ambient MAY 2025 #004

Electrified Heat Transition Tracker

About The Electrified Heat Transition Tracker

Limited data availability is holding back progress in the electrified heat transition. In line with our mission to accelerate the adoption of electrified heating and cooling technologies, Ambient releases the Electrified Heat Transition Tracker - a monthly update on the heat sector. By collating key data and providing insights, we aim to support the sector and policymakers to drive up adoption.

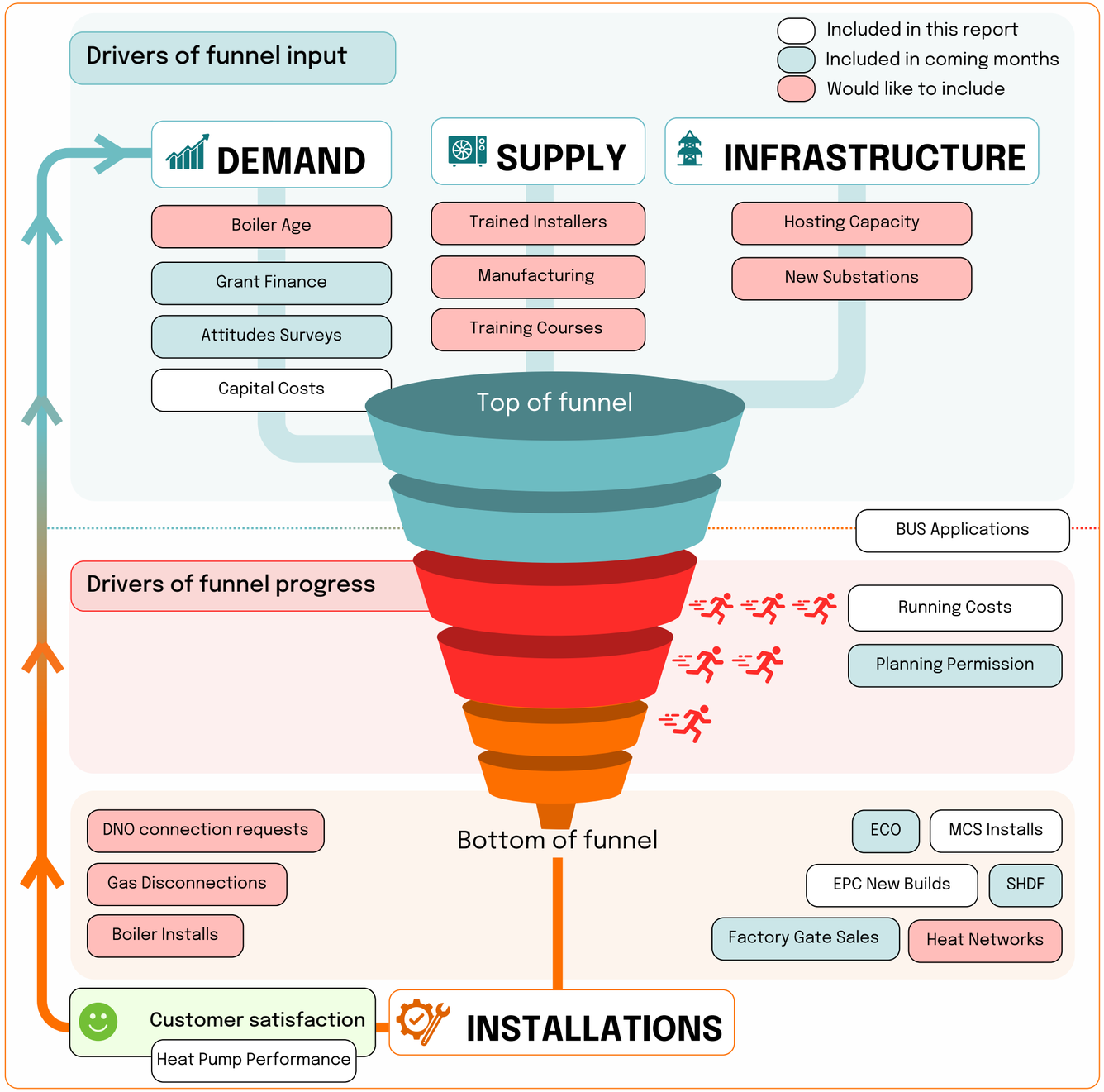
Heat Transition Model

Targeted policy intervention is the single most powerful lever to accelerate the electrified heat transition.

By tracking the evolution of drivers of adoption, Ambient's framework as shown in the visual enables barriers to be identified, so that they can be addressed with targeted interventions.

It also enables us to understand how interventions are performing so that their potential can be maximised.

