

27th October 2022

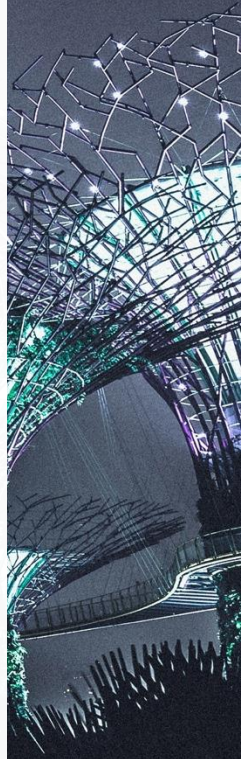
Policies (in Europe) for driving heating systems decarbonisation

The 8th IEA-Tsinghua Joint Workshop - Making Buildings Zero-Carbon Ready by 2030 – Near-term Solutions for Heating Systems

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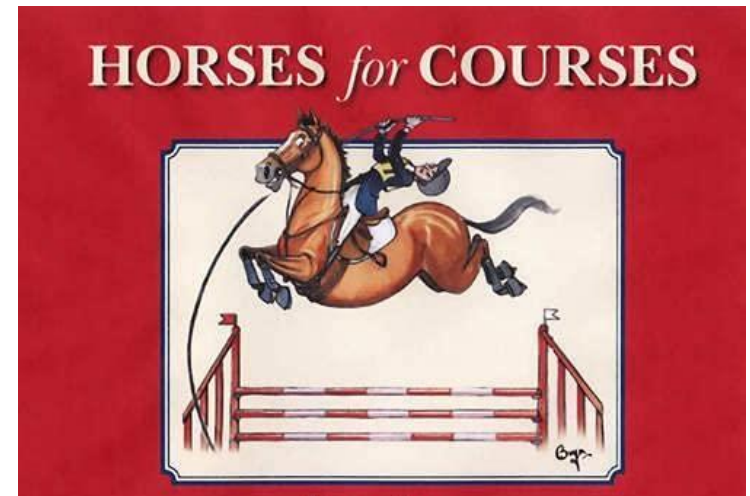
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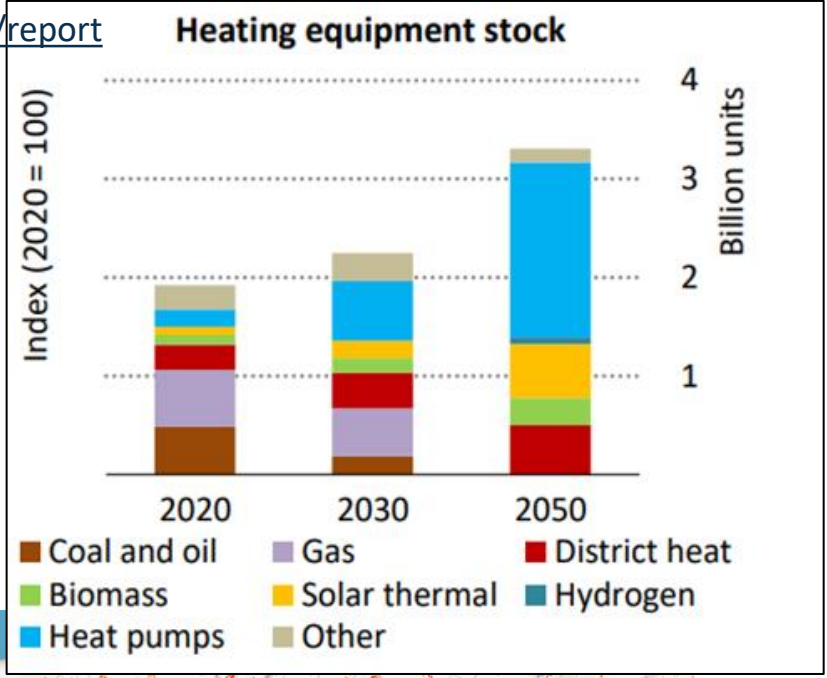
Governance and market structure matters

- Central planning and state led delivery more accepted in certain regions.
- Federal systems and municipal structures imply more local rule setting.
- More economically 'liberal' regions may rely more on pricing and financial measures.



