YOUR SOLAR QUOTE

Hi Stephen.

Thanks for choosing Qualis to provide a design for a solar PV system at 189 Park Lane Heage Belper Derbyshire , DE56 2AE.

We're delighted to supply the attached proposal for a 8.36 kW solar array.

We expect your system to generate 6,153 kWh of clean electricity every year, and save 1,274 kg CO_2 of carbon.

There are full details on the following pages. We hope you enjoy the read!

Kind regards,

James Beaumont

Qualis

8.36 kW PV System

7 × 440W, 6 × 440W & 6 × 440W panels,
1 × SolaX X3 Hybrid G4 PRO 10kW ,
23.2 kWh battery storage

£15,031 inc VAT

Expected payback 12 years. Estimated first year savings £1,206

6,153 kWh/yr

Annual CO2 savings of 1,274 kg

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This proposal is for:

Stephen Noon

189 Park Lane Heage Belper
Derbyshire
DE56 2AE

Prepared	30 April 2026
Valid for	30 days

System Overview

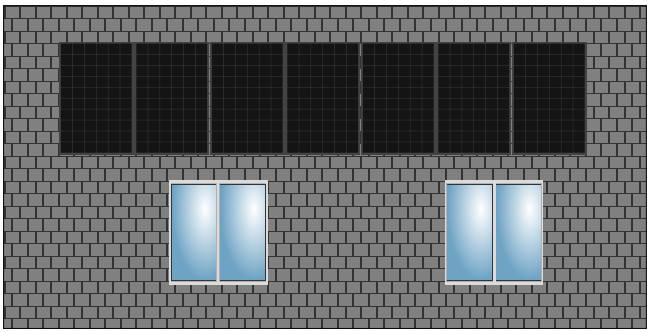
Your system comprises **19 Longi HiMo6 HTB 440W All Black Mono solar panels** to collect sunlight and turn it into DC electricity.

The panels will be connected to **1 SolaX X3 Hybrid G4 PRO 10kW inverter**, which converts the DC electricity into mains (AC) electricity.

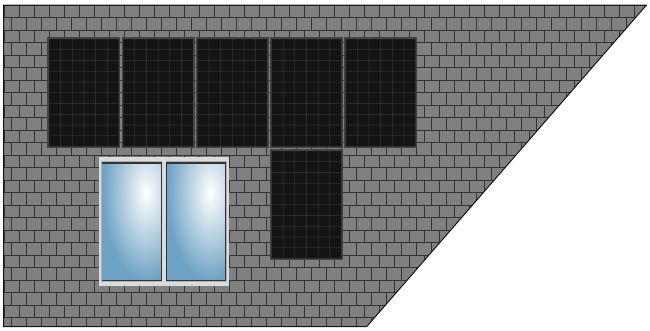
A SolaX 23.2kWh battery storage system will allow you to store excess energy from sunny days, so that you can use your generated electricity at night too.

We include all the isolators, wiring and meters needed to connect the system safely to your electrical system. Your system will be installed and certified by our trained installation team.

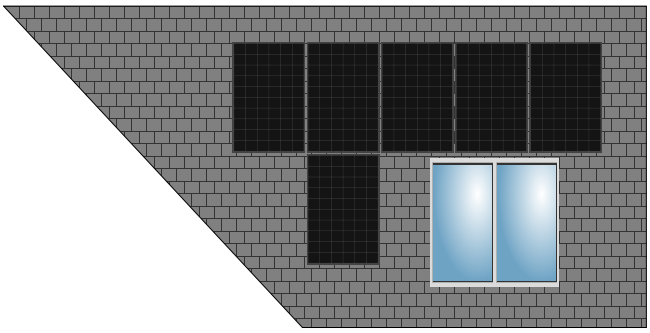
Garage Front



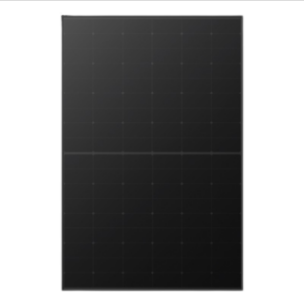
Garage Back



Garage Back Side



System Components



Solar Panels: Longi HiMo6 HTB 440W All Black Mono × 19

Longi's all black Hi-MO 6 440W improves power generation capacity providing a great power to size ratio and excellent performance - achieving 22.5% ef...

