

Case Study

Bromford Housing - Phase One

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In 2015 Bromford Housing Association completed the installation of a Kensa micro district ground source heat pump solution in 16 formerly electrically heated bungalows in rural Shropshire.

The results were so successful that Bromford Housing is now currently embarking on a second phase of retrofit ground source heat pump installations in one and two bed bungalows.



The initial project was intended as a pilot scheme to establish the viability of ground source heat pumps as an upgrade option across Bromford's electrically heated housing stock and received funding from both the Non Domestic RHI and ECO.

The project involved drilling a network of communal boreholes to harness heat energy from the ground, with each borehole serving two properties. A separate Kensa 6Kw Shoebox Twin ground source heat pump was installed in each bungalow meaning that no central plantroom was needed and each household receives its own bill direct from an energy provider. The communal borehole array reduces costs and timescales as drillers can deliver a smaller number of deeper holes.

Key Facts - Phase One

- 16 bungalows in rural Shropshire
- Replacing night storage heaters
- Kensa 6kW Shoebox Twin
- Micro district communal borehole array

Figures and funding

- £201,000 investment
- £286,295 RHI & ECO funding
- 20 yrs payback Non Domestic RHI
- Tenant savings of £350-£500 p.a. energy bills

Case Study

Bromford Housing - Phase Two

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This approach is known as a 'Micro Heat Network' and has been pioneered by Kensa as an opportunity for social housing providers to access multiple funding streams, including the lucrative Non Domestic RHI.

The compact but powerful Kensa 6kW Shoebox Twin heat pumps were neatly located in tenants' airing cupboards along with new domestic hot water cylinders. New steel panel radiator systems were also installed as part of the programme of retrofit works to ensure the heat pumps operated efficiently.

The systems use state of the art heating controls giving Bromford the ability to remotely set and monitor optimum property temperatures and allowing tenants the flexibility to make minor adjustments to ensure they keep warm and comfortable at all times.

A combination of heat meters and electrical consumption meters show how efficiently the systems are performing and also ensured that the project was eligible for the Non Domestic RHI fund, enabling Bromford to receive quarterly payments from the Government for the next 20 years.

During the handover process, in addition to supplying the tenant with operating instructions for the new heat pump, Kensa also demonstrated the operation of the system to the tenants including the heat pump controls and radiator valves to ensure ease of use after installation.

Phase Two is currently underway with Kensa ground source heat pumps being installed into 20 bungalows across two sites. The project is due to be completed in March 2016 and Bromford Housing expects lifetime CO₂ savings of 1987t and expected tenant fuel bill savings of between £350 and £500 p.a.



Key Facts - Phase Two

- 20 bungalows across two sites
- January 2016 - March 2016
- Lifetime CO₂ saving: 1987t

Figures and funding

- Total contract worth £252,716
- £358,592 RHI & ECO funding