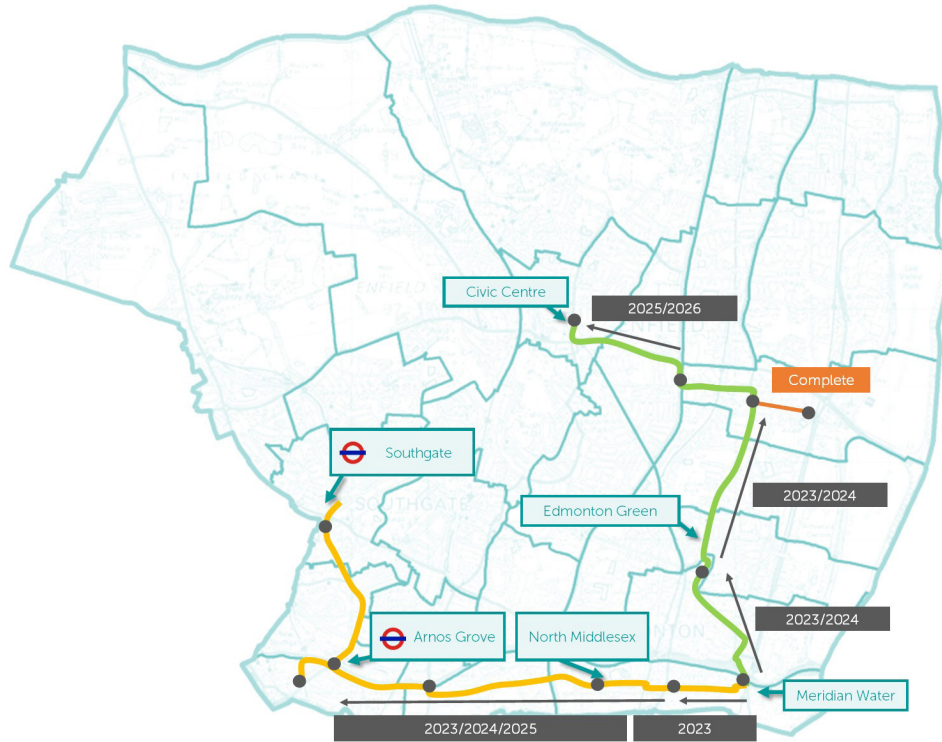


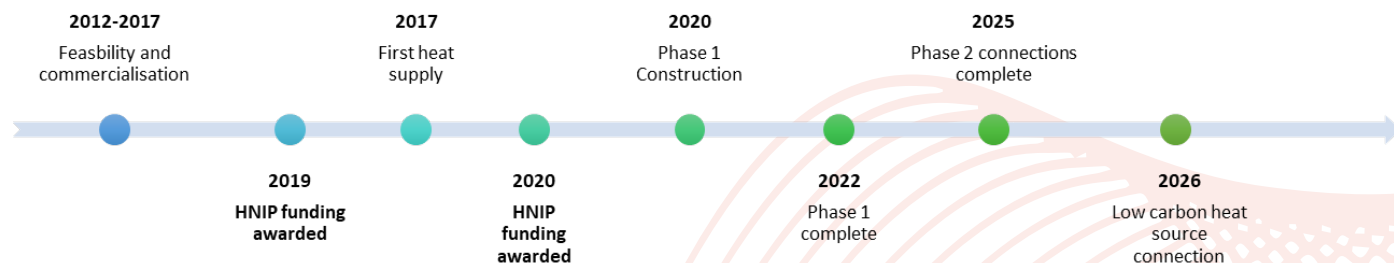
ENERGETIK MERIDIAN WATER



Funding beneficiary	Enfield Council on funded to Energetik
Location	Enfield, North London
Total project capex	£34,440,000 + £48,650,000 (from two rounds)
Funding awarded	£14,760,000 + £23,860,000 construction grant and loan
Annual delivered heat average over first 15 years	22.1 GWh + 37.3 GWh
Heat source & technology	Heat from EfW, 41MW of Temporary Boilers such as CHP, and Waste Recovery
Key anchor loads	6 non-residential connections including commercial outlets, a hotel, school and community centre, and the Meridian Water development including a new train station, workplaces, and open spaces.
Length of primary network	8.2km + 18.4km
Anticipated number of buildings and/or connections	Currently ~1000 residential & 6 commercial connections. 15,000+ projected residential connections over the next 5-10 years.
Annual carbon savings (average over first 15 years)	1,952 CO ₂ e over first round + 6,133 CO ₂ e over second round

Energetik, Enfield Council, and Vital Energi are delivering the Meridian Water heat network in Enfield. The project has benefitted from support across two HNIP funding rounds, representing £14.7 million and £23.8 million in funding respectively, to support the north of £80 million heat network project. There is ambition to decarbonise the network by changing to a low carbon heat source, to provide heat to nearly 20,000 residents, which will play a key role in Enfield's largest regeneration scheme.

Project Milestones



The Story So Far*

The project was commissioned in 2012, where a thorough feasibility assessment took place. After five years of foundational planning work, the project was granted approval by the Council and began commercialisation. The first HNIP grant award of £14.76 million acted as a springboard for development, with the central 60MW energy recovery facility at Edmonton Eco-Park kicking off the Meridian Water Heat Network. The vision for the development is to support the Council's social and environmental objectives and deliver key infrastructure for Enfield's largest regeneration scheme.

The second round of HNIP funding for £24 million was granted in 2021, to support the expansion of Energetik's network north and west of Meridian Water, installing a total of 18km of new pipe which will enable an extra 100GWh of new heat demand, saving an extra 22,000 tonnes of carbon dioxide equivalent per annum. These two major extensions will increase the networks reach, enable new connections, and link existing satellite schemes to the Meridian Water heat network and energy centre, maximising carbon savings. The northwards extension