<https://www.iea.org/report/s/net-zero-by-2050>

Geography increasingly important for communal solutions

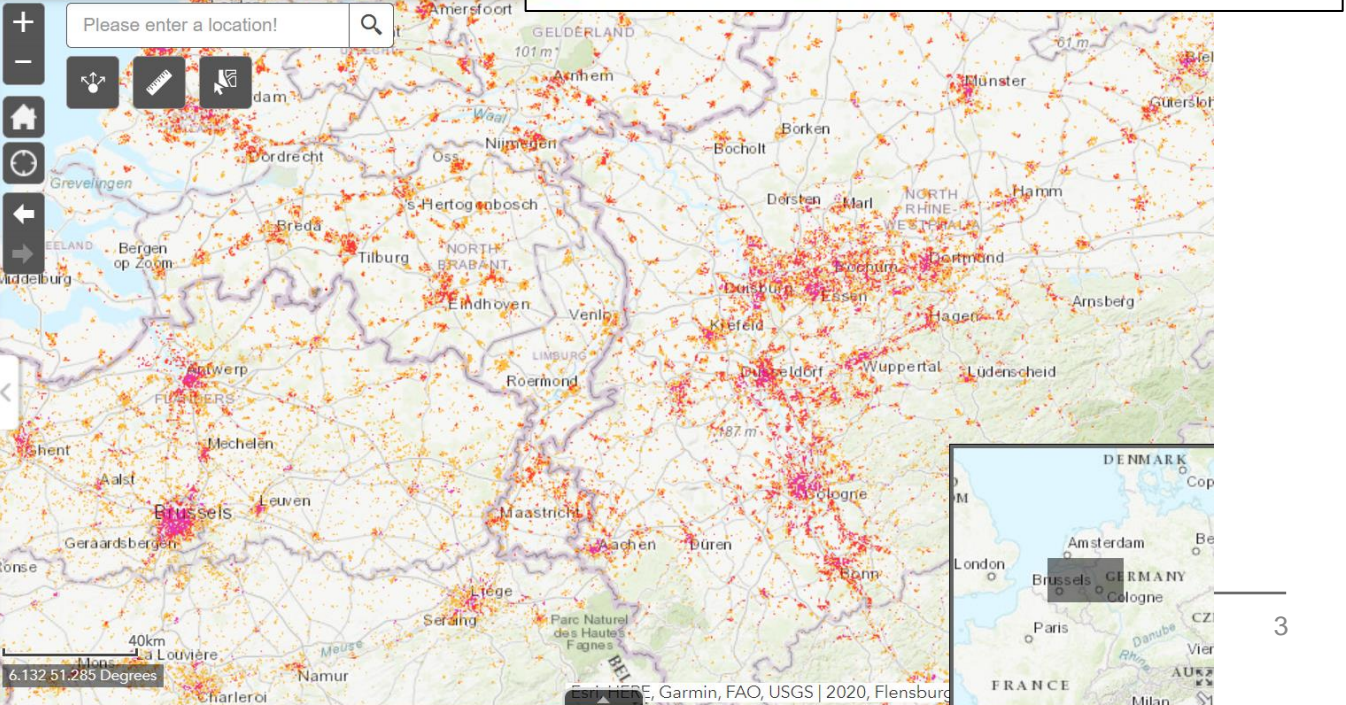


Peta Pan-European Thermal Atlas 5.2 sEnergies.eu uni-flensburg.de hh.se aau.dk

Heat Demand Densities 2015

Residential and service sector (Peta 5.0.1)

