

## Refrigerant containment legislation pays off: CO<sub>2</sub> eq emissions set to decrease further in the EU

***Brussels, 27 October 2011:*** A new study by French research bodies ARMINES / ERIE reveals that CO<sub>2</sub> eq emissions from refrigeration, air-conditioning and heat pump equipment have decreased by over 13% since 1990 and are set to decrease even further in the coming 20 years.

Regulations on ozone depleting substances and fluorinated gases (f-gases) finally payoff: Despite more than a doubling of the refrigerant bank over the past 10 years, CO<sub>2</sub> eq emissions have already decreased substantially by more than 13%. For the coming 20 years, the study predicts a further emissions reduction between 15% and 60% whilst assuming continuous market growth.

The study, commissioned by industry association EPEE, looks at two future scenarios: On one hand, the “F-Gas Scenario” based on the full implementation of the F-Gas Regulation combined with current market trends. On the other hand the “F-Gas Plus Scenario” taking into account a more aggressive introduction of lower GWP refrigerants. The results clearly show that the containment principle of the F-Gas Regulation has already started to deliver. The “F-Gas Plus Scenario” illustrates the industry’s potential to go even further. Besides the introduction of lower GWP refrigerants, several other key factors contribute to achieving emissions ‘reductions, like the improvement of emissions rates, lower refrigerant charges and higher recovery volumes at the end of life of the equipment containing refrigerant fluids.

Andrea Voigt, EPEE’s Director General explains: “The ARMINES/ERIE study’s results show that by fully implementing the EU F-Gas Regulation, emissions reduction in 2030 will even exceed the Commission’s forecast by roughly 15%. By reducing the quantity of HFC refrigerants placed on the market via a phase-down scheme based on their CO<sub>2</sub> eq content, emissions will decline further. It has to be understood, however, that using lower GWP refrigerants may require a re-assessment of their safety implications as most of the alternatives are mildly or even extremely flammable, which excludes their use in certain applications. There is no perfect refrigerant.”

Whilst acknowledging the positive implications of a realistic and balanced phase-down scheme, EPEE makes it very clear that no sacrifice must be made in terms of energy efficiency, safety and affordability of future solutions. Whilst F-Gases only make up for 1.8% of greenhouse gas emissions in the EU-27, CO<sub>2</sub> contributes to over 80% generated to a large extent by energy consumption. Any refrigerant bans or GWP cut-offs prescribing the use of certain refrigerants could therefore be counter-productive leading to higher energy consumption and increasing emissions.

The ARMINES / ERIE study has been commissioned in order to show the maximum achievable demand and emissions reduction from refrigeration, air-conditioning and heat pump equipment until 2030. It can therefore be used as a basis to establish reliable emissions phase-down schedules in the EU. EPEE invites the European Commission to consider this data as a basis for a sound political decision in view of the review of the F-Gas Regulation.

Ends.

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Please click here to go to the [Executive Summary](#) of the ARMINES / ERIE study.

The ARMINES / ERIE study is available upon request. Please contact EPEE Secretariat ([secretariat@epeeglobal.org](mailto:secretariat@epeeglobal.org)).

*Want to find out more on refrigerants and energy efficiency? Please click here to see our [latest factsheets](#).*

*To see what EPEE members do to contribute to the switch to a low-carbon and energy efficient economy, please see the [EPEE Green Business Cases](#).*

**Notes to the Editor:**

The European Partnership for Energy and the Environment (EPEE) represents the refrigeration, air-conditioning and heat pump industry in Europe. Founded in the year 2000, EPEE's membership is composed of 40 member companies and national associations across Europe realising a turnover of over 30 billion Euros and employing more than 200,000 people in Europe. As an expert association, EPEE is supporting safe, environmentally and economically viable technologies with the objective of promoting a better understanding of the sector in the EU and contributing to the development of effective European policies. For more information please visit: [www.epeeglobal.org](http://www.epeeglobal.org).