



The Voice of European Air-Conditioning, Refrigeration and Heat Pumps Contractors

Proposal for a revision of the F-gas Regulation

AREA POSITION

July 2022

AREA represents European refrigeration, air conditioning and heat pump (RACHP) contractors. RACHP contractors are the essential link between end users and manufacturers. They design, install and maintain RACHP equipment using every available solution with complete neutrality towards equipment and refrigerants, in the sole aim of ensuring the highest level of reliability, energy efficiency and cost-effectiveness.

The European RACHP contracting industry fully subscribes to the EU's decarbonisation and climate neutrality aspirations set out in the European Green Deal and, more recently, in the Fit-for-55 package. In this spirit, AREA also stands by the F-Gas Regulation's objectives of reducing emissions of fluorinated greenhouse gases, and in particular those with high global warming potential (GWP). In this respect, our members play an important role in the transition to climate-friendly RACHP solutions, bearing in mind that the overall environmental impact of RACHP systems needs to be considered beyond refrigerants' GWP, with a particular focus on energy efficiency and circularity of applied materials.

The F-gas Regulation is arguably the most important and impactful piece of EU legislation for our sector. Its provisions dictate the conditions under which our contractors - the immense majority of whom are very small companies with a local market – carry out most of their operations.

As concluded by the European Commission's review, the current F-Gas Regulation has successfully achieved its objectives, setting a gold standard for the rest of the world. The Regulation has also had a tremendous impact on our industry, bringing opportunities but also unprecedented challenges that put many of our companies - in particular the smallest ones - to a tough test as regards refrigerants prices, available technical alternatives, and of course competence and skills.

Despite the Regulation's proven success, the proposal for a revision substantially toughens two of its core provisions - the phase-down scheme and the placing on the market prohibitions – with the stated goal of further accelerating the market penetration of alternatives, and in particular natural refrigerants. Yet, the proposal ignores the actual ability of the RACHP contracting sector to cope with such a surge. More worryingly, it fails to ensure that equipment working with alternative refrigerants can only be handled by competent contractors, thereby leaving the door wide open to widespread safety hazards and energy inefficient equipment.

European RACHP contractors represented by AREA remain fully committed to the transition to climate-friendly alternatives to f-gases. For such a transition to be a success, several conditions ought to be met: the timing needs to be aligned with market and technological realities, equipment obsolescence should not be unduly forced, and alternative refrigerants – most of which are also greenhouse gases – should be properly regulated.

It is also necessary that national authorities are ready. Indeed, they are in charge of setting and implementing some of the administrative framework surrounding many of the legal provisions, as well as enforcing those. Their readiness is a prerequisite so that market operators can fulfill their own respective requirements.

With this in mind, AREA would like to give its opinion on the proposal for a revision and make concrete suggestions for changes to ensure that the overall EU ambition is preserved.

1- Filling the gaps on alternative refrigerants

The transition towards climate-friendly alternatives to HFCs can only happen provided the conditions for the safe and efficient use of those alternatives are set. Whilst the proposal rightfully aims to “*facilitate the use of alternative substances*” and includes HFOs, it falls short of translating this objective into a concrete framework actually allowing it to be achieved.

This would be the case if the Regulation – or at least parts thereof – was to apply to all types of refrigerants. That would make the Regulation more comprehensive and coherent. Indeed, there is an intrinsic connection between fluorinated greenhouse gases and alternative refrigerants. EU policies on the former have an immediate impact on the latter, and ultimately it is the same market. Moreover, there is an obvious environmental rationale since most alternative refrigerants also are greenhouse gases with a GWP. An extension is therefore fully in line with the Regulation’s scope and legal base.

Concretely, AREA suggests extending to ‘**alternative refrigerant greenhouse gases**’ the following requirements:

- **Training and certification scheme:** whilst the proposal clarifies for the inclusion of alternative refrigerants in training and certification schemes, it does not mandate the installation and maintenance of RACHP equipment with alternative refrigerants by certified installers only, as is the case now with HFCs. Concretely, this means that anybody can install RACHP equipment running with hydrocarbons (flammable) or with CO₂ (high pressures). Correlated with the fact that the new phase-down and bans will push the use of hydrocarbons for small air conditioning and heat pump solutions in households, the proposal generates unnecessary safety (potential accidents) and environmental (lower energy efficiency) risks.
- **Leak checks:** as a complement to the point above, it is necessary to extend periodical inspections and leak checks to prevent safety risks on technicians, personnel and end-users. Since they were introduced in the 2006 F-gas Regulation, leak check requirements have proven to be effective and efficient, bringing lower leakage rates with positive climate and energy consumption impacts. With the increased use of alternative refrigerants, all of which present safety issues and many of which are flammable, regular leak checks are necessary to ensure safe and energy-efficient system operation. Countries such as Spain have already mandated leak checks on all types of refrigerants.
- **Sale of refrigerants:** the existing requirements on the sale of fluorinated greenhouse gases, whether in bulk or pre-charged in non-hermetically sealed equipment, should be extended to alternative refrigerant greenhouse gases.

