

Heat Pump Landscape

Phil Hurley, Chair,
Heat Pump Association

Recent Announcements

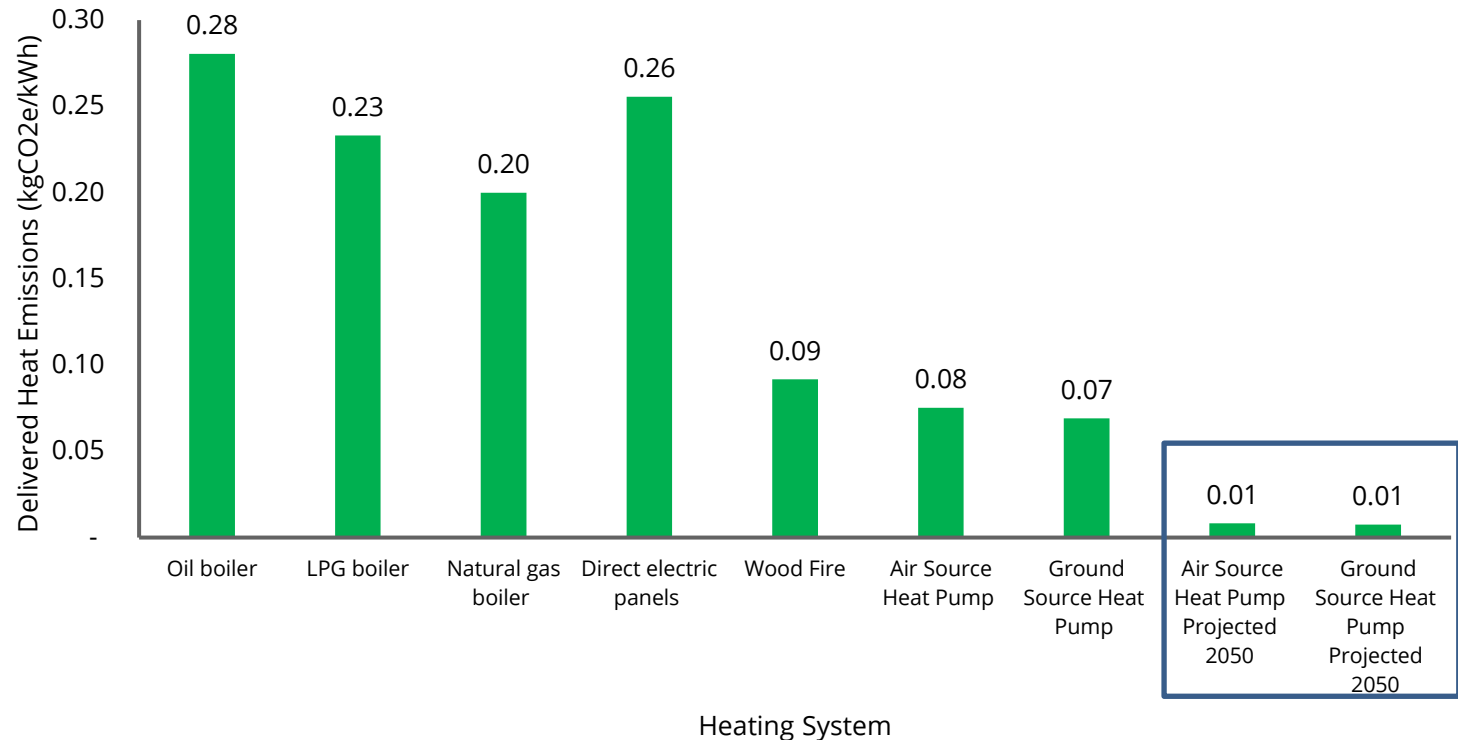


- 600,000 heat pumps per year by 2028 as part of [Ten Point Plan for Green Industrial Revolution](#)
- Heat and Buildings Strategy published – firm commitment to the use of HPs
- Building Regulation changes – “We anticipate that heat pumps will become the primary heating technology for new homes”



