

# Solar PV Cost and Payback Analysis - SAP/2012

, 20 The Grove, South Wales, SA12 6AL

Year	System Efficiency	Expected System Yield (kWh)	FIT Rate (p)	Total Generation Income	50% Energy Exported (kWh)	Export Rate (p)	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%	9,490	13.03	£1,237	4,745	4.77	£226.34	4,745	15.3	£723.61	£2,186	£0	£0	£2,186	£2,186	1
2	100%	9,490	13.49	£1,280	4,745	4.94	£234.40	4,745	16.8	£795.25	£2,310	£0	£0	£2,310	£4,496	2
3	99%	9,408	13.96	£1,313	4,704	5.11	£240.37	4,704	18.4	£866.39	£2,420	£0	£0	£2,420	£6,916	3
4	98%	9,325	14.45	£1,347	4,663	5.29	£246.67	4,663	20.2	£943.83	£2,538	£0	£0	£2,538	£9,454	4
5	97%	9,243	14.95	£1,382	4,621	5.47	£252.77	4,621	22.2	£1,028.11	£2,663	£0	£0	£2,663	£12.1k	5
6	97%	9,161	15.48	£1,418	4,580	5.67	£259.69	4,580	24.4	£1,119.82	£2,798	£0	£0	£2,798	£14.9k	6
7	96%	9,078	16.02	£1,454	4,539	5.86	£265.99	4,539	26.9	£1,219.61	£2,940	£0	£0	£2,940	£17.9k	7
8	95%	8,996	16.58	£1,491	4,498	6.07	£273.03	4,498	29.5	£1,328.19	£3,093	£0	£0	£3,093	£20.9k	8
9	94%	8,913	17.16	£1,530	4,457	6.28	£279.90	4,457	32.5	£1,446.32	£3,256	£0	£0	£3,256	£24.2k	9
10	93%	8,831	17.76	£1,568	4,416	6.50	£287.04	4,416	35.7	£1,574.82	£3,430	£0	£0	£3,430	£27.6k	10
11	92%	8,749	18.38	£1,608	4,374	6.73	£294.37	4,374	39.2	£1,714.58	£3,617	£0	£0	£3,617	£31.3k	11
12	91%	8,666	19.02	£1,648	4,333	6.96	£301.58	4,333	43.1	£1,866.58	£3,816	£0	£0	£3,816	£35.1k	12
13	90%	8,584	19.69	£1,690	4,292	7.21	£309.45	4,292	47.3	£2,031.87	£4,031	£0	£0	£4,031	£39.1k	13
14	90%	8,502	20.38	£1,733	4,251	7.46	£317.12	4,251	52.0	£2,211.60	£4,261	£0	£0	£4,261	£43.4k	14
15	89%	8,419	21.09	£1,776	4,210	7.72	£325.01	4,210	57.2	£2,407.00	£4,508	£0	£0	£4,508	£47.9k	15
16	88%	8,337	21.83	£1,820	4,168	7.99	£333.02	4,168	62.8	£2,619.41	£4,772	£0	£0	£4,772	£52.6k	16
17	87%	8,254	22.59	£1,865	4,127	8.27	£341.30	4,127	69.1	£2,850.29	£5,056	£0	£0	£5,056	£57.7k	17
18	86%	8,172	23.38	£1,911	4,086	8.56	£349.76	4,086	75.9	£3,101.21	£5,362	£0	£0	£5,362	£63.1k	18
19	85%	8,090	24.20	£1,958	4,045	8.86	£358.39	4,045	83.4	£3,373.87	£5,690	£0	£0	£5,690	£68.7k	19
20	84%	8,007	25.05	£2,006	4,004	9.17	£367.17	4,004	91.7	£3,670.13	£6,043	£0	£0	£6,043	£74.8k	20
21	84%	7,925	0.00	£0	3,962	0.00	£0.00	3,962	100.7	£3,991.98	£3,992	£0	£0	£3,992	£78.8k	21
22	83%	7,843	0.00	£0	3,921	0.00	£0.00	3,921	110.7	£4,341.58	£4,342	£0	£0	£4,342	£83.1k	22
23	82%	7,760	0.00	£0	3,880	0.00	£0.00	3,880	121.7	£4,721.28	£4,721	£0	£0	£4,721	£87.8k	23
24	81%	7,678	0.00	£0	3,839	0.00	£0.00	3,839	133.7	£5,133.61	£5,134	£0	£0	£5,134	£93.0k	24
25	80%	7,595	0.00	£0	3,798	0.00	£0.00	3,798	147.0	£5,581.31	£5,581	£0	£0	£5,581	£98.6k	25

## System Configuration

Array Size: 10.00 kWp  
 Installation Type: >4kW <= 10kW  
 Annual Yield: 9490 kWh pa  
 Export Amount: 50%  
 Inverter: SMA  
 Panels: Solarworld 250w Monocrystalline

