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For: Jo
Laurel Cottage, Ivinghoe Aston

Quote #: 3431558
Valid until: 28th December 2023

SMARTLY POWERING THE UK

Renewable Energy Solutions for Home and Business

Your Smartly Energy System Proposal

Dear Jo,

Thank you for the opportunity to present your Smartly Energy System Proposal. Please let us know if you have any questions, we're happy to help!

We hope you have peace of mind knowing we have the following accreditations: NICEIC approved contractor membership, MCS accreditation, HIES membership, SELECT membership, ECA membership and insurance backed consumer protection.

Best Regards,
Ross Miller
Smartly Energy





This proposal is no longer valid, please contact Ross Miller (ross@smartlyenergy.com) to get an updated proposal.

Smartly Energy is one of the UK's leading installers of Solar Energy Systems. We supply and install all over the UK, and guide you through every step of the process.

- Our experienced team are passionate about Renewable Energy and Electric Vehicles.
- Our mission is to help customers learn all about Electric Vehicles and Solar Power and ensure they get the most suitable system for their needs
- We are a sustainable UK family business, proudly certified as Carbon Neutral

We hope you have peace of mind knowing we have the following accreditations: NICEIC approved contractor membership, MCS accreditation, RECC membership, SELECT membership, ECA membership and insurance backed consumer protection.

Recommended System Option

13.05 kW

System Size

£2,952

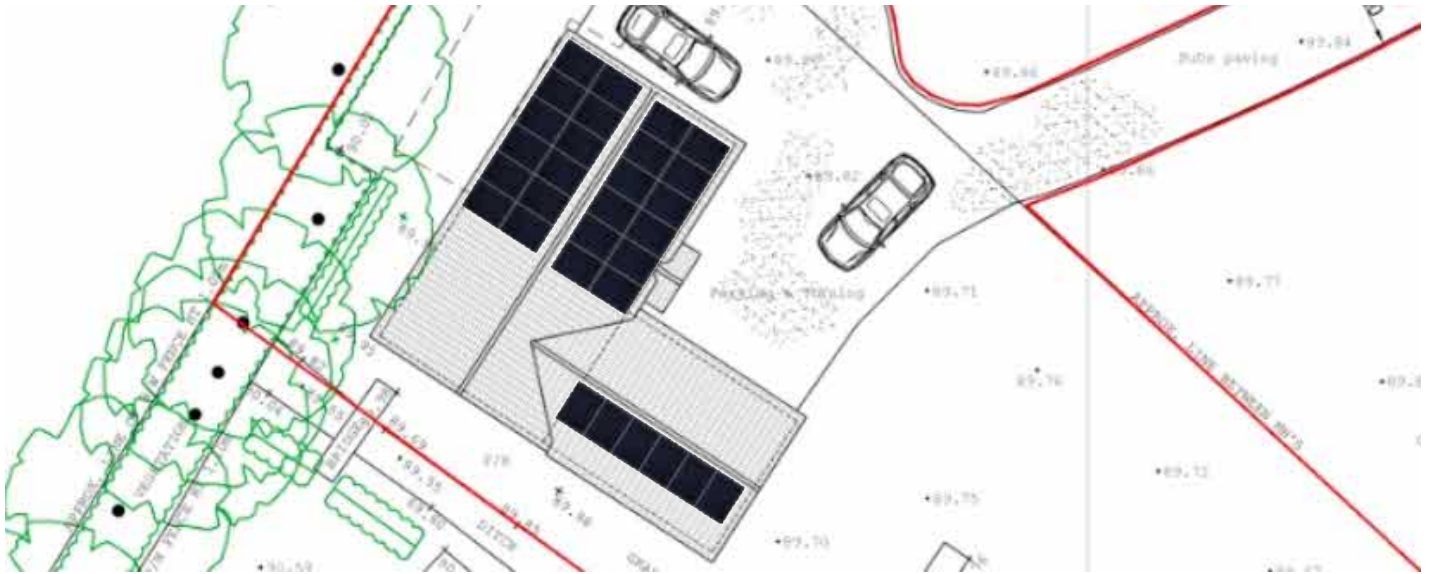
Estimated Annual
Electricity Bill Savings

£29,612

Total System Price

£29,612

Net System Price



Your Solution

Solar Panels

Jinko Solar Co., Ltd.

13.050 kW Total Solar Power

30 x 435 Watt Panels (JKM435N-54HL4R-B)

10,625 kWh per year

Inverter

Growatt New Energy Technology Co., Ltd.

