

Solar Electricity





Conversion of sunlight directly into electricity through the photovoltaic process is the dominant form of generating electricity locally. These solar cells are in the form of modules whose typical dimensions are 0.7 x 1.5 m and are generally roof mounted.

Advantages include -

- solar modules can be used anywhere where sunlight is available where is no pollution either local or global, no gaseous discharge, no waste and no safety issues
- helps to reduce your electricity bill

Benefits and costs-

The output from the panels is inverted by electrical components to supply electric power at mains voltage and frequency which can be used by the home occupier. An array of seven panels, roof mounted SW to SE, will cost $\mathbf{E}_{3000} - \mathbf{E}_{3500}$.

Such an array will produce ca 2,000 kWh/year which is approximately 40 - 60% of the average domestic electricity demand. If the majority of this energy was consumed by the residents, it could save up to **£**300 in electricity bills and will give a payback time of 8 - 10 years at current electricity prices.

Any excess power can be exported to the grid though only some suppliers will pay the deemed price currently set at 5.5p per unit of electricity (kWh). Alternatively, it can be used to heat hot water or be stored in a battery for subsequent use.

Very little maintenance or repairs is required as there are no moving parts. Warranties of up to 25 years are generally available on the panels.

Leaflets on these measures and other relevant information are available at www.yateleycan.org.uk.

After deciding what improvement(s) you need, identify a registered local installer or go to www.simpleenergyadvice.org.uk

For more information, visit https://yateleycan.org.uk