

Position Paper

UEAPME¹ position on the F-Gases implementation

Executive summary

- In the short term a Member State could present the Commission with a request according to Article 15 (4) in order to pillow the disproportional price-increase and the restricted availability of f-gases for specifically affected sectors. Such a request would be in line with the spirit of the f-gases-regulation, which in Article 15 (4) already addresses the potential scenario that sufficient refrigerant-supply could be endangered due to disproportionate costs.
- The phase down process should nevertheless be continued: only the step-by-step phase down of HFC refrigerants until 2030 will deliver the targets of the F-Gas Regulation in a justifiable manner.
- Refrigerants that are exported (in pre-filled systems) from the EU to third countries should be excluded from the quota. This would provide around 5% more quota.
- Due to existing technical and legal problems, provisions in the regulation (EU) No 517/2014 should be interpreted with as much flexibility as possible.
- A revision of the f-gases-regulation is necessary, according to the elements presented under Chapter 4. "Way Forward" below.
- Temperature-controlled logistics providers must be able to rely on the timeframe laid down in the F-Gas Regulation in particular to be able to plan in an economically sound way and with the guarantee of legal certainty.

1. Use of HFC refrigerants among UEAPME's members

In the most recent survey carried out by ECSLA (European Cold Storage and Logistics Association – the European umbrella association for the temperature-controlled logistics sector, member of UEAPME) its national associations were asked about their members' use of refrigerants. This survey is ongoing but preliminary results show that the temperature-controlled storage capacity of ECSLA members relies on different solutions depending on the Member States' specific circumstances.

In Germany and Spain, for example, more than 90 % of the temperature-controlled storage capacity of ECSLA members are currently cooled with refrigeration equipment that is operated with ammonia.

¹ UEAPME subscribes to the European Commission's Register of Interest Representatives and to the related code of conduct as requested by the European Transparency Initiative. Our ID number is [55820581197-35](#).

Unlike in France, the use of alternative refrigerants to HFCs, such as ammonia or CO₂, was not always feasible in certain member states as late as mid- to late 2000s. Cold stores built in those years or anticipating on their obligations regarding the use of ODS (ozone depleting substances) could not avoid using HFCs, and for negative temperatures this means using HFC-R404A.

In this context ECSLA members appreciate the clarity of the objectives of the F-Gas Regulation and the clarity on the deadlines. This has enabled them to include the objectives of the F-Gas Regulation in their long-time investment and business plans. As the planning period to build and realise temperature-controlled warehouses takes a lot of time, getting the relevant permits from the competent authorities is a long process. Building a cold store therefore takes several years and requires extensive planning.

However, investment into new installations – investment plans run for 20 years and more - are ongoing and ECSLA's members invest in long term sustainable solutions based on ammonia and CO₂. They are very much aware of the provisions of the F-Gas regulation and have made plans accordingly. It is however of utmost importance that these long-term investments can rely on guaranteed planning and legal security.

2. HFC refrigerants development (Availability and Price)

General aspects

The recast of the EU F-gas Regulation (EU) No 517/2014 introduces a quota system based on CO₂-equivalents. The aim of this quota system is to massively reduce the production, import and, as a consequence, the use of f-gases with a high global warming potential (GWP). It is precisely this quota system that is causing disproportional disruptions in the supply of f-gases in refrigeration, air conditioning and heat pumps.

Since the beginning of 2017, massive price increases for common refrigerants have been recorded. These price increases amount to up to 750% within 6 months only (see Table 1). At the same time, the available quotas are not fully used, as stated in the European Commission's Evaluation of the Quota Allocation Methodology (COM (2017) 377 final). The massive price increases since the end of 2016 and supply bottlenecks affect several Member States, such as Germany, France, Italy, Sweden and Austria.

(rounded)	1 st Q 2017	2 nd Q 2017	3 rd Q 2017	4 th Q 2017	1 st Q 2018	2 nd Q 2018	Total price increase
R-134a	10%	45%	82%	50%	25%	20%	654%
R-404A	15%	111%	200%	20%	25%	20%	1.312%
R-507A	15%	111%	200%	20%	25%	20%	1.312%
R-407C	10%	45%	82%	50%	60%	20%	837%
R-410A	10%	58%	110%	50%	30%	20%	856%

(Table 1: Price development in Germany. Since 2nd quarter 2018, further price increases are observed.)

