Make money from the sun

Farm facts

Name: Simon Brown, Skimble Crown
Location: Much Wenlock, Shropshire
Farm size and enterprise: 560 sows, farrow to finish

Background

Skimble Crown had been looking at the potential to use renewable energy for some time and with the south-facing barn decided solar PV would be the best option. The barn roof did not need strengthening and the solar panels have been arranged in such a way as not to cover the sky lights, therefore allowing as much natural light as possible to enter the barn.

Since the success of the solar PV installation, the farm is now looking at other forms of renewable energy, including a wind turbine, and also using the hot air from the inverters to warm the offices.

Benefits

- It is utilising a free resource
- Inflation linked, guaranteed payments for energy produced over 25 years
- The business is protected against future electricity price rises
- It improves the farm's environmental credentials
- Low maintenance costs and labour requirement
- Projected good return on capital invested.

Simon Brown next to his inverters

> *"PV gives such a good return on investment even when borrowing the money, especially when the business can utilise the generated electricity free of charge."*
> *Simon Brown, Owner*

The system

- 432 photovoltaic (PV) panels have been installed on the roof of the dry sow shed
- The 100kW capacity system is split between two 50kW inverters
- The two panel arrays are separated by a gap to allow for contraction and expansion
- The roof is south facing and has a pitch of 15°, the optimum being 30°
- The system has cost around £240,000 and benefits from the government feed-in tariff (FIT) which for this system generates 32.9p/kWh. Excess generated electricity not used on farm generates 6p/kWh
- This installation benefits from the higher FIT rate as it was completed before the rates were reduced in August 2011
- The electricity generated is primarily used on farm, reducing the unit's energy bill so creating two sources of saving/income.

The estimated payback for the system is around 8 years and a breakdown of the finances can be seen below:

Income and savings – 15 year loan and interest
£30k/year £20k/year

= £10k/year earnings

Key to success

- Do your research first
- Choose the right renewable energy for your site
- Choose a recommended and reputable supplier.

For more information on renewable energy visit www.bpexenv.org.uk

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