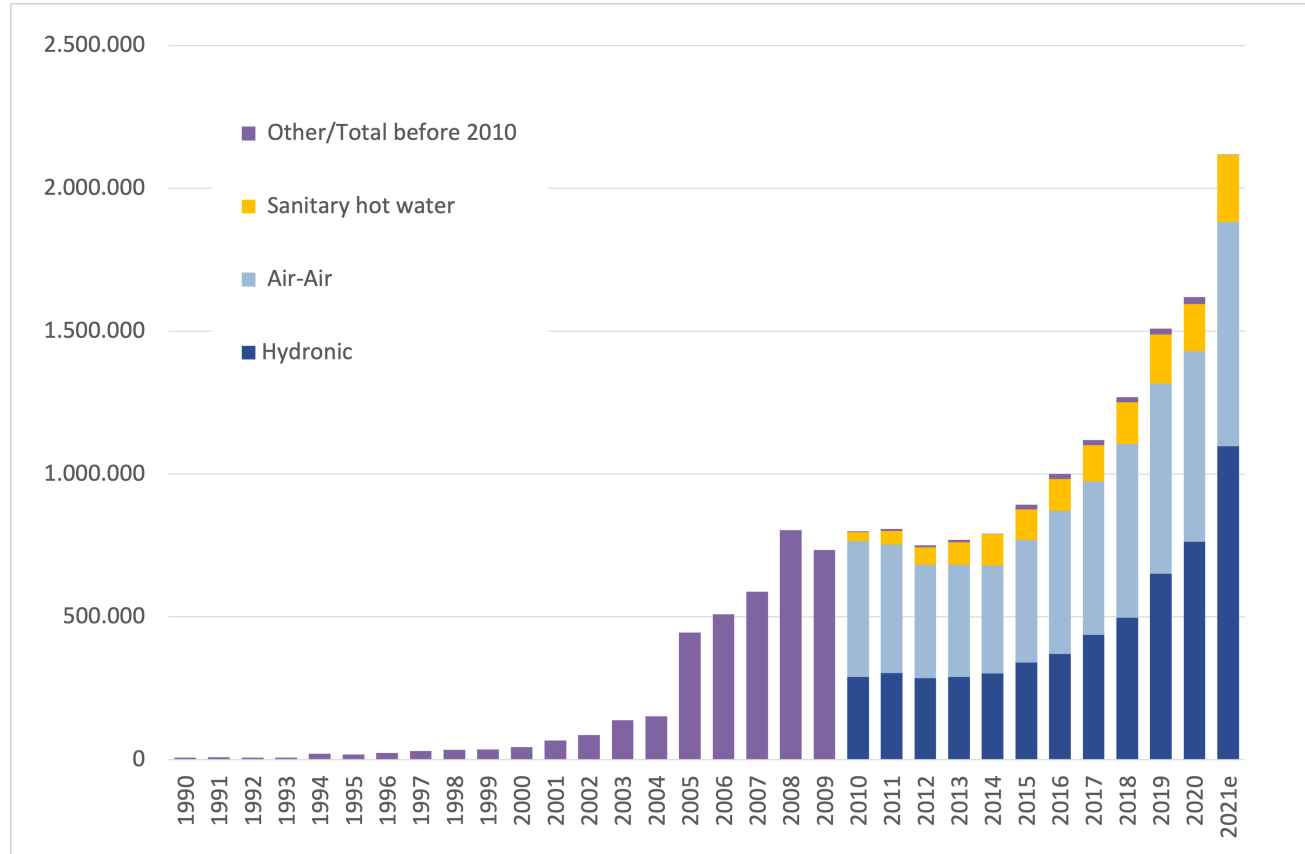


# An empowered EU heat pump sector will deliver

EU heat pump industry is ready to deliver more than 50 million heat pumps (including more than 30 million hydronic heat pumps) by 2030 **if the necessary policy support is provided and high ambition upheld**

