

Proposal Summary

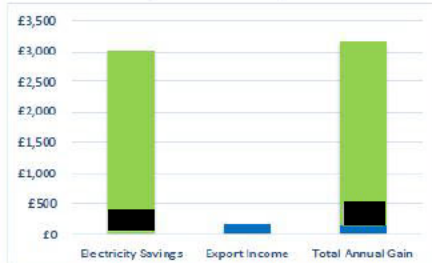
Total Solar Panel System Size
Peak solar output
11.385kW



Total Cost for All Equipment
Supplied and installed

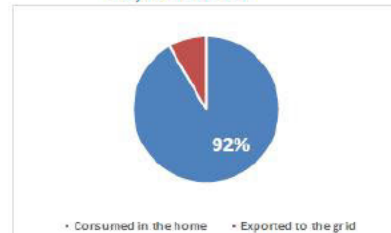


Annual Savings & Income
How you save money with solar

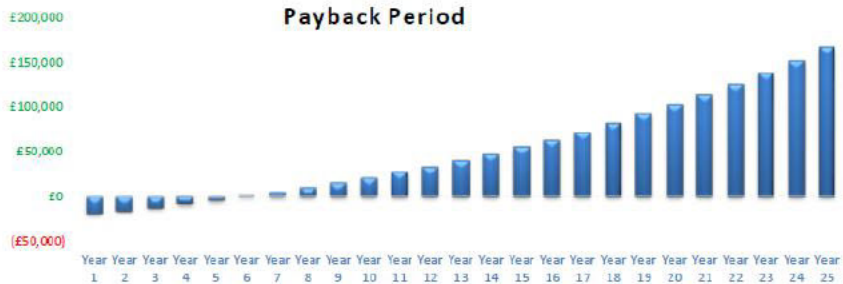


Where Does my Solar Electricity Go?
Total annual electricity generation

12,174 kWh



Payback Period



Next Steps

Above is a summary of the key points of your solar panel proposal. If you have any immediate questions, please call us now on 0800 909 8882.

In the pages that follow, you will find a very comprehensive proposal, carefully tailored to match your specific situation and needs. If any of the points are unclear, do not hesitate to get in touch.

Are you getting other quotes? If so, we can help compare and contrast equipment and warranties, to ensure you end up

Design Overview

Further to my survey of your home, we have produced this report for a suitable solar PV and battery system.

We recreated your roof in our solar CAD software. In addition to the 3D functionality, these CAD software also: a) Pulls in weather data from a local weather station, in order to improve the accuracy of its prediction of how much electricity your solar panel system will produce; b) Knows your exact location on the map, in particular the latitude, which dictates how much sun you are exposed to throughout the year; and c) Incorporates other relevant inputs such as your energy demand profile, how much you pay per unit for your electricity, any shading objects, and so on. You will find the full design report, together with visualisations, in the Appendix.

We have placed 23 'all black' solar panels on your South-facing barn roof (see graphic below). These are 495W panels made by Aiko and further panel details can be found on page 4 and in the data-sheet in the Appendix. This creates a 11.39 kWp solar panel system.

We then connect the panels to a 10 kW hybrid inverter made by Sigenenergy. Full details about the choice and importance of the inverter can be found on page 4, and a data-sheet is in the Appendix.

We have included 3 Sigenenergy SigenStor 10 batteries which have 8.76 kWh of useable storage each, totaling 26.28 kWh of usable storage. This system also has a 'whole home' back-up function meaning that during a power-cut the battery storage will continue to power your home.



System Components, Project Costs & Benefits

Equipment to be installed:

23 x Aiko 495W ABC solar panels
 Renusol Variosole on-roof mounting system
 1 x Sigenergy 10kW hybrid solar inverter
 3 x SigEnergy BAT-8.76 kWh battery storage (including 1 x Gateway)
 If on-roof, 1 x bird protection
 All DC and AC isolators, cabling, trunking, etc.

