# EeA briefing highlights concerns over PFAS polymers in Europe



Per- and polyfluoroalkyl substances (PFAS), a group of man-made chemicals, have been under scrutiny for over a decade for their potential effects on human health and the environment. Although specific PFAS compounds such as PFOS and PFOA have been widely recognised for their impacts, attention is increasingly turning to PFAS polymers, chemically larger molecules previously considered to pose lower risks.

The European Environment Agency (EEA) has published a briefing titled ‘PFAS polymers in focus: supporting Europe’s zero pollution, low-carbon and circular economy ambitions,’ which outlines emerging evidence on the lifecycle impacts of PFAS polymers. These substances currently constitute between 24 and 40 percent of the total PFAS volume on the EU market and are utilised across a diverse range of products and technologies.

The briefing emphasises the importance of assessing PFAS polymers with a full lifecycle perspective. While PFAS polymers are generally regarded as less toxic than their non-polymeric counterparts due to their larger molecular size, which restricts uptake into living cells, concerns are raised regarding various stages of their production, use, and disposal.

Among the issues identified are toxic effects on workers, local communities, and the environment from chemicals used in manufacturing PFAS polymers and the by-products generated during production. Additionally, certain PFAS polymers can degrade over time into smaller, persistent compounds which may possess greater toxicity than their original forms.

Environmental concerns also arise from the release of potent greenhouse gases such as trifluoromethane (HFC-23) and ozone-depleting substances like dichlorofluoromethane (HCFC-22) during production processes. Furthermore, the widespread incorporation of PFAS polymers in numerous products poses potential challenges for recycling efforts, as these materials are difficult to detect and separate at waste processing stages, potentially hindering circular economy objectives.

In response to these concerns, a universal PFAS restriction has been proposed under the EU’s REACH regulation by Denmark, Germany, the Netherlands, Norway, and Sweden. This proposed ban would cover all PFAS substances, including PFAS polymers, with some uses receiving limited time-bound derogations. The European Chemicals Agency (ECHA), along with the dossier submitters, has noted in recent communications that alternative restriction options besides a full ban are also being explored for certain applications.

The EEA briefing and the ongoing regulatory discussions highlight evolving understanding and policy considerations regarding PFAS polymers in Europe, recognising both their widespread use and the complex challenges related to their environmental and health impacts. The RECYCLING magazine is reporting on these developments as part of wider efforts to advance Europe’s ambitions for zero pollution, low-carbon transition, and a circular economy.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.reuters.com/business/environment/eu-plans-ban-forever-chemicals-consumer-products-2025-01-20/> - This article discusses the European Commission's plan to propose a ban on PFAS in consumer products, highlighting the environmental and health concerns associated with these chemicals.
2. <https://www.echa.europa.eu/-/echa-receives-pfass-restriction-proposal-from-five-national-authorities> - This source details the proposal submitted by Denmark, Germany, the Netherlands, Norway, and Sweden to restrict PFAS under the REACH regulation, addressing the risks posed by these substances.
3. <https://www.eea.europa.eu/publications/emerging-chemical-risks-in-europe/emerging-chemical-risks-in-europe> - The European Environment Agency's publication provides insights into the environmental and health risks associated with PFAS, emphasizing the need for regulatory measures.
4. <https://www.reuters.com/sustainability/boards-policy-regulation/calling-time-forever-chemicals-2024-02-29/> - This article examines the global impact of PFAS pollution, discussing the chemical industry's role and the increasing regulatory focus on these substances.
5. <https://www.ft.com/content/ddd8ad60-e6fa-48eb-8b67-fde95ba052b6> - This piece highlights the concerns of chip suppliers regarding the EU's proposed ban on PFAS, emphasizing the challenges in semiconductor supply chains due to these chemicals.
6. <https://www.lemonde.fr/en/opinion/article/2024/05/27/global-pfas-experts-support-proposed-french-law-to-ban-certain-uses-of-forever-chemicals_6672824_23.html> - This article reports on global PFAS experts supporting France's proposed law to ban certain uses of PFAS, reflecting the international movement towards restricting these substances.
7. <https://news.google.com/rss/articles/CBMiigFBVV95cUxPS294bW5qQTA1aGRMN3BjR2JHcThGNFJ3SlkxdXRtVm4yd1NaY18tTjlROFEyUEZETXpFdkFxdXUzS200NVltSkItYjc5SDFDZFQ3WDdxYUY3TlV5N1pSb3RfTlZqWl9BRHZVTG96QzVfMlVoTV9LNDFfdmp2ZkR1YUZCc1VBejljVnc?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data