

Lessons learnt from preparing the REACH restriction on intentionally- added microplastics

**PFAS WP7 (SEA)
CA meeting 24_3_2021**



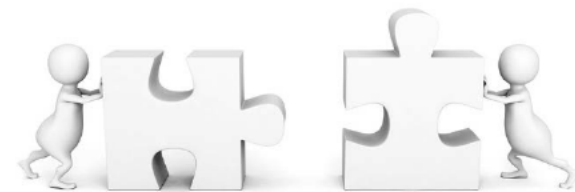
Risk Management Directorate
European Chemicals Agency



What we knew at the start

Microplastics:

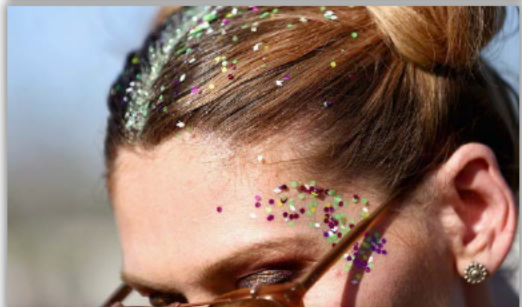
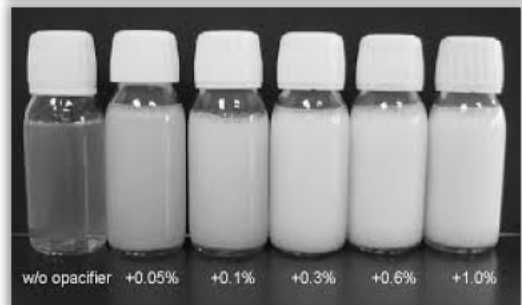
- Typically refer to solid particles (including fibres) made from synthetic polymers < 5mm in size
- Secondary MPs formed as larger pieces of 'plastic' degrade/abrade
 - Litter (SUPs, fishing gear, bottles, nurdles), synthetic clothing, tyre abrasion
- Primary MPs in various types of products added for achieving specific functionalities
 - Beads, encapsulates, flakes, powders, crumbs



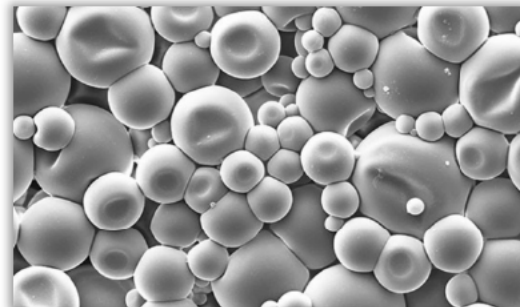
Identification of relevant sectors

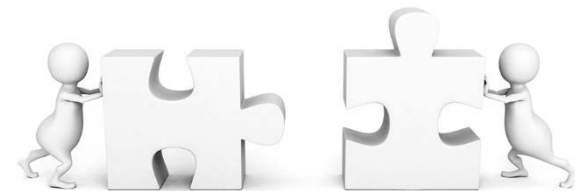
- COM mandate: look at intentional uses
- COM study on MPs gave good starting point
- Stakeholder w/s in the beginning to collect views on uses, alternatives, concerns, etc.
- Literature research → allowed us to nail key sectors/uses, develop some understanding
- Annex XV consultation → allowed us to refine sector-specific assessment by asking the right Q's
- Notably, we missed infill material for artificial pitches and included a 'placeholder'

Examples of uses/sectors



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Sector-specific impact assessment

- Quantities and emissions in scope
- Alternatives and costs to develop them
- Other costs (e.g. foreseeable profit losses)
- Cost/effectiveness ratios (comparing substitution cost vs emissions)
- Sectors very diverse in terms of substitutability
- Different restriction proposals for sectors (ban, conditional derogations, mandatory instructions, mandatory reporting, grace periods)

Proposed restriction

Microplastic definition



Prohibition on 'placing on the market'

Uses where microplastic releases to the environment are inevitable



Derogated uses (can continue)

Natural, biodegradable, soluble, minimal-releases. Medicinal/IVDs. Can be 'conditional'



Mandatory 'instructions for use and disposal' for conditionally derogated uses

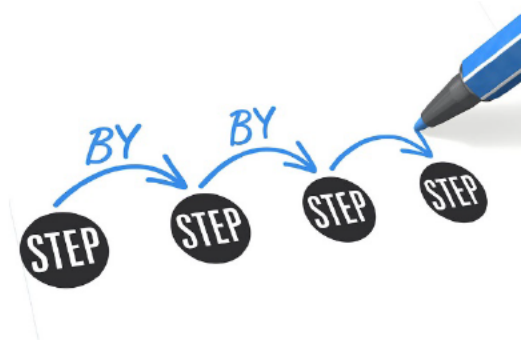
Minimise releases; enhance information flow



