

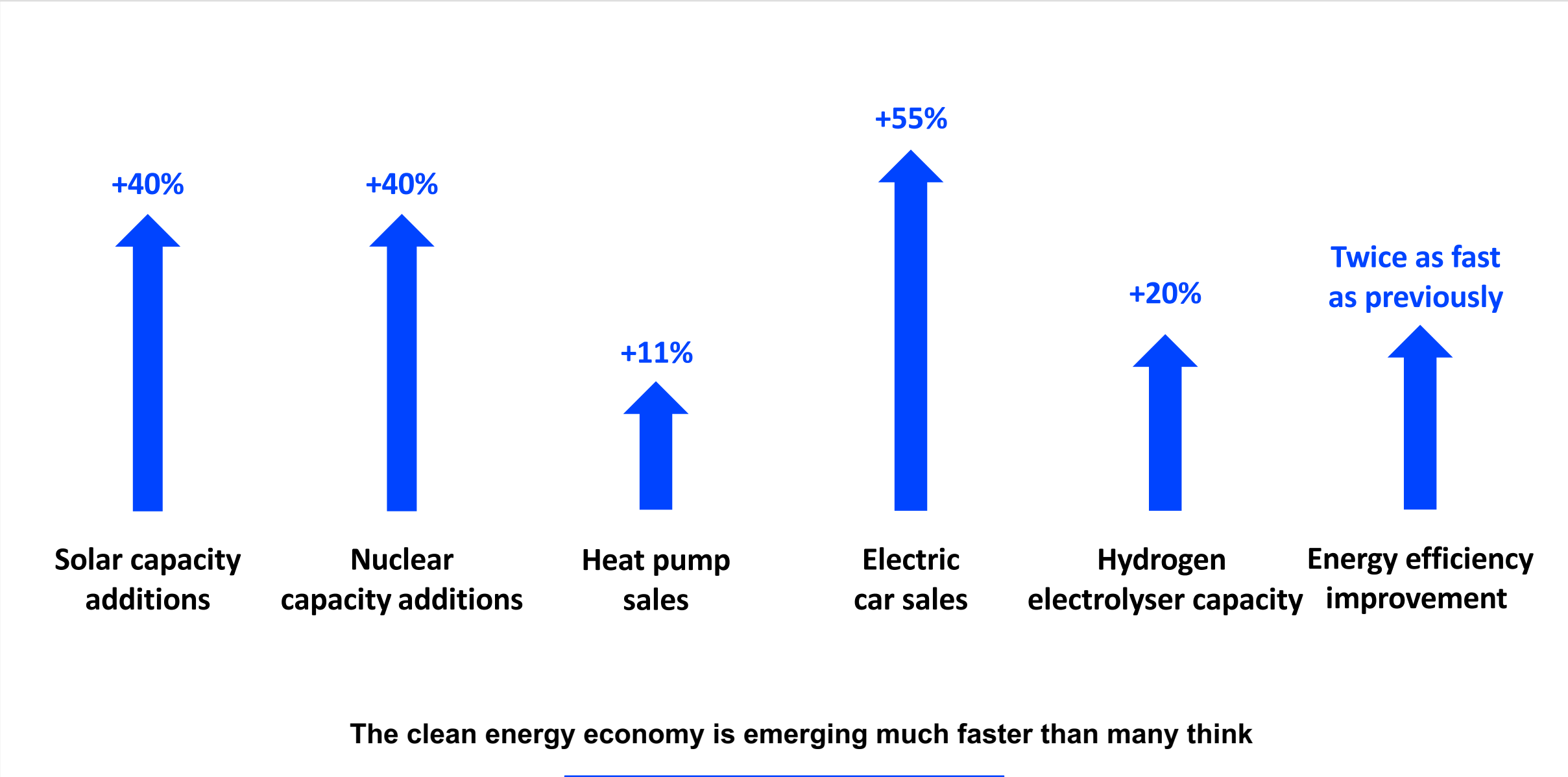


# The Future of Heat Pumps

Laura Cozzi, Chief Energy Modeller

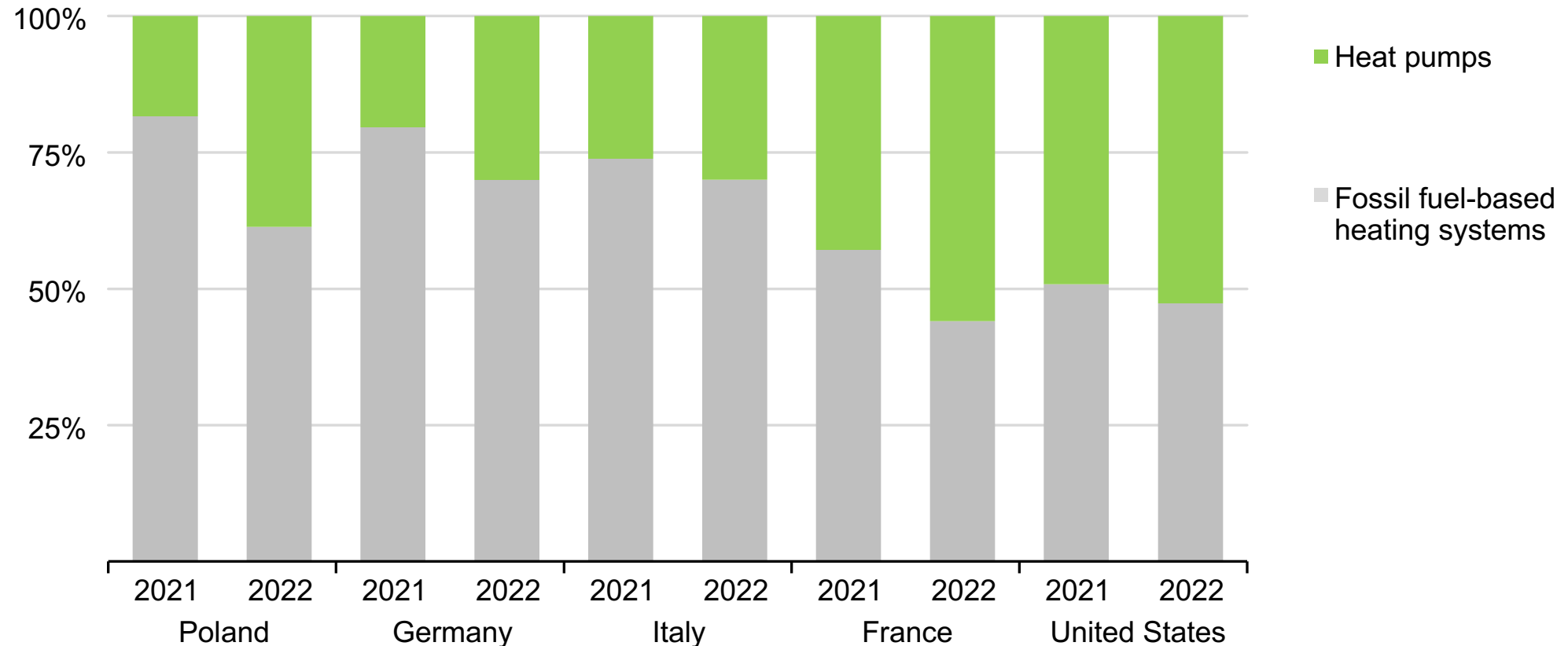
26 May 2023, Stockholm

# Global energy transitions have been supercharged over the last