POSITION PAPER

Brussels, October 2025

EHPA position on the EU energy security framework

The European Commission is revising the EU energy security framework to address sectoral fragmentation and the gaps revealed during the energy crisis caused by Russia's invasion of Ukraine, and to prepare for a more decarbonised, electrified, and integrated energy system. This position paper presents the European Heat Pump Association (EHPA) recommendations for the revision of the EU energy security framework, emphasising the role of heat pumps in achieving these goals by reducing dependence on imported fossil gas and driving decarbonisation of heating and cooling.

Heat pumps play a pivotal role in enhancing Europe's energy security by harnessing natural energy from the air, ground, or water, requiring only a small amount of driving electricity. Their deployment reduces Europe's reliance on fossil gas imports for heating and cooling across residential, commercial, and industrial settings.

The current energy security framework regulations surround short term or at best medium term actions on the fossil fuel supply side that happen within a crisis. This narrow framework undermines the actions that are required to develop a secure energy system in Europe long term. The **clear transition of Scandinavian countries from oil** to heat pumps and waste heat recovery powered by indigenous and increasingly clean electricity has **demonstrated the exact actions** that need to be deployed to create **long lasting secure energy systems**. Swapping gas supply from one unreliable partner to another unreliable partner is the exact actions that caused the crisis in 2022/3. Any European energy security framework must ensure long term actions are central to the strategy.

With energy efficiency up to five times greater than that of a conventional fossil fuel boiler, heat pumps' indirect gas use is limited to the small proportion present in a country's electricity mix, which remains significantly lower than the gas consumed by even the most efficient fossil-fuel boiler. According to calculations by the European Commission, **expanded adoption of heat pumps combined with improved home energy efficiency could save €60 billion through avoided fossil fuel imports**[1].

As of the end of 2024, approximately **26 million domestic heat pumps** were in installed across Europe, already **displacing an estimated 24 billion cubic metres (bcm) of natural gas** that year[2].

[1] European Commission (2025), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Action Plan for Affordable Energy. Available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52025DC0079

[2] This is based on the assumption that a heat pump would replace a gas boiler – for space heating, water heating, or both. The final energy consumption for these needs averages around 11,000 kWh per household across the EU. On average, a heat pump would cover the entire final energy demand of one household, effectively replacing the total consumption previously met by a gas boiler.

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Replacing fossil fuel boilers in just 7% of European homes (around 14 million dwellings) with heat pumps would **reduce gas consumption by an additional 13 bcm**, an amount **equivalent to the EU's imports from Russia** for household space and water heating[3].

In total, the EU imported 51.7 bcm of natural gas from Russia in 2024, representing approximately 19 percent of its total gas imports. To eliminate all imported gas currently used for residential space and water heating**, Europe would need to install nearly 72 million additional heat pumps**, an increase of close to 180 percent. In Germany alone, an estimated 25.8 million heat pumps would be required to fully replace gas for household heating and hot water (see figure 1).

