



## Net Zero by Industry Delivering desirable and affordable heat



**Every home, not just 80%, has a range of suitable low carbon heating solutions<sup>1</sup>.**

For most, this will be a form of heat pump technology, such as an air source, ground source or heat network system, but also hot water only heat pumps or storage solutions where flexibility is required.



**80% of households who have made the switch to a heat pump are as or more satisfied with their heat pump compared to their previous heating system<sup>2</sup>.**

Which was researched in the largest UK study of its kind, showing satisfaction levels between heat pump and gas boiler users in general are extremely similar.



**Calculations are showing that air source heat pumps can be cheaper to install and operate than a gas boiler<sup>3</sup>, which will improve as the cost of electricity is reviewed.**

Heat pumps aren't costing as much to install or operate as people expect, especially when combining quality installs with current grants funding and energy discounting tariffs.



**Even where a heat pump is not practical or desirable, homeowners still have a choice of alternative low carbon electric heating options.**

Such as electric resistance heating, which is 100% efficient<sup>4</sup>, and innovations in battery core and phase change technologies, to effectively utilise green electricity from UK renewables.

<sup>1</sup> Electrification of Heat - Interim Insights from Heat Pump Performance Data (ESC, 2023)

<sup>2</sup> Heat pumps get thumbs up from British owners across all property types in first major survey (Nesta, 2023)

<sup>3</sup> A heat pump might be a lot cheaper than you think: here's how (Which?, 2023)

<sup>4</sup> At the point of use.

## Electric heating is a viable and affordable Net Zero solution...

...But plagued by myths and obsolete thinking, such as heat pumps being ineffective in the UK's cold climate and electric heating being more expensive to run than fossil-fuel alternatives. We shouldn't be afraid to embrace technologies that are on the market but not the most common today.

If heat pumps were not able to operate in cold climate, Scandinavian and other Northern European countries, as well as US states like Alaska, would not have the highest per-capita penetration of all types of heat pumps in the world. In the UK, studies would also not show

that the overwhelming majority of heat pump owners were either satisfied or very satisfied with their heating system<sup>5</sup>.

When it comes to electric heating running costs, it is also time to renew our thinking. A recent Government sponsored study modelled the upfront and running costs of converting homes to electric heating and found that for some homes, electric resistance heating was the preferable option<sup>6</sup>. With heat pump grants and a more competitive tariff market place, and the cost of heat pumps are also taking consumers by a positive surprise.

### It's time for the UK to catch up with the global electric heating market.

The UK's infrastructure, installer network and regulations have been supporting high carbon technologies for more than 50 years. It is only natural that there is resistance to moving away from this – human nature is often resistant to change.

There must be research and awareness into what is holding the UK back from developing Net Zero aligned heat. From misunderstanding to purposefully damaging PR campaigns<sup>7</sup>, we must remove the unfounded level of doubt seen in the minds of prospective buyers and installers.

- **All homes** are compatible with some form of electric heating.
- **A range of electric heating options** are available to the UK - we just need to leverage them.
- **Desirability and cost effectiveness** are not discarded with electric heating, but we must tell consumers about the solutions available to them.

<sup>5</sup> Heat pumps: A user survey (Nesta, 2023)

<sup>6</sup> Cost-Optimal Domestic Electrification (BEIS, 2021)

<sup>7</sup> Revealed: Media Blitz Against Heat Pumps Funded by Gas Lobby Group (DeSmog, 2023)

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