

LAUNCH OF THE NORDIC REPORT *ADDRESSING MICROPLASTICS IN A GLOBAL AGREEMENT ON PLASTIC POLLUTION*

Agenda

- 14.00 – 14.05: Introduction and welcome by Anne Christine Parborg Meaas, Norwegian Environment Agency
- 14.05 – 14.15: Statement from Erlend Draget, Norwegian Ministry for Climate and the Environment
- 14.15 – 14.35: Presentation of report by Idun Rognerud, Norwegian Institute for Water Research
- 14.35 – 14.55: Panel conversation
 - Dr. Alexandra Harrington, IUCN WCEL & Lancaster Univ.
 - Dr. Guilberto Borongan, Asia Institute of Technology
 - Daniela Garcia, Permanent Representative of Ecuador to the WTO
 - Declan McAdams, Chairman PINOVO
- 14.55 – 15.10: Q&A
- 15.10 – 15.15: Closing statement by Hans Nicolai Adam, IKHAPP



Addressing microplastics in a global agreement on plastic pollution

Project team:

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Nordic
Co-operation

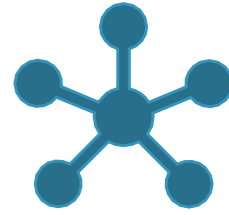


Norwegian Ministry
of Climate and Environment



Microplastics are diverse

- 'Microplastics' is an umbrella term commonly used to refer to all plastic particles smaller than 5 mm in size.
- A treaty definition may require multiple inclusion criteria.
- The definition may avoid a lower size limit to allow for progress in detection technologies.



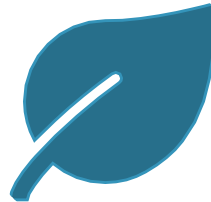
Material composition

Polymers and additives



Size and shape

Fibres, fragments, pellets



Biodegradability

Intermediate states

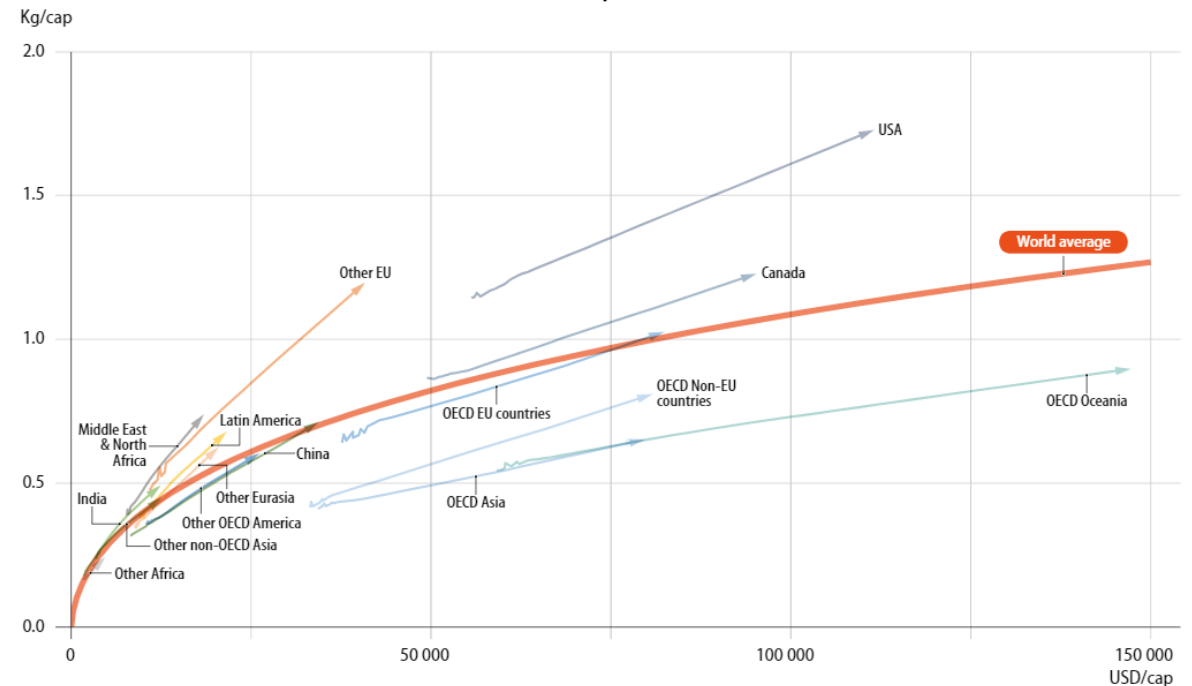


State

Solid, water-soluble and liquid

Why microplastics?

