

# Powering Down, Small Scale Resource Management



***Lisa and Piers Guy farm at Higher Keigwin in the heart of Penwith Moors, West Cornwall, an area characterised by small family run dairy and beef farms. The Guys have made resource management central to the planning and running of their 100 acre holding and have adopted a reduced carbon approach to utilising the farm's natural assets.***

In a move towards a low carbon status one of the main priorities has been to become more energy efficient and less reliant on fossil fuels. "Our starting point was to commit not only to switching to greener forms of energy but importantly to "power down" so that we can reduce our overall energy consumption," explains Lisa.



*"The switch to greater energy efficiency doesn't happen overnight," warns Lisa. "It has taken us 5 years to wean ourselves off oil but we have now reached a point where we meet all our electricity needs and produce 50% of our wood for heating on farm; we also earn and save in the region of £5,000 from our own renewables."*

The Guys installed a 5kW Evance wind turbine on their farm three years ago. The turbine generates 13,000 kWh per year which powers their farm buildings, house, office, holiday cottage, and a small meat storage unit; in addition they sell 3,000 kWh back to the grid. Based on 2011 prices, the same turbine will cost £25,000 and generate an annual income of £3,561 from the current Feed in Tariff (FIT). The Guys also estimate that they save in the region

of £1,500 by generating electricity for their own use on farm.

The farms aims to become self sufficient in wood and 3 years ago the Guys began re-coppicing 5 acres of wet willow, with a further two acres of native species recently established. "We see deciduous woodland as having considerable future value" explains Lisa. "I believe that the price of wood will gradually increase over the next ten years as wood burning technology becomes cheaper and the demand for wood fuel increases; I would urge other small scale producers interested in medium term renewable investments to think about setting 10-20 acres aside for wood."

A further priority for the Guys is the management of the farm's rough ground and long term pasture. They run a small herd of South Devons that graze extensively over herb rich leys and 60 acres of moorland. Aside from the obvious benefits that see a species rich environment they are very aware of the role that these areas have to play in terms of carbon management. "While it's true that we are committed to managing our farm for low outputs and high animal welfare," enthuses Lisa, "we can also see the potential to generate income from our capacity to store carbon. This is particularly true of marginal and moorland areas like ours and the way to encourage farmers and landowners might be to develop carbon incentive schemes."

Interested in finding alternative ways to produce energy on your farm? Then visit the [renewables](#) section of the Swarm Hub.