will link the network with the existing Ponders End heat network providing energy to two large housing developments of 1,200 homes, and then extend through to Enfield Town, adding two care homes and a civic centre building to the heat network. The westwards extension will further connect through to the Arnos Grove and Oakwood heat networks, providing opportunities to connect with more buildings along the way.

Connected homes will benefit from a carbon saving for heat and hot water of over 90%, compared to a traditional gas boiler system. With Meridian Water's first residential connections due for completion before the energy centre is operational, Energetik will provide heat through the network using temporary boilers but will later utilise the low carbon source.

The energy centre is approaching completion. Energetik's Meridian Water energy centre is progressing well and is expected to be complete in the summer of 2023. The installation works of the northern extension to link Meridian Water to existing heat networks in Ponders End have begun and are progressing well.



The scheme has been successful in securing customer sign ups with a success rate of 85% of retrofit customers agreeing to connect to the network. Following two successful retrofit projects connecting 25+ existing homes to our heat network, Energetik are now set to begin the third phase of retrofits in the same area (Ponders End, Enfield).

Project Insights

Energetik faced the challenge of engaging numerous homes connected to Enfield's heat network while ensuring implementation teams understood the network's purpose. Regular engagement benefits various aspects of network operations. Frequent workshops and meetings have been held with partners, maintaining a clear understanding of processes and information. This proactive approach addresses issues promptly and prevents knowledge loss when experiencing staff turnover.

Consistent messaging was key to the success of Energetik. Hosting regular events for new and existing customers helped improve understanding of system operation and the advantages over gas boilers. This approach enhanced customer satisfaction and promoted long-term network success.

Jayne Clare, Managing Director at Energetik says:

"Energetik will utilise a local heat source and supply tens of thousands of homes with low carbon heat and hot water, generating huge carbon savings and contributing towards Enfield's climate action plan objectives. We are demonstrating how to do district heating the right way, placing quality and our customers and the centre of everything we do and how we do it. We want to set an example for the rest of the industry as it grows."



*Up to date as of March 2023