

Outstanding lesson for school energy saving with Dimplex

An acclaimed Hertfordshire school, with the coveted 'outstanding' Ofsted status, is setting the standards in energy saving and is one of the first in the UK to install a high efficiency Dimplex air source heat pump.

Sir John Lawes secondary school in Harpenden, as well as being a training school and specialist centre for science and media arts, also holds the Ofsted status of 'Outstanding for Education for Sustainable Development'. So a high performance, low carbon heating solution was an essential feature of a new maths block building for its 1,200 students.



One of the latest Dimplex high efficiency LA 40 TU, 40kW air source heat pumps has been installed by Dimplex installer partner Azure Natural Energy Systems, to provide heating for the three new classrooms, two offices and communal area in the new building, all linked to a fully integrated energy management system.

It's part of an ongoing programme of energy savings measures which has won 'green' awards for the school and seen a substantial improvement from G to E on the Display Energy Certificate in addition to savings of 20 percent on the fuel bills.





Client

St Johns Lawes
School

Products

LA 40 TU air source
heat pump

Partners

Azure Natural Energy



Head teacher Claire Robins says: "We're very proud to be a pioneering school and to be one of the first in the country to have this system. As well as practical energy savings, it works at many levels including our educational programme because our students are highly motivated by environmental and sustainability issues."

A school-wide programme of energy saving measures which includes improving insulation, installing low energy light bulbs and double glazing in the main building built in the 1930s, is closely monitored and fuel bills have been reduced by £20,000 a year.

Facilities manager Malcolm Hills explains: "We're working hard to improve our carbon footprint and it's very much an ongoing process as we are determined to improve our energy ratings. The new heat pump has only been running for part of a winter so far but we are expecting it to make an important contribution to our programme as it can deliver a coefficient of performance in excess of 4.0, even at low temperatures," he says.

The Dimplex heat pump is installed at the rear of the new school building, surrounded by a strong metal cage as a precautionary preventative barrier to any inadvertent or unwelcome tampering. In the adjacent plant room is the 'brains' of the system which controls not only the heating but also the automatic CO₂ monitoring system. This senses any rise in CO₂ levels in the classrooms and adjusts the input of fresh air, "ensuring the students are kept healthy and awake," adds Mr Hills.

Plans for the next phase of energy saving measures are under way and include movement sensors for the lighting systems and external lamination for some of the 1960s classroom blocks to improve heat retention as well as the latest solar PV panels.

 **Dimplexrenewables**[®]

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