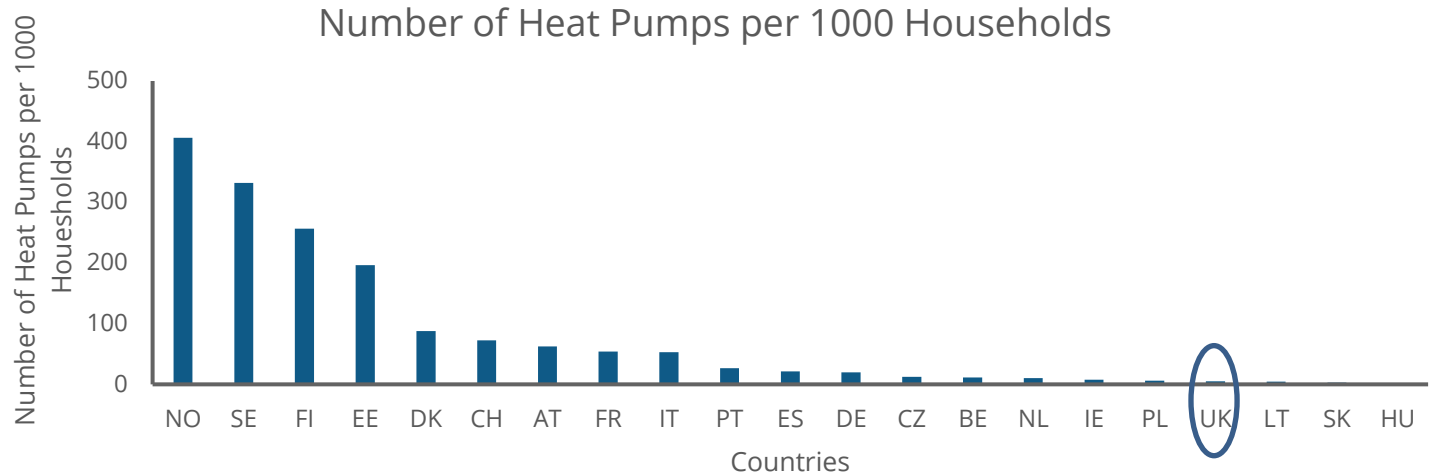
Why heat pumps?

