



Bedminster heat network

Working in partnership with Bristol City Leap, <u>Vattenfall</u> has started the next phase of the Bedminster heat network, a key milestone in the delivery of vital infrastructure and bringing low carbon heat to the area.

The <u>Bristol City Leap</u> partnership between Bristol City Council, Ameresco and Vattenfall will accelerate investment in Bristol to help meet the city's ambition to be carbon neutral by 2030.

<u>Vattenfall</u> bring investment and European experience in design and delivery of large-scale, resilient heat networks. Here in Bristol, we will expand and decarbonise the city's existing heat network, create jobs and boost the local economy in Bristol. Three heat networks are already in operation in Redcliffe, Old Market and Bedminster, and a further in construction in Temple.

The purpose of this document is to provide information about live and upcoming activity in Bedminster. Whilst there are FAQs below, please reach out to us if you have specific questions at: <u>bristol.enquiries@vattenfall.com</u>

Please note, this is a live infrastructure project and exact timings are subject to change. All information provided below is estimated, and accurate dates for works will be communicated as and when possible.

What is a heat network?

A heat network (also known as 'district heating' or 'communal heating') is a system of insulated pipes that transports heating and hot water from centralised sources to multiple buildings. In Bristol, the current focus is connecting new residential and commercial developments.

More information can be found on our website: <u>What is a heat network?</u>, or watch Vattenfall's explainer video on how the Bristol heat network works on <u>YouTube</u>.

What is happening in Bedminster?

To connect new developments in Bedminster and provide buildings with heating and hot water, we are installing buried network and generating heat using energy centres.

We have a three-phased approach:

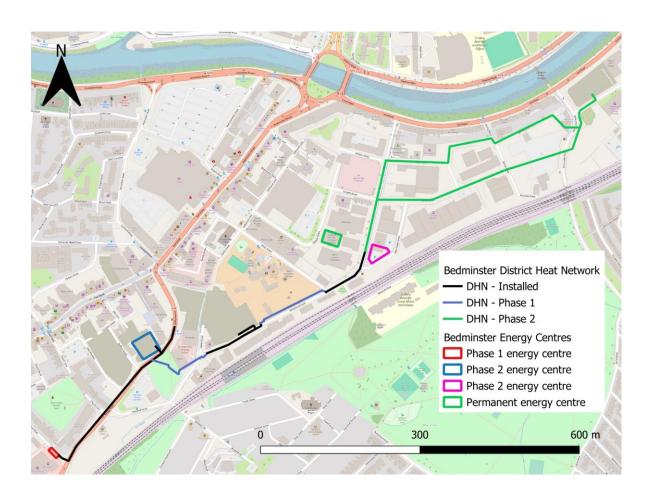
- **Phase 1** Temporary energy centres located on the highway of St John's Road and on the Metalworks premises in Whitehouse Street from 2024-2025.
- **Phase 2 –** Interim energy centres located on private land, for an estimated duration of 2025-2028.
- **Phase 3 –** Permanent low carbon energy centre.

Please note, Phases 2 and 3 are subject to planning permission.

The map below provides a view of the buried pipework delivered to date (shown in black), alongside ongoing construction works in blue. Future phased work is show in green but we are continuously evaluating the route, which will develop in accordance with feasibility studies and market development opportunities.

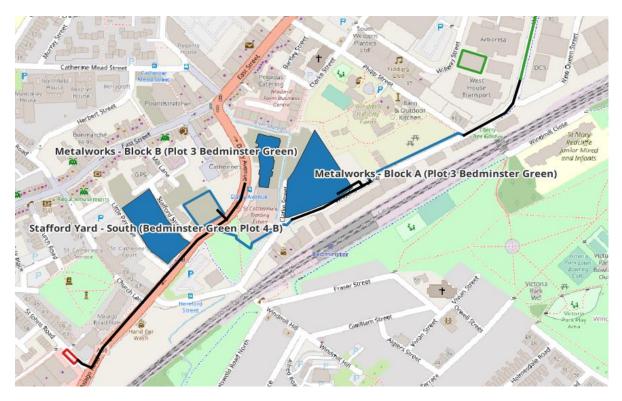
December 2024, Bedminster network - FAQs





What buildings in Bedminster are connected to the heat network?

As of December 2024, three new developments are receiving heating and hot water from the Bristol heat network (shown in the map below).



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How will the Bedminster heat network generate energy?

The energy generation solutions currently being considered are:

- **Phase 1 (2024-2025)** –heat generated by hydrotreated vegetable oil (HVO) which is made from 100% renewable raw materials.
- **Phase 2 (2025-2028)** heat generated by gas from an existing energy centre we are repurposing from the Old Market heat network.
- Phase 3 (from 2028 onwards) heat generated from air source heat pump technology.

Phase 1 energy centre - St John's Road

What has been done to date?

