



Case Study – Guest House and Tearoom

Project	Cwmbiga Farm Guest House, Penfforddlas, Llanbryn-mair, Powys (www.cwmbiga.co.uk)
Equipment	20 x Gasokol TecSol A-frame mounted solar collectors (40 m ²), arranged in 4 banks of 5 collectors, plumbed in series. Connected to a 4000 litre thermal store via a plate heat exchanger, with a flow meter and a 3 level solar controller. The system has a data logger to enable the customer to monitor the solar collectors' heat output and kW hours produced.
Details	4 Star rated, environmentally friendly accommodation, consisting of two luxury bunk house style cottages each sleeping 2-8 people. Additional guest room accommodation in main farm house. Recently completed visitor's tearoom. As the buildings are Grade I Listed the solar panels were mounted on A-frames on the hillside.
Objective	The solar water heating system was installed to work in conjunction with a 50kW log burning boiler designed to provide both hot water and underfloor space heating.
Achievements	Completed in July 2007, the customer reports that the system is providing ample hot water needs for all guest and occupants even when at full capacity, as well as augmenting the heating system.

