# Your Renewable Energy Quotation



# Your Details

Your Name	Lee Bateman
Installation Address	Battle Pavillion, North Trade Road Battle East Sussex TN33 OHS
Telephone	01323 646284
Email	lee@iwa.uk.com
Our Reference	OH9322

# About OHM Energy

We are one of few companies that specialise in the integration of conventional heating and energy systems, with cutting edge, proven renewable energy solutions.

We have a small team of fully qualified professionals, with an emphasis on quality and client satisfaction. It is all important to us that you receive unbiased accurate advice. We as a company do not wish to install a system that is not suited to the given situation.



# AT A GLANCE

YOUR CONSULTANT Robyn Dyer

PHONE 01323 739474

EMAIL robyn@ohmenergy.co.uk

QUOTE VALID UNTIL 22/03/2025

NET £27,301.03

VAT £5,460.21

GROSS £32,761.24



# Your Solution

The following quote is for the installation of **52** Panels to be installed **To the East and West elevations** at **BATTLE PAVILLION, NORTH TRADE ROAD**, **BATTLE**, **EAST SUSSEX, TN33 OHS**. The panels we have specified are high quality as is the inverter and other components. We have opted for a high efficiency panel to increase overall system size. The panels will be black to minimise any visual impact.

We have assumed that the roof covering will be trapezoidal, and we have also included the supply and installation of a Tesla Powerwall 3 DC.

We have assumed suitable and safe roof access / scaffolding will be provided by the client and is not included in this quote. However, do let us know if this is something you would like us to get involved with.

A full technical survey will be completed to verify the details within this quote prior to installation. Please be aware where roof access is not available on technical survey the details listed in this quote could be subject to change when we commence on site.

We will conduct a structural survey where possible, however where access to roof or joists cannot be gained we will require you to have a structural survey completed at your own cost. We will require a copy of this before commencing the work.



Your OHM Energy Solution

The following is included with your new system.



### BATTERY (X1)

### TESLA POWERWALL 3 DC & GATEWAY (AC COUPLED)

The Powerwall 3 is the latest iteration of Tesla's home battery system, designed to store energy for residential use. With the built in Solar inverter it has the ability to act as a hybrid inverter for the solar and the battery and can be either DC or AC coupled. It integrates with solar panels or electrical grid to provide back up power, reduce reliance on the grid and maximize energy efficiency. The system is compact, wall mounted and can be integrated with multiple units to scale for higher energy needs. We are proposing to AC couple this system and have separate inverters for the Solar PV.

B→ VIEW DATASHEET



### **BIRD PROTECTION (X1)**

### BIRD SPIKES

The bird spikes will be installed around the panels and this offers several key benefits. It prevents birds from nesting or perching under and around the panels, which can cause damage to wiring, reduce panel efficiency, and lead to costly maintenance.



### INVERTER (X1)

#### SOLIS 3-PHASE 20KW INVERTER

The Solis Solar PV Inverter is a high-efficiency device that converts the direct current (DC) generated by solar panels into usable alternating current (AC) for homes or businesses. Known for its reliability and advanced technology, Solis inverters support both residential and commercial solar installations. They offer features like remote monitoring, wide voltage ranges, and high maximum efficiency, ensuring optimal energy production. Solis inverters also include safety functions like overvoltage and short-circuit protection, and they are compatible with a variety of solar systems, making them a versatile and durable choice for solar power conversion.

B→ VIEW DATASHEET



# MOUNTING (X1) PITCHED ROOF

### B→ VIEW DATASHEET

TTXI



## PANEL (X52)

### TRINA SOLAR 450W

The Trina Solar panel is a high efficiency panel with a power output of 450W and an efficiency rating of 22.5%. It features a dual glass design for enhanced resistance to environmental stresses like high temperatures, humidity, and mechanical loads.

B→ VIEW DATASHEET



# Your Price Breakdown

SOLAR PV & BIRD SPIKES	£17,981.53
TESLA POWERWALL 3 DC	£9,319.50
TOTAL	£27,301.03

# Solar PV Warranties

15 Year manufacturer warranty, 25 Year Manufacturer power warranty, Maximum of 0.55 % annual power degradation, 10 Year Inverter Warranty and 2 Year Insurance Backed workmanship Warranty on all Works Carried out by OHM Energy Ltd (Commercial not insurance backed).

