

Solar PV Cost and Payback Analysis - MCS2012

Year	System Efficiency	Expected System Yield (kWh)	FIT Rate (p)	Total Generation Income	50% Energy Exported (kWh)	Export Rate (p)	Deemed Export Earnings	50% Energy Used On Site (kWh)	Electricity Cost (p/kWh)	Consumed Electricity Savings	Income and Savings	Maintenance Cost	Loan Interest	Effective Income	Cumulative Benefit	Year
1	100%	1,848	14.38	£265	924	4.77	£44.07	924	14.0	£129.36	£439	£0	£0	£439	£439	1
2	100%	1,848	14.96	£276	924	4.96	£45.83	924	14.8	£137.12	£459	£0	£0	£459	£898	2
3	99%	1,831	15.55	£284	916	5.16	£47.26	915	15.7	£144.08	£476	£0	£0	£476	£1,374	3
4	98%	1,815	16.18	£293	908	5.37	£48.75	907	16.7	£151.39	£493	£0	£0	£493	£1,868	4
5	97%	1,799	16.82	£302	900	5.58	£50.21	899	17.7	£159.06	£512	£0	£0	£512	£2,380	5
6	97%	1,783	17.50	£312	892	5.80	£51.73	891	18.7	£167.10	£531	£0	£0	£531	£2,911	6
7	96%	1,767	18.20	£321	884	6.04	£53.39	883	19.9	£175.53	£550	£0	£0	£550	£3,462	7
8	95%	1,751	18.92	£331	876	6.28	£55.01	875	21.1	£184.37	£570	£0	£0	£570	£4,033	8
9	94%	1,735	19.68	£341	868	6.53	£56.68	867	22.3	£193.65	£591	£0	£0	£591	£4,625	9
10	93%	1,719	20.47	£352	860	6.79	£58.39	859	23.7	£203.37	£613	£0	£0	£613	£5,239	10
11	92%	1,703	21.29	£362	852	7.06	£60.15	851	25.1	£213.56	£636	£0	£0	£636	£5,875	11
12	91%	1,687	22.14	£373	844	7.34	£61.94	843	26.6	£224.24	£659	£0	£0	£659	£6,535	12
13	90%	1,671	23.02	£384	836	7.64	£63.87	835	28.2	£235.44	£684	£0	£0	£684	£7,219	13
14	90%	1,655	23.94	£396	828	7.94	£65.74	827	29.9	£247.17	£709	£0	£0	£709	£7,928	14
15	89%	1,639	24.90	£408	820	8.26	£67.73	819	31.7	£259.46	£735	£0	£0	£735	£8,664	15
16	88%	1,623	25.90	£420	812	8.59	£69.75	811	33.6	£272.34	£762	£0	£0	£762	£9,426	16
17	87%	1,607	26.93	£432	804	8.93	£71.79	803	35.6	£285.83	£790	£0	£0	£790	£10.2k	17
18	86%	1,591	28.01	£445	796	9.29	£73.94	795	37.7	£299.96	£819	£0	£0	£819	£11k	18
19	85%	1,575	29.13	£458	788	9.66	£76.12	787	40.0	£314.75	£849	£0	£0	£849	£11.8k	19
20	84%	1,559	30.30	£472	780	10.05	£78.38	779	42.4	£330.24	£881	£0	£0	£881	£12.7k	20
21	84%	1,543	0.00	£0	772	0.00	£0.00	771	44.9	£346.45	£346	£0	£0	£346	£13.1k	21
22	83%	1,527	0.00	£0	764	0.00	£0.00	763	47.6	£363.42	£363	£0	£0	£363	£13.4k	22
23	82%	1,511	0.00	£0	756	0.00	£0.00	755	50.4	£381.18	£381	£0	£0	£381	£13.8k	23
24	81%	1,495	0.00	£0	748	0.00	£0.00	747	53.5	£399.76	£399	£0	£0	£399	£14.2k	24
25	80%	1,479	0.00	£0	740	0.00	£0.00	739	56.7	£419.20	£419	£0	£0	£419	£14.6k	25

System Configuration

Array Size: 2.00 kWp
 Installation Type: >4kW <= 10kW
 Annual Yield: 1848 kWh pa
 Export Amount: 50%

Financial Details

Installation Cost: £5,066
 Inflation Rate: 4%
 Energy Inflation: 6%

Note: 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 standard MCS procedure and is given as guidance only. It should not be considered as a guarantee of performance.

Note: This system performance calculation has been undertaken using estimated values for array orientation, inclination or shading. Actual performance may be significantly lower if the characteristics of the installed system vary from the estimated values.

