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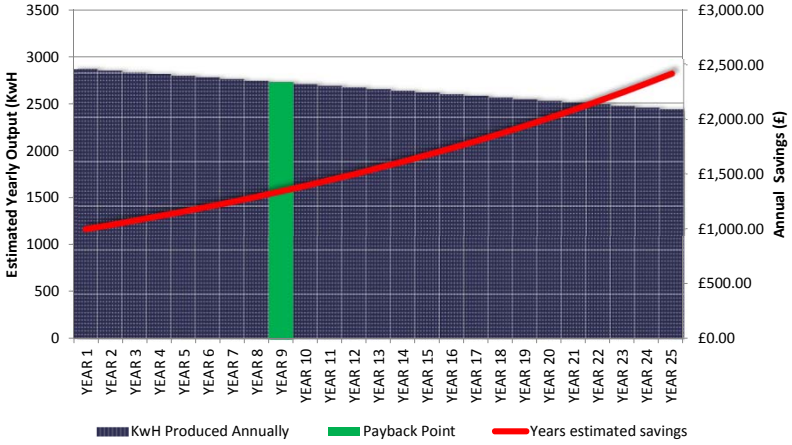
Solar Power Output and Payback Estimation document

To help make an informed decision with regards to purchasing solar panels, Energy Connect have put together the following estimation document. Our calculations have been based on an array of 15x 255watt solar panels installed at a tilt of 30° whilst facing 180° (South) with no shading issues. When calculating the savings we have factored in the Feed In Tariff (FIT) Rate of 21 pence per KWh generated, the electricity savings based on you using 100% of the power generated and an export tarrif rate of 3 pence per KWh on the surplus power*.

Please Note: We have based the cost saving calculations on future year's tarrif rates, electricity costs and export rates increasing at a rate of 4% inflation (5% on energy costs). The likelihood is that the savings will be exceed those shown as electricity rates are widely projected to rise at a rate well above that of inflation.

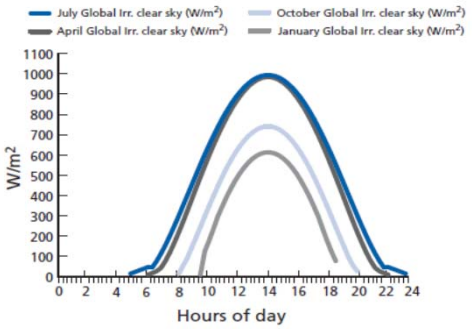
Chart showing the expected performance and savings over the expected 25 year lifetime of the products quoted:



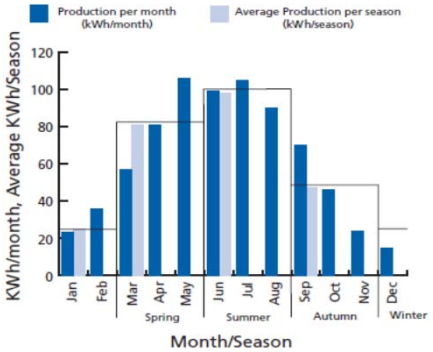
The bar marked in green above indicates the expected 'Break Even' Year where the total savings to that point have matched the quoted installation cost of £9969.75. Over the 25 year period we estimated that the solar array would generate a total of 66382.88KWh of electricity, with total payback of £40358.15 (this figure represents a combination of Feed In Tariff payments and Electrical Savings).

Useful Solar Resources

The two example graphs below are not tailored to your location/installation but instead are included to demonstrate the typical seasonal performance variation of UK based solar installations.



Example average daily isolation curves: Manchester, 300 Inclination, due South. Ref: European Joint Research Centre, http://re.jrc.cec.eu.int/ pvgis/pv/ PVGIS©European Communities, 2002-2006



Example average kWh electricity generation bar chart: Manchester, 30° Inclination, due South, 750kWh/yr Ref: European Joint Research Centre, http://re.jrc.cec.eu.int/ pvgis/pv/ PVGIS©European Communities, 2002-2006

If you have any queries or questions related to this document or any other matter please don't hesitate to contact our solar team on:

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The performance of solar PV systems is impossible to predict with certainty due to the variability in the amount of solar radiation (sunlight) from location to location and from year to year. This estimate is based upon the manufacturer's data and the Government's standard assessment procedure for energy rating of buildings (SAP) and is given as guidance only. It should not be considered a guarantee of performance and we can offer no assurance that quoted savings will be realised. *Assumes an export tariff is in place with your electricity supplier.