

COMBINED EVALUATION ROADMAP/INCEPTION IMPACT ASSESSMENT

This combined evaluation roadmap/Inception Impact Assessment aims to inform citizens and stakeholders about the Commission's work in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities. Citizens and stakeholders are, in particular, invited to provide views on the Commission's understanding of the current situation, problem and possible solutions and to make available any relevant information that they may have, including on possible impacts of the different options.

TITLE OF THE INITIATIVE	<i>Review of EU rules on fluorinated greenhouse gases</i>
LEAD DG – RESPONSIBLE UNIT – AP NUMBER	DG CLIMATE ACTION – Unit A2: Climate finance, mainstreaming, Montreal Protocol
LIKELY TYPE OF INITIATIVE	<i>Evaluation and proposal for a Regulation on Fluorinated Greenhouse Gases (recast)</i>
INDICATIVE PLANNING	<i>Q4_2021</i>
ADDITIONAL INFORMATION	https://ec.europa.eu/clima/policies/f-gas_en

This combined roadmap/Inception Impact Assessment is provided for information purposes only. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by this document, including its timing, are subject to change.

A. Context, Evaluation, Problem definition and Subsidiarity Check

Context

This Commission recently adopted the [European Green Deal Communication](#) and proposed a [Climate Law](#) with the objective to step up EU ambition and to reach climate neutrality by 2050. Early and ambitious action to avoid emissions from fluorinated greenhouse gases (F-gases) is key to reaching these objectives, because F-gases are used in equipment (e.g. refrigeration and air-conditioning) that will be emitting these highly warming gases for decades. In 2014, the EU adopted strict [F-gas rules](#) that together with [rules on air-conditioning in cars](#) are expected to reduce emissions by two-thirds by 2030 compared to 2014. Furthermore, in 2016 countries in the world agreed to limit progressively the production and consumption of hydrofluorocarbons (HFCs: the most common F-gases) under the [Montreal Protocol](#). This will help implementation of the Paris Agreement and may reduce climate warming by up to 0.4 degrees Celsius by 2100. The current F-gas rules can only safeguard EU compliance with the Protocol until 2030.

Evaluation

To contribute to the EU's climate targets and taking into account only the technologies known at the time, the F-gas [Regulation \(EU\) No 517/2014](#) was designed to reduce emissions by discouraging the use of F-gases with strong climate effects, as well as preventing their emissions, e.g. from equipment relying on F-gases (containment measures). It also aimed at facilitating a global agreement on HFCs, which materialised with the the Kigali Amendment to the Montreal Protocol in 2016, and to stimulate innovation in climate-friendly technologies. This evaluation will examine how the F-gas rules have affected the market by looking into the progress made on avoiding F-gas use, overall consumption and resulting emissions, and at which cost this was achieved. It will examine the effectiveness, efficiency, coherence, relevance and EU added value of the different types of measures; specifically the quota system ("phase-down"), prohibitions, containment measures, and reporting/verification. The evaluation will also seek to identify opportunities for clarifying and simplifying the rules and reinforcing their enforcement. The evaluation and impact assessment will be carried out back-to-back and cover the period 2015 until now in the EU Member States. It will seek to combine the fact finding and stakeholder consultations on the performance of the existing Regulation with an assessment of impacts of proposed policy options to the extent possible. In this way, the process will allow to respond in a timely fashion to recent developments that require our intervention (see problem description below).

Problem the initiative aims to tackle

EU F-gas emissions have increased by 60% since 1990 and currently amount to 2.5% of overall EU greenhouse gas emissions. While the existing rules in place can already achieve significant emission reductions, the EU should update the rules in the light of the European Green Deal objectives, recent international obligations (cf. Kigali Amendment), technical progress made and lessons learned during the implementation. While the current rules contribute to more climate-friendly technologies and the achievement of an international agreement on HFCs, some challenges need to be tackled:

- **The EU will be at risk of becoming non-compliant with the Montreal Protocol after 2030.** The last step of the EU-regulated phase-down is in 2030 and there are currently no clear rules and no reduction

planned for the period thereafter. Under the Montreal Protocol the last reduction step is in 2036, at a lower level than is achievable with the current EU phase-down schedule. Also there are some EU exemptions and thresholds that do not exist under the Montreal Protocol rules. In addition, specific limitations on production required by the Protocol are not part of the EU rules on F-gases

- **The recent technological development may permit further emission savings in support of reaching the European Green Deal objectives more easily.** Higher ambition and further promotion of climate-friendly technologies may be possible, in particular in sectors not covered by the phase-down of HFCs and thus currently lacking a policy driver to a widespread market introduction.
- **There are some challenges related to the implementation and enforcement of the Regulation.** These challenges concern e.g. illegal imports and misuse of the quota system as well as more comprehensive monitoring and a need for better policy coherence to exploit synergies with the “Single Window for Customs”.

Basis for EU intervention (legal basis and subsidiarity check)

The legal basis for this intervention is Article 192(1) of the Treaty on the Functioning of the European Union (Environment). It is an area of shared competence between the Union and Member States. In general, there is a clear imperative to act at EU level: Only a harmonized EU approach can implement the obligations under the Montreal Protocol as regards HFC consumption and respect internal market rules at the same time (i.e. free movement of goods). It is also largely more efficient for undertakings, as well as authorities, to deal with one EU level system only instead of having 27 different national systems managing trade licences, quotas and reporting. On the contrary, the Montreal Protocol obligations on reducing HFC production capacities could also be ensured unilaterally by those Member States affected. However, it may be more efficient to do this at EU level.

