Electrical & Solar

12.15 kW	£1,727	£9,990	£9,990
System Size	Estimated Annual Electricity Bill Savings	Total System Price excluding VAT	Total System Price including VAT



1 Existing mains cables & New PV to house

2 New PV Cables to the Office and House Inverters

Your Solution

FoxESS F Series
3.6kW of Inverter Power
Fox ESS 1 x F3600

FoxESS K Series Hybrid Inverter
7kW of Inverter Power

SYSTEM OPTIONS

27 Panels + 9.6kw Bat V2

PAYMENT OPTIONS

Bank transfer

NEXT STEP

Review Proposal

Ryan Roberts
Sales Representative
01978 468118 Email

Specs



Fox ESS 1 x KH7

Details Specs



Battery
Fox ESS
4.74 kWh Total Battery Storage
1 x CS4800

Battery
Fox ESS
4.74 kWh Total Battery Storage
1 x CM4800

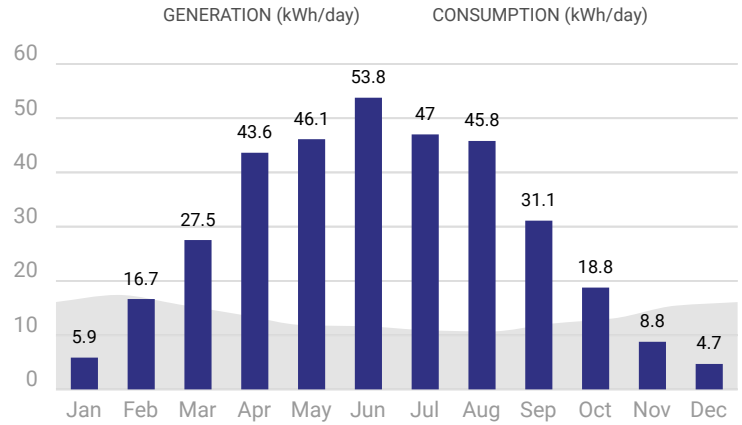
Solar Panels
Hengdian Group DMEGC Magnetics
12.150 kW Total Solar Power
27 x 450 Watt Panels (DM450M10RT-B54HBB)
10,654 kWh per year

