

Battery and solar is a winning combination for education centre

2 years ago



Adding battery power to a building's solar array is helping a higher education centre to cut carbon emissions and costs.

The University and Professional Development Centre (UPDC) in Bury St Edmunds, Suffolk, offers degree courses and adult education services. It recently installed 500 kilowatts (kW) of rooftop solar, with support from West Suffolk Council. The estates team at UPDC, part of the Eastern Education Group, sought to ensure that it could maximise use of the renewable energy generated by the rooftop array, with an energy storage system to capture the surplus solar.

Andrew Swift, Group Director of Estates for [Eastern Education Group](#), said: "This is a large building, which was a former warehouse and engineering facility, so it takes a great deal of energy to run. The campus is functional all year round and generally for long hours on most days.

"When energy prices escalated our bills increased threefold, so it became a priority to reduce them. West Suffolk Council supported us with the solar installation, as we wanted to optimise our use of renewable energy and the sustainability it would generate for the college. We were already informed of battery energy storage systems and approached Connected Energy to find the right solution for us."

Energy storage specialists Connected Energy carried out a feasibility study to demonstrate the savings that the Group could make by adding an energy storage system to support the solar array. Connected Energy recommended and installed one of its 300kW E-STOR units.

"E-STOR enables us to store excess energy from the solar panels and draw down on it during peak periods of demand, rather than directly from the grid," added Andrew. "Combined with the solar array we estimate

that it will offer us considerable savings annually with our energy costs.”

The Eastern Education Group provides further, higher and adult education services across the East of England, namely Suffolk, Norfolk, and Cambridgeshire. The Group has also installed EV charge points across its estate and is in the process of replacing its carbon fuelled fleet for energy efficient alternatives. “Vehicles that utilise the charging stations at UPDC can do so in the knowledge that the power source to them is provided by renewable energy from the solar array and energy storage system,” said Andrew.

Connected Energy takes batteries from end-of-life electric vehicles and gives them a second life in its E-STOR energy storage systems. This means that E-STOR offers increases sustainability benefits compared to a system that uses new batteries.

“If this installation works as well as we anticipate, we will look at installing further energy storage systems in tandem with rooftop solar arrays across the Group’s estate,” added Andrew. “Sustainability is a priority for the Group, we are committed to several of the UN’s sustainable development goals and are exploring more options for capital investment to further reduce the carbon footprint of every campus in our portfolio.”