



Evaluation and Impact Assessment for amending Regulation (EU) No 517/2014 on fluorinated greenhouse gases (F-Gas Regulation)

*Joint comments following the 6 May 2021 Stakeholder Workshop
25 May 2021*

Representing the full value chain of the refrigeration, air-conditioning and heat pump sector (RACHP) in Europe, the signatories of this joint statement support the European Green Deal and its objectives to reduce greenhouse gas emissions by at least 55% by 2030 and to reach climate neutrality by 2050. Accounting for half of the total final energy consumption in Europe, the RACHP sector offers a large cost-effective potential to facilitate decarbonisation through energy efficiency improvements, the electrification of heating via heat pumps and by facilitating a more circular approach to energy, including the integration of renewables into the energy system.

Given the pivotal role of the RACHP sector in achieving the EU's climate and energy goals, we would like to raise our strong concerns related to the modelling approach taken by the consultants and presented at the DG CLIMA Stakeholder Workshop on 6 May 2021. In short, we believe that it does not provide the technical justification to support the policy options proposed by the consultants. In addition, the F-Gas Regulation has already proven to yield substantial emission savings showing that it follows the right approach. Bearing in mind that very insufficient information on the modelling has been made available and that the time provided for feedback is too short, the following points summarise our main points of concern:

- **A significant lack of granularity**

The modelling adopted presents a severe lack of granularity in relation to the subsectors. By way of example, heat pumps and air conditioners are not clearly defined, and any specific reference to condensing units in commercial refrigeration is missing¹. Despite their specification in eco-design legislation. Refrigerant choice, lifetime assumptions, and other factors vary considerably depending on the application segments. Therefore, insufficient segmentation leads to premature and potentially misleading and unsubstantiated conclusions.

- **Unrealistic approach to certain refrigerants and technologies**

In order to fully tap into the potential of heat pumps and air conditioners, in particular, and of RACHP, in general, to facilitate decarbonisation across sectors, all types of low global warming potential (GWP) refrigerants are required. While the commercial/professional refrigeration market is already making use of alternative refrigerants, modelling assumptions such as 80% of non-fluorinated refrigerants for chillers using centrifugal compressors as of 2025, 90% of hydrocarbons for small heat pumps as of 2025, 100% of hydrocarbons for large split a/c and VRFs as of 2030, etc. are not realistic, considering the fact that such products are not yet commercially available on the EU market. They neither take into account the important principle of refrigerant choice to foster innovation, nor the crucial aspects of safety, energy efficiency, affordability as well as existing safety standards and building codes that restrict the use of flammable and toxic refrigerants across all air conditioning and heat pump applications. Energy efficiency should never be prejudiced, given that the major part of emissions are related to energy use (indirect emissions) rather than to the refrigerants (direct emissions).

¹ However, sub-sectors are mentioned in the Eco-design legislation, as it can be inferred from Commission Regulation (EU) 2015/1095 of 5 May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers; and Commission Regulation (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

- **A lack of recognition of the significant abatement potential of heat pumps**

The current modelling does not take into account the enormous abatement potential of heat pumps and air conditioners in terms of energy related emissions ('indirect' emissions). Indeed, roughly 80% of heating is currently still based on fossil fuels, and half of the total final energy consumption in the EU is related to heating and cooling. In other words, decarbonising heating is crucial to achieve the EU's climate and energy goals and heat pumps are a major solution in that respect.

However, the contribution of heat pumps and air conditioners in terms of abating energy related CO2 emissions has not been taken into account in the modelling. This can be strongly misleading and comes with the major risk that the heat pump benefits are jeopardised due to restrictive refrigerant related obligations.

- **A general lack of data**

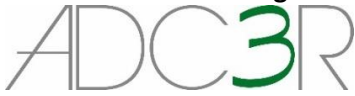
The assumptions shared are based on very incomplete data and do not assess certain primary aspects, such as leakage reduction (for example via electronic logbooks), recovery, recycling and reclamation (RRR), etc. They also do not seem to take into account other important considerations concerning safety standards and/or European Union Directives/Regulations (e.g. General Product Safety Directive, Low Voltage Directive, ATEX Workplace Directive, Machinery Directive, Pressure Equipment Directive etc.), and local and regional building codes. Moreover, they do not consider other policy measures including but not limited to Ecodesign measures. For example, in the preparatory studies of the latter, a wealth of information is available on market size and growth, cost aspects, etc. which provide very useful background information for the modelling.