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

System Performance

213%

Energy From Solar



Environmental Benefits

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



Each Year

213% Of CO_2, SO_x & NO_x

2.7 tonnes Avoided CO_2 per year

Over System Lifetime

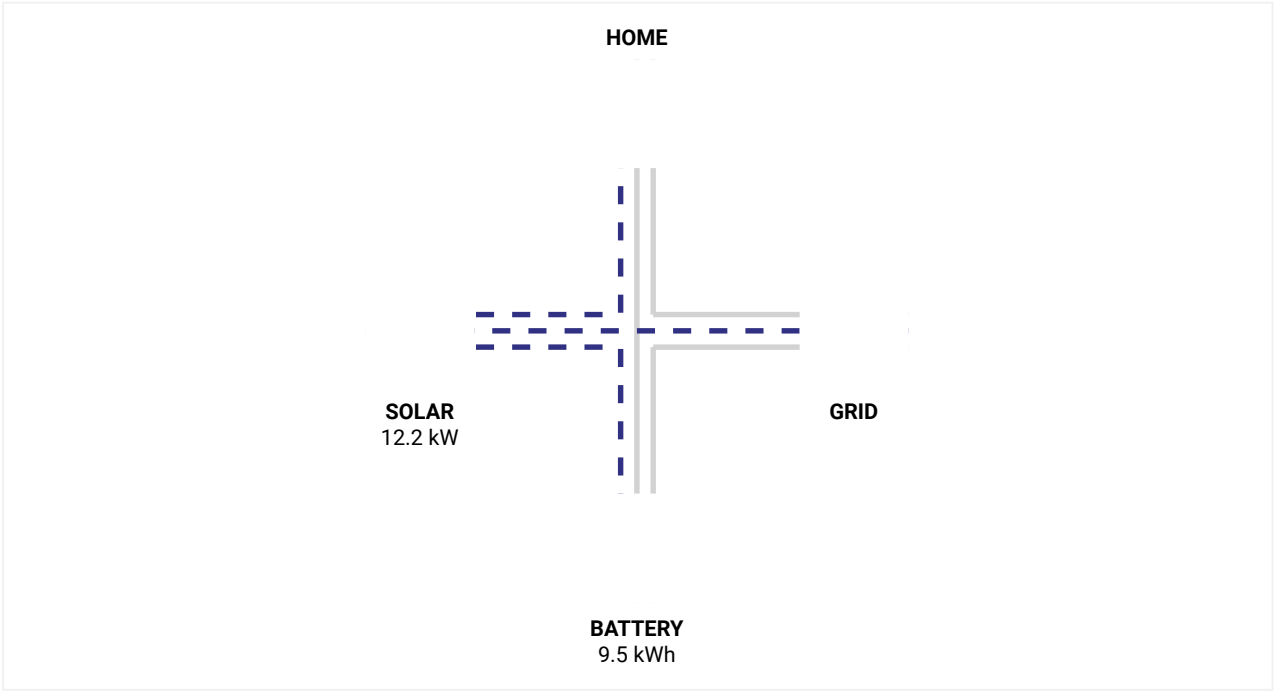
80,648 Car km avoided

518 Trees planted

58 Long haul flights avoided

How your system works

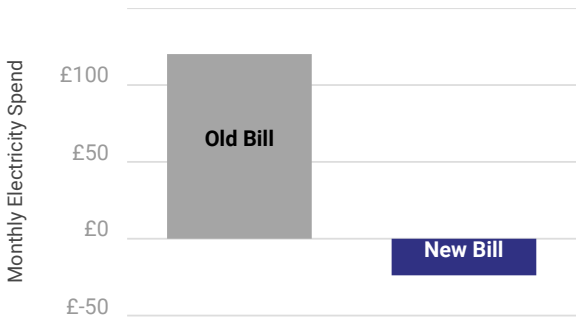
Generating Excess Solar	Partially Offset Usage	Night

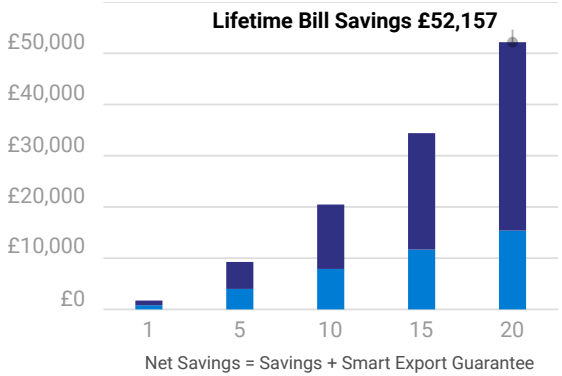


Electricity Bill Savings

First Year Monthly Bill Savings

Cumulative Bill Savings





Detailed Savings Table

Your projected energy cost is calculated by considering a 7% 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 5000 kWh per year, assuming Electricity Electricity Tariff.