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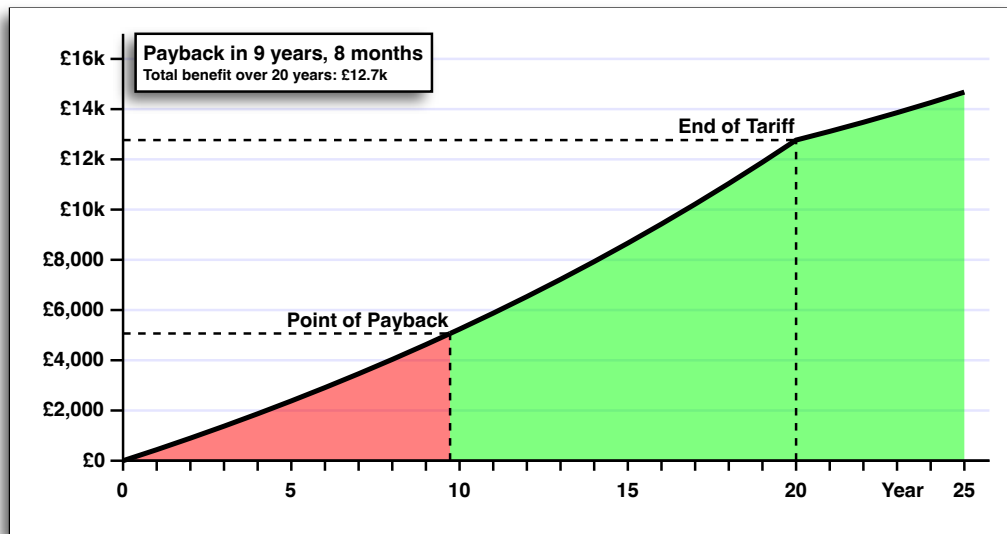
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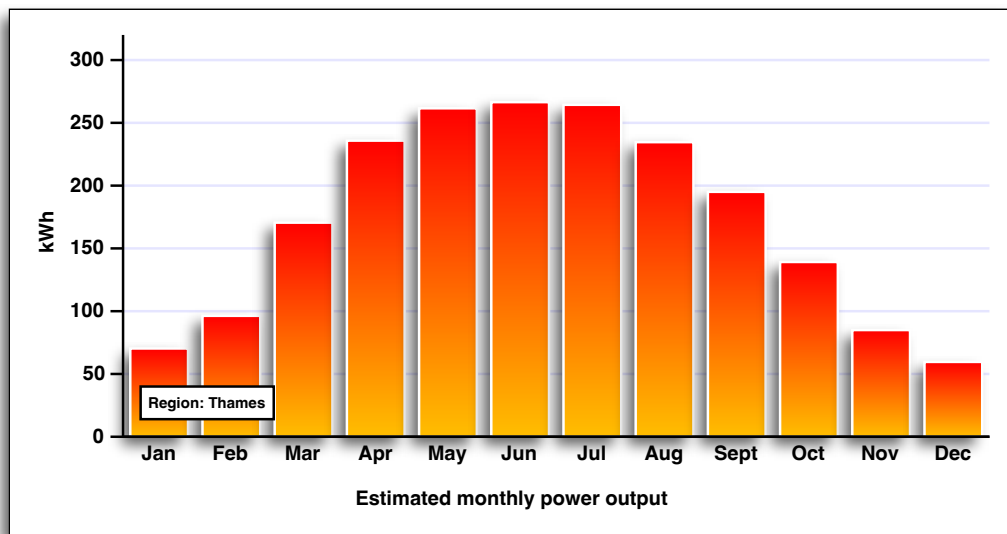
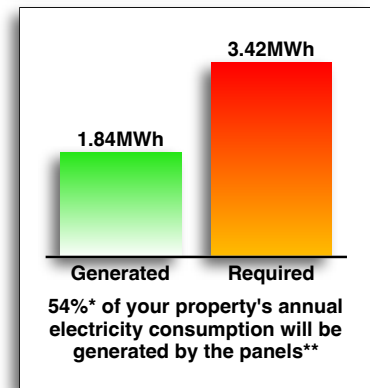
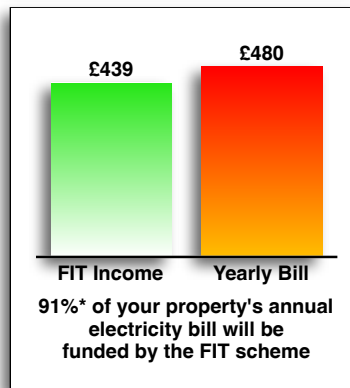


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20 year ROI 152%
 20 year benefit £12.7k
 Initial investment of £5,066

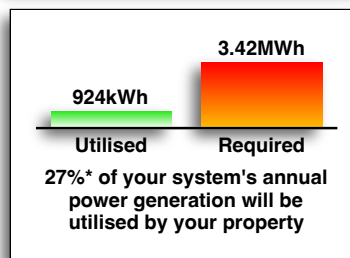
17 Tonnes
 of Co2 saved
 over 20 years



Configuration
 Single Array System
 Region: Thames
 Pitch: 15 degrees
 Azimuth: 0 degrees
 Shade Factor: 1.00
 Yield: 924 kWh/kWp

Note: Please refer to the note(s) on Page 1 of this report for important information and assumptions about the calculation of figures within this report.

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* Based on first year's calculated output.
 ** Not all electricity generated by your system will be consumed by your property. This figure is given as guidance to overall offsetting of electrical consumption.
 NOTE: Your electricity bill and property's electrical consumption figures are based on an energy price of 14.00p/kWh and a bill of £40 per month.

Every effort has been made to ensure accuracy of results. Alphatronix will not accept any responsibility for inaccuracies or errors which affect the results shown here. The user must satisfy themselves of likely paybacks and financial results before investing in a PV system.
 Solar Payback Version: 3.3