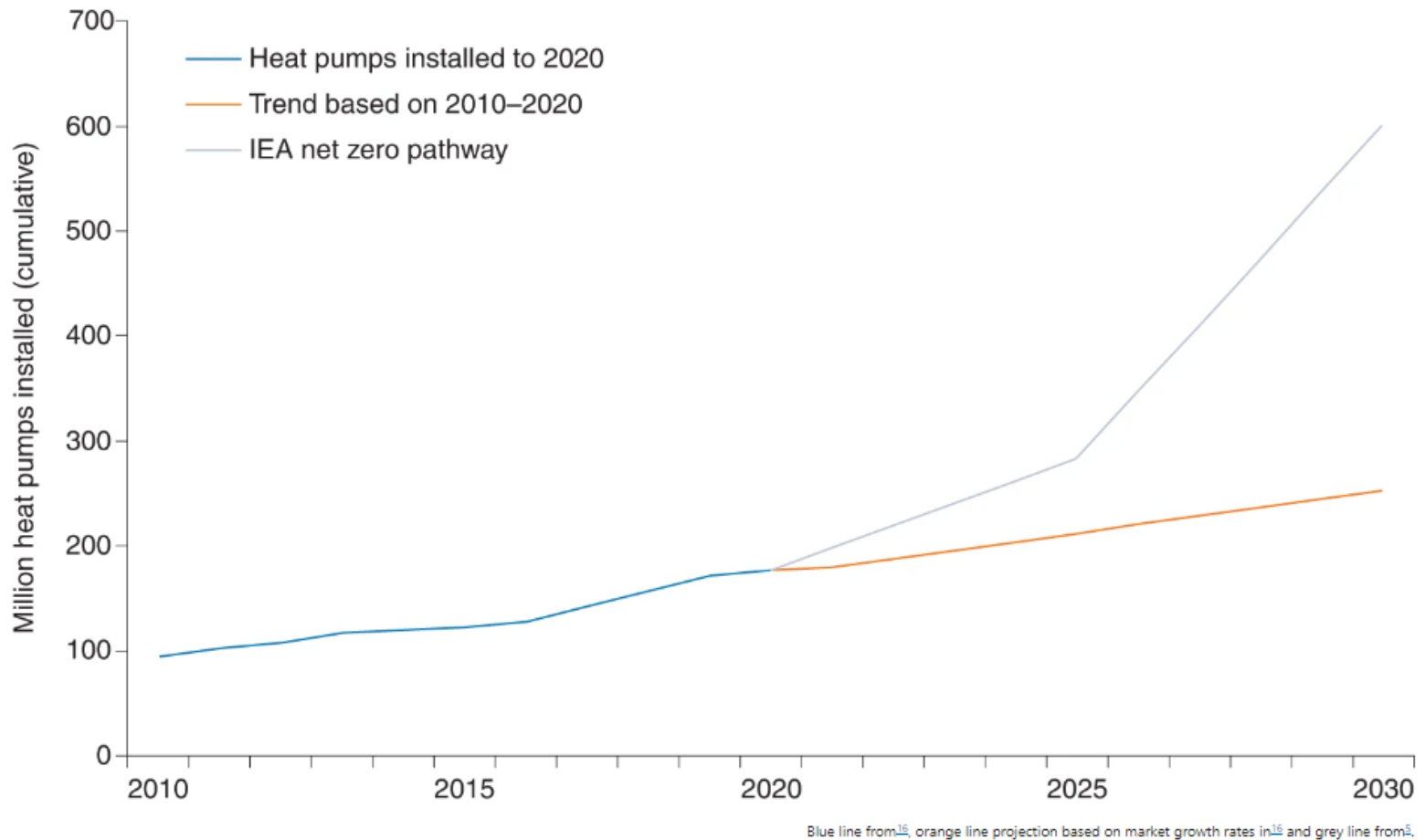
- < 50 TJ/km²
- 50 - 120 TJ/km²
- 120 - 300 TJ/km²
- > 300 TJ/km²



<https://euf.maps.arcgis.com/apps/webappviewer/index.html?id=8d51f3708ea54fb9b732ba0c9440913>

