

NGOs raise concerns over F-gas lobbying and call for Council to show environmental leadership in the F-gas Regulation

Our organisations represent over 35 million citizens and activists across the whole of Europe concerned by climate change and environmental and health deterioration.

We are writing to raise concerns over excessive lobbying from the fluorinated gas heating and cooling industry aimed at undermining proposals to ban fluorinated refrigerant bans in certain equipment types in the context of the F-gas Regulation and to call for an urgent agreement on this critical piece of climate legislation.

Europe, which is warming at twice the rate as other regions, has been pummelled by floods, wildfires and prolonged heat waves. The Secretary General of the UN, Antonio Gutierrez, has warned: “Our world needs climate action on all fronts - everything, everywhere, all at once”.¹ We urgently need leadership and a strategic vision from European policy makers, one which looks beyond the voice of the F-gas industry. Europe has historically shown environmental leadership, now is the time to support European natural refrigerant manufacturers and not simply to cave into the loudest voice in the room.

F-gases including HFCs are super climate pollutants and low global warming potential (GWP) F-gases including hydrofluoroolefins (HFOs) are per- and polyfluoroalkyl substances (PFAS) or forever chemicals with environmentally damaging breakdown products like trifluoroacetic acid (TFA). Natural refrigerant alternatives exist in abundance and do not cause these problems to the climate or human and environmental health. The EU F-gas Regulation must set a clear and ambitious timeline for the transition away from F-gases without ushering in future environmental consequences of a significant uptake of PFAS.

The EU has led the global transition away from HFCs and is home to many innovative natural refrigerant equipment manufacturers, with the number of natural refrigerant models increasing greatly in many cooling and heating subsectors. For example, in 2022 34% of the heat pumps sold in Germany, one of the biggest European markets, were based on propane.² Furthermore, a survey of German air to water heat pump models found that the almost 400 propane units available were almost 7 per cent more energy efficient than the units with F-gases.³

The trade-off between refrigerants and heat pump development implied by the F-gas industry does not exist and has been refuted by the European Commission during their analysis prior to the publication of their proposal. The aims of RePowerEU and the transition away from fluorinated refrigerants can and must go hand in hand to avoid locking in unnecessary climate damaging F-gases as the EU decarbonises its buildings and its powergrid.

Many HFCs and HFOs produce TFA as a breakdown product. The [Montreal Protocol’s Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee \(RTOC\) 2022 Assessment](#), notes that “TFA is a persistent, long-lived chemical with potentially harmful (toxic) effects on animals, plants, and humans.” Although the report notes that TFA levels are not expected to harm the environment over the next few decades “some regional concerns are being raised.”⁴ Since the publication of this report recent data on the toxicology of TFA has come to light. In 2023 a report by the UK Health and Safety Executive (HSE) identified

¹ UN Secretary General Speech 20 March 2023 Available here: <https://press.un.org/en/2023/sgsm21730.doc.htm>

² [Environmentally friendly heat: Heat Pump Monitor© 2023 shows the use of natural refrigerants in Germany - EUPD Research \(eupd-research.com\)](#)

³ German UBA Database. Available here [BAFA - Energy - List of eligible heat pumps with test/efficiency certificate \(as of 4 August 2023\)](#)

⁴ Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee of Montreal Protocol on Substances that deplete the Ozone Layer, (2022). ‘2022 Assessment Report’. UN Environment, p51. Available here: <https://ozone.unep.org/system/files/documents/RTOC-assessment%20-report-2022.pdf>

TFA as a ‘concern for developmental toxicity’⁵ and concluded that TFA requires further evaluation and investigation. This is backed by recent publications of the German Federal Environment Agency, that classify TFA as a ‘substance of very high concern (SVCH) that is hazardous to drinking water resources and must not be emitted into the environment to protect the aquatic environment for future generations.’⁶

Finally, it should not be forgotten a swift transition from F-gases will reduce dependence of the European economies on a world oligopoly of patented gases and raw materials (including fluorspar) which are mined entirely outside the EU and particularly in China (67%).

Banning fluorinated gases from all applications where this is already possible or will soon be possible will avoid pollution problem and bring forward our climate agenda, while simultaneously fostering both European technological leadership and independence.

We therefore call on the European Council to support:

- **A full ban on fluorinated gases in foams, domestic refrigeration, commercial refrigeration, monobloc heat pumps and medium-voltage switchgears and consider a staggered approach which will allow for earlier GWP 150 bans in those sectors**
- **A staggered approach (first a ban on GWP higher than 150 [for high-voltage switchgear GWP cascade from < 1, < 1000], followed as soon as possible by a ban on fluorinated gases) for all other applications.** It is worth noting that this proposal is supported by several switchgear manufacturers. See [Switching Gears for Net Zero](#)

We also strongly recommend that any applications which are not subjected to a ban on fluorinated gases will be subject to a revision clause after the universal PFAS proposal under REACH is concluded.

We remain at your disposal for any further information and we attach here below, further quick reference for the above-mentioned figures and facts.

Why the F-gas Regulation is about European dependence on raw materials. [Here](#)

Why the F-gas Regulation is the most important PFAS legislation. [Here](#).

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⁵ Health and Safety Executive (2023). ‘Analysis of the most appropriate regulatory management options (RMOA)’. UK Environment Agency, p107. Available here [UK REACH: Regulatory management option analysis \(RMOA\) \(hse.gov.uk\)](#)

⁶ Arp et al. (2023). ‘Prioritised PMT/vPvM substances in the REACH registration database’. German Federal Environment Agency. Available here. [UBA TEXTE 21/2023 Prioritised PMT/vPvM substances in the REACH registration database \(umweltbundesamt.de\)](#)