# Heat pump sales in 21 European markets



# Heat pumps are mature and used everywhere - today



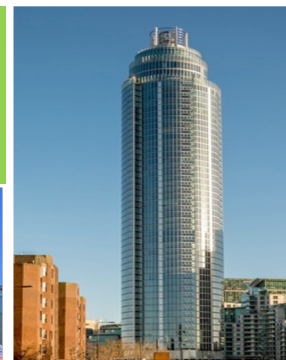
White goods &  
cars

Commercial  
Applications



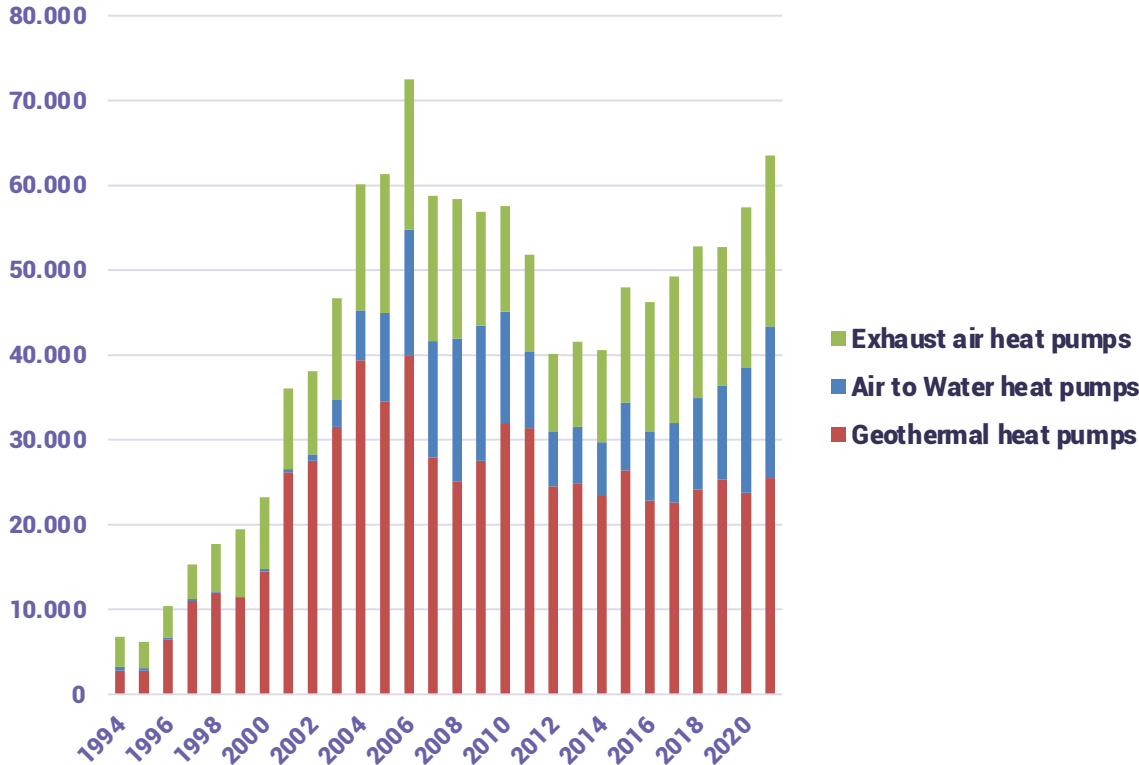
Residential  
Applications

Industrial  
Applications &  
District Heating



Big  
buildings

# The Swedish example: converting a heating sector



Heat pumps are used in almost 70 % of all single-family houses

District heating **using big heat pumps** is dominating in multi-family buildings

