

# Solar PV Proposal

## 2.7kW Marley Solar Tile Proposal

23 November 2020

Quote Ref: 90 Selbrooke Crescent

Cust Ref: AFGUK Architects



### Parts to include:

9	x	Marley Solar Tile 300Wp
1	x	Solis 0.7kW Mini 4G Single Tracker Inverter
1	x	Solis 1.5kW Mini 4G Single Tracker Inverter
2	x	Electrical Items including total generation meter, AC and DC isolation
2	x	DNO application and MCS registration
1	x	Insurance Backed Workmanship Warranty
No scaffold included		

### System Total:

**£5,402.89**

Ex. VAT

### Works to include:

Mounting and connecting the solar panels  
Mounting and connecting the inverter and meter  
Connection to your consumer unit  
Commissioning onto mains 230V  
End user training, instruction and handover

We estimate that installation of this system will take 1-2 days.

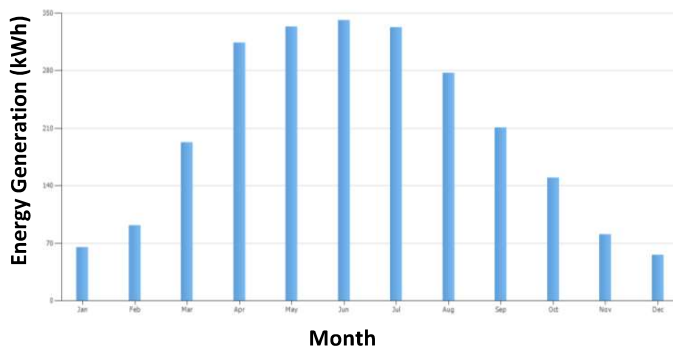
## Estimated Annual Energy Performance

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We have used two different methods to calculate the estimated performance of this system. One is SAP, the government's Standard Assessment Procedure, and the other is PV Sol, specialist solar simulation software. Both estimates are below:

MCS SAP Calculation	2,341.44	kWh
PV Sol Calculation	2,442.00	kWh

### Your System's Monthly Energy Generation



Graph shows how your energy yield will change over the course of a year.

During the winter your system will still produce useful energy. Even December produces around 15% of peak generation.

### Your System's Shading Frequency

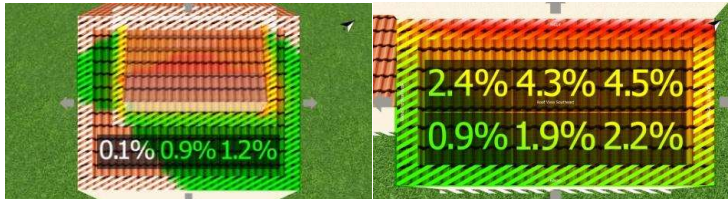
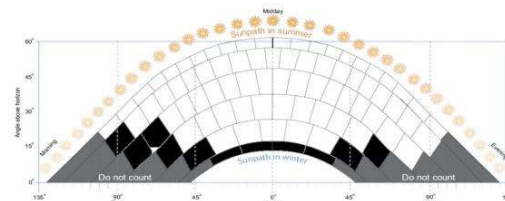


Diagram shows the percentage of time that your panels will be shaded throughout the year.

### PV\* Sol and SAP Performance Estimates

PV\*SOL Expert is a high-end 3D software program for PV system design. With PV\*SOL we can accurately determine energy yield based on local climate data, calculate the effects of shading from nearby objects on PV performance and optimise module coverage with millimetre precision.

The sunpath diagram opposite was used to produce a shading analysis for the SAP calculation.