Additional datasets included this month:
Heat pump running costs, EPC regional breakdown



March 2025: At a glance

MCS HEAT PUMP INSTALLATIONS

5,280

FEB 25 ▲ +7%

MAR 24 ▲ +21%

HEAT PUMP MONITOR AVERAGE COP*

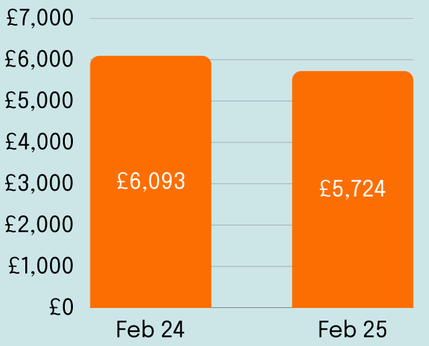
3.89

(389% EFFICIENCY)

*COEFFICIENT OF PERFORMANCE, A MEASURE OF EFFICIENCY FOR HEATING SYSTEMS

AVG MCS HEAT PUMP INSTALLATION COST (£)

CPIH-ADJUSTED, WITH BUS



NEW BUILD EPC WITH HEAT PUMPS

23%

FEB 25 ▲ +5%

MAR 24 ▲ +109%

BUS VOUCHER APPLICATIONS

4,028

FEB 25 ▲ +18%

MAR 24 ▲ +88%

BUS VOUCHER REDEMPTIONS

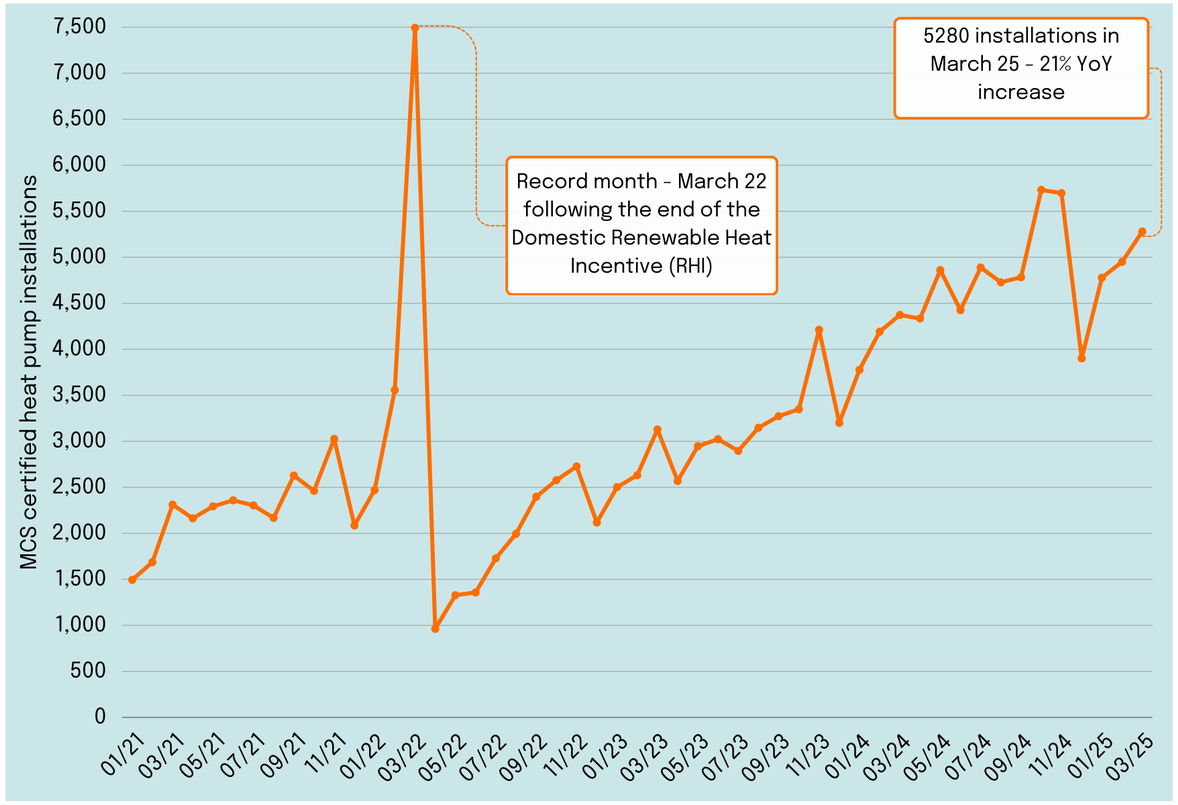
2,477

FEB 25 ▲ +6%

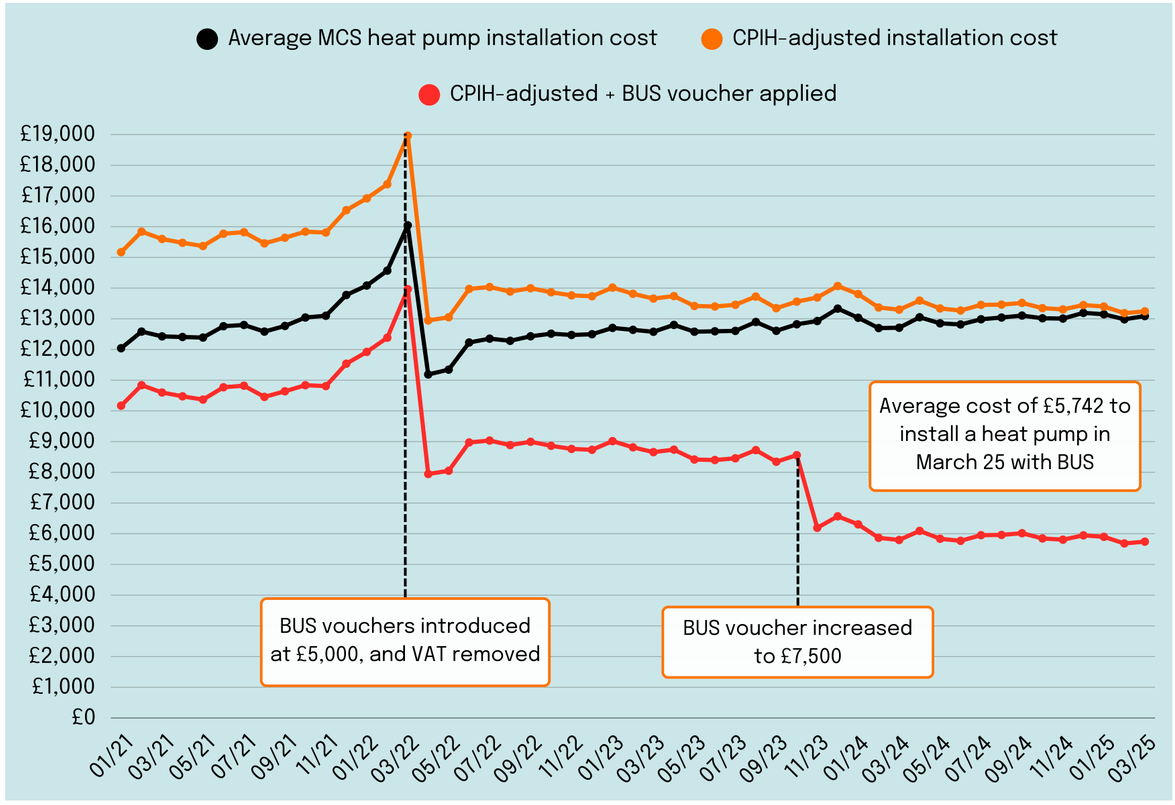
MAR 24 ▲ +67%

MCS certified heat pump installations and CPIH-adjusted installation cost

Heat pumps installations continue to climb in second-best March ever



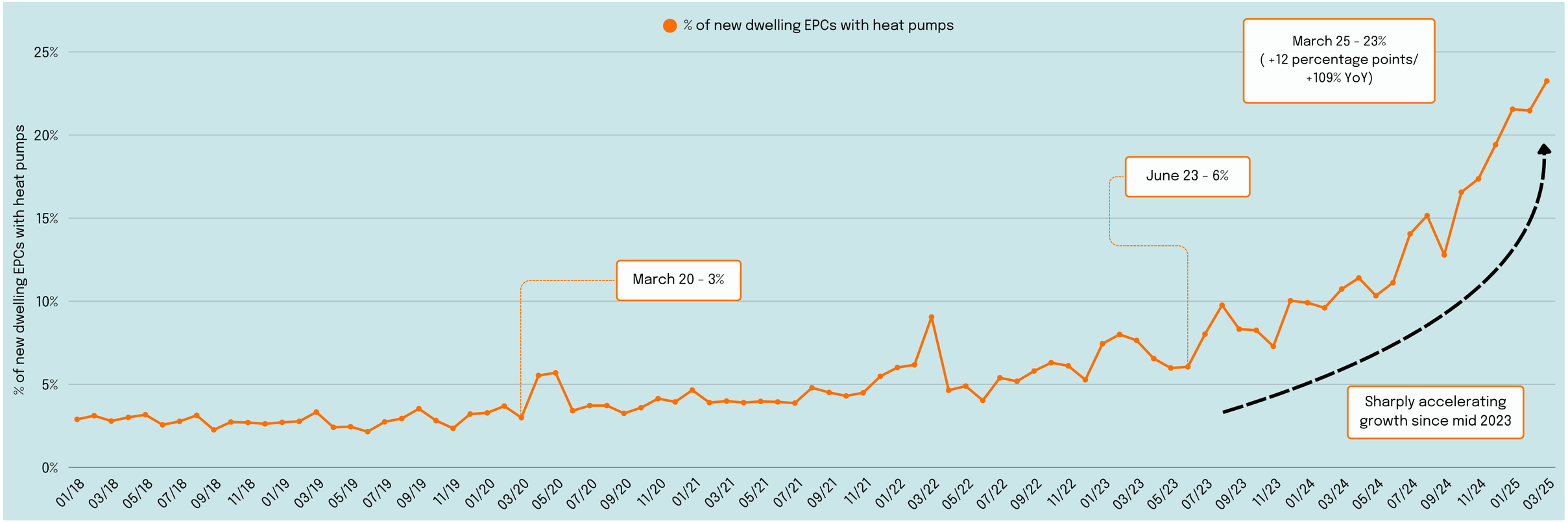
Government subsidies effectively boosting the market as it develops*



