

*Taking Back Control*  
**The Household  
Case for  
Electrification**

*Emma Kirstine Parslov & Hannibal von Scholten, May 2026*



# Executive Summary

Energy security and rising cost of living are major challenges for families in Europe today, and the recent fossil energy price spikes born out of the war in Iran once again reveal, where the EU's real vulnerability, competitiveness and affordability issues lie. This analysis shows, that even before the fossil energy crisis, European households could reduce their energy bills significantly by switching to electric heat and transport. The size of the savings vary across Member States based on local energy prices and household energy demand. We estimate that the household's savings are significant across all selected member states. French households could save €3,070 per year, Spanish households around €2,000, German households €1,950, Italian households €1,780 and Polish households around €1,870. An average EU household would save €2,220.

These estimates are based on the latest energy prices available from Eurostat and therefore reflect a pre-crisis scenario. Consequently, the estimates can be considered as relatively conservative. The recent fossil fuel price spikes only strengthen the business case for electrification and the political imperative to protect consumers from price shocks. In our sensitivity scenario that factor in the recent price hikes, the expected energy bill savings by shifting for an average EU household would be 59% higher than in the baseline scenario.

Electrification also provide benefits that go beyond these direct household savings. Replacing 65 million gas boilers would cut the total reliance on EU gas imports by half. Replacing half of the combustion engine cars on European roads reduce oil imports by 20 percent. Lower fossil fuel demand allows the Union to rely on fewer energy suppliers, reduces our vulnerability to the weaponization of European fossil fuel reliance and increases price stability. It also lowers the environmental and health damage caused by burning fossil fuels.

However, energy cost savings cannot drive the transition alone, and current policies often block progress. The main barrier to heat pump adoption is the high up-front costs. While the price of electric vehicles start approaching those of fossil fuel cars, heat pumps remain more expensive to buy than gas boilers. This means that households must recover the higher investment cost through lower running costs. The payback time therefore depends strongly on two conditions: a sufficiently low electricity-to-gas price ratio and sufficiently high heat demand.

This is where current policy often works against the transition. Many EU tax systems still favor natural gas over electricity, weakening the business case for heat pumps despite their much higher efficiency. Rebalancing gas and electricity taxes would improve the electricity-to-gas price ratio and shorten payback times. But for households with limited savings or weak access to credit, better price signals are not enough. Member States should therefore combine tax reform with targeted subsidies, low-interest loans or financing schemes such as social leasing. We estimate that a subsidy of around €4,500 would reduce the average EU heat pump payback time to five years, though higher support will be needed where heat demand is low or electricity remains expensive relative to gas.

# Introduction

The recent increase in fossil fuel prices driven by the war in Iran has exposed a familiar weakness: Europe's continued dependence on imported oil and gas leaves households vulnerable to energy shocks. For millions of European households, that dependence translates directly into higher bills and squeezed budgets.

This crisis once again proves that volatile geopolitics make fossil fuels both expensive and unreliable. European leaders now face a critical decision between continued fossil dependence or the pursuit of structural solutions through a build-out of homegrown green energy and accelerated electrification.

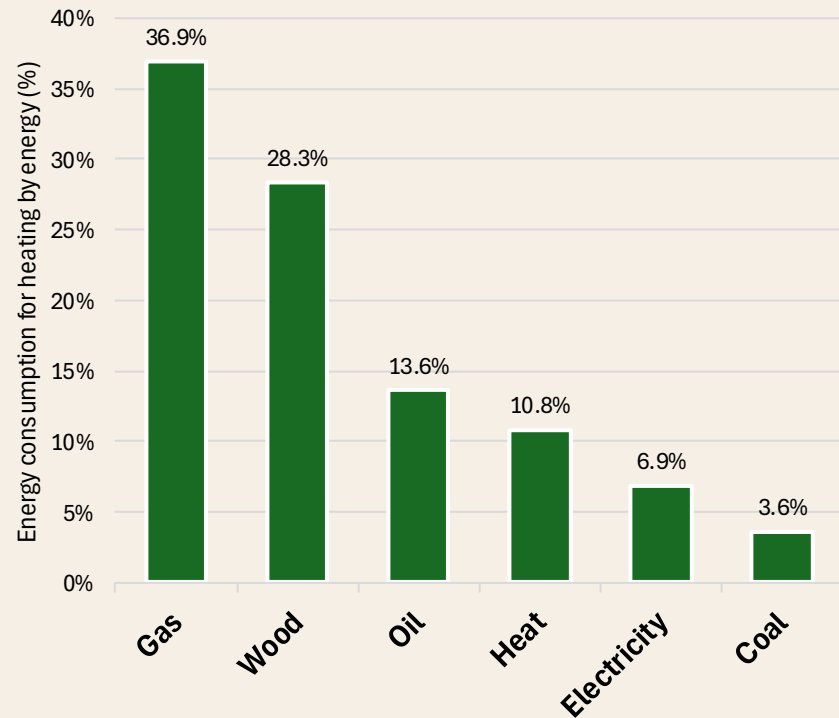
This analysis explores the potential household energy bill savings from switching to electric heat and transport in the EU. The analysis finds that even in a pre-energy-crisis price scenario, households could reduce their energy bills significantly. The potential savings vary across Member States based on local energy costs and heat demand but on average households in the EU can save €2,220 on their energy bill every year by switching to a heat pump and an EV. These savings equal at least one full month of income for the poorest half of European families.

As these estimates are built on pre-crisis data, they should be regarded as relatively conservative. The fossil fuel price spikes we are currently witnessing only strengthen the business case for electrification. This analysis therefore includes a sensitivity scenario based on the price hikes observed in March to fully reflect both the extreme vulnerability of EU households and the gain from addressing that, lowering energy costs and making EU citizens more resilient.

Clean electrification provides a path toward strategic autonomy while improving affordability and competitiveness. In short, it allows European families to take back control.

# EU households are still far from electrified

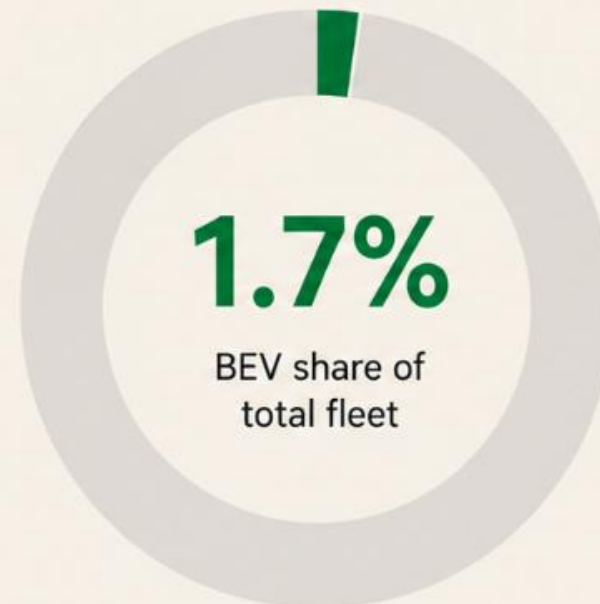
Gas and oil accounted for over half of household heating energy consumption in 2023



Source: [Odyssee-Mure](#)

Battery electric vehicles account for 1.7% of EU's total fleet

BEV: 4,434,976 | Total fleet: 256,129,847



Source: [T&E](#)

EU households are still far from electrified.

In 2023, gas and oil still accounted for more than 50% of household heating energy consumption, while electricity made up only 7%.

The transport picture is similar: battery-electric cars represented just 1.7% of the EU's total car fleet.

