

# EHPA's position on the revision of the Energy Efficiency and Renewable Energy legal framework after 2030

The European Commission's consultations on the post-2030 energy efficiency and renewable energy frameworks come at a critical moment for the EU's energy transition, as it advances towards its 2040 climate target and climate neutrality by 2050.

In this context, this paper sets out the European Heat Pump Association's position on how the future frameworks can better support the deployment of heat pumps, a mature and widely available technology that enables the electrification of heating and cooling, integrates renewable energy, and contributes to a more efficient and circular energy system across residential, commercial, and industrial applications.

## Cross-cutting priorities for the post-2030 framework

### 1. Setting binding and ambitious targets for the decarbonisation of heating and cooling

The post-2030 energy legislative framework must be underpinned by binding, quantified targets that give investors, industry, and Member States the certainty needed to plan and finance the transition.

Keeping and raising the sectoral target for renewable energy in heating and cooling is critical to accelerate the decarbonisation of the sector. As of 2024, the share of renewables stood at 26.7% while the deployment rate for heat pumps is well below the manufacturing capacity of the heat pump sector in Europe.

On the energy efficiency side, accelerating the deployment of electrification solutions such as heat pumps is essential not only for decarbonisation but also to unlock significant energy efficiency gains thanks to fuel switching, by reducing overall final energy consumption compared to fossil-based alternatives. The post-2030 framework should also ensure that progress metrics reflect the reduction of fossil fuel use and imported energy dependency, recognising the energy security dimension of the transition to efficient electrification technologies.

Ensuring the effective delivery of these targets will require a strong focus on implementation capacity, access to finance and the availability of enabling conditions such as infrastructure, system integration and streamlined administrative frameworks.

### 2. Ensuring coherence between energy efficiency and renewable energy frameworks

A stronger alignment between the energy efficiency and renewable energy frameworks is essential to maximise impact and avoid fragmented policy signals. This includes harmonising definitions across the two legal texts, such as the definition of waste heat, to ensure coherence across frameworks.

Measures promoting energy savings and renewable deployment should be designed in a complementary way, particularly in the heating and cooling sector, where electrification and efficiency go hand in hand. Technologies and solutions that simultaneously deliver energy efficiency and renewable energy benefits, such as heat pumps and waste heat recovery, should be fully recognised across both frameworks.

Greater coherence should also extend to alignment with the Energy Performance of Buildings Directive and the National Building Renovation Plans, ensuring that heating and cooling decarbonisation strategies are consistent with building renovation pathways and support more effective implementation at national level.

Overall, all of this would simplify implementation for Member States and ensure that efforts under both frameworks contribute effectively to shared decarbonisation objectives.

### **3. Strengthening electrification and system integration**

Electrification, supported by a growing share of renewable electricity, will be the cornerstone of the EU's energy transition. The future framework should explicitly recognise and support the role of electrification technologies, such as heat pumps, in decarbonising heating and cooling in buildings, district heating, and industry. At the same time, it should promote system integration by enabling flexible operation and the efficient use of ambient and waste heat. This will help optimise the overall energy system, reduce costs, and enhance resilience.

### **4. Support national implementation**

The post-2030 framework must be designed with implementation effectiveness as a core principle. Transposition of the recast Energy Efficiency Directive and Renewable Energy Directive has been uneven across Member States, and delivery on specific instruments, including local heating and cooling plans and smart meter rollout, remains insufficient. Member States are already falling behind on 2030 targets, revealing a gap between EU-level ambition and national delivery. The post-2030 framework should therefore include stronger implementation support mechanisms, clearer national milestones, and enhanced monitoring to ensure that targets translate into concrete action on the ground.

## **Energy Efficiency Directive (EED)**

### **1. Primary energy factor**

The EU default PEF for electricity, set under the EED, is used to reflect the amount of primary energy needed to generate electricity. Because the EED energy efficiency target is measured in both primary and final energy consumption, a high PEF tends to favour reductions in electricity use over direct reductions in fossil fuel consumption. This can undermine the case for electrification in heating, as technologies such as heat pumps may appear less efficient under the primary energy metric, even though they help reduce emissions and fossil fuel dependence.

