

EPEE statement on the German General Administrative Regulation on the Procurement of Climate-Friendly Services (AVV Klima)

EPEE, representing the refrigeration, air-conditioning and heat pump (RACHP) industry in Europe, welcomes the consideration of environmental protection and circular economy aspects in German federal public procurement within the framework of a general administrative regulation.

However, we consider that the ‘negative’ list of services that may not be procured by federal government departments, provided in Annex 1 of the regulation, is inconsistent with the goals of the overall procurement regulation. Indeed, the goal formulated in the AVV - to reduce the federal government's greenhouse gas emissions - will not be supported by banning some of the appliances listed in Annex 1, but rather hindered. In addition, the ban on the procurement of certain products will not only lead to an increase in CO₂ emissions, but also to an increase in investment and life cycle costs.

The AVV ‘negative list’ also contradicts several overarching EU policy goals, most importantly the Energy Efficiency First principle. Finally, it is not in line with the EU F-gas Regulation.

The above concerns apply specifically to the inclusion of the following applications in Annex 1:

- Multi-split and VRF air conditioning systems with a rated capacity above 10 kW
- Chillers with a rated capacity above 10 kW using refrigerants with a GWP ≥ 150
- Refrigerators and freezers, and other stationary and mobile refrigeration and air conditioning systems, with halogenated refrigerants (if alternatives available)

EPEE would like to request a review of Annex 1 and deletion of the above-mentioned products based on the below arguments. We would be happy to further explain this background and to contribute to the success of the AVV Klima.

1. Inconsistencies within the criteria of the German public procurement (AVV Klima)

In the main text of the AVV Klima, the focus is on “highest energy efficiency” including life cycle energy cost, greenhouse gas emissions, life cycle carbon costs, as well as other criteria such as natural resource efficiency and circular economy. EPEE fully agrees with such principles if they are properly analysed and based on EU harmonized criteria, including the EU “Energy Efficiency First” principle. It does not appear that such an analysis was performed for the products in question on the negative list, resulting in unfocused and contradictory guidance.

For example, in the case of banning the procurement of “*air conditioning systems with halogenated refrigerants, if alternatives are available*”, the public procurement authorities would be faced with a requirement to buy products with lower energy efficiency, in contradiction to the AVV Klima requirement “to buy the product with the highest energy efficiency in the market”.

When comparing the energy efficiencies for a 3.5 kW split type AC with the Eurovent certification database this is clearly demonstrated. As shown in Figure 1 in the Annex to this statement, the model using the non-halogenated R290 refrigerant has a cooling energy efficiency (SEER) of 8.5, whereas the highest energy efficiency model using halogenated refrigerants has an 18% higher SEER of 10. Using the same sources, the difference would be even larger in heating mode, where the best available 3.5 kW model has a 28% higher efficiency.

In the same vein, multisplit/VRF air-conditioning systems today not only fulfil cooling tasks but are also efficient and cost-effective heat pumps and thus an essential component for meeting climate protection targets in the building sector. These units are subject to the highest efficiency requirements according to Ecodesign, which is why they demonstrate excellent efficiency in heating and cooling operation that can hardly be matched at system level by water-led systems of the same size. A ban on these systems in the AVV Klima would counteract these efforts. A blanket exclusion from procurement is not expedient in terms of climate protection and energy efficiency targets and hinders competition.

Finally, banning chillers with a refrigerant GWP ≥ 150 could equally cause contradictions with energy efficiency goals. Notably, chillers above 10 kW that use a refrigerant with a GWP < 150 are hardly available on the market or only as special designs. In addition, the possible alternative refrigerants are flammable, which requires additional construction work for installation and operation.

Within the framework of a life cycle assessment, these systems should be evaluated on a project-by-project base, using EN standard methodologies for assessing the performance of cooling and heating systems under the Energy Performance of Buildings Directive (EPBD), e.g. EN 15316-4 for heating and EN 16798-13 for cooling.