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

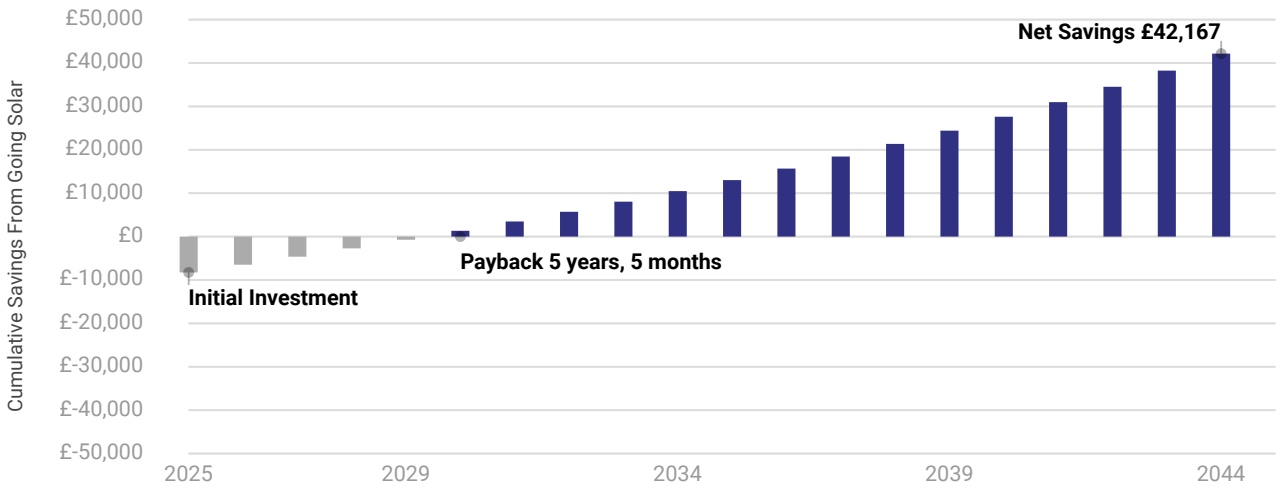
Proposed Tariff Details - E.ON Electricity (Wales)	
Energy Charges	
Usage Charge *All Day Mon-Sun*	£0.24 / kWh
Smart Export Guarantee	
Feed-In Credit *All Day Mon-Sun*	£0.12 / kWh
Fixed Charges	
Fixed Charge	£19.72 / month

Net Financial Impact

Simple Financials | Detailed Financials

£52,157	-	£9,990	=	£42,167
Utility Bill Savings		Net System Cost		Estimated Net Savings

Cumulative | Annual



Detailed Annual Financial Table

Quotation: Bank transfer

27 x Hengdian Group DMEGC Magnetics 450 Watt Panels (DM450M10RT-B54HBB) 1 x F3600, 1 x KH7 (Fox ESS) 1 x CS4800, 1 x CM4800 (Fox ESS)	
Total System Price	£9,990.00 Excluding £0.00 VAT
Purchase Price	**£9,990.00** Including £0.00 VAT

Payment Milestones

DEPOSIT: 25% Payable on confirmation of order	£2,497.50
ADVANCE PAYMENT: 50% Payable on materials delivery	£4,995.00
BALANCE: 25% Payable on final comissioning	£2,497.50
Total	**£9,990.00**

Electrical & Solar

About RR Electrical & Solar Ltd

Download Proposal

System Performance Assumptions: System Total losses: 9.4%, Inverter losses: 2.9%, Optimizer losses: 0%, Shading losses: 0%, Performance Adjustment: 0%, Output Calculator: System Advisor Model 2020.02.29.r2. Panel Orientations: 27 panels with Azimuth 88 and Slope 12.

The MCS output (MIS 3002) and self-consumption (MGD 003) calculation methodology was not used in calculating the numbers in the table below. An alternative calculator System Advisor Model 2020.02.29.r2 was used.

[EESS capacity not used for self consumption] Storage capacity of the battery - assumed usable capacity of battery [Total energy discharged per annum] Assumed usable capacity of battery x 730 [Additional self consumption] Estimated annual output (Section B) x self consumption rate with battery as a % (no higher than 95%) - Expected solar PV self-consumption (with EESS) (Section D)

A. Installation data		
Installed capacity of PV system - kWp (stc)	12.150	kWp
Orientation of the PV system - degrees from South	Group 1: 27 panels with Orientation: 90 °	°

Inclination of system - degrees from horizontal	Group 1: 27 panels with Tilt: 12°	°
Postcode region	7W	
B. Performance calculations		
kWh/kWp (Kk)	876.9	kWh/kWp
Shade Factor (SF)	1.000	
Estimated annual output (kWp x Kk x SF)	10,654	kWh
C. Estimated PV self-consumption - PV Only		
Assumed occupancy archetype	In Half Day	
Assumed annual electricity consumption, kWh	5,000.00	kWh
Assumed annual electricity generation from solar PV system, kWh	10,654	kWh
Expected solar PV self-consumption (PV Only)	1,852.20	kWh
Grid electricity independence / Self-sufficiency (PV Only)	37.04	%
D. Estimated PV self-consumption - with EESS		
Assumed usable capacity of electricity energy storage device, which is used for self-consumption, kWh	8.53	kWh

Expected solar PV self-consumption (with EESS)	3,916.56	kWh
Grid electricity independence / Self-sufficiency (with EESS)	78.0%	%
E. Additional benefits from PV and EESS		
EESS capacity not used for self-consumption	0.95	kWh
Total energy discharged per annum	6228.36	kWh
Additional self-consumption for EV, heat pumps, diverters (only when present)	25.42	kWh

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%

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 20th December 2024.