12.000 kW Total Inverter Rating

2 x MIN 6000TL-X

Battery

GivEnergy

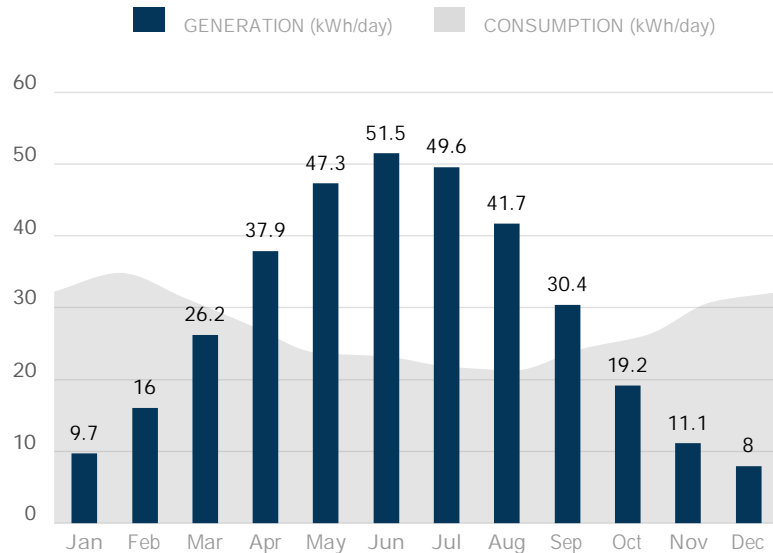
13.5 kWh Total Battery Storage

1 x GIV-AIO-AC-13.5kWh

Warranties: 25 Year Panel Product Warranty, 30 Year Panel Performance Warranty, 10 Year Inverter Product Warranty, 12 Year Battery Product Warranty

System Performance

106%
Energy From Solar



System Performance Assumptions: System Total losses: 0%, Inverter losses: 0%, Optimizer losses: 0%, Shading losses: 0%, Performance Adjustment: 0%, Output Calculator: MCS. Panel Orientations: 6 panels with Azimuth 213 and Slope 30, 12 panels with Azimuth 122 and Slope 30, 12 panels with Azimuth 303 and Slope 30.

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 is given as guidance only. It should not be considered as a guarantee of performance. The solar PV self-consumption has been calculated in accordance with the most relevant methodology for your system. There are a number of external factors that can have a significant effect on the amount of energy that will be self-consumed.

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

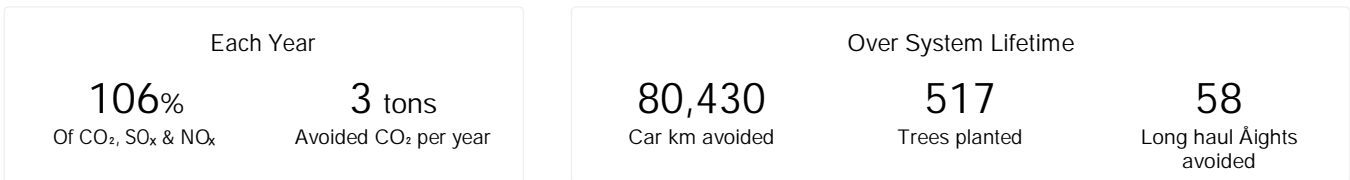
Important Note: The energy performance and benefits of EESS is impossible to predict with certainty due to the numerous functions a system can be programmed perform. This estimate is based upon the standard MCS procedure and is given as guidance only. It should not be considered as a guarantee of performance.

A. Installation data		
Installed capacity of PV system - kWp (stc)	13.05	kWp
Orientation of the PV system - degrees from South	Group 1: 6 panels with Orientation: 35 ° Group 2: 12 panels with Orientation: 60 ° Group 3: 12 panels with Orientation: 125 °	°
Inclination of system - degrees from horizontal	Group 1: 6 panels with Tilt: 30° Group 2: 12 panels with Tilt: 30° Group 3: 12 panels with Tilt: 30°	°
Postcode region	1	
B. Performance calculations		

kWh/kWp (Kk) from table	Group 1: 945 Group 2: 888 Group 3: 675	kWh/kWp
Shade Factor (SF)	1.00	
Estimated annual output (kWp x Kk x SF)	10,625	kWh
C. Estimated PV self-consumption - PV Only		
Assumed occupancy archetype	Home All Day	
Assumed annual electricity consumption, kWh	10,000.00	kWh
Assumed annual electricity generation from solar PV system, kWh	10,625	kWh
Expected solar PV self-consumption (PV Only)	4,718.29	kWh
Grid electricity independence / Self-sufficiency (PV Only)	47.18	%
D. Estimated PV self-consumption - with EESS		
Assumed usable capacity of electricity energy storage device, which is used for self-consumption, kWh	13.50	kWh
Expected solar PV self-consumption (with EESS)	7,230.89	kWh
Grid electricity independence / Self-sufficiency (with EESS)	72.0%	%

