CAN Europe's Feedback

Call for Evidence: EU Heating and Cooling Strategy

Summary:

Climate Action Network (CAN) Europe is Europe's largest NGO coalition fighting climate change, uniting over 200 organisations from 40 countries and representing more than 40 million citizens. Our goal is to deliver a Paris Agreement compatible decarbonisation pathway that leaves no one behind. Buildings account for 40% of the EU's final energy use and 36% of energy-related greenhouse gas emissions, with heating and cooling alone responsible for half of this consumption and 30% of total CO2 emissions with the majority still produced using fossil fuels. To remain within the 1.5°C limit, emissions from buildings must fall by at least 68% by 2030 compared to 2020 levels. Yet, progress towards renewable heating and cooling remains too slow due to economic, technical and political barriers. This submission outlines CAN Europe's proposals to tackle these barriers and accelerate the transition to renewable-based, efficient and affordable heating and cooling systems, and contribute to achieving energy security for the EU.

The upcoming EU Heating and Cooling Strategy represents a pivotal opportunity to place the building sector on a Paris Agreement compatible, affordable, and just decarbonisation pathway. To achieve this, the strategy must enforce the energy efficiency first principle, prioritise renewable-based solutions, and ensure coherence with the Electrification Action Plan and the Energy Security Framework while addressing inequities in energy taxation. The implementation of the Gas Directives, the Energy Efficiency Directive, the Energy Performance of Buildings Directive and the National Building Renovation Plans as a tool should serve as drivers for the fossil fuel phase-out, supported by inclusive financing mechanisms that support deep renovations, protect vulnerable households and reduce energy poverty. At the same time, the growing challenge of cooling must be tackled through sustainable technologies, passive design, urban greening, and the urgent enforcement of the F-gas phaseout. By aligning policy, regulation, and investment with social safeguards and public awareness, the EU can deliver resilient, efficient, and affordable heating and cooling systems that cut emissions, enhance comfort, and ensure no one is left behind in the transition.

Building renovation as the driver of heating and cooling decarbonisation

The upcoming Heating and Cooling Strategy ought to become an opportunity to reinforce the

implementation of the Energy Performance of Buildings Directive (EPBD). Even though its transposition is set for the end of May 2026, few earlier requirements have either failed to be properly transposed or they have been experiencing delays in the majority of Member States. One of these being a requirement introducing the stop for financial incentives for the installation of stand-alone boilers powered by fossil fuel, which needed to be achieved by 1st of January 2025 (as per Article 17 EPBD RECAST)[1].

Providing support for the fulfilment of this requirement, beyond scoring an important milestone towards the roll out of renewable-heating technologies, it could play in favour of delivering sound National Building Renovation Plans (NBRPs)[2]. The latter Plans introduce a first ever indicative phase out date for fossil fuel boilers in buildings by 2040. Member States are in fact called to concretely plan a pathway looking towards a complete phase out of these technologies by this date, including policies, measures, energy system trends and infrastructures. Evidently, alongside clear regulatory instruments, channelling financial support and investments in deep renovations, renewable–heating technologies and the improvement of infrastructures and energy systems are crucial elements that must feature these Plans. Moreover, increasing the ambition of the latter, not only will support the phasing out of these technologies, but it can and should support the phase out of fossil fuels from buildings, which is pivotal to achieve a Paris Agreement Compatible aligned decarbonisation goal. In light of this, the Heating and Cooling Strategy, with its launch scheduled for early next year, should give further guidance to Member States (building upon the work done on the implementation guidance notes) for the finalisation of the National Building Renovation Plans, which is scheduled for the end of 2026. On top of helping the design of such pathways, the drafting and finalisation of these Plans shall also be used as an opportunity to finally retrieve data on heating and cooling consumption patterns of households and businesses (which should be broken down by type of technologies, building types, climate zones etc.) to finally fill the data gap necessary for future-proof policy making purposes.

