

A more efficient use of public funds to enable the heating and cooling transition.



The European Union's journey towards climate neutrality is paved with several crucial stepping stones. **Decarbonising the heating sector, responsible for a massive 31% of the EU's energy demand and heavily reliant on fossil fuels, is one such critical step.** This dependence poses a double threat: jeopardising our climate goals and leaving us vulnerable in the face of energy security concerns.

District heating and cooling (DHC) networks offer a promising solution. Currently, they provide warmth to 67 million EU citizens, and harness the power of renewable and climate-neutral energy sources like geothermal, biomass, and waste heat, contributing 41.3% of their energy mix. A recent study estimates that expanding DHC to cover 20% of the EU's heat demand by 2030 could save a significant amount of gas, highlighting its potential to significantly contribute to decarbonisation efforts¹.

The recently revised **Energy Efficiency Directive (EED)** recognises the importance of efficient DHC, setting a clear pathway for these networks to become fully renewable and climate-neutral by 2050. Achieving this ambitious vision requires not only robust policies but also substantial investments, **reaching €144 billion by 2030.**

In this context, EHP welcomes the decision of the European Commission to assess the state of public funding and the capacity of EU countries to increase the uptake of private investment in energy efficiency. Specifically, **the implementation of Art. 30 of EED represents an unmissable opportunity for the EU and Member States to accelerate the decarbonisation of the heating and cooling sector.**

In order to seize this opportunity, we recommend to:

1. Establish dedicated Heat Funds

The current financing landscape for clean heating projects is fragmented across various programs targeting different sectors, making it challenging to secure funding. Due to the high investment costs for heat infrastructures, this can make it difficult to raise funds, despite the low running costs. Moreover, many national and EU support schemes do not take heating infrastructure into account.

- ✓ To tackle this issue **the report should call on the Commission to propose an EU Heat Fund, inspired by the Invest EU Program, to consolidate financing for clean heating projects.** This fund should have transparent eligibility criteria and support tools for investors and project developers, like those in the existing Innovation Fund.
- ✓ Alternatively, **Member States should establish a dedicated National Heat Fund** to support their respective heating and cooling sector. This would not only simplify access to funding but also encourage a coordinated effort across Member States. The successful **"Fond Chaleur"**²

¹ Heat Matters: the missing link in the REPower EU, Aalborg University 2023

²² <https://fondschaleur.ademe.fr/>

in France, the more recent **German “BEW”³** and the **HEAT⁴ programme in Czechia** are some examples of national dedicated heating funds which have already demonstrated a great impact in supporting modernisation and expansion of heat networks.

2. Improve accessibility and transparency of the current European funding landscape.

While public funding exists to support heating decarbonisation efforts, the current landscape faces challenges that hinder its effectiveness. The issue lies not in a lack of resources, but in maximising the utilisation and impact of available EU and national funds. Stakeholders urgently need improvements in several key areas.

- ✓ Firstly, **extending timeframes for project financing would offer greater flexibility** and allow for more comprehensive planning.
- ✓ Secondly, **enhancing transparency and readily available information** is crucial to ensure stakeholders understand funding opportunities and navigate application processes effectively.
- ✓ Finally, **streamlining project submission procedures by reducing bureaucratic hurdles and establishing clear, consistent eligibility criteria** would significantly alleviate administrative burdens and encourage wider participation.

By addressing these challenges, we can unlock the full potential of public funding and accelerate progress towards a cleaner and more sustainable heating sector.

3. Support public authorities and operators in preparatory stages and investments plans.

To facilitate a smooth transition and ensure compliance with the new EED definition for efficient district heating and cooling networks, **financial and technical support are crucial for public authorities and operators**. This support should be delivered through two key channels:

- ✓ **National and local Project Development Assistance (PDAs) initiatives playing a central role in providing technical and expert support for preparatory studies.** These studies are vital for assessing existing networks, identifying required upgrades, and developing detailed plans for modernisation and expansion. By allocating dedicated funding and support through PDAs, modelled on the example of the existing EIB’s ELENA initiative, public authorities can empower network operators to conduct thorough evaluations and create comprehensive roadmaps for achieving the new EED standards.
- ✓ **Technical assistance programs offered by relevant institutions** to equip public authorities and operators with the necessary expertise for developing investment plans. These plans will outline the specific investments required to meet the EED requirements, including

³ <https://www.bundesanzeiger.de/pub/publication/LqynJ78mbcSrTH7IL83?0>

⁴ <https://www.sfzp.cz/en/about-the-modernisation-fund/>

infrastructure upgrades, integration of renewable energy sources, and potential operational changes. By providing access to technical expertise, these assistance programs can significantly enhance the quality and feasibility of investment plans, ultimately ensuring a smoother and more efficient transition towards efficient and sustainable DHC systems.

4. Unlock private investments through de-risking schemes and blended finance.

Public funds are fundamental to attract and leverage more private capitals in the district heating and cooling sector. EU and National financial resources cannot supply just by their own to the funding needs to decarbonise the sector. Nevertheless, the inherent economics of DHC make heat networks infrastructure be perceived as riskier compared to other clean techs.

De-risking is a crucial process in the development and operation of geothermal and waste heat district heating and cooling networks for several reasons. To attract financial investors, de-risking is fundamental to ensure projects' economic viability and stability by assessing and managing financial risks for investors and securing funding for all stages of the project.

DHC projects typically demand significant upfront capital, requiring advanced engineering and technical solutions. Moreover, in the case of geothermal and waste heat, they inherently carry the risk of heat availability respectively underground and on the long-term.

- ✓ To mitigate these challenges, **we suggest proposing the establishment of insurance schemes to attract private investment**. For example, the **French geothermal risk guarantee system or 'SAF⁵**, guarantees short-term risks linked to geothermal first well drilling, as well as the long-term risk of total or partial depletion of the resource during 15 years of operation. These kinds of schemes could also support to decrease the risks in waste heat recovery from industrial and tertiary activities.
- ✓ Additionally, private-public partnerships can play a pivotal role in facilitating these projects, while Energy Service Companies (ESCOs) offer innovative models such as "heat as a service," enhancing their feasibility.
- ✓ When needed, operating subsidies for renewable or clean heat projects should be developed to hedge projects against market price fluctuations and ensure fair cost-compensation in the long-term. The Dutch scheme "SDE++" represent a successful example.
- ✓ Support contractual standardisation at EU level for waste heat recovery agreements between supplier and DHC operators.

Finally, EHP strongly advocates for the **establishment of more blended finance schemes for heating projects at National levels**. These innovative schemes offer a unique opportunity to leverage public resources alongside private capital. For instance, a **public agency could provide loan guarantees** for a geothermal heating project, mitigating the perceived risk for private investors. This, in turn, could **encourage a private bank to offer a lower interest rate loan**, making the project more financially attractive.

EHP believes that such blended finance schemes can be instrumental in driving the clean heating transition. By de-risking projects through **public guarantees, grants, or first-loss positions**, these schemes

⁵ <https://eurogeologists.eu/european-geologist-journal-43-boissavy-the-successful-geothermal-risk-mitigation-system-in-france-from-1980-to-2015/>

can **unlock significant private capital**. This additional financing power can then be directed towards **investments in renewable energy sources** for district heating and cooling networks.

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