- Annual releases estimated to double by 2060 (OECD 2022)
- Persistence and accumulation in the environment
- Concern of risks to human and environmental health
- Non-threshold contaminants: Unable to identify a safe threshold for emissions



OECD Global Plastics Outlook: Policy Scenarios to 2060
Microplastic releases increase with economic growth

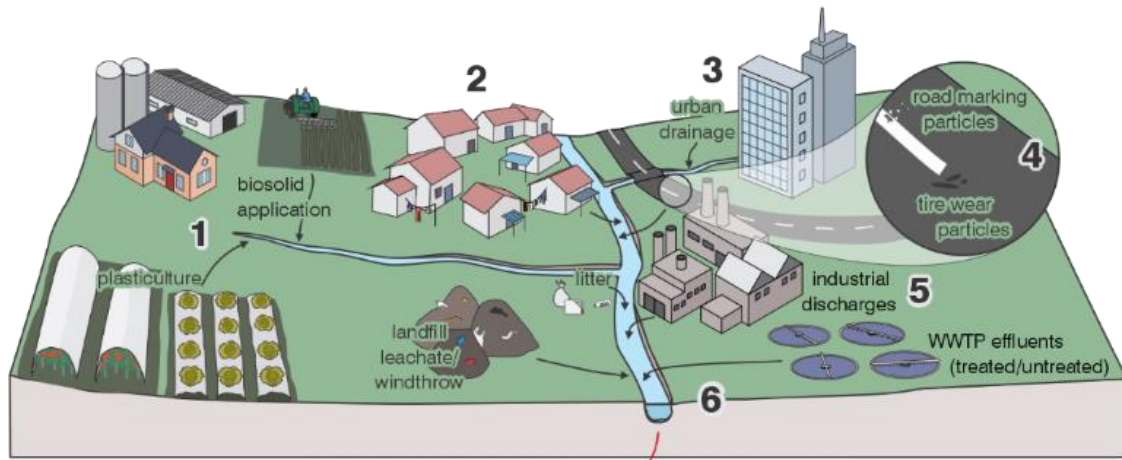
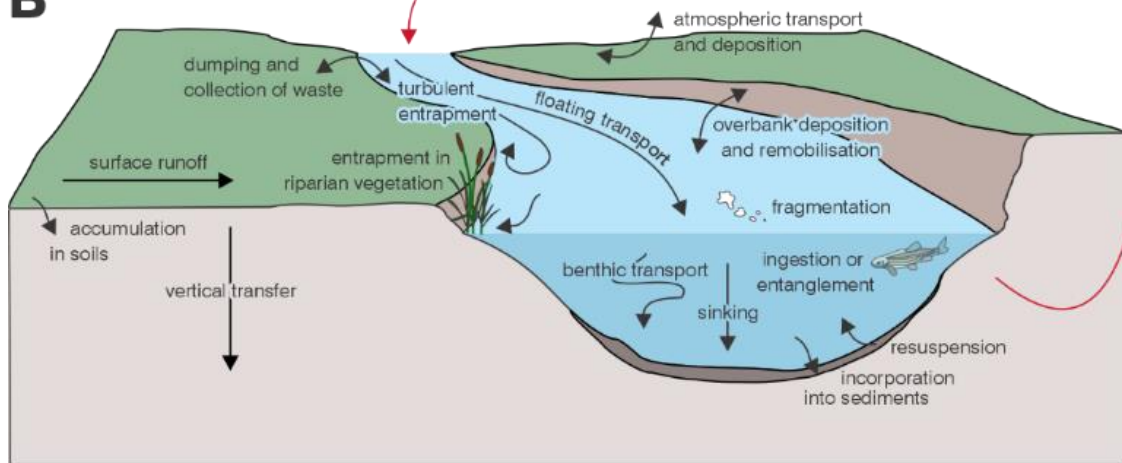