B. Objectives and Policy options

The baseline is maintaining the current Regulation without changes. The policy options will depend on the findings of the evaluation and are expected to include the following:

- **Seeking alignment with the Montreal Protocol**
 - Add new phase-down steps beyond 2030 to the existing phase-down
 - Remove some exemptions and thresholds not foreseen by the Montreal Protocol
 - Make separate phasing down of HFC production
 - Add flexibility to be able to align with future Montreal Protocol decisions
- **Raising ambition in line with European Green Deal**
 - Increase phase-down ambition in line with technological development
 - Prohibit the use of F-gases in products or equipment, where these gases are no longer needed
- **Improve implementation and enforcement**
 - Technicians also to be trained on the use of non-F-gas alternatives
 - Include detailed rules to empower customs and surveillance authorities and facilitating a link to the “Single Window for Customs” and real-time per-shipment tracking in the HFC licencing system.
 - Strengthen obligations of economic operators to prevent illegal trade
 - Limit the market players to legitimate participants
 - More comprehensive monitoring
- **Clarifications that are identified by the evaluation**

C. Preliminary Assessment of Expected Impacts

The significance of the impacts is expected to vary across the different policy options considered. All impacts will be assessed against a baseline scenario, which assumes no modifications to the existing Regulation.

Likely economic impacts

F-gases are used in many sectors. The refrigeration and air conditioning sector is consuming ¾ of EU F-gases but is already being transformed due to the HFC phase-down (and some accompanying prohibitions). The additional economic impact on this sector is expected to be minor, as the objective is to reinforce measures only where alternatives are available and the costs of switching reasonable. For sectors using F-gases other than HFCs (e.g. SF6), new prohibitions could result in additional costs. EU manufacturers of climate-friendly equipment could benefit from a strong policy driver for innovation and obtain higher turnover as the world demand for such equipment is increasing due the global agreement on HFCs. Better implementation and enforcement would benefit compliant companies, including SMEs, as unfair competition due to illegal activities would be prevented. Macroeconomic effects are expected to be small, as it was the case for the existing Regulation¹.

¹ https://ec.europa.eu/clima/sites/clima/files/f-gas/legislation/docs/swd_2012_364_en.pdf

Likely social impacts
Green transformation may improve competitiveness and create job opportunities. Job losses are not expected.
Likely environmental impacts
An updated phase-down and new prohibitions would reduce F-gas emissions, in particular in the long term. How much is achievable in the medium and long-term will be investigated. Additional emissions saved are mostly linked to avoidance of F-gases in new equipment, which would otherwise be lost by leakage over its lifetime ² . Thus the higher the ambition now, the more emissions can be prevented in the distant future. Better implementation and enforcement will help safeguard the expected emission reductions of the current Regulation, i.e. two-thirds reduction by 2030.
Likely impacts on fundamental rights
No significant impacts expected.
Likely impacts on simplification and/or administrative burden
Less burden for authorities and importers is likely due to improved implementation measures and clarifications. On the other hand administrative burden may increase slightly due to necessary adjustment to Montreal Protocol rules and minor changes to ensure more comprehensive monitoring.
D. Evidence base, Data collection and Better Regulation Instruments
Impact assessment
The economic, environmental and social aspects of the considered policy options will be assessed. The impact assessment will support the preparation of this initiative and inform the Commission's decision, The plan is to conclude the assessment in Q2_2021. External consultants will assist in assessing the performance of the current Regulation and the impacts of the policy options.
Evidence base and data collection
The Commission is monitoring and analysing the EU HFC market, climate-friendly alternatives, effects of the quota system and the phase-down progress via several contracts with external consultants. The Commission will publish reports on specific F-gas topics in 2020. Data from the annual reporting from undertakings required by the F-gas Regulation is analysed and compiled by the European Environment Agency. Global data and analysis is available from the technical bodies of the Montreal Protocol and scientific literature. External consultants will help collecting and assessing additional relevant data to close existing data gaps, mostly from industrial stakeholders, their associations and national administrations. They will also carry out modelling of the F-gas market, including the future F-gas demand and the availability of alternatives in the medium to long term, as well as emission scenarios for the EU in the relevant sectors and sub-sectors. Commercially sensitive data will require special treatment for handling and accessing the information.
Consultation strategy
The stakeholder consultations are meant to strengthen the evidence base for the evaluation and impact assessment. Thus, it will focus on to what extent the F-gas Regulation is working well, the need to review it, the choice of policy options and expected impacts. The main stakeholders include the chemical industry, the refrigeration and air conditioning sector, electricity providers, business associations and national administrations. The outcome of the following consultation activities will be summarised in a report: <ul style="list-style-type: none"> • A single online public consultation which will run for 14 weeks in Q3_2020. The questionnaire will be available in 23 official EU languages on the 'Have your say' website. • A targeted stakeholder interviews with businesses and authorities at EU and national level carried out by the external contractor • A stakeholder workshop in Q1_2021 to receive feedback on preliminary findings of the Evaluation and Impact Assessment The outcome of all consultation activities will be presented in a synopsis report.
Will an Implementation plan be established?
The revised Regulation will be directly applicable in all Member States.

² Lifetimes range from 10 years for refrigeration equipment to 50 years for insulation foams