Model

Power	440 watts
Dimensions	1134 × 1722mm

Inverter: SolaX X3 Hybrid G4 PRO 10kW

The X3-HYB-G4 PRO offers flexible expansion with dual independent battery ports and versatile micro-grid and generator modes.

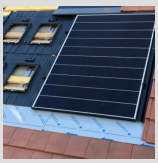
AC Power	10000 watts
Trackers	3

Battery: SolaX TP58 5.8kWh (for X3 Hybrid G4 PROs) 1 Parallel Box

With a 10-year warranty and 90% depth of discharge, the new Triple Power battery is a flexible, practical, high-performance energy storage.

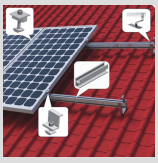
Capacity	Primary: 5.800 kWh, Secondary 5.800 kWh
Quantity	1 × Primary, 3 × Secondary

Mounting



GSE roof-integrated mounting system

A roof integrated mounting system from French manufacturer GSE Integration. Works with a range of panels, and is ideal for both new build and retrofit...



Fastensol pitched roof mounting system

Fastensol are an excellent value choice for pitched roof mounting systems, suitable for the majority of roof types.

System Performance

We have made an estimate of the annual energy generation of your system. This takes into account the following factors that affect the output of a solar array.

The location of the system

Sunlight is weaker near the poles than near the equator. We use data from a meteorological model of the intensity of sunlight over the course of the year in different locations all over the world.

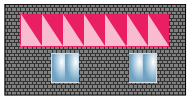
The orientation of the system

Solar panels that face south receive a little more sunlight than panels that face east or west. However, in diffuse light the orientation of the panels makes little difference, so the effect is less marked than many people imagine.

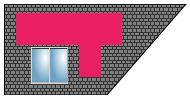
The degree of shading

If you have trees, neighbouring buildings or nearby high ground that will shade your PV array, the output of the system will be reduced. We have used a 'sunpath diagram' that estimates how often sunlight will be blocked from reaching the panels.

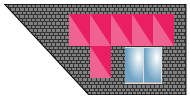
Roof diagrams



Garage Front
Orientation: -90° Pitch: 40°

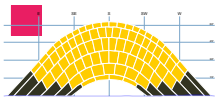


Garage Back
Orientation: 90° Pitch: 40°

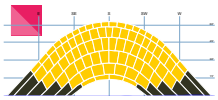


Garage Back Side
Orientation: 90° Pitch: 40°

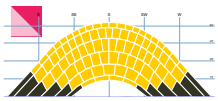
Sunpath diagrams



Shade factor: 1.00
Kk: 736



Shade factor: 1.00
Kk: 736



Shade factor: 1.00
Kk: 736

We expect your system to generate

6,153 kWh per year

Installation data

Installation capacity of PV system – kWp (stc)	8.36 kWp
Orientation of the PV system – degrees from South	See roof diagrams
Inclination of system (pitch) – degrees from horizontal	See roof diagrams
Postcode region	Zone 6

Performance Calculations

kWh/kWp (Kk)	See sunpath diagrams
Shade Factor (SF)	See sunpath diagrams
Estimated output (kWp × Kk × SF)	6153 kWh

Important note: The performance of solar PV systems is impossible to predict with certainty due to the variability in the amount of sunlight from location to location and from year to year. This estimate is based upon a model that takes account of meteorological data at your location and makes an allowance for losses due to shading of the panels. This is a complex calculation however, and no model can be 100% accurate. It should not be considered a guarantee of performance.

If shading is present on your system that will reduce its output to the factor stated. This factor was calculated using industry standard shading methodology and we believe that this will yield results within 10% of the actual energy estimate stated for most systems.

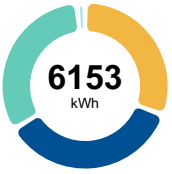
Your Energy Explained

In addition to the MCS calculation of system output we have run a detailed model of your system to estimate how much of the electricity generated by the system you are likely to use yourself and how much will go to the grid.

