coolproducts
for a cool planet

Mission Possible

Funding the Renewable Heat Transition

Briefing and policy suggestions

See the full study

Coolproducts is a coalition of European NGOs working to ensure that ecodesign and energy labelling truly work for Europeans and theenvironment. The campaign is led by the European Environmental Bureau and ECOS.

The EEB is Europe's largest network of environmental citizens' organisations. We bring together over 180 member organisations from 40 countries. We stand for sustainable development, environmental justice & participatory democracy.

The EEB is an international non-profit association - Association internationale sans but lucratif (AISBL)

EC register for interest representatives: Identification number 06798511314-27
BCE identification number: 0415.814.848
RPM Tribunal de l'entreprise francophone de Bruxelles
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EEB European Environmental Bureau

European Environmental Bureau
Rue des Deux Eglises 14-16, B-1000 Brussels
Tel: +32 2 289 10 90
eeb@eeb.org
eeb.org

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Life

European Climate Foundation

A new analysis commissioned by the European Environmental Bureau's (EEB) Coolproducts campaign shows that up to **a million more households could have been fitted with heat pumps had the EU and Member States spent on renewables the equivalent of the amount paid to fossil heating subsidies in recent years.** The study, conducted by Trinomics, underlines the gap in political will between Europe's renewable vision and the current reality by focusing on data[1] in the 15 European countries that still provide some subsidies to fossil-fueled domestic heating systems.

With 75% of European homes still relying on outdated fossil heating technologies, policymakers now have the chance to invest in the future instead of bailing out expensive systems, and achieve the REPowerEU heat pump target. All citizens deserve cleaner, greener, and cheaper heating, and the good news is: we can afford it.

> *"... a million more households could have been fitted with heat pumps had the EU and Member States spent on renewables the equivalent of the amount paid to fossil heating subsidies in recent years."*

1 Data from 2020 to 2022 was used, depending on the most recent year for which data was available. When subsidies data could not be found, assumptions were made on the budget.

The good, the bad and the ugly

Germany, Italy and France are the largest providers of subsidies for heating technology in Europe, followed by Poland, Spain and several other countries. While most of these investments are made in future-proof technologies like heat pumps, a large proportion has continued to be spent on installing new fossil heating appliances over the last three years, according to the analysis carried out for the EEB's Coolproducts campaign[2].

France and Germany dropped support for fossil heating from 2023 and are considering a ban on new installations, however Italy still has not planned to put a stop to installing hundreds of thousands of gas boilers every year. Italy is also the country with the highest fossil heating investments per capita (€22) and the one with the highest overall sum funneled into fossil fuel boilers (€1.32 billion).

