

The PFAS Restriction Proposal

Media Briefing
Brussels
7 February 2023



“Forever chemicals”

Very High Persistence

Concerns about adverse effects

- Bioaccumulation
- Mobility
- Long range transport potential
- Accumulation in plants
- Effects on human health and ecosystems
- Endocrine activity
- Mixture effects

- All PFASs are either persistent themselves or degrade to other persistent PFASs
- Persistence due to strength of the carbon-fluorine bond
- PFASs remain in environment for decades to centuries ➡ **“Forever chemicals”**

The broadest restriction proposal in history

Roughly 10 000
PFASs



Why PFASs are used

Combination of useful properties from technical viewpoint

- Water, oil and dirt repellency
- Durability under extreme conditions:
 - temperature, pressure, radiation, chemicals
- Electrical and thermal insulation

Where PFASs are used



Rainwear



Non-stick coating



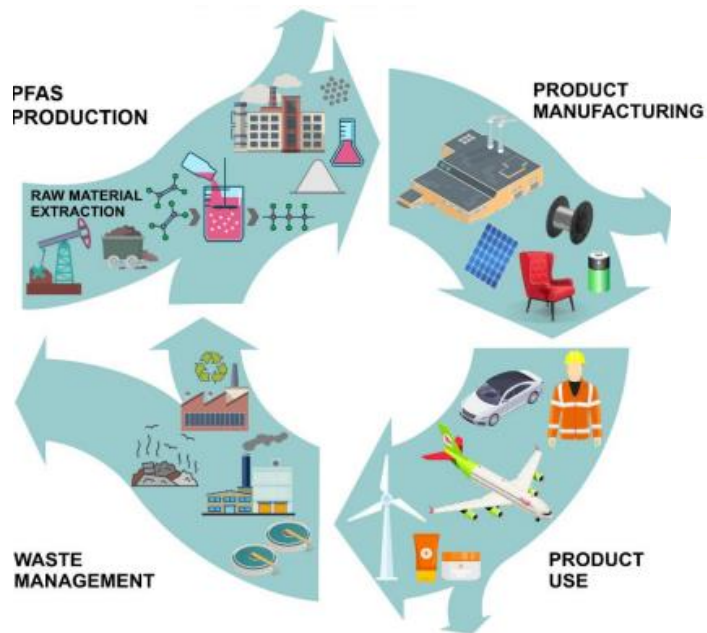
Cosmetics



Medical equipment

- Industrial processes
- Firefighting foams
- Textiles
- Food contact materials (incl. packaging)
- Metal plating/metal products
- Consumer mixtures
- Ski wax
- Transport
- Applications of fluorinated gases
- Electronics and semiconductors
- Energy sector
- Construction products
- Lubricants
- Petroleum and mining
- Medical devices
- Cosmetics
- Other uses

75 000 tonnes of emissions in 2020



Source:
https://ec.europa.eu/environment/pdf/chemicals/2020/10/SWD_PFAS.pdf



National Institute for Public Health
and the Environment
Ministry of Health, Welfare and Sport

baua: **KEMI**
Bundesanstalt für Arbeitsschutz
und Arbeitsmedizin
Swedish Chemicals Agency

