

Case Study: Lockwood Hub



Surrey County Council are actively seeking ways to make financial savings as rising demand continues to put pressure on their services. They also aim to reduce future carbon emissions and ensure their services are resilient to risks posed by climate change.

As part of this drive to reduce carbon emissions, CircoSense was identified as a potential energy saving solution with its cognitive, energy saving technology. The unit was installed in February 2017, and as part of a Proof of Concept process, underwent a trial to prove the savings which could be achieved at this site.

Initially a site survey was carried out, which identified the site had stored hot water heated directly from a condensing gas water heater. CircoSense fitted hour totalizers onto the gas solenoid valves to assist the measurement and verification process.

After the six-week trial period concluded, it was established that the CircoSense had resulted in savings of 38% on the cost of heating hot water at the site, with an annual reduction in carbon emissions of 10.1 tonnes.

Paul Hasley, Energy Manager at Surrey County Council, stated “We selected the Lockwood site to have a trial installation of the CircoSense device, which resulted in savings in both the costs of hot water and in carbon emissions.”

How the savings were calculated at Lockwood Hub

1. Reading of hour totalizers on gas solenoid valves on day one of trial
2. Reading taken after two-week baseline period, during which CircoSense unit is on “Bypass” mode to learn system usage
3. CircoSense unit changed from “Bypass” to “Active” and begins to reduce energy usage
4. Final reading taken after two weeks on “Active” and compared to baseline period

Key Facts and Figures

- Proof of Concept installation
- Non-modulating boiler
- 38% reduction in gas consumption for hot water
- No disruption to the facility
- 10.1 tonnes carbon reduction