# **Battery Storage Warranties**

10 Year Battery Product Warranty and 2 Year Insurance Backed workmanship Warranty on all Works Carried out by OHM Energy Ltd (Commercial not insurance backed).

As a Government Accredited Installer, there is certain standard information we must provide:

### P.V. Panel Specification

Panel size: 1134 x 1762 x 30 mm Peak power(Pm): 450W (or equivalent)

# Payments

Upon receipt of your signed authorisation, we'll confirm by email how you can pay. An illustration is shown below.

- 25% on deposit
- 50% one week before commencement or delivery of materials, whichever is soonest
- 25% on completion

# Authorisation

To proceed with this order please sign below to acknowledge that you have read and accept the information contained within this quote document and have read and accepted our terms and conditions.

CUSTOMER SIGNATURE CUSTOMER NAME DATE OF AUTHORISATION

- The prices are subject to a technical survey once acceptance of quotation has been received. The technical survey is to ensure that the parameters and viability of the project can be carried out as per specification. Under normal circumstances we would not expect this to influence the price quoted in this agreement
- During the installation if it becomes apparent that a need for extra equipment is required that was not in the original quote we will advise you of this fact and provide you with an amended / additional quotation. Upon agreement of this quotation a supplementary invoice will be provided and payment will be due within 7 days
- Any building and painting works following the installation are not included
- Whilst all due care will be taken, no responsibility can be accepted for any furnishings, fittings, fixtures or redecoration when undertaking the proposed works
- We will endeavour to match existing exterior brickwork, cladding or rendering to the best of our efforts. However, no liability can be accepted where the precise bricks or finish materials are not available, or we have not been informed of the exact type to use.

OHM Energy is a member of the RECC Assurance Scheme and this document has been prepared in accordance with the Consumer Code.

#### Our main obligations to you:

- We will carry out the work with all reasonable skill and care according to the timetable agreed with you
- We will carry out the work and all communication with you according to the RECC Assurance Scheme Consumer Code
- We will provide you with a guarantee that covers both the installation and the goods installed for a one year period unless otherwise specified in writing
- Your right to cancel
- You can cancel this contract and receive a full refund of your deposit by sending written notice no later than 14 working days after the date on which this contract was signed; this right is known as the "Cooling Off Period"
- If there is a severe or unreasonable delay beyond the "Cooling Off Period", not caused by you, or by events beyond our control, then you will have a right to cancel this contract and receive a full refund
- If we are in serious breach of our obligations, as detailed in this contract, then you have a right to cancel and receive.

#### Your main obligation to us:

- You may be asked to pay a deposit when you sign the contract. As indicated within your quote
- You may be asked to make a further advance payment. It must be paid no more than three weeks before the agreed delivery or installation date
- It is your responsibility to get the necessary permissions and approvals for the work to take place. We will help if instructed to do this If not instructed will assume you have gained these permissions
- If you fail to pay on time we may stop work and charge additional costs
- If you cause the work to be delayed, we may stop work and charge reasonable additional costs.

#### 1. Your MAIN OBLIGATION to us is to make the payments due to us

#### The Timetable

2.2 We agree to supply the goods and carry out the installation work as specified in the timetable set out in the Quotation. We must have discussed that timetable with you before you sign this Contract. Your acceptance of these terms indicates that you agree to proceed using that timetable

2.2.1 We may adjust that timetable after discussing this with you

2.2.2 If, for whatever reason, there is any delay, suspension or cancellation of the supply of the goods or installation of the system then the conditions described in 8.2.1 and 8.2.2 of this Contract will apply

2.3 We will carry out the work and all communication with you giving:

a detailed Quotation that includes:

- an itemised list of the goods to be supplied
- any relevant taxes such as VAT
- a timetable for supplying the goods and for carrying out installation work
- a right to cancel this Contract by sending written notice to us using the cancellation form and address provided by us (see section 1.3 of this Contract)
- a written estimate of how the system will perform, calculated according to the relevant MCS installer standard.