As part of the complementary measures to advance heating and cooling decarbonisation in the building sector, NBRPs and the EPBD implementation at large should be supported because they can advance integrated (deep) renovation activities (especially targeting worst performing buildings). As renovation cycles remain long (circa 20 years), it is important that whenever renovation activities are carried out, and it is technically feasible, coupling works on envelope with the installation of renewable-based heating technologies is promptly enabled. This logic should be particularly supported in the context of the roll out of Minimum Energy Performance Standards for non-residential buildings and the national trajectories for the progressive reduction of average energy consumption of the residential sector (as per Article 9 EPBD RECAST). In the context of renovation of existing buildings, it will also be important to support Member States in setting requirements for building elements (i.e. minimum energy performance requirements) at a level that would facilitate the effective installation of low temperature heating systems (as per Article 5 EPBD RECAST). This should be clearly coupled with the right use of energy labelling and ecodesign rules to orient consumers' choices towards decarbonised and future-proof heating systems.

Roadmaps to scale-up for heat pumps, district heating, geothermal and solar thermal

The Heating and Cooling Strategy should include or be followed by specific roadmaps to scale-up sustainable and renewable heating and cooling solutions. These should include specific trajectories for district heating, solar thermal, and geothermal technologies, as requested by the European Parliament. The Heating & Cooling Strategy or the accompanying Electrification Action Plan (EAP) should also set out actions as part of reaffirming the Commission's commitment to the REPowerEU

[1] According to the latest package of infringement procedures, out of 27 Member States 9 Member States, whose building stocks are highly dependent on fossil fuels for heating purposes (such as RO, AT, EL, BE, LU, DE, BG, PL), have failed to comply with the requirement
[2] https://caneurope.org/national-building-renovations-plans-nbrp-a-powerful-tool-for-a-just-and-climate-resilient-built-environment/

heat pump deployment target. Providing long-term policy certainty, these roadmaps would accelerate the shift from fossil fuels to sustainable and renewable Heating & Cooling solutions.

Support the implementation of energy efficiency solutions

The Energy Efficiency First principle outlined in the Governance Regulation and the EED is a guiding principle for energy related decisions and serves as a tool for EU policy making. The principle helps strategic decision making based on cost-effectiveness and benefits, and makes sure that energy efficiency measures that make energy demand and supply more efficient, are taken adequately into account. It is paramount that the **Energy Efficiency First principle** serves as a guiding principle for the upcoming European Heating and Cooling Strategy.

The successful implementation of the current energy efficiency legal framework is crucial to help achieve the EU's climate goals and gain more energy security, which is why the Heating and Cooling Strategy needs to reinforce the implementation of the Energy Efficiency Directive (EED). The Heating and Cooling Strategy should under no circumstances be used to announce changes to this important legislation. Any simplification attempts of the EED can negatively interfere with the implementation of this framework. The Strategy should first and foremost focus on simplifying the implementation of the EED and support Member States in this regard.

The Heating and Cooling Strategy shall in particular make sure to drive the implementation of the heating and cooling provisions, such as Article 25 and 26 of the EED on planning and supply, which needed to be transposed into national law by 11 October 2025, giving a priority to renewables-based and efficient heating and cooling and the phase out of fossil fuels.

Heating and cooling plans are an effective tool to develop renewable and energy efficient heating and cooling measures locally and specially important for the deployment of renewable based district heating. However, as a recent analysis by Energy Cities shows, only 18.5% of Member States in Europe have transposed the requirement mandated by the EED into national law, leaving a vacuum for municipalities that wish to draw up heating and cooling plans in other countries. To give guidance at national level, civil society in Spain has already identified joint recommendations for the methodology of heating and cooling plans: However, more comprehensive EU-level guidance is currently missing. The Heating and Cooling Strategy should give a mandate to the EU Commission to draw up more guidance on heating and cooling plans including with recommendations to make heating and cooling measures renewables-based and more energy efficient leading to energy demand reduction and fossil fuels phase out. In this regard, it will be important that the heating and cooling plans are also connected to the gas network decommissioning plans required by the gas Directive, ensuring a socially just fossil gas phase out in the EU by 2035.

