

# Voltage Management and Solar Electricity System Bedfordshire and South East London



Ardenham Energy has installed a combination of voltage management systems and grid connected solar electric technology on properties in Bedfordshire and Shooters Hill in London. This has enabled the householders to be amongst the very first in the country to benefit from both solar electricity as well as voltage management which will reduce the energy load by 10-15%.

The solar PV systems will generate about 900 kWh for every kWp of installed capacity, and the addition of a state of the art voltage management system has enabled the properties volts to run at 220V rather than 245V. This voltage reduction will save in excess of 10% of the energy consumption in the property each year.

With the proposed Feed In tariff starting in April 2010, offering 36.5p / kWh generation and 5p / kWh export, the addition of a voltage management system will reduce electricity consumption and increase the amount of exported electricity.

Both projects Comprise

- 170Wp PV Modules
- Mastervolt Soladin Grid synchronising inverters.
- AC & DC control switchgear and cabling .
- 220V voltage stabiliser manufactured by VPhase

**Ardenham Energy Ltd** is an engineering contractor certified under the UKMCS Low Carbon Buildings Scheme for grant aided projects ([www.lowcarbonbuildings.org.uk](http://www.lowcarbonbuildings.org.uk)). The company has extensive renewable energy engineering project experience and can provide a full service for wind systems, solar PV (electric), solar hot water systems, ground and air source heat pumps and backup power systems. These can be for domestic, governmental and commercial and non commercial buildings in the Home Counties and London region.

**For more information contact:**

Ardenham Energy Ltd  
Ardenham Court  
Oxford road  
Aylesbury,Bucks, HP19 8HT

Tel 01296 –331362  
Fax 01296 375747  
[www.ardenhamenergy.co.uk](http://www.ardenhamenergy.co.uk)  
[info@ardenhamenergy.co.uk](mailto:info@ardenhamenergy.co.uk)



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