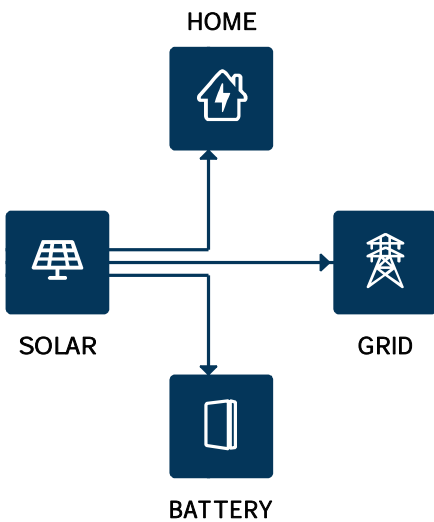
Environmental Benefits

Solar has no emissions. It just silently generates pure, clean energy.

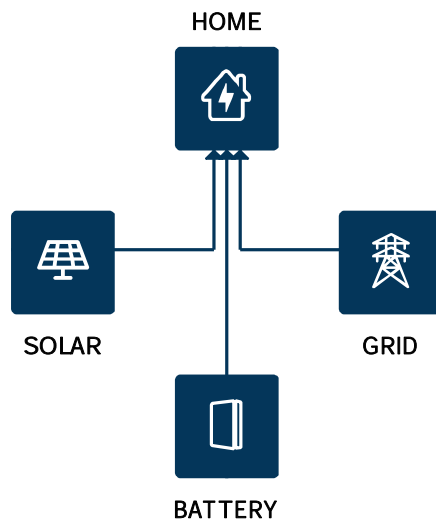


How your system works

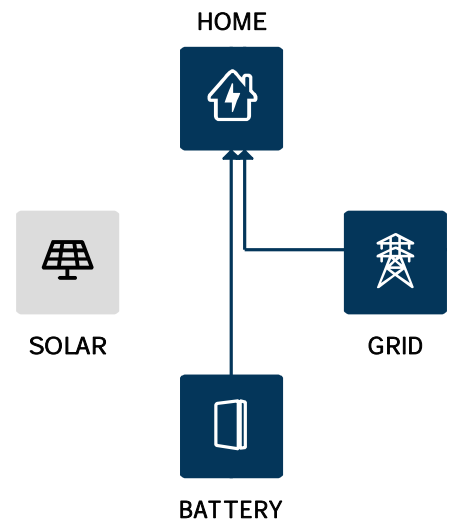
Generating Excess Solar



Partially Offset Usage

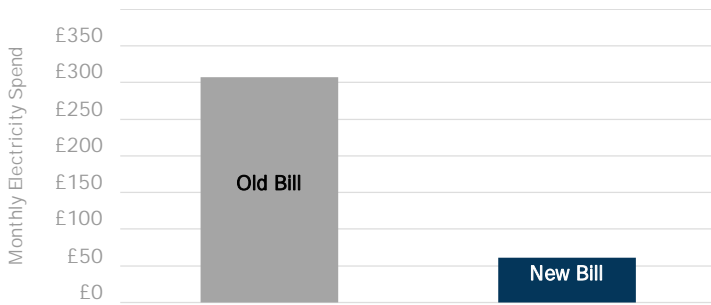


Night

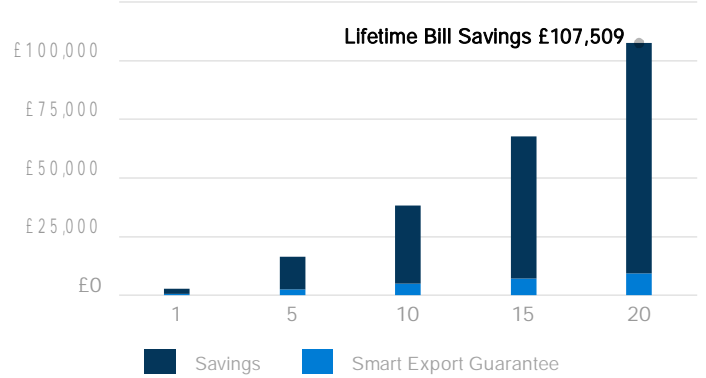


Electricity Bill Savings

First Year Monthly Bill Savings



Cumulative Bill Savings



Month	Solar Generation (kWh)	Electricity Consumption before solar (kWh)	Electricity Imported after solar (kWh)	Electricity Exported after solar (kWh)	Export Credit (£)	Utility Bill before solar (£)	Utility Bill after solar (£)	Estimated Savings (£)
Jan	301	999	700	0	0	365	260	105
Feb	449	975	535	0	0	355	201	154
Mar	811	969	198	3	0	355	84	270
Apr	1,137	824	1	273	41	304	-25	329
May	1,466	734	0	702	105	272	-90	362
Jun	1,544	698	0	822	123	259	-108	367
Jul	1,536	676	0	838	126	252	-110	362
Aug	1,293	662	0	605	91	247	-75	322
Sep	913	728	0	151	23	270	-8	277
Oct	595	812	239	0	0	300	99	201
Nov	334	926	597	0	0	339	224	115
Dec	247	998	750	0	0	365	278	87

Your projected energy cost is calculated by considering a 7.0% increase in energy cost each year, due to trends in the raising cost of energy. This estimate is based on your selected preferences, current energy costs and the position and orientation of your roof to calculate the efficiency of the system. Projections are based on estimated usage of 10000 kWh per year, assuming Custom Tariff Electricity Tariff.

