POSITION PAPER

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EHPA's position on an EU clean heat market mechanism

In its Electrification Action Plan, the European Commission committed to explore the possibility of introducing a Clean Heat Market Mechanism (CHMM) by 2027 to support heat pump deployment and reduce upfront costs. EHPA welcomes the European Commission's focus on accelerating heat pump deployment, and the recognition that electrification is central to lowering energy bills and reducing Europe's dependence on imported fossil fuels. The question this paper addresses is which instruments will most effectively deliver that acceleration. We look at the current state of the EU heat pump market, consider the evidence on what is driving or holding back deployment, and set out the considerations and conditions relevant to a UK-style CHMM in the EU context, as well as the measures already available to accelerate deployment.

1. The barriers to heat pump deployment are on the demand side

Under REPowerEU[1], the European Commission called for 30 million additional hydronic heat pumps by 2030. EHPA estimates that meeting the REPowerEU trajectory, which requires the number of newly installed heat pumps to double every four years, would mean 60 million more heat pumps installed by 2030 compared with the 17 million units in place when REPowerEU was published in 2021. In 2025, through its Affordable Energy Action Plan[2], the Commission calculated that heat pump take up and home efficiency could save €60 billion in avoided fossil fuel imports by 2030. Following the crisis in the Middle East and the subsequent rise in energy prices, the European Commission put electrification and deployment of heat pumps at the centre of its response to the crisis, as a way to reduce energy bills and Europe's dependence on imported fossil fuels. According to its own assessment, an annual increase of the rate of heat pump deployed from around 2.4 million units at the moment of the publication of AccelerateEU[3] to around 4 million units by 2030 would not only bring relief for consumers but would also support Member States in progressing to reduce the average primary energy use of the residential building stock by at least 16% by 2030.

The evidence available from the EU's heat pump market data and from the European Commission's own diagnosis in the recently published Electrification Action Plan points to demand, not supply, as the key barrier to actually deliver the acceleration needed to achieve those goals.

European **manufacturing capacity** is not the constraint. The EU heat pump sector supports around 433,000 direct and indirect jobs and, according to industry surveys[4], more than 80% of monobloc heat pump units and over 90% of indoor units sold in Europe are assembled within the region, compared with under 10% sourced from China. Manufacturers had, by 2023, committed €7 billion[5] to expanding production capacity in anticipation of continued growth. When the market

[1] European Commission. (2022). *REPowerEU plan* (COM(2022) 230 final). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2022:230:FIN
[2] European Commission. (2025). *Action Plan for Affordable Energy (COM(2025) 79 final)*. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52025DC0079&qid=1741780110418
[3] European Commission. (2026). *AccelerateEU - Energy Union: Affordable and secure energy through accelerated action* (COM(2026) 370 final). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52026DC0370
[4] EHPA. (2026). *Europe's heat pumps are mainly 'made in Europe'*. https://ehpa.org/news-and-resources/news/heat-pumps-made-in-europe/
[5] EHPA. (2023). Heat pump manufacturers plan investments worth €7 billion. https://ehpa.org/news-and-resources/publications/heat-pump-manufacturers-plan-investments-worth-e7-billion/

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contracted in 2023-2024, several manufacturers announced job cuts[6] explicitly attributed to falling demand. These were demand-driven contractions in an industry that had already built the capacity to supply a larger market. Many of the manufacturers that would be subject to a supply-side obligation are among those that have committed this capital. Financial penalties would reduce the capital available for exactly that investment, at a moment when the pace of the transition needs to accelerate.

The Commission's own diagnosis points to demand-side prices. The Electrification Action[7] Plan identifies the **electricity to gas price ratio** as the central barrier to electrification, noting that electricity is taxed more heavily than gas for final consumers in most Member States and costs households, on average, around two and a half times as much as gas. It sets a KPI to bring this ratio down below of 2.5 in every Member State by 2030, a threshold that 17 Member States already exceed[8].