We installed a temporary energy centre situated on St John's Road, off Malago Road, in March 2024. This was to provide heat to new residential developments in Bedminster.

What will be done next?

This phase 1 energy centre will be shut down and be replaced by the phase 2 energy centre located on private land in Dalby Avenue. We will fully remove the structure including the wooden panels, containers and concrete foundations, and the road and footpaths will be reinstated.

When will these works be done?

Currently we are working to get the phase 2 energy centre running from end of March 2025. The new energy centre needs to run for a couple of weeks to ensure that it operates reliably before we can shut down and remove the energy centre in St Johns Road. This is planned to be completed in April 2025.

Phase 2 energy centre

What works are planned?

We will be supplying heat on private land in Dalby Avenue and this will replace the phase 1 energy centre situated on St John's Road. There will be no visibility of this energy centre from the highway or public footpaths. This energy centre will be in use from this location for 1 year.

What happens next?

We are preparing the site to receive the phase 2 energy centre and the hoardings on the exterior of the site perimeter will be replaced. This energy centre is planned to begin operation by end of March 2025.

Bedminster Green crossing

What works are planned?

We need to create a tunnel underneath the surface of the Green and install buried pipework to join the existing heat networks along Whitehouse Lane and Dalby Avenue.



Is the Green being sold?

We are taking a Lease of Rights over Bedminster Green from Bristol City Council to carry out the works and have rights of access for the future operation of the pipes. The council will still have ownership of the Green. Once the pipes are installed, the Green will be restored, maintained as usual and full access will be given back to the public.

Why is the route going through the Green and not the road?

We could not install pipework in the highway via Providence Place and Hereford Street due to significant utility congestion, some of which are immovable assets, as well as a lack of trench depth required for installation. Disruption to these high-risk utilities would have caused major disruption to essential services for residents and businesses over a sustained period of time.

What are ground investigations and why are they happening?

Ground investigation work is a short-term exploratory exercise that checks the viability of the installation of buried pipework. No new pipework will be put in the ground at this point. We are doing this work in three work areas - two locations are on public footpaths in Whitehouse Lane and Clarke Street and one work area within Bedminster Green. The ground investigations will happen consecutively in each area, requiring a few days per location.

Will the ground investigations cause any impact?

The work areas are small and will be fenced off to protect the public accordingly. There will be some disruption for those using the footpaths, with suitable diversions provided and access maintained where possible. For the work area on the Green, footpaths won't be affected. The contractor has received guidance from specialists and will be using robust protection methods to protect the Green. No trees will be removed as part of these works but some minor tree pruning, and undergrowth clearing is required to allow access.

When are ground investigations happening?

We will complete ground investigations from late February to early March 2025 to check viability of installed pipework. Subject to fulfilling planning conditions, and in preparation for construction, three trees will be removed before the end of February 2025. This is due to the requirement for removal prior to birds nesting season.

Windmill Hill City Farm construction works

What works are planned?

We are installing the buried pipework through the perimeter of the Farm (via the allotments) and joining this to existing networks at the Whitehouse Lane/Philip Street junction and in Whitehouse Lane.

We consulted the Farm management and allotment plot owners on these works, and they were approved. The farm will remain open as usual for visitors. Ongoing coordination with Bristol City Council's Highways team is underway to ensure that work is coordinated with wider improvements and disruption is kept to a minimum.

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Preparation works will begin in December 2024, with construction anticipated to begin in January 2025 during the farming offseason.

Why are you going through the farm and not the road?

Alternative options along Whitehouse Lane and via Philips Street/Percy Street had immovable buried utilities. The route through the farm also has the least interference with ongoing and planned highways improvements.

What are you doing to support the farm and protect a community asset?

We are working closely with the farm to offer support that is both valued and impactful. We have agreed a package of upgrades including the opportunity to connect to the network when appropriate, resurfacing of vehicle path, improved entrance gates, enhanced walkways to improve accessibility and the replacement of perimeter fencing. This will be completed once the construction is finished in early 2025.

We are proud contributors to the Windmill Hill City Farm's Big Give Christmas Challenge 2024 which will help towards the running of the volunteering programme to deliver mental health support to the community.

Community benefits

Are there plans and timelines to connect existing houses onto the network?

Connecting existing homes is something the UK as a whole is still working on and our immediate focus is connecting new build properties to the heat network. This allows us to put infrastructure in the ground and fit appropriate substations within the buildings.

We are exploring pilot projects for connecting existing homes locally to demonstrate technical and economic viability. If you're interested in being involved in a pilot project, please email bristolbusdev@vattenfall.com.

How can residents benefit?

The heat network in Bristol is a critical component for Bristol's decarbonisation plan and will provide low carbon heat and hot water to the equivalent of 12,000 local homes within five years.

As part of Bristol City Leap, we will deliver a combined social value package over £61 million which includes initiatives and funds supporting skills and development, supporting community energy and boosting the local supply chain.

Find out more about our social value activities here.

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