

# Optimisation Study Case Studies

## Glyn Street, Notting Hill

Glyn Street, a 12-year-old development by Notting Hill Genesis (NHG) in Vauxhall, London, embarked on a journey to enhance the efficiency of its heat network. With 69 dwellings housed in a single block, Glyn Street faced severe inefficiency challenges and temperature imbalances, prompting NHG to seek solutions.

### Challenges and Background

The development's existing 4-pipe heat network, responsible for heating and hot water provision, suffered from inefficiencies and extreme temperatures in communal areas. Temperatures reached 32°C in winter and soared beyond 40°C in summer, leading to discomfort and dissatisfaction among residents.

### FairHeat's Optimisation Study and HNES Demonstrator

NHG partnered with FairHeat to facilitate the HNES Demonstrator application and conduct an in-depth Optimisation Study.

Following the results of the comprehensive Optimisation Study, FairHeat proposed a solution to convert the existing 4-pipe system into a more efficient 2-pipe Low Temperature Hot Water (LTHW) network. This transformation involved decommissioning the hot water system and retrofitting Heat Interface Units (HIUs) onto the space heating network. Additionally, proposals for plant room upgrades were made to ensure adequate pumping redundancy and futureproofing for potential heat pump installations.

### Outcomes

The project results were significant, achieving an average of 70% reduction in heat losses and cost of heat. The optimisation study also formed the basis for a successful capital works application in the HNES main scheme, following the demonstrator, securing £460,000 in funding towards project delivery.

*“The funding we received to commission a heat consultant’s optimisation report at Glyn Street was essential to our understanding on why the heat network was losing such elevated levels of heat. The recommendations and costings produced by FairHeat put us in a good place to make an application to the main HNES fund. We have installed heat sensors on each floor of the building to provide us with remote data on communal temperatures. This will allow us to measure the impact of the conversion works on heat loss. Our key aims are to address customer discomfort and reduce carbon emissions.” – Jennifer Mclean, Major Works Project Manager, Notting Hill Genesis.*