This proposal has been prepared by RR Electrical & Solar Ltd using tools from OpenSolar. Please visit www.opensolar.com/proposal-disclaimer for additional disclosures from OpenSolar.

MEMBERSHIP CERTIFICATE

This is to certify that
RR Electrical and Solar Ltd

having satisfied the requirements for membership of The Home Insulation & Energy Systems Quality Assured Contractors Scheme, has been awarded the status of Accredited Member for the below products and undertakes to abide by the decisions of The Ombudsman and to serve their customers with integrity and a commitment to quality.

MEMBERSHIP NUMBER

RRE/A/1378

VALID UNTIL

12/04/2025

ACCREDITED PRODUCTS

Solar PV

Battery Storage

The Home Insulation and Energy Systems Quality Assured Contractors Scheme (HIES) is a division of The Integrity Foundation, a Company Limited by Guarantee. Registered address: Centurion House, Leyland Business Park, Centurion Way, Farington, Leyland, England, PR25 3GR. Registered in England and Wales (Company Number 07972075).

Consumer advice

Important information about your protection

Crystal Mark 23752 Clarity approved by Plain English Campaign

To receive protection from our scheme:

- your installer must be a member of the scheme when you enter into a contract with them to carry out the work;
- you must enter into a contract direct with the member;
- the installation must be on a domestic property; and
- the installation must be in England, Scotland, Wales or the Isle of Wight.

If you don't meet the above conditions, we may not be able to protect you. Please read on to understand the protection you will receive and the obligations you have.

Vetted and accredited

Scheme members have passed our strict accreditation process for the product (or products) they want to be accredited for. They are also continually monitored to make sure they are keeping to our rules. This monitoring can include, but is not limited to, checking members' finances, competency certificates and business insurance. We may also share information with consumer bodies (where appropriate).

Consumer advice line

Once you have entered into a contract with a scheme member, you can benefit from access to our consumer advice line. We are on hand to answer any questions you may have about the member during the installation.

Free access to alternative dispute resolution

When you have entered into a contract with a scheme member, you can benefit from free access to our mediation services to help resolve a dispute you may have with them.

During the mediation process, the mediator may arrange for an independent inspection to be carried out on the installation (if they consider this appropriate). This service is also free to you.
We will not be able to investigate your complaint if you are taking, or have already taken, a form of legal action.

Free access to an independent ombudsman

In the unlikely event that we cannot resolve a dispute, as a consumer you will also have free access to the independent ombudsman we have appointed. The ombudsman's decision is binding on the member but not on you. The ombudsman will not be able to investigate your complaint if you are taking, or have already taken, a form of legal action. This service is only available to consumers and not commercial organisations.

Free deposit and stage-payment protection insurance

The deposit and stage-payment protection insurance covers up to 25% of the contract value (maximum limit of £5,000) for 120 days (terms and conditions apply). We provide this protection to cover you in the unlikely event that the member cannot complete your installation because they are no longer trading.

To benefit from this protection (which we pay for):

- the member must have registered your installation on our online portal;
- you must have entered into a contract with the member, named as supplier on the certificate;
- you must be able to provide proof of your contract with the member, named as supplier on the certificate;
- you must be able to provide proof of the payments you have made to the member, named as supplier on the certificate; and
- the member must have ceased (stopped) trading, and if they are a limited company, Companies House must have confirmed this.

No protection will be in place until we have written to you to confirm we have arranged this, after the member has registered your installation on our system, and in line with the conditions above. If you have not received our letter confirming we have arranged your protection within five working days of you signing the contract, please contact our member or us as soon as possible as your payments will not be covered.

