



RISE

Retrofit information,
support & expertise

The Heat Pump Market and What's to Come with HPA UK

Case study

July 2026

Funded by:



Department for
Energy Security
& Net Zero

www.riseretrofit.org.uk



Contents

Contents	2
Introduction	3
Background	3
Heat Pump Association (HPA UK)	3
Understanding heat pumps	3
Improving energy efficiency and energy security	4
Heat pumps in social housing and large-scale retrofit	4
Challenging common misconceptions	5
Resident experience and living with heat pumps.....	5
Growing the market	6
Skills, policy and investment	6
Barriers and enablers	6
Looking ahead: HPA UK's vision	6

Introduction

As the UK works towards achieving net zero emissions, decarbonising the way homes are heated has become one of the country's greatest infrastructure and climate challenges. Domestic heating currently accounts for a significant proportion of the UK's carbon emissions, with millions of homes still relying on natural gas boilers. Heat pumps are increasingly recognised as one of the most effective technologies for delivering low-carbon heating. However, despite their long history and widespread use across Europe, misconceptions, affordability concerns, and limited public awareness continue to slow their uptake in the UK.

In this RISE podcast, Adam Armour-Florence speaks with **Laura Bishop, Chief Executive of the Heat Pump Association (HPA UK)**, and **Charlotte Lee, Director of Policy and External Affairs**, about the current state of the UK heat pump market, the opportunities and challenges facing widespread adoption, and what lies ahead as heat pumps become central to the UK's decarbonisation ambitions.

Readers that would like this document in a more accessible format should contact rise@turntown.co.uk.

Background

Heat Pump Association (HPA UK)

The **Heat Pump Association (HPA UK)** represents manufacturers, suppliers and organisations involved in the UK's heat pump industry. The association works closely with Government, industry partners and local authorities to promote heat pump deployment, develop technical standards, support workforce development, and shape policies that accelerate the transition to low-carbon heating.

The interview took place at a pivotal time for the sector. The publication of the Government's **Warm Homes Plan**, alongside continued investment in housing decarbonisation programmes and the forthcoming **Future Homes Standard**, signals an increasing policy focus on electrifying heat as part of the UK's net zero ambitions.

Understanding heat pumps

While heat pumps are often viewed as an emerging technology in the UK, Laura explains that this perception is misleading.

"Heat pumps were founded in the 1800s. The first heat pump as we know it was built and operated in the 1940s. This is not new."

Instead, she argues, the UK is simply catching up with countries such as Sweden and Denmark, where heat pumps have been used successfully for decades because of the absence of widespread natural gas networks.

In reality, heat pumps are a proven and familiar heating solution. Laura points out that most people already interact with the same technology in everyday life:

*"Most people have a heat pump in their house or in their building – **and it's a fridge.**"*

Rather than generating heat by burning fuel like a gas boiler, a heat pump transfers naturally occurring heat from the air, ground or water into a building through a refrigeration cycle. Because it moves heat instead of creating it through combustion, it can deliver significantly greater efficiency while producing far lower carbon emissions.

Homeowners do not therefore need to understand the complex thermodynamics involved to benefit from the technology. From a user's perspective, **a heat pump performs the same essential functions as a conventional boiler** – providing space heating and hot water – **but in a cleaner and more efficient way.**

Improving energy efficiency and energy security

Beyond reducing carbon emissions, Laura highlights that heat pumps offer broader benefits for both households and the UK's wider energy system.

Unlike gas boilers, heat pumps do not rely on burning fossil fuels, helping to improve local air quality while reducing greenhouse gas emissions. As renewable electricity generation continues to expand through wind and solar energy, homes heated by heat pumps will increasingly be powered by domestically generated clean electricity.

Laura also points to energy security as a growing consideration. Recent global energy price volatility has highlighted the UK's dependence on imported fossil fuels. By shifting towards electricity generated from domestic renewable sources, households become less exposed to international gas price fluctuations and geopolitical disruptions.

Efficiency is another significant advantage. While a typical gas boiler provides around **0.8 units** of useable heat for every 1 unit it consumes, a well performing heat pump can provide **3 or 4 units** of heat for every unit of electricity consumed.

Heat pumps in social housing and large-scale retrofit

The discussion also highlighted the growing role of heat pumps within social housing retrofit programmes.

Laura explained that local authorities and housing associations across the country are increasingly replacing gas boilers with air source heat pumps (ASHP) and ground source heat pumps (GSHP) through programmes such as the **Social Housing Decarbonisation Fund (SHDF)**. Examples now exist across London,

Manchester, Birmingham and many other UK cities, with heat pumps installed in individual homes, large housing estates and high-rise apartment blocks.

