

**Community Project Case Study-  
Chickenshack Housing Co-operative,  
Brynllyn, Rhoslefain, Tywyn, LL36 9NH**

*“Clear Skies bridged the gap between what we could afford and what we actually wanted, in terms of an highly efficient, low emissions heating system”*

**Steven Jones – Director Chickenshack**

*“This was an exciting and pioneering new step for our company, which celebrated the forward-thinking of both our clients and Clear Skies”.*

**Chris Laughton FIDHE, MD of ‘The Very Efficient Heating Company’**



**System Installation Details**

|                                |  |
|--------------------------------|--|
| Date of Installation           | Solar Thermal Water Heating and Log Boiler |
| Cost                           | December 2003                              |
| Estimated Annual Energy Saving | £15,000                                    |
| Amount of Clear Skies Grant    | £7,000                                     |

The Chickenshack Housing Co-op manages 5 acres of land and four dwellings and works to an evolving permaculture inspired design. Together as members of the co-op they work towards an energy efficient and sustainable home. This includes a solar & biomass heating system, an organic veggie garden and orchard and they manage a meadow, a small woodland and willow coppice as well as a natural wetland. The Chickenshack team spent two years considering all the options for their heating system – the buildings in question comprised a large property of 4 adjacent buildings, with an outhouse across a courtyard. The whole premises was originally heated by electric, which they replaced with small wood stoves. This involved a considerable amount of work, was quite expensive to run and failed to heat the property adequately.

The team wanted one central heating system that was wood powered and solar powered, that would heat the whole property efficiently and with low atmospheric emissions. A 30 kW ‘batch’ log boiler was fitted which is normally fired just once a day, only possible by storing heat in large water tanks. Heat is distributed in varying amounts according to the outside temperature. During the summer, when there is little demand for space heating, a 4.8 sq. metre solar collector boosts the domestic hot water with occasional top-up from an electric immersion. An interesting feature is that the log boiler is located in a remote outhouse that required the use of underground, highly insulated ‘district’ heating pipe. The boiler burns wood at moisture content below 25 % at over 1000 C. at up to 90% efficiency of combustion.