Our model simulates how your system behaves minute-by-minute over the course of an entire year, allowing us to predict how the solar array and battery will meet your electricity consumption at different times. For example we can look at a sunny day in summer where your generation may considerably exceed what you use in the house, or a dull day in winter where you may still need to import significant amounts of electricity from the grid. We can also predict the state of charge of the battery at any point in the year, and we can calculate financial benefits by applying electricity tariffs, including variable ones that change by the time of day. This allows us to more accurately predict likely savings from the system.

Accredited systems installed in the UK are eligible for export payments for each unit of electricity exported through the Smart Export Guarantee (SEG). You can get details from your electricity supplier or from Ofgem (ofgem.gov.uk).

Annual Generation



Direct use **1887** kWh

Via battery **2193** kWh

To grid **1973** kWh

Lost charging **100** kWh

Annual Consumption

From solar **1887** kWh

From battery **2110** kWh

From grid **2003** kWh

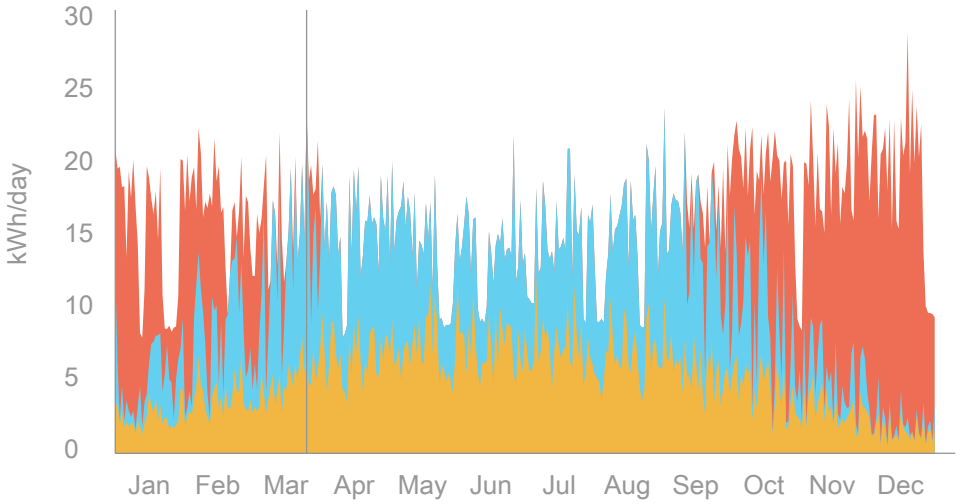
Annual Import/Export

Importing **2003** kWh

Exporting **1973** kWh

Where your electricity comes from in a typical year

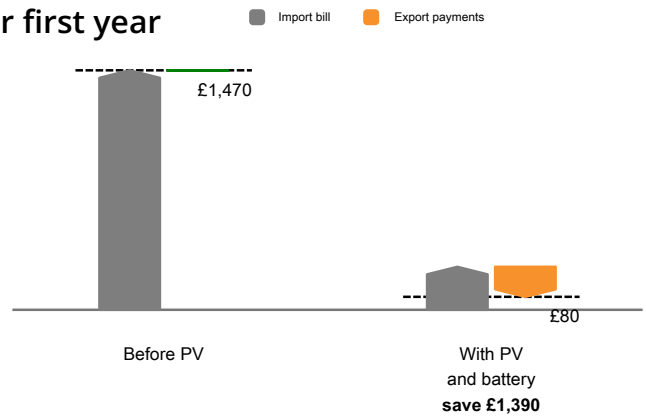
Based on an electricity usage of 5999 kWh per year, the graph below shows how much electricity used in the property is expected to come directly from the solar panels , how much is expected to come via battery storage, and how much is expected to come directly from the grid.



Financial Benefits

We have run a detailed model to estimate financial returns from your solar installation over a 25 year period.

