Accelerating the Widescale Deployment of Heat Pumps in Commercial and Industrial Settings

Recommendations for Government and the Wider Sector

Heat Pump Association UK (HPA UK) has outlined several policy recommendations to accelerate the deployment of heat pumps in Commercial and Industrial settings. Heat pumps offer a proven low-carbon heating and cooling solution and are required to play a crucial role in reducing carbon emissions from buildings and industrial processes.

This document summarises actions that the heat pump sector can deliver for itself, together with the 'Keys Asks' for Government, and others involved in the supply chain. Prioritising these will give investors, the supply chain, and clients the confidence, clarity and certainty needed to deliver the required growth.

Actions for the Heat Pump Sector:

Government policy cannot drive this market alone; HPA UK stands ready to support the heat pump sector and the Government through raising client awareness and working on the following set of actions.

- Compile a range of **case studies to highlight technologies** that are available, the benefits to end users, and what can be achieved through the installation of heat pumps in a range of commercial, industrial and public sector settings.
- Enhance the **data granularity of heat pumps above 20kW** within the HPA UK Sales Data Programme.
- Demonstrate the **value of the heat pumps used in the commercial, industrial and public sectors** for the UK economy.
- Promote the **variety of job roles and training pathways** associated with heat pump deployment in commercial, industrial and public sectors and the value of those roles, working in collaboration with allies interested in workforce development.
- Continue to **work with professional bodies to develop and publish further guidance on standard design processes** for those delivering commercial and industrial design, commissioning, and maintenance services.
- Collate and **disseminate international learnings** and developments to Government and the sector.
- Consider where **early market development** might be achieved, pending delivery from the longer-term policy recommendations noted below.
- Work with UK manufacturers and others in the supply chain to **onshore UK testing facilities for high capacity heat pumps** used in commercial and industrial sectors, to reduce certification costs, accelerate times to market, and to improve potential export opportunities.

Actions for the others in the supply chain:

DNOs:

- Improve the **response times for connection requests** and speed-up connection times for heat pump installations. Agree, publish and deliver **service level agreements** for responding to design and connection requests for commercial heat pumps.
- Support the development of UK **commercial and industrial heat pump testing facilities** by contributing to electrical testing requirements which, when met, will result in easier grid connections.

Ofgem:

- Consider **socialising the costs to update the network** and anticipatory investment in the grid to support the transition to electrified heat.

Utilities:

- Develop and support **long-term power purchase agreements**. Assess support opportunities for load shifting and time of use tariffs.

Commercial Buildings (Including Public Sector)

For the purpose of this document, commercial includes all types of non-domestic buildings used for business purposes and income-generating activities. These also include public sector buildings.

As of 2024, building sector direct emissions were responsible for approximately 21% of the UK's territorial greenhouse gas emissions. Of these building emissions, around **27% are produced from the use of fossil fuels for space heating and hot water in commercial and public sector buildings**[1]. Decarbonising commercial buildings presents an opportunity to significantly boost the UK's investment in large-scale heat pump manufacturing capacity.

The Climate Change Committee, in Carbon Budget 7, have suggested that heat pumps will be the dominant technology within non-domestic buildings, **with 88% of non-residential heating being delivered by low carbon sources by 2040**, and the sector almost completely decarbonising through rapid electrification by 2050[2]. They have additionally suggested that the public sector lead the way in decarbonising heat to build confidence in the transition.

Recommendations for Government:

Regulation and Policy

Further regulatory change and policy development is needed to unlock many of the barriers to the widescale deployment of heat pumps in commercial and public sector settings across the UK.

- Publish a specific '**Plan for the Electrification of Non-Domestic Heat'** to provide clarity on the Government's ambition and actions to decarbonise this sector.
- Set up a '**Non-domestic Electrification of Heat Taskforce**'.
- Work with the Sector to agree a **trade deal** to boost productivity, innovation, skills, and employment.
- Review and amend **Permitted Development Rights** for non-domestic heat pumps to reduce planning barriers and to align PDR for commercial buildings more closely with dwellings.
- Provide certainty on the outcomes of the **GB F-Gas Phasedown consultation** as soon as practicable.
- Publish a response to the **non-domestic Private Rented Sector minimum energy efficiency standards**: EPC B implementation consultation.
- Explicitly recognise the **transitional value of hybrid systems** where heat pump technologies can be used, such as in pre-heat scenarios.

Awareness

Clarity is needed to provide clients confidence in their decision making and encourage take-up of clean heat in the sector.