year



# Heat pump sales are rivalling those of fossil fuel-based systems

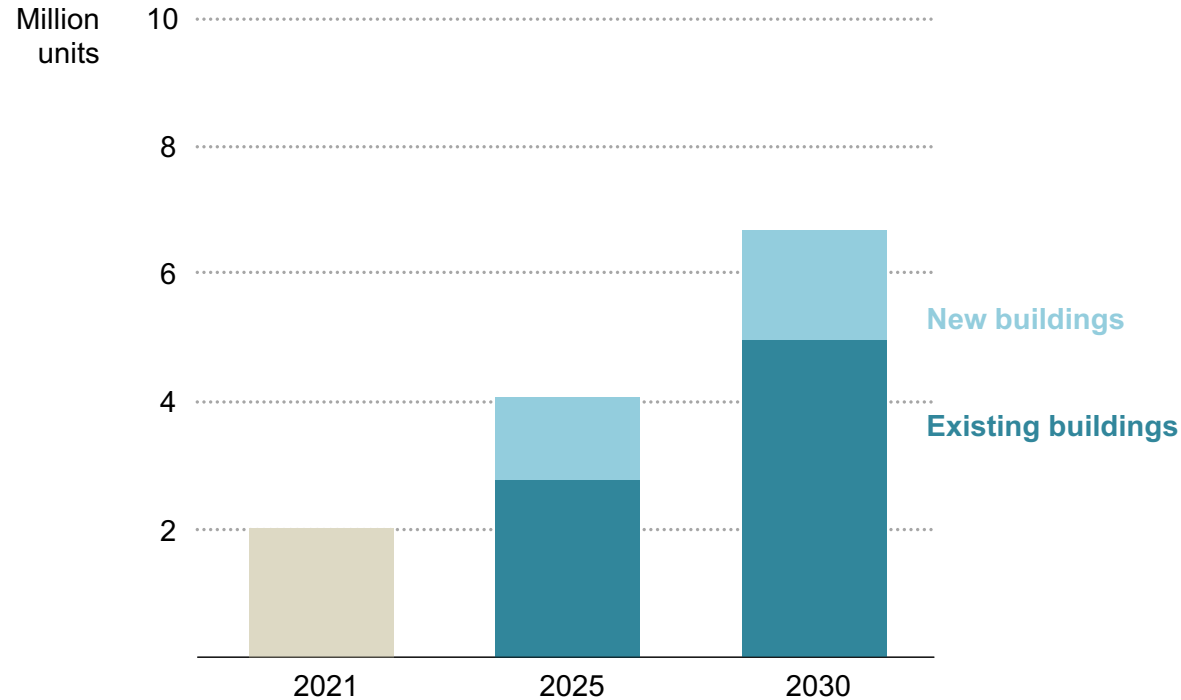
Ratio between sales of heat pumps and fossil fuel-based heating systems for buildings in selected countries, 2021-22