#### **Policy asks:**

- Ensure that the PEF applied in each Member State does not exceed the EU default value established by the European Commission (currently 1.9).

- Revise the EU default PEF value with a forward-looking approach based in 2040 to reflect the increasing share of renewables in the electricity mix and the trajectory towards a decarbonised grid, in line with the Commission's own climate targets.

## **2. Waste heat recovery: extending the obligation beyond data centres**

Article 26 of the revised EED (EU/2023/1791) requires operators of data centres with a total rated energy input exceeding 1 MW to assess the feasibility of utilising waste heat, and to implement waste heat recovery where technically and economically feasible. This is a significant and welcome step. However, data centres represent only one category of waste heat source.

Industrial sites, commercial refrigeration installations, supermarkets, large-scale water treatment facilities, and server rooms in office buildings all generate substantial quantities of recoverable heat that is currently vented to the atmosphere or discharged to water. The limitation of the waste heat obligation to data centres leaves significant decarbonisation and efficiency potential untapped.

### **Policy asks:**

- Amend the EED to replicate the data centre waste heat obligation for all industrial and tertiary installations above a defined energy input threshold, including but not limited to large commercial refrigeration and cooling systems (e.g. supermarkets, cold storage), industrial processes generating low- and medium-grade waste heat, water treatment facilities, and large commercial buildings with centralised cooling.
- Require all covered installations to carry out a technical and economic feasibility study assessing whether their waste heat can be used on-site, supplied to a nearby building or district heating and cooling (DHC) network, or used via industrial symbiosis. Only where this analysis concludes that recovery is not feasible should waste heat be allowed.
- Establish sector-specific waste heat recovery targets at EU level, to be incorporated into NECPs and monitored through the Governance Regulation reporting cycle.
- Require Member States to map available waste heat sources as part of their comprehensive assessments on heating and cooling under Article 25 EED, making this data publicly accessible.

## **3. Heating and cooling planning: comprehensive assessments and local plans**

Article 25 of the revised EED requires Member States to carry out comprehensive assessments on efficient heating and cooling, and to ensure that municipalities with more than 45,000 inhabitants develop local heating and cooling plans.

In practice, when looking at the comprehensive assessments on efficient heating and cooling, several shortcomings become apparent. Many have not been published in the Commission's CIRCABC database. Where they are available, they are often only published in the national language, which limits comparability across countries. Moreover, key data, such as current heating and cooling demand by sector, the installed technology base (including fossil fuel boilers and heat pumps), and the geographic distribution of waste heat sources, is frequently missing. These gaps are often compounded by limited financial resources and technical capacity at national and local level.

Local heating and cooling plans, in turn, should go beyond mere compliance exercises. They should serve as practical, zoning-based, and data-driven instruments that guide investment and infrastructure decisions based on local needs.

At the same time, these instruments are intended to be aligned with the NECP process and timeline. Ensuring such alignment would help avoid duplication of efforts by Member States, while enabling comprehensive assessments and local plans to feed directly into the preparation and update of NECPs with robust data and forward-looking planning.

#### **Policy asks:**

- Provide targeted EU financial support, through existing facilities like ELENA or by redefining the scope of existing programmes (e.g. Modernisation Fund), or a dedicated technical assistance facility, to Member States and municipalities that lack the resources to conduct high-quality plans and assessments.
- Mandate that the data gathered during local plan development be made open-source and available to local authorities, researchers, and the wider public, to avoid duplication and support evidence-based decision-making.
- Ensure the coherent and timely integration of these instruments and their results into the National Energy and Climate Plans (NECPs)<sup>1</sup>, which shall include clear plans to phase out fossil fuels.