The electricity to gas price ratio has a direct effect on heat pump sales: where the ratio is lower, running a heat pump costs less, and households can see the economic advantage of switching; where it is higher, that advantage decreases or reverses. According to Eurostat data on household energy prices, including all taxes and levies, this ratio varied across the EU from 1.30 in Sweden to 5.11 in Romania in the second half of 2025. The effect of energy taxation specifically is stark. EHPA's own analysis[9] shows that countries taxing electricity more heavily than gas see slower heat pump adoption and remain more dependent on fossil fuels, while countries that tax electricity less heavily than gas make heat pumps more attractive and affordable.

This is a demand-side price signal that directly affects consumers' decisions, on which a supply-side obligation has no effect. A mechanism that requires manufacturers to sell more heat pumps does not change the cost of running one, which is what determines whether switching makes economic sense for a household. Manufacturers can influence purchasing decisions only to a limited extent: the final decision rests with consumers and depends on economic viability, building characteristics and local conditions. Deployment is further constrained by installer availability and grid capacity, none of which a supply-side mechanism would address.

The experience of vehicle electrification does not provide a straightforward precedent for addressing these demand-side barriers through a supply-side mandate in the heating and cooling sector. Electric vehicles (EVs) and the CO2 standard provide a useful example of how regulation can influence technology uptake, but the comparison with heating and cooling technologies has important limits. Heating and cooling replacement is a necessity-driven purchase, with households typically responding to upfront costs, running costs and the characteristics of their building, rather than making a discretionary technology choice. EV volume growth has also been supported by fleet and corporate leasing markets, which have no direct equivalent in residential heating. The underlying manufacturing dynamics differ too: much of the cost reduction in EVs has come from scaling an evolving technology, including batteries and power electronics, whereas core heat pump components such as compressors are mature, commoditised technologies with less scope for cost reduction through volume alone. Heat pump deployment is also dependent on the building and local system in which the equipment is installed, including insulation, heat emitter compatibility, installer availability, and grid capacity. This makes heat pump deployment fundamentally different

[6] Eurofound. (2024). *Nibe: Internal restructuring in Sweden* (Factsheet No. 200968). European Restructuring Monitor. https://apps.eurofound.europa.eu/restructuring-events/detail/200968; Eurofound. (2024). *Vaillant* (Factsheet No. 201184). European Restructuring Monitor. https://apps.eurofound.europa.eu/restructuring-events/detail/201184

[7] European Commission. (2026). *Electrification Action Plan* (COM(2026) 595 final). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52026DC0595

[8] European Commission. (2026). *Electrification Action Plan* (COM(2026) 595 final), p. 5, figure on electricity-to-gas price ratios in EU Member States for industry and households in 2025

[9] EHPA. (2025). *Analysis: high taxes on electricity are slowing heat pump uptake*. https://ehpa.org/news-and-resources/press-releases/analysis-high-taxes-on-electricity-are-slowing-heat-pump-uptake/

from vehicle electrification, where the purchase of the vehicle does not require adaptation of the consumer's home or other physical infrastructure at the point of purchase.

2. The UK experience

Because the proposed EU mechanism is still at the exploratory stage, the UK's Clean Heat Market Mechanism provides the most directly relevant real-world example of a supply-side obligation designed to increase heat pump deployment. However, the evidence on its effect remains limited. The scheme has been in place for only one year, having taken effect in April 2025, and it is still too early to assess its effectiveness. This view is shared across the debate: analysis supportive of the mechanism also concludes that "more information would be needed to provide a full evaluation of the scheme and its contribution to market growth"[10]. At this stage, it is difficult to isolate the impact of the mechanism from that of other support measures already in place, particularly direct grants for heat pumps, on which the scheme was always designed to operate in parallel. Some early indicators, as a 22% fall in retrofit installations in the first half of 2026 compared with the same period of 2025[11], and a penalty that has been reduced by 90% since the scheme was first proposed, raise questions that deserve closer attention as more data becomes available. At the same time, some market participants report that the mechanism is providing a signal to manufacturers and stimulating commercial activity, even if this cannot yet be quantified. Neither set of indications yet amounts to a basis for firm conclusions in either direction.