Mandatory 'reporting' for conditionally derogated uses

Generic identity, use description, release

Phased implementation



Phased implementation

24 months

4 years

6 years

'Microbeads'
Other users

**Reporting
requirement**

**Detergent &
maintenance,
agriculture,
Fertilising
products**

**Plant protection,
biocides**

**Instructions for
use & disposal
requirements**

**Rinse-off
cosmetics**

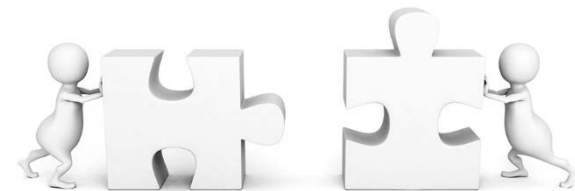
**Leave-on
cosmetics,
MD**

EiF

36 months

5 years

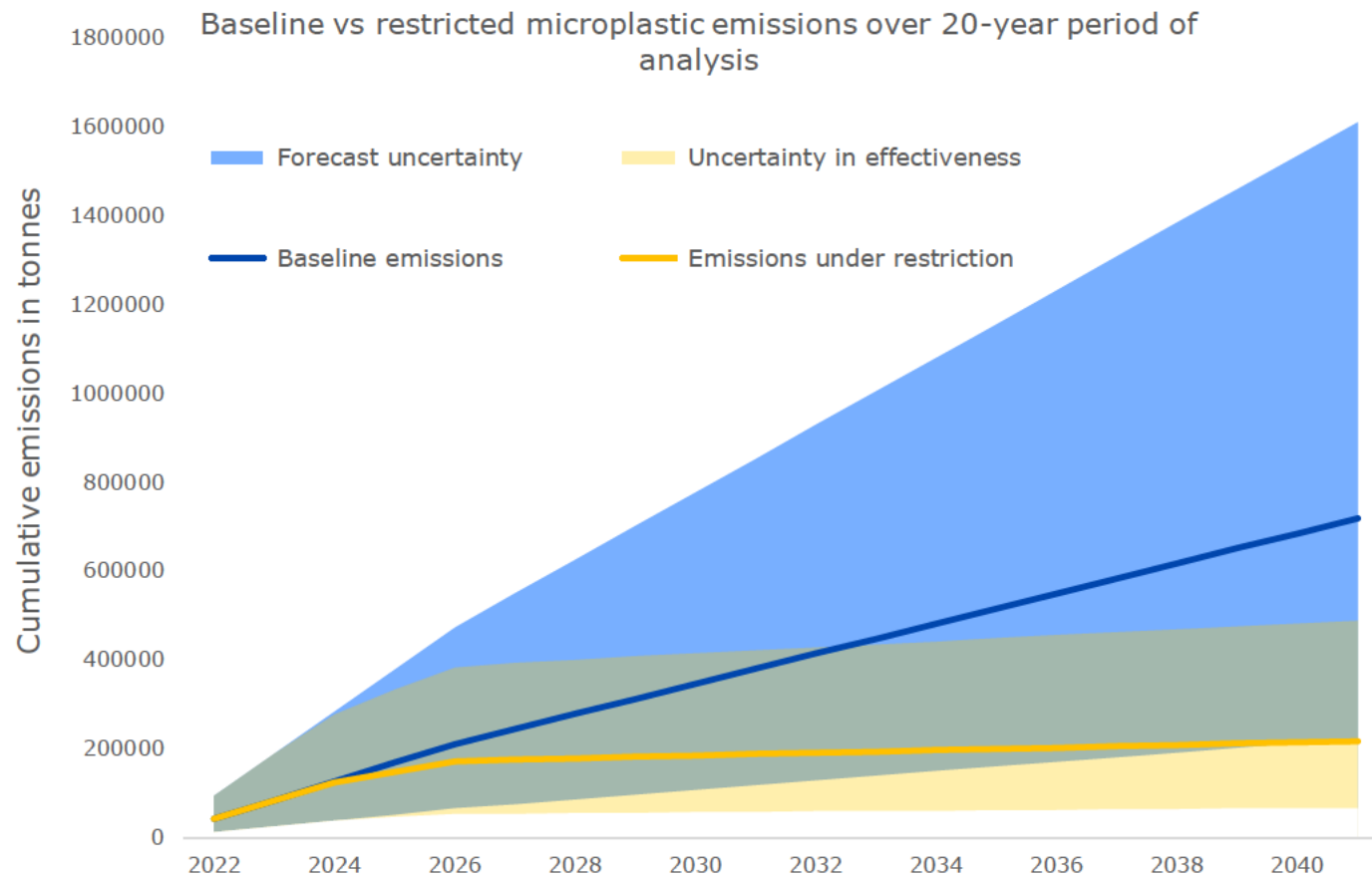
8 years



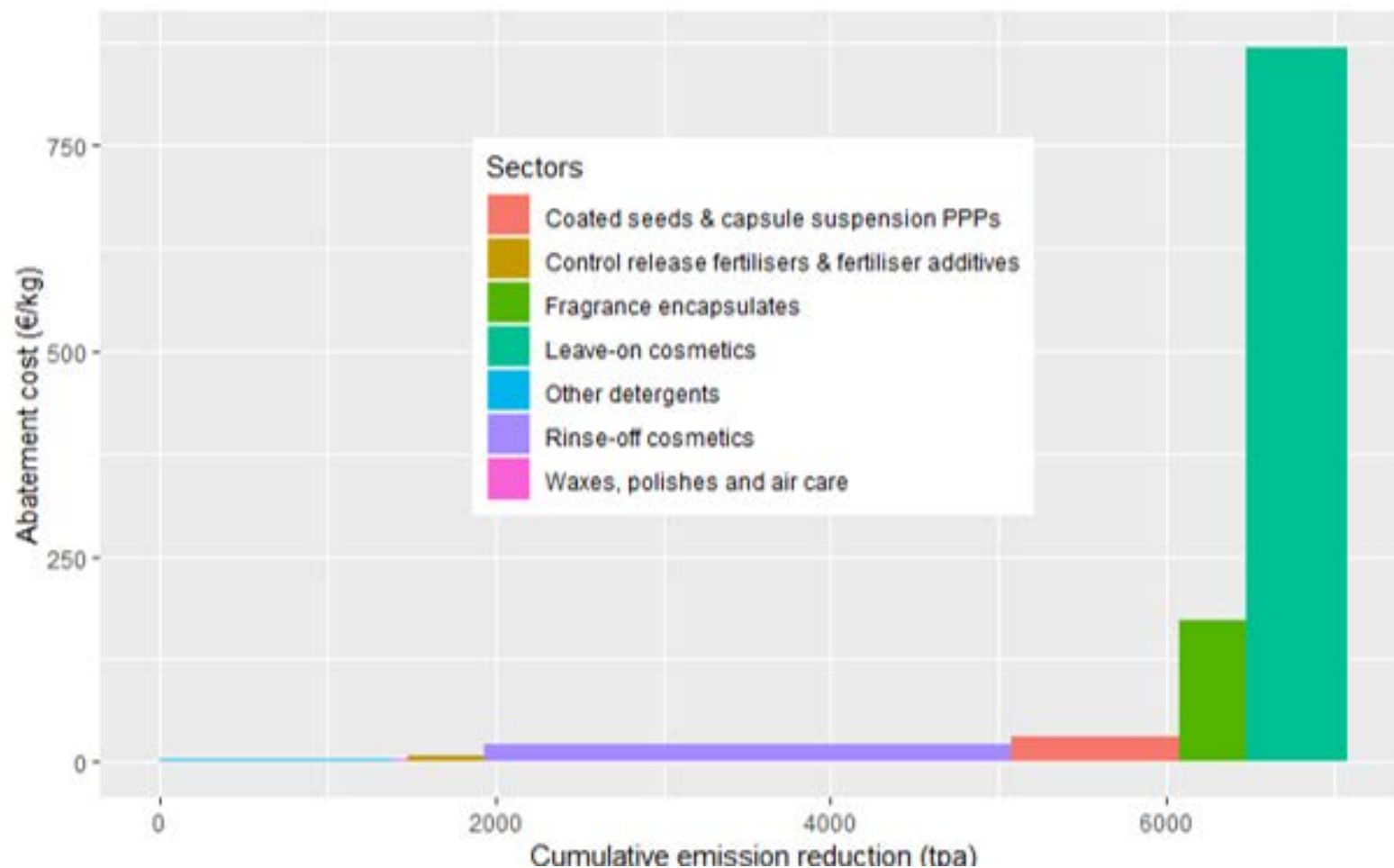
Overall proportionality argumentation

- Use volumes and emissions in scope
- Effectiveness of emission abatement
- Marginal abatement cost curve
- Theoretical considerations

Effectiveness



Marginal abatement cost curve



Further theoretical arguments

- Option value theory → 'first act, then learn' rather than 'first learn, then act'
- Builds on the justified assumption that
 - emissions are irreversible
 - we will learn a great deal more about the harmfulness of MPs in the environment in the near term future
- Option value is net value resulting from the avoidance of irreversible emissions ***conditional on learning*** about the actual harmfulness of MPs

Conclusions

- Clear definition of MPs has helped us
- Early identification of sectors/uses has helped us
- Providing an analysis of restricting infill material *during* opinion making was tedious
- Focus on C/E has made impact assessment comparable across uses
- Benefits hard to quantify, discussed qualitatively
- Good to have theoretical arguments that underpin proposed actions but did not get a lot of attention

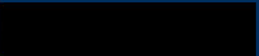
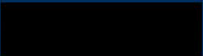
Thank you!



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echa.europa.eu/hot-topics/microplastics

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