EPEE Position on the draft Motion for a Resolution on a comprehensive approach for the non-CO2 climate-relevant anthropogenic emissions

10 June 2011

On 15 June 2011, the European Parliament’s Committee for Environment, Public Health and Food Safety will vote on the draft Motion for a Resolution on a comprehensive approach for the non-CO2 climate-relevant anthropogenic emissions, authored by MEPs Richard Seeber and Theodoros Skylakakis.

The European Partnership for Energy and the Environment (EPEE), representing the heat-pump, cooling and refrigeration industry in Europe, welcomes the active engagement of the ENVI Committee in the fight against climate change and its call for a comprehensive European climate policy. Indeed, controls on refrigerant use should be also a part of European climate policy and EPEE supports the principle of a phase down of the consumption of HFCs using the mechanisms of the Montreal Protocol. However, we do wish to underline that any such proposals need to balance all relevant aspects, including energy efficiency, safety and affordability.

- **HFC replacements – No one-fits-all solution.** HFCs are used as a replacement to ozone-depleting HCFCs and CFCs. HFC refrigerants are chosen because of the high merits in safety, energy performance and the zero effect on ozone depletion. HFC refrigerants can also easily be used to retrofit most existing HCFC air conditioning and refrigeration systems without major changes in technology. All non-HFC alternatives and unsaturated HFCs (HFOs) available on the market today require major modifications of the equipment design due to major differences in chemical and thermodynamic properties impacting HVAC equipment performance, energy efficiency, reliability and safety.

- **Refrigerant safety – A key priority.** The safe use of all refrigerants (flammability, toxicity, operating pressures, and corrosiveness) is a key priority, especially when considering that most stationary air-conditioning and refrigeration equipment is installed close to the building occupants. Although alternative refrigerants such as hydrocarbons with substantially lower direct GWP already exist, safety requirements limit the refrigerant charge amount. Due to this limitation, units are not able to reach the performance and energy efficiency equivalence of units using HFCs. In addition, the cost of ensuring safety throughout the life-cycle of a product becomes enormous.¹

- **Refrigerant selection – A balanced approach.** When choosing any type of refrigerant, the life cycle approach based on its intended application should form the basis for the choice: proven performance, energy efficiency, safety, technical viability, direct and indirect GHG emissions, economic and environmental viability are key elements that need to be balanced.

**A ban or rapid phase-down would have perverse effects:**

- It would force the use of alternative non-HFC refrigerants that are not well adapted to the application, potentially resulting in lower cooling and/or heating performance, lower efficiency ratios and thus increased energy use – thereby resulting in a higher total equivalent global warming impact than HFC-using equipment. The overall impact of a ban would be detrimental to the environment and jeopardise the EU’s 20-20-20 targets. In several sectors, non HFCs are not even able to meet the minimum energy efficiency requirements imposed by the EU Eco-Design Directive from 2014 onwards (e.g. air conditioners under Lot 10).
- It would create safety concerns for building maintenance workers and inhabitants of buildings who could be forced to adopt unsuitable alternative refrigerant solutions with...

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¹ HFOs, HFC-32 and HFO mixtures with HFC-32 which have a medium to very low GWP exist already or are being developed, and are attractive from an efficiency point of view for several applications. However, they do also require modifications of equipment design with regard to safety, currently being assessed by international standardization committees.
flammability, safety and health risks in certain applications. In addition, it should not be taken lightly that the contractors who install and service equipment working with alternative refrigerants need to be trained as well. Pushing alternative refrigerants quicker than industry can train contractors would entail considerable risks related to the safety of the equipment and its operation.

- **HFCs are essential to contribute to the 20-20-20 targets** - HFCs are for example needed in heat pump technology, used for space heating, hot water heating, in heat pump tumble dryers, etc. The EU Directive for the Promotion of Renewable Energy Sources, the Energy Performance of Buildings Directive and the Eco-Design Directive, as well as Member States’ national action plans, rightly push for an increased use of heat pump technology which could contribute to an 8% reduction of global greenhouse gas emissions (see IEA study).

- **EPEE supports a gradual phase-down approach not a phase-out.** EPEE supports the review of the EU F-Gas Regulation which we believe should build on the strong foundations of containment (direct HFC-emission prevention\(^2\)) and inspection, in combination with an international realistic, gradual and balanced phase-down approach of HFCs - not a phase out. In order to effectively and sustainably reduce greenhouse gas emissions on the short and long term, the consumption of refrigerants should be controlled but their use should not be banned. This would guarantee flexibility so that users of refrigerants can opt for the most sustainable option for their particular application. A phase-out will not only be costly, but is neither market nor environmentally orientated and risks being counter-productive.

- **The F-Gas Regulation works.** In view of the current review of the F-Gas Regulation, EPEE supports the continuation of a single coherent policy at EU-level for F-gases and equipment containing F-gases. Two years after the entering into force of the F-Gas Regulation, countries that have implemented its measures such as France, Germany, Hungary, Sweden and the UK report a general reduction of leakage rates and thus of direct emissions due to more frequent leakage checks and service as well as improved technicians’ skills. The Netherlands, where a similar system (STEK) was already put in place in 1992, i.e. 15 years before the F-Gas Regulation entered into force, confirm the effectiveness of containment measures and report a reduction from an over 20% average annual leakage rate to a 3.5% annual leakage rate over the past years.

- **European actions should be aligned with international negotiations** - The European Commission and European Parliament have rightly been pushing for HFC discussions to be placed under the Montreal Protocol. Indeed, built-up experience with the Montreal Protocol can be used for these type of refrigerants as well. More importantly, a global arrangement is preferable to a multitude of regional agreements, as a fragmented approach complicates implementation and may create confusion for internationally operating businesses. However, no concession can be made to the EU energy efficiency goals and to the health and safety of the users and public at large.

We would be happy to further elaborate on this in a face-to-face meeting. In the meanwhile, we sincerely hope you will take these arguments into account during the 15 June (and future) discussions on refrigerants and of course remain at your disposal for any questions you may have.

Yours sincerely,

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Director-General EPEE

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\(^2\) Direct CO2 emissions only occur when refrigerants are released into the atmosphere. Proper equipment design and containment can avoid leakages.