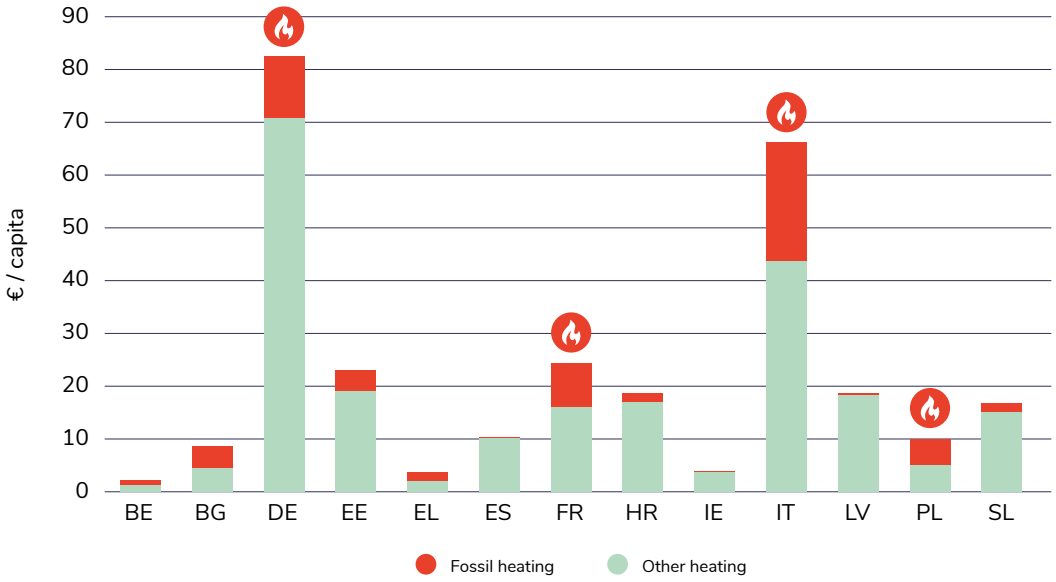

Figure 1: Total amount of subsidies per capita for heating installations per country and per heating type

Looking at the subsidies per country and per heating type, it's worth stressing that, Belgium, Bulgaria, Greece and Poland spend the highest shares of their support on fossil fuel heating systems. Though their subsidies to heating technologies are limited, all of them direct over 45% of their subsidies towards fossil fuel systems.

On a brighter note, Spain and Ireland have the highest shares of support for renewable energy heating systems, with more than 90% of their subsidies assigned to renewable systems.

2 The Coolproducts campaign is a coalition of NGOs working to ensure better energy-using products for consumers and the planet including heating appliances, jointly led by the EEB and ECOS.

On the right path, but too slow

Luckily, the overall share of fossil fuel heating subsidies is significantly lower than low carbon heating subsidies, though this varies from country to country. Subsidies for low carbon systems (€9 billion) account for over 67% of the total budget of €13.6 billion, while fossil fuel system subsidies account for 23% in the countries covered by this study. Support for biomass covers only 6.5% of the total budget while support for district heating was €6 million (0.01%) and other/hybrid systems €460 million (3.4%).

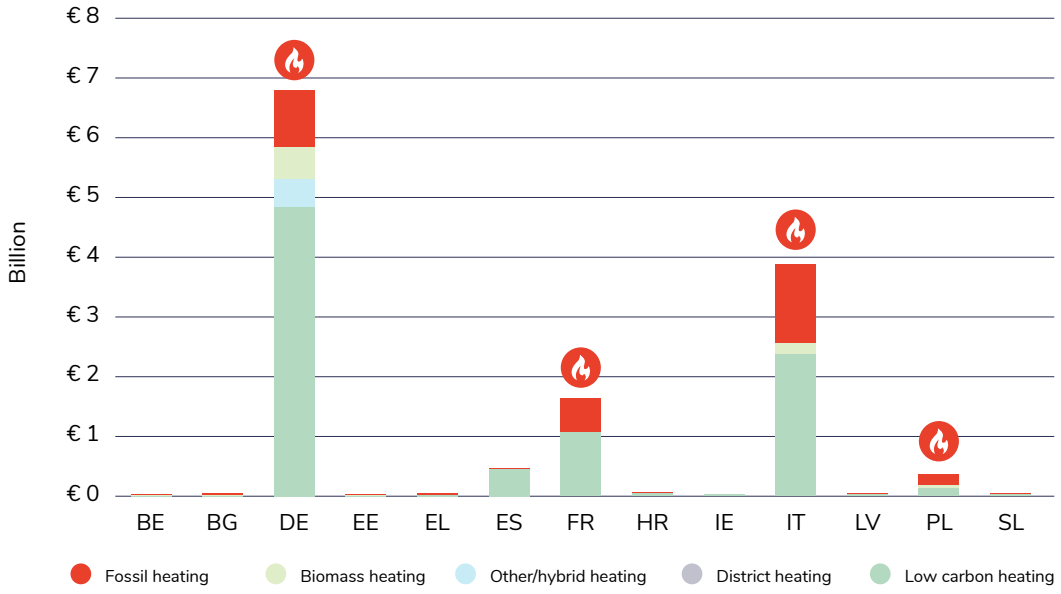

Figure 2: Total amount of subsidies for heating installations per country and per fuel (billion €)

France has taken the boldest step by placing a ban on fossil heating in new buildings, with a possible extension to existing buildings. Furthermore, as of 2023, the country will no longer subsidise fossil heating technologies. Germany has also discontinued its support for fossil heating and is discussing a possible phase-out of fossil-only heating technologies.