2. Contradictions with overarching EU policy goals

- **Energy Efficiency First**

EPEE's position is that the "negative list" proposed in the AVV Klima is in clear contradiction to the EU Energy efficiency first principle.

At EU level, the principle of Energy Efficiency First has recently been elaborated in the form of a [Recommendation](#) and [Guidelines](#) by the European Commission. The guidelines make clear that energy efficiency is not only indispensable to reduce fossil fuels consumption, but the underlying assumption is that the best energy is the one not produced because there is no need to use it. It is further specified that reducing demand should be also prioritized to producing energy from climate neutral sources.

Based on the above, public procurement instruments and support tools should require or encourage the procurement of the most energy-efficient goods and services. It is explicitly specified that this involves setting objectives that do not preclude energy efficient alternatives.

Consequently, this principle must be observed in public procurement. By drafting a negative list, the AVV Klima clearly excludes energy efficient technologies based on criteria which are not fact based. It uses refrigerant criteria (GWP thresholds / non- halogenated) which could prevent the uptake of highly energy efficient equipment. It also uses technology-based criteria (multi split / VRF) which are not in line with the findings of the EU Ecodesign Directive Lot 21, nor are they based on a proper system analysis.

- **EU F-gas Regulation**

The handling and use of halogenated refrigerants is comprehensively regulated by the EU F-Gas Regulation 517/2014 and the national supplements in the German Chemicals Act. Any additional regulation alongside the F-Gas Regulation will add complexity and operational costs to equipment manufacturers, to system integrators and other value chain players, and need to be considered carefully.

Article 11(2) of the F-Gas Regulation specifies that prohibitions shall not apply to equipment for which it has been established in Ecodesign requirements adopted under Directive 2009/125/EC that due to higher energy efficiency during its operation, its lifecycle CO₂ equivalent emissions would be lower than those of equivalent equipment which meets relevant Ecodesign requirements and does not contain hydrofluorocarbons. EPEE would therefore request information on whether a life cycle assessment on energy efficiency and climate impact has been carried out for the products in the negative list, or on what basis the prohibited devices were included in Appendix 1. In the explanations to the AVV (Annex 2), it is stated that the products on this negative list have a significant negative impact on the climate, without this having been objectively demonstrated for the above-mentioned products.

About EPEE:

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 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 realize 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 see our website (<https://www.epeeglobal.org/>) for further information.

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Annex: Figures (Source: Eurovent data base for R32-R410A, German ecolabel (blauer Engel) and UK online sales info for R290)

