

Residential Heating

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Renewable Heating Technology



Delivering NetZero: A roadmap for the role of Heat Pumps



Presented by

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Communications Manager Residential Heating



Audio

Attendees will be in listen only mode to ensure the best experience for all



Questions

We welcome these & ask that your questions be submitted for the Q&A session

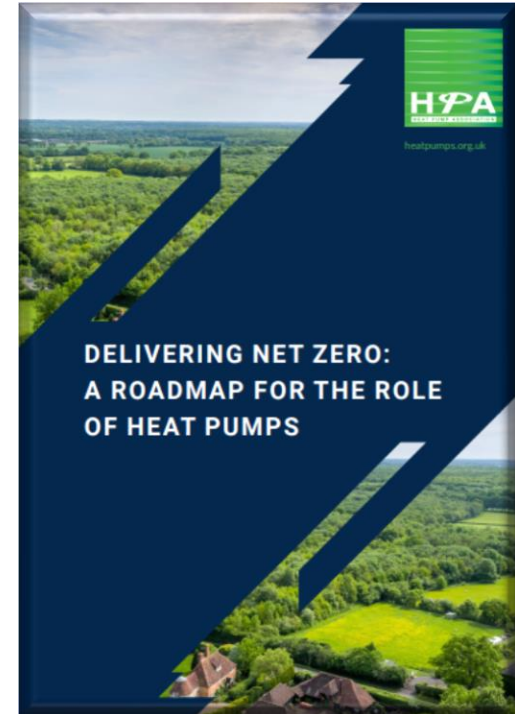


Recording

We are recording this session to enable access at your convenience

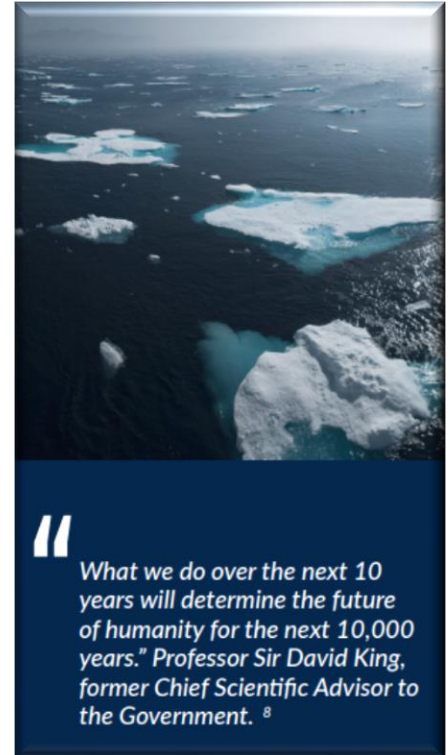
Agenda

- The Netzero challenge
- Roadmap for heat pump deployment
- Rising to the challenge
- Developing the installer base
- Customer Acceptability
- Policy Support & FHS
- Where are we now?
- Conclusions and Q&A



The Netzero challenge

- June 2019 NetZero passed into law
- 80% reduction from 1990 levels
- Immediate and widespread action
- The way we heat buildings must change



