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For: Mark
10 Twelve Acres Road, Snodland

Quote #: 4602240
Valid until: 5th July 2024



Solar Energy System Proposal

Dear Mark,

Thank you for the opportunity to present your Solar Energy System Proposal.

Best Regards,
hello@gbenergygroup.com
GB Energy Group



Recommended System Option

8.6 kW	£1,649	£12,870	£12,870
System Size	Estimated Annual Electricity Bill Savings	Total System Price	Net System Price



Your Solution

Solar Panels

LONGi

8.600 kW Total Solar Power

20 x 430 Watt Panels (LR5-54HTB-430M)

9,271 kWh per year

Inverter

SolaX Power

7.5 kW Total Inverter Rating

1 x X1-HYBRID-7.5-M

TS4-A-0

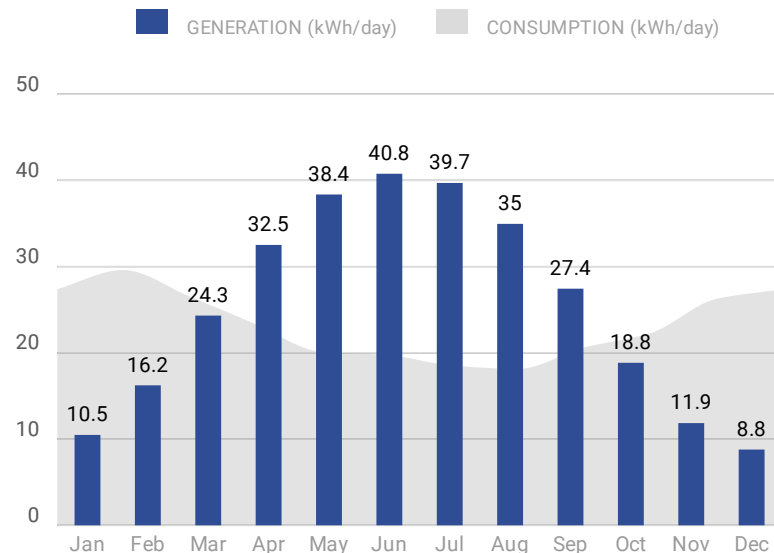
Module-level PV Optimizer

20 x TS4-A-0

Warranties: 25 Year Panel Product Warranty, 25 Year Panel Performance Warranty, 10 Year Inverter Product Warranty

System Performance

109%
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: 18 panels with Azimuth 164 and Slope 20, 2 panels with Azimuth 164 and Slope 20.

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.

A. Installation data		
Installed capacity of PV system - kWp (stc)	8.600	kWp
Orientation of the PV system - degrees from South	Group 1: 18 panels with Orientation: 15 ° Group 2: 2 panels with Orientation: 15 °	°
Inclination of system - degrees from horizontal	Group 1: 18 panels with Tilt: 20° Group 2: 2 panels with Tilt: 20°	°
Postcode region	2	
B. Performance calculations		
kWh/kWp (Kk) from table	Group 1: 1078 Group 2: 1078	kWh/kWp
Shade Factor (SF)	1.000	

Estimated annual output (kWp x Kk x SF)	9,271	kWh
C. Estimated PV self-consumption - PV Only		
Assumed occupancy archetype	In Half Day	
Assumed annual electricity consumption, kWh	8,500.00	kWh
Assumed annual electricity generation from solar PV system, kWh	9,271	kWh
Expected solar PV self-consumption (PV Only)	3,381.43	kWh
Grid electricity independence / Self-sufficiency (PV Only)	39.78	%