The following is an example of the Austrian situation:

The Austrian refrigeration, air-conditioning and heat pump sector is unequivocally committed to the fundamental objective of the EU f-gases regulation and has proactively embraced its responsibility towards the environment for decades. In the period from 1990 to 2010, refrigerant greenhouse gas emissions in Austria were reduced by about 80%. The emission reduction of approx. 80% in the specified period is primarily due to the following factors:

1. shift to refrigerants with a lower global warming potential,
2. a considerable reduction of leakage-rates of devices and plants,
3. the excellent qualification of Austrian specialists and
4. despite a large increase in refrigeration, air conditioning and heat pump systems and equipment in the specified period, the refrigerant consumption [kg/year] could be kept stable by practical optimization measures.

Based on decades of experience, the Austrian economy has come to the conclusion that a successful substitution of refrigerants can only happen cautiously and by considering a larger context. In this sense, a 4-pillar model was developed. This model takes into account various equally important factors for a concrete system. Those are:

- eco-efficiency,
- energy efficiency,
- safety and
- manageability.

Impact

The estimated and immediate economic damage for the refrigeration, air conditioning and heat pump service-sector, in Austria was around € 10 million only in 2017. Far more problematic, however, is the fact that some of the refrigerants are available only very irregularly or not at all. The next reduction-step of the quotas from 93% in 2017 to 63% in 2018 is expected to even further exacerbate the situation.

Many, especially SME-structured refrigeration, air conditioning and heat pump equipment manufacturers/maintainers, will no longer be able to meet the needs of their customers. The lack of refrigerants, as well as the cost explosion and planning uncertainty have undermined the economic balance and contractual relationships between equipment installers and their customers. As a result, in some areas interruptions to the cooling chain (e.g. medical infrastructure, food hygiene, gastronomy or tourism) must be expected. With this, there is an immediate risk to the health and safety of consumers, because the uninterrupted maintenance of health and safety is not guaranteed by large-scale plants, but in total by the overwhelming large number of small and smallest refrigeration, air conditioning and heat pump systems.

On the basis of all this UEAPME sees the following areas as most critical, not only in Austria but in every Member State with the same situation:

1. Guaranteed supply with refrigerants

As long as the adjustment to equipment operated with low GWP refrigerants has not yet taken place or cannot take place (e.g. due to not or not-sufficiently existing substitutes), the adequate supply with necessary refrigerants is key to avoid a threat to health and safety.

2. Constructional and structural limitations

Existing buildings, of any size and regardless of their use, provide only very limited structural possibilities to implement significant change to existing refrigeration, air conditioning or heat-pump systems. For example, simple parameters like the room sizes can already be such practical limits. Furthermore, the installation of new system-components e.g. in the open air, that would be necessary for a modification of an existing system, usually will need additional approvals based on building law.

3. Operation of new equipment/systems

The installation of new equipment/systems is hindered by the limited availability of refrigerants including such with a low GWP. Finally, an operation for the expected useful life (of an average around 15 years) cannot be guaranteed, what in matters of investment is highly problematic for both, the customers and provider of such equipment/systems.

4. Lack of legal and normative certainty

Essential product standards are established only now. Their implementation needs a reasonable amount of time, which is 2-3 years. For example, the European Commission took a decision about additional standardization activities only in November 2017. In this context the new working group CEN TC 182 WG12 "Flammable Refrigerants Standardization Request M / 555" is currently only forming. However, the outcomes of this working group will have a direct impact on the future requirements for equipment/systems and should be available already today. This means that important elements of the necessary standardization and legal implementation do not yet exist, although the phase-down progresses with all its negative and oligopolistic effects.

5. Lack of a more holistic assessment

The current rules are strongly focusing on the GWP. Such an approach very much ignores aspects like eco- and energy-efficiency, which are important factors for a holistic assessment of equipment/systems and are described with the total equivalent warming impact (TEWI). Such a focused view on the GWP-property often forces that highly energy-efficient systems (run by high GWP-refrigerants) are replaced by less efficient systems (run by low GWP-refrigerants), like for example indirect systems with a significantly lower TEWI.

