

# Call for positive vote

## Eleven groups call for positive vote on FDIS IEC 60335-2-40

The international standard IEC 60335-2-40 is developed and maintained by the International Electrotechnical Commission Technical Committee 61 Sub-Committee 61D (IEC TC61 SC61D) and contains safety requirements for electrical heat pumps, air-conditioners and dehumidifiers intended for household or similar use. A Final Draft International Standard (FDIS), i.e. a new version, of IEC 60335-2-40 has been developed and will soon enter its final vote stage where National Committee members of IEC may approve or reject the draft by casting a positive or negative vote.

**This vote is of immense importance to global climate mitigation**, as many refrigerants commonly used in these appliances are highly potent greenhouse gases. As such, they are listed in the Kigali Amendment to the Montreal Protocol and are subject to global phase-down efforts. In addition, the demand for the type of appliances covered by this standard is rising. For instance, the number of heat pumps sold in Europe is steadily increasing<sup>1</sup> and the total number of air conditioning units in use globally is expected to roughly triple by 2050<sup>2</sup>. This adds to the potential impact and to the importance of transitioning to environmentally sustainable refrigerants. The forthcoming vote is a crucial event to this end.

**The standard in question, IEC 60335-2-40, sets charge limits for different types of refrigerants** and therefore has a strong influence on their respective prevalence in the appliances covered by the standard. Through the charge limits, the current version of the standard highly obstructs the use of hydrocarbons such as propane (R290), which is a climate-friendly and cost-effective alternative to high-GWP refrigerant gases. The standard is thus posing a barrier to the phase-down of climate-detrimental fluorinated refrigerants. The current charge limits that penalise sustainable alternatives are unjustified and a result of strong industry influence in the early 2000's. With IEC 60335-2-40 as a precedent, other standards on international and regional level (EN 60335-2-40, EN 378, ISO 5149) as well as on national level have adopted the same charge limits and further hindered the use of hydrocarbons in refrigeration.

**The forthcoming FDIS for IEC 60335-2-40 contains amendments that would enable the use of hydrocarbons in air conditioners** rated at around 12kW which, if voted positively, represents a massive leap forward for climate-friendly refrigeration technology. In addition, approving this FDIS is likely to prompt equivalent change in other international, regional and national standards, amplifying the impact.

**In conclusion, a positive outcome of the vote is crucial in paving the way for sustainable and future-proof refrigeration technology.** Conversely, a negative vote would mean a catastrophic set-back in the global effort to phase down fluorinated refrigerants. The signatories of this paper therefore call for a positive final vote of IEC 60335-2-40.

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<sup>1</sup> EHPA (2021) Market Report 2021 URL: <https://www.ehpa.org/market-data/market-report-2021/>

<sup>2</sup> IEA (2018) The Future of Cooling URL: <https://www.iea.org/reports/the-future-of-cooling>

## Signatories:

- Environmental Coalition on Standards (ECOS)
- European Environmental Bureau (EEB)
- Environmental Investigation Agency (EIA)
- Deutsche Umwelthilfe (DUH)
- ZERO
- ECODES
- Legambiente
- 2Celsius
- HEAT
- Refrigerants Naturally!
- KNVVK



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