#### The Deposit

3.1 You will pay us the deposit specified in the Quotation when you sign this agreement. Should you decide to cancel the contract within the "Cooling Off Period? we will return that deposit to you in full. 3.1.1 If you pay the deposit before we have inspected your house, and if we find during that inspection that the installation cannot proceed, then we will promptly refund that deposit to you in full.

#### Advance payments

3.2 We may require you to pay a further advance payment no more than three weeks before the agreed delivery or installation date. This will only be used to carry out this installation, for example to purchase goods. We explain in detail in the Quotation when invoices will be sent and the amount due for each payment.

#### Final Payment

3.3 The balance outstanding on the contract price is due on completion and commissioning of the installation. We will issue you with an invoice when the work is complete and has been commissioned. 3.4 You will not be entitled due to any alleged minor defect to withhold more than a proportionate amount of the outstanding balance. If you do withhold any amount after the due date because of any alleged minor defect you must give us notice before the final date on which payment is due. In that notice you must also state the reasons you are withholding the payment.

#### Consequences of late payment

3.5 If you fail to pay the amount specified in an invoice by the due date then we may charge interest until the full amount is paid. The interest rate we charge will be 3% above the base rate set by the Bank of England.

3.6.1 If we do not receive payment by the seventh day after payment is due, then we may give you written notice that we intend to stop work on the installation. Once we have sent you this written notice, we may suspend all work until payment is made.

3.6.2 If you are in breach of this Contract because you have failed to make an agreed payment, and we have suspended work on the installation, as detailed in section 3.6.1 of this Contract, then we may be entitled to recover any additional costs we incur. We will provide you with written notice containing full particulars of any claim for compensation within 21 days of any suspension of work.

3.7 We may require you to return and deliver up the goods to us. Failing this we will take legal proceedings to recover the goods or their outstanding value.

#### 4. Your other obligations to us

4.1 You must obtain all relevant permissions (such as planning and building consents) that are necessary before we start work on the installation. If we ask to see those permissions (and related drawings and/or specifications) you must make those available.

#### Supply of services

4.2 You must agree to provide the following for our use free of any charge:

- water, washing facilities and toilets
- electricity supply
- adequate storage space
- safe and easy access to your property from the public highway
- easy access to the location within the property where the installation is to take place by removing all belongings.

#### 5. Delivery, Title and Risk

- 5.1 We will deliver the goods to the location detailed in the Quotation.
- 5.2 Once goods are delivered to the buyers address they become the responsibility of the buyer
- 5.3 Until ownership of the goods passes to you, you must:
- store the goods separately in such a way that they remain readily identifiable as our property
- not destroy, deface or obscure any identifying mark or packaging on or relating to the goods
- maintain the goods in a satisfactory condition.

5.4 We must place your deposit and advance payment made before the goods have been delivered to your property in a special "client? or other third party bank account or dedicated "customer? bank account. This money can only be used for work carried out under this Contract.

5.4.1 If we should fall into receivership, administration or bankruptcy then the money in that dedicated bank account will be returned to you or passed to another RECC Assurance Scheme supplier who will complete the work.

5.5 Goods belonging to us may be delivered to the site. If the contract is terminated early for reasons detailed in section 9.3 of this Contract then, with reasonable notice, you must return and deliver the goods to us. If this happens then we will reimburse you if any of your money was used to purchase a proportion of the goods. If you do not return the goods to us, we retain the right to take legal proceedings to recover the goods or their value.

5.6.1 If the Contract is terminated early for reasons detailed under section 9.4 of this Contract then, with reasonable notice, you must return and deliver the goods to us. If this happens you may have to pay compensation for reasonable costs or losses reasonably incurred. This may be deducted from any deposit or further advance payment you have already made.

#### 6. Change of work

6.1 If, after signing the contract, you want to change the work, you must consult with us first. We may be able to incorporate your changes into the installation provided that:

- it is technically possible
- we have the necessary resources
- the necessary permissions are in place.

6.2 If we agree to this change of work you must:

- confirm this in writing
- do so within 14 days of when you first tell us.

6.3 We will then adjust the price:

- by written agreement beforehand, if possible; or if not then
- by later written agreement; or if not then
- by referring to any priced documents, if this applies; or if not then
- by a reasonable amount for the work done or goods supplied.