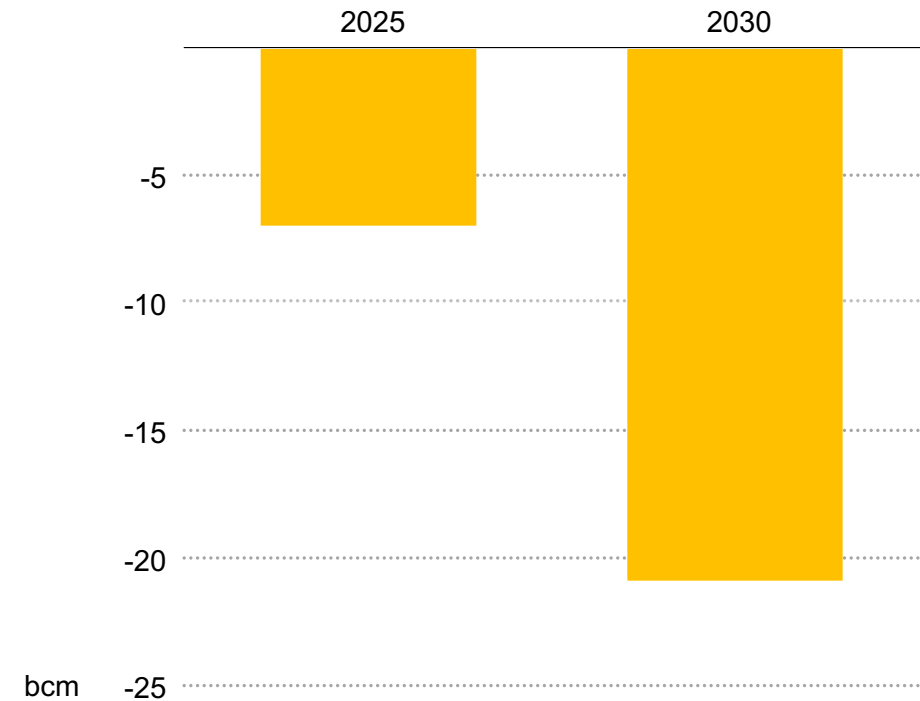
**Heat pumps overtook sales of fossil fuel-based heating systems in the United States and France in 2022, and are advancing rapidly in other european markets such as Poland, Germany or Italy**