*New methodology using CPIH index and MCS heat pump installation costs

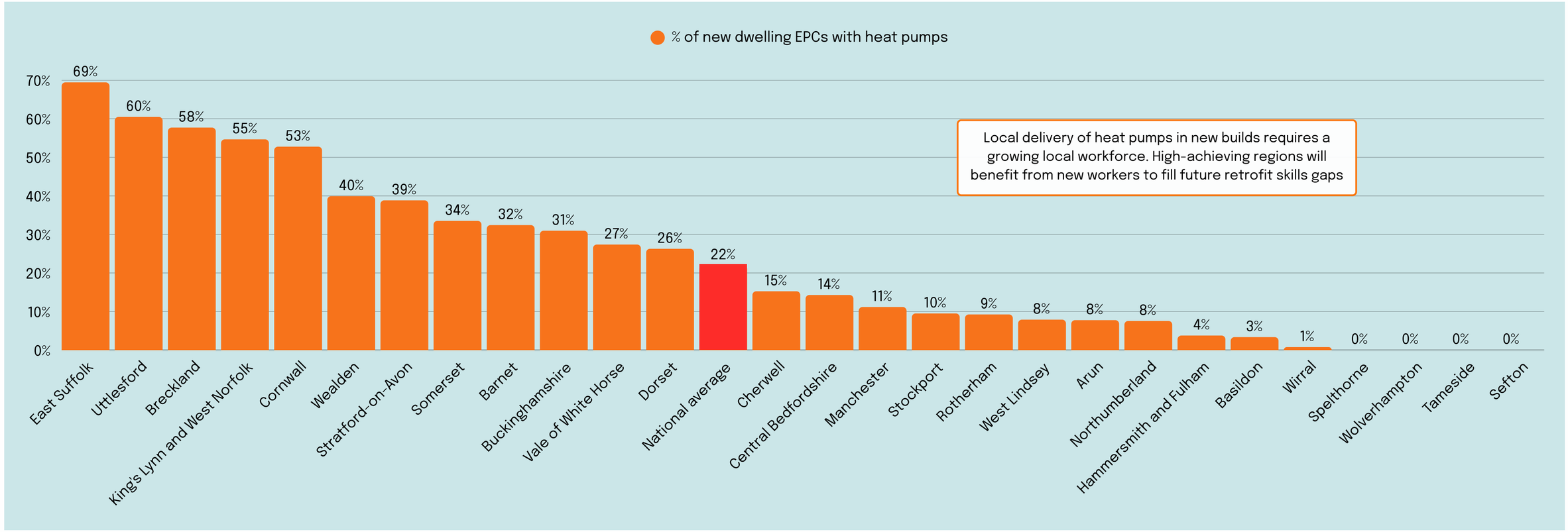
EPC open data: new dwellings

Almost a quarter of new builds had heat pumps installed in March[6]



EPC open data: new dwellings

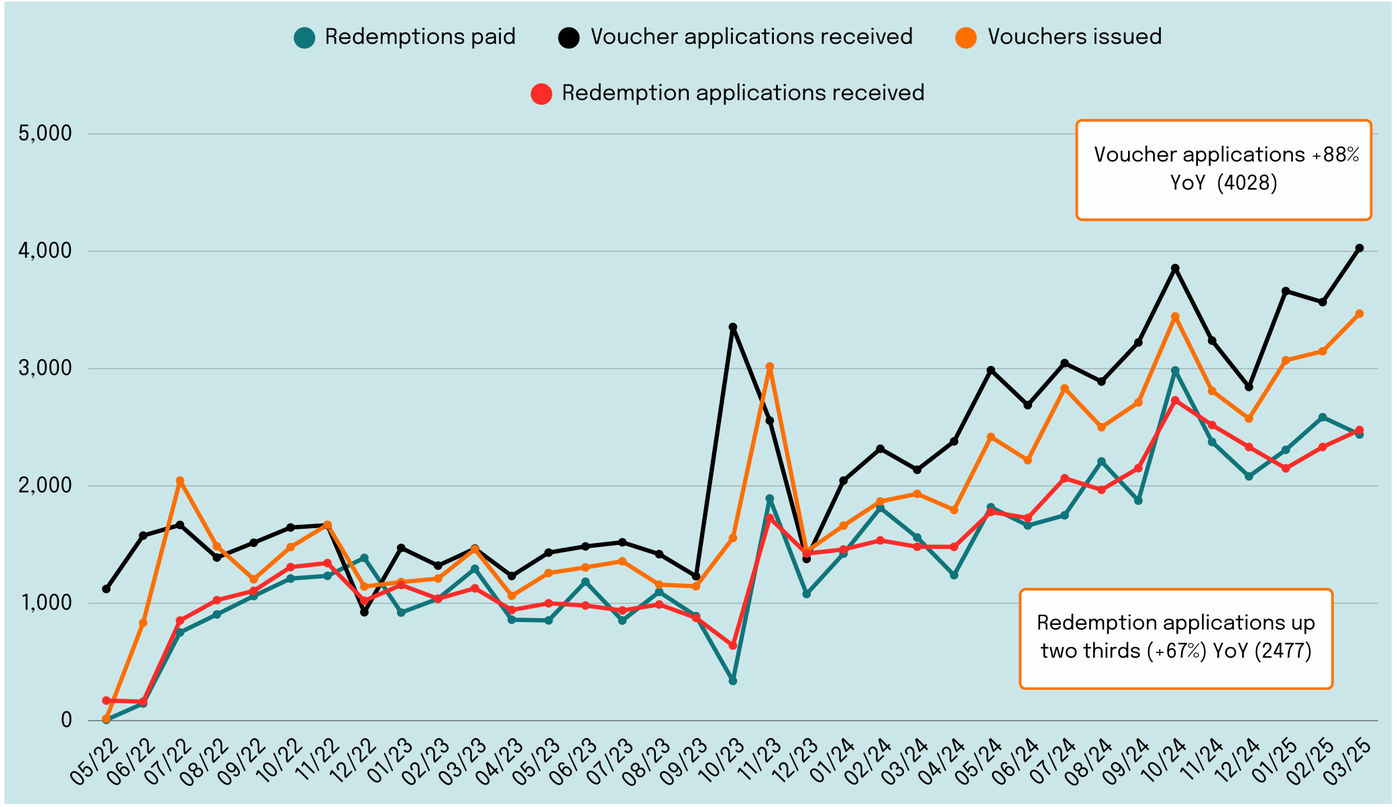
East of England flies high in new build heat pump leaderboard*