- Consider the Government's role in producing awareness-related **communications for non-domestic end users**, similar to existing options for domestic consumers.
- Publish a **review of the Public Sector Decarbonisation Scheme** including post-installation reporting to share learnings with the sector and build confidence in the technology among end users/

[1] https://assets.publishing.service.gov.uk/media/696f8a3ec0f4afaa9536a0c4/warm-homes-plan-standard-print.pdf (page 20)
[2] https://www.theccc.org.uk/wp-content/uploadsagr/2025/02/The-Seventh-Carbon-Budget.pdf

Financial Incentives and Support:

More must be done to reduce the upfront and running cost of heat pumps to make the lowest carbon heat the lowest cost heat and to incentivise end users to transition away from fossil fuels.

- Reduce the **high cost of electricity relative to fossil fuels for all non-domestic energy users**.
- Enhance **incentives for commercial projects** which maximise the ability to **self-generate and store electricity**.
- Provide **urgent clarity on the continued support and funding for the public sector** to decarbonise, following the closure of the Public Sector Decarbonisation Scheme in June 2025.
- Develop **guidance on proposed business models and partnership mechanisms** to unlock private investment into heat pumps.
- Consider the role of **Government backed loans for low carbon heating solutions,** developing lower cost finance mechanisms for clean heat.
- Consider approaches to i**ncentivise end users to participate in non-domestic flexibility** and shift their electricity usage to help balance the power grid's supply and demand, including encouraging thermal storage.
- Incentivise **datacentres to find opportunities to utilise waste heat**.
- Incentivise the **use of waste heat and cooling energy** in the future of our energy system, consideration of carbon tax on waste heat, and potentially consider a form of obligation on generators of waste heat.

Industrial

The industrial sector includes major emitting industries such as steel, cement, chemicals, glass and ceramics, paper, and food and drink.

Industry is currently the third highest carbon emitting sector in the UK economy, **accounting for 12% of UK emissions in 2023**[3]. Decarbonising industry presents an opportunity to significantly boost the UK's investment in large scale heat pump manufacturing capacity.

The Climate Change Committee suggest that electrification will be the predominant route to decarbonising most industrial emissions, with Carbon Budget 7 assuming that **by 2030 advanced heat pumps can replace heat output of combined heat and power plants**[4].

Industrial heat pumps typically operate at temperatures up to 165°C, with some specialist technologies able to reach temperatures up to 200°C, including steam generation. These offer options for fully or partially decarbonising a significant proportion of industrial processes. When coupled to on-site electricity generation and storage (both electrical and thermal), industrial heat pumps sometimes offer a cost-effective option when compared to other sources of heat. However, this is not yet the reality in most instances because of the relative costs of fossil fuels and electricity.

[3] https://www.theccc.org.uk/wp-content/uploads/2025/02/The-Seventh-Carbon-Budget.pdf
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Recommendations for Government:

Regulation and Policy

Further regulatory change and promised policy development is needed to remove many of the barriers to the widescale deployment of heat pumps in industrial settings UK wide.

- Publish an **Industrial Decarbonisation Strategy** to provide clarity to the sector, building upon the inclusion of heat pump technologies in the Clean Energy Industries Sector Plan[5], part of the UK's Modern Industrial Strategy[5].
- Publish a **national map of waste heat sources** (power, kW and temperature, °C).
- Assess opportunities for **industrial heat pumps to address air quality concerns** in target areas.
- Consider **identifying locations where fast track grid connections** are available for those looking to move to electrified heat for processing, working with Ofgem, NESO and network companies to proactively plan for industrial decarbonisation.
- Explicitly **recognise the transitional value of hybrid systems** where heat pump technologies can be used, such as in pre-heat scenarios.

Awareness

Clarity is needed to provide clients confidence in their decision making and encourage take-up of clean heat in the sector.

- Transfer learnings from the Public Sector Decarbonisation Scheme design to consider an **Industrial Heat Pump Demonstrator programme** to evidence performance guarantees and to collect data on payback timescales.

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- Ensure the **successful delivery of the British Industrial Competitiveness Scheme** to reduce electricity costs and to avoid unintended consequences that might be a barrier to heat pump deployment.
- Work to introduce a wider, but **targeted electricity discount** for industrial energy users looking to electrify.
- Clarify and expand eligibility so that the whole heat pump system qualifies for capital allowances and investment relief, introducing **Enhanced Capital Allowances for low carbon heating**.
- Consider incentives such as **reduced network charges** for industrial sites utilising heat pump systems flexibly.
- Develop **guidance on proposed business models and partnership mechanisms** to unlock private investment into heat pump technologies and encourage industrial electrification.
- Investigate potential **mechanisms to avoid generation curtailment payments** by making lower cost electricity available to operators of large heat pump systems.

[5] https://www.gov.uk/government/publications/clean-energy-industries-sector-plan
[6] https://www.gov.uk/government/collections/the-uks-modern-industrial-strategy-2025