

AmCham EU's response to DG CLIMA's consultation on 'Reducing fluorinated greenhouse gas emissions – Further action at EU level'

CONSULTATION RESPONSE

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CONSULTATION RESPONS

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B. Questions on choice of policy action

- B.1 The European Commission is looking to set out a plan to reduce EU emissions by 80-95% by 2050. In this context, how do you judge current EU policies on greenhouse gas emissions from F-gases (e.g. the F-Gas Regulation on certain F-gases and the Directive on mobile air-conditioning)? -single choice reply- (optional)
 - properly implemented and fully sufficient
 - fully sufficient if properly implemented
 - insufficient, even if properly implemented
 - no opinion
- B.2 What are the main obstacles to switching to alternative technologies with lower impact on the climate (i.e. fluids with low global warming potentials or other non-in-kind technologies) in the applications currently relying upon F-gases? (max 3 choices) -multiple choices reply- (optional)
 - there are no real obstacles
 - alternative technologies will not be available in specific applications
 - alternative technologies will require higher initial investments
 - alternative technologies will be more costly to operate
 - alternative technologies will not meet the same performance standards (e.g. reliability, energy efficiency, insulation properties etc)
 - alternative technologies will require greater effort to meet the same safety standards
 - other

B. 3 Specify (1000 max)

Alternative technologies are available as of today in:

• Fire protection in most applications

Technological alternatives are available in the short to medium term in:

- Refrigeration: domestic, industrial, commercial and transport (road and maritime)
- Air conditioning commercial (low GWP alternative)
- Insulation Foams
- Non-Medical Aerosols



Switch gear

Areas where alternatives are either nonexistent or not widely available yet:

- Residential, and light commercial AC
- Organic rankine cycle (ORC) for generating electricity from waste heat and low temperature geothermal
- Semiconductor production
- Medical dose inhalers
- Military and aviation (for fire protection)

AmCham EU recommends taking into account the economic and social impact of alternatives and making sure they do not entail disproportionate costs.

B.4 In the absence of global action to phase-down HFCs, which options would you consider the most appropriate, at EU level, to contribute to the established targets for reducing greenhouse gas emissions? (max. 3 choices) -multiple choices reply- (optional)

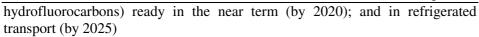
- establishing maximum, gradually declining limits to the quantity of HFCs placed on the EU market (phase down) expressed in terms of CO2 equivalent *equivalent*
- encouraging voluntary agreements for specific sectors where replacement is technically feasible and cost-effective
- introducing additional prohibitions on use and marketing for certain equipment and products, where cost-effective alternatives exist (e.g. a ban on application X containing hydrofluorocarbons as of date Y)
- strengthening, where possible, measures aiming at containment and proper recovery of F-gases (e.g. through stricter and/or broader application of existing measures in the F-gas Regulation)
- including emissions related to production and consumption of F-gases under the EU ETS
- establishing EU harmonised taxes on sales of F-gases
- setting up deposit and refund schemes for products involving F-gases
- no further action
- other policy options at EU level

B.5 Specify (1000 max)

We support a global phase-down scenario if alternative technologies are safe and available at proportionate costs

The new proposal should focus on applications which have high leakage rates, or high aggregate absolute emissions, and on applications where alternatives already exist

Refrigeration is a high volume and emissive user of F-gas refrigerants – but there are low global warming potential alternatives (including



In Fire protection, transitioning commercially available solutions is possible by 2012, in most cases. They are already widely available and commercialised. They also eliminate the expenses associated with leak control and recovery, and recycling costs required for GHG

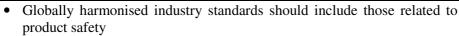
Measures to improve the integrity of recovery processes will assist the EU in reducing Fgas emissions. Certification and training should be extended to individuals and companies that are involved in the recovery of these agents

B.6 If a global agreement to phase-down HFCs is eventually concluded, which policy options (if any) would be the most appropriate to complement, at EU level, the establishment of maximum, gradually declining, limits for the quantity of HFCs placed on the EU market expressed in terms of CO2 equivalent. (max 3 choices) -multiple choices reply- (optional)

- encouraging voluntary agreements for specific sectors where replacement is technically feasible and cost-effective
- introducing additional prohibitions on use and marketing of certain equipment and products where cost-effective alternatives exist (e.g. a ban on application X containing hydrofluorocarbons as of date Y)
- strengthening, where possible, measures aiming at containment and proper recovery of F-gases (e.g. through stricter and/or broader application of existing rules in the F-gas Regulation)
- including emissions related to production and consumption of F- gases under the EU ETS
- establishing EU harmonised taxes on sales of F-gases
- setting up deposit and refund schemes for products involving F-gases
- no further action
- other policy options at EU level