Included in the Price:

Roofing labour
 Electrical labour
 Scaffolding and access equipment
 MCS Certificate
 5-year insured workmanship warranty (solar installation)
 Grid connection notification

Project Cost Summary: Price valid up to 30 days and subject to survey

Our total fee, including all of the above, is:

* Please note: If you are paying through a business, we need to apply 20% VAT to the prices above.
 * Please note we expect wifi on the location of equipment and full mains supply in place.

Predicted Savings & Income:

Electricity bill saving by using solar electricity directly in the home
 and bill saving from storing solar electricity in a battery:
 Bill saving from diverting solar electricity to heat your water:
 Electricity bill saving from charging your EV with solar electricity :
 Income from the Smart Export Guarantee(see page 7) :

Total Annual Gain:
Estimated Payback Time:
 (Based on 7.5% energy price inflation)

Assumptions:

Overall solar array system size:
 The price you currently pay for your electricity:
 The amount of electricity you need per year:
 The total amount of solar electricity that will be generated per year:

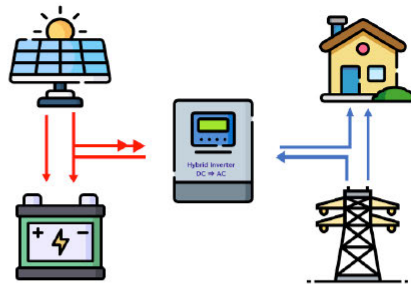
Electricity bill saving by using solar electricity directly in the home
 and bill saving from storing solar electricity in a battery:
 Bill saving from diverting solar electricity to heat your water:
 Electricity bill saving from charging your EV with solar electricity :
 Solar electricity exported to the grid:

Solar Fraction – how much of your total energy bill will met by solar:
 Smart Export Guarantee Rate(assumed – see page 7) :

Inverter

The solar panels are then connected to an **inverter**. The inverter converts the DC electricity from the panels into Alternating Current or 'AC' electricity which can then be used to power devices, lighting, etc.

For the solar PV system size mentioned on the previous page, we recommend the following inverter:



Manufacturer:	Sigenergy
Inverter Rating:	10kW
Model:	SIG-STOR-EC-10-TP
Warranty:	10 years
Number of Inverters:	1
Total Inverter Capacity:	10kW



You can find a data-sheet of the inverter in the Appendix.

The total inverter capacity in kW is usually less than the total 'peak' solar panel capacity in kWp. This is because solar panels only reach their peak, or full, output capacity when the sun shines at exactly 90 degrees to the panel surface and in ideal temperature conditions. For most of the year, and at most times of the day, solar panels do not output at their full rated capacity. For this reason, inverters are often 'under-sized' in relation to the solar panels – basically it helps the whole electricity generation system run more efficiently.

Sigenergy specializes in solar inverters, battery storage, and smart energy solutions designed for efficiency and reliability. Their products optimize power generation and consumption, supporting sustainable energy use. They offer a standard 10-year warranty on inverters, with options for extended coverage. As a growing player in renewables, Sigenergy continues to develop cutting-edge technology for a cleaner future.

Solar Panels & Mounting System

Solar photovoltaic (PV) panels convert sunlight into electricity. The type of electricity produced is known as Direct Current or 'DC'.

Often with technological solutions, 'ROI' and 'quality' are mutually exclusive – you can have one or the other, but not both. This maxim used to be true in the world of solar as well. Nowadays, due to mass production of solar panels in brand new, gleaming factories in Asia, and with the financial muscle of huge conglomerates behind R&D and after-care, you can secure very high quality equipment, at a keen price, in the knowledge that were the worst to happen, the warranty will be backed up in full, far into the future.

