ECOS position on the upcoming F-Gas Regulation trialogue

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ECOS calls on EU institutions, and especially on the Council and its members, to maintain the ambition of EP's position by backing strict bans on F-Gases with precise deadlines that will most of all defend public health and protect climate.

The F-Gas Regulation should not create a new environmental and health problem while tackling the climate problem of F-gases. As long as no concrete HFC phase-out and F-gas product bans are determined, industry will continue developing new potentially harmful chemical substitutes. F-gas alternatives do already exist in the European market. There is no need to trade public health and climate protection for the prolonged use of F-gases which also have the highest emission contribution to PFAS pollution. Given the heavy workload of the Spanish Presidency and the need for this file to be finalised and ready to come into effect for the start of 2024, a successful outcome in the next 19 July trialogue is of utmost importance.

ECOS calls on national governments and the Council presidency to consider the following points:

The F-gases phase-out must be protected

- An HFC phase-out would send a clear global signal ensuring the EU remains a leader on F-gas ambition and affording leverage for faster action under the Montreal Protocol.
- We must ensure that the F-Gas Regulation is futureproof and helps the EU achieve its climate neutrality goals by 2050.
- A swift transition away from F-gases will reduce EU dependency on imported F-gases and fluorspar from third countries.
- A full-scale and prompt transition to climate-friendly solutions is needed to avoid an unmanageable burden on future generations to contain HFC leakage during use and recover HFCs at end of life.

Annex IV bans are justified and should remain ambitious

Why is a ban of all fluorinated gases justified?

- A ban will include HFOs, which otherwise sit outside HFC phase-down and are patented by US multinationals.
- The idea is not new; there is precedent as this approach has been previously taken by the Commission (e.g., ban 21)
- Banning all F-gases aligns with potential upcoming PFAS restrictions under REACH.

ECOS - Environmental Coalition on Standards
c/o WeWork, Rue du Commerce 31 · 1000 Brussels · Belgium
T ++32 2 899 7680 · info@ecostandard.org · ww.ecostandard.org

- It helps avoid locking in environmentally damaging HFC blends below GWP 150, which risks ever-growing servicing and maintenance costs and stranded assets.

Specific bans are implementable with no delay.

- Ban 14 is possible as F-gas-free alternatives already exist on the market.

- Ban 17 should not be delayed. The proposed ban date for 150 GWP varies between 2025-2027. Many manufacturers already offer systems that meet this GWP threshold. Therefore, it should come in effect as soon as possible. In addition, total F-gas ban dates are necessary, even if they are later. This will allow industry time to move away from environmentally harmful chemicals. The market has already shifted significantly to non-F-gas alternatives for self-contained AC and heat pumps, monoblocs included. A full F-gas ban therefore prevents backsliding and unnecessary use.

- Ban 18's date for 150 GWP of 2027 in single split systems of <12 kW is viable as the necessary technology already exists. The ban should apply to both air-air and air-water systems.
    - A new product standard is opening the door for air-air spilt systems and a market signal is needed to unlock innovation. There is no need to change kW cut off down to 6kW as proposed by industry. The new standard for residential air conditioning will allow for safe and energy efficient use of R290 in systems up to 12 kW. A recent study found that 12kW systems using R290 can achieve Seasonal Energy Efficiency Ratios (SEERs) of 12.1.
    - A total F-gas ban date is necessary and viable as the market is shifting towards non-HFC alternatives for AC and heat pumps for 12 kW and below and above 200 kW. This ban would prevent backsliding and unnecessary use of PFAS.
    - The 150 GWP limit for >12kW is also necessary. Manufacturers are already innovating. For example, Panasonic has recently launched a range of F-gas free heat pumps from 50-80 kW.2

New bans must be considered.

New bans will ensure that all sectors where alternatives are available are progressing away from F-gases. They are technologically feasible. We would like to draw your attention to the following issues:

- For Mobile AC, a market signal is required to unlock investment in production.

- In Mobile refrigeration, transport refrigeration units typically have high leakage rates, short lifetimes and poor end of life refrigerant recovery, making this a key subsector for urgent action to address fluorinated gas emissions. Leakage rates for refrigerated road transport can be as high as 165% of original charge over a 10-year period. The 2021 Preparatory Study states the lifetime emission rates of transport refrigeration systems are the highest of all non-emissive sectors behind ship air conditioning at 25% for vans, 18% for trucks and trailers and 30% for fishing vessels.3 Low-GWP alternatives exist already on the market, but uptake has been slow necessitating an Annex IV ban to motivate the market to shift.

- Foams have a product lifetime of 50 years and the recovery of F-gases within is expensive. Alternatives relying on H20, and CO2 are already available for XPS and PU Spray foams. One component Foam (OCF) is currently only using HFC-1234ze, but that sector should be encouraged

to find an alternative to F-gases. To the extent there are any concerns about the feasibility of a transition in the OCF sector, Article 11(4) provides a sufficient safeguard provision that allows for time-bound exemptions when alternatives are unavailable. Bans must ensure that retrofit of buildings under the Energy Efficiency Directive uses HFC-free foams.

- For **technical aerosols**, there is a broad consensus on the technical feasibility of alternatives. Their cost-effectiveness has been proven with further cost reductions expected through economies of scale.

- **Chillers** is another area where bans are required. **Mini chillers** require very little refrigerant charge and can rely on propane. A clear market signal will prevent market penetration and use of mid-GWP HFCs, HFOs and HFC blends. **Displacement and centrifugal chillers** currently have multiple natural refrigerant alternatives that are expected to dominate the market going forward. The use of F-gases in these sectors unnecessarily consumes HFC quotas and contributes to illegal HFC trade.

- **Ban 23 / Art. 13** on **switchgear** is necessary. A total F-gas ban instead of GWP limits (even GWP 10) is needed because GWP limits promote the establishment and development of PFAS substitutes and SF6 mixtures. Especially on Medium Voltage level, F-gas free solutions are widely available from several manufacturers. At High Voltage level, F-gas free solutions are available within the set timelines according to manufacturers.

Anastasia Tsougka
Programme Officer
www.ecostandard.org
WeWork, Rue du Commerce 31, B-1000
Brussels, Belgium

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