Your electricity tariff rates may change as a result of installing the system. You should contact your electricity retailer for further information.

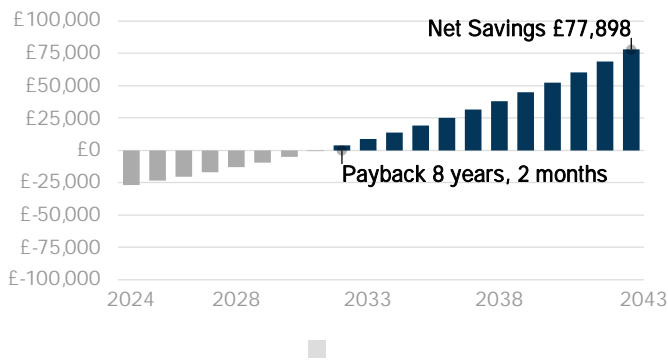
Proposed Tariff Details - Custom Tariff	
Energy Charges	
rate 0 All Day	£0.35 / kWh
Smart Export Guarantee	
rate 0 All Day	£0.15 / kWh

Fixed Charges	
Fixed Charge	£0.50 / day

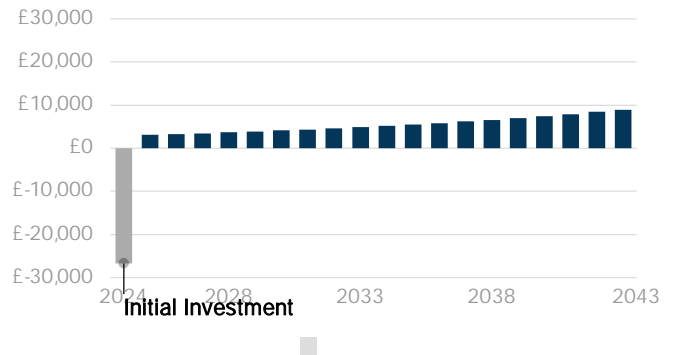
Net Financial Impact Cash

£107,509 - **£29,612** = **£77,898**
 Utility Bill Savings Net System Cost Estimated Net Savings

Cumulative Savings From Going Solar



Annual Savings From Going Solar



Estimates do not include replacement costs of equipment not covered by a warranty. Components may need replacement after their warranty period. Financial discount rate assumed: 6.75%

Quotation

Payment Option: Cash

30 x JKM435N-54HL4R-B 435 Watt Panels (Jinko Solar Co., Ltd.) 2 x MIN 6000TL-X (Growatt New Energy Technology Co., Ltd.) 1 x GIV-AIO-AC-13.5kWh (GivEnergy)	
Total System Price	[REDACTED] Excluding £0.00 VAT
Purchase Price	[REDACTED] Including £0.00 VAT

Price excludes Retailer Smart Meter should you want us to install your Smart Meter it will be an additional cost.
 This proposal is valid until 28th December 2023.

Payment Milestones

25% Deposit Acceptance of Proposal	[REDACTED]
Remaining 75% Completion of Installation	[REDACTED]
Total	[REDACTED]



This proposal has been prepared by Smartly Energy using tools from OpenSolar. Please visit www.opensolar.com/proposal-disclaimer for additional disclosures from OpenSolar.