Ensuring complementarity of the Energy Security Package including the EU heating and cooling strategy, the Electrification plan and the Energy Security Framework

Renewables-based electrification is instrumental and must be complemented with overall energy savings to drive the decarbonisation of heating and cooling. **Cheap, reliable, renewable power electricity** is a requirement for heat pumps to help support decarbonisation and to give consumers and industry the economic incentives to electrify. The upcoming Electrification Action Plan should seek to better integrate renewable power into the energy system, through supporting the optimisation of the electricity grid and the deployment of non-fossil flexibility, such as energy storage and demand-side flexibility.

Also heat pumps have the potential to be a great source of system flexibility, being able to shift power to when renewable power is available and the grid is not under strain. To do this, flexible network tariffs should be further rolled out across Member States, with protections against negative impacts of market exposure for more vulnerable households. Complimentary technology co-located alongside industrial and household heat pumps, such as batteries or thermal storage, should be explored to improve the flexible potential and reliability of electrified heating. When a lot of electrification can reduce overall energy savings, electrification technologies deployed also operate at the highest best practice standards.

The Energy Security Framework should work towards a fossil free energy system that is reducing reliance on fossil gas and increases renewables based electrification, also in its emergency planning.

Reduce inequitable energy taxation

Most heat pumps run on electricity, but electricity is about three times more expensive than fossil gas in most European countries. This means that the significantly greater efficiency of heat pumps does not translate into equally higher economic benefits for the user. This is the result of an imbalance in taxation levels and levies that favour fossil fuel energy over electricity-based solutions. This situation steers consumers towards less sustainable solutions, and increases overall costs for society. Gas and electricity prices need to differ to incentivise the switch to electrified demand, and how this switch can be managed in a way that is equitable and socially just. The upcoming Heating & Cooling Strategy should help to **reverse this distorted pricing** by readjusting taxation levels, based on the climate impact of the different fuels and energy carriers. The energy price needs to better reflect environmental costs of fossil gas, and lowering taxes, levies and charges on electricity. This would ensure that customers are guided towards renewable heating solutions. Once again, such measures need to be designed with a wider social lens in mind, to avoid that increases in fossil gas prices disproportionately impact the most vulnerable.

Redirect public financing towards long-term, inclusive, and renewable-based renovation pathways

As already mentioned above, regulation needs to always be supported by the right enabling framework. Coupling both active and passive renovation measures can and should always be supported by the right financial incentive (where public support remains strongly earmarked for the most vulnerable segments of the society), technical assistance (via the proliferation of one-stop shops and/or the uptake of renovation passports as tools for the design of personalised decarbonisation pathways of single buildings) and the right social safeguards. In a context where the upcoming Emissions Trading System covering GHG emissions of buildings and road transport will likely increase the price of heating fuels, reducing energy demand while replacing old, inefficient, fossil-fuels-based heating systems should stay high in priority. Supporting the linkage of NBRPs and Social Climate Plans (SCPs) can help this objective[3], as the small Social Climate Fund envelope can be integrated with other sources of funding (Cohesion Fund, ETS revenues etc.) to back a longer term and more inclusive decarbonisation pathway of our building stock. Reducing energy demand of buildings while supporting the uptake of renewables-based heating technologies as heat pumps, solar thermal, geothermal and renewable based district heating, means less CO2 emissions to sustain the current heating demand, thus less allowances will be needed which can prevent the rise of energy prices for consumers, which proves especially important for those living in very leaky buildings and already

[3] https://caneurope.org/renovation-wave-nbrps/

impacted by energy poverty[4].

Supporting the good implementation of a clear stop for fossil fuel subsidies can help Member States redirect that funding to improve energy efficiency, building renovations and move district heating systems to renewables. Diverse and accessible and integrated financing options, including extensive subsidies are needed targeting especially energy poor and low-income households across all tenures. However, subsidy programmes should be sufficiently long-term to avoid capacity crunch and to create conditions for the sectors (building energy efficiency and heating and cooling solutions) to expand sustainably[5].

