



# Heat Pumps in the Heating Transition and the expected HPAction Plan

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# About EHPA

## Our vision:

In a fully decarbonised Europe, heat pump technologies are the number one heating and cooling solution. They are a central part of a renewable, sustainable and smart energy system.

More: [ehpa.org](http://ehpa.org)

## Founded in 2000

## 224 members representing the entire value chain

- Heat pump and component manufacturers
- National associations
- Test labs
- Utilities and consultancies
- Research institutes and universities

## 30 countries

## International cooperation with

Comprehensive Economic Cooperation Agreement (CECA)  
International Energy Agency - Heat Pump Centre (IEA HPC)  
International Renewable Energy Agency (IRENA)  
Heat Pump and Thermal Storage Centre of Japan (HPTCJ)



# Heat pumps are mature and used everywhere



White goods and cars

Commercial applications

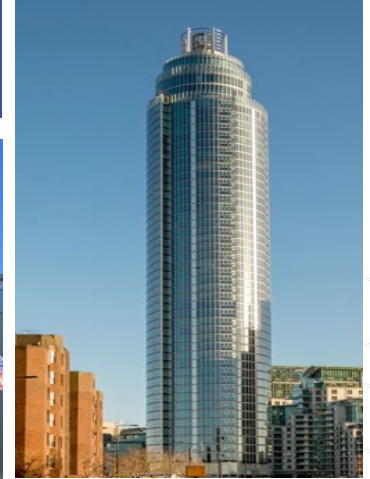


Residential applications

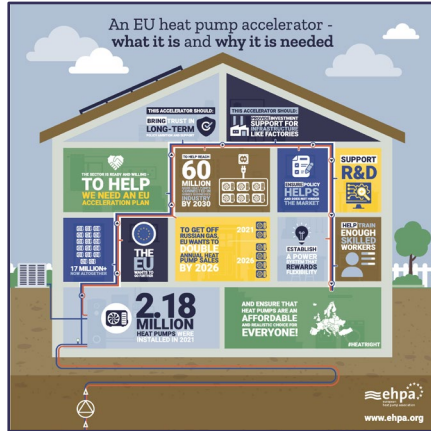
Industrial applications  
and district heating



Big buildings



# High ambition needs action: Heat Pump Accelerator



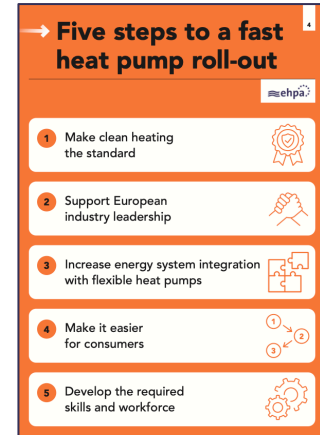
From mid 2022: EHPA stresses: "We need a heat pump accelerator"



Q1 2023: EC endorses and announces Heat Pump Action Plan + dedicated webpage



June 2023: EHPA launches Heat Pump Accelerator







# HEAT PUMPS: THE HEART OF EUROPE'S ENERGY FUTURE

## European Heat Pump Association - EU policy priorities 2024-2029

Heat pumps offer a clean, cost-effective way to decarbonise heating and cooling. Three to five times more efficient than gas boilers, they slash energy imports, energy use, and greenhouse gas emissions. Heat pumps also provide stability against fluctuating energy bills.

To unlock their full potential, EU legislators and decision-makers must take the lead in developing the necessary policy and financial conditions for the acceleration of the clean energy transition.

The European Heat Pump Association (EHPA) has outlined **five key priorities to put clean heating and cooling at the heart of Europe's energy system today for a brighter tomorrow**. Here's an overview:



### Set clear policy direction and targets

Ensuring consistent, streamlined and ambitious long-term policies on heat pumps is vital for attracting demand for them and investments in the EU's manufacturing and workforce.



### Make heat pumps affordable for all

There is an urgent need to shield low-income households from high energy prices and support their access to cleaner and, ultimately, cheaper to run heating and cooling solutions like heat pumps.



### Strengthen industrial leadership and skills

Europe's heat pump sector is a world leader. It provides more than 161,000 direct jobs already today, with the potential for many more.



