

Building Control for Smaller Buildings

SSE Smart Connect™ is our new plug-and-play building management system that unlocks energy savings in the 75% of UK buildings previously considered too small for a control system to be cost-effective¹.



It provides an off-the-shelf, wireless solution to monitor and control building systems such as heating, lighting, and other equipment in schools, community centres, retail units, hospitality venues and similar small-to-medium-sized buildings.

By using LoRaWAN® technology to allow sensors and actuators to communicate with a 4G-connected control hub, Smart Connect delivers powerful building automation with minimal installation and remote management – no complex engineering or dedicated sales process is required.

Why Smart Connect?

Simple | Scalable | Smart

Smart Connect brings big-building energy intelligence to smaller sites in a compact, easy-to-use package. Key features and benefits include:

Plug-and-Play Setup

The Smart Connect controller auto-connects to the internet (built-in 4G/GSM or Ethernet) and auto-discovers devices. It comes pre-configured with an ever-growing library of 500+ compatible devices (sensors, meters, HVAC controls) for true plug-and-play integration. Even if a site has no existing BMS, Smart Connect can create one out-of-the-box. Over-the-air updates keep the system up-to-date without the need for onsite visits.

Completely Wireless Deployment

All field devices (e.g. radiator thermostatic valves, temperature sensors, smart plugs, occupancy sensors) connect wirelessly via LoRaWAN – a long-range, low-power radio standard. This means no intrusive wiring or building works. The Smart Connect hub can cover an entire building wirelessly (up to several floors) from one point. Battery-powered sensors last for years and can be placed anywhere needed (classrooms, meeting rooms, shop floors).

This wireless approach makes installation quick and low-cost – typically done in hours by an electrician with no specialised BMS engineer required.

Remote Monitoring & Control

Once installed, everything can be managed through a secure web interface – accessible on desktop or smartphone. Users get 24/7 real-time visibility into temperatures, energy usage, and device status across their building. They can adjust heating schedules, set smart on/off rules for plug loads, and receive alerts and alarms if conditions stray from setpoints. Because it's cloud-managed, facility managers (or even our SSE support team) can fine-tune settings remotely, ensuring optimal performance without site visits.

Energy Optimisation Out-of-the-Box

Smart Connect directly addresses common sources of energy waste in small buildings: overheating, lights left on, and equipment running in empty rooms. By adding occupancy sensors and smart TRV (thermostatic radiator valve) controllers, the system can automatically turn down heat and turn off devices when spaces aren't in use. Schedules and zoning can be implemented easily via the app – e.g. a community hall's heating might follow booking times, and shop lighting and HVAC can align with open hours. This demand-driven control can typically reduce energy use by 18–39% even in buildings that previously had basic timer controls.

Scalable & Future-Ready

The Smart Connect solution is highly scalable – start with one site (or even one area), then expand. It's simple to add more sensors or control points at any time; the system will auto-detect the new devices and bring them online. This means customers can

¹ <https://docs.nrel.gov/docs/fy22osti/82750.pdf>

begin with a targeted need (say, heating control) and later incorporate lighting, ventilation, or sub-metering on the same platform. Moreover, Smart Connect lays the groundwork for advanced energy services: the data and control can integrate with SSE's Remote Service Centre to enable energy flexibility (Step 3 of a net-zero journey) – for instance, aggregating sites for demand response or load shifting programs in the future. Clients get a solution that not only saves energy now but also prepares them for smart grids and tariff optimisation down the line.

Case Study

St Katherine's School is part of the Cathedral Schools Trust, a well-established and creative multi-academy consisting of 12 primary and secondary in the wider Bristol area.

The school currently had an ageing Building Management System, and were keen to have a simplistic and cost effective solution without costly system overhauls.

Solution

Our solution was the installation of the **SSE Smart Connect solution**: a controller and 94 TRV controllers, along with five occupancy sensors strategically placed. This cloud based solution utilises an open IoT solution designed to connect and monitor energy consumption and building status, making it ideal for small and medium-sized buildings like St Katherine's School estate.

Testimonial

"The SSE Smart Connect system installed by SSE Energy Solutions have made a significant impact on our sustainability goals at St Katherine's. In just one week of heating, we saw a 62.8% reduction in gas usage compared to the same week the previous year. This translated into a 52.65% decrease in our gas bill – a remarkable financial and environmental win.

This improvement is entirely due to the ability to set target temperatures in individual rooms, giving us precise control over our heating. I'm confident we'll see even greater savings once we implement scheduled heating, allowing radiators to switch on and off automatically.

Alex Poulton, Facilities Manager

[Click to read the full case study](#)

Outcomes



Energy savings
41,490 kWh per annum



Emissions Reduction
7.57 tCO₂e per annum



Cost Savings
£3,000 per annum



Better Wellbeing
Monitoring

Conclusion

Smart Connect delivers a new approach to smart building control that is ideally suited for small and medium-sized facilities looking to save energy, cut costs, and simplify their operations. With its wireless LoRaWAN deployment, intuitive cloud management, and proven results, Smart Connect offers a no-fuss route to modernising any building's environmental controls.

Whether you're an energy consultant, a school bursar, or a small business owner, Smart Connect translates advanced smart building tech into a straightforward solution that delivers immediate value. It embodies SSE's commitment to innovation in the energy transition – helping every size of organisation achieve a better world of energy by eliminating waste, improving comfort, and enabling future flexibility.

SSE Smart Connect™
A Remote Optimal™ Solution

For a better world of energy

To find out more about how SSE Energy Solutions can help your organisation, get in touch today
Enquiries.energySolutions@sse.com | 0345 072 9529 | SSEEnergySolutions.co.uk