# The sustainable choice is also the cost-effective choice

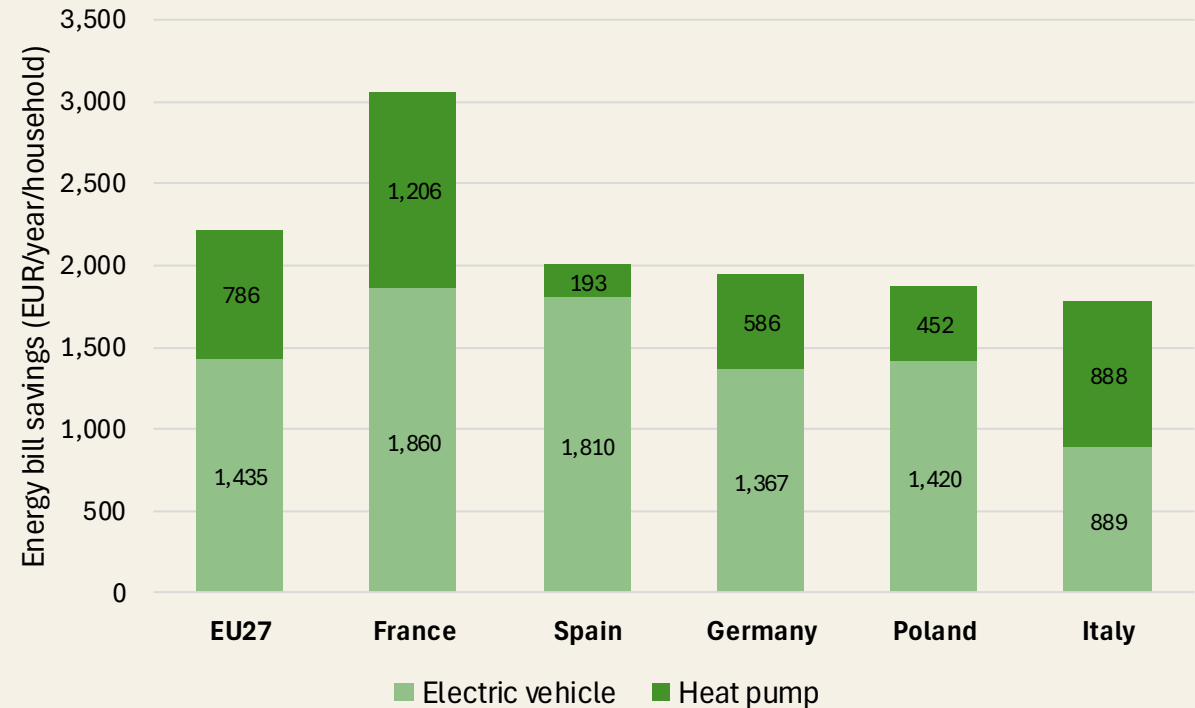
Across the EU, households can cut energy bills significantly by choosing heat pumps over gas boilers, and electric vehicles over internal combustion engine cars.

These choices also contribute to wider societal benefits including lower fossil fuel dependence, greater energy security and price stability, as well as reducing health and environmental damage.

But energy cost savings will not drive the transition alone. High investment costs of heat pumps remain a major barrier, and current tax systems in many Member States continue to favor gas over electricity.

**Member States should therefore implement policies that remove the remaining barriers and encourage the uptake of heat pumps and electric vehicles over their fossil fuel alternatives.**

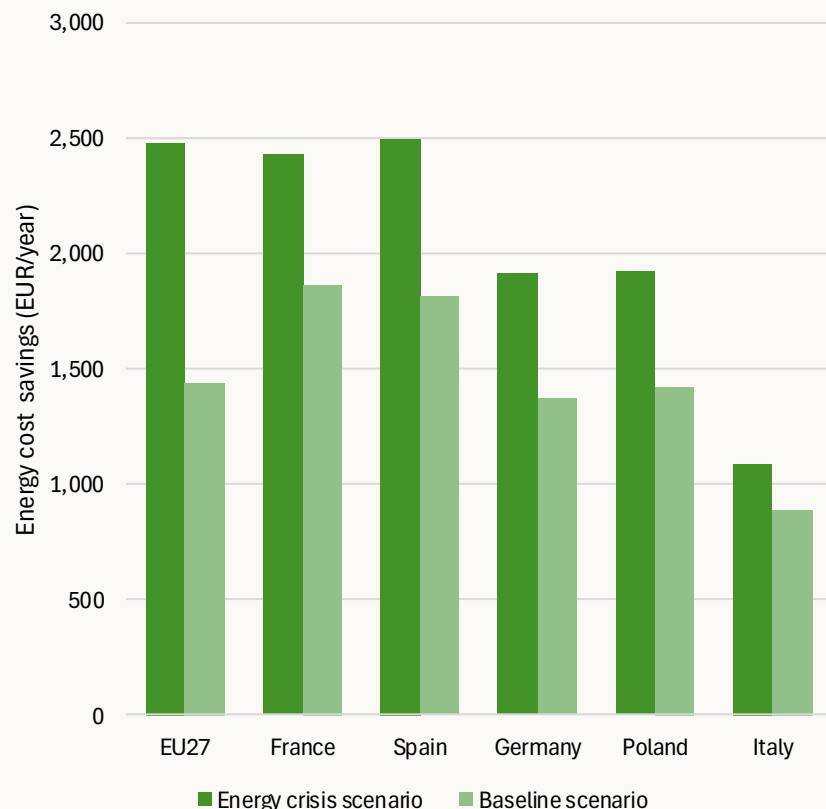
**Yearly energy costs savings from heat pumps and electric vehicles compared to their fossil alternative**



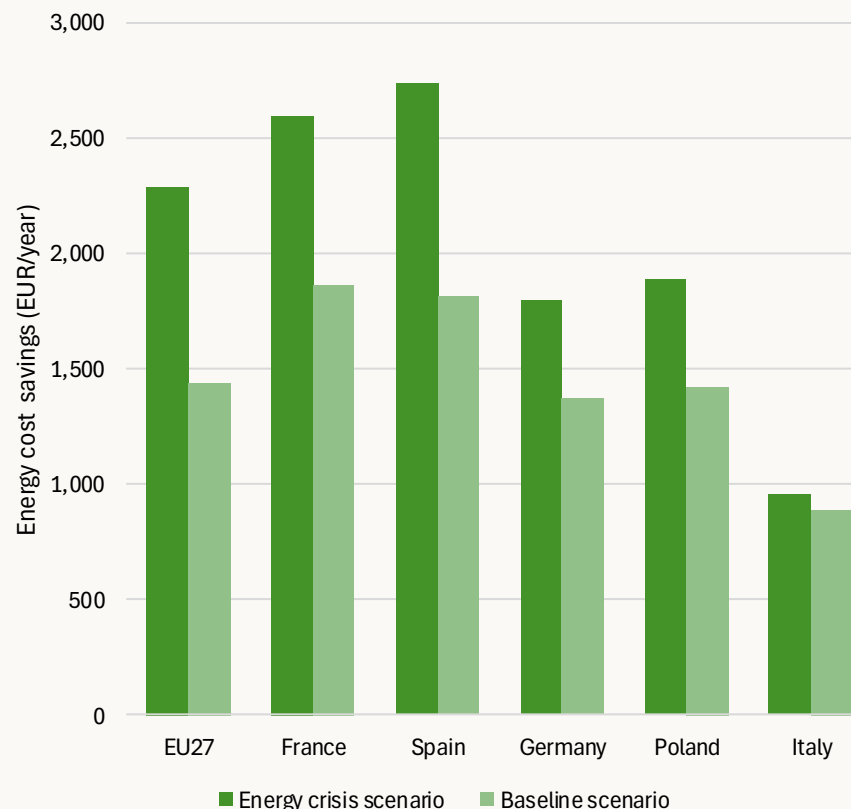
**Sources:** Most recent available energy prices from [Eurostat](#) at time of analysis and efficiencies from the [Danish Energy Agency's Technology Catalogue](#), assuming existing single-family house. Heat demand estimated using [Odyssee-Mure](#) average heat demand pr. m2 and a 150 m2 dwelling assumption. Petrol and diesel prices based on [IEA](#), mileage on [Odyssee-Mure](#) and fuel consumption on [Agora's TCO tool](#). To reflect expected ETS2 effects a markup of 10% is applied for natural gas and 9% for petrol and diesel.

# Sensitivity analysis: Energy crisis 2026

Annual savings energy savings from electric vehicles



Annual savings energy savings from electric vehicles



The return of fossil fuel price spikes following the Iran war only strengthen the business case for electrification.

These figures show how the estimated annual energy cost savings increase under a worst-case energy crisis scenario compared with the more conservative baseline scenario. The logic is simple: when fossil fuel prices rise, households relying on gas boilers and fossil cars become more exposed to volatile energy markets.

The scenario is approximated by assuming that the increase in average wholesale prices for natural gas, Brent crude oil and electricity from March 2025 to March 2026 are passed through to consumer end prices.

**Sources:** The scenario is approximated by assuming a markup on energy prices corresponding to the change in average wholesale prices for natural gas, Brent crude oil and electricity for March 2025 to March 2026. For natural gas and crude oil we use [World Bank Commodity Price Data](#) and markups correspond to 35% and 43% respectively. For electricity we use country specific estimates from [Energy charts](#).

# Wider benefits of electrification



Electrification delivers advantages that extend far beyond individual household budgets. Replacing gas boilers and fossil cars with electric alternatives would reduce the EU's reliance on imported oil and gas, strengthen energy security and make households and businesses less vulnerable to fossil fuel price shocks.

