

Our technology is installed at

Elizabeth House, London

OCTAVIA 



Elizabeth House

Network losses reduced by 68%

Our technology was installed throughout Elizabeth House after Octavia Housing noticed overheating in corridors and flats, as well as experiencing higher than expected energy costs for heat generation and pumping. Guru Pinpoint was used to identify where and how the network could be improved.

The analytics and diagnostics delivered by Guru Pinpoint provided Octavia Housing with the information they needed to improve the network.

Impact

68%

reduction in network heat losses

80%

saving in pump room energy

4°C

reduction in corridor ceiling void temperatures

£128

saving per household per year after tariffs were reduced from 7.7p to 3.8p per kWh

The challenge

In 2015 Octavia Housing was experiencing higher than expected energy costs for heat generation and pumping. They had also noticed overheating in corridors and flats.

Furthermore, Octavia Housing was looking for opportunities to reduce standing charges and unit cost to residents, as well as aiming to reduce the financial risks of having to estimate the cost of supplying heat.

The solution

Guru Systems installed its technology across the network, including in each of the 115 flats. This gave Octavia Housing real-time data on how its network was functioning for the first time.

Guru Pinpoint analysed data from across the heat network including the volume of gas used by the power plant, the power consumed by pumps, the flow rates and temperatures throughout the network and the heat being consumed by each household.

Data analysis focused specifically on the efficiency of the plant room and network losses, with Guru Pinpoint's machine learning algorithms helping to identify where and how the network could be improved.

The results

The analytics and diagnostics delivered by Guru Pinpoint provided the information required to implement improvements to the Elizabeth House network. These changes resulted in:

- 68% reduction in network heat losses
- 4°C reduction in corridor ceiling void temperatures (where piping is located)
- 80% cost saving in pump room energy

Together these results have resulted in significant savings for residents. Over the course of the project, the energy tariff for residents reduced from 7.7p to 3.8p per kWh.

In addition, the housing association has reduced the risk of fuel poverty amongst residents, reduced overhead costs and reduced CO₂.



"Energy can be an invisible cost for social landlords as we take on the role of heat suppliers. Guru Systems has helped us to understand how to make our heating network more efficient, minimise costs for our tenants and support those at risk of fuel poverty."

Eamon Somers, Consultant Development Manager, Octavia Housing