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SUPPORTING SUSTAINABLE AMBITION AND STRONGER ENFORCEMENT OF THE F-GAS REGULATION TO PROMOTE EUROPE'S TRANSITION TOWARDS DECARBONIZATION

The European FluoroCarbons Technical Committee (EFCTC)¹, representing producers and suppliers of HFCs, HFOs and HCFOs, fully supports the objectives of the F-gas Regulation. Specifically, EFCTC recognises that the review of the current rules provides a real opportunity to strengthen the implementation and enforcement of the EU's approach to regulate F-gases and extend the refrigeration, air conditioning and heat pump (RACHP) containment measures including certification, recovery, to all F-gases. This will build on the successful transition to lower global warming potential (GWP) solutions that the current Regulation is fostering.

The F-gas Regulation² is currently meeting its objectives. Our industry remains committed to do its part to comply with the already ambitious phasedown schedule for HFCs but caution that going forward it must be carefully calibrated to ensure that it does not disrupt and delay the transition that European industries and consumers are already pursuing. Furthermore, whilst keeping EU adherence to international agreements, the F-gas Regulation needs to protect competitiveness of EU industry and facilitate international trade in lower GWP products and equipment.

This paper provides EFCTC's views on how the revision of the Regulation can best support this critical effort and deliver tangible emissions reductions. EFCTC would recommend the following:

- A. F-gases will play a key role in decarbonising critical European industries relying on heating and cooling technology. It must be ensured that the proposal is based upon a thorough adequate review of each technology sector/application to determine the required amounts of F-gases needed to allow each sector to deliver on the European Union's ambition to reach net zero by 2050, in line with the energy efficiency first principle.
- B. The proposal contains several measures to strengthen the Regulation through the tackling of illegal trade of F-gases with reinforced legal provisions facilitating improved border control and enforcement but lacks the introduction of harmonised minimum penalties. It is essential that these are supported and extended (as detailed below).
- C. Effectively improve the control and implementation of the Regulation, in particular the HFC quota system and for New Market Entrants.
- D. Extend measures to improve reporting, verification and to prevent leakage from equipment as well as address end-of-life treatment to all F-gases, including HFCs, HCFOs and HFOs .

¹ [Home - Fluorocarbons](#)

² [Regulation \(EU\) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation \(EC\) No 842/2006Text with EEA relevance \(europa.eu\)](#)

Based on these four recommendations, EFCTC would underline the following points, by way of further detail:

- A. F-gases will play a key role in decarbonising critical European industries relying on heating and cooling technology. It must be ensured that the proposal is based upon a thorough adequate review of each technology sector/application to determine the required amounts of F-gases needed to allow each sector to deliver on the European Union’s ambition to reach net zero by 2050, in line with the energy efficiency first principle.**

F-gases will play a key role in decarbonising critical European industries relying on heating and cooling technology. The revised F-gas Regulation needs to facilitate this parallel objective. The current proposal limits its focus on direct emissions.

We encourage the European policymakers to take into account a more holistic view and assessments by F-gas users, including energy efficiency and decarbonizing heating by heat pumps, in order to avoid counter-productive effects on the overall EU Green Deal targets. Sustainable ambition will be achieved by balancing the intertwined objectives and legislation provisions on direct and indirect emissions.

The Commission has identified the review and revision of the current phase down schedule as a necessity to meet Europe’s ambitious 2030 climate goals. At the same time, it has acknowledged that to reach carbon neutrality, the support of innovative technologies delivering energy savings in energy intensive sectors, mobility, and buildings must be fully harnessed.

The REPower EU Action plan, which has targets to roll out 30 million heat pumps in Europe by 2030, demonstrates the high growth necessary in the residential heat pump markets and commercial/industrial applications in almost all sectors where the capture of heat from the air/ground/water or waste sources presents a real opportunity to decarbonise with direct energy savings. F-gases therefore are critical technologies to reduce the EU’s dependency of fossil heating sources and meet these aims. According to EPEE estimates³, using high efficiency RACHP equipment can lead to savings of 20GW (Gigawatt) in 2030 – the equivalent of 20 nuclear power stations or 13,000 wind turbines.

