POSITION PAPER

Brussels, Monday 28 July 2025

EHPA & EPEE feedback on the call for evidence for an impact assessment on energy labelling of low temperature heat emitters

The European Heat Pump Association (EHPA) represents the voice of the European heat pump sector in Brussels. Our mission over the next five years is to ensure sustainable, stable growth in the domestic, commercial and industrial heat pump market in order to make heat pumps the number one heating and cooling technology in Europe and achieve a competitive, resilient European sector.

The European Partnership for Energy and the Environment (EPEE) represents the Refrigeration, Air-Conditioning, and Heat Pump industry in Europe. 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.

EHPA & EPEE welcome the European Commission's initiative to explore the potential of low-temperature (LT) heat emitters. This product group offers significant energy savings potential, especially when they are combined with a heat pump – and can play a key role in supporting the implementation of the Renovation Wave Strategy while contributing to the decarbonisation of the building sector.

However, the Commission should consider that low temperature emitters are not only meant for renovation or replacement of existing emitters but are also installed in new buildings with heat pumps – thus any new measure should be future proof and sufficiently flexible to address the various applications of low temperature emitters.

In light of this, EHPA & EPEE provide a set of recommendations with the aim to help the Commission to design and commit a high-quality impact assessment.

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Key recommendations:

1. Prioritise Heat Pump

The impact assessment should prioritise the deployment of all heat pump technologies, including hybrid heat pumps, as key solutions for decarbonising the building sector.

While the call for evidence suggests that low-temperature (LT) emitters could support the deployment of hybrid systems, EHPA & EPEE believe that the broader policy focus should be on enabling the shift from fossil-fuel-based boilers to all types of heat pumps in combination with LT emitters.

Supporting the deployment of all heat pump technologies – including hybrids – will be essential for accelerating the transition toward a climate-neutral Europe by 2050.

Finally, the study should consider that low-temperature heat emitters, when combined with heat pumps, **can enable both active and free cooling functions**. This added versatility supports year-round energy efficiency and enhances the overall system value, making low-temperature solutions more attractive for integrated heating and cooling in buildings. At this stage, the study fails to consider the reversibility of systems and thus disadvantage emitters able to function in reverse mode and providing cooling.

2. On the scope of the products considered for an energy label

EHPA & EPEE would like to request clarification on the scope of the study to ensure coherence and regulatory efficiency:

- The Commission should clarify whether the scope of the study for an Impact Assessment will cover all heat emitters or focus solely on low-temperature (LT) heat emitters.
- Overlap and inconsistency with existing regulations should be avoided. For example, the scope includes hydronic fan coil units, which are currently covered by Ecodesign Lot 21. At the same time, floor and wall units are excluded from the study. Temperature control systems are addressed separately under Ecodesign Lot 1 as part of system packages.

3. On the objective of the Impact Assessment and the added value of an energy label for components in a system

EHPA & EPEE welcome the initiative that the call for an impact assessment aims to explore the feasibility of introducing an energy label for low temperature heat emitters.

However, the European Commission and the forthcoming assessment should be aware about the state of play in which in practice, heat emitters such as radiators or convectors, are rarely purchased by end users as standalone products. Instead, they are typically selected and installed as part of a complete heating system, with decisions guided by installers. As a result, it is unlikely that end users would use or rely on an energy label when choosing these products. We would suggest conducting a consumer study or an impact analysis to understand if there is any added value in labelling low temperature emitters and if this energy labelling would achieve the goals targeted by such new measure.

Nonetheless, a label could still provide an added value in providing performance-related information in the context of the Energy Performance of Buildings Directive (EPBD). The revised EPBD highlights the importance of encouraging the use of low temperature emitters to improve the overall energy efficiency of buildings. From this perspective, making relevant performance data available — for example, through a product information sheet rather than a consumer label — could support more accurate energy performance calculations at the building level. Most manufacturers offer a selection tool to display the performance of their fan coil units at different air and water conditions. From these datasheets, it is possible to retrieve the water flow rate and other performances of the fan coil unit.