### Unlock the full potential of large heat pumps

Large heat pumps serve a crucial role in industrial electrification and energy integration. Able to reach 200°C, they can efficiently utilise waste heat from industrial processes, wastewater, and other sources for district heating and industrial applications, so boosting circularity.



### Use heat pumps' flexibility to support the energy system

Heat pumps provide flexibility by heating when electricity costs are low and shutting off during peak times, reducing costs for the EU's energy system and consumers.

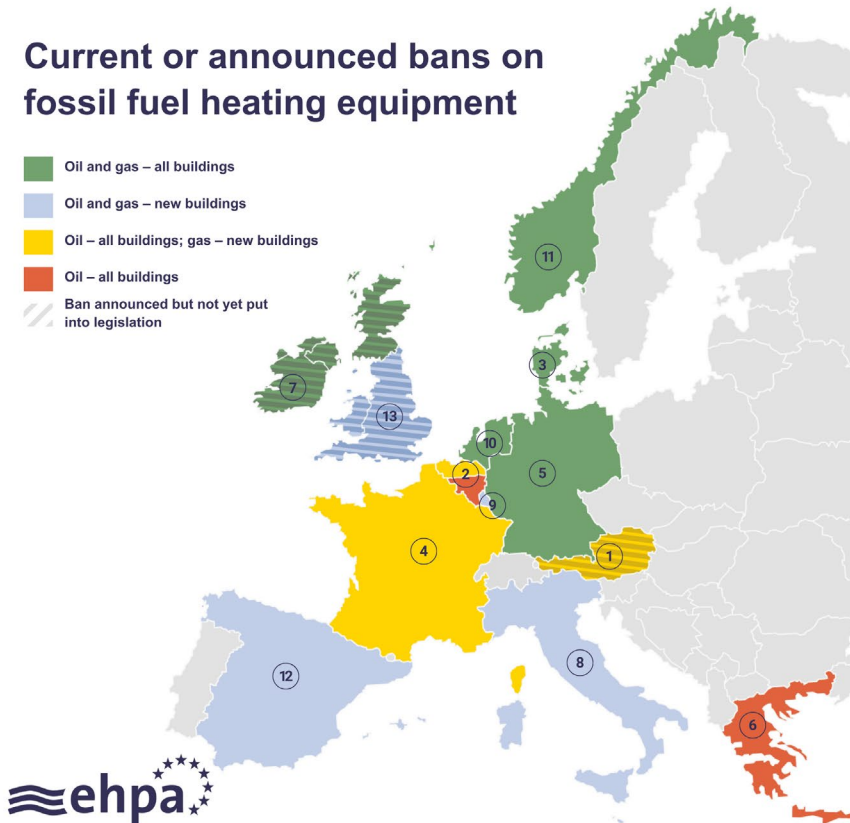
Read EHPA's **manifesto in full**



# 1. Set clear policy direction at EU & National level

## Current or announced bans on fossil fuel heating equipment

- Oil and gas – all buildings
- Oil and gas – new buildings
- Oil – all buildings; gas – new buildings
- Oil – all buildings
- Ban announced but not yet put into legislation



**1. AUSTRIA:** Oil boilers in new homes banned since 2020. Gas boiler ban planned for new buildings from 2024. Mandatory replacement of old fossil fuel heating systems planned from 2025.

**2. BELGIUM:**

**Flanders:** Oil boilers in all buildings banned since 2022, unless no natural gas network nearby. Gas connections banned for large building projects since 2021 & in new buildings from 2025.

**Wallonia:** Oil boilers banned in new buildings from 2025 and existing buildings from 2026.

**Brussels:** Oil boilers banned in all buildings from 2025.

**3. DENMARK:** Fossil fuel boilers banned in areas with district heating in new and existing buildings. Fossil fuel boilers other than natural gas boilers banned in areas with a natural gas network in new and existing buildings. Building regulations make fossil fuel boilers virtually non-existent in new construction, even in areas where they are not explicitly banned.

**4. FRANCE:** Oil boilers banned in all buildings since 2022. Gas boilers banned in new single-family buildings since 2022 and from 2025 for new multi-family homes.

**5. GERMANY:** New heating systems to use 65% or more renewable energy from 2024. Installation of mono-use oil coal boilers banned in new and existing buildings since 2020.

