



The Heat and Buildings Strategy was released on the 19th of October, alongside the Net Zero Strategy, which included a chapter on Heat and Buildings. This briefing note focuses on heat and buildings but does include some content from both strategy papers. Ultimately, while the strategy acknowledges the importance of considering local and regional circumstances in its delivery, there is little devolution of power to accompany this.

Heat and Buildings Strategy Headlines:

Government plans to:

- Support the adoption of low carbon heating by phasing out the installation of new gas boilers from 2035. The government will not require removal of existing boilers whilst costs are still high but will support early adopters with a £450 million three-year Boiler Upgrade Scheme offering households grants of up to £5,000 for low-carbon heating. Aligned with this is the ambition to reduce the cost of heat-pumps by at least 25-50% (2025), reaching parity with gas boilers by 2030
- Support the installation of 600,000 heat pumps a year up to 2028 (potentially being able to replace 1.7 million fossil fuel boilers per year by the mid-2030s. A new £60 million Heat Pump Ready programme will provide the funding needed for the government to achieve this
- Decarbonise UK heat networks, putting £338 million (2022-2025) into the Heat Network Transformation Programme, at least £270 million of this will go towards the Green Heat Network Fund. By 2025 there will be sector regulation and the introduction of heat network zones which will be delivered by local authorities
- Fund £1.425 billion of Public Sector Decarbonisation, with the aim of reducing emissions from public sector buildings by 75% by 2037
- Provide further Social Housing Decarbonisation Fund and Home Upgrade Grants totalling £1.75 billion, partly to upgrade fuel poor homes to EPC Band C by 2030, and all homes to meet EPC Band C by 2035 where possible.
- Rebalance energy prices to ensure that heat pumps are no more expensive to buy and run than gas boilers. Current electricity and gas prices do not incentivise consumers to make green choices, such as switching from a gas boiler to an electric heat pump. By expanding domestic renewables to push down electricity wholesale prices, in combination with rebalancing energy levies (such as the Renewables Obligation and Feed-in-Tariffs) and obligations (such as the Energy Company Obligation) away from electricity to gas over this decade the government hopes to reduce electricity costs.
- The government recognise that, in the long run, green products are more efficient and cheaper, and say they are putting fairness and affordability at the heart of their approach. They will launch a Fairness and Affordability Call for Evidence on these options for energy levies and obligations to help rebalance electricity and gas prices and to support green choices, with a view to taking decisions in 2022.

Implications for the West Midlands

- As an interim measure to the Future Homes Standard, the government plan to introduce an uplift in building standards, effective from June 2022.
- The Energy White Paper committed the government to introduce heat network 'zoning' in England by 2025 and the strategy highlighted how the new Heat Network Zones will be delivered by local authorities. The method for how heat zones will be designated, and run, is currently under consultation and considers their relationship with local area energy planning. Once this has been determined Energy Capital will be in a strong position to support Local Authorities in delivering these and aligning them with future local area energy plans.
- Companies such as Baxi and Worcester Bosch in the region are likely to be supportive of ambitions to scale up the manufacturing of heat pumps. A new £60 million [Heat Pump Ready programme](#) (sitting within BEIS' £1 billion Net Zero Innovation Portfolio, NZIP), will provide the funding needed to stimulate

this market. The programme will be split into 3 delivery streams with the first totalling £30 million for high-density heat pump deployment, the second totalling £25 million for developing tools and technology and the third totalling £5 million to trial support and learning.

- There will also be a market-based mechanism introduced to support the heat pump market (in the mid-2020s) and to provide incentives for industry to take the lead in the consumer market in low-carbon heating. A consultation on a market-based mechanism has been published in parallel to this strategy.
- Government will set a Minimum Energy Efficiency Standard of EPC Band B by 2030 for privately rented commercial buildings in England and Wales, acting as a stimulus for Energy Capital's planned programme of work to decarbonise commercial buildings in the region in support of our 2041 goal.
- Minimum Energy Efficiency Standards funding of £4.3m is available to local authorities to ensure compliance and enforcement of these regulations.
- Given the proportion of West Midlands homes in low EPC bands that are in fuel poverty, we will continue to support LAs to access Home Upgrade Grant funding.
- Further Social Housing Decarbonisation Funding (SHDF) and Home Upgrade Grants totalling £1.75 billion were confirmed. This additional funding is partly to upgrade fuel poor homes to EPC Band C by 2030, and for all homes to meet EPC Band C by 2035 where possible. The Energy Capital led SMART Hub has been working closely with local authorities across the region to access the first wave of this funding, leading a consortium bid with Sandwell Metropolitan Borough Council; Wrekin Housing Trust; Orbit Housing Group; Midland Heart; Community Housing Group; Wolverhampton City Council and Solihull Community Housing, and is now preparing a bid for wave 2 with other partners.
- There is a significant emphasis on skills and retraining, which could be explored further with funding announced that aims to provide transitional training for individuals moving into a green job, as well as investment into skills and training with the National Skills Fund and Skills Bootcamps.