B.7 Specify (1000 max)

- EU policy must encourage the use of low GWP alternatives in international transport of refrigerated freight by road and marine container
- Any bans proposed would only apply to new equipment
- Introducing a timely prohibition on the use of certain equipment and products, where cost-effective alternatives exist, is the most efficient tool for reaching the EU policy goals. It would also be the simplest tool to implement and verify



- The certification of companies and technicians need to be properly enforced in every member state. Creation of a public database of certified persons and companies should be available to operators of fire suppression systems
- Attention to the quality of pre-charged equipment manufactured outside
 of the EU. Imports of such products need to comply or exceed European
 standards to guarantee the integrity of the equipment will contain the FGases for the life of the product/system

B.8 If you have a specific suggestion on how to reduce leaks and improve recovery of F-gases from products through stricter and/or broader application of the type of measures already present in the F-gas Regulation, please briefly specify below: -open reply- (optional) (1000 max)

- More regular and efficient reporting of F-gas use to governments and the data's inclusion in Member State reporting requirements.
- Public reporting of HFC use/leakage rates by major users of F-gases
- Extension of regulation to refrigerated road transport (as is already the case in Dutch, Spanish and French implementation). Extension to refrigerated marine containers.
- Greater focus needs to be put on waste regulations and incentivising the recovery and recycling/destruction of HFCs in products and systems at their end of life. AmCham EU recommends an overhaul of the rules related to the transboundary shipment of waste, which currently act as a deterrent to effective and efficient reclamation of recovered F-gases.

B.9 If you have any specific suggestions of technical adjustments to the current F-gas Regulation, e.g. to clarify its provisions, please briefly specify below: -open reply- (optional) (1000 max)

The opportunity to have a harmonised system of certification, and EU data base, of companies and individuals certified to handle F-gases.

The application for F-Gases needs to be sector specific. The first movement should be on F-Gases, like fire protection, where there are available alternatives at very similar prices. An across the board phase-down probably will cause undue hardship in some applications. So the phase-down needs to be systematic and begin by identifying those applications which can be phased down with little or no impact and slowly progress as new technology and applications become available. However we stress that existing installed systems should not be decommissioned until their natural end-of-life.

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C.1 Who do you think will be most exposed to any negative impacts of a strengthened approach to F-gas emissions? (max 2 choices) -multiple choices reply- (optional)

- Producers of F-gases
- Producers of products or equipment normally relying upon F-gases
- Commercial or industrial users of relevant products or equipment
- Individuals using relevant products or equipment
- Companies servicing relevant products or equipment
- Others

C.2 Specify (1000 max)

In the case of air conditioning and refrigeration, the transition to other substances for products or equipment normally relying upon F-gases will lead to increased product safety considerations and costs. Producers with high product safety thresholds will be most negatively impacted in the transition.

C.3 Who do you think will benefit most from a strengthened approach to F-gas emissions? (max 2 choices) -multiple choices reply- (optional)

- Producers of F-gases
- Producers of products or equipment normally relying upon F-gases
- Commercial or industrial users of relevant products or equipment
- Individuals using relevant products or equipment normally
- Companies servicing relevant products or equipment
- Others

C.4 Specify (1000 max)

End-Users should benefit as it would reduce their overall carbon footprint.

C.5 What type of application (if any) do you think will be most positively affected by a phase-down of HFCs? (max 3 choices) -multiple choices reply-(optional)

- domestic refrigeration and freezers
- commercial refrigeration and freezing equipment
- industrial refrigeration and freezing equipment
- transport refrigeration
- room air conditioning (factory-sealed movable and single-split systems)



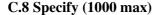
- air-conditioning in motor vehicles
- air-conditioning in other modes of transport
- air-conditioning excluding room a/c, and a/c in modes of transport
- heat pumps
- medical aerosols
- aerosols (other than medical)
- fire protection
- foams
- solvents
- others or no specific use category
- no positive impact

C.6 What type of application (if any) do you think will be most negatively affected by a phase-down of HFCs? (max 3 choices) -multiple choices reply-(optional)

- domestic refrigeration and freezers
- commercial refrigeration and freezing equipment
- industrial refrigeration and freezing equipment
- transport refrigeration
- room air conditioning (factory-sealed movable and single-split systems)
- air-conditioning in motor vehicles
- air-conditioning in other modes of transport
- air-conditioning excluding room a/c, and a/c in modes of transport
- heat pumps
- medical aerosols
- aerosols (other than medical)
- fire protection
- foams
- solvents
- others or no specific use category

