

## Examples of PV solar installations and estimated costs

The calculations below are a guide to system performance and likely costs.

For a quote to be provided one of Solar Technology's technicians will need to conduct a site survey.

### 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) Assumes feed in tariff of 36.5p (see small print)
- 4) Household using half the electricity generated and selling half to the grid
- 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 using Sharp PV panels and a Sunny Boy inverter. A panel should last 45 years and Sharp guarantee their panels for 5 years and the performance for 25 years.

In addition, domestic customers can make extra savings where grants of up to £2500 are received (available until April 2010).

### **1.5 kWp system will generate 1125 kWh p.a. Approximately 34% of households needs.**

#### **Roof space required 22m<sup>2</sup>**

Description	Calculation	£
Number of units of electricity generated multiplied by the feed-in tariff	1125.00 @ 0.365	410.60
Sell back 562.5 unused units at 5p per unit	562.50 @ 0.05	28.10
Saving based on generating and using 562.5 units costing 13p per unit	562.50 @ 0.13	73.10
Total income and savings per year	410.60, 28.10, 73.10	511.80

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

There will be an additional cost for the erecting of scaffolding, this cost cannot be calculated until a site survey has been completed. Using these figures, the system will pay for itself in 16 years (less if conventional electricity prices increase significantly) and then generate a profit of over £4000 over the 25 years that the manufacture guarantees the performance of the panels.

### **2.5 kWp system will generate 1875 kWh p.a. Approximately 56 % of household needs.**

#### **Roof space required 42m<sup>2</sup>**

Description	Calculation	£
Number of units of electricity generated multiplied by the feed-in tariff	1875.00 @ 0.365	684.40
Sell back 937.5 unused units at 5p per unit	937.50 @ 0.05	46.90
Saving based on generating and using 937.5 units costing 13p per unit	937.50 @ 0.13	121.90
Total income and savings	684.40, 46.90, 121.90	853.20

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

There will be an additional cost for the erecting of scaffolding, this cost cannot be calculated until a site survey has been completed.

Using these figures the system will pay for itself in 16 years (less if conventional electricity prices increase significantly) and then generate a profit of over £7000 over the 25 years that the manufacture guarantees the performance of the panels.

The above systems are only examples and Solar Technology can design, supply and install a size of system tailored to suit your budget and needs.

For more information or to book a site survey please contact Solar Technology. Email: [info@solar-technology.co.uk](mailto:info@solar-technology.co.uk), Tel: 0800 849 3103.

### **The small print:**

1. The grant available is the Low Carbon Building Programme Phase 1  
This is an existing grant programme (due to expire April 2010), where domestic customers can receive £2000 - £2500
2. The Government is proposing a feed-in tariff of 36.5p per unit to come into effect in April 2010
3. The primary legislation has been passed giving the Government the powers required to implement the FiT  
They have proposed a level and structure for the tariff, with final confirmation via consultation completed by October 2009
4. In the example, we've assumed that for every kWp of PV installed, you will generate 750 kWh per annum  
This is below the national average