

A Solar Photovoltaic (PV) and Solar Thermal Installation for Domestic property, Abertillery



This end terrace domestic property set high on the valley side in Abertillery was due a refurbishment and whilst the scaffolding was up, to allow for a complete re-rendering of the property, the owners decided to make further use of the scaffolding around the property and install a green solution upon the roof.

The Problem:

The rising costs of both gas and electricity prompted the owner of this end terrace domestic property to explore other options, namely the generation of his own electricity. WDS Green Energy were called and after much discussion with the owner and a detailed site survey WDS green energy were able to offer a solution that not only would reduce his electricity bills but also a solution that would reduce the dependence upon gas for water heating.

The Solution:

WDS Green energy provided a small **1.44kW Solar Photovoltaic system** upon the south- west facing roof which is the ideal facing for maximising the potential from Solar systems. As well as this row of PV panels the owner decided to add a **solar thermal system** to heat the water for the property. WDS green energy were happy to oblige and installed a single Dimplex flat plate collector alongside the Solar photovoltaic panels.



The Benefits:

The **solar photovoltaic system** upon the roof will generate green electricity for use within the property, reducing the monthly expense for electricity as well as generating an income under the Government Feed-in-Tariff scheme (FiTs).

The FiTs is set for 20 years at an inflation linked tariff per kilowatt hour of electricity generated by the **solar panel array**. There is also a further tariff for exporting any unused electricity back to the national grid.

The **solar thermal system** will contribute up to 70% of the hot water demand of the annual domestic hot water demand of the property and the owner is eligible for a grant of £600 towards the installation costs of the system under the Government Renewable Heat Premium Payment scheme (RHPP).

Gaining this grant also does not rule the owner out of receiving the Renewable Heat incentive scheme (RHI), which operates in a similar manner to the Feed-in Tarrif scheme but for heat generation and which is due to begin in early 2014.

