

It's time to get electricity freedom.



Mr Shaun Judge  
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Grange Lane  
Radlett  
Watford  
WD25 8GD

Amelio Solar Energy  
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North Hykeham  
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LN6 9WG

Client Ref: 3691  
Quotation Ref: 3691

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19<sup>th</sup> October 2023

Dear Shaun

### Quotation for PV Panel Installation at IGD

Following the site survey, please see our quotation for a 15.99kWp Solar PV system at IGD. We have taken into account, the actual roof dimensions and connections into your supply.

We understand that the property is in a conservation area and therefore planning permission will be required. If you would like our help or guidance on this, then please do not hesitate to ask for more information.

In this proposal you will find the following information:

- **Your installation**  
This is the optimum product and technology option we suggest for your installation
- **Your Financial Rewards**  
This explains the financial benefit of a Solar PV installation
- **Performance Analysis**  
This explains the cost, performance and financial benefits of the installation
- **Why Amelio Solar Energy?**  
Amelio Solar Energy's credentials and why you can trust us to complete your installation

We hope that these documents provide all of the information that you need to make your decision, however if you would like to discuss please do not hesitate to contact us.

We look forward to hearing from you.

Kind regards

Yours sincerely

A handwritten signature in blue ink, appearing to read 'RDH J', followed by a horizontal line.

**Richard Jones MBA FRICS**  
**Managing Director**

## Solar PV Installation

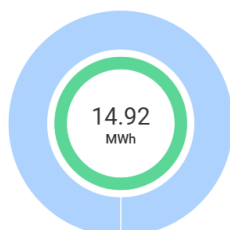
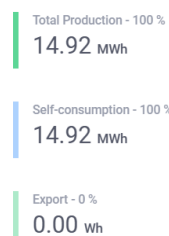
15.99kWp, 39 Panel System

Premium Technology Panels and Inverter

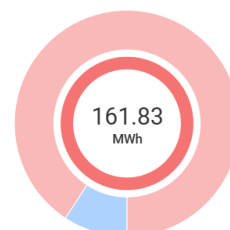
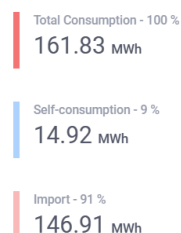


- ✓ JA Solar Panels
- ✓ SolarEdge inverter with the output from all panels fully optimised
- ✓ High quality solar mounting system from Van der Valk
- ✓ Full monitoring of the system including all panels with the SolarEdge App
- ✓ Detailed monitoring of electricity flowing to and from the grid as well as from the solar panels

### SYSTEM PRODUCTION



### CONSUMPTION



## 15.99kWp (39 panel) System: JA Solar 410Wp mono solar panels with Solaredge inverter Premium Technology Panels and Inverter

To supply, install and commission a 39 panel, MCS Accredited, 15.99kWp solar photovoltaic array at the above property using JA Solar Mono 410Wp panels and Solaredge inverter.

Materials	£15,250.00
Labour & Sundries	£12,250.00
Certifications	£250.00
<b>Total excl' VAT</b>	<b><u>£27,750.00</u></b>

### Panels:

The proposal JA Solar Panels are also of an advanced design with a high output to allow for maximum production from each panel.

### Inverter:

We propose specialist inverters from SolarEdge – these have optimizers for the panels that we install. This maximizes performance of the array in total and the effects of shading that there might be from time to time. SolarEdge state that they consider their inverter/optimizer system produces up to an additional 25% performance – we have assumed a more conservative 10% in our calculations.

**Please note that cheaper solutions are available, and ones with a larger or smaller number of panels. We have chosen these options as they give the best balance between cost and quality, but would be happy to explore different size systems with you if you wish e.g. to meet any available financial budget.**

#### Materials Supplied

All materials to complete the full installation and commissioning of the PV system are included in the above price. These include: PV modules with frames, roof fixing system, 1no. inverters, 1no. AC isolators, DC isolator where needed, 1no. kWh meter, all DC and AC cabling for each installation.

#### Positioning

The panels will be as shown here. We have assumed connection into an existing distribution board.