We have access to all the solar panels currently available in the UK market and continually assess the key factors such as price, build quality, efficiency, warranty, manufacturer size, UK support, and so on. At the moment, for your project, we recommend the following panel:

Manufacturer: Aiko
Panel Rating: 495W
Type of Silicon: ABC
Product Warranty: 25 years
Model Number: AIKO-A495-MAH54Mb

Number of Panels: 23
Solar PV System Size: 11.385 kWp



Aiko is a world-leading new energy technology company founded in 2009, that focuses on R&D and manufacturing of PV core products and integrated solutions for power generation, storage, usage, providing customers with solar cells, ABC (All Back Contact) modules.

Aiko is constantly pursuing to develop cutting-edge technology that helps to redefine energy and build better lives for all.

We work with all the major **mounting system** manufacturers. For your installation, we recommend:

Manufacturer: Renusol
Type: on-roof mounting system
System: Variosole
Country of Manufacture: Germany
Product Warranty: 10 years



Optional Extras

Certain devices can complement a solar PV array (see below). Please let us know if you are interested any of these.

Heat your water with solar electricity

If you have an immersion heater in your water tank, you can heat your water for free with excess solar electricity.

There are various devices on the market, and the one we recommend is the Solar iBoost. It's relatively inexpensive and easy to install.



The iBoost is fitted in your airing cupboard next to the immersion. We then install a clamp / transmitter where the main electricity cable comes into your home. When the clamp senses you have surplus solar electricity, it turns your immersion on and, hey presto, you get free hot water.

Manufacturer
Marlec

Model
Solar iBoost

Charge Rate
3 kW

Warranty
2 years

Charge your electric car with sunshine

Solar electricity is also the most environmentally friendly way of charging an electric car.

If you already have an electric car – or are thinking you might get one in the future – we recommend a 'smart' home chargepoint like the Zappi.

The Zappi has a setting that guarantees you can charge your car with free solar electricity only, if you wish to. It also allows you to make use of cheap, overnight tariffs, such as Octopus Go.



Manufacturer
MyEnergi

Model
Zappi, Type 2

Charge Rate
7 kW

Warranty
3 years

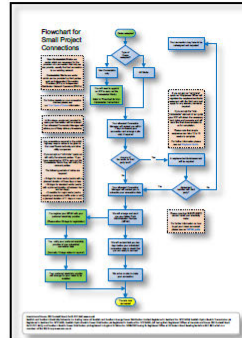
Grid Application & Smart Export Guarantee

Grid Application

In order to connect solar inverters greater than 3.68 kW on a single phase to the national grid, you need prior permission from the local electricity company, known as the 'DNO'.

Your total inverter capacity is:
10kW

Per phase, if your inverter size is greater than 3.68 kW or you have a Tesla Powerwall/PureDrive 5kW export, an application to the DNO is required. This process will take 8-9 weeks and we will undertake all the paperwork.



Smart Export Guarantee

The Smart Export Guarantee (SEG) scheme started on 1 January 2020. Under the scheme, you are paid for every kWh (unit) of solar electricity you export to the grid.

To access the SEG, **you must sign up directly with a participating energy supplier** and have a suitable smart meter installed (free of charge). The possibility of installing a smart meter in your area will need to be confirmed with your electricity supplier.

The rate you are paid per kWh varies from supplier to supplier. **Please note: Infinity Energy does not arrange or manage your SEG application — it is entirely the customer's responsibility to organise this with their chosen supplier.**

The screenshot shows the 'The Smart Export Guarantee' website. It includes a header with the title and a sub-header 'Find a Smart Export Guarantee Supplier'. Below this is a table of participating suppliers.

Supplier	Smart Meter	Smart Meter Type	Smart Meter Location	Smart Meter Type	Smart Meter Location	Smart Meter Type	Smart Meter Location	Smart Meter Type	Smart Meter Location
1. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
2. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
3. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
4. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
5. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
6. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
7. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
8. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
9. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter
10. British Energy	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter	Smart Meter

At the moment, we recommend Octopus Energy, which pays 15p per kWh on its Outgoing Fixed tariff, but you would need to check with Octopus if you are eligible for this deal.

