

School Project Case Study

Redlands Primary and Nursery School



Redlands Primary and Nursery school serves children from ages 3 to 11 in Worksop, Nottinghamshire. Their wind turbine was installed in 2005 to provide renewable energy direct to the classrooms.

Mr Honey the Headmaster said:

“We are absolutely delighted with our wind turbine that you have built for us as part of our rebuilding programme. The turbine itself sits among a line of trees at the side of our field, and is safely fenced. We have had absolutely no problems whatsoever with it; indeed we have had many local people commenting on what a great idea it is, lots of media interest and pleasingly no complaints at all about noise. It seems to spin pretty quietly. It provides us with an estimated £2000 worth of free energy, which can only be beneficial to our School budget and so releases funds that would otherwise have been spent on energy. But most of all is the great benefit in educating and informing our children. They are fascinated, often stand and watch it spin and it is a regular topic of conversation. So our children are learning in a practical way about our duty to conserve energy, and hopefully they will carry this attitude into their working lives in the future.

My only regret is that we should have built 2 turbines, so that we could get even more benefit from the free wind, that never seems to fail us.

Yours, Chris Honey”

Refurbishment

Redlands underwent major refurbishment and re-building in 2004/05. The Iskra AT5-1 wind turbine was installed as part of this program just before the new school buildings opened. It is now reducing electricity bills, reducing carbon dioxide emissions and contributing to the sustainability of the school.



Funding

Nottinghamshire County Council funded this project as part of the re-building programme. They also took advantage of a government grant through Clear Skies, which provided 50% of the costs. This same funding is still available and is now provided through the Low Carbon Buildings program, Phase 2. Details can be found at: <http://www.lowcarbonbuildingsphase2.org.uk/>

System Details

The wind turbine is an Iskra AT5-1 mounted on a 12m freestanding tower. The turbine is separated from the playground by a low timber fence. The electrical equipment is situated in the school facilities room where the system is also connected to the national grid.