Environmental Benefits

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



Each Year

109%
Of CO₂, SO_x & NO_x

2 tons
Avoided CO₂ per year

Over System Lifetime

70,177
Car km avoided

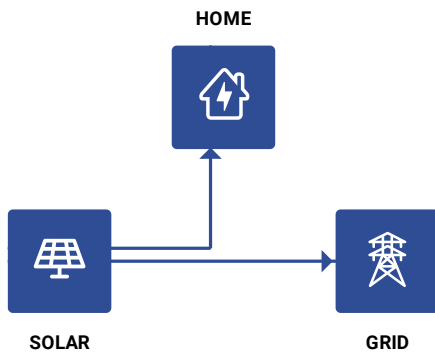
451
Trees planted

50
Long haul flights avoided

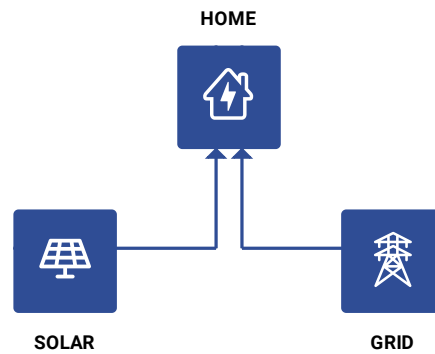


How your system works

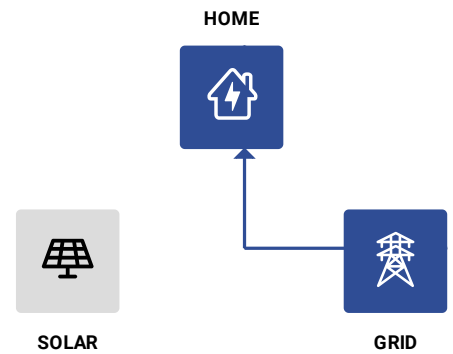
Generating Excess Solar



Partially Offset Usage

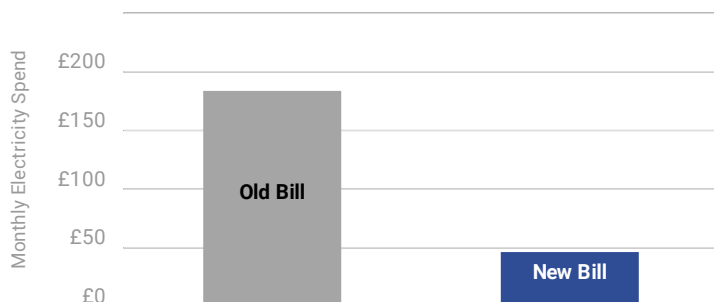


Night

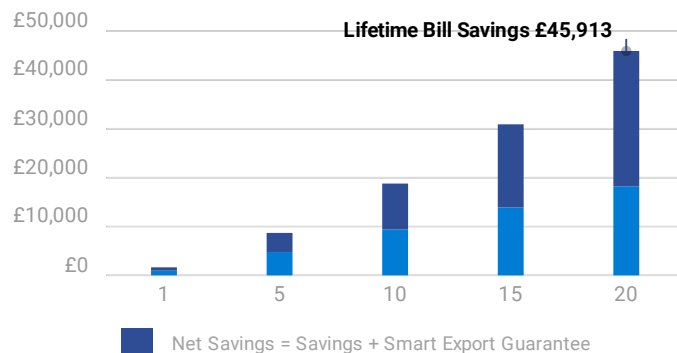


Electricity Bill Savings

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	325	849	633	108	17	217	167	50
Feb	454	829	566	191	31	212	135	77
Mar	754	824	491	422	68	211	76	135
Apr	975	701	364	638	104	182	4	178
May	1,189	624	283	848	140	164	-54	218
Jun	1,223	593	254	884	147	157	-69	226
Jul	1,231	574	249	905	151	152	-74	227
Aug	1,084	562	269	790	131	149	-48	197
Sep	823	619	345	550	89	163	16	147
Oct	584	690	443	338	54	179	80	100
Nov	356	787	572	140	22	202	146	56
Dec	272	848	650	74	12	217	177	39

Utility savings based on switch from Loyal Octopus Fixed 1yr South Eastern - Apr 24 to Octopus Flux South Eastern - Apr 24

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 8500 kWh per year, assuming Loyal Octopus Fixed 1yr South Eastern - Apr 24 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 - Octopus Energy Octopus Flux South Eastern - Apr 24

Energy Charges

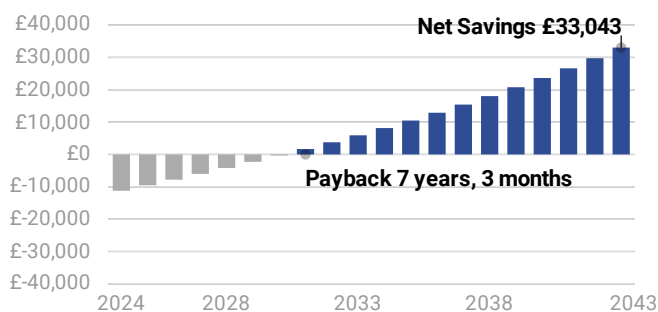
Peak Import 4pm-7pm	£0.35 / kWh
Standard Import 5am-4pm & 7pm-2am	£0.25 / kWh

Flux Import <i>2am-5am</i>	£0.15 / kWh
Smart Export Guarantee	
Peak Export <i>4pm-7pm</i>	£0.26 / kWh
Standard Export <i>5am-4pm & 7pm-2am</i>	£0.16 / kWh
Flux Export <i>2am-5am</i>	£0.06 / kWh
Fixed Charges	
Standing Charge	£16.68 / month

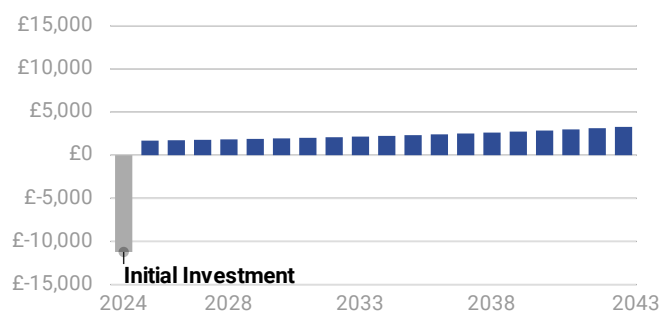
Net Financial Impact Cash

$$\begin{array}{rclcl}
 £45,913 & - & £12,870 & = & £33,043 \\
 \text{Utility Bill Savings} & & \text{Net System Cost} & & \text{Estimated Net Savings}
 \end{array}$$

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

20 x LONGi 430 Watt Panels (LR5-54HTB-430M) 1 x X1-HYBRID-7.5-M (SolaX Power) 20 x TS4-A-O	
Total System Price	£12,870.00 Excluding £0.00 VAT
Purchase Price	£12,870.00 Including £0.00 VAT
Deposit Payable	£3,217.50

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 5th July 2024.

Payment Milestones

Deposit	3,217.50
Advance Materials Payment	4,504.50
Final Payment	5,148.00
Total	12,870.00



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