Given the complexity of the RACHP markets, including domestic, commercial, mobile and industrial uses, there cannot be a “one size fits all” technological solution for all applications. Each sector/application requires its own specific and unique review to determine the most effective balance between energy efficiency characteristics, resource efficiency (material, time, energy), low GWP solutions and the safety requirements needed for each application. Regional differences also need to be taken into account.

All this, while ensuring a continuous availability of solutions to the sectors/applications seeking to not only decarbonise but also maintain their operations. In most cases, existing heating and cooling systems require current HFCs. There are no viable alternatives to further reduce the CO₂ value of the of such systems. For new systems, it is essential that there is an assurance of the medium to longer term availability of low GWP solutions including HFCs and HFOs to the sectors seeking to decarbonise their operations. For example, when it comes to industrial refrigeration – not all systems are large enough to suit use of alternatives such as ammonia or CO₂.

³ [EPEE](#) HFC outlook EU

The EU HFC phase down has proven to be a powerful driver for the industry to transition towards lower GWP solutions. The Regulation provides a predictable signal to the industries using F-gases and to those introducing and developing alternatives to F-gases with higher GWP. Since 2015, the European market has demonstrated that the structure of the F-gas Regulation provides the market flexibility to make appropriate refrigerant choices as well as driving the reduction of refrigerant related emissions. The full positive impact of the current F-gas Regulation has been confirmed by the latest report on fluorinated greenhouse gases by the European Environment Agency⁴.

B. The proposal contains several measures to strengthen the Regulation through the tackling of illegal trade of F-gases with reinforced legal provisions facilitating improved border control and enforcement but lacks the introduction of harmonised minimum penalties. It is essential that these are supported and, as detailed below extended.

Following the adoption of the current F-gas Regulation, the implementation of the quota system led to significant price increases. An unintended side-effect of the new system gave rise to a new, powerful underground market trading in illegal HFCs.

The quotas continue to be circumnavigated often by criminal organisations, who make vast profits on this black market including through e-commerce. As early as 2016, reports of illegal (non-quota) HFCs in European markets began to emerge and up to a potential maximum of 31 million tonnes CO₂ equivalent could have entered through EU borders illegally in 2019.⁵ This constitutes up to a third of the EU legal market⁶. Several countries have made successful seizures of illegal shipments, such as during the Joint Inspection Week.⁷ The review of the F-gas Regulation and the introduction of the Single Window Environment for Customs, which enables better cooperation between the different customs authorities, provide the perfect opportunities to tackle the challenge and further reduce the illegally traded HFCs on the European market. To this end, we are supportive of the Commission proposal and would like to make suggestions to further improve these measures through the following:

- EFCTC supports the setting of minimum penalties under Article 31 for non-compliance in the revised Regulation. Member States currently vary in their approach to penalties and in many cases, they are too low to act as any sort of deterrent to illegal activities. This disparity is exacerbated by differing judicial approaches and legal mechanisms in Member States. As a consequence, a coordinated minimum approach across Europe, as was adopted in the EU Emissions Trading Directive, is very much needed to ensure the fight against illegal trade is properly advanced.
- *Secondly*, online sales of non-compliant cylinders should be banned on e-commerce platforms. Controlling the illegal supply of HFCs into the EU is crucial to deliver on the environmental

⁴ A December 2021 [report](#) by the EEA on F-gases demonstrated progress made under the EU's hydrofluorocarbon (HFC) quota system, as governed by the EU F-gas Regulation. The report recognised that in 2020 the quantity of HFCs placed on the EU market was 4% below the limit allowed under the EU HFC quota system, and thus, 52% below the maximum imposed by the Montreal Protocol's Kigali Amendment.

