

Loughborough Park, The Guinness Partnership

The Loughborough Park project, a 9-year-old development by The Guinness Partnership (TGP) in Brixton, comprises 487 dwellings. The heat network faced challenges in efficiency and heat losses. To address these issues, TGP collaborated with FairHeat under the Heat Network Efficiency Scheme (HNES) Demonstrator.

Challenges and Background

Loughborough Park's heat network suffered high heat losses due to elevated flow temperatures, pump electricity consumption, and poor heat generation efficiency. This adversely affected operational costs and energy efficiency.

FairHeat's Optimisation Study and HNES Demonstrator

TGP enlisted FairHeat to support with an application for HNES Demonstrator Funding and to then carry out an Optimisation Study following their successful bid. The aim was to propose effective measures to optimise the system's performance.

FairHeat proposed two work packages (WP) to address challenges:

- WP1 focused on reducing flow temperatures, altering pump controls, eliminating network bypasses, enhancing insulation, and HIU recommissioning.
- WP2 incorporated all WP1 measures along with replumbing boilers into thermal stores, network pipework reconfiguration, CHP decommissioning, and pump replumbing.

Outcomes

WP2 was selected, which expected to significantly lower the average heat losses to 211 W/dwelling, saving 22%. Additionally, WP2 reduced annual electricity costs by around £1000, marking considerable energy savings. HNES funding was secured in Round 1 of the HNES main scheme for this project.

Loughborough Park has The Guinness Partnership's largest heat network, and Fairheat were instrumental in our successful bid. Fairheat helped identify our needs and explained the technical analysis behind the proposed work programmes in a clear way. Fairheat worked collaboratively with us to make sure they understood our residents, our needs and vision. The final HNES submission reflected this. – Chloe Jenner, Communal Heat Network Manager, The Guinness Partnership