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PV Solar Installation Examples and Estimated Costs

Certificate Number ELC54042
 Photovoltaic Systems

The calculations below are a guide to system performance and likely costs. For a firm quotation a Solar Technology site survey is needed.

Calculations are based on the following assumptions:

1. South-facing roof
2. Average 3-bedroom house with average electricity consumption of 3300 kWh p.a.
3. Feed-in tariff of 41.3p (available from April 2010 and adjusted annually in line with changes in the Retail Price Index)
4. Household using half the electricity generated and selling half to the National grid @ 3p (as above)
5. Based on Southern and Scottish electricity prices

All Solar Technology PV Solar Systems use top quality panels and inverters. The installations are based on Sharp PV panels and a Sunny Boy inverter. A panel should last 45 years and Sharp guarantee their panels for 5 years and performance for 25 years.

In addition, domestic customers can make extra saving where grants of up to £4000 (Scotland) and £2500 (rest of the UK) are received (available until April 2010).

**1.5 kWp system will generate 1125 kWh p.a. Approximately 34 % of household needs.
 Roof space required 22m²**

Description	Calculation	£
Number of units of electricity generated multiplied by the feed-in tariff	1125 @ .413	464
Sell back 562.5 unused units at 3p per unit	562.5 @ .03	17
Savings based on generating and using 562.5 units costing 13p per unit	562.5 @ .13	73
TOTAL income and savings per year		£554

Cost of a 1.5 kWp system is £8300 inc VAT @ 5 % (excluding grant discount).

There may be additional costs for scaffolding, which cannot be calculated until a site survey has been completed.

Using these figures the system will pay for itself between in 15 years (less as conventional electricity prices increase significantly) and then generate a profit of over £5000 over the 25 years that the manufacturer guarantees the panel performance.

**2.5 kWp system will generate 1875 kWh p.a. Approximately 56 % of household needs.
 Roof space required 42 m²**

Description	Calculation	£
Number of units of electricity generated multiplied by the feed-in tariff	1875 @ .413	774
Sell back 937.5 unused units at 3p per unit	937.5 @ .03	28
Savings based on generating and using 937.5 units costing 13p per unit	937.5 @ .13	122
TOTAL income and savings		£924

Cost of a 2.5 kWp system is £13500 inc VAT @ 5% (excluding grant discount).

There may be an additional cost for scaffolding. This cost cannot be calculated until a site survey has been completed.

Using these figures the system will pay for itself in 15 years (less if conventional electricity prices increase significantly) and then generate a profit of over £9000 over the 25 years that the manufacturer guarantees the panel performance.

The above systems are only examples and Solar Technology design, supply and install a system tailored to suit your budget and needs. For more information or to book a site survey please contact Solar Technology. Email: info@solar-terchnology.co.uk ;Tel: 0800 849 3103

The small print

1. The grants available are under the Low Carbon Building Programme Phase 1, where domestic customers can receive up to £4000 in Scotland and up to £2500 in the rest of the UK. These grants finish in April 2010
2. The feed-in tariff of 41.3p per unit and export rate of 3p per unit come into effect in April 2010
3. In the examples, we have assumed that for every kWp of PV installed, you will generate 750 kWh per annum. This is below the national average.