⁵ https://stopillegalcooling.eu/wp-content/uploads/EFCTC_Press-Release_EN-3.pdf

⁶ <https://eia-international.org/wp-content/uploads/EIA-report-Doors-wide-open.pdf>

⁷ <https://www.europol.europa.eu/media-press/newsroom/news/f-gases-worth-more-%e2%82%ac-10-million-seized-in-week>

objectives of the Regulation. The lack of transparency in online marketplaces is a problem for the enforcement of information requirements.

- *Thirdly*, action must be taken to stop the abuse of the T1 Transit process, which has been identified as an important route for illegal imports of HFCs. *Article 20* requires the registration and *Article 26* requires reporting for imports including temporary storage and the customs procedures referred to in Articles 201 and 210 of Regulation (EU) 952/2013⁸. *Article 23* asks for designated entry and exit points. EFCTC asks that this is maintained and is upgraded by defining the criteria under which the customs offices are selected.
- *Fourthly*, the mandatory implementation of the Single Window Environment for Customs – fluorinated greenhouse gases Union non-customs formality must be ensured as early as possible.
- *Finally*, guidance should also be mandated for the disposal of confiscated products, containers and equipment illegally imported into the EU and funding needs to be allocated to the Member States choosing to opt for destruction.

C. Effectively improve the control and implementation of the Regulation, in particular, the HFC quota system and for New Market Entrants

The current Regulation controls the placing on the market of HFCs through a quota system. This system allocates companies operating in the EU market quota to place a specific quantity of HFCs on the market each year, as well as providing quota to new entrants to the market. The current system has inadvertently led to a significant fragmentation of the HFC market through the introduction of several thousands of new entrants annually to the EU markets trying to circumvent the quotas systems. This has resulted in the disruption of compliant, well-established supply networks that made large investments in the handling and recovery of HFCs. It has also created major bureaucratic issues in controlling the import of HFCs in the EU.

The review provides a possibility to consider whether allowing further new entrants will benefit the supply of F-gases to the EU market whilst the phase down is further reducing the quantities permitted on the market, as well as how to manage new applications.

- *Firstly*, The Commission proposal introduces new conditions for registration and allocation of quota. EFCTC fully supports the effective vetting of all companies placing HFCs on the EU market as has been proposed.
- *Secondly*, to better enable enforcement of the regulation, EFCTC notes the upfront charge that is proposed to be levied on all producers/importers, covering the cost of managing quota allocations, IT services and licensing systems. We stress that any charge must be fair and proportionate. Such necessary enforcement structures and resources need to be in place before a payment as introduced under *Article 17 [4] can be implemented*. The charge of €3/tonne CO₂ equivalent as well as payment upfront for the quotas in the proposal is prohibitive and could disrupt market supply.

⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R0952>

D. Extend measures to improve reporting, verification and to prevent leakage from equipment as well as address end-of-life treatment to all F-gases, including HFCs, HCFOs and HFOs

To improve reporting and verification measures of the Regulation, thresholds and exemptions must be removed or changed to avoid misuse by players on the market and to ensure that they do not present a risk to the Union's compliance with their international obligation under the Kigali Amendment.

In order to improve the management of use and emissions of F-gases on the EU market, it is essential that there is a full understanding of the entire lifecycle of these products and equipment. This will enable measures to be taken to tackle the most critical areas of emissions. Vital pillars to address as part of the review include: improvements in information on the handling of F-gases through the mandatory use and evaluation of electronic logbooks under Article 7 and on recovery, recycling and reclamation as well as reinforcing the provisions on the end-of-life of F-gases.

- *Firstly*, addressing F-gas leakage, recovery and re-use provide real opportunities to further reduce emissions of all F-gases including HFCs, HCFOs and HFOs. Promoting recovery and subsequent recycling or reclamation should be prioritised where technically feasible. It is essential that Member States encourage the development of producer responsibility schemes under Article 9 for the recovery of fluorinated greenhouse gases and their subsequent recycling, reclamation or destruction. This should also require the Commission to evaluate potential opportunities to harmonise such schemes at EU level.
- *Secondly*, introducing a requirement for Member States under Article 29 to collect, evaluate and monitor mandated logbooks in electronic format would help identify leakage and emissions.
- *Thirdly*, add a business specification in the F-gas Portal profile for undertakings performing reclamation of F-gases to enable reporting of their relevant activities.