Microplastics in the Plastics Treaty

- Microplastic pollution is **transboundary** and occurs **throughout the value-chain**
- Avoid **unintended consequences** of measures to tackle macroplastics
- Global trade requires **holistic and harmonized regulation** to change practices
- Industry needs common standards and criteria to drive **investment** and **innovation**

A

1. Agriculture
2. Households (incl. domestic laundry)
3. Urban environments
4. Road environments
5. Industry
6. Wastewater and solid waste management

**B****C**

1. Releases from rivers and land
2. Aquaculture
3. Fisheries
4. Sea-based industry
5. Maritime traffic

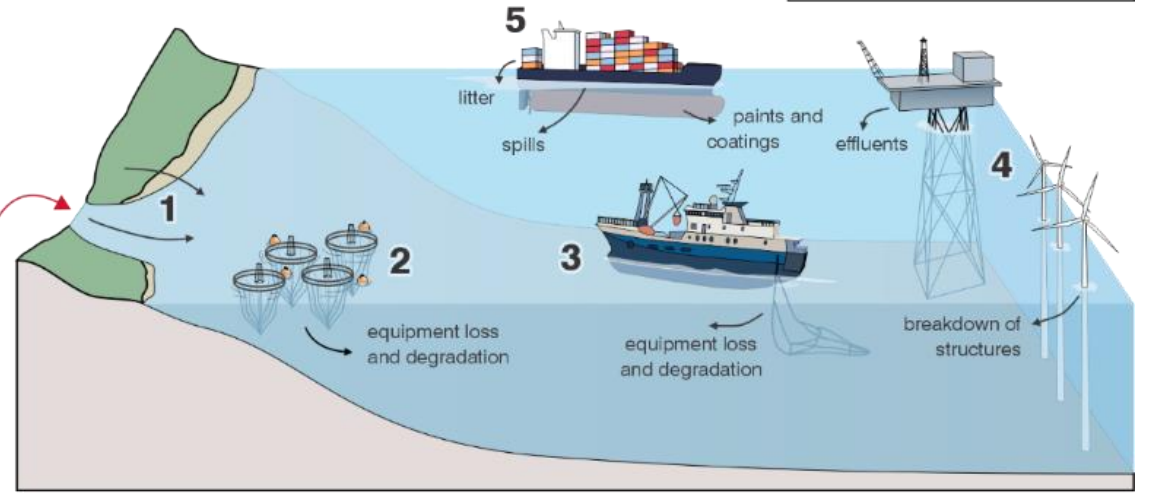
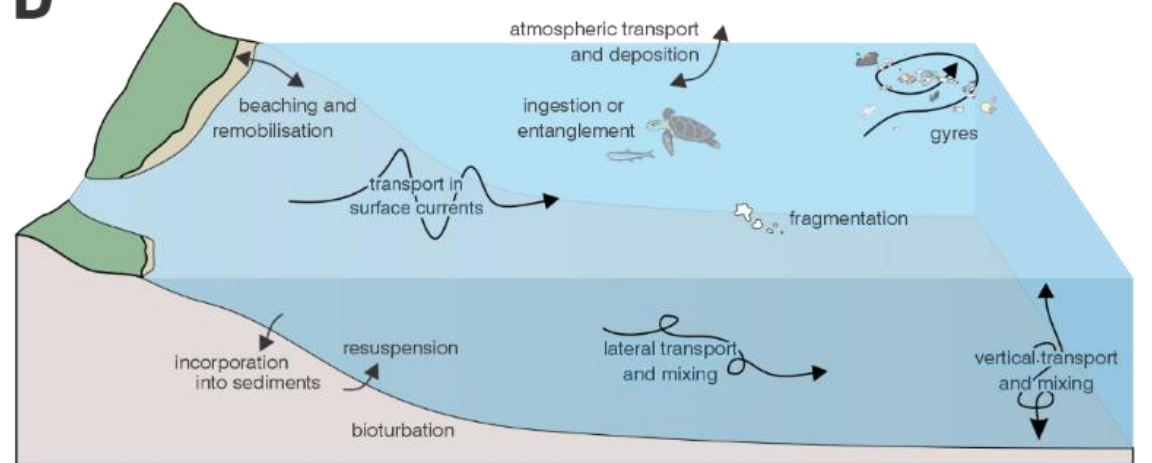
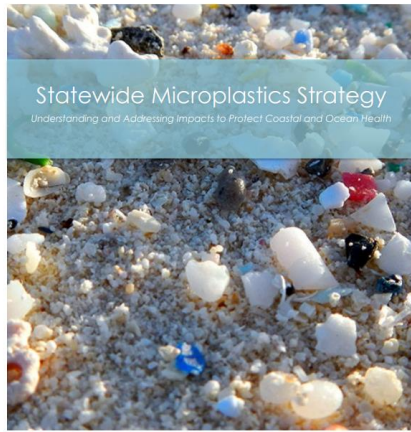
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Image credit: Rachel Hurley