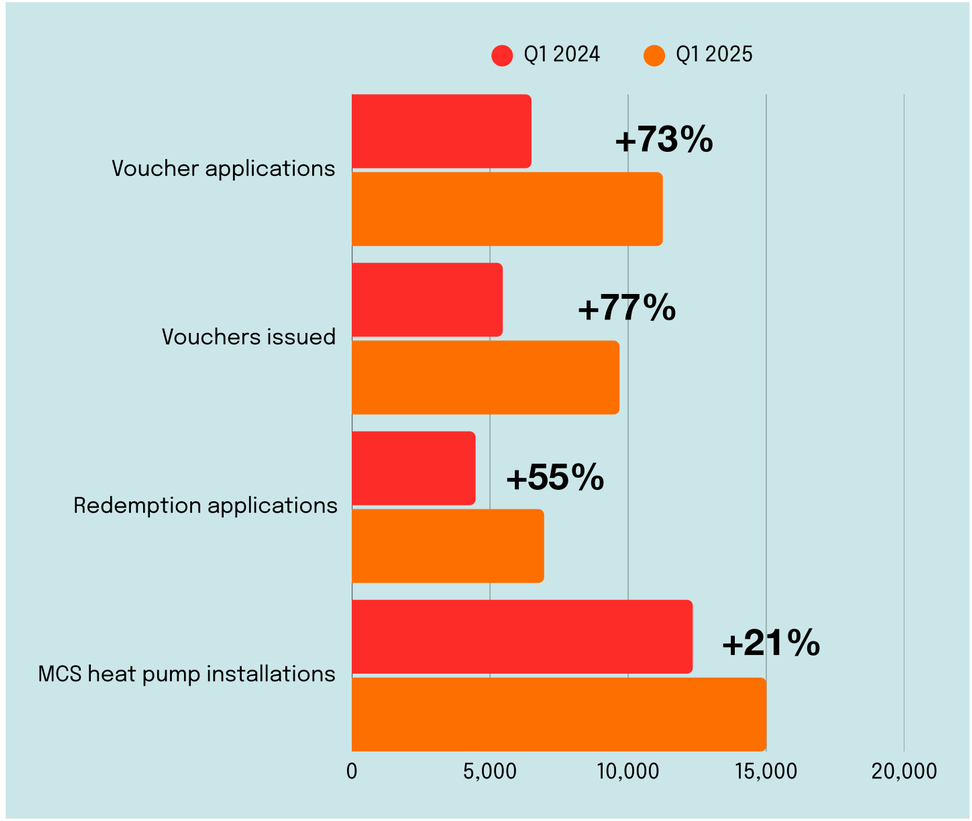
*Only local authority areas with +100 new builds completed in 2025 are included.

Boiler Upgrade Scheme (BUS)