2.1 Introduction of the CHMM

Discussions in the UK started with a first public consultation on a market based mechanism for low carbon heat in 2020-2021, following the ambition set out in its 2021 Heat and Buildings Strategy to grow the heat pump market to around 600,000 installations per year by 2028[12]. A further consultation in 2023[13] set the scheme's original design: a 4% target for the first year, rising over time, with a proposed penalty of £5,000 per missing credit. The Energy Act 2023 provided the primary legislative basis[14].

The scheme was widely labelled a "boiler tax" by the gas and boiler industry[15], a framing that shaped the political debate over its ambition. Before the scheme took effect, manufacturers announced they would raise boiler prices by around £95-£120 per unit, stating this as a direct response to the anticipated penalty[16]. The scheme's start was delayed by a year, and the penalty was reduced first to £3,000 and then, before launch, to £500 per missing credit. Secondary legislation brought the scheme into force in January 2025[17], and a further 2025 consultation confirmed the year 2 (2026/27) target at 8%.

[10] Lowes, R., & Santini, M. (2026). *The UK clean heat market mechanism: Case study*. Regulatory Assistance Project. https://www.raponline.org/wp-content/uploads/2026/07/rap-lowes-santini-the-UK-heat-market-mechanism-2026-jul.pdf
[11] Department for Energy Security and Net Zero. (2026). Heat pump deployment statistics: June 2026. GOV.UK. https://www.gov.uk/government/statistics/heat-pump-deployment-statistics-june-2026
[12] Department for Business, Energy & Industrial Strategy. (2021). *Market-based mechanism for low carbon heat*. https://www.gov.uk/government/consultations/market-based-mechanism-for-low-carbon-heat
[13] Department for Energy Security and Net Zero. (2023). *Clean heat market mechanism*. https://www.gov.uk/government/consultations/clean-heat-market-mechanism
[14] Energy Act 2023, c. 52, pt. 4, ch. 1. (2023). https://www.legislation.gov.uk/ukpga/2023/52/part/4/chapter/1
[15] Harvey, F. and Cooke, P. (2023), 'Gas boiler lobby trying to delay UK's heat pump plans, leak shows', The Guardian. https://www.theguardian.com/environment/2023/jul/20/gas-boiler-lobby-uk-heat-pump-plans-leak
[16] Baxi UK. (2023). *The Clean Heat Market Mechanism*. https://www.baxi.co.uk/professional/help-and-advice/news/the-clean-heat-market-mechanism
[17]The Clean Heat Market Mechanism Regulations 2025, SI 2025/81. (2025). https://www.legislation.gov.uk/uksi/2025/81

2.2 The broader policy framework for heat pumps

The CHMM operates alongside a wider package of UK measures supporting heat pump uptake. The **Boiler Upgrade Scheme**[18], provides a capital grant of £7,500 for air to water and ground source heat pumps, and £2,500 towards air to air heat pumps. Heat pump installations also benefit from a **0% VAT rate**[19]. The government's **Warm Homes Plan**[20], published in January 2026, sets the ambition of reaching 450,000 heat pump installations a year by 2030 and provides the wider policy framework within which the CHMM sits.

2.3 Design and market-effect considerations

The obligation falls on suppliers of 20,000 or more gas boilers, or 1,000 or more oil boilers, a year; smaller suppliers, including those meeting the small-company definition under the Companies Act 2006, are exempt. The target is expressed as a number of credits, which can be met through accredited heat pump installations, banked or carried forward, or purchased from other suppliers; a supplier that falls short may instead pay a penalty of £500 per missing credit. Eligible technology is limited to hydronic (air-to-water) heat pumps up to 45kW and hybrid systems earn half a credit. Verification depends on the Microgeneration Certification Scheme (MCS), the UK's existing installer-accreditation body, which acts as the certification scheme for the mechanism.