2- Bans and phase-down

The current phase-down scheme has been a source of opportunities but also great challenges for small RACHP contractors, who were faced with shortages and sharp price increases. As it is proposed, the new stricter phase-down will pose enormous challenges for the entire heating and cooling industry, and this for several reasons:

- Threatens the full roll-out of heat pumps required as per RePowerEU
- Already from 2027 onwards, difficulty to find refrigerant to service equipment
- With hundreds of thousands of technicians needing to be upskilled to safely handle highly flammable refrigerants, the installer base will just not manage to make the conversion in time unless there is concerted action from EU and national authorities to alleviate the shortage of both training facilities and trainers across Europe. as there remains a shortage of both training facilities and trainers across the EU. This is likely to amplify the already existing issue of unskilled companies and personnel installing equipment.

The complementary bans proposed seem almost redundant since the stricter phase-down will effectively prevent the use of virgin refrigerant for new equipment from 2027 onwards. Moreover, a number of terms used in the definitions of the bans are unclear and will lead to inconsistent interpretations: *'self-contained'*, *'when required to meet safety standards'*. Finally, the inclusion of *"parts thereof"* affects spare parts and components, meaning that it will be impossible to maintain and repair existing equipment. Not only does it go against the EU Circular Economy Strategy and EU Sustainable Product Initiative (SPI), but it also encourages extended use of inefficient equipment.

On specific bans proposed, AREA welcomes the comprehensive ban on non-refillable containers. On the other hand, ban 18 on stationary split air-conditioning equipment and split heat pump equipment comes too soon. An additional minimum of 3 years would be necessary for the market to adjust. In practice, the ban would push hydrocarbons solutions. Despite hydrocarbons' high flammability, in the absence of mandatory certification, these units could then be installed by anybody and there would be no obligation to have them leak checked.

3- Enforcement

AREA supports the provisions aimed at addressing illegal trade and generally improving enforcement. We also welcome the possibility for Member States to enable electronic logbooks / electronic central database for record keeping obligations. For the sake of transparency and consistency, the European Commission should be empowered to either develop such a tool at European level or establish a framework for national logbooks to be shared at European level.

AREA's suggestions article by article

Article 1 – Subject matter

- *“facilitates the **safe and efficient** use of alternatives”*

Justification: reflects the need to ensure proper competence of operatives manipulating alternatives

Article 2 – Scope

- *“1. This Regulation applies to the fluorinated greenhouse gases listed in Annexes I, II and III, whether alone or in a mixture, **as well as alternative refrigerant greenhouse gases where relevant.***
*2. This Regulation also applies to products and equipment, and parts thereof, containing fluorinated greenhouse gases **and, where relevant, alternative refrigerant greenhouse gases, or whose functioning relies upon those gases.**”*

Justification: parts of the regulation should apply to alternative refrigerant greenhouse gases in order to ensure its objectives are achieved

Article 3 – Definitions

- **Self-contained**: since a lot of heat pumps fall in that category, we propose the definition used in standard EN378 3.1.2: *“complete factory-made refrigerating system in a suitable frame and/or enclosure, that is fabricated and transported complete, or in two or more section and in which no refrigerant-containing parts are connected on site other than by isolation valves, such as companion valves”*
- **Operator**: the definition in point 5 should be clarified in particular as regards the part *“or the owner where designated by a Member State as being responsible for the operator’s obligations in specific cases”*
- **Hermetically sealed equipment**: it should be clarified why the last part of the current definition (*“and which have a tested leakage rate of less than 3 grams per year under a pressure of at least a quarter of the maximum allowable pressure”*) has been deleted
- **Alternative refrigerant greenhouse gas** means refrigerating substances with a greenhouse effect used as alternatives to fluorinated greenhouse gases. They include hydrocarbons, ethers, carbon dioxide and unsaturated hydro(chloro)fluorocarbons
- **Recycling**: *‘recycling’ means the reuse of a recovered fluorinated greenhouse gas following a basic cleaning process, including filtering and drying*
- **recovery / reclamation / disposal**: align with definitions in EN378

Article 5 – Leak checks

- Points 1 to 4 should apply to fluorinated greenhouse gases of class A1
- A new part should be introduced for alternative refrigerant greenhouse gases:
“Operators of equipment that contains alternative refrigerant greenhouse gas in the quantities expressed below shall ensure that the equipment is checked for leaks at least every 12 months by appropriately certified personnel:
(a) 3kg of refrigerant classified as A1
(b) 1kg of refrigerant classified as A2, A2L and A3”

Justification: it is necessary to extend periodical inspections and leak checks to prevent safety risks on technicians, personnel and end-users. Since they were introduced in the 2006 F-gas Regulation, leak check requirements have proven to be effective and efficient, bringing lower leakage rates with positive climate and energy consumption impacts. With the increased use of alternative refrigerants, all of which present safety issues and many of which are flammable, regular leak checks are necessary to ensure safe and energy-efficient system operation.