**6. GREECE:** Oil boiler sales and installation banned in all buildings from 2025.

**7. IRELAND:** Fossil fuel boiler ban planned for new non-residential and existing buildings undergoing major renovation from 2024.

**8. ITALY:** New buildings must use 60% renewables for heating since 2022.

**9. LUXEMBOURG:** Building requirements make oil and gas impossible for new buildings since 2023.

**10. NETHERLANDS:** Gas boilers banned in new buildings since 2018. Gas boiler ban planned in all buildings from 2026.

**11. NORWAY:** Fossil fuel heating systems banned in new buildings since 2017. Oil boilers banned in all buildings since 2020. Use of natural gas for existing boilers is not widespread, and most buildings have electric heating systems.

**12. SPAIN:** New buildings must use 70% renewables for domestic hot water and pool heating, obtained from monthly values, or 60% if demand is less than 5.000/d, including losses.

**13. UNITED KINGDOM:**

**England:** Fossil fuel boiler ban planned for new buildings from 2025.

**Scotland:** Oil and gas boiler ban planned for new buildings from 2024. Fossil fuel boilers ban planned for all buildings from 2045.

## 2. Make heat pumps affordable for all

Cost of electricity (ct/kWh<sub>el</sub>)

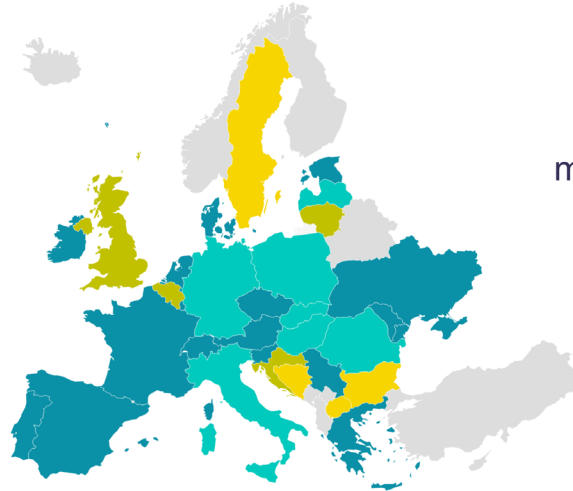
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Cost of gas (ct/kWh<sub>thermal</sub>)

≈ 2

Electricity to gas price ratio

■ <1.5 ■ 1.5-2.5 ■ 2.5-3.5 ■ >3.5



Electricity should be max. twice the price of gas to bring savings from heat pumps

