Heat pumps: The new gold standard?

Thomas Nowak
Secretary General
European Heat Pump Association
Heat pumps are mature and used everywhere – today
Special benefit, where heating and cooling is needed
Heat pump sales in 21 European markets
2021: 2.2 million units | stock: 17 million

Heat pumps: the new gold standard! | Thomas Nowak | 21.10.2022
Heat pump benefits 2021
Based on 17 million heat pumps installed

- **Thermal capacity**: 147 GW
- **Useful energy**: 283 TWh
- **Renewable energy**: 179 TWh
- **Fossil final energy savings**: 229 TWh
- **CO₂ savings**: 45.9 Mt
- **Clean air**: No PM at point of operation

Auxiliary energy

If auxiliary energy is green, heat pumps provide 100% green heat
Heat pump manufacturing happens across Europe

- 170+ sites
- SME based
- Often located in rural/remote areas
- Turnover of 14.5 billion € (of which about 1.7 billion € VAT)
- 60% manufactured in Europe

➔ Jobs: 117 000 FTE
➔ Export potential

† ➔ Perspective
Growth of renewable heating lacks behind EU targets

https://ec.europa.eu/eurostat/web/energy/data/shares

Source: Eurostat Shares
2022 - a tipping point for heat pumps?

- Clear recognition of all benefits of heat pumps
- Technology is ready and trusted
- National targets that prioritize heat pump solutions
- Technology clarity instead of technology neutrality
Heat pumps dominate are recognized in policy

RePowerEU and cut our dependence on Russian gas

Photovoltaic
Wind
Heat pumps
Storage

#EUGreenDeal
REPowerEU: High ambition for heat pumps double-digit growth necessary throughout this decade

Air-air HP are also replacing fossil gas

Slight advantage for air-water HP
(hybrid) Heat pumps work in all buildings
Industry is preparing for growth

As of today, 3.750 million € of investment 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
Five points to make it happen

01 Create trust in long term ambition
02 Make clean heating economically most attractive
03 Avoid disruption through legislation
04 Focus on skills for the energy transition
05 Better heat pumps and systems through more R&D and better data

... and recognize the need to upgrade of electric grids
From high ambition to concrete action

‘it needs “all hands on deck to” accelerate heat pump deployment and eliminate dependency on fossil energy.

It needs a heat pump accelerator
The European Heat Pump Association aisbl / founded 2000

173 Members
Heat pump manufacturers
Component manufacturers
National associations
Consultants
Research & test institutes

22 countries represented

International cooperation
CECA, IEA, IEA HPC, IRENA, HPCJ

Vision
In a fully decarbonised Europe, heat-pump technologies are the number one heating and cooling solution, being a core enabler for a renewable, sustainable and smart energy system.