# Heat pumps help reduce EU natural gas dependency

### EU heat pumps sales based on REPowerEU

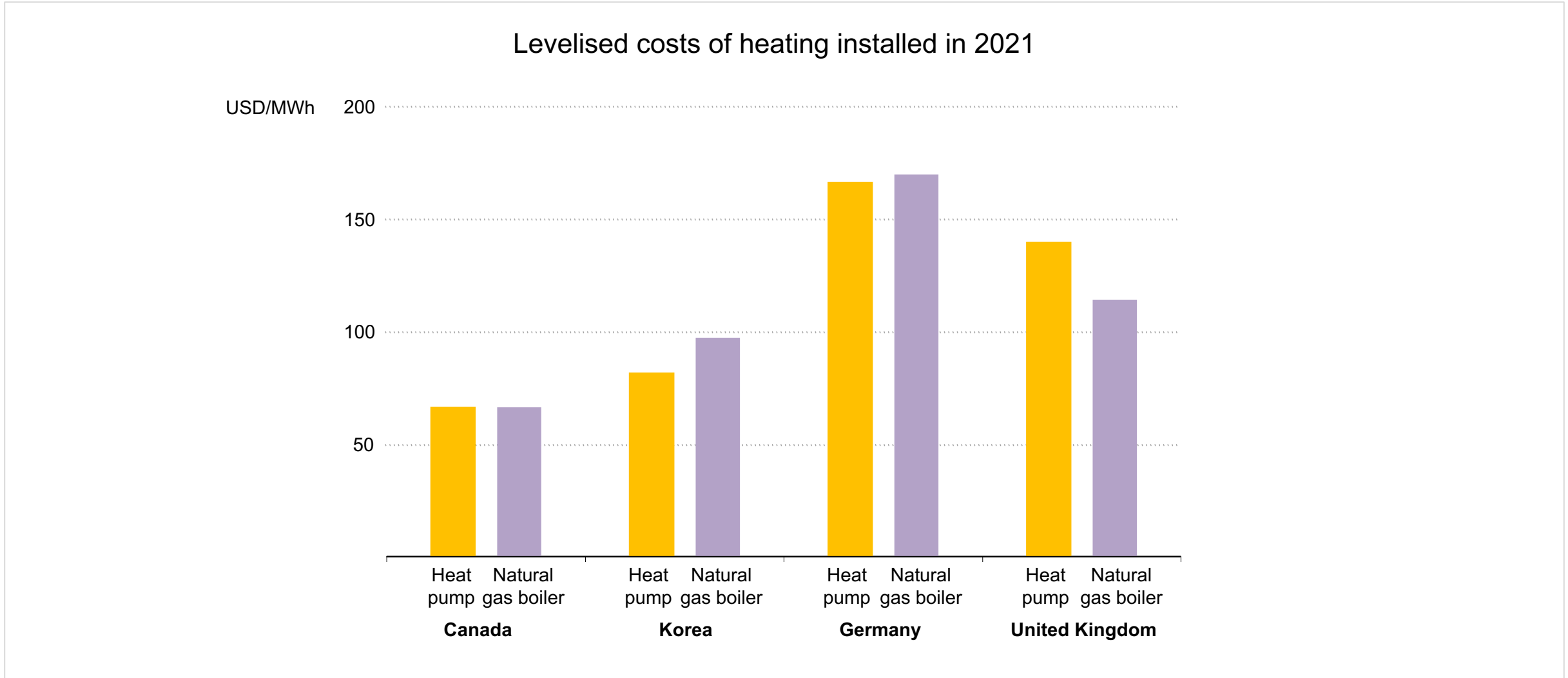


### Natural gas savings from heat pumps



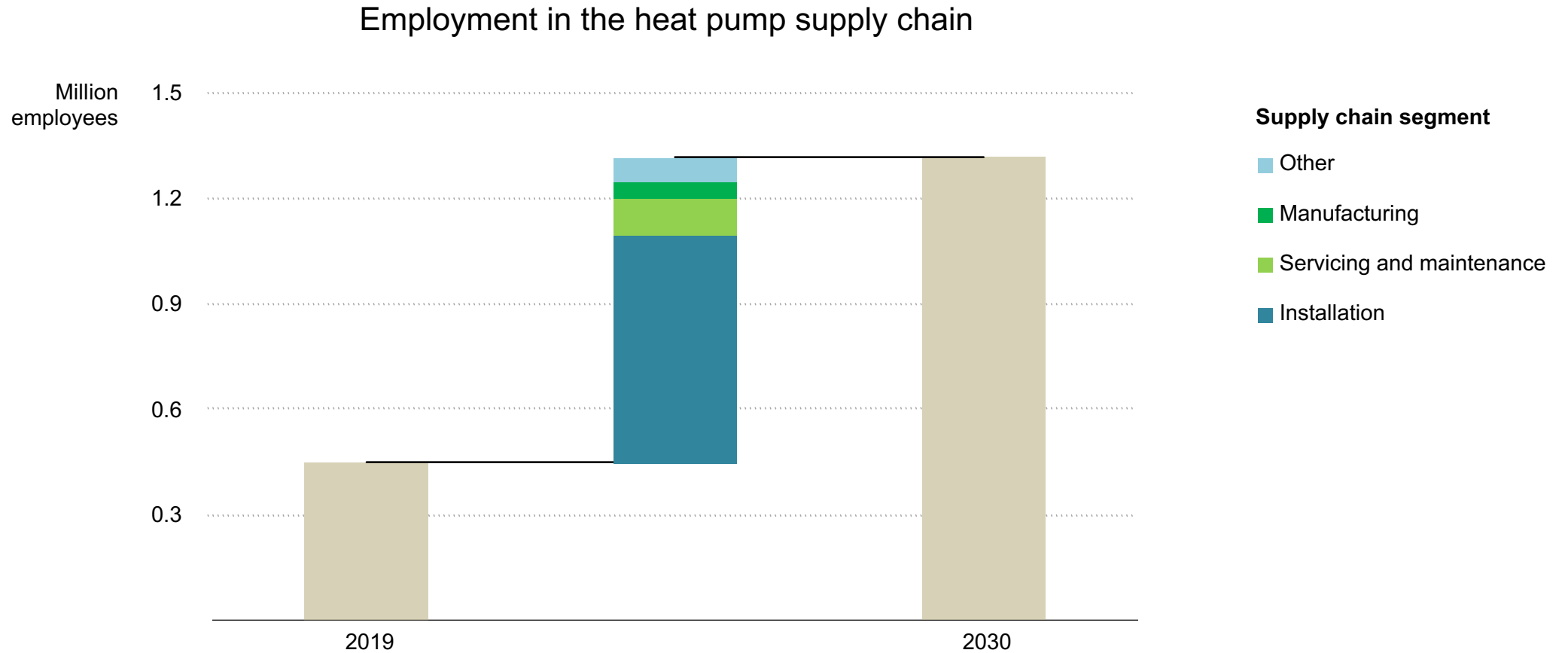
**Plans by leading EU manufacturers to invest nearly EUR 4 billion in heat pump manufacturing and related efforts help to accelerate sales, reducing EU natural gas consumption by 21 bcm by 2030.**