There might indeed be added value for the EPBD if such data could be systematically integrated into the calculation methods used for energy performance certificates (EPCs). However, it remains unclear how this would work in practice. Under the EPBD, EPCs are required when buildings are constructed, sold, or rented out, and they may include performance-related data about building components. In some cases, EPCs must also be updated after major renovations. However, in most practical cases — such as when a heating system is replaced due to age, failure, or a standard upgrade — this does not trigger a new EPC or energy performance calculation. As a result, even if low-temperature heat emitters are labelled with high efficiency ratings, this information is unlikely to be captured or reflected in a formal building assessment. This limits the potential of the label to influence real-world decisions or accelerate uptake of these products.

4. On a fair comparison between the different technologies to ensure level playing field

To ensure a fair and meaningful comparison between the various technologies assessed, the Impact Assessment should adopt a comprehensive approach that considers the full environmental impact of each product group, beyond the energy efficiency performance. Specifically:

- The total environmental performance should be assessed, considering not only energy consumption during use but also material used and lifecycle impacts. For example, while non-electric radiators may appear more energy-efficient, they typically require significantly more material (e.g. steel).
- The feasibility of creating a comparable energy label between fundamentally different technologies—such as non-electric radiators and fan coil units—should be carefully

evaluated and clearly explained. The later can provide cooling, are also often used in new built, in commercial applications etc.

- Clarification is also needed on how the addition of auxiliary fans will be assessed in comparison to radiators without fans.

5. On the metrics and testing standards to better characterise and distinguish between LT emitters.

EHPA & EPEE urges caution in the development of simplistic or isolated efficiency metrics for low temperature (LT) emitters. There is no physical or performance-based justification for defining emitters by static temperature classes (e.g., "low", "medium", "high"). All hydronic heat emitters deliver heat whenever water temperature exceeds ambient temperature — what matters is how they are integrated into a building system.

Key emitter performance characteristics — such as output at low water flow rates, radiant vs convective emission ratio, or dynamic control accuracy — can only be accurately assessed in the context of system-level operation. For this reason, we recommend that any metrics or testing standards:

- Is based on the EPBD standard EN 15316-2 “Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 2: Space emission systems (heating and cooling)”, which already provides a comparative method for emitter energy performance.
- Reflect seasonal and dynamic operating conditions, rather than nominal or design-point values.
- Support interoperability with heat pumps, where low temperature emittersdirectly enhance system COP.

EHPA & EPEE recommend that emitter labelling — if developed — should be aligned with the EPBD and existing system performance standards, rather than attempting to classify products in isolation. In addition, testing methods are already available for a number of low emitters, such as fan coils and we caution applying new testing methods and points not suited for the tcehnologies tested and potentially labelled.

While EPBD alignment is recommended, EHPA & EPEE also would like to stress that in practice, EPBD calculations are not typically triggered when only the heat emitters or even the heating system are replaced. Energy Performance Certificates under the EPBD are required under specific conditions — such as when a building is constructed, sold, or rented — and not for routine component changes. This limits the applicability of EPBD-based metrics unless Member States explicitly require recalculations in such cases.

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ABOUT 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 aswell 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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The European Heat Pump Association (EHPA) represents the European heat pump sector. Our over 230 members include heat pump and component manufacturers, research institutes, universities, testing labs and energy agencies. EHPA advocates, communicates and provides policy, technical and economic expertise to European, national and local authorities, and to our members.

Our vision for is to be the leading authority and trusted partner in the path to fully enable the decarbonisation of buildings and industry in Europe.

Our mission over the next five years is to ensure sustainable, stable growth in the domestic, commercial and industrial heat pump market in order to make heat pumps the number one heating and cooling technology in Europe and achieve a competitive, resilient European sector.