, Italy, France, Spain, Poland, and the UK
 - Converters: companies that purchase plastic pellets to make plastic products or packaging
- Germany is Europe's biggest plastics manufacturer and producer
- Major production companies include LyondellBasell (based in the Netherlands), DowDuPont (across Europe), and BASF (Germany)

The plastics industry



- Europe accounts for 21% of recycled plastics production globally
- Circular plastics production has grown by nearly one-third since 2018 and makes up 19.7% of Europe's overall plastic production as of 2022
 - Regulations outside EU are not as strict
 - Dependence on imports may increase
- The plastics industry employs more than 1.5 million Europeans

Demand for plastics converters by European country

Primary industries that utilize plastic pellets include packaging, automotive, electronics, construction, and medical

European plastics converters demand by countries



Context for the Regulation

- 2018 the EU Strategy for Plastics in a Circular Economy recognized the risks microplastics present
- 2019 the European Commission's group of Chief Scientific Advisors echoed this sentiment
- 2020 (January) European Green Deal adopted
- 2020 the Circular Economy Action Plan 2.0 enacted as a follow-up to the Green Deal
- 2021 plan 'Towards zero pollution for Air, Water and Soil' suggested that the EU should lower microplastic releases by 30% by 2030
- 2023 Commission adopted a Regulation that restricted intentional addition of microplastics to products
- 2025: target plastic pellet release into the environment to lower microplastic pollution (pellet spills are the third greatest source of unintentional microplastic releases)

Articles of the Draft Regulation

- 1. Regulate supply chain at all stages to prevent loss of pellets
 - a. Applies to both EU and non-EU land and maritime transporters handling above 3 tons
- 2. Defines terms
- "Economic operators" and carriers have responsibility to clean losses, notify authorities of incidents and production and transport of pellets
 - a. Authorities establish public register, establish longterm damage and report to Commission
- 4. Economic operators must establish risk assessment plans, assessed by authorities
 - a. Timeline of plans depends on size of enterprise
- 5. Risk assessment plans must be certified according to standards set out

- 6. Environmental management systems
- Accreditation of certificates
- 8. Verification of compliance
- 9. Accident protocol
- 10. If non-compliance is identified, authorities must bring economic operators in line ASAP and recover damage
 - a. Suspend operations if health risk
- 11. Member states will designate authority in consultation with European Environment Agency
 - a. Sets out powers
- 12. Commission assistance with compliance
 - a. Develop training materials
 - Provide financial assistance where needed only to micro and small enterprises in addition to training

Articles of the Legislation

- 13. Standardized methodology
- 14. Complaints and "interested parties"
- 15. Penalties for infringement
- 16. Compensation for damages to human health
- 17. Amendment process
- 18. Delegation duties
- 19. Entry into force

Annex I: Risk assessment plans

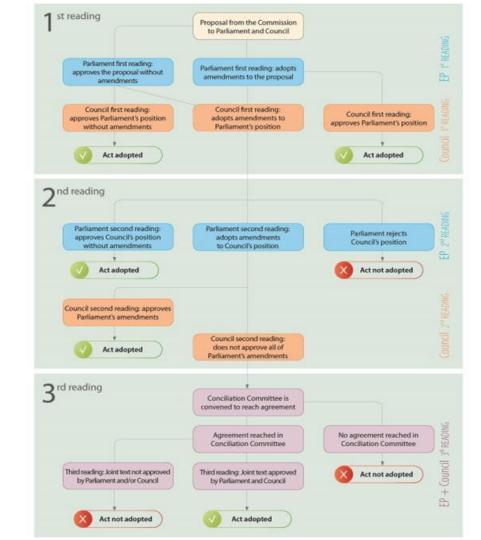
Annex III: Actions to undertaken for EU/non-EU carriers, land and maritime

Some Likely Points of Debate

- Scope of regulation
 - Should maritime transport be included?
 - Should non-EU carriers be included?
 - What quantity of pellets?
 - O What time frame?
- Distributing costs of compliance/obligations
 - Across countries (large v. small producers/ consumers of pellets) and across firms (large firms v. SMEs)
- Funds to support compliance
 - Little or no new funding offered to help with compliance or enforcement costs
- Penalties for noncompliance
 - How will companies be deterred from noncompliance?
 - Will Member States really enforce penalties?
 - Should these penalties differ for SMEs?

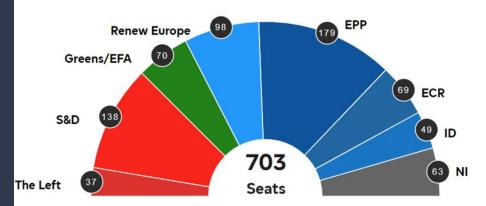
Legislative Procedure

- European Commission proposes legislation
- European Council (heads of government) offer suggestions, discuss big picture
- Co-decision
 - Environment Council and EP (ENVI committee) adapt Commission proposal separately
 - Council and EP seek compromise in trilogue
 - Each votes on compromise



European Parliament

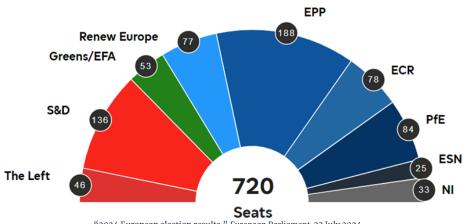
EP composition by party, 2019-2024



"2019 Outgoing Parliament." European Parliament.

https://www.results.elections.europa.eu/en/european-results/2019-2024/outgoing-parliament/.

EP composition by party, 2024-2029



"2024 European election results." European Parliament. 23 July 2024. https://www.results.elections.europa.eu/en/european-results/2024-2029/.