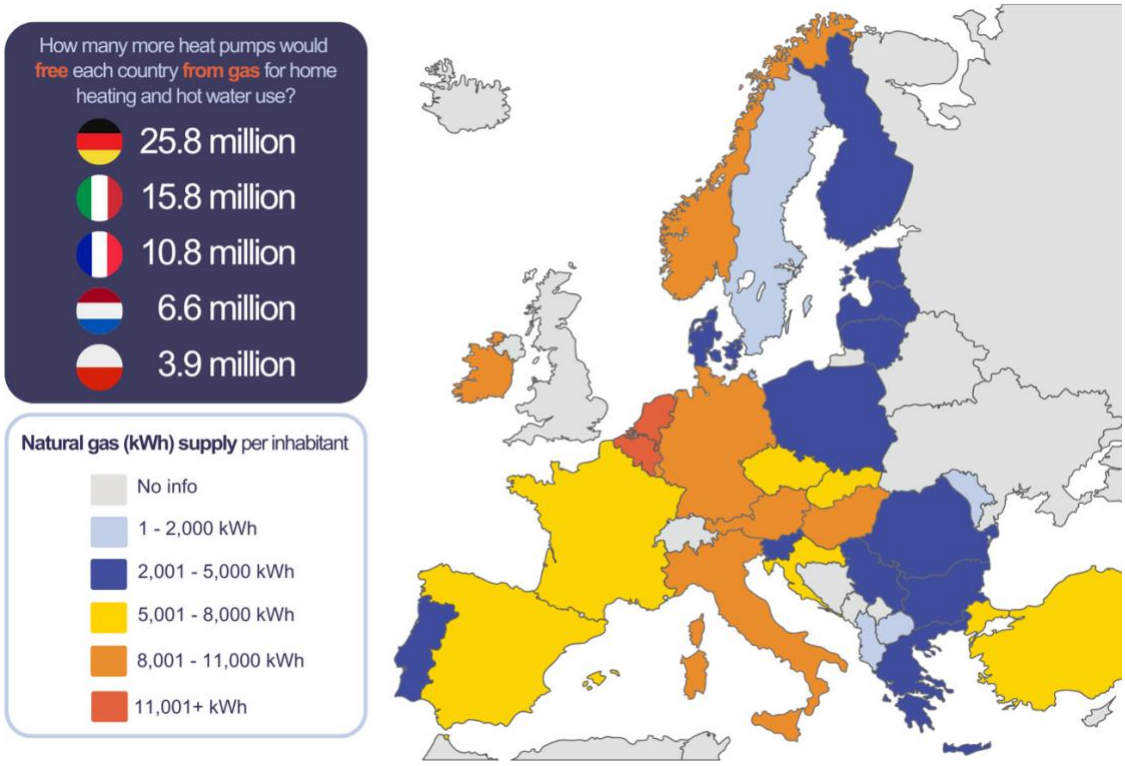

Figure 1: Additional heat pumps required to eliminate natural gas use for household heating and hot water in Europe.

In order to strengthen the heat pump market and realise all these benefits, it is essential to maintain a stable policy environment and establish market conditions that render clean technologies the most economically viable option.

The regulatory framework under the EU Green Deal and the Fit-for-55 provided a supportive environment for the heat pump sector, establishing ambitious targets for Member States to increase the share of renewable energy in their national mix, improve energy efficiency, and to decarbonise the EU building stock. Now, **full and timely implementation of these policies, including the Energy Performance of Buildings Directive, the Energy Efficiency Directive, the Renewable Energy Directive, and the EU Emissions Trading System 2 (ETS2), should be prioritised**. The latter will put a price on carbon emissions from

[3] Deploying fourteen million heat pumps could eliminate the equivalent of the Russian gas used for space and water heating in the EU. In 2024, Russian gas imports accounted for 19% of total EU gas imports, 51.7 bcm of gas through pipelines and LNG. It is considered here that 24.8% of those imports, as for any other import of gas or EU domestic production, will be used by households for space and water heating, that is 12.8 bcm to be replaced, see note below for how.

heating and transport, while the Social Climate Fund will alleviate the social and economic impacts arising from its implementation, helping to accelerate the deployment of heat pumps and other clean technologies.

Alongside the swift implementation of the ETS2, other measures are needed to **make electric technologies more competitive than fossil fuel alternatives**. For this to happen, Member States should review their **energy taxation policy**, ensuring electricity prices are not more than twice the price of gas.

Today, 8 of 17 European countries tax electricity at least three times more than gas, and all of them were among the smallest markets for heat pump sales in 2024 relative to their population (see figure 2).