- **Disregard of the competitiveness of European industry**

The conclusions shared by the consultants disregard the importance of the export market. For the EU, in order to be a technology leader at global level, and to avoid a shift of production to outside of the EU, a level playing field and fair and equal treatment versus manufacturers outside the EU is a top priority. However, as long as exported refrigerants in pre-charged equipment are not taken into account in the modelling and exempted from quota requirements in the EU, this cannot be the case. Moreover, the industry has developed new product platforms, based on the use of flammable refrigerants and relying on the predictability of the existing F-Gas phase down. These efforts and the fact that these platforms will potentially not have the time to come to maturity in the market, have not been considered in terms of abatement costs, etc. It seems that the enormous effort undertaken by industry to deliver compliant products has not been taken into account at all, being considered as "negligible".

In conclusion, as signatories of this joint statement we would like to highlight our strong support for the F-Gas Regulation, which has demonstrated to be a well-functioning regulatory framework achieving the highest relative emission reductions of all greenhouse gases in the EU, since 2014, and pioneering the Kigali Amendment to the Montreal Protocol at a global level. We would like to re-iterate our willingness to work together with the European Commission and its consultants to continue building on this success in a constructive manner, keeping in mind the overall context of the European Green Deal and the European Climate Law. Achieving 55% emission reduction by 2030 and climate neutrality will only be possible if the energy context is properly taken into account. Consequently, policy options considered for the revision of the F-Gas Regulation need to be geared towards this objective rather than resulting in unrealistic conclusions based on incomplete modelling assumptions.

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ADC3R: ADC3R has fully supported F-Gas Regulation and the European Green Deal and has continuously worked to ensure its success. ADC3R is the the Association of companies Distributing, Filling (ADC) Recovering and Reclaiming Refrigerants (3R). Our association promotes the interests of the companies which cumulatively carry out the activities of distribution, filling, recovery and reclaiming of refrigerant in France, major actors in the refrigeration and air conditioning sector. Our members are also key actors in Europe representing more than 400 supply points and 90% of the natural and synthetic refrigerants in distribution in France. Through our industrial network, we also guarantee the collecting and treatment of all fluorinated refrigerants and are therefore an essential part of the environmental policy for refrigerants.

AGORIA: Agoria means progress through technology. We are paving the way for all technology-inspired companies in Belgium pursuing progress internationally through the development or application of innovations and which, together, represent some 310,000 employees. We are proud that more than 2000 member companies trust in the three pillars of our services: consulting, business development and the creation of an optimal business environment. Follow us on www.agoria.be and <https://twitter.com/agoriafr>

AFCE: AFCE is an alliance of industrials, collective members, and users, representing, from the producer to the end user, the French sector of refrigeration and air conditioning. All together AFCE encourages and support a proactive, responsible, coordinated, and coherent application of the regulation on fluorinated gases, the European Green Deal, and the United Nations Framework Convention on Climate Change. <https://www.afce.asso.fr/>

APPLiA: APPLiA represents home appliance manufacturers from across Europe. By promoting innovative, sustainable policies and solutions for EU homes, APPLiA has helped build the sector into an economic powerhouse, with an annual turnover of EUR 53 billion, investing over EUR 1.6 billion in R&D activities and creating nearly 1 million jobs. www.applia-europe.eu

AREA: AREA is the European association of refrigeration, air conditioning and heat pump contractors. Established in 1989, AREA voices the interests of 24 national associations from 21 countries representing 13,000 companies employing 110,000 people and with an annual turnover approaching € 23 billion. <http://area-eur.be/>

ASERCOM: ASERCOM, the Association of European Component Manufacturers is the platform for dealing with scientific and technical topics and their challenges, promoting standards for performance rating, methods of testing and product safety, focusing on improved environmental protection, serving the refrigeration and air conditioning industry and its customers. It is the aim of ASERCOM to be the platform for dealing with scientific and technical topics and their challenges, promoting standards for performance rating, methods of testing and product safety, focusing on improved environmental protection, serving the refrigeration and air conditioning industry and its customers. ASERCOM addresses top issues and communicates relevant opinions of its members to the industry, the public, governmental bodies and nongovernmental organisations. <https://www.asercom.org/>