## The major benefits include:

1. Security: Replacing the EU's 65 million gas boilers will **cut gas import dependence in half**. The EU can likewise **reduce oil import by 20 percent by replacing half of all combustion engine cars**. Reducing fossil fuel demand in accordance with the Commission's Impact Assessment for the 2040 climate target means that **the EU can rely on gas import from Norway only**.
2. Cost-of-living: Households can **save more than 2,220 EUR annually** by replacing gas boilers and internal combustion engine cars with heat pumps and electric vehicles. For energy poor households spending more than 10 percent of income on energy (such as 40 percent of the households in Hungary, Latvia and Slovakia) these savings will dramatically improve cost-of-living. For the poorest half of EU households, saving 2,200 EUR equals at least a full month income.
3. Jobs: Installing and servicing **65 million heat pumps**, charging points for about **150 million electric vehicles** and doubling capacity of grids in the EU will generate millions of local, skilled labor jobs across the EU, notably jobs that cannot be outsourced to China or taken over by AI.
4. Competitiveness: For a European SME with two boilers and five cars, the savings in #2 translate into almost 9,000 EUR annually in cost reductions.
5. The Green Dividend: As the EU reduces import costs by 160 bn EUR annually (317 bn. EUR on average from 2008-2024 cut in half by 2040), more funds are freed up to invest in hospitals and schools (even after investments in grids, batteries and EVs) and thus strengthen the social fabric of the European Union, as well as the investments in defence, that keeps the continent safe.
6. Health: Air pollution is among the top threats to the health of Europeans, beating traffic accidents and alcohol on aggregate. Gasoline and diesel cars in road transport and coal and lignite for electricity and heat generation are two of the main drivers of air pollution in the EU. Thus, Electric Vehicles and Heat Pumps can contribute significantly to cleaner air.

# Policy makers must enable the transition

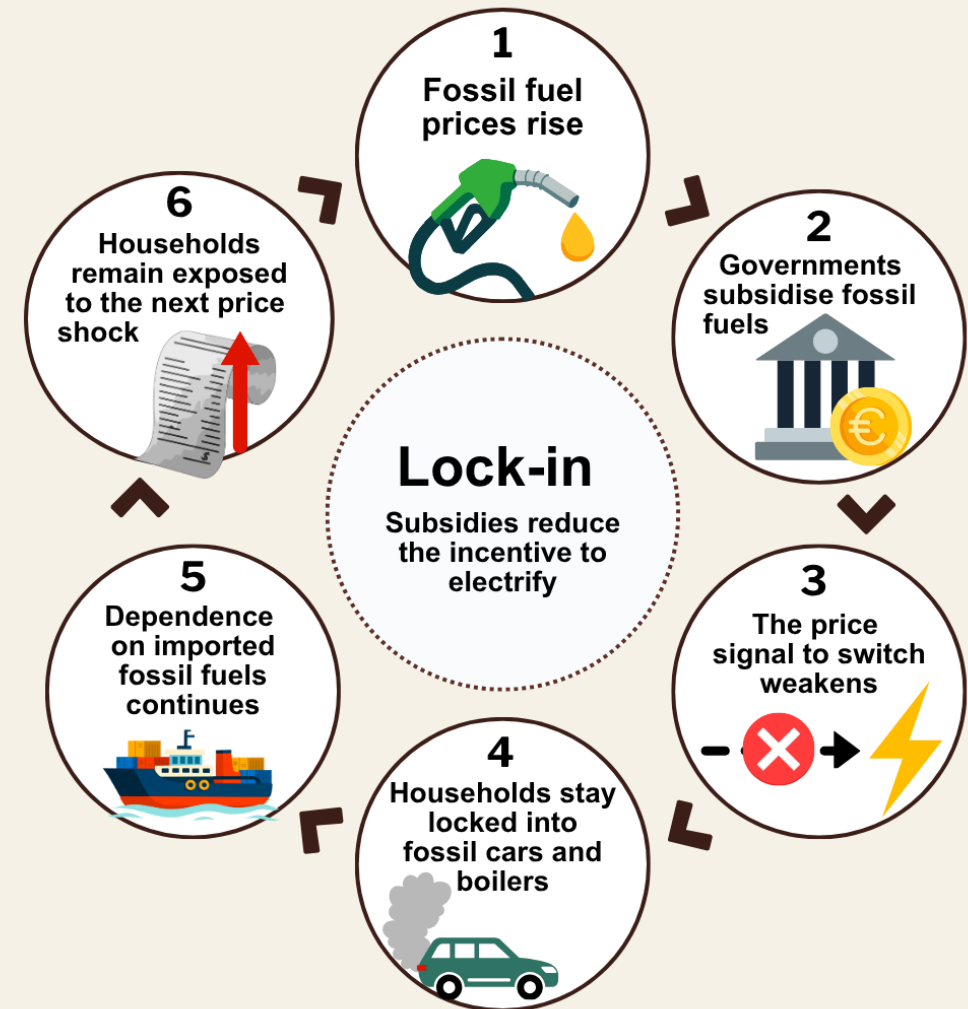
Heat pumps and electric vehicles can reduce households' energy costs, strengthen energy security and reduce households' exposure to volatile fossil fuel markets, benefitting both households and businesses across the EU.

But lower running costs will not drive the transition alone. Many households still face two practical barriers: high upfront investment costs of especially heat pumps and tax systems that continue to favour gas over electricity. The policy task is therefore to make the switch possible: Member States must correct distorted price signals and ensure that investments in heat pumps and EVs are accessible, especially for low-income households.

The current fossil energy crisis is the second in less than five years. The EU should treat the increasing fossil fuel prices as a market signal: dependence on imported fossil fuels leaves households exposed. Policymakers should therefore resist the temptation to respond to rising fossil fuel prices with broad fossil fuel subsidies. That may ease pressure in the short term, but it risks locking households into the same vulnerability that created the cost-of-living challenge in the first place.

## The Vicious Circle of Fossil Fuel Subsidies

Short-term relief can reinforce long-term vulnerability



# Policies addressing barriers

## 1. Tax systems working against electrification

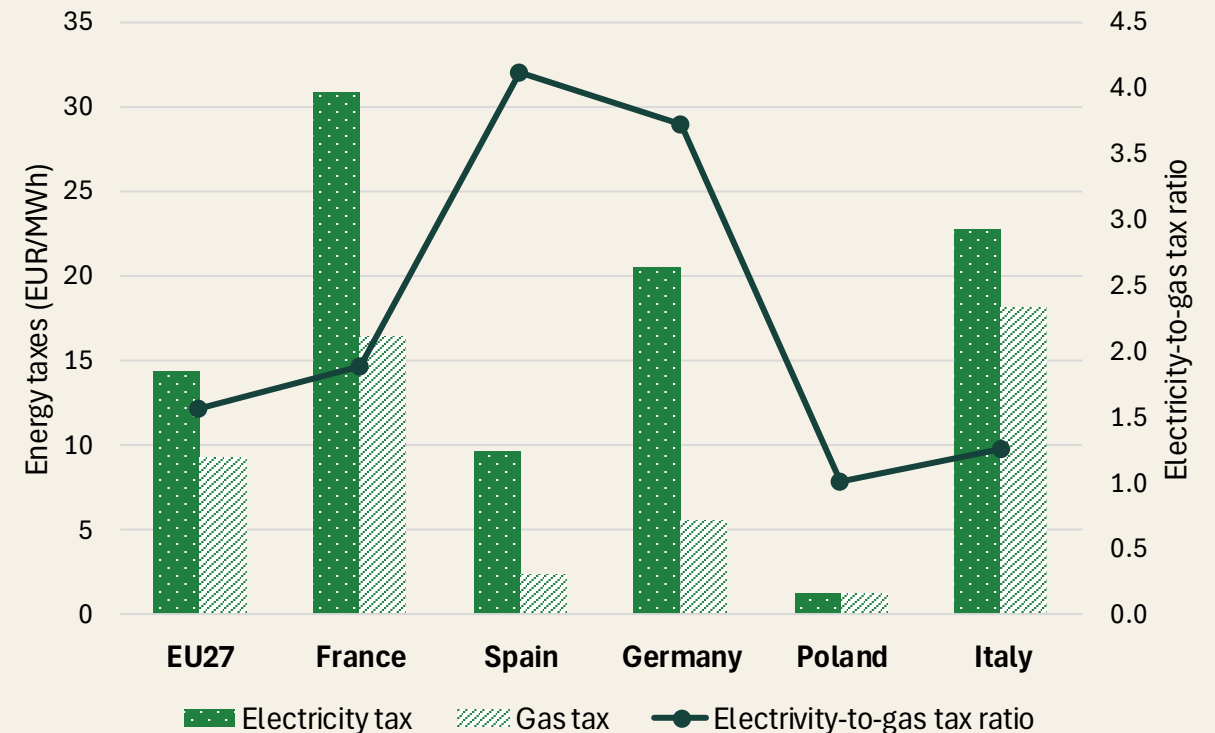
Heat pumps and electric vehicles are far more energy efficient than gas boilers and fossil cars, but this advantage is weakened when electricity is taxed disproportionately compared to gas.

In most EU countries, the tax system unfortunately continues to favor natural gas over electricity. This distorts the market and weakens the business case for electrification. The level of cost savings depends on the electricity-to-gas price ratio.

### Policy recommendation:

Member States can reduce the electricity-to-gas price ratio and make heat pumps and EVs even more economically attractive by reducing the electricity tax rate to the EU minimum requirement or at least balancing the tax rates of gas and electricity.

