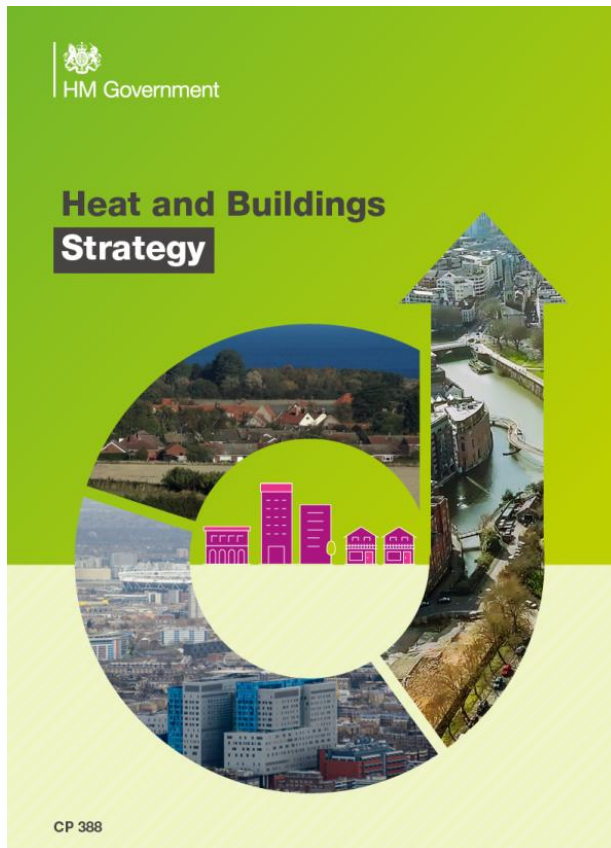




Heat & Buildings Strategy

Overarching strategic framework with aim to decarbonise virtually all UK buildings by 2050.



Courtesy of BEIS

Strategy highlights

- Major part of UK's Net Zero Strategy released in Oct 2021.
- Alongside energy efficiency, focus on heat pumps, district heating & hydrogen as largely distinct options.
- 'Signalled intention' of no new gas boilers from 2035, and no gas in new build from 2025.
- Decision about the role of hydrogen by 2026

Strategy details

The strategy expresses clear support for future electrified heat provision through heat pumps, with heat networks in denser urban settings where individual heat pumps are not viable. Hydrogen as part of a repurposed gas grid features prominently but its role is subject to the need for evidence and a future decision point in 2026.

There is recognition of the need to rebalance energy prices between electricity and gas (which currently disadvantages electrified options) "*over this decade*".

Heat pumps

The document confirms government's commitment to 600,000 heat pump installations per year by 2028. A key aim is they heat pumps are no more expensive than gas boilers by 2030.

The low regrets focus for heat pumps is in new build homes and for less-dense areas, whilst recognising they may not be the best solution for every situation, such as in higher-density settings.

Heat networks

Whilst there is no firm target for deployment, the strategy refers to the CCC's estimation that they could provide 18% of total heat demand by 2050.

Acknowledging that low carbon heat networks can unlock shared access to untapped heat sources and be especially suitable for high-density settings, the document considers heat networks as complex endeavours involving multiple stakeholders, suggesting a focus on larger / city-scale applications.

Hydrogen

As part of committing to a decision about the role of hydrogen by 2026, the strategy focuses on the need for large-scale trials and developing the evidence on which to base a decision. It suggests hydrogen (if it happens) may be the best solution for higher density settings, with a key selling point in the similarity in user experience to gas boilers.

Questions to consider regarding SGHE

- Because it falls between heat pumps and district heating options, is there a risk over SGHE being overlooked on a national and local level?

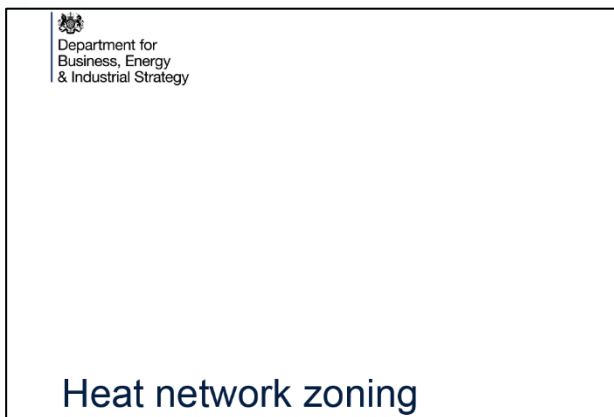
References & further information

<https://www.gov.uk/government/publications/heat-and-buildings-strategy>



Heat Network Zoning

Strategic policy to implement ‘heat network zones’ across England by 2025, where all buildings of certain types will be required to connect within 10 years.



Courtesy of BEIS

Scheme highlights

- Intended to dramatically increase deployment of low carbon district heat
- National methodology design and zone designation by central government
- Local implementation by ‘Zoning Coordinators’ (likely local authorities)

Emerging policy details

This is a long-term strategic policy which forms a central part of government’s intention to increase heat network coverage. Proposals reference the CCC’s estimation they could provide 18% of total heat demand by 2050 in a least-cost pathway to meeting net-zero. A consultation exercise on the draft proposals is now under consideration by BEIS.

Bristol, Birmingham, Greater Manchester, Leeds, Newcastle and Nottingham identified as pilot cities.

What is a heat network zone?

“A heat network zone will be a designated area within which heat networks are the lowest cost, low carbon solution for decarbonising heating for an area”

Responsibilities for implementing zones:

- Central government:
 - Develop standardised methodology (see below).
 - Decide which buildings must connect.
 - Undertake national mapping exercise.
 - Establish local Zoning Coordinators as well as governing and funding arrangements.
- Zoning Coordinator (likely to be local authority)
 - Local zone refinement.
 - Local engagement and consultation.
 - Formal zone designation and enforcement.
 - Determine procurement and delivery approach.

Funding

“We acknowledge that heat network zoning policy will only be successful where local authorities have the right resources to implement their responsibilities effectively.”

Which buildings will be required to connect?

“All new buildings, large public sector and large nondomestic buildings – as well as larger domestic premises which are currently communally heated – would be required to connect to a heat network within a prescribed timeframe.” (Option 3, preferred)

What is meant by a “heat network”?

- District heat networks where multiple buildings access heat from a central source or sources.
- Existing communal networks may be connected to larger district heat networks in zones.
- No minimum size, SGHE eligible:
“We would consider ambient networks and shared ground loops as district heat networks as long as they meet the previous requirement.”

Methodology development

This will involve *“processes and tools for identifying a geographic area as a heat network zone and getting the heat network opportunity ready for the market [including] several stages of modelling and mapping as well as engagement of local stakeholders”.*

Questions to consider regarding SGHE

- Could SGHE open up non-mandatory connections in heat network zones? E.g. rows of terraced homes.
- Could SGHE be a solution for non-zoned areas?
- Could SGHE consideration affect methodology?
- Could consideration of SGHE as an option affect local zone implementation?

References & further information

<https://www.gov.uk/government/consultations/proposals-for-heat-network-zoning>