

Glyn Street Estate



The Glyn Street Estate in Lambeth originally received support for an Optimisation Study in the HNES Demonstrator Scheme to identify the underlying cause of the building's high energy use, overheating, and poor resident experience. In Round 1 of the main scheme, Notting Hill Genesis then received capital grant funding to implement efficiency improvements to the 69-dwelling residential block. The building is made up of two blocks, Dexter House and Muscovy House. The project was delivered between Summer 2023 and Winter February 2024, rectifying several issues to the 12-year-old underperforming communal heating network.

Summary	
Network name	Glyn Street Estate
Network owner / operator	Notting Hill Genesis
Location	Lambeth, Greater London
Number of residential / commercial customers	37 rented flats, and 32 leasehold units
Total funding awarded	£461,848
Total project capex (total value of works)	£925,547
Heat source	Gas
Performance/efficiency improvement measures deployed	Conversion from 4-pipe to 2-pipe system New smart metres and HIUs Enhanced pipework insulation Removal of central domestic hot water system
Annual reduction in network fuel use (kWh/year)	235,823
Annual reduction in network carbon emissions (kg.CO2)	40,000

Overview of heat network

The Glyn Street Estate is a mixed tenure development comprised of two blocks, Dexter House and Muscovy House, in Lambeth, Greater London. The building contains 37 rented flats and 32 leasehold units and was built in 2010.

In 2022, the HNES Demonstrator Scheme awarded Notting Hill Genesis with funding for an Optimisation Study to identify the underlying causes of efficiency issues that the building was experiencing with its 12-year-old heat network system.

Glyn Street Estate then received capital grant funding in Round 1 of the HNES main scheme to implement efficiency improvements identified in the original optimisation study. Fairheat was the principal designer and contractor for the improvements, with Watkins as their delivery sub-contractor. The works were completed between July 2023 and February 2024, with a post works performance review completed the same year.

Details of why the project was needed

The communal heating system was approximately 12 years old and underperforming. Residents were reporting poor experiences with their heating provision, and the system was using high amounts of energy.

Additionally, overheating became a persistent issue in the building, particularly in corridors and communal spaces. In the winter, temperatures reached 32°C, soaring to 40°C in the summer.

Residents were being forced to open windows which increased heat loss, while complaints from residents uncomfortable with their dwelling temperatures increased.

The optimisation study uncovered high network heat losses due to its 4-pipe design, inefficient plant operation and control strategy, and poor pipework insulation. This in turn increased operational costs and carbon emissions. Furthermore, the risk of scalding increased due to overly high temperature domestic hot water, and the unreliable system caused frequent reactive maintenance callouts.

Efficiency measures implemented

As part of the HNES capital grant funded works, the system was converted from a 4-pipe to a 2-pipe system. The central domestic hot water system was removed, and new Heat Interface Units (HIUs) and smart metres were installed in all homes. This provided residents with better control over their heating, and improved temperature control.

Pipework insulation across the network was enhanced, with a focus on reducing communal space temperatures and improving overall system controls. The main plantroom was reconfigured as part of the project, and thermal storage was added, alongside weather compensation instruments to reduce flow temperatures and increase network efficiency.

The water quality has been improved thanks to the installation of water quality equipment and remote monitoring devices, and NHG is able to better monitor the network thanks to the installation of monitoring systems installed across all dwellings.

Outcomes of changes

NHG now has much better visibility on the overall system and dwelling performance thanks to the monitoring system and Building Management System (BMS) platform. They also now receive remote water quality alerts and notifications. Issues with the system have significantly reduced, with no site outages recorded in 2025/26, as the building now maintains a more stable network.

Thanks to the efficiency improvements made to the network, NHG has now met their performance targets across the network. Gas consumption has reduced by 45% 1 year after the works completed, exceeding the original target of 39%. Sustained energy savings are being observed across the monitoring period, and energy costs have thus significantly reduced across the building.

Electricity consumption has also decreased, particularly across the winter months, and corridor temperatures have returned to normal levels, reducing on average by 8-10°C.

The network's general efficiency has also significantly increased, and heat loss has dramatically reduced. From the baseline, there has been an approximately 70% reduction in heat losses, and no reactive maintenance repairs required in the last two financial years. Residents have also noticed improvements, with 84% satisfied with new communal temperatures post works.

Next steps

NHG will be using the successes from the Glyn Street Estate project as a replicable model for the wider NHG housing portfolio, as they work towards creating more efficient and comfortable homes for their residents.



Quote from heat network owner

“Delivering the upgrades at Glyn Street has transformed the network. We’ve cut energy use, stabilised performance, and created a far more comfortable environment for residents. Seeing communal temperatures drop and residents feel the difference, shows just how impactful these works have been.”

Jennifer Mclean, Major Works Project Manager, Notting Hill Genesis