On the other hand, counteracting their own subsidies for renewable heating, Italy and Poland are two other major markets who have yet to show signs of putting the brakes on the financial and political support for fossil heating.

We are not doing it right

With 108 different schemes supporting fossil heating between 2020 and 2023 only among the countries analysed[3], fossil heating still clearly enjoys too much funding. These schemes amounted to €3.2 billion in the most recent year for which data was available — in most countries 2022. If this pot of money had been invested in renewable heating, up to a million additional households could have installed a heat pump with attractive pricing.

In other words, if we had invested the total amount that was invested in fossil heating in recent years in heat pumps instead, we would have had a very strong start towards achieving the EU's REPowerEU heat pumps target of installing 10 million units in the next five years. Instead, fossil subsidies continue to exist, counteracting and undermining existing renewable heating subsidies.

In doing so, many additional households could have escaped yet another serious fossil-fueled energy crisis, instead of relying on more government subsidies to keep expensive and obsolete heating systems in place. Investing in future-proofing European heating would also have had significant additional positive social impacts, if the funds had been directed to low-income households.

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3 Belgium, Bulgaria, Croatia, Estonia, France, Germany, Greece, Ireland, Italy, Latvia, Poland, Romania, Slovenia, Spain and the UK

The money is available

In fact, the study finds that the average subsidy needed to allow for an affordable purchase of a heat pump is around €4,700 per household. This means that, in the countries analysed, this is the average sum needed for households to pay back the heat pump investment within 7 years, which was assumed to be a reasonable time in view of the lifespan of a heat pump (18 years on average). Luckily, a good start has been made by many countries with subsidies for heat pump purchases leading to a small, or no, remaining subsidy gap in these cases.

If the focus broadens from solely upfront purchase subsidies to a smart combination of measures that reduce the total lifetime heating cost of a heat pump, the overall investment from the public purse could be largely reduced, becoming less than €2,500 per household in the analyzed countries. In this case, purchase subsidies would be combined with shifting taxation from electricity to fossil fuels, supporting improved insulation and providing attractive loans to households. This would enable many more households to embrace renewable and efficient technologies. While this largely possible in many countries with the existing taxation, we believe this finding can be of inspiration for the revision of the Energy Taxation Directive.