Article 6 – Leakage detection systems checks

- *Extend to alternative refrigerants with the same thresholds as in Article 5*
- Paragraphs 1 and 2: *replace “any leakage” with “a leakage”*

Justification: It is technically impossible to detect every leak because leak detection equipment has a minimum leakage threshold (e.g. 5 grammes per year)

Article 7 – Record keeping

- *1 (6): the identity of the undertaking which installed, serviced, maintained and where applicable repaired or decommissioned the equipment, including, where applicable, the number of the undertaking’s certificate;*

Justification: the current wording creates confusion as to the type of certificate what is meant here is the certificate of registration for the legal entity

Article 8 – Recovery and destruction

- *2: Any recovered fluorinated greenhouse gases listed in Annex I and Annex II, Section 1, shall not be used for filling or refilling **other** equipment unless the gas has been recycled or reclaimed.*

Justification: it should be clear that f-gases recovered can be used to refill the same equipment they have been recovered from

Article 10 – Training and certification

- Paragraph 1 should clearly establish that mandatory certification must be extended to alternative refrigerant greenhouse gases
- Paragraph 2 should also cover alternative refrigerant greenhouse gases
- Paragraph 3 (e): ‘*energy efficiency aspects*’ should be further specified
- Paragraph 6 should be extended to alternative refrigerant greenhouse gases
- Paragraph 7 should specify that the validity of existing certificates may be subject to additional requirements to reflect the extension of the certification scheme to alternative refrigerant greenhouse gases
- Enforcement would be facilitated with:
 - An EU list of notified bodies and their certification schemes
 - The requirement to add to the certificate the reference to the Implementing Regulation at the time of issuing

Article 11 – Restrictions on placing on the market and sale

- Paragraph 1: *'including parts thereof'* should be complemented with *'except for servicing and maintenance'*

Justification: the current wording affects spare parts and components, thereby effectively preventing repair and maintenance of existing equipment

- Paragraph 5:
 - extend to alternative refrigerant greenhouse gases used in refrigeration, air conditioning and heat pump equipment
 - Suggested amendment: *"or undertakings that **directly** employ persons holding such a certificate or a training attestation"*

Justification: 'direct employment' ensures that companies using temping staff on an ad hoc basis do not circumvent the requirement

- Paragraph 6:
 - Extend to alternative refrigerant greenhouse gases used in refrigeration, air conditioning and heat pump equipment
 - Stipulate that the seller has to maintain records of the transaction and the certified undertaking records of the installation for 5 years for inspection on demand by the local authority
 - Suggested new wording: *"Non-hermetically sealed equipment charged with greenhouse gases may only be sold to an end user where evidence has been provided to the seller by an undertaking certified in accordance with Article 10 confirming that they will be carrying out the installation of the equipment being supplied. The seller shall maintain records of the transaction and the certified undertaking records of the installation available for inspection for 5 years after the transaction."*

Article 12 – Labelling and product and equipment information

- Paragraph 4 should allow the use of a QR code

Justification: more and more contractors use QR codes that lead to an online logbook. The Regulation should accommodate this technological development

- Paragraph 6: define what a 'facility' means, i.e. *"Any establishment which engages in reclaiming and/or recycling fluorinated greenhouse gases or alternatives to fluorinated greenhouse gases."*

Article 20 – The F-Gas Portal

- The F-gas portal should include an open part that allows anyone to quickly check whether an importer or a manufacturer has a quota or not. It could be based on company name or VAT number

Justification: According to Article 19.1 and 19.2, manufacturers of equipment must be able to identify the source of the refrigerants they use, draft declarations, and keep records of proof. An F-Gas portal that makes the names and IDs of all quota holders public would really help buyers of refrigerants to be more confident on the quality and legality of their purchases.

Annex IV – Placing on the market prohibitions

- **Ban 14:** replace '*fluorinated greenhouse gases*' with '*HFCs*' to align with wording of ban 13
- **Ban 17:**
 - Extend the deadline by 3 years to 1 January 2028
- **Ban 18:** extend the deadlines to:
 - (a) 1 January 2028
 - (b) 1 January 2030
 - The notion of "*except when required to meet safety standards*" must be clarified

Justification: a minimum of 3 additional years is required to make it possible for manufacturers to develop alternatives in all the existing product ranges and for enough competent contractors to install them