Roadmap for heat pump deployment

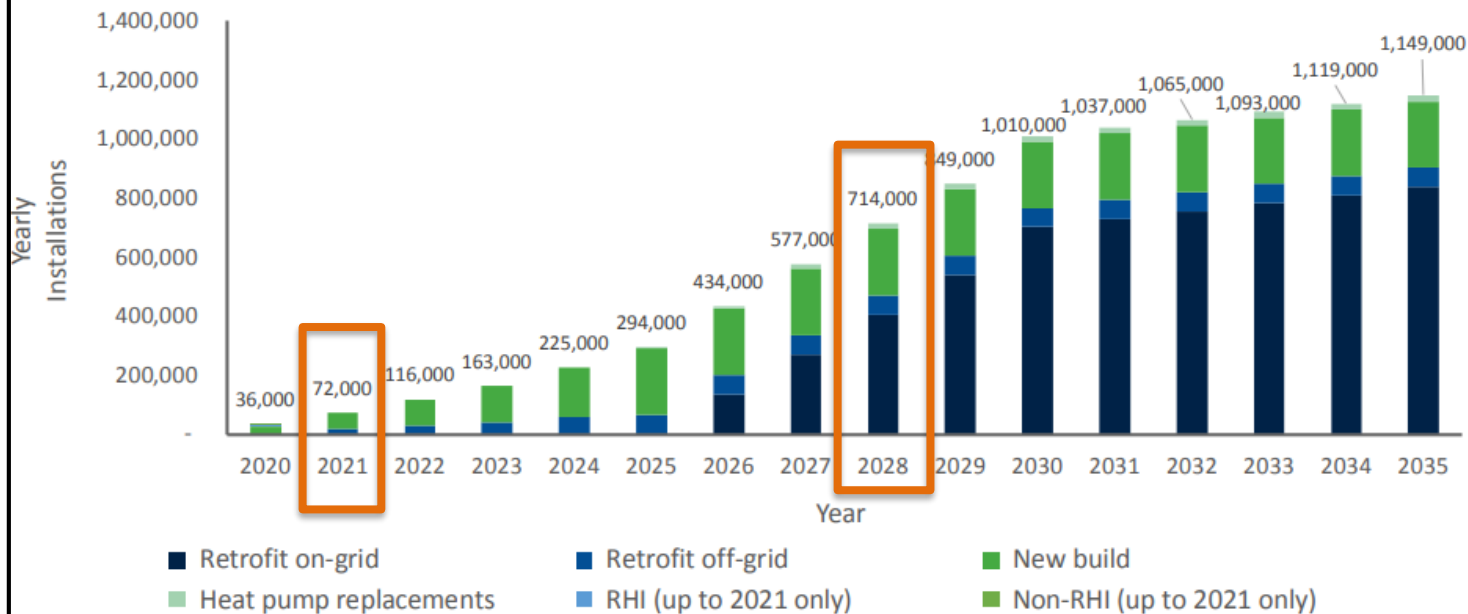
- 2020: 35000 heat pumps installed
- 600k installs annually by 2028!
- CCC say 19 million required by 2050
- Trajectory of change...



UK heat pump market set to double in 2021

- The Heat Pump Association has surveyed its members to estimate the supply of heat pumps in 2021.
- This has revealed that manufactures have placed orders with their supply chains to deliver a total of 67,000 units in 2021
- This equates to a nearly double the number of heat pumps on shelves and in warehouses ready for installers to meet the growing consumer demand