Appendix: Heat and Building Overview

Decarbonising heating:

Heat Networks:

- Government plan to decarbonise the UK heat network market with £338 million over 2022/23 to 2024/25 being put into the Heat Network Transformation Programme - of which at least £270m will go towards the Green Heat Network Fund
 - The £338 million funding is to create the market conditions in the first half of the 2020s by helping to overcome barriers to heat network market entry, providing an environment for regulation and market mechanisms to successfully support increased deployment in the second half of the 2020s and into the 2030s.
 - The heat network zones will also be established and delivered by local authorities with additional powers to secure their viability.
- Government intend that the Heat Networks Market Framework will introduce maximum CO₂ emission limits for district heating by the early 2030s at the latest.
- Plans to introduce regulation to ensure new fossil fuel heating installations in England are phased out in line with the natural appliance replacement cycle. The regulation will address large off-gas-grid non-domestic buildings (over 1,000m²) no earlier than 2024, followed by small and medium non-domestic buildings and all homes from 2026.
- They will introduce new regulations from 2025 through the Future Homes Standard to ensure all new homes in England are ready for net zero by having a high standard of energy efficiency and low carbon heating installed as standard; so all new homes will be fitted with a low carbon heat source such as a heat pump or connected to a low carbon heat network.

- As an interim measure to the Future Homes Standard, the government plan to introduce an uplift in standards, effective from June 2022.

Heat pumps/boilers:

- Government have set an ambition that by 2035, no new gas boilers will be sold, with the removal of government support for new LPG and oil heating systems from 2022.
- A new £450 million three-year Boiler Upgrade Scheme was announced, where households will be offered grants of up to £5,000 for low-carbon heating systems (or £6,000 for Ground Source Heat Pumps).
- The current cost of installing heat pumps is around £10k for the average home. Their aim is to reduce the cost by at least 25-50% by 2025 and to reach parity with gas boilers by 2030 at the latest, as the market scales up and drives down upfront costs.
- A new £60 million Heat Pump Ready programme (part of BEIS' £1 billion Net Zero Innovation Portfolio (NZIP)) to fund pioneering heat pump technologies was announced, supporting the government's target of 600,000 installations a year by 2028 (up from 35,000 currently). A third of new heat pumps are expected to be in new build properties.
- There will also be a market-based mechanism introduced to support the heat pump market (in the mid-2020s) and to provide incentives for industry to take the lead in the consumer market in low-carbon heating. A consultation on a market-based mechanism has been published in parallel to this strategy.
- Government aims for a 30-fold increase in heat pumps manufactured and sold within the UK by 2030. Potential of manufacture of 300,000 units a year by 2028 could create 10,000 jobs.

Hydrogen:

- A series of trials will be held to determine, by 2026, whether hydrogen is a viable heating option.
- There are three hydrogen trials proposed:
 - 1) Neighbourhood trial (H100 project) is due to begin in 2023 in Fife, Scotland
 - 2) Village trial due to begin in 2025
 - 3) Plans will be developed by 2025 in favour of a hydrogen heated town at the end of the decade (dependent also on 2026 decisions).
- Government are assessing the potential of blending up to 20% of hydrogen into the existing gas network - assessment will be complete by autumn 2022, with a final policy decision in 2023.
- Three scenarios are currently under consideration; high electrification scenario; high hydrogen scenario (dependent on the hydrogen decision 2026 - there would be plans for most of the national gas grid to be converted to hydrogen, with a pilot hydrogen town); dual energy system scenario, where both hydrogen and electrification prove feasible, there would be use of both systems, with widespread shifting of the gas grid to low carbon hydrogen, offering more consumer choice.

Energy Efficiency:

- Government will set long-term regulatory standards to upgrade Privately Rented Homes to the Minimum Energy Efficiency Standards of EPC band C by 2028. Fuel-poor homes will be upgraded to EPC Band C by 2030 where practical.
- Government will set a minimum energy efficiency standard of EPC Band B by 2030 for privately rented commercial buildings in England and Wales.
- Government will provide £800 million additional funding to the Social Housing Decarbonisation Fund (SHDF) over 2022/23 to 2024/25, for energy performance improvements in social housing.
- Government are considering setting a long-term regulatory standard to improve social housing to EPC band C.

- Government will support as many fuel-poor homes to achieve a minimum energy efficiency rating of C by the end of 2030 by providing £950 million additional funding over 2022/23 to 2024/25 for off-gas-grid properties through the Home Upgrade Grant (HUG).
- HUG will support upgrades to the worst-performing off-gas grid homes in England.
- Funding for SHDF and HUG will total £1.75 billion, with plans to expand the Energy Company Obligation Scheme and the Warm Homes Discount Scheme until 2026.
- Government will publish a policy framework - Energy Related Products Policy Framework - setting out proposals for raising minimum energy performance standards and improving consumer information for a range of high potential products, such as space heating, cooking, taps and showers and lighting.
- They have recognised the need to take a 'fabric-first' approach, focusing on installing measures that upgrade the building fabric (e.g. walls/lofts) itself before making changes to the heating system - so that the transition to low-carbon heating is cost-effective and resilient.

Public Sector:

- Government has committed to halving direct emissions from public sector buildings by 2032, against 2017 levels, and reducing emissions from public sector buildings by 75% by 2037.
- To do this, the govt will provide £1.425 billion additional funding for the Public Sector Decarbonisation Scheme (PSDS) over 2022/23 to 2024/25, and through the Greening Government Commitments (GGCs).

Jobs:

- Their aim to support 175,000 green skilled jobs by 2030 and 240,000 by 2035 – resulting in £6 billion additional GVA by 2030. They have launched the independent Green Jobs Taskforce, which aims to deliver 2 million Net Zero jobs by 2030, to help ensure a skilled workforce.
- As well as encouraging current engineers, electricians and plumbers to retrain into greener jobs, they will also work with industry and the low carbon projects supported through the Green Heat Network Fund to increase opportunities to gain skills in the heat networks sector.

Further Information

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