

Narrow or Eliminate The Feedstock Exemption

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Science Warning That Feedstock Emissions Will Delay Ozone Recovery 7 (6-11) Years!

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Breaking News: Feedstock Emissions Delay Ozone Recovery!

- Parties exempted feedstocks from phaseout based on assumptions of the early negotiators and claims by fluorocarbon manufacturers of near-zero emissions and no replacements for products important to society made with ODS feedstocks
- The truth is that atmospheric feedstock emissions delay ozone recovery to mostly make plastic products unimportant to society that pollute fresh water, land, oceans, and atmosphere!

Co-benefits of Narrowing Feedstock Exemption

- Ozone recovery back on schedule
- Lower greenhouse gas emissions (particularly HFC-23 and HCFC-22)
- Less plastic pollution, more nature-based products and recycle
- Less global warming from airborne microplastics and nanoplastics
- Safer workplaces and chemical manufacturing communities
- Less trifluoroacetic acid (TFA)
- Easier prevention of unauthorized production, illegal trade, and emissions

View and Weep



Next Steps to Ozone Recovery and Less Plastic

- Parties, by Decision can **narrow** the feedstock exemptions or, by **Amendment** can **do away** with the exemptions while the Technology and Economic Assessment Panel (TEAP) monitors the environmental superiority of replacement technology; for example, a Decision for a 10% annual ODS and HFC feedstock reduction
- Meanwhile, TEAP can catalogue available not-in-kind replacements for plastics (fluoropolymers) made from feedstocks controlled by the Montreal Protocol and also contribute to upstream solution options for plastic AND atmospheric pollution
- A traditional time-limited Essential Use Exemption is a safety valve in case of a plastic product important to society that cannot be supplied without fresh ODS feedstock
- An Emergency Essential Use Exemption of no more than 20 metric tonnes each request can be granted by the Ozone Secretariat after consulting TEAP

THANK YOU!

Backup Slides

Decision IV/25: Essential Use Exemption (EUE)

- EUE **only if:**

- Necessary for health, safety, or is critical for the functioning of society, AND
- No available technically and economically feasible alternatives or substitutes that are acceptable from the standpoint of environment and health

- Production and consumption **only if:**

- All economically feasible steps have been taken to minimize the essential use and any associated emission of the controlled substance; AND
- The controlled substance is not available in sufficient quantity and quality from existing stocks of banked or recycled controlled substances

- <https://ozone.unep.org/treaties/montreal-protocol/meetings/fourth-meeting-parties/decisions/decision-iv25-essential-uses>

The Montreal Protocol Can Join the Global Fight Against Plastic Pollution Because...

- Narrowing the feedstock exemption can curb plastic upstream at the production stage!
- Flexible mechanisms and TEAP under the Montreal Protocol and national implementation strategies can guide the choice of environmentally superior alternatives, as was the case with ODS phaseout!
- The Montreal Protocol can jump-start a legally binding international plastics treaty!

Background: Feedstock Exemptions

- ODS and HFC feedstocks are Montreal Protocol “controlled substances”
- In the Montreal Protocol London Amendment (1990), Parties were short-sighted in modifying the definition of “production” to exempt controlled substances used as feedstocks from calculations of substances produced and consumed.
- Parties agreed to an adjustment that exempts “insignificant quantities of controlled substances originating from inadvertent, unauthorized or coincidental production during a manufacturing process, from unreacted feedstock, or from their use as process agents which are present in chemical substances as trace impurities, or that are emitted during product manufacture or handling from the definition of controlled substances.” (Decisions IV/12 and XXIV/6.)

Background: Feedstock Exemptions

- In adopting this amendment and adjustment, Parties falsely assumed that feedstocks were converted to other chemicals in their entirety and were emitted in insignificant amounts and also falsely assumed feedstocks were not diverted to unauthorized trade
- Since the amendment and adjustment, rampant illegal trade in unauthorized ODSs and HFCs plus increased atmospheric monitoring have invalidated the assumption and exposed industry deception

Background: Feedstock Exemptions

- The Montreal Protocol Scientific Assessment Panel (SAP) has warned Parties that global carbon tetrachloride (CTC) and other ODS emissions are far greater than explained by authorized production
- Reminder! Montreal Protocol Parties absolutely have the authority over ODSs and HFCs and can exercise this authority to narrow the use of these substances as feedstocks.

Additional Resources

- Reimann, Stefan, Luke M. Western, Megan J. Lickley, David Sherry, John S. Daniel, Lambert J. M. Kuijpers, Stephen A. Montzka, Matthew Rigby, Guus J. M. Velders, Martin K. Vollmer, Lukas Emmenegger, Qing Liang, Sunyoung Park, and Susan Solomon. 2026. [Continuing Industrial Emissions are Delaying the Recovery of the Stratospheric Ozone Layer](#). *Nature Communication*, 17(3190)
- Stephen O. Andersen, Song Gao, Suely Carvalho, Richard “Tad” Ferris, Marco Gonzalez, Nancy Sherman, Yiyao Wei, and Durwood Zaelke. 2021. [Narrowing Feedstock Exemptions Under the Montreal Protocol has Multiple Environmental Benefits](#). *Proceedings of the National Academy of Sciences* 118(49)
- Stephen O. Andersen, Marco Gonzalez, and Sally Rand. 2023. [35th Anniversary Protecting the Ozone Layer](#). United Nations Environment Programme (UNEP) and Institute for Governance & Sustainable Development (IGSD).

About IGSD...

Institute for Governance & Sustainable Development (IGSD) is a nongovernmental organization (NGO) with offices in Washington, DC, and Paris, France. IGSD's mission is to build resilience by accelerating fast climate mitigation actions to slow near-term warming and self-reinforcing climate feedbacks, avoid catastrophic climate and societal tipping points, and limit global temperature to 1.5°C—or at least keep this temperature guardrail in sight.

<https://www.igsd.org>