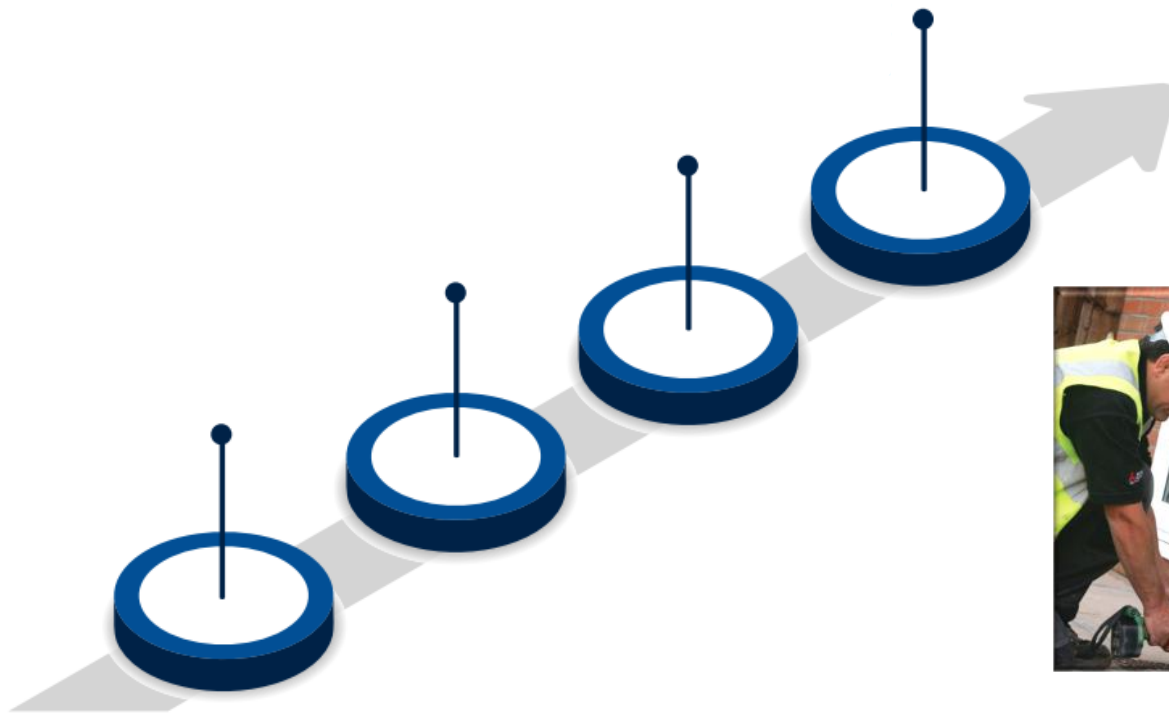
Heat Pump Installations per Year

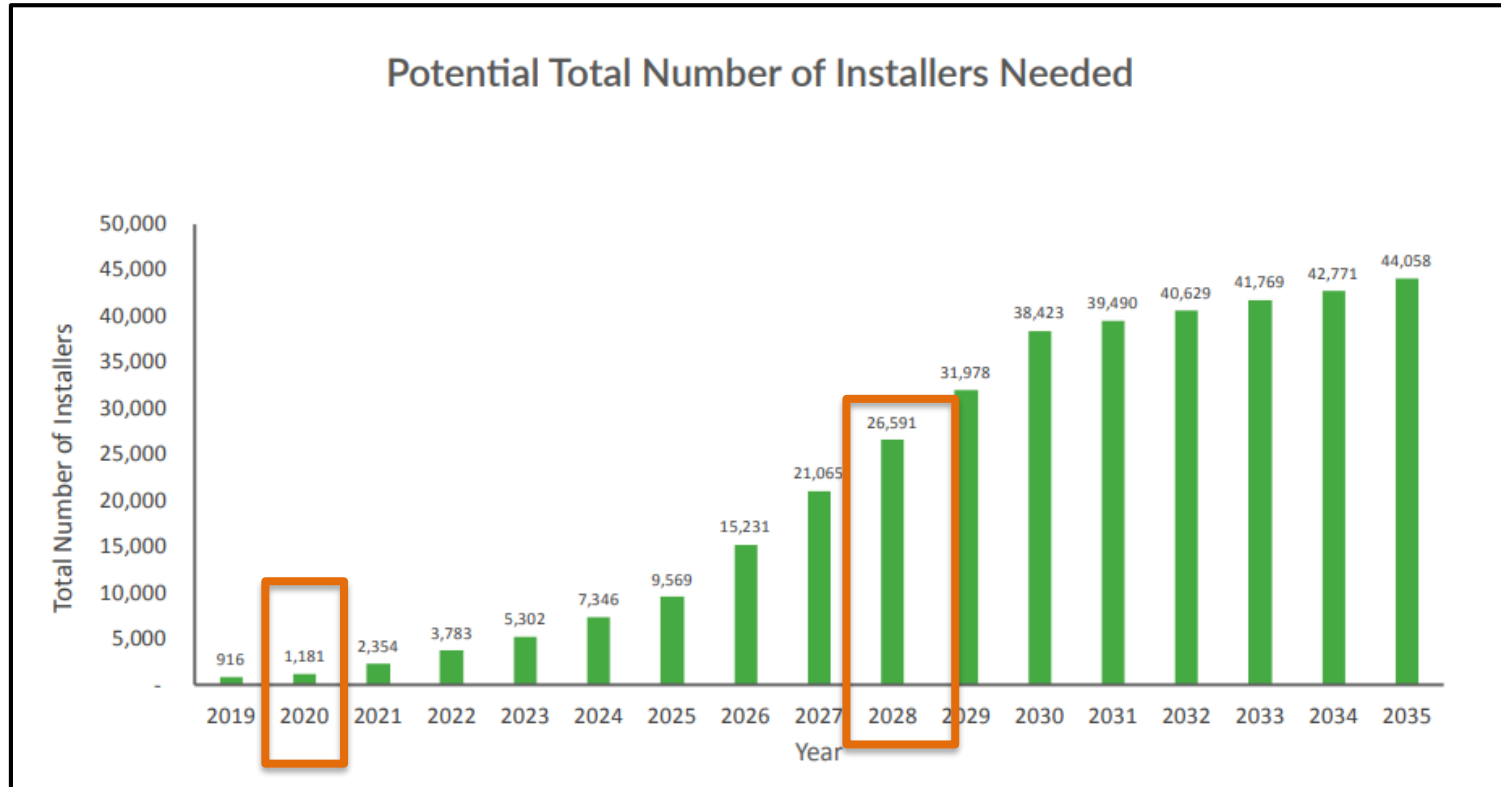


Rising to the challenge



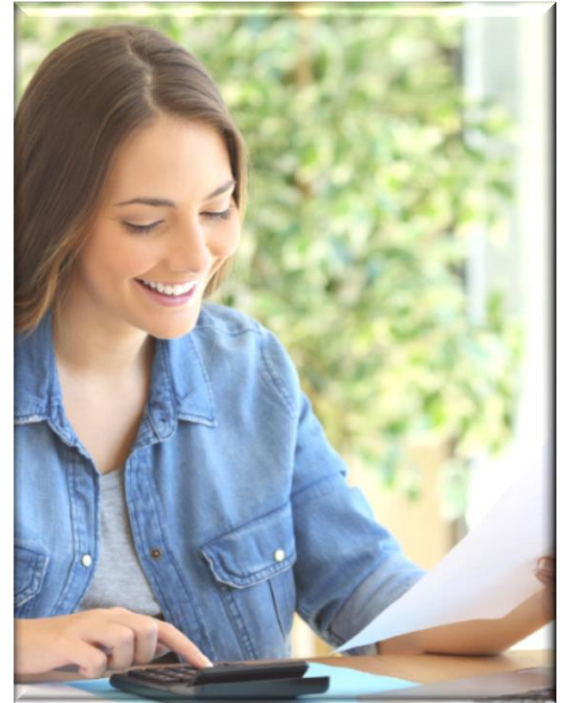
Rising to the challenge – Installer Base





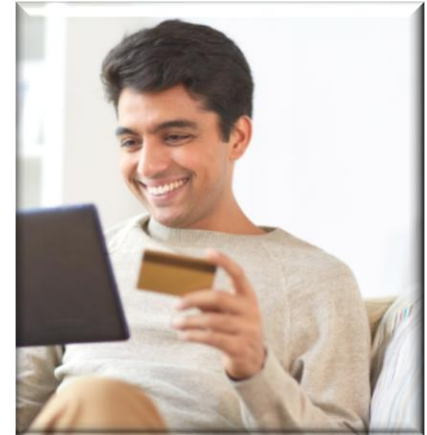
Rising to the challenge - Consumers

- Upfront Cost and Choice
- Operational and Running Costs
- Information Flow & Smart Controls
- Hybrid Heat Pumps



Upfront Cost and Choice

- Competitive market place
- Increasing demand
- Larger number of installers
- Faster deployment