Public information campaigns on the benefits of the renewable Heating & Cooling solutions

As a crucial step in promoting renewable heating, authorities need to improve public awareness of the need for the fossil-fuel-to-renewable-heating transition, and its benefits. We need all voices and partnerships to support the energy transition in our buildings, effectively engaging stakeholders and the local population, from planning to implementation to monitoring of the transition. Public information campaigns and engaging citizens from planning to implementation, can take any form that works: TV, radio or newspaper advertising, social media, workshops, online platforms to promote exchange with experts, and participation. Experience from countries where renewable heating is most advanced (e.g. Sweden, Germany) shows that Governments would be wise to dedicate a significant portion of their overall funding for renewable heating promotion to strategic communications. The Commission should encourage MS to include such successful practices in their communication strategies which should also foresee adequate funding of reliable information.

Resilient buildings and sustainable cooling

Cooling is the fastest growing end-use for energy in buildings, growing in Europe at 6% per year since 2000. At the current rate, energy demand for cooling is projected to triple by 2050. Up to 1 in 5 EU households cannot afford the cost of summer cooling. Cities can have temperatures up to 10-15°C higher than the surrounding countryside. This is due to a combination of low ventilation, fewer green spaces, higher population density, and sealed surfaces like roads and buildings which absorb heat during the day and release it at night.

To adapt to rising temperatures, the Heating & Cooling Strategy should include measures to tackle this growing problem and recommend Member States to emphasise cooling in renovation and energy planning via EPBD and EED implementation. Invest in skills and social support, boost specialist training for design, retrofit, installation, and ensure EU grants drive climate-resilient[6] construction and mandate urban greening, requiring shade and green areas in city planning and district renovations.

Households should be supported with cooling solutions that keep everyone comfortable without increasing energy bills in the summer by building the business case for passive design and nature-based cooling. Include passive cooling measures like blinds and shading in retrofit obligations. Require Member States to track and report on summer cooling needs and fund tangible solutions for energy poverty through direct financing via the SCF.

Surging cooling demand risks overloading the electricity grid. Without efficiency and demand

[4] https://caneurope.org/position-paper-can-europe-views-on-ets2/
[5] https://caneurope.org/briefing-on-barriers-for-renewable-heating-solutions
[6] hhttps://caneurope.org/content/uploads/2025/06/Briefing-National-Building-Renovations-Plans.pdf

reduction measures, energy use can skyrocket, while the associated carbon emissions exacerbate global warming. The EU should implement the F-gas phaseout by enforcing the revised rules with urgency, while supporting the transition through targeted subsidies for sustainable cooling technologies, with a priority on air-to-air heat pumps using natural refrigerants. Public authorities can leverage state buying power by integrating sustainability standards for cooling into green public procurement, ensuring that market demand drives innovation and deployment. An efficiency-first approach should underpin all measures, with financial support linked to the use of natural and climate-friendly refrigerants to maximise climate benefits and accelerate the shift to sustainable cooling solutions.

Conclusions

The upcoming EU Heating and Cooling Strategy represents a pivotal opportunity to place the building sector on a Paris Agreement compatible, affordable, and just decarbonisation pathway. To achieve this, the strategy must enforce the energy efficiency first principle, prioritise renewable-based solutions, and ensure coherence with the Electrification Action Plan and the Energy Security Framework while addressing inequities in energy taxation. The implementation of the Gas Directives, the Renewable Energy Directive, the Energy Efficiency Directive, the Energy Performance of Buildings Directive and the National Building Renovation Plans as a tool should serve as drivers for the fossil fuel phase-out, supported by inclusive financing mechanisms that support deep renovations, protect vulnerable households and reduce energy poverty. At the same time, the growing challenge of cooling must be tackled through sustainable technologies, passive design, urban greening, and the urgent enforcement of the F-gas phaseout. By aligning policy, regulation, and investment with social safeguards and public awareness, the EU can deliver resilient, efficient, and affordable heating and cooling systems that cut emissions, enhance comfort, and ensure no one is left behind in the transition.

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