Climate and Zero Carbon Working Party RCC Report

Investigations into the potential for strategic shifting of the heating load profile over the day

The notion of shifting the heating load from the middle of the night to other times during the day is popular with residents. Achieving this while maintaining cost neutrality is a complex matter, which involves

- Determining the exact impact of various switching profiles on load delivery
- Determining the impact on temperature levels of any new load profiles
- Determining the cost implications of any shift in load

Resident members of the working party who have some expertise in this area were charged with generating a paper explaining in detail how this might work, including some modelling of these processes.

Ramboll, the City's consultants, have produced a model of the heating System, which will be shared with the working party.

Any experiments into intra-day load shifting need to be approached cautiously as there is potential for later increases in charge rates.

Investigations into the potential for using weather forecasts to modify the load profile on a day-to-day basis.

Schneider Electric had been asked to see how a weather API might be integrated into the heating BMS.

Investigations into commercial and technical solutions for individual controls.

Members of the working party have been working with residents of Wallside and BEO resident engineers on the practicalities of this project. Based on a customer needs specification, Schneider Electric are expected to provide a technical feasibility and rough pricing, based on this specification. A draft legal framework has been agreed with residents.

Investigations into the potential for block-wide improvements to the thermal structure of buildings.

Extensive work on investigation of the potential for Soffit insulation has been carried out, but cost challenges and water penetration mean that this unlikely to be viable.

There is better news on the insulation of roofs which is now likely to be a building regulations requirement for the next phase of roof replacement.

Investigations into designs for thermal improvements to flats, which will be implemented by residents at their expense.

This is a large subject and needs proper definition. The first likely area is improvements to glazing. Members of the working party are following the trials in Golden Lane, which could be implementable in the Barbican.

Investigations into non-heating related energy savings around the Barbican Estate

This matter was being investigated across the whole of the City's housing portfolio by the City's energy team.

Working Party Membership

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