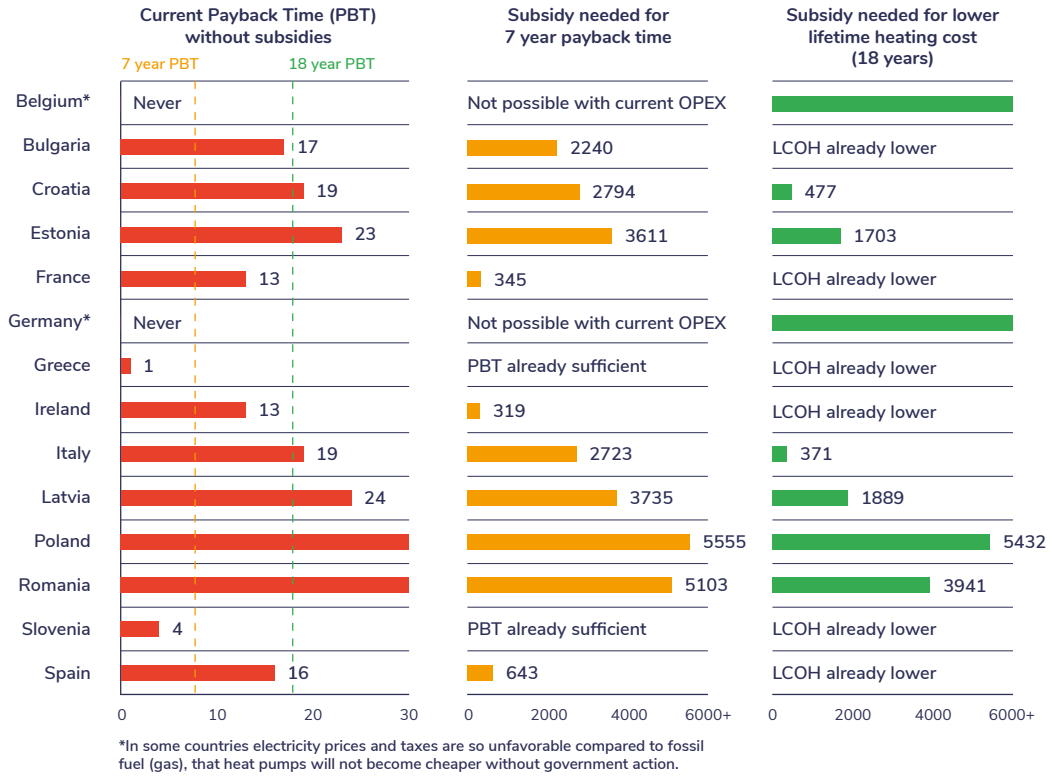

Figure 3: Necessary purchase subsidy needed to make heat pump heating more financially attractive than the current reference heating technology.[4]

4 Abbreviations in the figure: HE Gas = High efficiency gas boiler, ASHP = Air-source heat pump, air-air = air to air heat pump.

While the average gap varies from country to country[5], it's worth stressing that the gap without subsidies is staggeringly similar to recent public spending on energy.

The think-tank Brueghel has calculated that the total amount of money spent on the energy crisis in 2022/23 is roughly €646 billion in Europe, or roughly €4,000 per household. This shows that **if we were to treat the environmental and energy poverty crises the same way we treated the energy supply crisis, the money would be available**.

Investing this amount in renewables and insulation would — in addition to its significant climate benefits — create two other aspects of added value:

- The first, unlike most of the actions taken during the energy-supply crisis, this spending would be an investment and not a cost. Improving the heating and cooling system of Europe's dwellings increases their market value, generates jobs, improves living comfort, reduces day-to-day bills with higher energy efficiency and reduces dependency on imported fossil fuels.

- The second, unlike gas investments, this spending would ensure that Europe produces its own energy within Europe, significantly contributing towards REPowerEU's objectives of reducing imported energy.

5 In some countries no subsidies are needed as the technology already pays back by itself, in others solid subsidies are already in place, while the rest the subsidy and efforts would be bigger.

What needs to be done

Ban fossil heating subsidies as soon as possible via the Energy Performance of Buildings Directive

The swift approval of the Energy Performance of Buildings Directive must include a ban on fossil heating subsidies as soon as it enters into force. While this would not include hybrid units, loopholes for renewable gas-ready boilers should be avoided, given the high number of studies that show the poor performance of such systems compared to heat pumps.

Make sure in all countries, citizen can access to favourable, heat pump-dedicated subsidies

In some countries (e.g., Belgium) electricity prices and taxes are so unfavorable compared to fossil fuel (gas), that heat pumps will not become cheaper without government action. Shifting taxes from electricity to gas is at the core of creating a level playing field. It's therefore imperative that consumers in every Member State have access to at least one dedicated tariff for heat pumps that enjoys the lowest possible taxation.

Create a "EU renewable heating fund" to complement national subsidies

Existing European and national funds are unfortunately scattered around several funding streams. Newly available budget from cutting fossil subsidies should be complemented by a single "European heating fund" that matches national funds in whatever form they are provided, to bridge the remaining gap between current subsidies and what is needed to make renewable heating affordable for all. This could for instance take the form of grants and zero-interest loans to cover the high upfront costs of heat pumps, administered by the financial system (banks, credit companies) in partnership with the European Investment Bank.

Focus on the upfront cost, particularly for low-income households

Some households are not in a position to bank on future savings: with no savings and/or no access to traditional loans, they would simply not be motivated to purchase renewable technology. For these households, and possibly more broadly, policies must focus on cutting the entire upfront cost, either via grants, zero-interest loans or leasing.

Harmonise national schemes as much as possible to allow all EU citizens access to renewable heating and cooling

A harmonisation of the existing subsidy schemes should be promoted by the European Commission, in order to give all EU citizens an equal opportunity to take advantage of renewable heating technologies to cut their energy bills and, keep their homes warm without warming the planet.


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