Tax system favours gas over electricity in selected Member States except Poland



Source: [Taxes in Europe Database v5](#)

# Policies addressing barriers

## 2. Attractive and accessible financing targeting low-income households

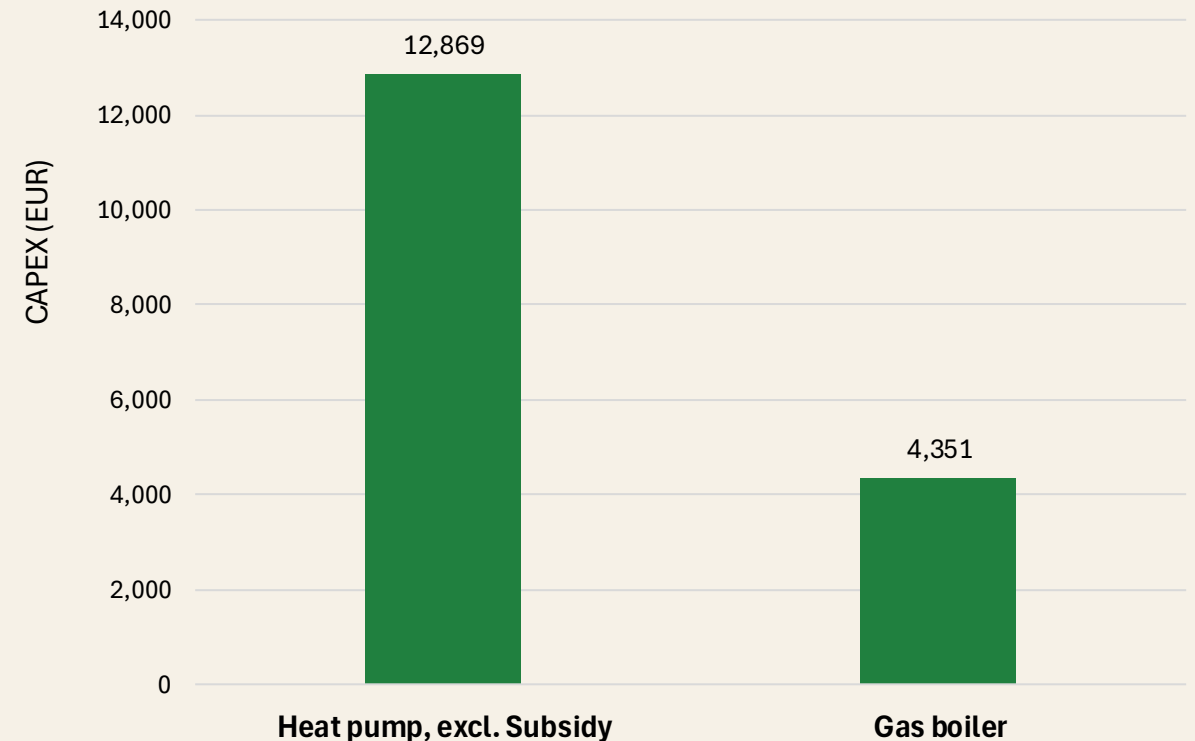
Electric vehicles increasingly have comparable up-front costs to fossil cars, but gas boilers are often cheaper than heat pumps.

Although the lower energy costs make heat pumps cheaper over time, higher up-front costs remain a barrier for households. This is especially true for lower-income households, who may have limited savings, insufficient access to loans and/or less attractive loan terms compared to other income groups.

### Policy recommendation:

Member States should lower this barrier through simple, accessible subsidy schemes or other attractive financing schemes targeting low-income households, such as social leasing schemes. For the average EU household, we estimate that a subsidy of around 4,500 EUR would allow heat pumps to recover its initial cost within five years.

Heat pump vs. gas boiler CAPEX



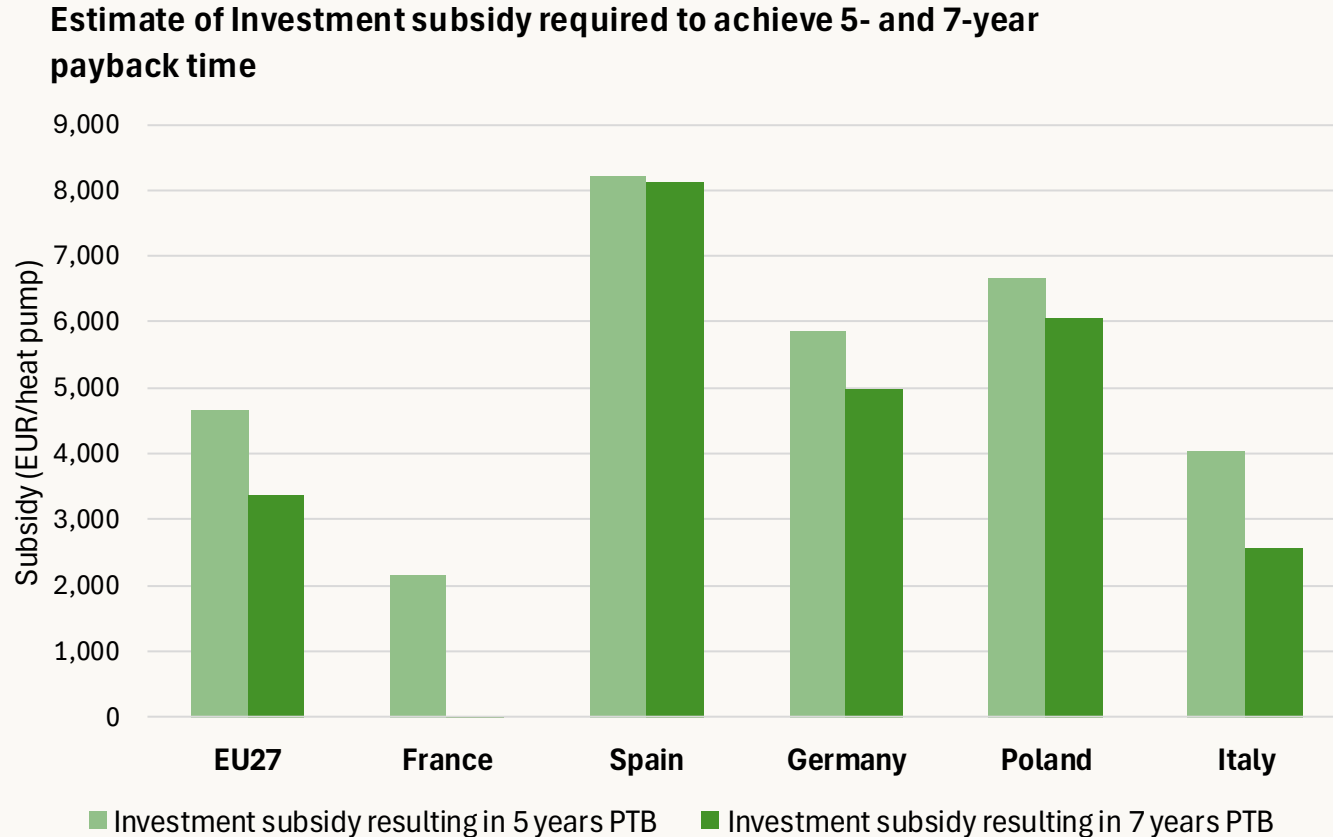
Source The [Danish Energy Agency's Technology Catalogue](#). Includes installment and equipment costs. Excludes VAT.

# Required subsidy level for heat pumps depending on preferred payback time

Heat pumps have lower energy costs than gas boilers but require higher upfront investment and can have higher O&M costs. Households often prioritise short-term costs over long-term savings. Therefore, Member States should provide investment subsidies to ensure the uptake of heat pumps, instead of gas boiler which are both more energy-intensive and dependent on imported fossil fuels.

This figure shows the level of investment subsidy required to achieve payback periods of 5 and 7 years. The required subsidy varies across countries due to differences in the gas-to-electricity price ratio and average household heat demand.