Your first year



Your PV system will generate electricity that you would otherwise need to buy from the grid. In the first year of operation, assuming you are on a flat tariff of 24.50 p/kWh, we expect your electricity bill to fall from £1,470 to £264 - a saving of £1,206.

You will also export excess electricity to the grid. With a flat export tariff paying 15.00 p/kWh, we expect you to earn £184 from exported electricity in the first year, making the effective cost of electricity for your property £80 in the first year.

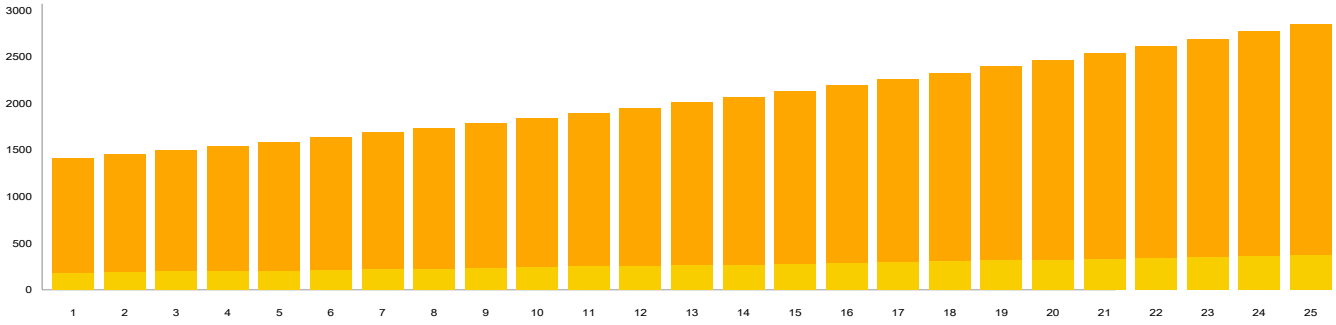
These 'first year' figures have been calculated without allowing for inflation or gradual solar panel degradation. When these are taken into account we can run a full lifetime simulation of benefits, shown in the graph below.

How we calculate your system's financial projections

On the following page we show tables for cumulative income and expenditure over the full lifetime of your system. In these tables we have applied a discount rate of 4%. A discount rate is a means of comparing costs and benefits over time by lowering the value of a future sum of money to show what it is worth today.

Assumptions

Projection length	25 years
Degradation Rate	0.5% per year
Inflation rate	3.5%
Discount Rate	4%
Future import tariff:	
	Default flat tariff 24.50 p/kWh increasing with inflation
Existing export tariff:	
	Default flat tariff 15.00 p/kWh increasing with inflation



Environmental Benefits

Your new PV system will supply your property with clean, green electricity - and in sunny periods some will also be exported back to the grid.

Overall you'll be making a big contribution to reducing CO_2 not just by lowering the carbon intensity of your own electricity, but by putting low-carbon electricity back in the grid for others to use too.

Your current electricity supply produces

1,242 kg CO_2 each year

82% will be supplied by solar, saving

1,019 kg CO_2 each year

1,231 kWh will be exported, saving

255 kg CO_2 each year

Total savings

1,274 kg CO_2 each year

Your yearly CO_2 reduction of 1,274 kg is equal to...

a car ride of 4,550 miles

CO_2 absorbed by 58 trees

Disclaimer: We calculate and compare the likely annual CO_2 emissions for your home based on your generation and usage with the solar PV system detailed in this document versus estimates for a property like yours using energy from the grid. Your actual CO_2 emissions will depend on lots of factors, like how much energy your solar panels generate, how much of this energy you use directly and how much energy you continue to use from the grid. To calculate what these savings equate to in miles driven, we base this on the CO_2 emissions of an average sized diesel car as outlined in the UK government's 'Greenhouse gas reporting: conversion factors 2024' (https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2024). To calculate what these savings equate to as the average amount of CO_2 absorbed by trees, we base this on a rate of 22kg per tree per year. Trees absorb anywhere between 10 and 40kg of CO_2 per year on average, depending on a whole host of factors including the species, location, planting density, and age.