90 % emission reduction from heating of buildings since 1990

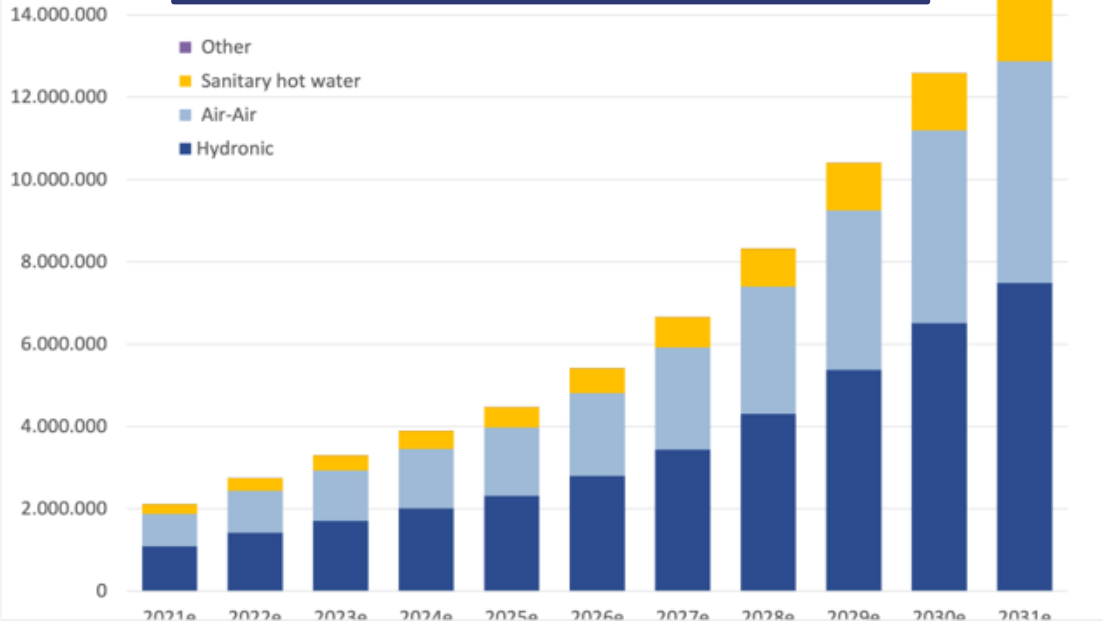


# Heat pumps work in renovation



# The ambition: Double digit growth for the rest of this decade

## EU ambitions in numbers



## Insights

- **Constant double-digit growth**
- **All technologies growing – no major shift in demand**
- **No disruption: HP is proven technology**

## Sidenote: Component manufacturers are innovation drivers

- **Demand for heat pumps triggers demand for**
  - **Heat exchangers**
  - **Compressors**
  - **Controllers** ... from EU production sites
  - **Fans**
  - **Motors**
  - **pumps**
- **Already highly industrialised**
- **Can triple to quadruple today's capacity but this will only happen if ambition is backed by concrete measures → demand**





# EU manufacturing landscape 2021: 170 factories



**Jobs**

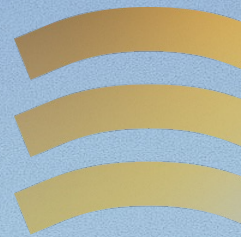
**Export potential**

**Perspective**



## Sidenote: lights will stay on with millions of heat pumps in 2030

- **Electric grids develop dynamically**
- **More heat pumps enable higher utilisation factors of renewable electricity generation**
- **Heat pumps provide stability and flexibility to the grid**
- **Utilities and DSOs are upgrading based on announced ambition levels**
- **Valorisation of flexibility, encourage grids and storage build-up → electricity market design!**



# Short term measures with near to immediate impact on the market

# 1. Create trust in long term ambition

- **Strong communication confirming that heat pumps are at the centre of the energy system, creating trust and accelerating investments by all stakeholders**
- **Keep ambition level for all heat pump technologies high**



## 2. Make clean heating economically most attractive

- **value to flexibility: ensure implementation of electricity market design directive**
- **Internalise the cost of CO<sub>2</sub> emission to fossil energy: ETS2 + SCF**
- **Rebalance Electricity taxation**
- **add heat pumps to Annex III of the VAT directive, ensure VAT reduction possibility for**
  - **heat pumps, and**
  - **electricity used for the efficient provision of heating and cooling**

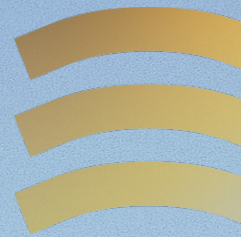
## 2. Make clean heating economically most attractive /2

- **Encourage subsidy schemes for heat pumps**
- **Fast track renewable/energy efficiency policy in “Fitfor55”-package**