#### **4. Financing and energy saving obligation schemes**

Energy Efficiency Obligation Schemes (EEOS) and white certificate schemes should remain key instruments to deliver end-use energy savings post-2030. Several Member States, including France, Italy and Spain, have demonstrated that these schemes can effectively support the deployment of efficient heating technologies, including heat pumps.

White certificate schemes can provide a stable and market-based incentive for energy efficiency investments, while leveraging energy suppliers and market actors to support consumers and businesses. Experience across Europe also shows that well-designed schemes can support both large-scale industrial projects and residential heat pump deployment.

#### **Policy asks:**

- Maintain EEOS and white certificate schemes among key instruments for end-use energy savings nationally, while ensuring a balanced mix with alternative measures to avoid distortions across Member States.
- Ensure that white certificate methodologies fully recognise the contribution of heat pumps and electrification technologies.
- Require and support Member States in reducing administrative and transaction barriers, particularly but not limited to small-scale residential projects, ensuring that financing is linked to verified energy savings and schemes remain stable and predictable over the long term.
- Ensure effective cost-recovery provisions for obligated parties, including timely reimbursement and avoidance of caps that undermine scheme economics.

## **Renewable Energy Directive (RED)**

### **1. Waste heat definition: expanding scope to on-site and buildings**

Article 2 of the revised RED (EU/2023/2413) defines waste heat as 'unavoidable heat or cold generated as by-product in industrial or power generation installations, or in the tertiary sector,

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<sup>1</sup> Detailed policy recommendations on the NECPs can be found in EHPA's position paper on the revision of the Governance Regulation, available [here](#).

which would be dissipated unused in air or water without access to a district heating or cooling system.' Four cumulative conditions must be met for heat to qualify: it must be unavoidable, a by-product, originating in an industrial or tertiary process, and not reused on-site or in a single building outside a DHC network.

This definition excludes two significant categories of recoverable heat: first, heat generated by residential cooling systems, which does not originate in an industrial or tertiary process; and second, heat that is reused on-site or within a single building or small building cluster without connection to a district network. For example, heat recovered from supermarket refrigeration systems, heat from sewage water used in residential buildings.

This exclusion creates a regulatory asymmetry: the same thermal energy recovery is recognised under the RED only if it flows through a DHC network, but not if it occurs at smaller scale, discouraging investment in decentralised solutions that can be highly cost-effective.

#### **Policy asks:**

- Amend Article 2 RED to remove the restriction that waste heat must originate exclusively in 'industrial or power generation installations or the tertiary sector', extending the definition to cover heat and cold generated as a by-product of any process, including residential cooling, where it would otherwise be dissipated unused.
- Expand the condition that waste heat must be 'dissipated unused in air or water without access to a district heating or cooling system' as a qualifying criterion. Heat or cold recovered and used on-site, within a single building, or via mini-low temperature thermal grids should also qualify.
- Ensure that on-site waste heat recovery can be counted towards RED targets.

#### **2. Reporting methodology: updating Commission Decision 2013/114/EU on seasonal performance factors**

Article 7 and Annex VII of the RED establish the rules for calculating the renewable energy contribution of heat pumps towards Member States' national targets. The underlying calculation methodology is set out in Commission Decision 2013/114/EU, which determines a minimum seasonal performance factor (SPF) for counting the ambient and geothermal energy through heat pumps towards the renewable energy share in heating and cooling.

This Decision is now significantly outdated. It was adopted in 2013 based on the power system efficiency from 2010 and the calculation of the minimum SPF has not been updated since then. The same Decision already acknowledged that this value was a conservative estimate, and the efficiency of the power system was expected to increase in the following years.

As a consequence, several Member States are currently underreporting the renewable energy contribution of heat pumps in their national statistics, distorting the picture of progress towards renewable heating and cooling targets and potentially discouraging policy support for heat pump deployment.

#### **Policy asks:**

- Review the Commission Decision 2013/114/EU updating seasonal performance factor values to reflect the performance of heat pumps currently available on the market, as measured under recognised testing standards.