



## Case Study – Eco House

Project	Penwhilwr, St Dogmaels, Pembrokeshire. ( <a href="http://www.quietearth.org.uk">www.quietearth.org.uk</a> )
Equipment	2 x Gasokol TecSol (S) flat plate solar collectors (4m <sup>2</sup> ), connected to a 206 litre twin coil vented copper hot water cylinder, with a 12 volt electronic solar controller.
Details	Winner of the TV series Grand Designs Eco House in 2008. This unique house was designed using natural materials, the main structure being built of straw bales, with renewable energy resources such as solar energy to heat water and a wind turbine to provide power.
Objective	To build a low impact straw bale home which had to be sensitive to the environment. The house is built from natural and mainly locally sourced materials. Powered by sun and wind, and fuelled by its own woodland, with all waste to be composted on site.
Achievements	<p>The vision of the owner of this unique property was to create a home that harmonised with nature. This is a sustainable building that uses renewable resources to reduce the CO<sub>2</sub> impact on the environment.</p> <p>The solar water heating system was installed to compliment the ethos of this property, which in conjunction with a wood burning stove is providing hot water for the owner's requirements.</p>