Please note, the insurance we buy and the protection scheme we operate do not cover any payments (deposits and stage payments) of more than 25% of the contract value (or the maximum limit of £5,000) that you make to the member before the installation is finished and the contract is completed.

Free insurance-backed guarantee (IBG)

An IBG provides protection if the member ceases (stops) trading and cannot honour the terms of their written guarantee (terms and conditions apply). IBGs range from two to 10 years and the length of the IBG you receive may be different from the length of the written guarantee provided by the member.

To benefit from an IBG (which we pay for):

- your installation must be fully completed to your satisfaction, there must be no faults and you must have paid all amounts due direct to the member, named as supplier on the certificate;
- you must have a contract with the member, named as supplier on the certificate;
- you must be able to provide proof of your contract with the member, named as supplier on the certificate;
- you must be able to provide a copy of the written guarantee you received from the member, named as supplier on the certificate; and
- the member must have ceased (stopped) trading, and if they are a limited company, Companies House must have confirmed this.

No cover will be in place until you have received your IBG certificate. If you have not received your IBG certificate, please contact the member to ask for it.

Important information
This sets out the full services available to you under the scheme. In order to receive the protection we offer, you must enter into a contract for goods or services with one of our members during their membership with us and keep to the conditions set out on this page. Our member is responsible for providing the goods or services to you under their contract with you. You are responsible for choosing which of our members to enter into a contract with. We will not enter into negotiations or discussions with members on your behalf (including providing advice on which of our members offers the most suitable or best value work for you). We are not responsible for the actions of our members.

Phone: 0344 324 5242 Email: info@hiesscheme.org.uk Website: www.hiesscheme.org.uk

The Home Insulation and Energy Systems Quality Assured Contractors Scheme (HIES) is a division of The Integrity Foundation, a company limited by guarantee. Registered address: Centurion House, Leyland Business Park, Centurion Way, Farington, Leyland, England, PR25 3GR.
Registered in England and Wales under company number 07972075.

HIES-CL-004-Apr22





Consumer protection, made simple.

HIES Consumer Code

When you enter into a contract with a member of HIES to install renewable products at your home in England, Scotland, Wales or the Isle of Wight, you should receive the following.

Vetted and accredited installers

All members have successfully passed our strict accreditation process for the product (or products) they want to be accredited for. We also monitor them continuously.

Consumer advice line

We are on hand to answer any questions you may have once you have entered into a contract with a scheme member.

Deposit and stage-payment protection insurance

This covers up to 25% of the contract value (maximum limit of £5,000) for 120 days, once your installation is registered with us.

Insurance-backed guarantee (IBG)

An IBG provides protection if your installer ceases (stops) trading and cannot honour the terms of their written guarantee. You will receive an IBG once the member has added in a date on our system to show when they completed your installation.

Alternative dispute resolution

Our expert mediators are always on hand to help resolve any disputes you may have with one of our members.

Access to an ombudsman

As a consumer, you will have free access to an ombudsman if we cannot settle your complaint.

Please read the consumer advice section to understand the protection you may receive and the obligations you have.



Installation Assurance Authority
Right first time

RR Electrical and Solar Ltd

Unit 9 Livery Stables Units, Summerhill Road,
Wrexham
LL11 4SH

Certified by
The Installation Assurance Authority for the Microgeneration Certificate Scheme for the following measures:

MCS

Battery Storage

09/04/2024 — Date Issued
08/04/2025 — Expiry Date
IAA03130 — Membership Number

Chief Executive
Head of Certification

The Installation Assurance Authority Limited
3 Vimy Court, Vimy Road, Leighton Buzzard,
Bedfordshire LU7 1FG
www.theiaa.co.uk

Installation Assurance Authority
Right first time

RR Electrical and Solar Ltd

Unit 9 Livery Stables Units, Summerhill Road,
Wrexham
LL11 4SH

Certified by
The Installation Assurance Authority for the Microgeneration Certificate Scheme for the following measures:

MCS

Solar PV

09/04/2024 — Date Issued
08/04/2025 — Expiry Date
IAA03130 — Membership Number

Chief Executive
Head of Certification