While credit trading between suppliers is permitted under the Regulations, there is no public trading platform, published price data, or disclosure requirement for individual trades. This means there is limited public visibility into how the credit market is functioning in practice.

In addition, a supplier that sells both fossil boilers and heat pumps also has the option of meeting its obligation through its own installations, rather than through the credit market. This can include using revenue from the boiler side of the business to support its own heat pump sales, for example through discounts, alongside the separate practice of raising boiler prices to help cover the anticipated cost of the mechanism.

The government's own impact assessments[21] confirm that the mechanism's costs fall on businesses, and, when the scheme's target was subsequently raised, on households too. The consultation-stage impact assessment for the original 2023 proposal projected a positive net benefit to society overall, but a negative Business Net Present Value of -£116 million and a net cost to businesses of £59 million per year. When the Year 2 target was raised from 6% to between 8% and 10%, the government's analysis, reviewed by the UK's Regulatory Policy Committee[22], the projected net direct cost to businesses went to £11.5 million a year, and a negative net present value to households of -£48 million, driven by the cost of switching from gas to electricity not being fully offset by efficiency gains.

2.4 Heat pump installation figures

[18] UK Government. (n.d.). *Apply for the Boiler Upgrade Scheme*. https://www.gov.uk/apply-boiler-upgrade-scheme
[19] HM Revenue & Customs. (2024). *VAT on energy-saving materials and heating equipment (Notice 708/6)*. https://www.gov.uk/guidance/vat-on-energy-saving-materials-and-heating-equipment-notice-7086
[20] Department for Energy Security and Net Zero. (2026). *Warm Homes Plan*. https://www.gov.uk/government/publications/warm-homes-plan
[21] Department for Energy Security and Net Zero. (2023). *Clean Heat Market Mechanism: Impact Assessment*. https://assets.publishing.service.gov.uk/media/647757b15f7bb700127fa2a4/clean-heat-market-mechanism-ia.pdf
[22] Regulatory Policy Committee. (2025). *RPC opinion: The Clean Heat Market Mechanism (Amendment) Regulations 2025 options assessment*. https://www.gov.uk/government/publications/the-clean-heat-market-mechanism-amendment-regulations-2025-impact-assessment-rpc-opinion-green-rated

According to official statistics published by the UK Department for Energy Security and Net Zero[23], retrofit heat pump installations in the first half of 2026 reached 20,895, a fall of 22% against the 26,768 installed in the same period of 2025. Installations across the whole of 2025 went up to around 53,250, an increase of 9% on 2024 and more than four times the 2020 level.

Given the short period involved, and the presence of other policies operating in parallel, this evidence does not yet amount to a reliable basis for concluding that the mechanism itself has succeeded or failed to accelerate deployment.

3. Specific considerations about a UK-style CHMM at EU level

The effectiveness of the UK's CHMM is not yet established, but its design and the political dynamics it has triggered already offer several considerations relevant to a comparable instrument at EU level:

- **It risks distorting competition between manufacturers:** Because the obligation attaches to fossil-boiler sales, it falls on manufacturers with boiler portfolios, while manufacturers selling only heat pumps carry no obligation. The costs and opportunities are not evenly distributed across the sector, and manufacturer's exposure depends on their product mix. A mechanism of this kind has the potential to affect the market share of one player over another, in either direction, and these effects should be assessed and understood to avoid unintended consequences for the market.