Source: Eurostat, using prices from first half 2023.  
Created with: Datawrapper



### 3. Provide long term confidence for the heat pump industry

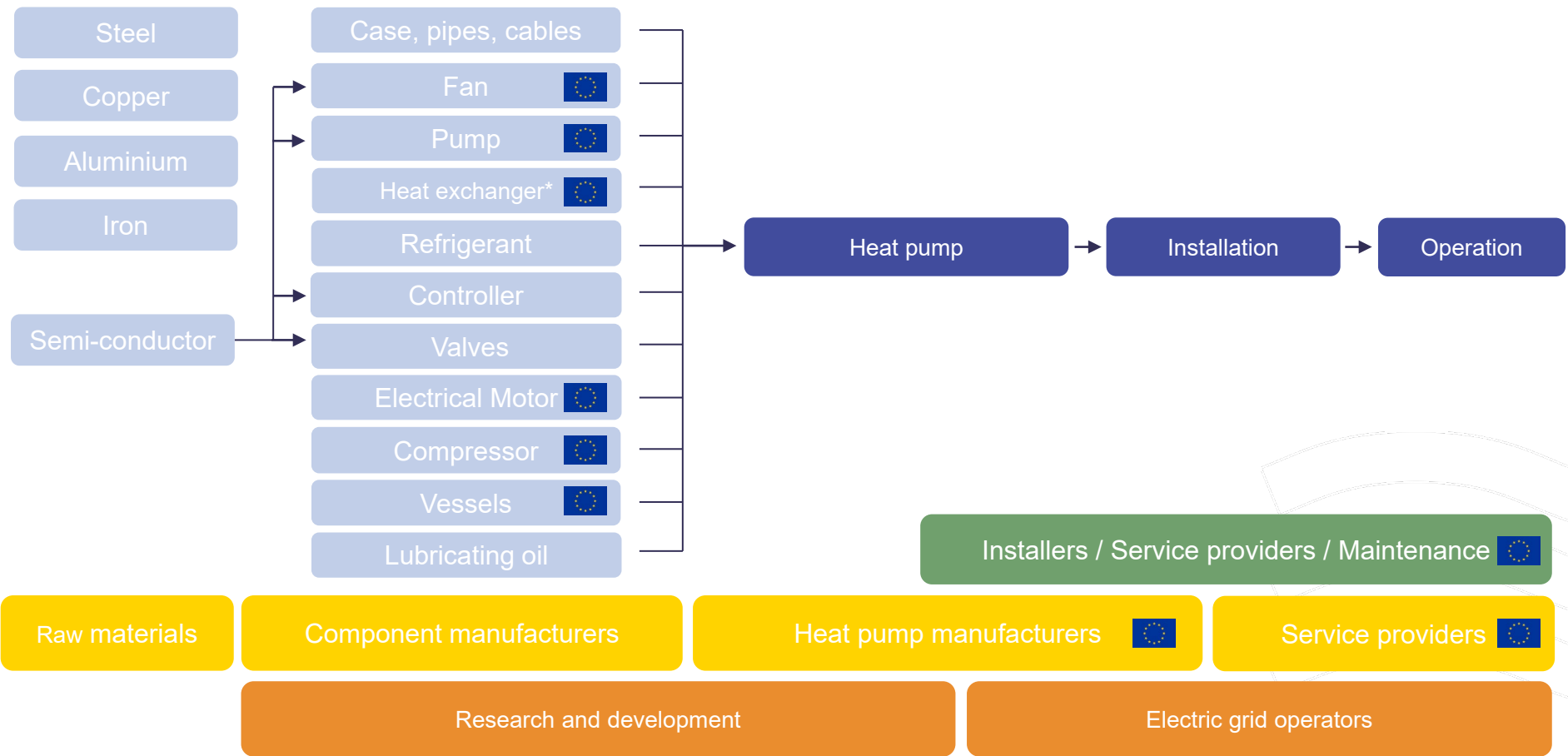
**>7 billion € investments  
announced until 2025**

Based on press releases by Daikin, Viessmann, Stiebel-Eltron, Bosch, Panasonic, Vaillant, Hoval, Ziehl-Abegg, Alfa-Laval, Grundfoss, Wilo, Kensa, Ariston, Clivet/Midea, BDR Thermea, Groupe Atlantic, Rheinmetall etc.

[Link to overview of investments](#)

