

## F-Gas industry roundtable

### Successful exchange on the progress of the F-Gas Regulation

**The F-Gas industry roundtable, organised by EPEE, brings together at regular intervals stakeholders to discuss progress in implementing the F-gas Regulation. In addition to a report on communication activities the issue of illegal imports of refrigerants was addressed. About 60 stakeholders attended the roundtable.**

### Development of HFC prices

Julia Kleinschmidt from Öko-Recherche presented the outcome of the monitoring of HFC prices that started in 2016. It is an ongoing activity commissioned by DG Clima. The price data on refrigerants are obtained from 62 companies. These include 12 companies active in commercial refrigeration, 10 chiller manufacturers, 10 heat pump manufacturers, 9 active in industrial refrigeration, 9 active in stationary air conditioning plus some others.

Most price increases started in the second quarter of 2018. The biggest increase until the end of 2017 was for R404a, the refrigerant with the highest GWP of those analysed. Since the start of 2018, a price decrease was observed. For R134a, R407c and R410a, the price increases seem to have ended while a slight price drop could be observed in the third quarter of 2018 for R407c and R 410a. At the peak a seven-fold price the increase could be observed.

The analysis of alternatives shows that the price of R32 has dropped over the past year by about 15%. Propane (R 290) and CO<sub>2</sub> (R 744) have also shown a slight price decrease.

The presentation (GEN – 969.01 – slide 13) shows that the prices of refrigerants are still well within the forecasted ranges of 35 EUR/t CO<sub>2</sub>e for 2030 and 50 EUR/t CO<sub>2</sub>e for 2050.

Some companies participating in the price monitoring think that we may move towards a 'wave-like' price evolutions with increases at the start of the year and a flattening or decrease in the second half of the year.

It must be reminded that 2018 was the year when a 30% phase-down started, the next major step is an 18% phasedown in 2021.

Among the elements that possibly could explain the price decreases for refrigerants, elements of stockpiling in the previous year and possibly illegal refrigerants (possibly 50% cheaper than in the regular circuit) were mentioned.

### France

François Heyndricks from the French association AFCE indicated that the ensilage tax on refrigerants (15 EUR CO<sub>2</sub>e, up to 35 EUR CO<sub>2</sub>e in 2024) can be avoided if a voluntary industry agreement would be successful. This agreement aims at meeting the F-gas phase-down objectives 6 to 36 months earlier, meaning that for some products, the bans would be achieved sooner on a voluntary basis. It would entail, for instance, a faster switch to from R410a to R32 for small split air conditioners. To avoid the tax, industry is willing to move faster. It would allow France to advocate and argue for a more rapid phase-down at European level to meet environmental objectives.

Of note is the recent publication by AFCE in French and English on the impact of available low-GWP refrigerants on the energy efficiency of equipment, some energy efficiency and state-of-the-art

available low-GWP refrigerants. Uniclimate has contributed to this study that provides a view on possible evolutions for about 10 applications, as well as market assessment for these products.

### **Gapometer**

Ray Gluckmann presented an update on the Gapometer, a computer modelling tool, that has been under development at the request of EPEE since 2012. The tool analyses the risks of the gaps between supply and demand of refrigerants to achieve the F-gas phase down goals.

The current modelling shows that the phase-down objective is being achieved. For some products, the shift to low GWP refrigerants is taking place at a faster pace than expected, e.g. small air conditioning or within the supermarket sector.

The price increases of high GWP-refrigerants witnessed in 2017 have provided the necessary motivation for equipment manufacturers and their customers to look at alternatives.

Within the supermarket sector, significant progress has been away from R404a. Even though the number of supermarkets providing input to the Gapometer is limited it seems that leakage is now under far better control. The investments in new equipment that does not use R404a allow supermarkets to become self-sufficient for the R404a they can recover when replacing and retrofitting equipment.

The one flaw of the Gapometer is that it is not able to quantify the illegal trade in refrigerants.

According to EFCTC, the illegal trade could represent 20 to 25 MT CO<sub>2</sub>e. If that would be the case, the phase down would still be achieved, but not at a faster rate than the current models would indicate.

### **Awareness raising campaigns**

Together with AREA, Asercom and EFCTC EPEE have developed leaflets calling on contractors to stop using high GWP refrigerants and to get ready for flammable refrigerants. These are available in most European languages.

In addition to these, EPEE has published a 'lessons learned from the EU F-Gas Regulation' and Q&A on HFOs and HCFOs.

### **Update from DG CLIMA, European Commission, on illegal trade of refrigerants**

Arno Kaschl (DG Clima) indicated that the Commission is aware that illegal trade could undermine the integrity of the phase-down. DG Clima is undertaking awareness raising activities with the Member States climate and customs experts. Unfortunately, the participation level of customs experts (representing about 2.400 custom officers in Europe) has been low.

The objective is to have specific HFC customs codes in place by 2022. These will be different and in addition to the Ozone Depleting Substances (ODS) codes.

The Commission has put in place a licensing system for importers and exporters, however, the it depends on the Member States customs officers to identify importers that do not appear in the register.

DG Clima hopes that the 'Single Window environment for Customs' (originally part of the e-Customs Decision 70/2008) can be rendered operational for refrigerants. By 2020, the IT system for a voluntary scheme involving 15 Member States (unfortunately not including all major Member States) would be in place. With time, a legal basis to make this mandatory would be put in place.

It was remarked that DG Clima could make use of the EPREL database to check if all importers are registered.

### **Illegal trade in refrigerants**

AREA, EFCTC and EPEE expressed concerns about the development in illegal trade. The rise in the price of refrigerants has been a driver for this trade. Due to limited market surveillance and limited penalties, little is happening to counter this trade. EFCTC, part of the chemical industry association CEFIC, estimates that this trade amounts to 20 to 25 MT CO<sub>2</sub>e. This would not only relate to some of the usual suspected countries but surprisingly also appears near car manufacturer sites where it would be blatantly visible.

Of the 16 AREA member contractor associations, 13 have reported cases of illegal trade.

### **Recommended Actions**

Manufacturers using refrigerants may find it useful to check the presentation as it provides additional information. Some may even find it useful to participate in the price monitoring activities.

The links below provide access to the various documents mentioned above.

### **Related documents and links**

All related documents and articles can be found in the respective sections in the right sidebar.

- GEN – 969.01 – F-gas roundtable presentations
- AFCE study: <http://www.afce.asso.fr/results-of-the-nwe-study-energy-efficiency/>
- <https://www.epeeglobal.org/stay-in-business-stop-installing-r404a-r507a/>
- <https://www.epeeglobal.org/refrigerants/flammable-refrigerants-leaflet/>
- <https://www.epeeglobal.org/documents/epee-lessons-learned-from-the-eu-f-gas-regulation/>
- <https://www.epeeglobal.org/documents/epee-qa-on-hfos-and-hcfos/>
- [https://ec.europa.eu/taxation\\_customs/general-information-customs/electronic-customs/eu-single-window-environment-for-customs\\_en](https://ec.europa.eu/taxation_customs/general-information-customs/electronic-customs/eu-single-window-environment-for-customs_en)