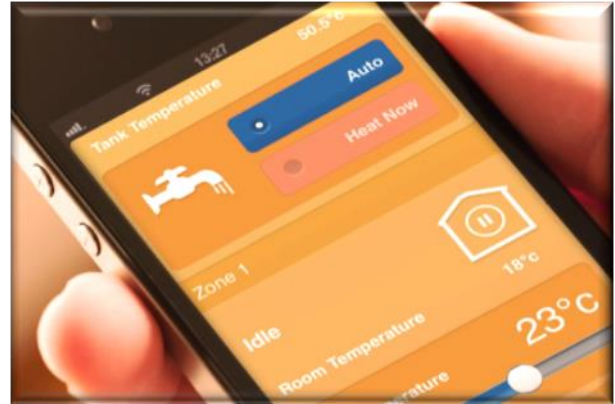
Operational and Running Costs

- New ways of consuming heat
- EVs and Heat pumps
 - Infrastructure planning
 - Acceptability of the electric economy
- Maintenance availability and costs will decrease



Information Flow & Smart Controls

- the Internet of Things (IoT)
- enhanced system monitoring
- Integrated smart systems
- Innovation and consumer acceptability



Hybrid Heat Pumps

- Although heat pumps can operate solely when installed correctly in any housing type, they can also be combined with the heating systems already in place.
- Integration between the two systems can vary to suit market and customer preferences
- A truly 'hybrid' system, which responds to market signals to deliver the cheapest heating type to consumers.

Policy Support

Achieving net zero by 2050:

“is only possible if clear, stable and well-designed policies to reduce emissions are introduced across the economy without delay”

Committee on Climate Change, Net Zero – The UK’s contribution to stopping global warming 2019.



“

[Net zero] is only possible if clear, stable and well-designed policies to reduce emissions further are introduced across the economy without delay.”
The Committee on Climate Change, Net Zero Report¹¹

Policy Support

POLICY SUPPORT SUMMARY	
Building Regulations affecting energy performance of homes built in England (known as Part L)	
Regulation of heat in existing homes via Part L of Building Regulations	
Taxation and Spending Policy	

POLL QUESTION

The Future Homes Standard

- 2019 spring statement introduced the FHS to the public
- By 2025 homes are to be future proofed with low carbon heating and world leading levels of energy efficiency
- A new home built to Future Homes Standard expected to be 75-80% lower CO2 than current regulations
- In order to start progress to this goal, it is proposed an uplift to Part L will be delivered in 2021



Everything we need is already here...

80%

Reduction in CO2



New Build case study

- Ecodan 4kW QUHZ ASHP was well-suited, it has been specifically designed with new-build standards of insulation and lower heating loads
- Exceptional noise-levels with a whisper-quiet 41.2 dB(A) at 1.5m from neighbouring properties, making it ideal for almost any new build scenario.
- In-built energy monitoring, using Mitsubishi's MELCloud, internet-based system, which allows for full control and monitoring from anywhere in the world.



What is already possible with ASHPs

A roadmap for energy efficiency standards

- Mass market / large developments now becoming common.
- Royal Borough of Greenwich gears up to meet its pledge of reaching net-zero carbon emissions by 2030
- Pressure is on to build more sustainable homes.
- Modular housing like homes
- energy and regeneration specialist, ENGIE to complete Greenwich's first zero-carbon homes using ASHPs



Conclusions

Some key takeaways from our session today

- The grid is decarbonising rapidly - electricity is the preferred fuel
- Heat pumps offer huge carbon savings immediately and are likely to be the favoured method of heating homes in the future
- Heat pumps offer one of the most cost effective ways to achieve compliance
- Low temperature heating is being planned to future-proof our homes.
- Strong evidence that quick wins are available from off gas and new build homes
- The combination of policies, installer base and consumer knowledge critical

POLL QUESTION

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How useful did you find this webinar?

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Q&A Session



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Thank You

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