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PROJECT SUMMARY

Project Name: Fernside Schools
Size of Installation: 2.16 kWp, split over 2 systems
Type of Installation: Retrofit, pitched roof and flat roof
Client: Kirklees Metropolitan Council
Equipment: Module – 12 x BP7180s framed modules
Inverter – 2 x Fronius IG15
Mounting system – Econergy Consolses for flat roof
Conergy SunTop II for pitched roof

Completion Date: October 2005
Predicted Generation: 1,620 kWh per year

Project Summary

The project comprises of two PV installations on schools in the Almondbury area of Huddersfield. Each system has a rated power output of 1.08 kWp.



The array mounted on the pitched roof



The array mounted on the flat roof

Technical Information

Each system comprises of six high efficiency BP Solar BP7180s mono-crystalline PV modules and a Fronius IG15 inverter. Inverters are fitted with integrated data-loggers to record generation and electrical values at regular intervals throughout the day. This data is then available to download to a PC for use as a teaching tool, or for analysis of the systems' performance.

The array on the flat roof is installed using Econergy Consolses, recycled plastic trays that are fixed in place by ballast. This type of system offers a simple method of installing a PV array onto a flat roof.

Social, Economic and Environmental Benefits

Visual displays showing the power generated at that moment in time, the energy generated to date and the amount of CO₂ emissions saved are located within prominent locations in each school. Generation is predicted as 1,620 kWh per year, saving nearly 14 tonnes of CO₂ emissions over a twenty year period.



The PV electrical installation of one of the schools



Rear view of the Econergy Consolse mounting system



The visual display showing kW, kWh and CO₂ saved