The European Partnership for Energy and the Environment (EPEE), the voice of the cooling and heat pump industry in Europe, welcomes the initiative to establish the EU Taxonomy and the inclusion of activities crucial for the energy transition, such as building renovation, manufacturing and installation of energy efficient appliances, utilisation of waste heat and cold as well as district heating/cooling distribution.

Given the urgent need to decarbonise Europe’s heating and cooling sector, and the potential wide-reaching impact of the Taxonomy on economic operators and other EU legislation, it is critical that the eligibility criteria developed for heating and cooling systems are coherent with existing legislation, simple to navigate for financial institutions and are fully aligned with the EU’s energy and climate agenda. To ensure that the Taxonomy delivers on all three fronts, EPEE invites the Commission to consider the following recommendations:

▪ Establish a single set of eligibility criteria for electric heat pumps that are consistent within the Taxonomy and with existing EU legislation
▪ Define eligibility criteria for cooling systems in data centres based on energy efficiency requirements and contribution to the transition to renewables
▪ Revise the calculation methodology for measuring the lifecycle emissions of new buildings
▪ Increase the energy savings requirement for renovation activities to 60%

Eligibility criteria for electric heat pumps

| Establish a single set of eligibility criteria for electric heat pumps referenced in all relevant sections and based on both Ecodesign minimum energy efficiency requirements as well as the contribution to the renewable energy targets for heating and cooling under the RED. |

The eligibility of heat pumps is addressed under the following sections:

- Section 3.4 Manufacture of energy efficiency equipment for buildings
- Section 4.16 Installation of electric heat pumps
- Section 7.3 Installation, maintenance and repair of energy efficiency equipment
- Section 7.6 Installation, maintenance and repair of renewable energy technologies

However, the different sections present a wide variety of eligibility criteria applied to the same technologies. Whilst section 4.16 bases heat pump eligibility criteria on a refrigerant threshold
of GWP ≤675 as well as Ecodesign minimum energy efficiency requirements, section 7.6 provides criteria based on the contribution to the renewable energy targets for heating and cooling under the 2018 Renewable Energy Directive (RED). Further still, section 7.3 refers to “highly efficient technologies” but falls short of drawing any link to existing EU legislation such as the energy labelling Regulation.

To ensure that the Taxonomy serves its purpose and is widely utilised in financial markets, the heat pump eligibility criteria should be aligned. Given the key role that heat pumps are set to play in driving energy efficiency improvements in the heating and cooling sector as well as integrating renewables in heating and cooling, the criteria should reflect this dual benefit of heat pumps: energy efficiency benefit and renewable energy benefit.

EPEE’s September 2019 Position Paper on the Draft TEG Taxonomy Report called for an exclusion of refrigerant related criteria as they are technologically prescriptive and are already detailed under the EU F-Gas Regulation. The HFC Phase Down mechanism is already ensuring the industry’s transition towards refrigerants with a lower GWP. F-Gas emissions have been falling since 2014 and by 2030 it is expected that they will be reduced by two-thirds compared to 2014 levels. Considering the success of this existing instrument, EPEE believes that new refrigerant criteria introduced in the Taxonomy provide limited potential benefits, whilst posing a significant risk of slowing down the adoption of energy efficient cooling systems.

Therefore, EPEE recommends establishing a single set of criteria based on both Ecodesign minimum energy efficiency requirements as well as the contribution to the renewable energy targets for heating and cooling under the RED.

Alignment with eligibility criteria for data centres

Eligibility criteria for data centres should also be based on Ecodesign minimum energy efficiency requirements as well as the contribution to the renewable energy targets for heating and cooling under the RED.

EPEE would also recommend taking a similar approach in section 8.1 concerning data processing, hosting and related activities, which are currently based on refrigerant criteria of GWP<10. EPEE welcomes the Commission’s efforts to address the rising emissions stemming from data processing and hosting facilities, and considers the recently published study on Energy-efficient Cloud Computing Technologies and Policies for an Eco-friendly Cloud Market to be a particularly useful addition to this work. However, neither this study nor the JRC Code of Conduct or CLC Technical Report reference refrigerant criteria of GWP<10 as best practice for lowering the climate impact of data centres.

Moreover, given that this work is still in its infancy, a clear definition of data centres is lacking in the literature. EPEE members also foresee potential difficulties for smaller data centres to comply with such criteria, and even some inherent issues for larger operators, given that the space requirements for installing cooling equipment that uses the type of refrigerants that would qualify exceed the assumptions under which existing data centres were built. This is primarily
due to the greater equipment size that is needed to install larger heat exchangers to ensure the energy efficiency of systems with lower GWP value refrigerants.

Therefore, EPEE recommends adopting the same approach to heat pumps and data centres, applying eligibility criteria to both activities based on Ecodesign minimum energy efficiency requirements as well as the contribution to the renewable energy targets for heating and cooling under the RED, instead of criteria based on GWP values.

**Construction of new buildings**

Operational energy consumption measurement should remain in the methodology for calculating the Life Cycle GWP indicator of the building.

Section 7.1 requires that the life cycle Global Warming Potential (GWP) of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors and clients on demand, provided that the building is larger than 5000 m². Footnote 516 explains that the definition used for determining the GWP value is expressed in kgCO2e/m²/Y, measured in terms of the annual average over a reference study period of 50 years.

EPEE promotes a holistic approach to life cycle climate performance that includes the impact of energy consumption or the CO2 impact of the energy carrier as well as the CO2 impact of the construction materials and the end-of-life treatment. Whilst the choice of refrigerant remains important when assessing life cycle emissions, this should be balanced with energy consumption factors in the calculation methodology. Otherwise, the proposed approach risks resulting in greater investment in larger buildings, without lowering the carbon usage of those buildings. Thus, EPEE supports the assessment of the energy consumption as the “operational energy consumption” based on EN 15978 : 2012 (and not EN 15978 : 2011 as indicated in the draft Delegated Act). Energy consumption should always remain an important indicator as considered in the EU Level(s) Framework, which refers to the building performance calculation embedded in the EPB EN ISO 52000-1 series.

**Renovation of existing buildings**

Increase the energy savings requirement for renovation activities from 30% to 60%.

Section 7.2 outlines that renovation activities should deliver a 30% reduction of primary energy demand. Yet, the Commission’s Renovation Wave initiative states that in order to achieve the 55% GHG reduction target by 2030, the EU must reduce buildings’ GHG emissions by 60%. EPEE supports the ambition of the Renovation Wave to promote deep renovation or staged deep renovation and renovation activities that holistically consider the overall energy performance and health benefits of the building, including technical building systems like heat pumps and air conditioners. Therefore, EPEE calls on the Commission to align the EU Taxonomy with this vision by increasing the energy savings requirement for renovation activities to at least 60%.
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.