6.4 Every change that means extra or revised work (as opposed to changes that leave something out) may mean extra costs. We will try to keep those costs to a minimum.

#### 7. Unexpected works

7.1 The Quotation given to you must detail the hourly or daily costs that would result from any unexpected work due to site conditions or special circumstances beyond the control of the member.

7.2 Where unexpected work arises, we will tell you and ask how you want us to proceed. If you want us to continue, section 6.3 of this Contract will apply.

### 8. Changes to Agreed Timetable

8.1 We will make every effort to complete the work by the time agreed with you. You must appreciate, however, that sometimes delays may occur for reasons beyond our control, especially when third parties are involved in installing other, related works. We cannot be held responsible for those delays. If such delays occur we will complete the work as soon as possible.

#### Consequence of delay caused by us

8.2.1 In the case of major delays to the delivery of goods or installation then you may be offered different products of equivalent specification, value and quality, so long as they are MCS certified.

8.2.2 In the case of major delays to the delivery of goods then you will be entitled to cancel the contract as detailed in section 9.2 of this Contract.

#### Consequences of delay caused by you

8.3 We will seek to accommodate small delays without recourse to compensation.

8.3.1 If the work is delayed or lasts longer than expected for any reason within your control, we will adjust the price accordingly, as shown in section 6.3 and subject to section 7 of this Contract.

#### 9. Cancellation of this Contract

### Your rights

9.1 As detailed above in section 1.3 of this Contract, you can cancel this contract by sending us written notice no later than 7 working days after the date on which this contract was signed.

9.1.1 If you cancel this Contract after the period referred to in sections 9.1 and 1.3 of this Contract then you may have to pay compensation for costs or losses reasonably incurred. We will try to keep those costs to a minimum. We have a right to retain all or part of your deposit and further advance payment, if made, as a contribution. RECC Assurance Scheme 11.

9.2 If there is a serious delay to the delivery of goods for reasons that are outside your control, but within our control, then you will be entitled to cancel the contract and receive a full refund. This is in line with the RECC Assurance Scheme Consumer Code and the [Supply of Goods and Services Act 1982].

9.3 Additionally, if we are in serious breach of our obligations as detailed in this Contract then you have a right to:

- cancel the contract and receive an appropriate refund; or
- request a repair or a replacement; or
- ask for compensation.

You can seek those remedies if what we supply or install is faulty, incorrectly described or not fit for purpose. You cannot seek those remedies if you change your mind about the contract or you decide you no longer want some or all of the components.

#### Our rights

9.4 If you are in serious breach of your obligations as set out in this Contract and you fail to remedy that breach within 14 days of receiving written notice from us about that breach, then we have a right to cancel the contract.

9.5 If we suffer a loss as a result of your breach of contract, we must take reasonable steps to prevent the loss from getting worse. If your breach of contract leads to a cancellation then you may have to pay compensation for reasonable costs or losses reasonably incurred.

#### 10. Conciliation and arbitration

10.1 If at any time a dispute arises between you and us which cannot be resolved amicably then both you and we can refer the matter to conciliation. We must agree to conciliation if that is your wish.

10.2 The conciliation service that will be used is that offered by the RECC Assurance Scheme and is described in the Consumer Code. It aims to reach a non-legal solution to the dispute in a reasonable timescale. The RECC Assurance Scheme will appoint a suitably qualified independent expert (or experts) to consider the matter in the light of consumer protection legislation in force. After considering all the evidence, either in writing, or in a face-to-face mediation, the expert will make recommendations for resolving the issue. Neither party will be bound by these recommendations, though both are strongly encouraged to accept them in the interests of resolving the dispute speedily and effectively.

10.3 If the conciliator's recommendations are not acceptable for any reason, you can refer the matter to the independent arbitration service and we must agree to arbitration if that is your wish. If we would like to seek arbitration then we must seek your permission first. The procedure used for independent arbitration is described in the RECC Assurance Scheme Consumer Code. You will have to pay a fee equivalent to the County Court small claims procedure fee. This fee will be refunded to you if the arbitrator finds in your favour.

10.4 The outcome of the arbitration process will be legally-binding and enforceable. An award made under the independent arbitration service will be final and binding on you and us. You and we may only challenge the award on certain limited grounds under the Arbitration Act 1996.