# Consumers save by switching to heat pumps, but barriers remain



**Heat pumps save consumers money over their lifetime, but upfront costs remain high. Financial incentives are available in countries covering 70% of heating today, helping bring down the upfront cost.**

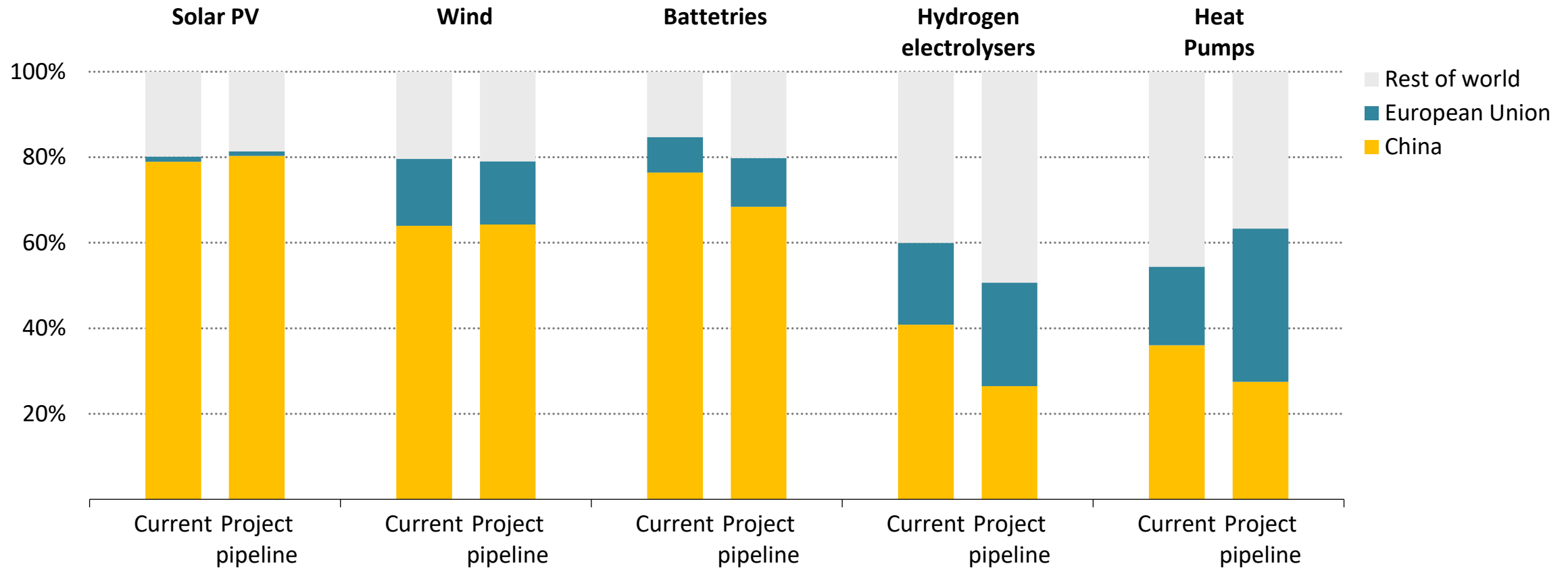
# Heat pump growth creates jobs, but labour bottlenecks could arise



**Employment related to heat pumps triples to 2030, with the most new jobs in installation. Many countries face shortages in occupations that would be able to quickly retrain to install heat pumps.**

# Clean technology supply chains are concentrated

Current share of global production/capacity



**China is the single largest producer in all major clean technology supply chain steps, but the EU's share in global heat pump manufacturing capacity is set to double by 2030.**

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