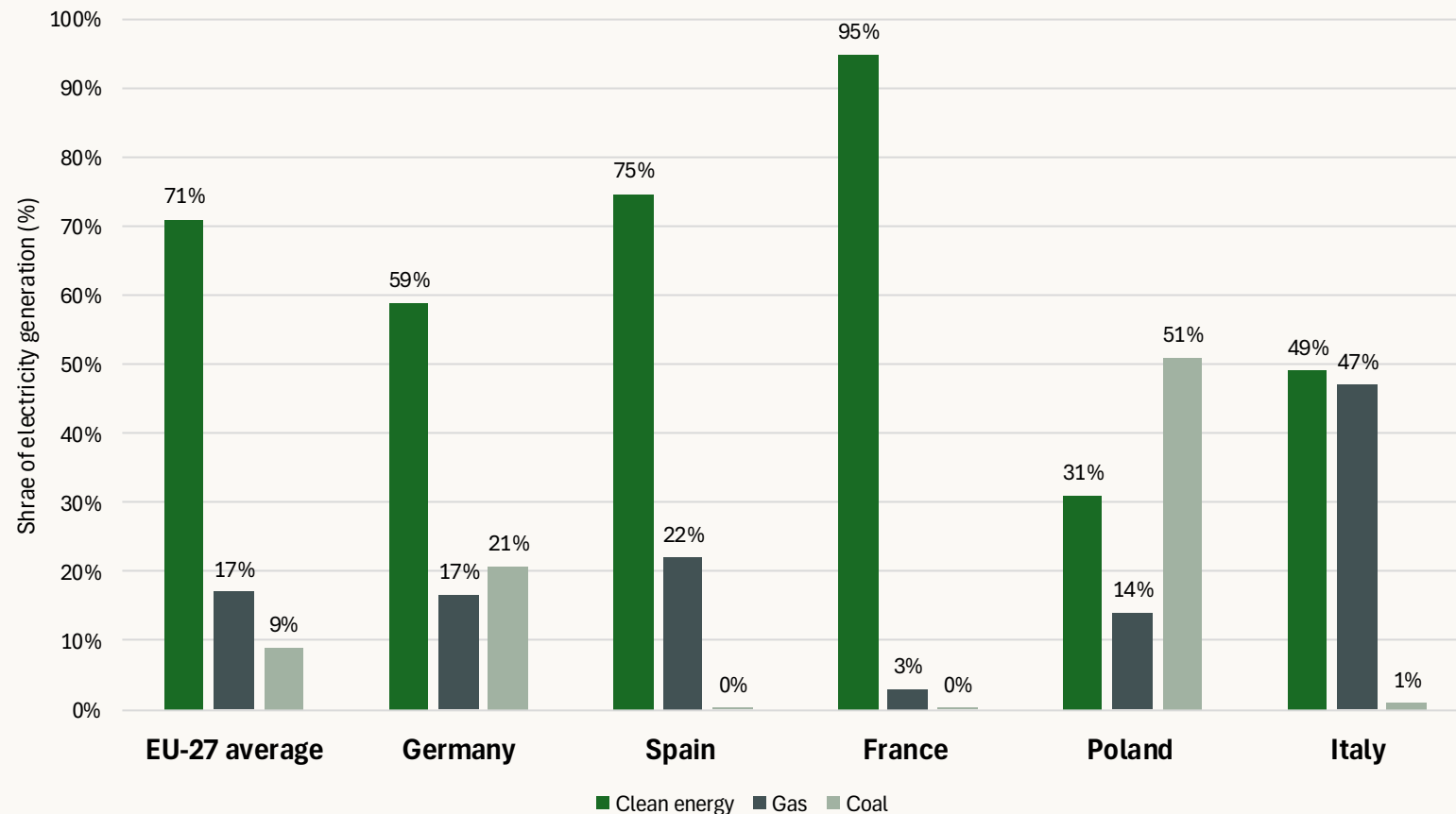
Subsidy needs are especially high in Spain and Poland. In Spain, low heat demand limits annual energy bill savings, while in Poland, a high electricity-to-gas price ratio weakens the running cost advantage of heat pumps. In both cases, lower annual savings mean that households take longer to recover the higher upfront investment.



Note: CAPEX and OPEX are based on the Danish Energy Agency's Technology Catalogue and assumed equal across all countries. Results should be interpreted with caution, as actual CAPEX can vary significantly across countries depending on installation costs, building characteristics, labour costs, local market conditions, quality standards etc.

# Electrification needs cheap, clean electricity to deliver its full benefits

Share of clean energy in electricity mix



Source: [Ember electricity data explorer](#)

The business case for heat pumps and electric vehicles depends on access to affordable electricity .

Electrification lowers household energy bills because heat pumps and EVs use energy much more efficiently than gas boilers and fossil cars. **But these savings are reduced if electricity prices rise with gas prices.**

When fossil fuels constitute a large share of the electricity generation mix, electricity prices remain exposed to volatile fossil fuel markets. A high share of clean electricity decouple electricity prices from fossil fuel prices and strengthen the business case of electrification.

# Annual energy savings potential for average households in select Member States

The following section provides a detailed breakdown of the annual energy savings households could achieve by having electric heating and EVs compared to gas boilers and fossil cars.

It illustrates the savings for an average EU household and follows with country specific averages for France, Spain, Germany, Italy, and Poland. Each section provides concrete examples of those savings in a national context. Each country profile also examines how national tax changes can lower energy bills even further.

These estimates are based on a 2025 price scenario and are therefore relatively conservative. The recent fossil fuel price spikes would only strengthen the business case for electrification and increase household savings further, the extent to which is explored in a sensitivity scenario.

The calculations focus only on annual energy savings and do not include the upfront costs a family would incur to make the switch to a heat pump or an electric vehicle.





# Annual energy cost savings for: The average EU household



The average EU household can save at least **2,220 EUR annually in energy costs** by switching to heat pumps and electric vehicles, and even more if national governments adjust taxes and if consumers heat and charge, when electricity is cheap. This saving translates to **almost two years of heating costs for an average EU household** or a one month interrail ticket with visits to the Louvre, Acropolis and Colosseum, with around 1,300 EUR left for seat reservations, local transport or accommodation.



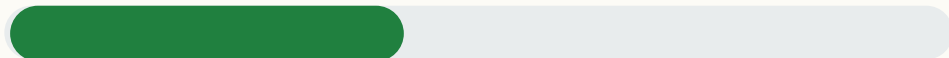
## Heat Pump

Annual average energy savings for household compared to gas boiler.  
Assumes heat demand of 14 MWh/year.  
Tax adjustment: 1:1 electricity to gas tax ratio.  
CAPEX and maintenance not included.

**Annual energy savings:** € 790 / year



**With 1:1 electricity to gas tax ratio** € 835 / year



## Electric Vehicle

Annual average energy savings for household compared to fossil car.  
Average mileage of 19,200 km/year.  
Tax adjustment: electricity tax rate set to EU minimum level.  
Similar CAPEX for EV and ICE assumed.

**Annual energy savings:** € 1,440 / year



**With electricity tax adjustment to EU minimum** € 1,490 / year





# Annual energy cost savings for: **The Müller household**

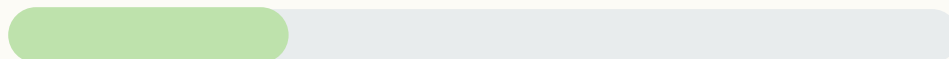
German households can save at least **1,950 EUR annually in energy costs** by switching to heat pumps and electric vehicles. Savings will increase even further if the national government adjusts taxes and if consumers heat and charge, when electricity is cheap. For an average German family, the saving is equivalent to more than **one year of heating costs**, or **season tickets for Bundesliga football** for a family of six, **including new jerseys every season**.



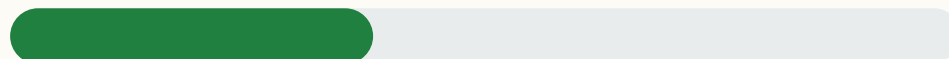
## Heat Pump

Annual average energy savings for household compared to gas boiler.  
Assuming heat demand of 17 MWh/year.  
Tax adjustment: 1:1 electricity to gas tax ratio.  
CAPEX and maintenance not included.

**Annual energy savings:** € 590 / year



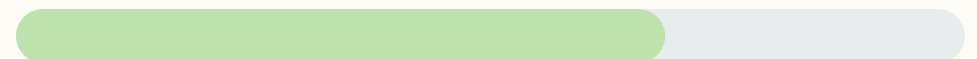
**With 1:1 electricity to gas tax ratio** € 760 / year



## Electric Vehicle

Annual average energy savings for household compared to fossil car.  
Average mileage of 21,200 km/year.  
Tax adjustment: electricity tax set to EU minimum level.  
Similar CAPEX for EV and ICE assumed.

**Annual energy savings:** € 1,370 / year



**With electricity tax adjustment to EU minimum** € 1,450 / year





# Annual energy cost savings for: The Garcia household



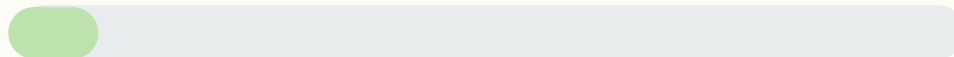
Spanish households can save around **2,000 EUR annually in energy costs** by switching to an electric vehicle and heat pump. Savings will increase even further if the national government adjusts taxes and if consumers heat and charge, when electricity is cheap. For an average Spanish household, the saving is equivalent to **22 months of electricity costs** for their car or **equivalent to almost five months of free groceries** annually.



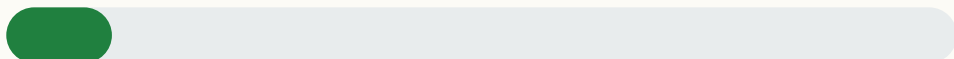
## Heat Pump

Annual average energy savings for household compared to gas boiler.  
Assuming heat demand of 6 MWh/year.  
Tax adjustment: 1:1 electricity to gas tax ratio.  
CAPEX and maintenance not included.

