

## Llŷn school gets full marks for energy saving



Ysgol Edern has succeeded in lowering its carbon footprint by 36% within a year, thanks to work to upgrade the school and the efforts of enthusiastic staff and pupils. Over the past 10 years, the school's use of propane, which is used to heat the school, has fallen by 38%, while its overall CO2 emissions has lowered by a quarter.

The school's electricity consumption is 10% below the typical national benchmark, which is the amount a school of its size would be expected to consume.

The savings are the result of a series of improvements carried out on the building to make it more energy efficient and, at the same time, pupils have been keen to monitor the school's energy consumption as well as the amount of electricity it generates with its new solar panels.

Since 2012, work has been conducted to transform Ysgol Edern into an efficient building, including installing new boilers, PV solar panels, improvements to the lighting systems, installing new doors and insulating the roof.

Geraint Evans, the school's head teacher, said: "The improvements over the last few years have enabled us as a school to reduce our energy consumption significantly and, as a result, our costs and carbon footprint."

As part of the project, a new door was installed in the entrance area to replace the old drafty door. However, the school decided to go one step further and create a new internal hallway by placing an additional door in the corridor to prevent cold drafts from coming into the building.

"I suspect it was an extremely inefficient building in the past," said Geraint. "But as a result of the work carried out, we've been able to see a substantial difference in our energy consumption within a relatively short period of time."

Installing a new heating system, along with insulating the roof and creating a new entrance to the building means less heat is able to escape from the school and that less energy is needed to heat the school.

Additionally, after re-wiring the building and introducing new efficient lights which run on sensors, the school's lights now switch off automatically.

But although the children no longer have to remember to switch the lights off, Geraint explained that learning the importance of saving energy is still a priority at the school.

"We have two pupils who keep a record of our energy consumption on a monthly basis, as well as how much electricity is generated by our solar panels," he said.

"Under the Gwynedd and Anglesey Green Schools scheme, the children have been studying themes such as solar panels and energy, so establishing an understanding of the importance of saving energy is something we feel strongly about."

Dyfan, a Year 6 pupil responsible for recording the school's energy consumption said: "We record our electricity consumption each month and feed the information into a spreadsheet. The spreadsheet informs us instantly if more electricity has been consumed in comparison to the previous month and compared to the same month last year. In order to reduce energy consumption we also remind everyone to close windows and doors and have placed stickers around the school to remind people that equipment such as computers need to be switched off when they're not in use."