





Efficiency improvements delivered CAPEX and OPEX savings

Harvesters Way is a residential development of 183 affordable homes built by Places for People in Edinburgh. Using data collected by Guru Systems, Places for People were able to deliver a low temperature heat networks as per the design, and pass on cost savings to residents.

Impact



CAPEX saving in the region of £1,600 per home compared to typical network oversizing of up to 300-400%



reduction in variable tariff



Over the course of the project, the energy tariff to residents reduced from 7p to 4p per kWh.

The challenge

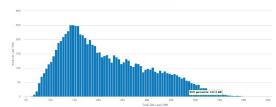
As both the landlord and energy supplier, Places for People wanted to deliver the lowest cost heating to residents. To achieve this, they wanted to make sure that the heat network was performing to the high standards adopted at design stage. They also needed to ensure the scheme was designed and commissioned correctly - and could efficiently deliver heat and hot water to homes from day one.

The solution

Working with building services design experts the Keenan Consultancy on the mechanical design and commissioning of the scheme, Places for People used data from Guru Pinpoint to commission critical components on the heat networks, such as the HIUs.

The results

Places for People were able to reduce design capacity to 400kW for the entire scheme, and, following the first year of full site operation, they confirmed that the actual heat load never reached over 300kW. This compares with typical network oversizing of up to 300-400%. This was a significant CAPEX saving, in the region of £1,600 per home.



Distribution of total side load, 99th percentile: 422.2 kW

As well as solving the oversizing problem using, real world data enabled commissioning with live information and ongoing monitoring of network performance.







70°C flow and 40°C return temperatures at the energy centre

Having real time data meant that Places for People could deliver against design. This was important to get right in the commissioning phase because after the contractor has completed handover and dwellings are occupied, access is costly and complicated.

The Hubs in each home also provided tenants with details of their energy usage.



"We wanted to make sure we could deliver the heat network as it was designed. Applying best practices and with Guru Pinpoint throughout the project, we delivered a state-of-the-art heat network."

James Culbertson, Keenan Consultancy