New record for monthly voucher applications and vouchers issued

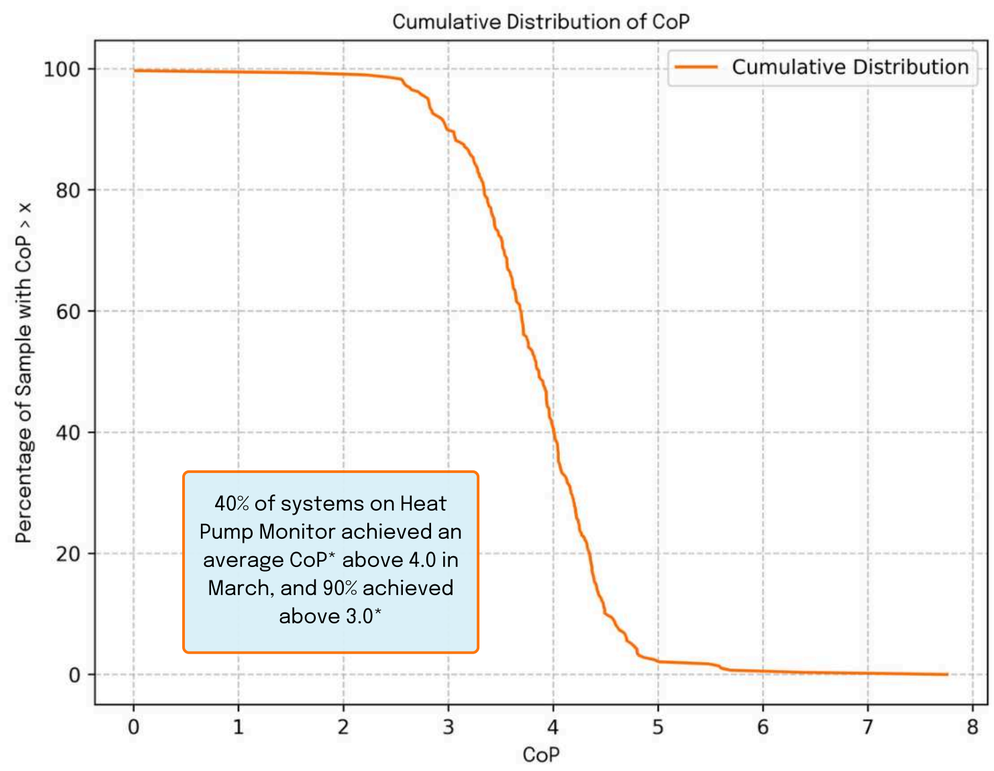


A larger share of heat pump installations are using BUS

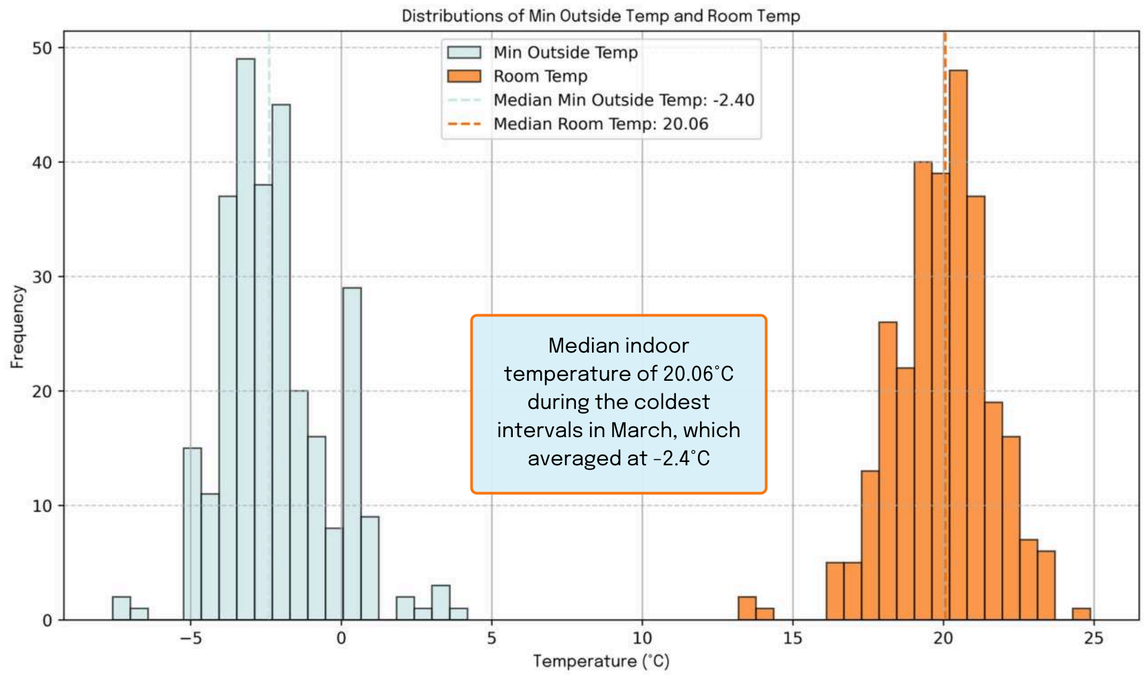


Heat Pump Monitor: Performance data (March 2025)

High quality heat pump installations are achievable



Heat pumps keeping people warm despite sub zero outside temperatures



*A COP of 3.0 is equal to 300% efficiency, and a COP of 4.0 is equal to 400% efficiency

Ambient cost saving calculations x Heat Pump Monitor Performance data

Our new Cost Calculator tool, developed by Ambient and Jan Rosenow, allows users to input basic household data to receive estimated savings they could make by switching to a heat pump: https://www.projectambient.org/ambient-cost-calculator.

Heat pump efficiency (SCOP)	Estimated max annual savings from switching from gas to a heat pump*			
	Standard Tariff (Price Cap)	Octopus Cosy	OVO Heat Pump Plus	Scottish Power Heat Pump Saver
3	£44	£265	£428	£460
4	£260	£426	£500+	£500+

What do the performance data and cost calculator results tell us?

