



About City House

City House in Croydon, combines a mixture of privately owned, socially tenanted and shared ownership apartments and studios. It comprises of 338 apartments all receiving heating and hot water from a communal boiler. Switch2 Energy are the Energy Services Company (ESCo) providing the heating and hot water to its residents.

The project

As part of Switch2's ongoing commitments to the residents at City House, a full system audit was carried out to establish opportunities to optimise the existing systems and improve transparency in monitoring and reporting.

The initial discussions for Essential Control to work with Switch2 Energy took place late in 2016 and in May 2017 City House was investigated as a potential upgrade opportunity. City House is typical of district heating sites in Switch2's portfolio and was the first site to be investigated by the duo together. After completing the full audit, a number of key factors were identified that would improve the efficiency of the plant room, while reducing costs for the resident. Discussions between Switch2 and Essential Control took place with a view to Essential Control taking over the BEMS at City House.

The existing BEMS on site was a Trend IQ3 type however it had been adapted over the years and was no longer fit for purpose. It was agreed that an upgrade to the BEMS system was required that would enable better transparency and monitoring of the scheme. Following the survey, Essential Control's proposal was to replace the entire motor control panel and to install a proprietary E-MAGINE BEMS system. The new system would then allow both Essential Control and Switch2 engineers full access to the plant and enable them to monitor alarms, temperature, pump speed, and set weather compensation. This in turn would increase efficiency of the energy consumed by the residents and provide a reduction of carbon emissions.

The outcome

Feedback from the residents has so far shown the new system has improved customer satisfaction for and there have been improvements in performance and effectiveness.

Due to the successes at City House, Switch2 and Essential Control will continue to provide servicing of existing BEMS for a number of Switch2 sites throughout next year. Works look to install a number of E-MAGINE systems but also their BACnet Interface product which enables them to monitor and manage sites in a similar way to if the full E-MAGINE system was installed but without the expense of a full upgrade, opening up the offering where a full upgrade is not feasible.