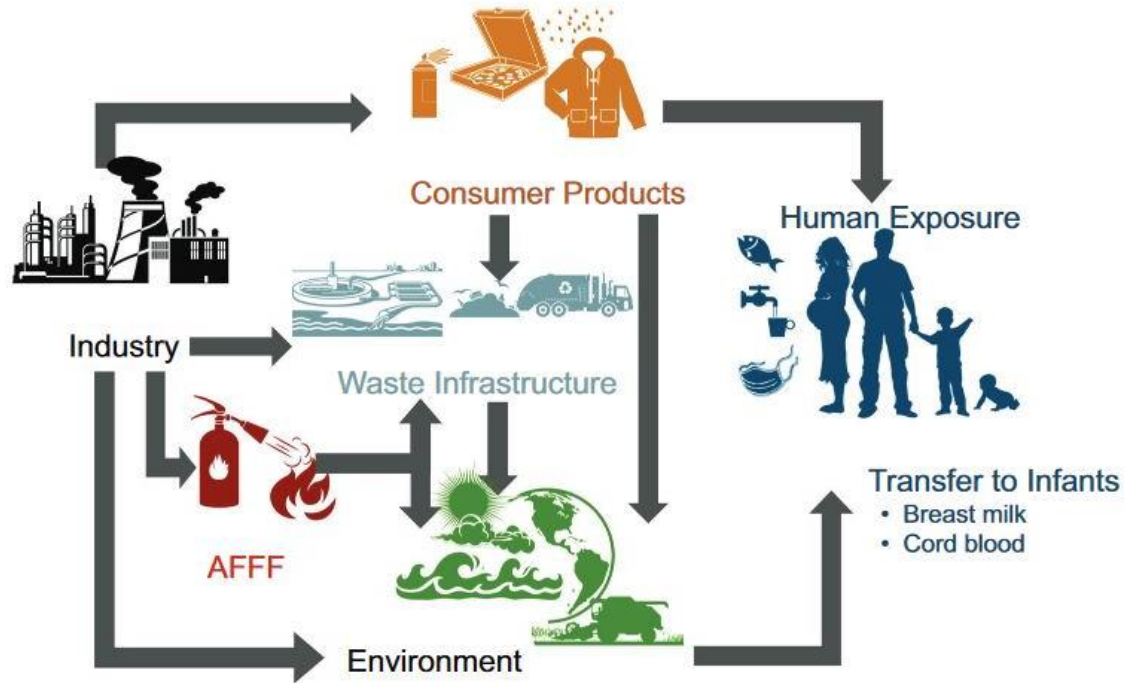


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PFASs are found everywhere



Source
https://bgc.seas.harvard.edu/assets/sunderland_jeseerev_2018wsi.pdf

Why do we need a PFAS restriction?

- **Adverse effects on environment and human health**
 - PFASs are used in high tonnages in a variety of applications
 - Emissions occur in all life cycle stages
 - Monitoring data: ubiquitous presence of PFASs in the environment and in humans
 - PFASs have very high persistence
 - PFASs are difficult to remove once released into the environment
 - ➡ “forever chemicals“
- ➡ **Uncontrolled risk from use of PFASs in EEA**
- ➡ **Need for EU-wide regulatory measure(s)**

The road to the restriction proposal

May – July 2020
Call for evidence

July 2021 – Oct 2021
2nd stakeholder consultation

Oct 2021 – Jan 2023
Drafting of proposal

Stakeholder interviews, literature search, meetings



Jan 2020
First meeting

13 January 2023
Submission
of proposal

7 February 2023
Publication of
proposal

The restriction proposal

Dossier: Risks, Impacts

Two restriction options considered:

1. Full ban
2. Ban with use-specific derogations

Proposed Restriction: option 2

- based on analyses of alternatives, and
- socio-economic considerations



Proposed restriction conditions

- **Ban of manufacture, placing on the market and use**
- **PFASs as such, as constituent in other substances or in mixtures as well as in articles.**
- **Above a set concentration limit**
- **Transition period: 18 months after entry into force**
- **Use-specific (time-limited) derogations**

Uses banned after 18 months

Examples



Proposed restriction conditions - derogations

Two standard derogation timeframes chosen

Examples:

Food contact materials for industrial food and feed production

Alternatives under development
but not available at entry into force

Implantable medical devices

Identification, development and
certification of alternatives needed

5 years

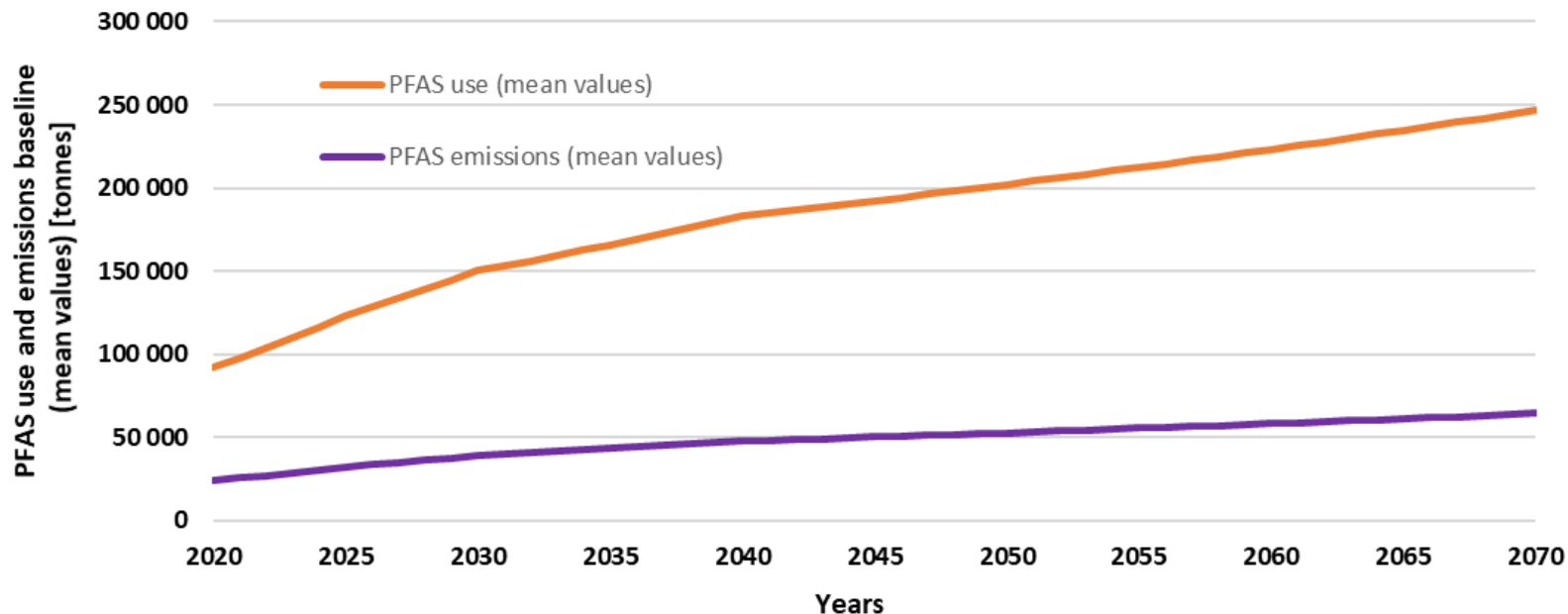
12 years

Example: Textiles

Main function	Impregnation (dirt/oil/water repellency)
Tonnage (2020)	Circa 92 000 tonne per year
Emissions (2020)	Circa 23 000 tonne per year
Estimated emissions (30 years) without restriction	1 400 000
Estimated emissions (30 years) full ban	66 000

➔ **Emission reduction of ~ 95% (in case of full ban)**

Prediction of use and emissions of PFASs in textiles



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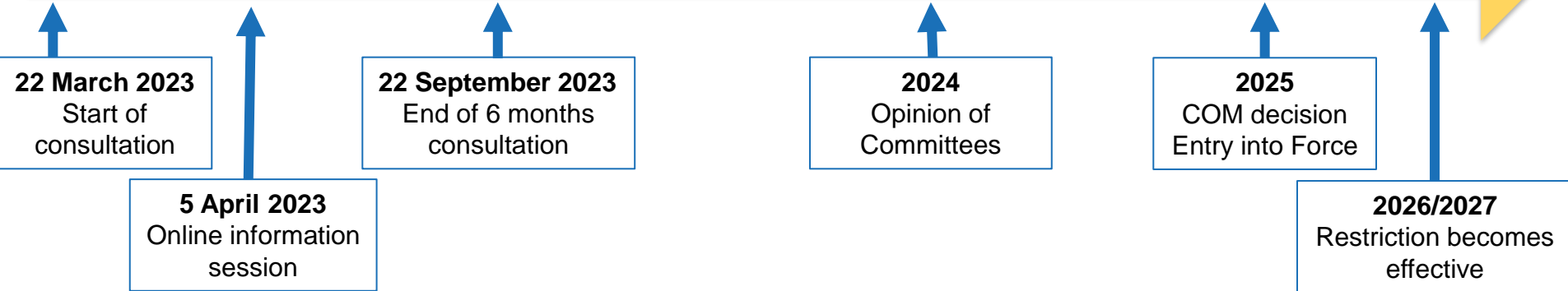
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Next steps



Consultation in scientific committees

Including 6 months + 60 days stakeholder consultation



PFASs restriction in brief

- **If releases are not minimised, adverse effects are inevitable**
- **Broad group restriction proposal**
- **(Time-limited) derogations for certain uses**
 - Industry: Effort needed to switch to alternatives
 - Environment: Emission reduction of 95 %
- **If no action is taken societal costs will exceed costs associated with a restriction**

➔ Stakeholders invited to provide input during consultation