### 3. Avoid disruption through legislation

- **Set a priority for heat pumps**
- **Create legal certainty through legislation with a long-term applicability**
- **Keep the impact of legislation on the whole value chain in mind when reviewing directives and regulations:**
  - **Ecodesign**
  - **Refrigerants / PFAS / REACH**
- **Encourage Member States to review and streamline administrative processes including permitting for geothermal drilling and sound**





# Medium term measures with strong impact on the value chain

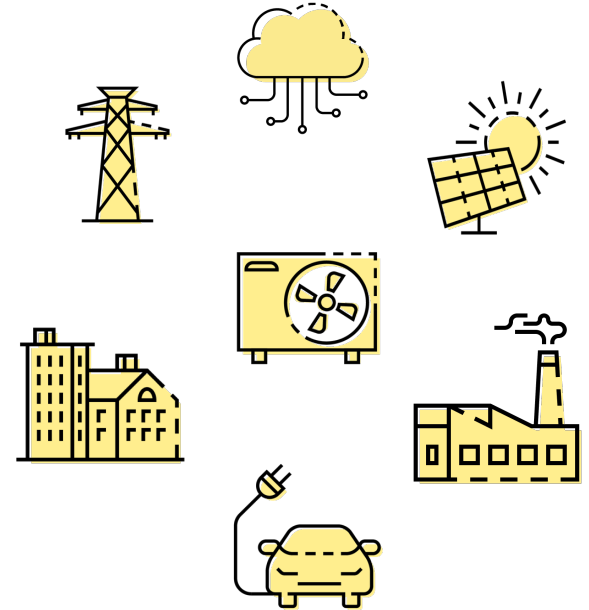
## 4. Focus on skills for the energy transition

- **Positive communication on the need for skills**
- **Installers – planners – architects – engineers – entrepreneurs**
- **Support reskilling and upskilling of the workforce: RESkilleEU summit**
- **Encourage deployment beyond business as usual**

**Sidenote: upskilling from boiler installer to heat pump installer takes 1 week**

## 5. Better heat pumps and systems through more R&D

- Smart, flexible heat pumps and integrated systems
- Sector coupling enabled by heat pumps
- Digital tools to enable flexibility
- Large scale heat pumps for industry and district heating
- Safe and efficient operation with low GWP refrigerants
- Circular economy for heat pumps





# Merge ambition, legislation and stakeholders into a **Heat pump accelerator**

# A heat pump accelerator

- **Brings all players to the table**
- **Sounding board for legislation that prioritises heat pump market development to**
  - fulfil Europe's energy and climate goals
  - make the continent independent of fossil energy for heating
- **Generates heat pump growth in Europe affecting the whole value chain**
  - Research and development institutions
  - Component manufacturers
  - Heat pump Manufacturers
  - Planners and Installers
- **Direct support to the REPowerEU targets**
  - Double annual sales within 5 years
  - Maintain double-digit growth of unit sales for this decade

- **Comments and insight by EHPA board**
- **Questions by the Commission**



## Fast track renewable/energy efficiency policy in “Fitfor55”-package

File	Article	Measure	Impact	Timeline
ETS2		Introduction of ETS for buildings	high	2026
SCF		support vulnerable households through direct income support and EE and decarbonisation of H&C measures	high	2025
ETD	Art. 5 & annex I	make electricity one of the least taxed energy sources	high	2023
RED III	Art. 3	40% collective RES share	medium	By 2030
RED III	Art. 23.1	Annual increase of 1.1 pp RE in H&C	medium	annual average 2021-2025 and 2026 - 2030
EPBD	Art. 15	No financial incentives for installation of fossil fuel boilers	high	As from 1/1/2027
EPBD	Annex II point C (f)	MS should plan complete phase out of fossil fuels in H&C in national plans	high	By 2040
EPBD	Art. 7	All buildings must be zero-emission buildings	high	By 2050
EED	ANNEX I (g), (h)	Direct fossil fuel combustion will not be eligible energy savings under energy savings obligation	high	As from 2024
EED	Art. 1 & 4	EE targets: increase of 39% EE in primary energy consumption & 36% in final energy consumption	medium	By 2030