**Annual energy savings:** € 190 / year



**With 1:1 electricity to gas tax ratio** € 225 / year



## Electric Vehicle

Annual average energy savings for household compared to fossil car.  
Average mileage of 24,900 km/year.  
Tax adjustment: electricity tax rate set to EU minimum level.  
Similar CAPEX for EV and ICE assumed.

**Annual energy savings:** € 1,810/ year



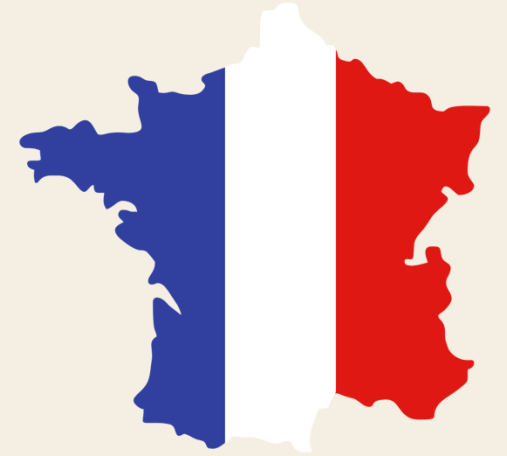
**With electricity tax adjustment to EU minimum** € 1,850 / year





## Annual energy cost savings for: **The Martin household**

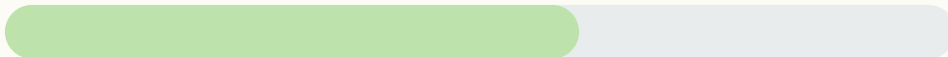
French households can save around **3,070 EUR annually in energy costs** by switching to heat pumps and electric vehicles. Savings can increase even further if the national government adjusts taxes and if consumers heat and charge, when electricity is cheap. For an average French household, the saving is equivalent to almost **3 years of heating costs** or **electricity costs for their car**, or more than **four times the annual spending on wine and alcoholic beverages**.



### Heat Pump

Annual average energy savings for household compared to gas boiler.  
Assumes 14.5 MWh/year.  
Tax adjustment: 1:1 electricity to gas tax ratio.  
CAPEX and maintenance not included.

**Annual energy savings:** € 1,210 / year



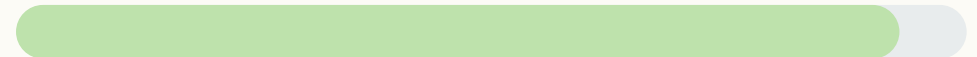
**With 1:1 electricity to gas tax ratio** € 1,350 / year



### Electric Vehicle

Annual average energy savings for household compared to fossil car.  
Average mileage of 21,000 km/year.  
Tax adjustment: electricity tax rate set to EU minimum level.  
Similar CAPEX for EV and ICE assumed.

**Annual energy savings:** € 1,860 / year



**With electricity tax adjustment to EU minimum** € 1,980 / year





## Annual energy cost savings for: **The Nowak household**

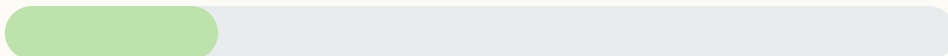
Polish households can save around **1,870 EUR annually in energy costs** by switching to heat pumps and electric vehicles. Savings can increase even further if consumers heat and charge, when electricity is cheap. For an average Polish household, the **saving is equivalent to cost of 17 months of heating or six months of groceries.**



### Heat Pump

Annual average energy savings for household compared to gas boiler.  
Assumes heat demand of 22 MWh/year.  
Tax adjustment: Poland already has 1:1 electricity to gas tax ratio.  
CAPEX and maintenance not included.

**Annual energy savings:** € 450 / year



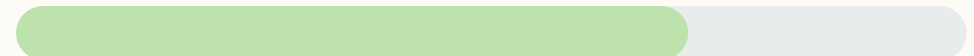
**With 1:1 electricity to gas tax ratio** € 450 / year



### Electric Vehicle

Annual average energy savings for household compared to fossil car.  
Average mileage of 19,200 km/year.  
Tax adjustment: Poland already at EU minimum level.  
Similar CAPEX for EV and ICE assumed.

**Annual energy savings:** € 1,420 / year



**With electricity tax adjustment to EU minimum** € 1,420 / year





# Annual energy cost savings for: The Rossi household

Italian households can save around **EUR 1,780 annually in energy costs** by switching to heat pumps and electric vehicles. Savings can increase even further if consumers heat and charge, when electricity is cheap. For an average Italian household, the **saving is equivalent to almost 18 months of heating expenditure**.



## Heat Pump

Annual average energy savings for household compared to gas boiler.  
Assumes heat demand of 22 MWh/year.  
Tax adjustment: Poland already has 1:1 electricity to gas tax ratio.  
CAPEX and maintenance not included.

**Annual energy savings:** € 890 / year



**With 1:1 electricity to gas tax ratio** € 930 / year



## Electric Vehicle

Annual average energy savings for household compared to fossil car.  
Average mileage of 19,200 km/year.  
Tax adjustment: Poland already at EU minimum level.  
Similar CAPEX for EV and ICE assumed.

**Annual energy savings:** € 890 / year



**With electricity tax adjustment to EU minimum** € 940 / year



# Conclusion

This analysis shows that EU households can reduce their cost of living significantly by switching to electric heat pumps and vehicles. French households stand to save **€3,070 annually**, while families in Spain and Germany save **€2,000 and €1,950** respectively. Polish households can cut bills by **€1,870** and Italian households by **€1,780** every year. These estimates rely on a baseline 2025 energy price scenario and are therefore **relatively conservative**. The current price spikes following the war in Iran only further strengthen the business case for electrification, with savings expected to be **77% higher** than in the baseline scenario.

However, skewed tax systems and high upfront costs slow down the transition. Many tax systems in Member States still favor natural gas over electricity, weakening the business case for heat pumps despite their much higher efficiency. Member States must at least balance these tax rates to allow electric options to compete on a level playing field.

The up-front costs of especially heat pumps remain a key barrier. While electric vehicles increasingly have prices similar to fossil fuel cars, heat pumps continue to be more expensive to buy than gas boilers. This leads to a longer payback time, making the switch difficult for households with limited savings or access to credit. Member States should provide subsidies or other attractive financing schemes to reduce the investment barrier.

European decision-makers must take the necessary steps to pursue structural solutions through build-out of homegrown green energy and accelerated electrification. It is the only way to shield households and businesses from the unpredictable world we now live in.

An electrified system built on cheap and reliable green energy will ensure strategic autonomy and a resilient future. It gives EU households the possibility to take back control over their energy bills. It is also essential to reach the EU's climate targets, helping to avoid runaway climate change.

# Annex Slides

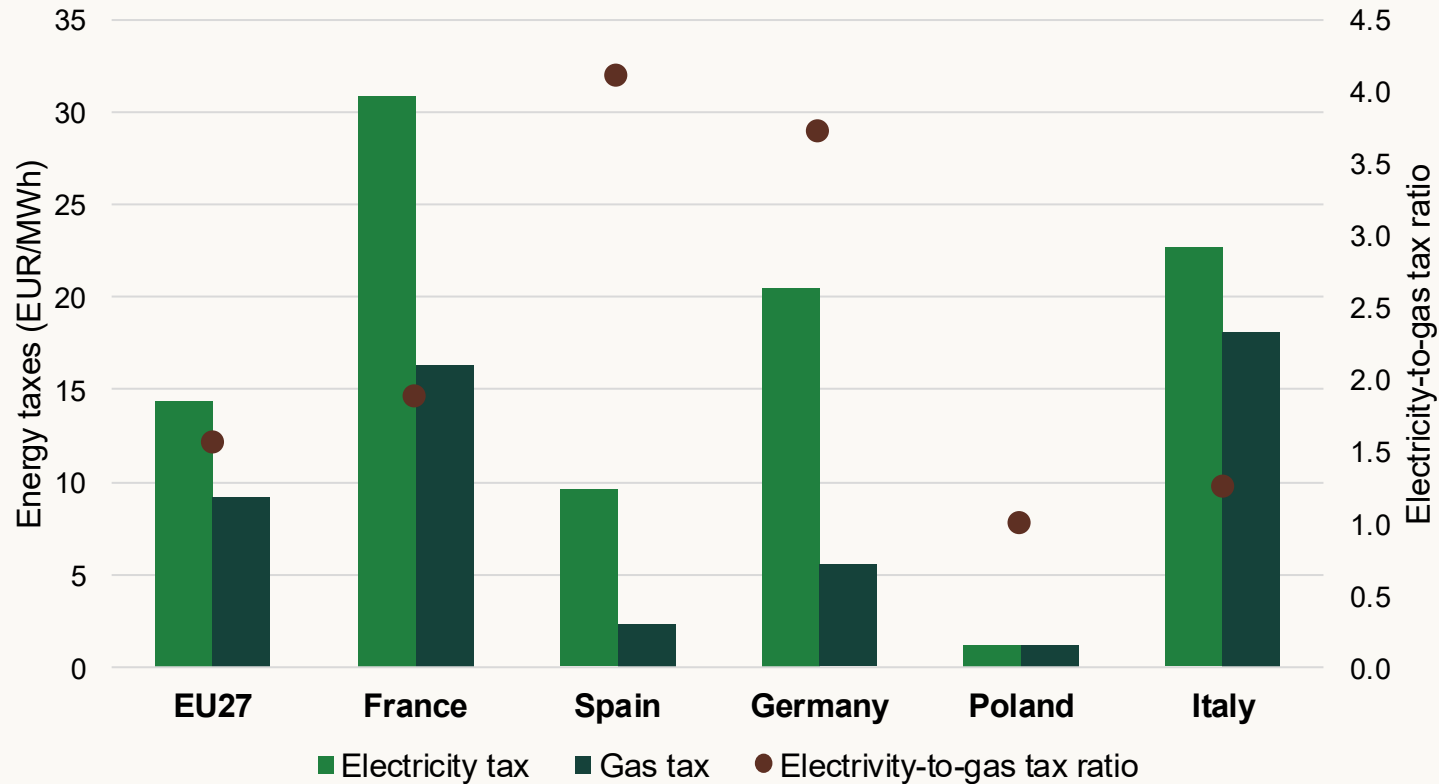
1. Electricity-to-gas tax ratios
2. Electricity-to-gas price ratios
3. Heat demand per household in Member States
4. Heating costs under different energy taxation schemes