- **Political risk:** A negative perception of a measure involving heat pumps can carry risk to the technology itself. In the UK, the mechanism became framed in public debate as a "boiler tax," after some boiler manufacturers announced CHMM-related boiler surcharges. These surcharges were commercial decisions rather than a requirement of the scheme, but the narrative shaped the political debate over its ambition, leading to a one-year delay and a 90% cut to the penalty before the scheme even launched. This dynamic is not limited to the UK or to supply-side mechanisms. In Germany, the discussions around the Building Energy Act which mandated new heating systems to use predominantly renewable energy led to a public and political backlash. Heat pump sales in Germany fell sharply in its aftermath, down 46% in 2024 compared to 2023[24]. An EU-level debate on a CHMM could expose heat pumps to similar reputational risk, whatever the merits of the instrument itself.

- **The EU is far more heterogeneous than the UK:** The EU comprises 27 markets with electricity to gas price ratios ranging from around 1.30 to 5.11 and correspondingly divergent levels of heat pump maturity, climate and technology mix. A uniform mechanism would fall unequally on manufacturers depending on the markets and climates in which they operate. A single EU-wide target risks concentrating activity where heat pumps are already competitive, while achieving little in the markets with the greatest need, precisely those with the highest price ratios. National-level obligations could target such markets more precisely but would add complexity and risk fragmenting the single market.

- **The data is not available**: Many European market authorities do not collect data on the number and type of heating systems installed. This would be a pre-requisite in advance of the scheme's design and operation to ensure that the levels established are appropriate for the diverse European market.

[23] Department for Energy Security and Net Zero. (2026). Heat pump deployment statistics: June 2026. GOV.UK. https://www.gov.uk/government/statistics/heat-pump-deployment-statistics-june-2026

[24] Bundesverband Wärmepumpe. (2024). *Wärmepumpen: Markt geht auf 193.000 Geräte zurück, aber Vertrauen in die Förderung steigt.* https://www.waermepumpe.de/presse/news/details/waermepumpen-markt-geht-auf-193000-geraete-zurueck-aber-vertrauen-in-die-foerderung-steigt/

- **The scope from the UK model is too narrow for EU market realities:** The UK scheme credits only air to water units, excluding new-build installations, air to air heat pumps and heating and cooling networks. For instance, under the UK CHMM, if a 100-apartment block is decarbonised with individual heat pumps, the manufacturer would earn 100 credits. However, achieving the same outcome with a large heat pump driven network with heat interface units in apartments would not get any credits. A design built on the UK template, without adaptation, would be poorly aligned with the market conditions, needs and technologies deployed across the EU.

- **It would serve as a distraction:** There is much to do by the EU and governments on overcoming the real barriers to heat pump deployment. The CHMM would require significant resources at EU and national level to develop, transpose, and operationalise the data collection and the scheme. This risks creating legal uncertainty, new bureaucracy and additional costs, both for industry and for administrations. Those resources would likely be better served ensuring there is a single competitive market, a coherent and stable product policy framework and attractive electricity pricing.

4. What can be done at EU level to support heat pump deployment

The key barriers for heat pump deployment can be addressed directly through measures that are already possible at EU level:

- **Close the electricity to gas price ratio**, in line with the European Commission's Electrification Action Plan's goals and measures, through the reform of electricity taxation, levies and network charges.

- **Implement ETS2** fully and on time, as it increases attractiveness for heat pumps, without requiring a parallel manufacturer's obligation. In addition, the ETS2 generates financing for heat pump support including for vulnerable households, mitigating exposure to volatile energy prices and tackling energy poverty.

- **Allow zero VAT.** Change the EU's rules to allow 0% VAT on heat pumps and then implement it nationally. For solar PV, this is already allowed at EU level and is implemented in several countries.

- **Deliver on the phase-out of fossil fuel subsidies as a binding legislative measure.** The Commission has already committed, in the Electrification Action Plan, to bring forward measures progressively phasing out fossil fuel subsidies as part of the post-2030 Energy Union package. Given the direct effect fossil fuel subsidies have on the operating cost gap between gas boilers and heat pumps, this commitment should be carried through into binding legislation.