- A well-installed and well-run heat pump can unlock significant savings, and can keep the household warm.
- The Heat Pump Monitor data shows us that this is possible - 90% of sampled heat pumps are likely to be cheaper to run than gas.
- Even at the lower SCOP of 3, savings upwards of £400 are possible with smart tariff use.
- However, the current range and accessibility of such tariffs remain limited. By improving both availability and public understanding of these options, a greater number of consumers could benefit from substantial savings.

*Assumptions:
Annual gas usage = 11,500 kwh
Gas supply discontinued, standing charge removed
Gas boiler efficiency = 85%

Tariff savings may vary based on how the tariff is used
Standard tariff = energy price cap
Cooking = 2% of annual gas usage

Effective tariff use + good heat pump performance = £500+ annual savings

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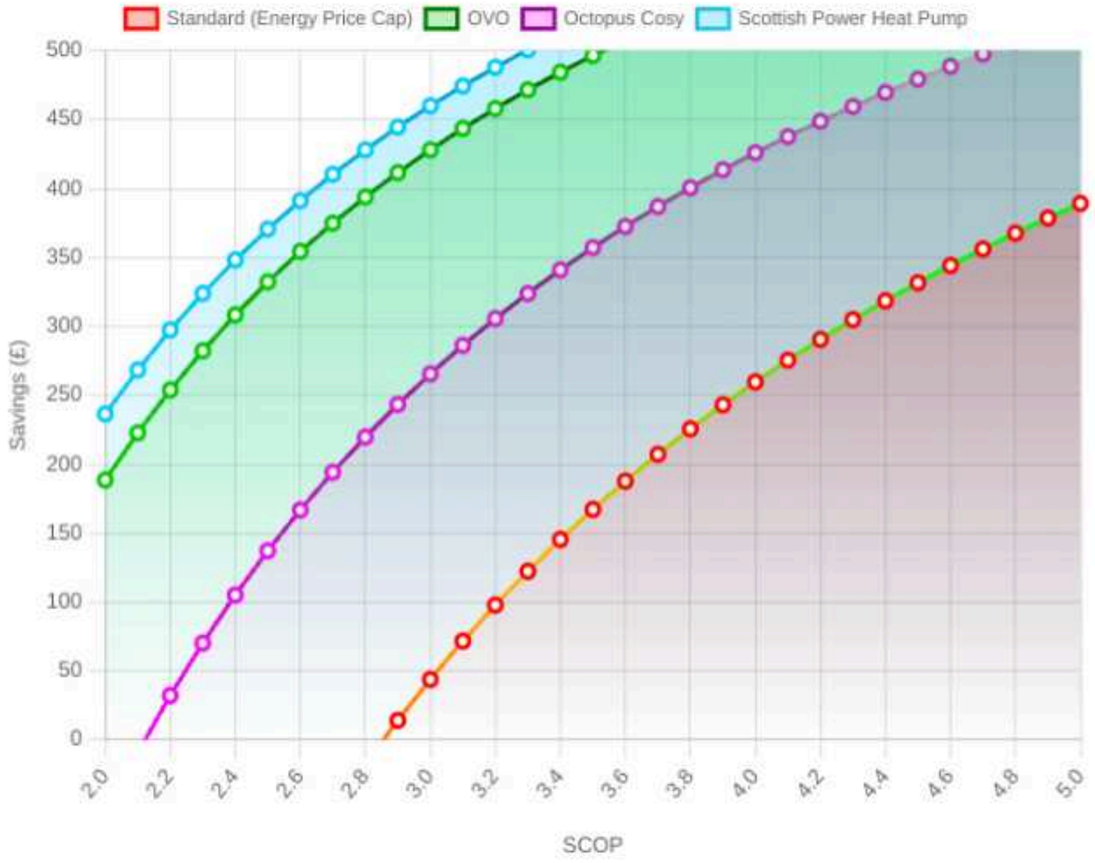

Key Events

Boiler Upgrade Scheme and certification requirements for clean heat schemes - **Announced 30th April**

A consultation on expanding the BUS to include other technologies (e.g. A2A heat pumps, heat batteries) and seeking views on making MCS the sole certification scheme for clean heat installation.

Clean Heat Market Mechanism: revisions ahead of Scheme Year 2 - **Announced 7th May**

A consultation on changing CHMM sales targets to 8-10% from April 2026, and seeking views on making MCS the sole certification scheme.

The Town and Country Planning Order 2025 - **29th May**

New legislation will ease permitted development rules for heat pumps in England, allowing bigger ASHP units and for the units to be placed within 1m of a property boundary.

Future Homes Standard - **Expected 2025**

New homes will need to have 75-80% lower carbon emissions than under current regulations, effectively phasing out gas boilers in new builds.

Summary

Heat pump demand rising, not flatlining

Heat pump installations are growing at 21% year-on-year, with record BUS voucher applications in March highlighting strong demand to come. With planning restrictions on ASHPs easing and the Future Homes Standard on the horizon, new build installation rates are set to climb even higher in 2025. The evidence is clear: the sector is on the rise.