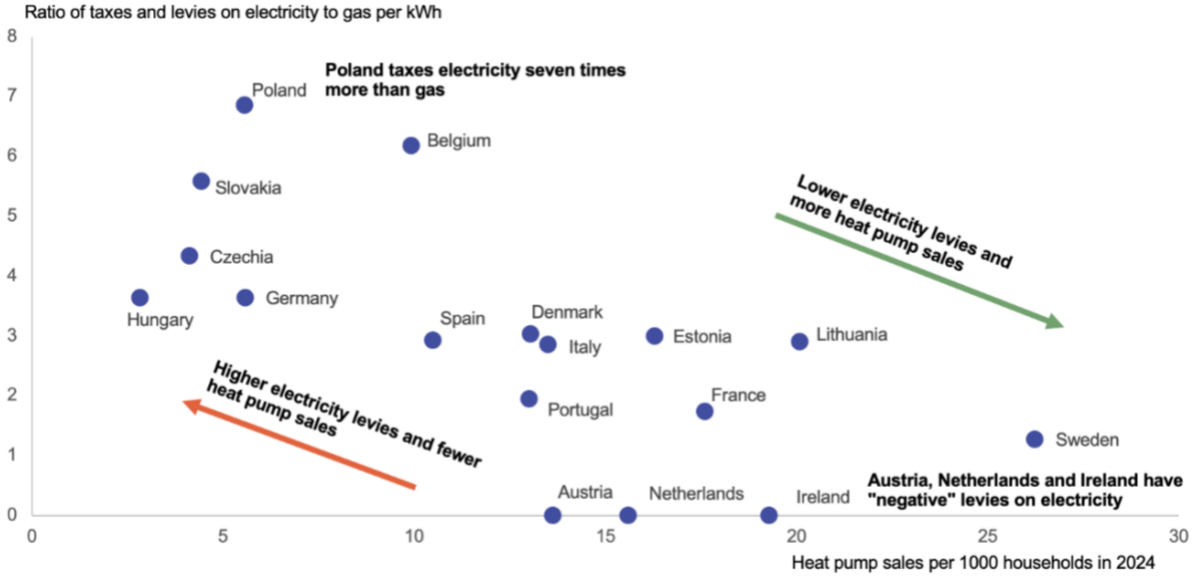

Figure 2: Energy taxation compared to heat pump sales.

In some countries, the tax on electricity compared to gas is extremely high. For example, **Poland imposes an electricity tax that is seven times higher than that on gas, and Belgium's is more than six times higher**. In contrast**, Sweden and Ireland take the opposite approach**. Sweden has long encouraged electricity use while taxing fossil fuels, which has contributed to widespread adoption of heat pumps. Ireland has recently modified its energy tax policy, leading to a growing number of heat pump installations.

While taxation alone cannot decrease Europe's fossil fuel imports, a supportive energy taxation policy and reduction in fossil fuel subsidies will enable citizens and businesses to stop favour fossil fuels over electricity, supporting heat pump deployment and therefore energy security.

The European heat pump industry, composed predominantly of small and medium-sized enterprises, operates more than **300 production sites across the continent**. These facilities, often located in remote areas, provide vital employment and economic opportunities, supporting over **416,000 direct and indirect jobs.**

Expanding heat pump deployment will in turn stimulate investment, as illustrated by the **€7 billion in planned investments** from 2022 to 2025 linked to the manufacturing and installation surge anticipated under REPowerEU. Clear, long-term policy signals will further enhance the competitiveness of a sector that has already demonstrated its global strength,

with an estimated **60% to 73% of heat pumps installed in Europe produced within Europe**[4].

Prioritising heat pump deployment through **stable policies, supportive taxation, and targeted investment** will strengthen EU energy security, accelerate decarbonisation, and drive sustainable economic growth across the continent. In 10 years time, the **EU could have reduced energy imports by 10s of billions per annum**, have a highly diversified and secure residual import supply to an efficient and competitive Europe. There is no time to waste.

[4] European Commission (2023), Commission staff working document: Investment needs assessment and funding availabilities to strengthen EU's Net-Zero technology manufacturing capacity. Available at https://single-market-economy.ec.europa.eu/system/files/202303/SWD_2023_68_F1_STAFF_WORKING_PAPER_EN_V4_P1_2629849.PDF

EHPA key recommendations

to boost Europe's energy security with heat pumps

1. Put clean heat at the centre of the energy security debate

Europe's reliance on imported fossil fuels is unwise. It puts citizens at the mercy of unreliable suppliers and erratic prices. We must shift to strategic energy security via sustainable, secure, efficient, home-grown heating solutions. A clear strategy to accelerate heat pump deployment is needed.

2. Reduce electricity prices to enable electrification

Switching from fossil fuels to electric solutions has to become the most competitive option. Implement the Affordable Energy Action Plan and provide consumers with competitive retail tariffs that incentivise heat pumps.

3. Maintain a stable regulatory framework

The EU can wipe €60 billion off its fossil fuel import bill through greater heat pump adoption and home efficiency. For the heat pump sector to grow, stability and predictability are essential. Swiftly implement the EU Green Deal policies without change. ETS2 revenues and the Social Climate Fund will also provide funding to accelerate heat pump deployment.

4. European demand for heat pumps made in Europe

All the previous measures will drive heat pump roll-out. And this will in turn drive investment in European manufacturing and jobs, boosting competitiveness and growing the 300 current heat pump & component production sites and over 416,000 direct and indirect jobs.

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The European Heat Pump Association (EHPA) represents the European heat pump sector. Our over 170 members include heat pump and component manufacturers, research institutes, universities, testing labs and energy agencies.

EHPA advocates, communicates and provides policy, technical and economic expertise to European, national and local authorities, and to our members.

We organise high level events and manage or partner in multiple projects.

We work to shape EU policy that allows the heat pump sector to flourish, and to become the number one heating and cooling choice by 2030. Heat pumps will be a central part of a renewable, sustainable and smart energy system in a future decarbonised Europe.