# 1. Electricity-to-gas tax ratios



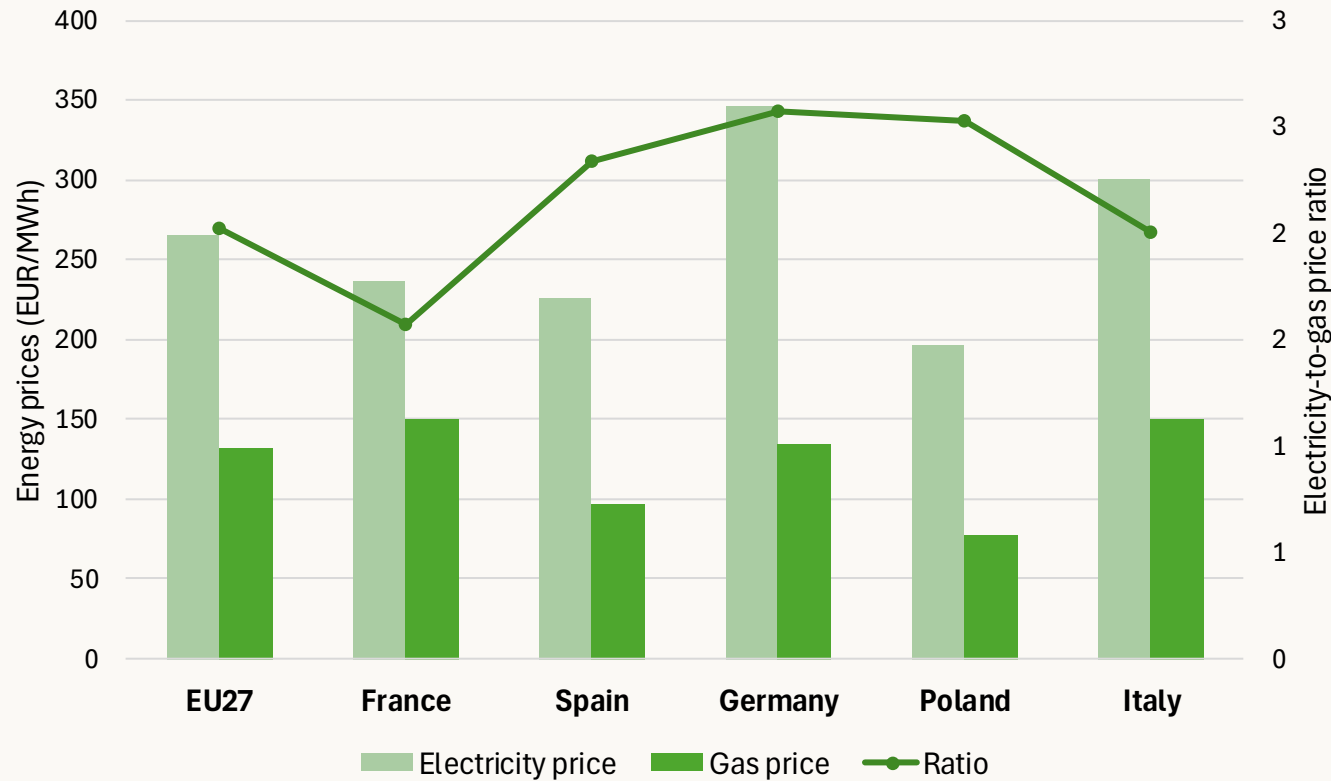
Tax system favours gas over electricity in selected Member States except Poland



# 2. Electricity-to-gas price ratios



Electricity-to-gas price ratio

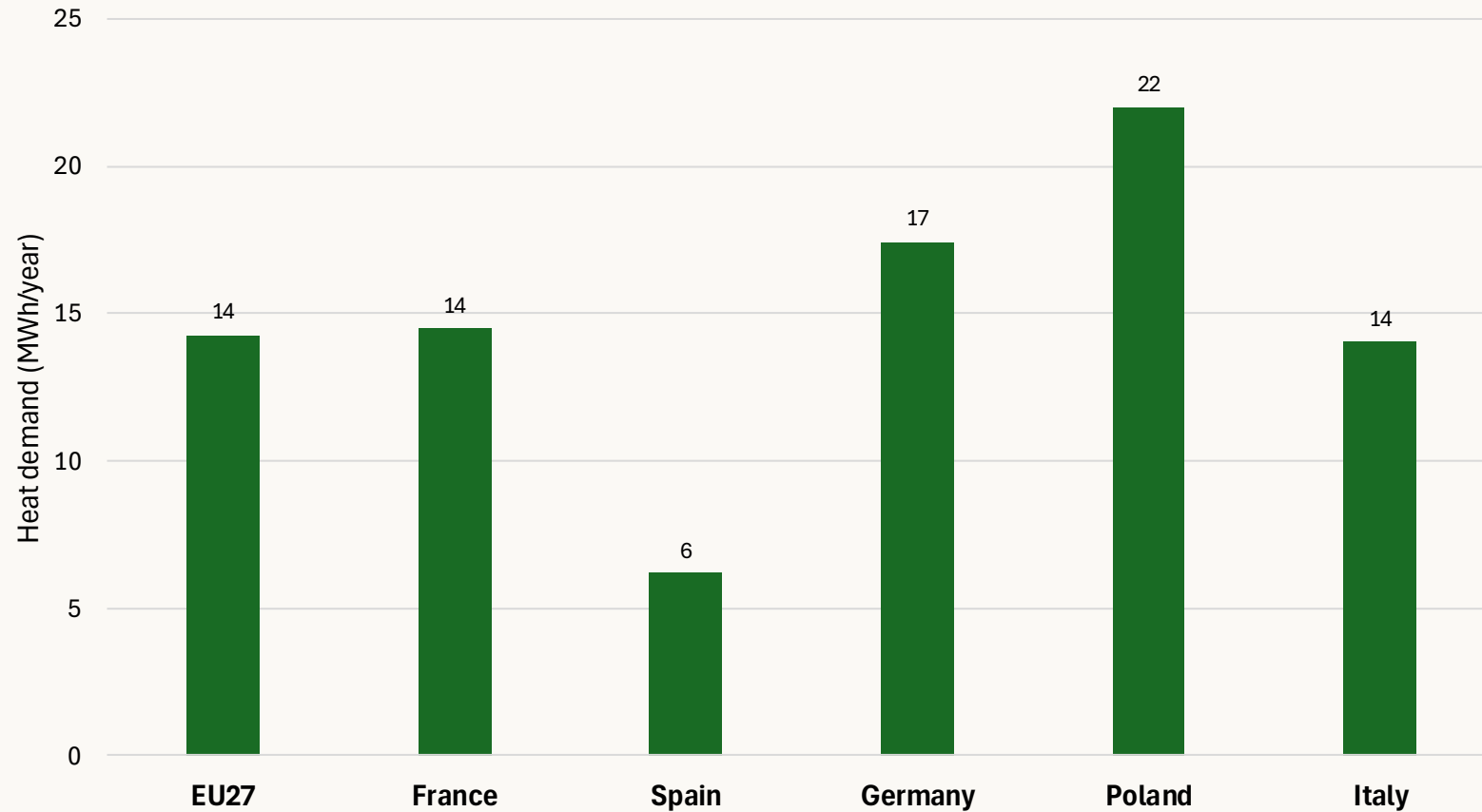


Sources: Most recent available energy prices from Eurostat. To reflect expected ETS2 effects a markup of 10% is applied for natural gas and 9% for petrol and diesel.

