



Energy. Managed.



Kirklees Council Case Study

Schools take control of sustainability

Kirklees Council began as a TEAM Sigma software customer, but decided to take advantage of outsourcing cost recovery and utility bill validation to the TEAM Energy Bureau. By using the multi-login online SigNet software provided as part of their TEAM Bureau Service, Kirklees have developed a strategy to engage schools and encourage them to take responsibility for their energy use, showing the schools what they use, when and where.

Background

Kirklees Council has committed to projects and initiatives to reduce CO2 emissions across almost 900 sites. Their portfolio includes a wide range of sites from nurseries, bus stations and leisure centres, to the more unusual; allotments, car parks, sewage pumping stations, a clock tower and a cemetery.

From policy changes based on transport, sustainable procurement and street lighting, Kirklees Council has a target to reduce CO2 emissions by 30% between 2005-2020. Already the council has demonstrated significant progress reflected in the 2012 CRC league table, moving from 168 to a ranking of 10th place, second of all local authorities in the UK.

Sustainable schools

The council has recognised that schools are responsible for nearly 50% of carbon emissions from building energy use across the local authority. This statistic is not an unusual find for councils and local authorities across the UK.

The council has set an aim for all of the 190 Kirklees schools to become a sustainable school by 2020. Nearly 30 schools have participated in the Kirklees Carbon Management Programme. The council is working to engage school staff and pupils, supporting them to reduce their energy consumption. These savings can be reinvested into schools in the form of teaching support, books and more.

Katie Stead, Environment Officer at Kirklees Council is a key player in the Sustainable Schools initiative. 'Schools pay their own energy bills, we can give them the intelligence and tools to help them reduce their own energy use.'

Steps for schools

The Council's Energy Team has been working alongside schools since the Council implemented the National Sustainable Schools Framework in 2009. This is the UK Government aim of every school being sustainable by 2020 (<http://www.education.gov.uk/vocabularies/educationtermsandtags/6788>).

Concerned about the long-term impact of energy use on financial and environmental resources, Kirklees Council invested in TEAM Sigma software. This allowed them to input and check utility invoices, start work on analysing consumption data and trends. In 2011, they took the decision to outsource the utility bill management and cost recovery to TEAM's Energy Bureau Service, which has SigNet as part of the service package.

Each school has a login to SigNet which allows them to view consumption data, trends and produce reports based on their own site. The council has a council wide log-in which allows an overview of each individual schools site (and additional council sites).

The schools can...

- View their utility bills – including historical bills.
- Look at reports including energy league tables, year on year progress and the consumption of half hourly/AMR meters (where implemented).
- Email or print easy to view graphs and charts to produce reports for governors' meetings

Using SigNet

Katie Stead, Environment Officer tells us; 'We saw outsourcing to the TEAM Energy Bureau not only as an opportunity to reduce the administrative burden of checking and processing every single bill for payment, but also to ensure a fully up to date and accurate database is put in place. We know we can rely on the quality data in SigNet. TEAM offered the best package to suit our needs.'

The entire council energy consumption database is managed by the TEAM Energy Bureau, who takes care of managing the bills on behalf of Kirklees Energy Team. The SigNet database allows Kirklees to run reports and collate the data for CRC, amongst other legislation and compliance reporting including the production of Display Energy Certificates (DECs). It is a valuable asset in identifying sites with higher levels of consumption which would benefit from energy improvements.

Tom Tolputt, Energy Engineer at Kirklees Council; 'TEAM Sigma is used on a daily basis in our offices for investigating billing enquiries, producing DECs, performance monitoring, year on year reports and carbon reporting.'

What the schools see

Katie Stead, Environment Officer adds; 'Business Managers and Bursars use TEAM Sigma, they like the visual representation of the data. The reports are used in meetings with school stakeholders to see where effective energy management and possible improvements can make a difference.'

The monthly reports provided by the Energy Bureau highlight where additional savings can potentially be made, and who are the highest consumers to focus on and encourage them to get on board with our Carbon Management Programme.'

Monitoring progress

SigNet monitors daily energy consumption; it provides a breakdown of when and where it is being used. It can be analysed by site or building, for example a gym or music room, or technology suite full of computers identifying what time they are switched on and switched off.

Sal Kerry, Carbon Education Officer liaises directly with Headteachers, Business Managers, Caretakers and Teachers, to build relationships within the schools and get them on board with the Council's Carbon Management Programme, and national programmes like Eco Schools and Sustainable Schools. Sal explains; 'We are looking for a joined-up approach across schools. It can be as simple as training building users on the correct use of the school heating system and how to manage it'.

Sal visits schools and supports them by identifying areas of improvement which will have the most impact, creating the biggest savings. Sal goes out to the schools to provide SigNet training and supply a workbook on how to use TEAM SigNet.

The future

Increasing training and the rolling out of SigNet to further sites is high on Kirklees Council's agenda, along with a mix of other key projects investing in low cost energy saving projects. Additional changes include installing auto shut down software on computers, hippo devices to shrink water usage supplied by Yorkshire Water, more repairs and maintenance and introducing dimmers and lighting controls.

Savings Snapshot

Using TEAM SigNet Kirklees Council was able to analyse gas consumption AMR data at 16 schools in 2011. Using strategies outlined in their CMP, Kirklees achieved energy savings during the Autumn half term and Christmas holiday of 52%.

Breakdown

Gas Energy Saving: 295,000 kWh

Estimated Gas Cost Savings: £9,000

CO2 reductions: 55 tCO2e