## Financial Details

Installation Cost: £15,000  
 Inflation Rate: 3%  
 Energy Inflation: 9%

**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.

**Prepared By: Ian**

**Free Quote**

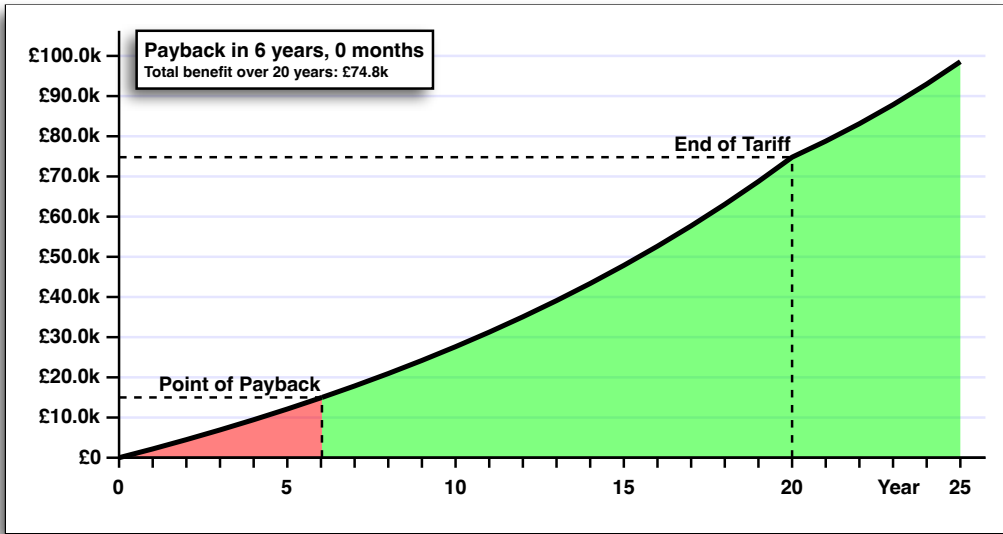
E: [solarsurgeon@gmail.com](mailto:solarsurgeon@gmail.com)  
 W: [www.thesolarconsultancy.co.uk](http://www.thesolarconsultancy.co.uk)  
**Project Reference: Mr / Mrs Jones**



**iSolarPayback**  
 for iPhone & iPad

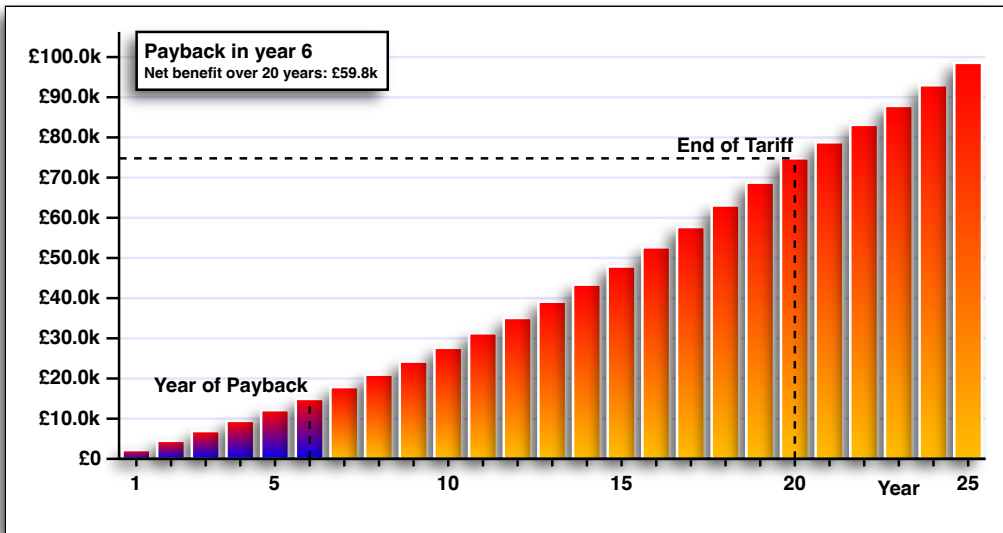
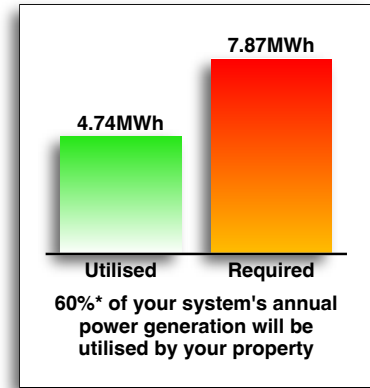
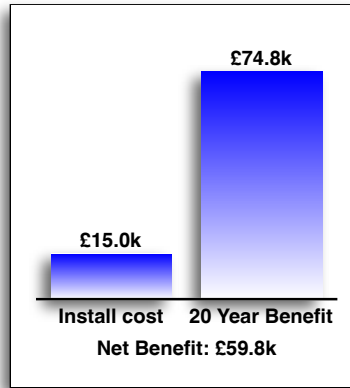
# Solar PV Cost and Payback Analysis - SAP/2012

, 20 The Grove, South Wales, SA12 6AL

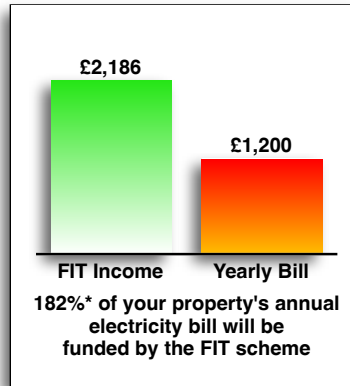


**System Payback**  
Payback in 6 years, 0 months

**9.49MWh**  
of Electricity Generated  
in Year 1\*



**92 Tonnes**  
of Co2 saved  
over 20 years



**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.

**Prepared By: Ian**  
**Free Quote**  
E: [solarsurgeon@gmail.com](mailto:solarsurgeon@gmail.com)  
W: [www.thesolarconsultancy.co.uk](http://www.thesolarconsultancy.co.uk)  
**Project Reference: Mr / Mrs Jones**

\* Based on first year's calculated output.  
NOTE: Your electricity bill and property's electrical consumption figures are based on an energy price of 15.25p/kWh and a bill of £100 per month.

Every effort has been made to ensure accuracy of results. Alphantronix 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.  
iSolarPayback Version: 4.0



**iSolarPayback**  
for iPhone & iPad