EHI: EHI represents 90% of the European market for heat and hot water generation, heating controls and heat emitters, 75% of the hydronic heat pump market, 80% of the biomass central heating market (pellets, wood) and 70% of the solar thermal market. EHI Members produce advanced technologies for heating in buildings, including: heating systems, burners, boilers, heat pumps, components and system integrators, radiators, surface heating & cooling and renewable energy systems. In doing so, they employ about 120,000 people in Europe and invest over a billion Euros per year in energy efficiency. www.ehi.eu

EHPA: EHPA is the European Heat Pump Association. In a fully decarbonised Europe, heat-pump technologies are the number one heating and cooling solution, being a core enabler for a renewable, sustainable and smart energy system. They integrate multiple energy sources, bridging the electric and thermal sector on a local and regional level (micro grids, DHC). Heat pumps are easy to install and

widely used in all thermal applications (buildings, transport, white goods) and industrial processes. Refrigerants and other components are available in sufficient quantities. The technology is recognised for its merits in legislation and existing energy models. EHPA is a forward-looking association aiming at putting heat pumps at the centre of the energy system by communicating the benefits of heat pumps, providing relevant information and being a reference point and integrator to all stakeholders.

EPEE: EPEE represents the refrigeration, air conditioning and heat pump industry in Europe. Founded in the year 2000, EPEE's membership is composed of over 50 member companies as well as national and international associations from three continents (Europe, North America, Asia). With manufacturing sites and research and development facilities across the EU, which innovate for the global market, EPEE member companies realise a turnover of over 30 billion Euros, employ more than 200,000 people in Europe and also create indirect employment through a vast network of small and medium-sized enterprises such as contractors who install, service and maintain equipment. Please visit our website www.epeeglobal.org and www.countoncooling.eu for information about our sustainable cooling campaign.

Eurovent: Eurovent is Europe's Industry Association for Indoor Climate (HVAC), Process Cooling, and Food Cold Chain Technologies. Its members from throughout Europe represent more than 1.000 companies, the majority small and medium-sized manufacturers. Based on objective and verifiable data, these account for a combined annual turnover of more than 30bn EUR, employing around 150.000 people within the association's geographic area. This makes Eurovent one of the largest cross-regional industry committees of its kind. The organisation's activities are based on highly valued democratic decision-making principles, ensuring a level playing field for the entire industry independent from organisation sizes or membership fees. www.eurovent.eu

FETA: FETA is the recognised UK body representing the interests of over 400 manufacturers, suppliers, installers and contractors within the heating, ventilating, building controls, refrigeration & air conditioning industry to policy makers and the wider public. <https://www.feta.co.uk/home>

JBCE: Founded in 1999, the Japan Business Council in Europe (JBCE) is a leading European organisation representing the interests of over 80 multinational companies of Japanese parentage active in Europe. Our members operate across a wide range of sectors, including information and communication technology, electronics, chemicals, automotive, machinery, wholesale trade, precision instruments, pharmaceutical, railway, textiles and glass products. <http://www.jbce.org>

JRAIA: The Japan Refrigeration and Air conditioning Industry Association (JRAIA) represents all the major Japanese manufacturers of refrigeration and air conditioning equipment. A significant majority of all air conditioning and refrigeration products sold in Europe are produced and marketed by member companies of JRAIA. Air conditioning and refrigeration technology was developed primarily in Japan. This know-how and expertise has been transferred to the EU and improves working and living conditions. The European investments and commitments of JRAIA companies are significant. <https://www.jraia.or.jp/english/index.html>

TI: Transfrigoroute International, is the voice of the temperature controlled transport industry, comprising 11 national member associations in Europe and uniting some 1,500 members involved in temperature-controlled logistics and the transportation of foodstuffs by road. TI is open to both haulage companies, manufacturers of equipment and accessories, as well as technical testing organisations. <https://transfrigoroute.eu/>