# 3. Average heat demand per households



Average heat demand for 150 m2 home

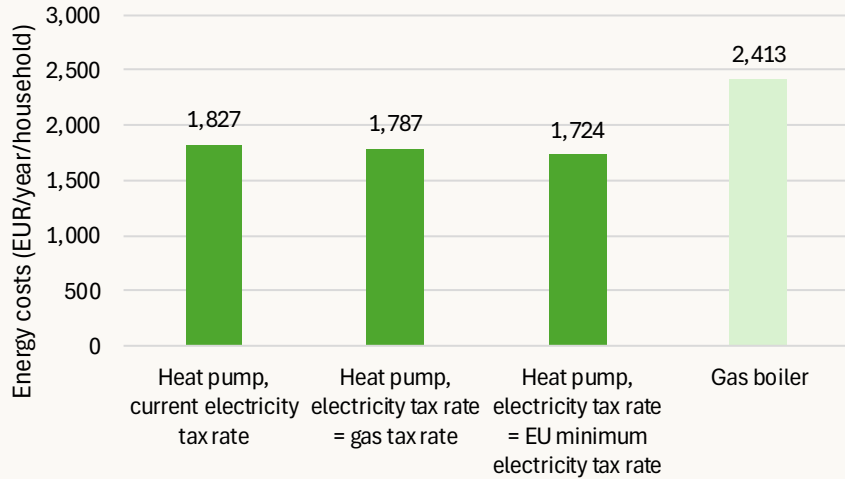


Sources: Heat demand estimated using [Odyssee-Mure](#) average heat demand pr. m2 and a 150 m2 dwelling assumption.

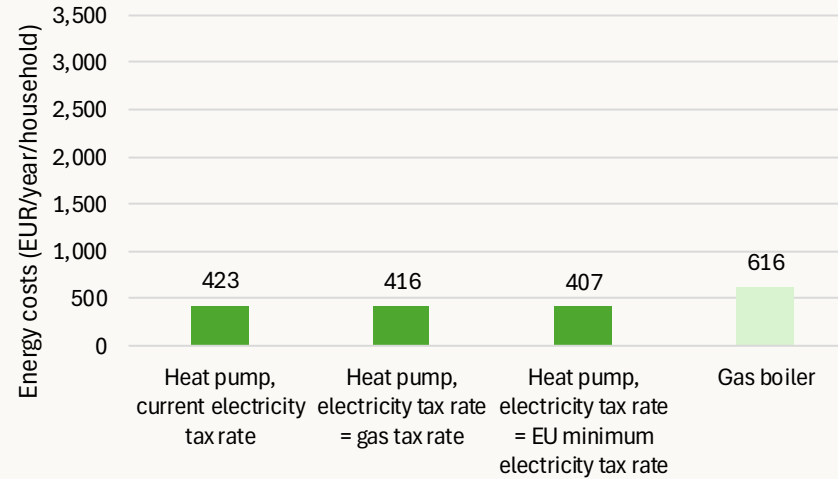
# 4. Heating costs and energy taxation



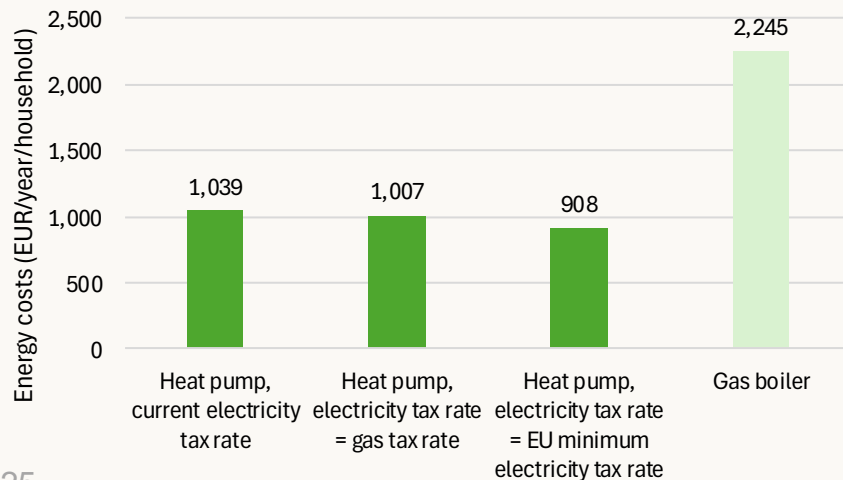
DE: Yearly energy costs under different electricity tax rates



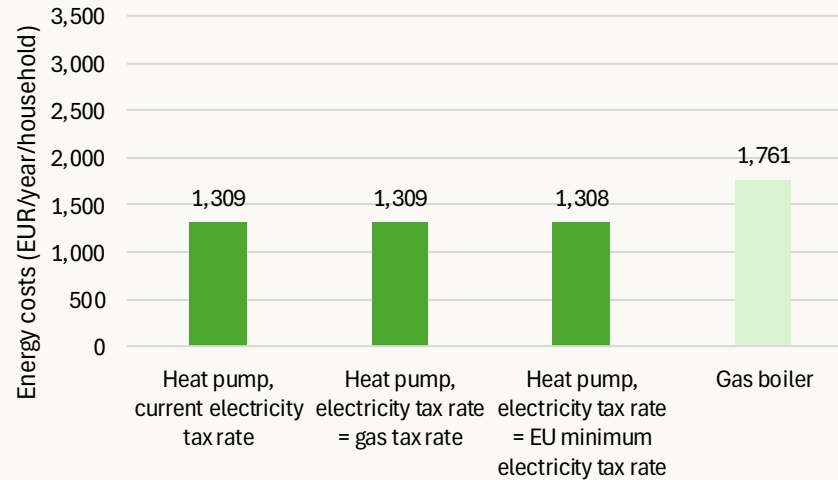
ES: Yearly energy costs under different electricity tax rates



FR: Yearly energy costs under different electricity tax rates



PL: Yearly energy costs under different electricity tax rates



# 5A. List of assumptions

- Heating calculations assume a 97% gas boiler efficiency and 330% heat pump efficiency, based on the Danish Energy Agency's Technology Catalogue.
- CAPEX and O&M of gas boiler and heat pump are based on the Danish Energy Agency's Technology Catalogue. Savings are calculated by comparing an air-to-water heat pump with a natural gas boiler, both installed in an existing single-family house. Does not include VAT.
- Annual heat demand is based on a 150 m<sup>2</sup> dwelling and average heating consumption per m<sup>2</sup> from [Odyssee-Mure](#). Assumed yearly heat demand: EU27: 14 MWh, Germany: 17 MWh, Spain: 6 MWh, France: 14 MWh, Poland: 22 MWh.
- Estimates should be interpreted carefully, as savings will depend on building type and characteristics.
- Estimates are rounded to the nearest ten, so totals shown in the main text may not always equal the sum of individually rounded figures.

## 5B. List of assumptions

- Energy-cost estimates assume ETS2 implementation: +10% on natural gas and +9% on petrol and diesel.
- Heat pump calculations use household energy prices from Eurostat, including all taxes and levies, based on the most recent comparable year available at time of analysis:
  - Germany: average of 2025S1–2025S2
  - France: average of 2025S1–2025S2
  - Spain: average of 2024S2–2025S1
  - EU27: average of 2024S2–2025S1
  - Poland: 2023S1–2023S2 for gas; the same year is used for electricity to ensure comparability
- If countries offer reduced electricity prices for heating, the heat pump business case may be better than shown, as this is not captured in Eurostat electricity prices.
- Heat pump scenarios distinguish between current electricity taxation and a scenario where the electricity-to-gas tax ratio is adjusted to 1:1.
- Energy taxes are from various national sources and cross referenced with [Taxes in Europe Database v5](#) at time of conducting the analysis.

# 5C. List of assumptions

- EV calculations assume that the fossil alternative is a 50/50 split between petrol and diesel cars.
- EV scenarios distinguish between current electricity taxation and a scenario where electricity taxes are reduced to the EU minimum level corresponding to 1 EUR/MWh.
- Average mileage reflects Member State-level data from [Odyssee-Mure](#).
- Fuel consumption, CAPEX, scrap value and yearly maintenance costs are assumed equal across countries and are based on [Agora Verkehrswende's TCO tool](#). Country specific subsidies for EVs and acquisition taxes are included based on [T&E good tax guide](#) assuming a compact SUV.
- Petrol and diesel prices are based on the latest available [IEA data](#), corresponding to 2024 prices.
- Country examples translate estimated savings into household equivalents using heating cost estimates for a heat pump from the analysis, EV electricity cost estimates from the analysis, [groceries](#), [football season tickets](#), [jerseys](#), [alcohol/wine expenditure](#) and travel/attraction costs from various national sources.
- Electricity generation 2025 source are from [Ember](#).