Charlotte also noted that previous government programmes have already supported the installation of **more than 5,000 heat pumps in social housing**, while the Warm Homes Plan is expected to continue supporting large-scale deployment through devolved funding for local authorities and housing providers.

Large-scale retrofit offers particular advantages because social landlords can improve many homes simultaneously, creating economies of scale that are often difficult to achieve in mixed-tenure neighbourhoods.

Challenging common misconceptions

Despite decades of successful deployment internationally, misconceptions remain one of the greatest barriers to wider adoption. Laura explained that many of the myths circulating today are the same ones she encountered ten years ago.

Among the most common misconceptions are beliefs that heat pumps cannot be installed in older homes, do not work with radiators, require perfect insulation, or fail during cold weather. Drawing on both professional knowledge and personal experience, Laura challenged these assumptions.

*"You can have a heat pump in a single-glazed, poorly insulated 1800s house...
There are heat pumps running in National Trust properties around the UK."*

She also highlighted that countries with much colder climates than the UK have relied on heat pumps for decades, demonstrating that cold weather is not a technical barrier.

The discussion emphasised that successful deployment depends less on the age of a building and more on ensuring systems are correctly designed, appropriately sized and professionally installed.

Resident experience and living with heat pumps

Customer satisfaction with heat pumps is consistently high once systems have been installed. According to data collected through the **Microgeneration Certification Scheme (MCS)**, approximately **95% of households** receiving a Boiler Upgrade Scheme-funded installation report being satisfied with their heat pump. Residents frequently describe heat pumps as producing a steadier and more consistent level of comfort compared with traditional gas boilers.

However, Charlotte noted that this also requires a change in mindset. Unlike gas boilers, which are typically switched on and off throughout the day, heat pumps perform most efficiently when maintaining a gentle, consistent indoor temperature over longer periods.

This reinforces the importance of resident education during retrofit projects. Clear guidance during handover can help residents understand how to operate their new systems effectively and maximise both comfort and efficiency.

Growing the market

Skills, policy and investment

The interview highlighted significant momentum within the UK heat pump market.

Charlotte explained that **2025 was a record year**, with **more than 125,000 heat pumps sold**, representing a **27% increase** on the previous year. Around **36% of units sold were manufactured in the UK**, supporting Government ambitions to strengthen domestic manufacturing.

Growth is also being supported by increasing numbers of qualified installers. Nearly **30,000 individuals** have completed recognised heat pump training courses since 2021, while **more than 2,200 MCS-certified installation businesses** now operate across the UK.

Both speakers suggested that the industry's **greatest challenge is no longer installer capacity but stimulating sufficient market** demand to utilise this growing workforce.

Barriers and enablers

Although the sector continues to expand, several barriers remain.

Both Laura and Charlotte identified the **high relative price of electricity compared with gas** as the single biggest obstacle to widespread adoption. While heat pumps are considerably more efficient than gas boilers, higher electricity prices can reduce the financial savings experienced by households.

Additional barriers include **upfront installation costs, persistent misconceptions**, and **ensuring access to qualified installers**.

At the same time, several important enablers are helping accelerate deployment:

- Government grants through the **Boiler Upgrade Scheme**
- The forthcoming **Future Homes Standard**
- Warm Homes funding programmes
- Time-of-use electricity tariffs
- Combining heat pumps with solar PV and battery storage
- New low-interest finance options for households

Together, these measures are helping reduce both installation costs and long-term running costs while making low-carbon heating increasingly accessible.

Looking ahead: HPA UK's vision

For HPA UK, success will ultimately be measured not simply by increasing heat pump sales, but by transforming the UK's entire heating system.

Charlotte explained that the long-term ambition is to reach a point where every boiler reaching the end of its life is replaced with a low-carbon heating system, with heat pumps expected to deliver the majority of those replacements.

The Government's revised ambition of **450,000 heat pump installations per year by 2030** represents an important milestone, but the sector will ultimately need to scale towards approximately **1.5 million installations annually** to match today's boiler replacement market.

For HPA UK, achieving that vision depends not only on technology, but on creating the right policy environment, supporting consumer confidence, improving electricity pricing, and continuing investment across the entire supply chain.

As Charlotte concluded, the technology already exists, the challenge now is unlocking demand and enabling the market to grow naturally.

Links to the resources referenced:

[HPA UK, the heat pump market and what's to come](#)

[Heat Pump Association \(HPA UK\)](#)



www.riseretrofit.org.uk



RISE – Retrofit information, support & expertise