Quote

QUALIS

Stephen Noon
189 Park Lane Heage Belper Derbyshire
DE56 2AE

Quote reference: 1530077
Quote date: 30/04/2026
Quote by: James Beaumont
Quote validity: 30 days

Description of goods and services	Price

Goods

19 x Longi HiMo6 HTB 440W All Black Mono solar panel
14 x GSE mounting frame (portrait 1650/1135) (half frame)
4 x GSE side flashing
GSE top left flashing (30mm)
GSE top right flashing (30mm)
7 x GSE top flashing (30mm)
6 x GSE top flashing joiner (30mm)
4 x GSE end clamp (H16)
4 x Frame reinforcement block
32 x GSE flashing fixing hook
32 x GSE flashing fixing hook screw
12 x GSE mid clamp (H16)
3 x Expanding foam strip
2 x GSE flexible flashing strip (330mm)
GSE black fixing screw (box of 100)
32 x Fastensol black universal clamp
16 x Fastensol black end cap
32 x Fastensol portrait flat tile roof hook
32 x Genius speedflash
4 x Fastensol rail splice
2 x BB200evo Reinforced BirdBlocker (30m)
4 x BirdBlocker clips for square tube 11x30x14-18 (box of 50)
10 x Fastensol black rail 3550mm
SolaX X3 Hybrid G4 PRO 10kW inverter
SolaX TP58 5.8kWh V3 (Primary)
3 x SolaX TP58 5.8kWh V3 (Secondary)
2 x AC isolator - IMO - 20A 4-pole
3 x IMO 25A DC Isolator 4-pole 2-string
6 x MC4 6mm Connector Pair
100m reel of 6mm2 solar cable
Emlite EMP1 3ph Meter
Label sheet
WISKA 6 Way Indubox Enclosure
SolaX CHINT 3ph CT Meter
32A MCB, Single Pole, B Curve
4.0mm² Twin & Earth AC Cable (25m reel)
Battery Hazard Warning Label Pack
2 x Dektite® Lead Multicable Solar Flashing (Tile or Slate Roof) DNLS10MB
AICO Ei144e Mains Heat Alarm

Battery Warning Label Stickers	
Battery in Installation Stickers	
2 x SolaX TBMS-MCS0800E-D BMU for TP-HS50E Battery (For X3 Hybrid G4 PROs)	
Goods total	**£11,491.32**
Services	
Roof Labour	
Electrics	
Services total	**£3,540.00**

System cost	£15,031.32
Total before VAT	£15,031.32
VAT at 0%	£0.00
Total including VAT	**£15,031.32**

Order form

Pay in Full

You'll need to pay for your system in full. If applicable, we've outlined any stage payments to the right to give you full transparency from the start.

If you have questions or need to discuss other arrangements, just reach out. You'll also find more details in our terms and conditions.

Payment Stages

£15,031.32
Total cost up front (On accepting the quote)