6. SME-specifics

In particular, for SME the current situation of limited legal and normative clarity is unbearable in every-days' business and legal certainty. In many contractual agreements it is not possible to guarantee the future maintenance of equipment/systems deployed to customers due to the questionable developments in matters of the legal/normative environment and the availability of refrigerants. This threatens the business-base for many SME and puts at risks EU-employment. Only in Austria we see at least 1.200 jobs at risk.

3. No strengthening of existing Regulation required

UEAPME realises that with the current F-Gas Regulation applicable since 1 January 2015, some stakeholders are already calling for a strengthening of the existing Regulation. Other stakeholders are arguing that the introduction of a concrete date as of which the use of HFC refrigerants would be forbidden would be a better solution than the one applied by the F-Gas Regulation.

From UEAPME's of view, the step-by-step phase-down of HFC refrigerants introduced by the F-Gas Regulation is in principle a sensible and realistic way in order to achieve a continuous reduction of HFC refrigerants by 1 January 2030.

An acceleration of the current deadlines and/or further decrease of the t eq CO₂ put on the market in the upcoming years could jeopardize the capacity of SMEs in this sector of maintaining an efficient cold chain for lack of refrigerants. Also, an anticipation of investment plans is economically not feasible.

Indeed, a stricter regulation concerning the use of HFC refrigerants or a fixed phase out date would not improve the situation where we are faced with a decreasing amount of available HFC refrigerants while at the same time prices are increasing. The current boost in prices and availability limitations as described above actually show that the system in principle works, although some adjustments are needed to cushion the most disproportional effects.

Quite on the contrary, many end-users would be faced with the pressure to abruptly implement alternative solutions which would completely overwhelm not only them (end-users) but also equipment installers in terms of personnel, technical knowledge, organisational capabilities and economic means.

Indeed, as a matter of fact, operators of temperature-controlled warehouse facilities have planned their investments according to the provisions and the deadlines of the F-Gas Regulation and are counting on the legal certainty as provided in the Regulation.

On top of that reports from national member associations show that temperature-controlled logistics companies are faced with a lack of qualified and experienced technicians of the refrigeration and air conditioning contractor sector, equipment installers and technicians who are not properly familiar with bigger ammonia operated refrigeration systems.

UEAPME therefore call on the Commission to adequately take this situation into account during the upcoming revision of the F-Gas Regulation.

4. Way forward

In the short term:

- We would like to remind the Commission that in the short term a situation could occur that a Member State presents the Commission with a request according to Article 15 (4) in order to pillow the disproportional price-increase and the restricted availability of f-gases for specifically affected sectors. Such a request would be in line with the spirit of the f-gases-regulation, which in Article 15 (4) already addresses the potential scenario that sufficient refrigerant-supply could be endangered due to disproportionate costs.
- Due to existing technical and legal problems, provisions in the regulation should be interpreted with as much flexibility as possible. So far, the impression is that the contrary is the case.
- Refrigerants that are exported (in pre-filled systems) from the EU to third countries to exclude from the quota. This would provide around 5% more quota.

In the medium term:

- Continue the phase down: Only the step-by-step phase down of HFC refrigerants until 2030 will deliver the targets of the F-Gas Regulation in a justifiable manner.
- UEAPME would like to propose a revision of the f-gases-regulation. first of all, the legal framework needs to step back from the current strong GWP-focus to a stronger focus on the elements described in the Austrian 4-pillar-model. This is not only necessary to make a legal intervention more proportional in economic matters, but also in matters of improving its contribution to climate-protection. Secondly, the training/certification provisions as well as the qualification systems based on certification for economic operators should be reviewed. This to prevent SMEs in some Member States to be subject to unsuitable an expensive training and certification systems and to reduce red tape leading to an increase of costs which are not justified by the environmental objectives of the Regulation. To this end the Commission should also carefully monitor the implementation of the Regulation to ensure a real level playing field and hinder unnecessary gold plating.
- Temperature controlled logistics providers must be able to rely on the timeframe laid down in the F-Gas Regulation in particular to be able to plan in an economically sound way and with the guarantee of legal certainty.

Brussels, July 2018

For further information on this position paper, please contact:

Guido Lena
 Director for Sustainable Development
 E-mail: g.lena@ueapme.com