About EFCTC

The European FluoroCarbons Technical Committee is a Cefic Sector Group that monitors legislation related to HFCs (hydrofluorocarbons), and HFOs (hydrofluoro-olefins) in the EU and at global level.

Fluorocarbons are used as feedstock, as refrigerants, as solvents and as blowing agents for insulation plastic foams.

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Disclaimer: The present position paper represents the views and opinion of the EFCTC Sector Group, not necessarily of Cefic as a whole.

EFCTC'S 13 RECOMMENDATIONS FOR A SUCCESSFUL REVISION OF THE F-GAS REGULATION

PHASE-DOWN

1. EU policy makers to discuss with user groups to get their views on whether or not they can meet the new proposed HFC phase-down schedule and how it impacts their investments based on the current Regulation.
2. Ask the Commission to explain how (methodology/process/findings) they have carried out the review of their earlier and more severe proposed phase-down and its impacts on the goals of the REPower EU Action Plan, which has set targets to roll out 30 million heat pumps in Europe by 2030. The proposed new provisions under the F-gas Regulation could potentially slow down the much-needed adoption of heat pumps in Europe as well as other energy efficient technologies.

ILLEGAL TRADE

3. *Article 31* allows the setting of maximum penalties. EFCTC believes that there should be a set of minimum penalties for non-compliance to act as a deterrent to illegal trade.
4. *Article 20* requires the registration and *Article 26* requires reporting for imports including temporary storage and the customs procedures referred to in Articles 201 and 210 of Regulation (EU) 952/2013⁹. *Article 23* asks for designated entry and exit points. EFCTC asks that this is maintained and is upgraded by defining the criteria under which the customs offices are selected.
5. *Article 11* upgrades the controls on the supply of HFCs into the EU. This is essential to prevent illegal trade. EFCTC believes that this should be strengthened further to either ban the sales of F-gases on on-line marketplaces or to introduce mandatory certification for undertakings selling bulk F-gases online.
6. *Article 23* introduces a number of actions for national customs authorities, EFCTC asks that guidance is mandated for the disposal of confiscated products, containers and equipment being illegally imported into the EU (i.e. timing) and funding be allocated to the Member States for destruction, if that is the chosen option of the Member States.
7. Ensure mandatory implementation of the Single Window Environment for Customs – fluorinated greenhouse gases Union non-customs formality as early as possible.

⁹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R0952>

PRODUCER/IMPORTER RESERVE AND QUOTA ALLOCATION

8. Levy a proportionate upfront charge on all producers/importers which covers only the costs of external staff working on the management of quota allocations, IT services and licensing systems for the purpose of implementation of the Regulation. Enforcement enabled through these fees needs to be demonstrated to be effective against illegal trade in HFCs.
9. Maintain the effective vetting of all companies that are placing HFCs on the EU market under *Article 18* of the proposal.

REPORTING, VERIFICATION, LEAKAGE CONTROL FROM EQUIPMENT AND END-OF-LIFE FOR ALL F-GASES

10. EFCTC strongly supports the new verification obligation for all undertakings in *Article 16 [9]* (i.e. the historical reporting on production, import, export, feedstock use and destruction of F-gases) that has been extended to apply to any reporting above a 1000t CO₂e threshold.
11. Remove the exemption from reporting requirements for bulk HFC producers and importers of less than 100 tonnes of carbon dioxide equivalent (CO₂e) per year in *Article 26 [1]*, in order to prevent multi-importations of HFCs.
12. Introduction of a requirement under *Article 29* to require Member States to collect and collate data from logbooks.
13. Extension of *Article 9* on the development of producer responsibility schemes for the recovery of fluorinated greenhouse gases and their recycling, reclamation or destruction by Member States to require the Commission to report on and to evaluate the opportunities to harmonise such schemes at an EU-level.

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