**Since Q4 2023: job cuts, reduced  
working hours affecting nearly  
3000 employees**

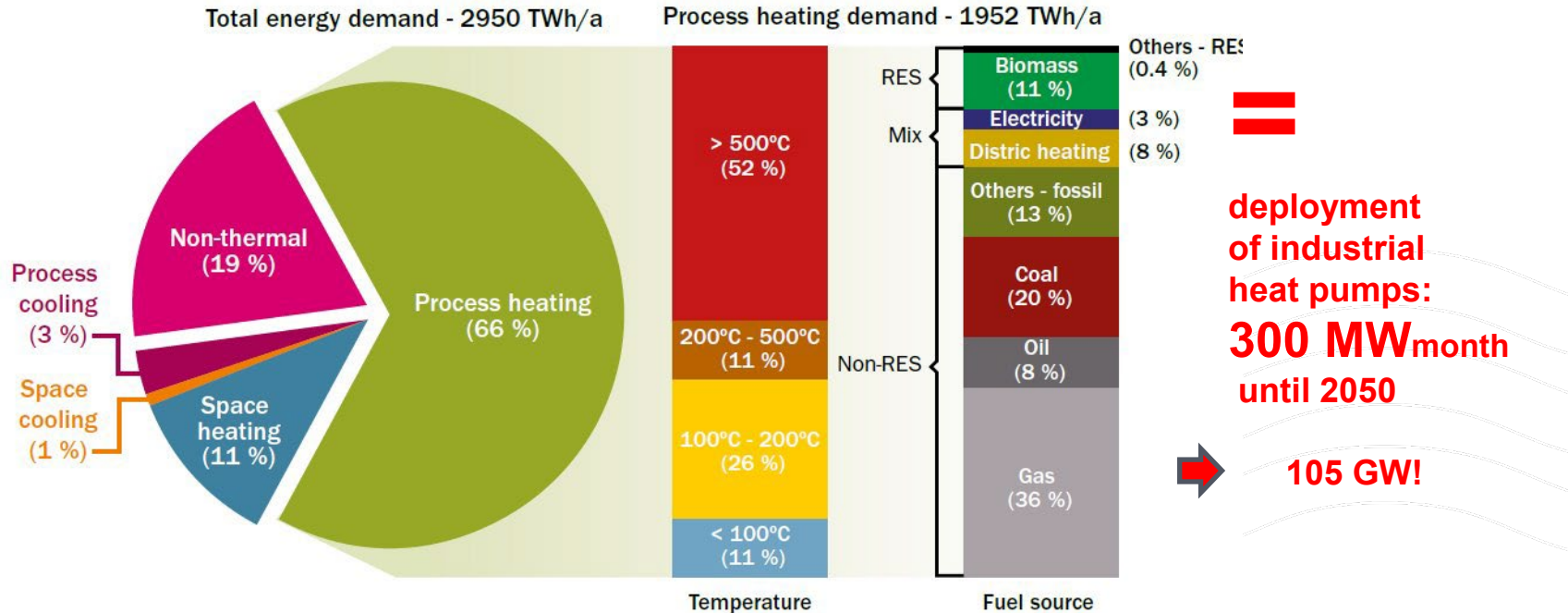
Based on press releases by Daikin, Vaillant, Saunier Duval, Nibe, Stiebel Eltron, Groupe Atlantic



\* Different types of heat exchangers are used e.g. evaporator, condenser, desuperheaters, subcoolers

# 4. Unlock the full potential of large heat pumps

1952 TWh EU industrial heat demand, 37% < 200°C



Source: De Boer et al: **Strengthening Industrial Heat Pump Innovation** Decarbonizing Industrial Heat

## 5. Create a business case for the use of HP's flexibility



Demand side flexibility update:

*“Barely any progress to ensure access to price signals for end-users”\**

**Giving a value to flexibility** → essential to make heat pumps attractive to end users and aggregators

\*Source: The implementation of the Electricity Market Design 2022 to drive demand side flexibility. Smarten 2022

# Do you want to know more about heat pump policies?

Check our overviews and reports on EHPA website.



[@helloheatpumps](https://twitter.com/helloheatpumps)



[European Heat Pump Association](https://www.linkedin.com/company/european-heat-pump-association)



[@EuropeanHeatPumpAssociation](https://www.youtube.com/channel/UC...)



[www.ehpa.org](http://www.ehpa.org)







Source: Glen Dimplex

## Heat pumps and high rise homes: Case studies from across Europe



## VAT on heat pumps and electricity in Europe

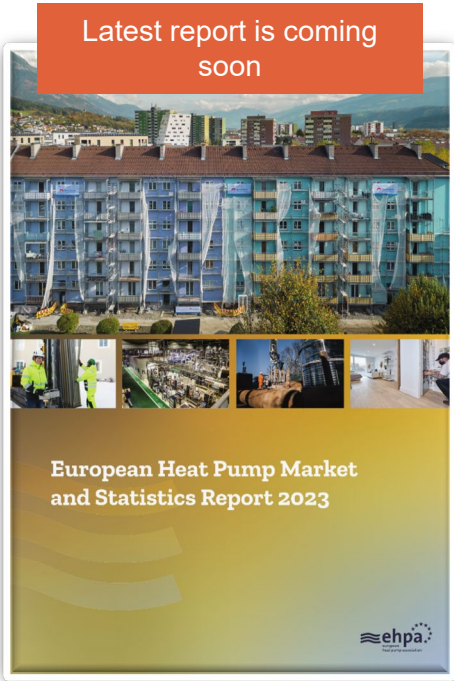


Photo: Ecoforest

## Subsidies for residential heat pumps in Europe



# EHPA Market Report 2023



Get the latest market data!