The Carbon Savings from Heat Pumps

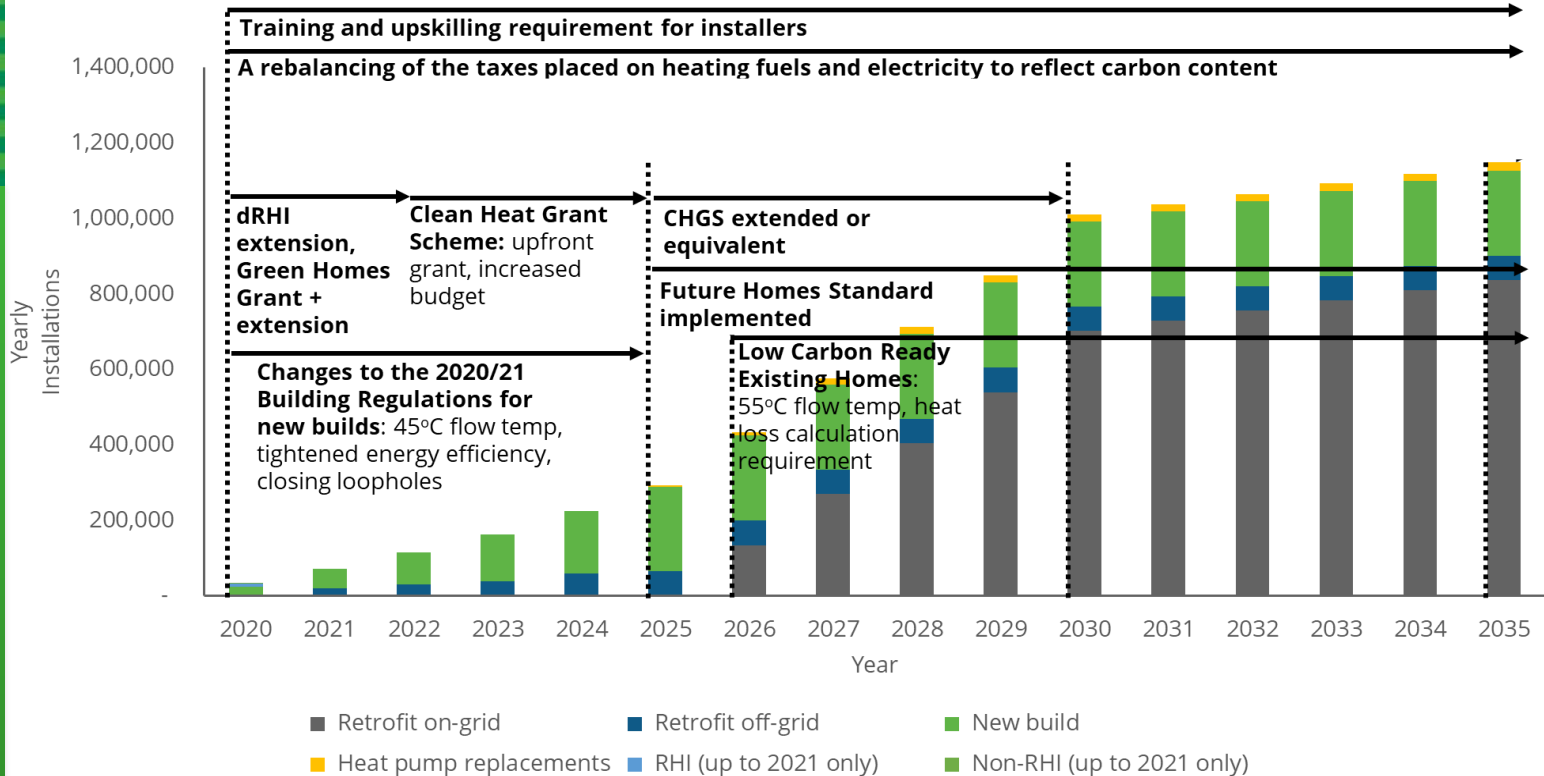


- Heat pumps offer huge carbon savings now around 65% versus a gas boiler.
- They also have the huge potential for further reductions as the grid continues to decarbonise. Projected savings vs. a gas boiler would be ~95% by 2050.

How does the UK compare to other countries?



- Heat pump deployment is widespread across many European countries with the UK lagging behind.
- Key lessons can be learned from these countries about increasing the deployment of heat pumps. Including tight carbon emission standards in new build homes.



- New build is essential for the growth of the heat pump market over the next few years, which looks like it will be driven by the Building Regulation changes.
- Following this, to meet the 600,000 units per year target deployment increase will need to come through retrofit of existing homes also.

Why new builds?

- [Research](#) by the CCC showed heat pumps can be cost-comparable to gas boilers in new build already.
- Avoids the need for costly-retrofit at a later date.
- Easier place to increase the deployment of low-carbon heat, compared to retrofit market, to help build the scale needed for net zero.