#### 11. General

(a) The Seller may perform any of its obligations or exercise any of its rights hereunder itself or by any third party.

(b) Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to that other party.

(c) No waiver by the Seller of any breach of the Contract by the Buyer shall be considered as a waiver of any subsequent breach of the same or any other provision.

(d) If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part the validity of the other provisions of these Conditions and the remainder of the Condition in question shall not be affected thereby.

(e) The Contract shall be governed by the Laws of England and Wales, and the parties submit to the exclusive jurisdiction of the English Courts.

(f) By signing this contract you are confirming that you have received planning permission for the proposed installation or ascertained that planning permission is not required. The Seller will

not be held responsible for any installations where planning permission was required but not obtained and no refunds will be offered.

### 12. Warranties and Liability

(a) Subject to these Conditions, the Seller warrants that the Services will correspond with the Specification at the time of supply and will be free from defects in material and workmanship for a period of 12 months from the date of supply.

(b) The above warranty is given by the Seller subject to the following conditions: (i) if the Price has not been paid by the due date the Seller shall be under no liability under any warranty; (ii) the Seller shall be under no liability in respect of any defect in the Services arising from any drawing, design or specification supplied by the Buyer; (iii) the Seller shall be under no liability in respect of any defect in the Services arising from any drawing, design or specification supplied by the Buyer; (iii) the Seller shall be under no liability in respect of any defect arising from fair wear and tear, wilful damage or negligence by the Buyer or a third party, abnormal working conditions, failure to follow the Seller's instructions (whether oral or writing), misuse or alteration or repair of any goods without the Seller's approval; (iv) the above warranty does not extend to parts, materials or equipment not supplied by the Seller.

(c) Subject as expressly provided in these conditions, and except where the Services are supplied to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977), all warranties, conditions or other terms implied by statute, common law, trade usage or otherwise are excluded to the fullest extent permitted by law.

(d) Any claim by the Buyer which is based on any defect in the quality or condition of the Services or their failure to correspond with the Specification shall (whether or not supply is refused by the Buyer) be notified to the Seller within 7 days from the date of supply or (where the defect or failure was not apparent on reasonable inspection) within a reasonable time after discovery of the defect or failure. If supply is not refused and the Buyer does not notify the Seller accordingly, the Buyer shall not be entitled to reject the Services and the Seller shall have no liability for such defect or failure and the Buyer shall be bound to pay the Price as if the Services had been supplied in accordance with the Contract. (e)Where any valid claim in respect of any of the Services which is based on any defect in the quality or condition of the Services or their failure to meet the Specification is notified to the Seller in accordance with these conditions, the Seller shall be entitled to repair or replace the Services (or the part in question) free of charge or, by agreement with the Buyer, refund to the Buyer the price (or a proportionate part of the Price), but the Seller shall have no further liability to the Buyer.

(f) Except where due to the Seller's negligence, the Seller shall not be liable to the Buyer by reason of any representation, or any implied warranty, condition or other term, or any duty at common law, or under the express terms of the contract, for any consequential loss or damage (whether for loss of profit or otherwise), costs, expenses or other claims for consequential compensation whatsoever which arise out of or in connection with the supply of the Services or their use or resale by the Buyer.

(g) The Seller shall not be liable to the Buyer or be deemed to be in breach of the Contract by reason of any delay in performing, of any failure to perform, any of the Seller's obligations if the delay or failure was due to any cause beyond the Seller's reasonable control, including but not limited to Act of God, explosion, flood, tempest, fire or accident, war or threat of war, sabotage, insurrection, civil disturbance or requisition, act, restrictions, regulations, bye-laws, prohibitions or measures of any kind on the part of any governmental, parliamentary, local or other authority, import or export regulations or embargoes, strikes, lock-outs, or other industrial actions or trade disputes, difficulties in obtaining goods, raw materials, labour, fuel, parts or machinery, power failure, or breakdown in machinery.

