

# **F-GAS: PHASE-DOWN AND ROLE OF THE INDUSTRY'S ASSOCIATIONS**

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## **1. Introduction**

The EU F-Gas Regulation is the European Union legislation to control F-Gases, to limit the amount of F-Gases sold in the EU from 2015 onward, to ban the use of F-Gases in many types of equipment where less harmful alternatives are widely available, and to prevent their emissions.

The Regulation has marked a milestone in the HFC phase down and it has pushed the issue forward worldwide.

### **1.1. F-Gas quota**

The F-Gas quota dictates the admissible amounts of HFCs that can be placed on the EU Market:

- 93% (2016),
- 63% (2018),
- 45% (2021)
- 21% (2030)

The European HVAC&R industry successfully faced the steepest step in the EU HFCs phase-down (2017- 2018), and it is now going to face the new challenges coming from the next bans. The HVAC&R manufacturers have their R&D units working very hard in order to be ready for the upcoming bans. These bans will also provide an additional boost in the development of new products: new F-Gas ready products.

## **2. EU Commission Position**

The European Commission stated in its report dated 4 August 2017: “...*The Commission therefore sees no need to amend the provision pursuant to point 13 of Annex III of Regulation (EU) No 517/2014...*”. On one hand this statement shows that the F-Gas objectives are achievable, on the other hand it has a strong impact on the HVACR industry which has to face many challenges.

### **3. Challenges**

#### **3.1 Refrigerants: availability and price**

The progressive reduction of the HFC to be placed on the market marked, in the Q1-Q2/2018, a serious increase in the price of the available HFCs and, at the same time, a serious decrease in their availability.

According to the last Öko-Recherche report (April 2019) it can be concluded that the indications for limited availability of refrigerants have been significantly reduced towards the end of 2018 and the possible reasons for price reductions from peak values in Q1-Q2/2018 include lower demand by end-users, previous stockpiling, possible illegal trade and large supply of refrigerants as many quota holders wanted to dispose residual quota before the end of the year.

#### **3.2 Refrigerants: flammability and safety standards**

When moving towards lower GWP refrigerants, flammable fluids will be needed for some applications, but it must be pointed out that the lower the GWP the more likely the refrigerant will be flammable.

In order to address the flammability issue the EC has issued in November 2017 a standardisation request to CEN/CENELEC regarding the use of flammable refrigerants in refrigeration, air conditioning and heat pump equipment. CEN TC182/WG12 is taking on this request and working very hard on it. This should result in a clear report outlining how to handle flammable refrigerants in a safe and sustainable way. It should be pointed out that it is not evident that the national building codes, will quickly accept the use of flammable refrigerants.

Eurovent, as CEN/CENELEC liaison organization, is actively participating and monitoring the CEN TC182/WG12 activities. This is in order to allow for the best exchange between HVACR manufacturers, HVACR experts, and policy makers.

#### **3.3 Technologies/components 'F-Gas-compliant'**

According to the F-Gas requirements and vision, the HVACR manufacturers are working very hard towards sustainable solutions; significant R&D efforts and investments are already in place, the whole HVACR industry (equipment and components manufacturers, refrigerants' producers) is working towards medium-long term solutions.

### **4. Role of the industry's Associations**

Eurovent does not represent the refrigerants' producers, Eurovent represents the refrigerants' users (HVACR manufacturers). This assigns to Eurovent clear and specific role and tasks.

Eurovent's role is:

- To support policy makers in defining the future vision
- To participate in the standardisation committees on the flammability issues
- To make manufacturers aware about the next phase-down steps
- To educate manufacturers towards medium-long term solutions
- To raise awareness on the F-Gas Regulation and its impact

Eurovent's role is not:

- To support one specific refrigerant choice
- To draft/suggest the industry's strategies in terms of new F-gas compliant solutions

#### **4.1 F-Gas: How to prepare the EU industry and to make it aware about the related impact/challenges**

Eurovent worked very hard in order to make the European manufacturers aware about the requirements and challenges coming from the EU F-Gas Regulations.

A dedicated Eurovent Technical Sub-Committee was set up. Within this sub-committee the technical staff of the Eurovent national associations widely elaborated on the impact of the F-Gas, on the needs of the local industry, on the national safety requirements, and on the industry's needs. This proved very useful in order to align the EU efforts and to come up with a shared joint industry approach

Furthermore, a MoU with Eurammon was signed in 2015. Eurammon is a joint initiative (set up in 1996) of companies, institutions and individuals who advocate an increased use of natural refrigerants. This provided and still provide all the involved Eurovent Product Groups with additional info and technical code of good practice on refrigerants suitable to replace HFCs

Eurovent has also conducted an extensive informative campaign (GEN documents) informing on the switch towards low GWP refrigerants, on the related allocation quota and on the ongoing standardization work on flammable refrigerants.

The Eurovent's actions were not limited to Europe. The Eurovent sub-chapter Eurovent Middle East is very active in the GCC region and has organized several seminars on the EU F-Gas approach and on the use of low GWP refrigerants also in the GCC region. This has proved very useful in order to raise the awareness on the EU F-Gas approach toward local authorities, policymakers and hvacr consultants.

## **5. Conclusions**

The EU F-Gas Regulation pushed the issue forward worldwide, the HFCs phase down is a reality and the return to past very unlikely.

In this framework a straightforward cooperation between all the involved players is more than fundamental. The Industry's associations have many tasks to perform but they should not forget their neutrality in terms of both strategy and technology.