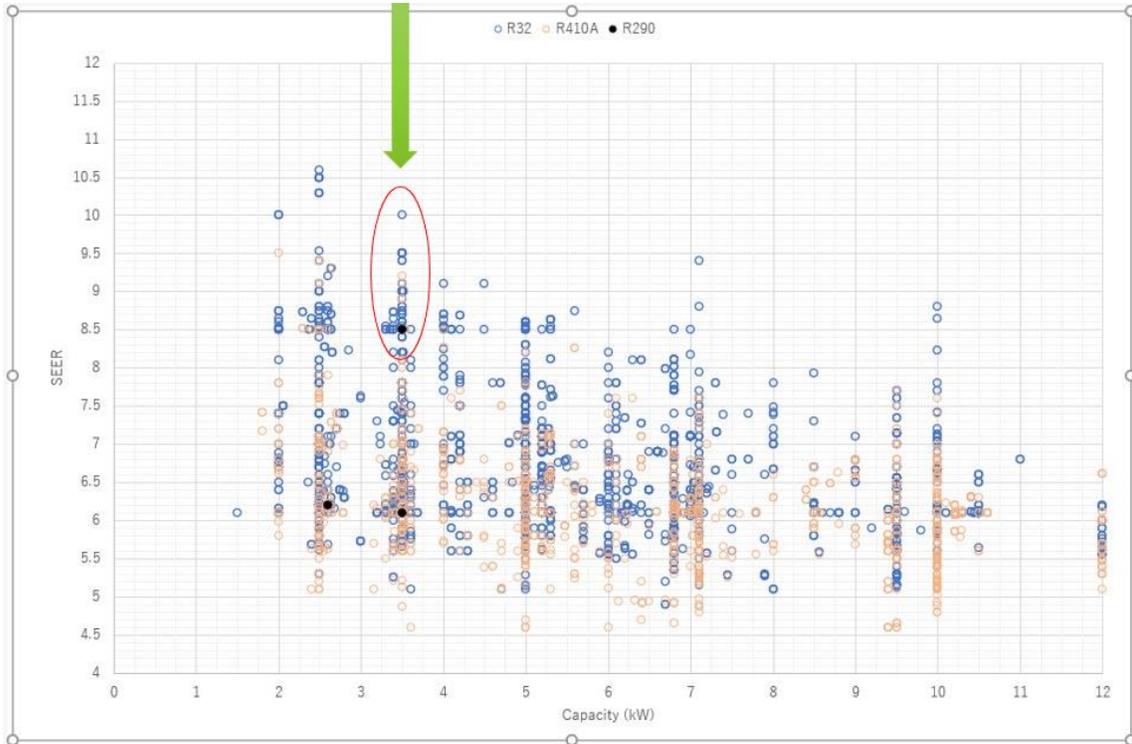


Figure 2: Split air to air heat pumps (reversible AC)

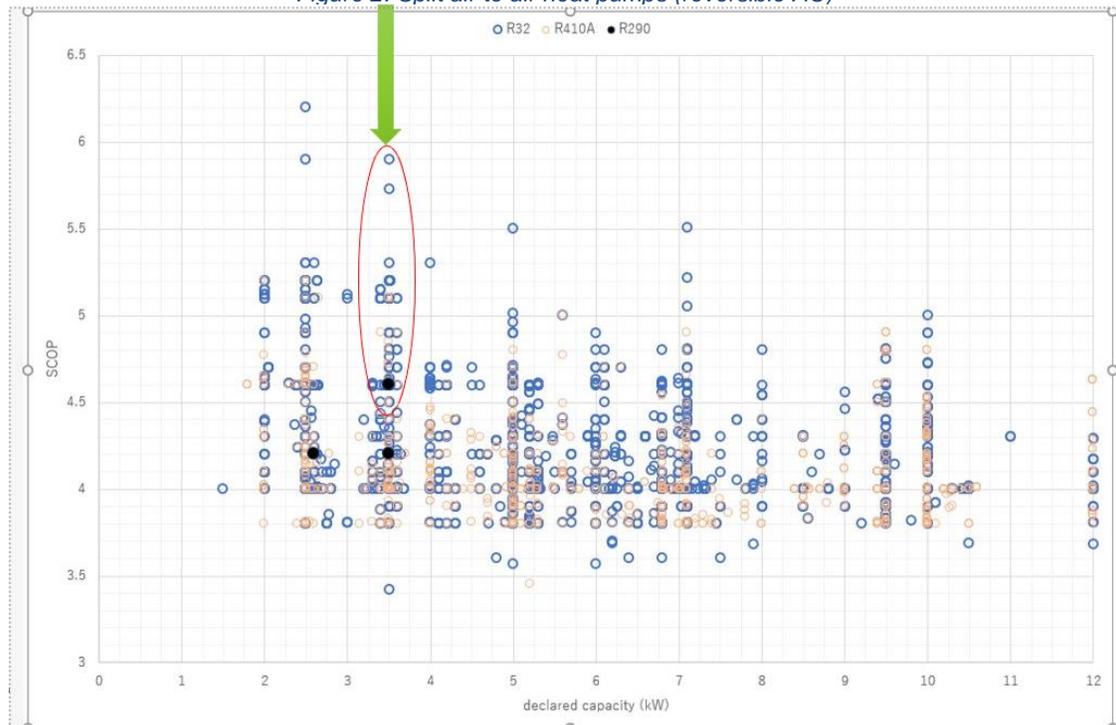


Figure 1: Split air to air heat pumps (reversible AC) in heating mode