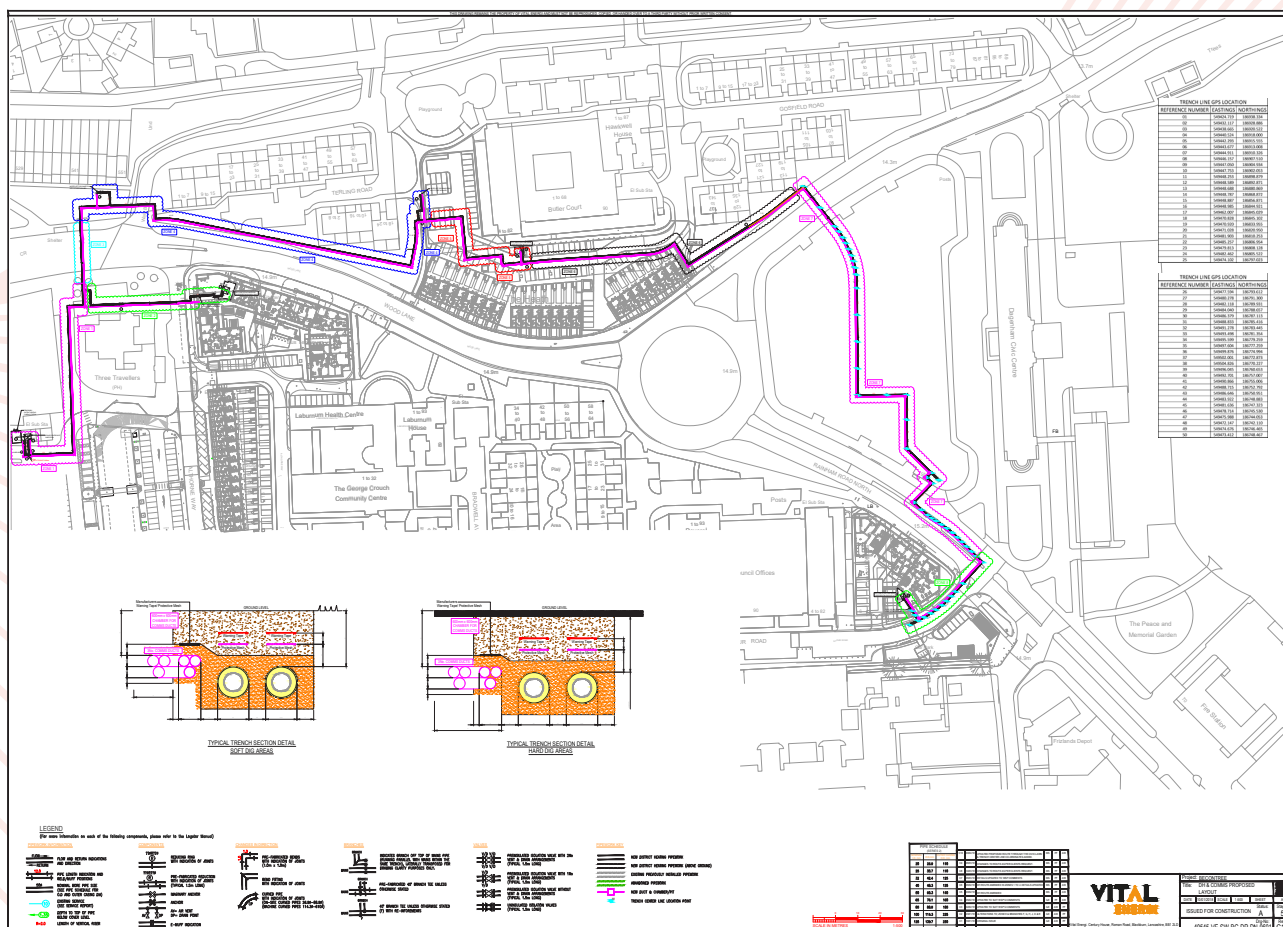


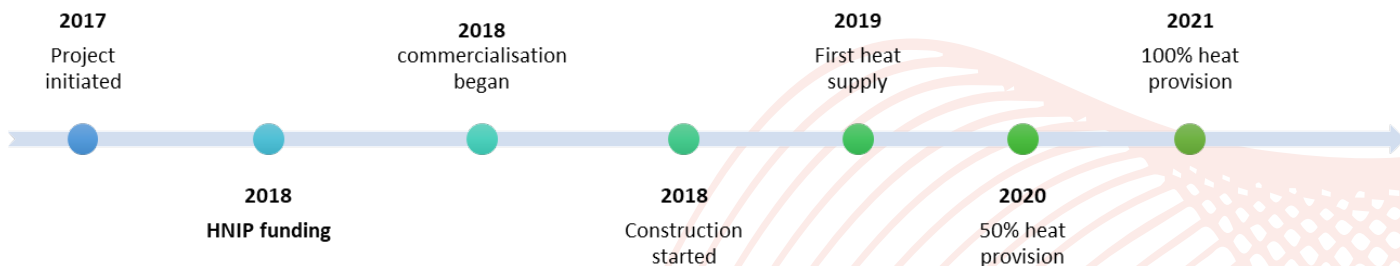
BECONTREE DISTRICT ENERGY SCHEME



Funding beneficiary	Barking and Dagenham Council on funded to B&D Energy Limited
Location	Barking & Dagenham
Total project capex	£5,350,000
Funding awarded	£1,075,000 construction grant
Planned/estimated heat export at completion	4.2 GWh per annum
Heat source & technology	Combined heat and power energy centre
Key anchor loads	Becontree Leisure Centre and Civic Centre
Length of primary network	0.8km
Anticipated number of buildings and/or connections	231 connections
Annual carbon savings (average over first 15 years)	197 t/CO ₂ e

Barking and Dagenham Council received over £1 million of HNIP funding for the Becontree heat network. This has been used to develop the energy centre, which uses combined heat and power (CHP) to heat business and residential developments. The network currently heats the Becontree Leisure Centre as well as 230 homes, reducing carbon emissions for hundreds of residents across the borough, and has so far provided over 267 million kWh of heat. The network is designed to facilitate future connections, to maximise benefits to area residents and businesses in the long run.

Project Milestones



The Story So Far*

In 2018, B&D Energy entered into a contract with Barking & Dagenham Reside and Countryside Properties to deliver low carbon supplies of heat energy to a new development within the Becontree area of Dagenham. The development was for 170 new homes.

The inclusion of district energy reduced the carbon emissions associated with these properties resulting in a lower carbon footprint across the site compared to the counterfactual. This scheme also supplied heat and electricity to the existing Leisure Centre's new 50m pool and the Civic Centre.

The network comprises of 0.8 kilometres of underground pipework and involved the installation of 3 boilers and a Combined Heat and Power Unit. The installation work was complete in 2021 with heat being supplied to customers, utilising the CHP units to reduce the carbon intensity.

Project Insights

The operational phase of the network provided valuable insights, leading to improved stakeholder communication and streamlined processes. By implementing an SMS notification system on substations, the team achieved quicker alerts and efficient issue resolution, fostering an elevated level of customer satisfaction.

The project's success in navigating complex regulations and overcoming time delays during substation installation required resilience and adaptability. These experiences have strengthened the project's foundation and provided valuable opportunities for mitigating similar challenges in the future.



*Up to date as of March 2023