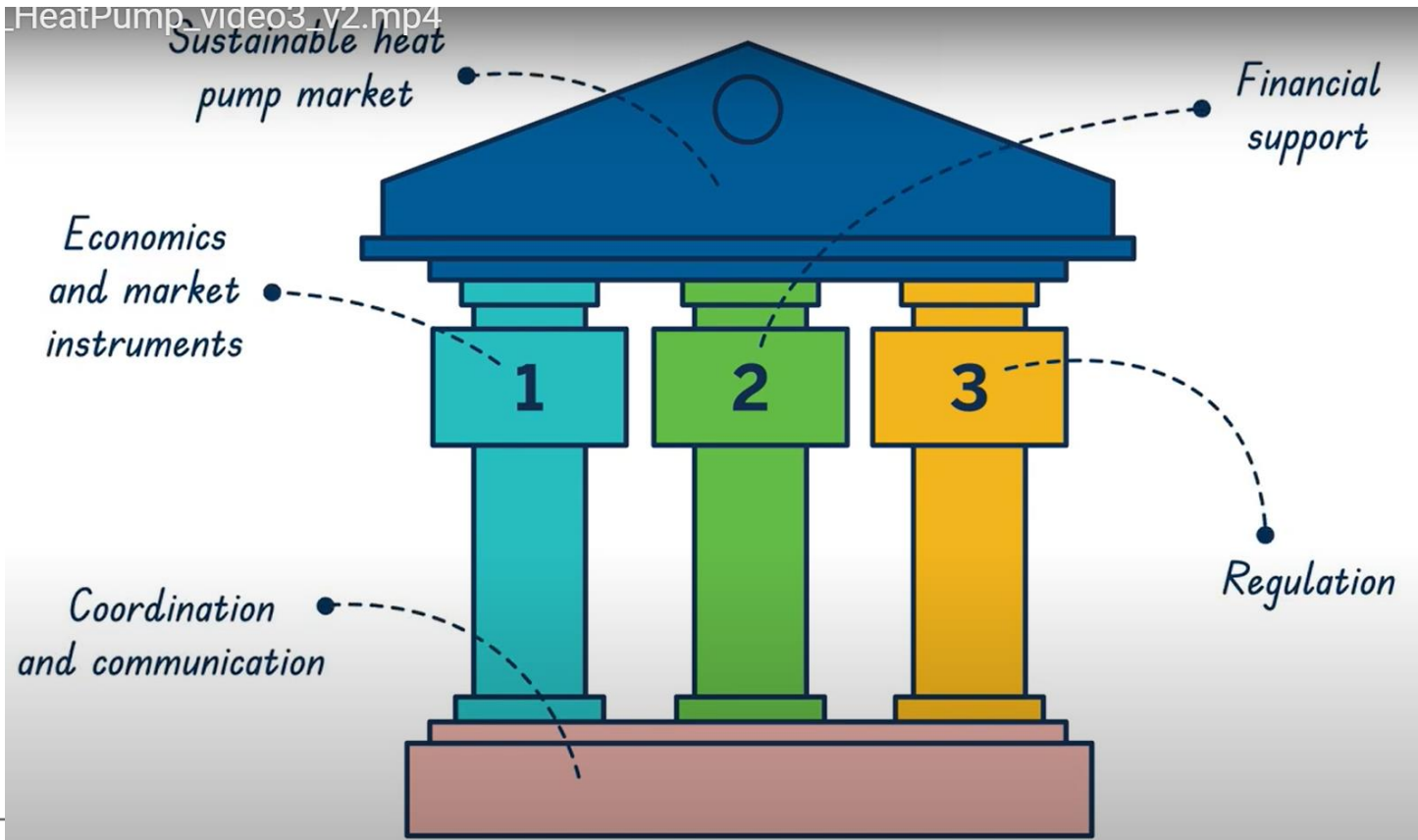
Fig. 1: Global historic heat pump sales and IEA net zero 2050 pathway.

From: [Heating up the global heat pump market](#)



Global stock of heat pumps through to 2020 (blue line) and growth to 2030 under a continuation of past trends (orange line), versus the number of units installed under the IEA's net-zero pathway (grey line).

Massive heat pump deployment requires coordinated policy packages



Heat pump policy toolkit, upcoming, RAP

Conclusions

- Heat decarbonisation policy requires multiple tools including governance reform, local planning, economic reform and regulation.
- We are still quite early in learning what works, particularly in the move away from gas.
- This all needs to be considered alongside building thermal (fabric) energy efficiency.