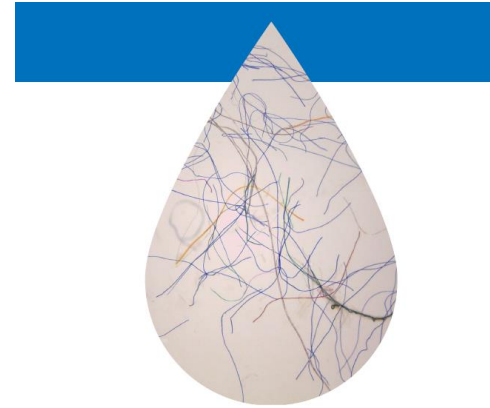


Data and monitoring still unevenly distributed

- Environmental monitoring expanding
- Leakage estimates largely based on high income countries
- Some dominant sources estimated to be:
 - Plastic pellets, flakes and powders;
 - Paints;
 - Tyre and roadwear;
 - Textiles;
 - Degradation of macroplastics.
- Regional and national variability according to geography, climate, dominant industries and socioeconomic factors.



February 2022



Report on Microfiber Pollution

2022 REPORT TO CONGRESS: DRAFT FOR PUBLIC COMMENT

Report Provided on Behalf of the Interagency Marine Debris Coordinating Committee



Current regulation of microplastics

- Marked uptick in policies and measures since 2018
- Research priorities shifting from documenting presence to identifying sources and solutions
- Regulatory measures: from microbeads to source-oriented approaches
- EU target to reduce microplastic emissions by 30% by 2030 compared to 2016 levels
- Measures on intentional and non-intentional releases
- California microplastics strategy

A source-oriented approach

Four categories of microplastics:

- Plastic pellets, flakes and powders
- Primary microplastics
- Use-phase microplastics
- Degradation-based microplastics



Photo from Jess Heighway



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Plastic pellets, flakes and powders

- Releases take place across the entire plastic value chain:
 - Leakage from production facilities
 - Storage and transportation
- Best available techniques / Best available practices
- Certification & Chain of custody schemes
- Emission limits



Image: Agents Rurals (twitter.com/agentsruralscat)

Primary microplastics

Sources

- Microbeads
- Artificial turf granulates
- Glitter
- Industrial abrasives
- Plastic coated agrichemicals

Measures

- Essential / non-essential use
 - Essential: Restrictions on use, emissions regulations, guidelines, BAT/BEP and reporting requirements
 - Non-essential: Phase-outs, bans and restrictions

Use-phase microplastics

Sources

- Textiles
- Tyre and road wear
- Paints
- Agricultural plastics
- Fishing gear

Measures

- Bans or restrictions on products with high risk of emissions
- Product design criteria
- Restrictions on use and applications
- Labelling requirements
- Voluntary codes of conduct
- BAT/BEP on industrial applications and processes
- Improved wastewater systems

Degradation-based microplastics

- Waste hierarchy: Reduction, reuse and recycling.
- Upstream:
 - Restrictions on high-risk materials: E.g., unprotected polystyrene or oxo-degradable plastics.
 - Reduce single-use plastics and products at high risk of being lost to environment.
- Midstream:
 - Sustainability criteria for durability, reusability, recyclability, safety and transparency.
- Downstream
 - Improved waste management
 - Interception in wastewater treatment plants



Moving forward

- Inclusion of microplastics at early stages can reduce risk of negative trade-offs of measures to address macroplastic pollution
- Global control measures prioritise largest sources and cost-effectiveness
- Establish sectoral workstreams to identify best practices and BAT/BEP
- Develop criteria for essential and non-essential uses of primary microplastics
- Establish source inventories to identify dominant sources at regional and national levels

Thank you

- Get in touch: idr@niva.no

The full report is available at:

<https://pub.norden.org/temanord2022-566>

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