Roof Structural Assessment & Planning Permission

Roof Structural Assessment

A typical solar panel weighs 22 kg and has a surface area of 1.9m². Each panel, together with the associated mounting equipment, will impose a load on your roof. It is highly likely your roof can easily tolerate this additional loading.

Nonetheless, we will carry out a structural analysis of your roof to guarantee the extra load is within tolerances.

Planning Permission

Most domestic solar panel installations do not require planning permission, as long as they are designed appropriately. The UK law in this area is as follows (taken from the government statutory instrument '2015 No. 596' which relates to the Town and Country Planning Act):

"A.1 Development is not permitted by Class A if—

(a) the solar PV or solar thermal equipment would protrude more than 0.2 metres beyond the plane of the wall or the roof slope when measured from the perpendicular with the external surface of the wall or roof slope;

(b) it would result in the highest part of the solar PV or solar thermal equipment being higher than the highest part of the roof (excluding any chimney);

(c) in the case of land within a conservation area or which is a World Heritage Site, the solar PV or solar thermal equipment would be installed on a wall which fronts a highway;

(d) the solar PV or solar thermal equipment would be installed on a site designated as a scheduled monument; or

(e) the solar PV or solar thermal equipment would be installed on a building within the curtilage of the dwellinghouse or block of flats if the dwellinghouse or block of flats is a listed building."

We have designed the system such that clauses (a), (b) and (c) are met in full. In addition, your house is not sited on a scheduled monument, therefore clause (d) does not apply.

It is our opinion, therefore, that planning permission is not required as long as your house is not listed or within the boundary of another listed building (clause (e)).

Ultimately, planning issues are the responsibility of the building owner and/or tenant, and independent advice should be sought in case of any doubt.

Accreditations, Warranties & References

Accreditations

We hold all the necessary accreditations to be able to install solar panel systems in the UK. These accreditations mean you are entitled to receive any subsidies that might be available, and also protect you as a consumer. Here are our certificate and membership numbers:

MCS Certificate Number:	NAP 14896
RECC / MCS Membership Number:	00048808



The Microgeneration Certification Scheme, **MCS**, certifies microgeneration products, such as solar panels, used to produce electricity and heat from renewable sources. MCS also certifies installation companies to ensure the microgeneration products have been installed and commissioned to the highest standard for the consumer.

As members of the Renewable Energy Consumer Code, **RECC**, we agree to abide by the Consumer Code. It covers all the factors that contribute to a high standard of consumer service, before, during and after a contract is agreed.

Warranties & Guarantees

The main components of the installation come with solid **product warranties** of at least 10 years. The exact product warranty lengths for the equipment we recommend are as follows:

Solar panels:	25 years
Hybrid Inverter(s):	10 years
Gateway:	5 years

In addition, Infinity Energy Services provides a free 5-year **insurance-backed guarantee** on our workmanship. In the first instance, if you are not 100% satisfied with our workmanship, you should contact us on 0800 909 8882 and we will come out and rectify it, free of charge. If our company is no longer trading, you would contact the insurance company, IWA, who will send a qualified company out to fix the problem, again free of charge.

The insurance policy also guarantees your deposit, such that if anything happens to us before

References

Infinity Energy Services has been installing solar PV systems since 2011. We are technically-led and put great emphasis on excellent electrical design, creating solar panels systems that produce the maximum amount of electricity possible in any given location.

We also pride ourselves on outstanding customer service; before, during, and after installation. We are happy to put you in touch with previous customers so you can hear their feedback direct. In the meantime, please refer to our Checkatrade web:



Infinity Energy Services Ltd
Unit 6 Swanwick Business Centre, Bridge Road
Hampshire SO31 7GB

Hugh Martin
Bonwycks Place Ifield Wood Crawley RH11 0LE

Contact person:
Mitchell James

Project Name: Hugh-11.39kWAlko495-Sig10kWTP-3xSig10

05/03/2026

Your PV system from Infinity Energy Services Ltd

Address of Installation

Bonwycks Place Ifield Wood Crawley RH11 0LE