#### Standard Assessment Procedure (SAP 2012) calculation for Solar PV

Photovoltaic (PV) technology harnesses the energy of the sun by converting it into electricity. The total amount of free electricity produced per year depends on the installed peak power of each PV panel. All panels are rated by manufacturers in terms of their peak power output under standard test conditions (i.e. radiation of 1,000 W/m2 at 25oC). For PV panels this will vary according to the type of cell technology used with some panels producing more electricity per square meter than others.

The design tool establishes what the total peak power output is by multiplying the manufacturers quoted peak output for a particular panel model by the total number of panels that are to be installed. The SAP 2012 calculator assumes that for the UK climate a 1kWp PV system will typically produce 900 kWh of electricity per year if positioned at an optimal orientation and inclination and when there is no shadowing by any nearby buildings, trees etc. From this the total electricity produced in a year by the PV array can be established.

#### **Proposed Site Characteristics**

The surface on which a PV array is mounted should receive as much light as possible as the more light received, the more electricity will be generated. The three issues that affect how much light a surface receives are:

• Orientation - a south facing surface is generally the best possible orientation however, a building facing in a south easterly or south westerly direction is acceptable in most instances.

- Inclination a tilted array will receive more light than a vertical array. Tilts should be between 20 and 50 degrees of horizontal for maximum performance with the optimum angle being 30 45 degrees.
- Shadowing a solar PV system performs best when there is no shadowing from objects nearby such as tall trees or buildings all of which can reduce system performance considerably.

#### Working Information

For a grid connected system electricity generated will always be used in your home first if there is anything switched on that requires power. Any surplus power will be exported back into the national grid. All installations above 3.68kW have to be approved by UK power network and an application is completed on your behalf by OHM energy. Subject to UK Power approval will depend on how much can be exported back to the grid. Knowing what the proportion that you expect to use on site is important as it will affect the potential revenue you might expect to receive. The proportion used will depend on the size of PV system installed and your expected daytime summer electricity demand. For example, most homes have some continuous or near continuous demand due to freezers fridges and standby electronics at a low level. This means that for a large proportion of the time all the output from a small PV system will be used on site, displacing the need to buy grid electricity. However, if you were to install a much larger PV system and used very little electricity during the day the proportion exported would be much higher.

#### Applications

There are a number of applications OHM will make on your behalf, such as local authority notifications and DNO (Distribution Network Operator) applications, amongst others. Please note, if we have not received any of these approvals in time for when your final balance is due, we will still require the final balance to be paid on time upon completion of our works. Our works are deemed completed upon completion of the DC side, and in some cases where possible, we will sital an export limitation device until the export has been agreed.

#### **Design Tool Outputs**

The design tool generates predicted annual outputs for energy, revenue and carbon. The calculator shows the expected revenue.

One is the money you will save from displacing electricity that you would otherwise buy in from the grid. The value of this will be determined by how much the solar PV system generates and how much of this generation you expect to use on site.

Any energy that isn't used can be exported back into the grid. This is a further source of income and for this to happen you will need to apply to a Smart Export Guarantee (SEG) Licensee. Each provider will have details of their specific application process on their website. SEG Licenses do not need to be the same company as your current energy supplier. You can choose to use separate companies for your SEG payments.

This calculator assumes that the system is grid connected and will be for a retrofit installation. Also that 75% of the energy produced by the Solar will be used on site and 25% will be exported at a rate of 12p per kWh for any export (current offered rate as of July 2021). Please note a Smart meter must be fitted in line with your supplier's guidelines to benefit from the Export tariff.

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 Government's standard assessment procedure for energy rating of buildings (SAP) and is given as guidance only. It should not be considered as a guarantee of performance. We have assumed that all electricity generated will be consumed on site, also that the average electricity price is 24p per kWh – these assumptions should not be used or interpreted as fact.

#### Additional Information

A full technical survey will be completed to verify the details within this quote prior to installation. Please be aware where roof access is not available on technical survey the details listed in this quote could be subject to change when we commence on site.

We will conduct a structural survey where possible, however where access to roof or joists cannot be gained we will require you to have a structural survey completed at your own cost. We will require a copy of this before commencing the work.

#### Batteries (except Tesla)

As standard we will install a double socket for use in a power cut, and back up situation. This will need to be local to the battery/fuseboard. Adding additional back up circuits or sockets can be reviewed, subject to survey and costing. Please contact us to discuss further.