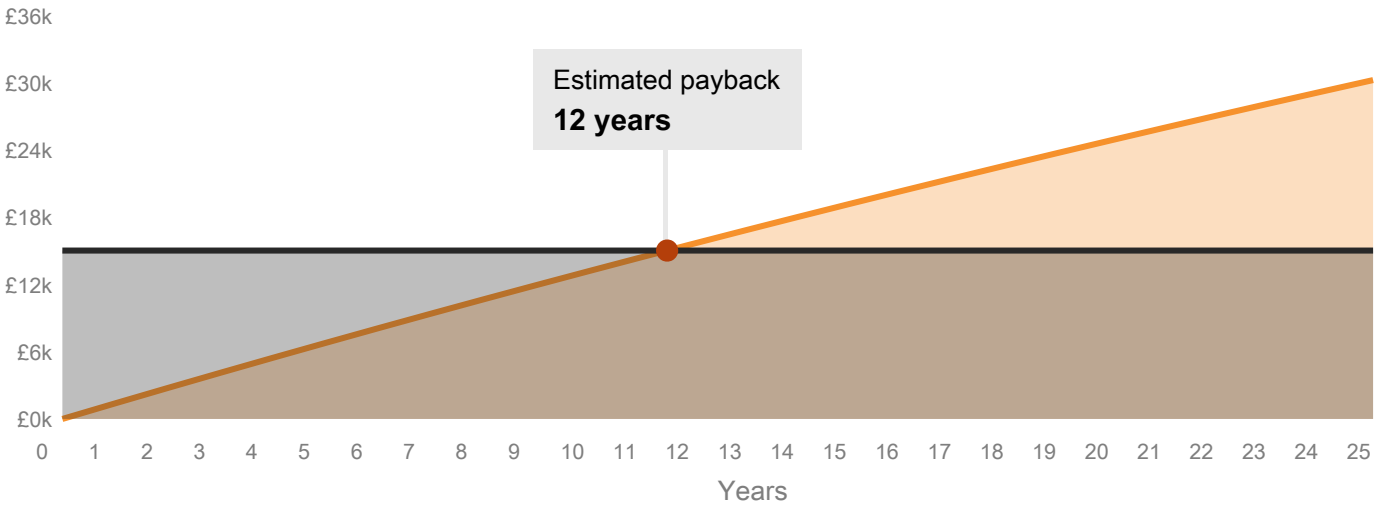
2. Read and sign below

To proceed with your order, please sign below.

1. You understand that all solar production and financial predictions shown are estimates. 2. You accept the total cost and payment schedule associated with your preferred payment option. 3. You have read and accepted our Terms and Conditions.

Customer signature	Customer name	Date

Pay in Full



Year	Running costs	Discounted yearly costs	Discounted cumulative costs	Discounted yearly benefits	Discounted cumulative benefits	Cashflow
1	£0	**£15,031**	£15,031	**£1,383**	**£1,383**	-£13,648
2	£0	**£0**	£15,031	**£1,367**	**£2,751**	-£12,281
3	£0	**£0**	£15,031	**£1,352**	**£4,102**	-£10,929
4	£0	**£0**	£15,031	**£1,337**	**£5,439**	-£9,592
5	£0	**£0**	£15,031	**£1,321**	**£6,760**	-£8,271
6	£0	**£0**	£15,031	**£1,306**	**£8,067**	-£6,965
7	£0	**£0**	£15,031	**£1,291**	**£9,358**	-£5,673
8	£0	**£0**	£15,031	**£1,277**	**£10,635**	-£4,397
9	£0	**£0**	£15,031	**£1,262**	**£11,897**	-£3,134
10	£0	**£0**	£15,031	**£1,248**	**£13,145**	-£1,886
11	£0	**£0**	£15,031	**£1,234**	**£14,379**	-£653
12	£0	**£0**	£15,031	**£1,220**	**£15,598**	£567
13	£0	**£0**	£15,031	**£1,206**	**£16,804**	£1,773
14	£0	**£0**	£15,031	**£1,192**	**£17,996**	£2,965
15	£0	**£0**	£15,031	**£1,179**	**£19,175**	£4,144
16	£0	**£0**	£15,031	**£1,165**	**£20,340**	£5,309
17	£0	**£0**	£15,031	**£1,152**	**£21,492**	£6,461
18	£0	**£0**	£15,031	**£1,139**	**£22,631**	£7,599
19	£0	**£0**	£15,031	**£1,126**	**£23,757**	£8,725
20	£0	**£0**	£15,031	**£1,113**	**£24,870**	£9,838
21	£0	**£0**	£15,031	**£1,100**	**£25,970**	£10,939
22	£0	**£0**	£15,031	**£1,088**	**£27,058**	£12,027
23	£0	**£0**	£15,031	**£1,076**	**£28,134**	£13,102
24	£0	**£0**	£15,031	**£1,063**	**£29,197**	£14,166
25	£0	**£0**	£15,031	**£1,051**	**£30,248**	£15,217

Payment summary

Total cost up front	**£15,031**
System cost including tax	**£15,031**

Disclaimer

Currency amounts are rounded to the nearest whole unit. We estimate the system's costs and benefits over the lifetime of the system using the assumptions shown on the Financial Benefits page. Please review these carefully to ensure they reflect your circumstances. Actual returns may vary and depend on variables that cannot be predicted.