

St Columb Minor Primary School

Turbine Size: Proven 6kW

Tower: 15m

Wind regime: Good/excellent

Approx annual output: 10,000kWh

Sector: Education

Grants/ Funding: The Low Carbon Buildings Programme (LCBP) Phase 2



Challenge

St Columb Minor School was involved in an energy management plan that included adopting strategies to conserve energy and become the model school for energy efficiency and renewable energy. This would demonstrate to the local community the schools commitment to develop a more sustainable environment for its children's future.

Solution

The school employed an independent energy consultant to carry out an energy audit. The consultant advised that a wind turbine, solar PV and solar thermal panels would be a suitable solution for the Eco-Schools programme. The school opted for a Proven 6 which would be sited in an exposed location with south prevailing winds to gain maximum energy output. Aeolus Power, a reseller of Proven Energy wind turbines installed the turbine. **50% grant funding was secured by British Gas, Framework Supplier under the Low Carbon Buildings Programme (LCBP) Phase II.**

Benefit

The school has a 6kW Proven Energy wind turbine that could produce an estimated annual yield of 10,000kWh.

This will reduce the school's CO₂ emissions by 4,300kg per year. With all of the renewable energy sources together the school is saving approx 15% on energy costs.

Another benefit of installing renewable solutions is feeding surplus energy back to the national grid to earn extra revenue from ROC's.

The school invested in a display panel which is positioned in the main entrance. This shows the electricity generated since the wind turbine installation, electricity being generated at the present time and CO₂ savings. The wind turbine and display will act as an educational resource in renewable energy for the staff, pupils, parents, visitors and St Columb Minor community.