C.7 Which policy option do you expect to impose the greatest administrative burden? -single choice reply- (optional)

- establishing maximum, gradually declining limits to the quantity of HFCs placed on the EU market (phase-down) expressed in terms of CO2 equivalent
- introducing additional prohibitions on use and marketing of certain equipment and products where cost-effective alternatives exist (e.g. a ban on application X containing hydrofluorocarbons as of date Y)
- strengthening, where possible, measures aiming at containment and proper recovery of F-gases (e.g. through stricter and/or broader application of existing rules in the F-gas Regulation)
- other



Mandatory registration and full inventory of the installed base is required. These obligations will ensure proper risk management, as the installed base currently continues to grow with no proper end-of-life procedures. Without monitoring, the emission of HFCs in the atmosphere will continue to grow

AmCham EU recommends and overhaul of the rules related to the transboundary shipment of waste, which currently do not provide incentives for such recovery operations

Outright bans could result in the venting of the installed base, as happened with Halons. Establishing gradually declining restrictions, with strong economic incentives to recycle F-Gases will extend the venting period over decades, but reduce the amount of F-Gases actually produced

Policies that reduce the supply of F-Gases in the EU such as import restrictions must include pre-charged equipment. Pre-charged equipment and F-Gas compounds should be treated alike when determining amounts of F-Gas manufactured or imported

C.9 How do you think a shift towards alternatives having a lower or no global warming potential will affect the competitiveness and market shares of European businesses (or the business you represent)? -single choice reply- (optional)

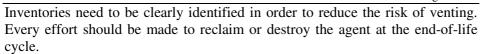
- No opinion
- Significantly beneficial for competitiveness
- Beneficial for competitiveness
- No significant change
- Harmful for competitiveness (specify below)
- Significantly harmful for competitiveness (specify below)

C.10 Specify (1000 max)

D. Additional Comments (max 5000 characters)

General Principles:

National legislation should be harmonised in order to benefit from the best policies that limit F-Gas emissions and promote the best and cleanest technology available.



Public awareness strategies should be implemented at the national level to educate fire and mechanical consultants on sustainable technologies.

We applaud the EU's support of the inclusion of HFC's in the Montreal Protocol; more should be done to encourage the major developing countries to support this proposal. Its inclusion will bring certainly to the future supply of F-Gases which will allow users to invest and create long-term strategies that shift their fire protection needs to more sustainable alternatives.

There is a first mover advantage for industries which shift away from high GWP Fgases. Other regions can be expected to move in to that direction, EU-based industries can share their best practice experience with training, installation and maintenance.

AmCham EU would like to raise the following issues which are key to the debate surrounding the EU's future Fgas legislation:

- The tradeoff between Fgas use and energy efficiency (80% of Fgases are used in energy related applications)
- Life cycle approach and end of life treatment
- Revision of transboundary shipment of waste legislation to further incentivise recovery
- The need for the new Commission proposal to stress the single market and harmonisation
- Need for flexibility and a sectoral approach, based on the availability of substitutes.
- Clear criteria regarding the technical and economical availability of substitutes which should not be at prohibitive costs for industry.

In addition to the already indicated application (fire protection in section C5) which is being positively affected, and will be further positively affected by a phase-down of HFCs, existing & future F-gas alternatives could be deployed in the area of electrical insulation and thus support the replacement of the most severe F-gas substances.

We would also like to raise that there are critical uses of Fgases, such as in the defence and aviation sectors for which alternatives are not easily found, and which the Commission will need to be taken into account in its upcoming proposal.



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It has to be underlined that lowering the global warming potential (GWP) of refrigerants and insulating foams may require a re-assessment of safety implications. Some of the new low GWP HFCs and also R-32 are mildly flammable; hydrocarbons are extremely flammable and require complementary assessments for their safe use. Other key properties are now under consideration and safety standards are in the process of being modified. In all cases, manufacturer liability remains a key parameter to decide whether a certain refrigerant can be used with confidence.

Note:

AmCham EU could not answer question C5 and C6 because of the diversity of Fgas applications among its membership. For our response to those questions, please see the answer to question B.3, where we stress that it is unlikely there will be a simple solution for all Fgas uses in different sectors.

AmCham EU speaks for American companies committed to Europe on trade, investment and competitiveness issues. It aims to ensure a growth-orientated business and investment climate in Europe. AmCham EU facilitates the resolution of transatlantic issues that impact business and plays a role in creating better understanding of EU and US positions on business matters. Aggregate U.S. investment in Europe totalled €1.4 trillion in 2009 and currently supports more than 4.5 million jobs in Europe.



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