

12th European Conference Technological Innovations in Refrigeration and in Air Conditioning

Politecnico of Milan, 8th-9th June 2007

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The adoption of the F-Gas Regulation in 2006 was an important milestone for the Heating, Ventilation and Air Conditioning & Refrigeration (HVACR) Industry.

After some very intense debate, EU decision-makers sent a strong signal in support of a containment regime, as opposed to unjustified bans or restrictions, to reduce emissions of fluorinated gases across Europe. Most importantly for the industry, the Regulation preserved “refrigerant choice”, a key principle which was questioned early on by Danish and Austrian domestic regulations.

The Regulation will yet pose a serious challenge for both F-gas producers and users, affecting the refrigeration industry as a whole. In view of the entry into force of the key requirements in July 2007, important debates are currently being held between the Commission and Member States on the many issues surrounding the implementation of the F-gas Regulation. On the industry side, our continuous involvement with decision-makers and the initiatives we took will be critical to ensure the smooth implementation of the legislation.

The containment obligation will force operators to prevent leakage of F-gases and repair any possible leaks in refrigeration, air conditioning, or heat pump equipment. It is an essential point of the Regulation, which will be key to ensure that F-gas emissions are effectively reduced. Regular leak checks, the details of which are currently being discussed by the EU institutions, will have to be applied to equipment at regular intervals on refrigeration applications. The industry has been developing highly performing leak detection systems, which will considerably ease the identification of leaks and the subsequent reparation of equipment. It is indeed critical to us to demonstrate that such stringent leak detection requirements effectively reduce emissions.

Operators will also be required to keep track of the reparation/maintenance work performed on applications through dedicated logbooks. Significant debates have been held on this issue, and our industry has been very active, taking the initiative to produce a standardised logbook. As regards recovery, operators will also have to put in place arrangements for the proper recovery of F-gas by certified personnel.

The Regulation will also ensure that the handling and recovery of F-gas containing equipment is carried out by qualified personnel. Minimum EU requirements in this field are currently being discussed, and should both ensure a higher level of

environmental protection while remaining practical for the industry. As regards labelling, the Regulation will require F-gas containing appliances to be labelled as such, indicating that the appliances contain substances covered by the Kyoto-Protocol.

The Regulation will thus considerably affect our business and change our practices. We are well prepared to meet this challenge, and both EPEE as an organisation and its members individually have been intensively involved with decision-makers and engaged on self-initiatives, such as logbooks and material (FAQ, websites...) to help operators to implement the legislation without any problems.

It is in our own interest to demonstrate that the F-Gas Regulation achieves emission reductions. For this reason, solid, reliable data on past and future F-gas emissions will be critical in the forthcoming review of the Regulation in 2010/2011. The latter must be based on reliable scientific evidence, as opposed to 'ideological bans'. Past debates have indeed shown that HFCs were often unfairly targeted, whereas in fact they allow the use of energy-efficient applications (thus minimising their global climate change impact) and are safe, non-toxic, and cost efficient.

Besides the F-Gas Regulation, our industry will also have to face major challenges and opportunities, with the recent shift of EU policies towards energy efficiency.

The Action Plan for Energy Efficiency, adopted in October 2006, has set the target of reducing our energy consumption by 20% by 2020. The Plan contains a package of priority measures covering a wide range of applications.

In particular, it underlines the importance of minimum energy performance standards for a wide range of appliances and equipment (from household goods such as fridges and air conditioners to industrial pumps and fans), and for buildings and energy services.

The Action Plan places specific emphasis on 10 priority actions, among which three are of importance for the HVACR industry:

- Building performance requirements: The Commission will propose expanding the scope of the Energy Performance of Buildings Directive in 2009 and, based on impact assessments, will propose EU minimum performance requirements for new and renovated buildings. A strategy for very low energy ("passive") houses (with good insulation levels, mechanical insulation systems and highly efficient heat recovery) should be developed by the end of 2008;
- Promotion of Heating and Cooling from Renewable Energies, where a Commission proposal for a Directive is expected this year, following the consultation conducted in 2006; and
- Eco-design of energy-using products: updated and dynamic labelling and eco-design requirements for appliances and other energy using equipment will be developed from 2007.

The EU eco-label, which rewards the most efficient applications, illustrates the current focus on energy efficiency and its importance for our industry. Industries that demonstrate that their product meets the demanding criteria set by the scheme can apply to use the eco-label's flower logo on the product and in its advertising. Our industry has been very active on determining the eco-label for heat pumps, advocating that eco-labels should be based on the total environmental impact (TEWI) of products, rather than on the sole GWP of the refrigerant used.

Eco-design of Energy Using Products (EuP) will be an additional challenge. The Directive aims to improve the environmental performance of products throughout the life-cycle by systematically integrating environmental aspects at a very early stage in the product design process.

The Directive does not directly introduce binding requirements for specific products, but rather defines conditions and criteria for setting environmental requirements to certain product characteristics (such as energy consumption). It will be followed by implementing measures, which will establish the eco-design requirements.

For the moment the EuP Directive is still in a preparatory process, involving stakeholders' contributions on various "lots". Our industry is particularly interested in Lots 1 (boilers), 2 (water heaters), 10 (residential conditioning) and 12 (commercial refrigerators) and is actively participating in the preparatory studies. The final reports of the stakeholders' workshops for Lots 1, 2, 10 and 12 should be issued in the second half of the year. After this, a more 'political' phase will begin with the discussions in the dedicated consultation forum and possible draft implementing measures to be presented by the European Commission.

Other environmental laws have a critical impact on the HVACR industry. For instance, the Directive on Waste of Electrical and Electronic Equipment (WEEE) addresses a complex waste patchwork of various products, materials, and components. The WEEE Directive seeks to prevent waste, in order to reduce the disposal of waste and improve the environmental performance of the operators involved. It also aims to induce design modifications to make waste of electrical and electronic equipment easier to dismantle, recycle, and recover.

The forthcoming review of the WEEE Directive (2008) could have significant implications for the HVACR industry, especially with regard to the scope. Indeed, a clarification of what is understood by the terms "fixed installations" and "equipment that is part of another type of equipment" is needed, and we believe that parts of HVACR equipment do not fall within the scope of the Directive.

All in all, the implementation of the key requirements of the F-Gas Regulation in a month's time will certainly mark a new era for our industry. We are keen to demonstrate that it effectively achieves results and that monitoring and containment are the best option for the handling of F-gas. Our industry will continue to be involved in the EU decision-making process, both in the review of the Regulation and on the many challenges that have emerged in recent years.