## Payback Calculations

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Using the more accurate estimated performance from PV Sol, we have calculated that you should earn approximately:

£51.18	Export Income
£224.47	Savings on your electricity bill (year 1)
<b>£275.65</b>	<b>Annual financial benefit from your PV system</b>

**£11,345.38** Total benefit after 25 years

**£5,942.50** Total profit after 25 yrs (total income minus total cost of system)

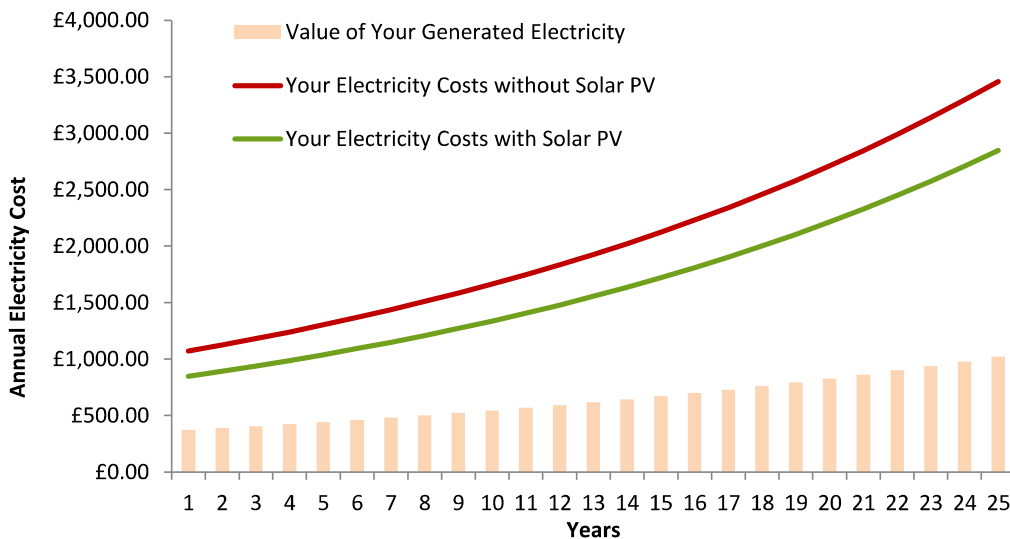
**6.7%** Return on Investment (ROI)

**1,292** Annual CO<sub>2</sub> savings from PV (kg)

**9,768** Equivalent miles per year in an electric vehicle



## Predicted Annual Electricity Costs



Graph shows how much you are predicted to spend annually on electricity over the next 25 years, both with and without solar PV.

As inflation continues to push up electricity prices, you will save proportionally more money each successive year you have solar PV. Subsequently, the value of the electricity your solar panels generate will increase alongside inflation.

## How We Calculated Your System's Performance

The previous calculations are based on the following assumptions:

Total Cost of System	5,402.89
Annual PV Generation (kWh)	2442
Smart Energy Guarantee Scheme Export Tariff Rate (pence per kWh)*	5.24
Amount of electricity generated by the system being exported to the grid	40%
Average price of domestic electricity (pence)	15.32
Price inflation	5%

The figures above take into account the effect of inflation on export tariffs, the change in the cost of electricity, solar module degradation and they are not set on a fixed rate basis. However, they do not take into account interest on loans.

The performance of a solar PV system is impossible to predict with certainty, due to the variability in the amount of solar radiation from location to location and from year to year. This is given as guidance only and it should not be considered as a guarantee of performance.

\*This figure is based off an estimate and will depend on your own energy provider's export rate.

## What Next?

**1) If you would like to accept this system, or have any questions about your proposal, then get in touch!**

You can call 01392 213912, or email [designteam@sungiftsolar.co.uk](mailto:designteam@sungiftsolar.co.uk)



**2) We will then send you a deposit request for 25% of your system's total cost.**

Keep an eye out for this, as the email can sometimes go through to your junk folder.



**4) Our installers will come to fit your solar panels on the agreed upon day.**

Now your system is up and running you can enjoy free energy for years to come!



**3) Once we receive your deposit our project management team will contact you to arrange an installation date.**

Contact one of the project managers on 01392 213912, and select option 2.