- **Support the design of subsidy schemes and ensure they are designed to work.** Evaluate best practices and lessons learned across existing national subsidy schemes and use this evidence to identify the principles of a well-functioning heat pump subsidy scheme: one that offers certain, long-term support and is simple for consumers to access, rather than becoming too costly to sustain or too slow and cumbersome to navigate. These principles should inform the coordinated design of national schemes, developed in partnership with Member States.

- **Ensure a well-trained and competitive installer market.** Installer capacity is a genuine bottleneck to deployment, and evidence shows that installation costs vary widely across

EU markets[25]. Training should be expanded at national level, and barriers to entry for installers reduced so that they can operate across a single market, with Member States avoiding gold-plating of qualification requirements or of the conditions linked to national subsidy schemes.

- **Encourage Member States** to adopt more ambitious and consistent policies for existing buildings, including phasing out all fossil fuel boilers by 2040.

5. Conditions for an EU CHMM

If a CHMM is nonetheless developed at EU level, it would need to meet the following conditions to avoid the risks identified above:

- **The need and effectiveness must be established first**, through a robust EU impact assessment and a credible evaluation of the UK scheme once sufficient data exists, given the scale of effort, the political risk, and the risk of unintended market effects involved.

- **Demand-side conditions must be addressed first, or in parallel.** The electricity to gas price ratio must be brought down, and upfront costs, grid capacity, installer numbers and building readiness addressed.

- **Demonstrable added value over existing and forthcoming tools.** It must be shown that a CHMM delivers something that demand-side measures and ETS2 do not, rather than duplicating instruments already in place.

- **Avoid unnecessary administrative burden**. Any reporting obligations should be built on existing EU frameworks and regulations.

- **Explicit safeguards against market distortion**, addressing the cross-subsidy and competition effects that may arise from the instrument through requiring all credits to be traded transparently.

- **Transparent credit trading**, with visible pricing and volumes, allowing independent monitoring of whether the mechanism is functioning as intended.

- **Durability and predictability**, with a clear multiannual trajectory for future obligations set well in advance of the relevant compliance periods, and adequate lead time between evaluation and target-setting, to give manufacturers the certainty needed for investment and product planning.

- **Technology mixes** commonly installed in Europe would need to be included in an appropriate way, to allow for dual use appliances, appliances that heat hot water, multiple units, etc.

- **Coherence with the wider policy framework**, with a clearly defined relationship to ETS2, the EPBD and EU industrial policy. The design should be consistent with the objectives of the Net-Zero Industry Act and the Industrial Accelerator Act, including on where manufacturing takes place.

[25] Miara, M., & Rosenow, J. (2026). Why are heat pump installation costs so much higher in Germany? Evidence from a European comparison. *Energy & Buildings*, *369*, 117998. https://doi.org/10.1016/j.enbuild.2026.117998

- **Proper market surveillance and enforcement**, to ensure the obligation is applied consistently, and the scheme operates as intended.

- **A clear stakeholder engagement and communication strategy**, to avoid misleading narratives, clarify how compliance costs arise and protect public confidence in heat pumps.

6. Conclusion

On the evidence available, a CHMM is not the priority to accelerate heat pump deployment. The barriers are on the demand side, and the measures to address them are already available. EHPA advises prioritising closing the electricity-to-gas price ratio, implementing ETS2 fully and on time, enabling 0% VAT, delivering a binding phase-out of fossil fuel subsidies, and supporting well-designed national subsidy schemes. These measures can address the demand-side barriers holding back the market today directly, without the political, competitive and administrative risks a CHMM could introduce.

If the EU proceeds with such a mechanism, it should therefore be based on clear evidence of additionality and effectiveness, complement existing measures rather than duplicate them, and include safeguards against market distortion. It should also provide a stable and predictable target trajectory, with sufficient lead time and longer-term visibility of future obligations. Its design should also ensure coherence with existing EU policies, support the competitiveness of manufacturers that are investing significant capital in the transition to clean heating and cooling technologies, and reflect the different market conditions across Member States.