High performing local areas show that Future Homes success is possible

A share of heat pump in new builds as high as 69% in some regions shows that achieving the Future Homes Standard is well within reach. A rapid transition away from fossil fuel heating in new homes is already underway in parts of the country, offering a clear blueprint for wider national rollout as standards are implemented.

Heat pumps can keep people warmer and save them money

The data proves that well-installed heat pumps deliver on warm homes even in sub-zero conditions, cutting energy use by harnessing free heat from the air. These high-performing systems offer the greatest bill savings, highlighting the importance of robust performance standards to drive customer satisfaction.

About

Ambient's Electrified Heat Transition Tracker is a monthly update on the electrified heat industry. By collating key data points and providing insights, we aim to support the sector and accelerate adoption of electrified heating and cooling technologies. To discuss datasets for future inclusion or to give feedback, please get in touch at george@projectambient.org.

ACCESS ALL RELEASES

Methodology & Notes

MCS

- For data included from the MCS dashboard, we have specified to include only ASHPs, GS/WSHPs, and other heat pump types from the dropdown selection. We have also specified to only include data on domestic installations. This dataset only captures MCS certified installations so does not reflect net installations of UK heat pumps.
- The MCS dashboard is live and subject to updates, meaning previously reported monthly data may change over time. The MCS data presented in this report reflects the information available as of 01/04/25 and may differ from the latest figures on the live tracker. All installations for the previous month should be included in the data 14 days into the next month.
- MCS data on heat pump installation cost is self-reported by installers.

EPC

- We count heat pumps as identified by the variable MAINHEAT_DESCRIPTION, new dwelling as TRANSACTION_TYPE; and we filter by UPRN to remove duplicates.
- Backdated data added leads to previous month totals changing. Owners of dwellings have the right for their EPC to be "opted-out" of public records, these will be removed retrospectively. Further, any cancelled EPCs are removed when the data is updated. It is also possible that numbers rise if owners opt in.
- EPC data is self-reported by assessors which may lead to inconsistencies; e.g. it is believed that a small % of new dwellings are listed as marketed sale due to the sale corresponding with issuance.
- Some heat pumps in flats will be missed from our data, as the Main Fuel Type may be listed as 'Communal' without specifying source of heating. This is remedied in government data by an additional variable called Low Zero Carbon, for which 'Communal Heat Pump' can be selected. However this variable is not accessible in the open data.
- EPC data applies only to England and Wales. An EPC for a new build may not be issued concurrently to the installation of a heating system, so data on heat pumps may not reflect accurate installation date.

BUS

- The BUS statistics include a small number of biomass boilers. While we believe biomass boilers are less efficient and clean compared to electrified heating technologies, we have left them in the data due to their minimal presence. The vast majority of grants issued under the scheme (97%) have been for air-source heat pump (ASHP) installations.
- Monthly BUS application figures "may change due to participants cancelling and re-submitting applications in order to change certain details of the application, or due to applications being rejected", according to Note 11 in the BUS Statistics spreadsheet.

Terminology

MCS Certified Heat Pump Installation: MCS stands for Microgeneration Certification Scheme. It's a program designed to ensure that heat pumps meet efficiency and safety standards.
Seasonal Coefficient of Performance (SCoP): A measure of a heat pump's efficiency. It compares the amount of heat output to the amount of electricity used over a heating season.
CPIH: Consumer Prices Index including owner occupiers' housing costs.
Electrification of Heat Study: A UK government-funded project that tested how well heat pumps work in homes across the country.
Heat Pump Monitor: A site that tracks the real-life performance of heat pumps installed in homes.
Air Source Heat Pump (ASHP): A type of heat pump that extracts heat from the outside air.
Ground Source Heat Pump (GSHP): A type of heat pump that extracts heat from the ground.
Air to Air Heat Pump (A2A): A type of heat pump that extracts heat from the external air and distributes it indoors through a ventilation system.
Zero Emission Boiler (ZEB): A type of electric boiler that heats water for radiators and underfloor heating systems without burning fossil fuels, by storing energy during off-peak hours and converting it to heat.

Data Sources

https://epc.opendatacommunities.org/

https://www.gov.uk/government/collections/boiler-upgrade-scheme-statistics

https://datadashboard.mcscertified.com/InstallationInsights

https://www.projectambient.org/ambient-cost-calculator

https://heatpumpmonitor.org/

https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/l55o/mm23

Irene Omaswa
Board Chair

George Stone
Policy & Public Affairs Officer

Gianluca Boni
Tech Advisor

Ambient is an independent not for profit organisation with a data-driven vision: for Britain to become a clean energy superpower by accelerating the adoption of electrified heating and cooling solutions. We aim to support policy makers and industry by providing data on the electrified heat transition and supporting the development of transformational policy. Ambient is backed by key figures in the climate space: Baroness Worthington, lead author of the 2008 Climate Change Act, and Dr Jan Rosenow, Director of European Programmes at the Regulatory Assistance Project (RAP).

TRANSITION TRACKER FUNDED BY:

European Climate Foundation

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Contact

hello@projectambient.org
projectambient.org