A report for the Committee on Climate Change

The costs and benefits of tighter standards for new buildings

Final report

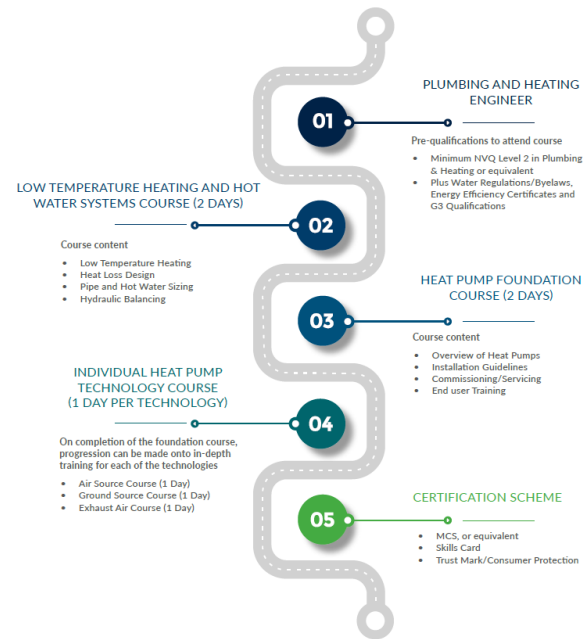
2019

 Currie & Brown

HPA Installer Training



- The number of installers will need to grow considerably if the ambition for growth in the heat pump market is going to be achieved.
- This is a key area of focus for the industry.
- The HPA has made significant progress in updating and improving the training provision for heat pump installers.



Installer skills

- HPA would like to see a 'low carbon skills card' which recognises qualifications across the low carbon heating sector.
- Also in the very early stages of working towards a Competent Persons Scheme for heat pump installers, focus initially here on new build. Shouldn't be too much bureaucracy.
- Assisting DLUHC with heat pump installation and commissioning guidance, likely to draw upon parts of MIS 3005.
- The HPA has also developed a commissioning sheet, with plans to roll this out for heat pump installs.

System Considerations Transitioning from Fossil Fuels to Low Carbon in New Build

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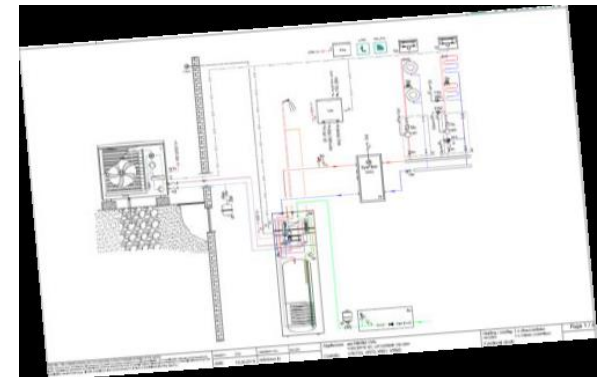
The UK Home

- Since most people can remember most new build have been built with a gas central heating.
- Our supply chain has been built around the supply of gas heating systems.
- In the last 18 months we started to see the shift towards low carbon heating and heat pumps.
- Building the skills sets across the value chain for modern low carbon homes



System approach

- Planning the right installation for your property types designing in success
- The heat pump as part of the property and key to the low carbon home
- Heating design points to keep in mind
 - Heat loss and hot water usage
 - External and internal pipe runs
 - Central heating pipe sizing
 - Placement of hot water cylinder
 - Consideration for sound
 - Designing for comfort



Outdoor unit placement



- Design consideration for placement of the outdoor unit.
 - Fit within the setting of the property types
 - part of the external design
- Simple points to consider
 - As close to the property as reasonable possible to minimise pipe runs
 - Ensuring condensation run off
 - Clearances –ensuring air flow and service access
 - Use of covers
 - As quiet as ...



Coordination of installation

- Training and up skilling of installers for successful system installation
- Developing installation teams considerations
 - Confident Gas installers
 - Installed to design
 - Electrical installation
 - Condensation
 - Controls not being set
 - Split responsibilities
- A warm home describes a welcoming home
- The consumer has to be in focus
 - Handing over to the family
 - How does my heating work
 - What should I expect
 - What are the benefits of this system
 - The heating system should be Invisibly brilliant

Questions

- HPA: www.heatpumps.org.uk