#### Internet Connection & Metering

We have included for a connection to your broadband router at no extra cost – we have assumed a wifi connection. This includes access to an internet portal where you can monitor performance of the PV system **and the grid electricity you use.**

#### Guarantee

JA Solar Modules have a twelve-year manufacturer's guarantee. They also have a manufacturer's guarantee for 83.1% performance after 25 years.

Solaredge inverters have a 12 year guarantee and their optimisers 25 years. **It is possible to extend the inverter guarantee to 20 years for an additional £600 plus VAT per inverter.**

Amelio Solar Energy provide a two-year workmanship guarantee for installation.

Should you accept this quotation full details of the guarantee are supplied with your order form and contract.

#### Planning and Building Regulations

We understand that the property is in a conservation area and therefore planning permission will be required. If you would like our help or guidance on this, then please do not hesitate to ask for more information.

We will provide a Building Regulations compliance certificate notification to your Local Authority under the competent person scheme.

#### DNO Consent

The consent of UK Power Networks would be required, and it is recommended that consent is applied for as soon as possible, as it can take up to 12 weeks for acceptance – we would undertake this process on your behalf. Whilst we do not charge for this, UKPN make an additional charge dependant on the application that has been made.

#### Certification

The costs shown on the first page of this letter as Certification are for the charges made by MCS for their Certificate, and NAPIT for the Building Regulations Notification.

System Performance

The performance of Solar PV systems is impossible to predict with certainty due to the variability of the amount of solar radiation (sunlight) from location to location and from year to year. This estimate is based upon the standard MCS procedure and is given as guidance only. It should not be considered as a guarantee of performance.

Terms & Conditions

We would require 30% of the total due to be paid 21 days prior to work commencing. The balance is to be paid on completion of installation. Please allow a minimum of 14 days between order and delivery of materials.

**These prices are valid for 21 days from the date of this quotation. Depending on price levels when we schedule your works, there may be a need for the costs to be adjusted.**

## Your Financial Rewards

Your Solar Panels will benefit you financially in two main ways:

### **Bill Savings**

Your property will use the electricity you generate first; therefore the bills from your electricity supplier will be lower. An estimate of these bill savings is included in the attached performance analysis and we suggest you consider this amount in relation to your current bills.

The more electricity usage that you can transfer to daylight hours rather than at night the better your returns will be as you will be using more of the solar generated electricity.

### **The Government's Smart Export Guarantee**

Since the end of the Feed in Tariff on 31 March 2019, the Government has introduced a Smart Export Guarantee. This is based on actual electricity exported measured by a two way smart meter.

To claim this you will have to swap to an electricity supplier that offers this such as Octopus Energy or EDF.

## Carbon Footprint

Your business will also benefit from savings in terms of the carbon footprint. We have calculated this as follows:

Carbon Savings are assessed to be as below:

15.99kWp                      2.88 Tonnes Co<sub>2</sub> p.a.



## Microgeneration Certification Scheme Performance Analysis

<b>15.99kWp (39 panel) System: JA Solar 410Wp panels, with SolarEdge inverter</b>				
Cost (incl' VAT)	Annual kWh <sup>1</sup>	Bill Saving <sup>2</sup>	Export Tariff <sup>3</sup>	Total Annual Income <sup>4</sup>
£27,750	14,311	£4,293	-	£4,293

1. Annual kWh  
The number of kWh you could expect the system to produce over a 12-month period, calculated using the standard MCS procedure and given as guidance only. It should not be considered as a guarantee of performance.
2. Bill Saving  
The amount you could save on your current electricity bill based on an average tariff of 30p per kWh plus VAT. We have assumed that 100% of the production of the system will be consumed at the property, based on the information you have provided. Any future increase in energy costs will significantly increase this figure as will changes to your consumption pattern and amount.  
  
Any future increase in energy costs will significantly increase this figure as will changes to your lifestyle/living pattern.
3. Export Tariff  
The amount you could achieve from exporting spare solar electricity to the grid assuming a tariff is put in place with an electricity supplier, paying, say 10p per kWh.
4. Total Annual Income  
Bill saving plus Export Tariff.

### **Important**

#### System Performance

The performance of solar PV systems is impossible to predict with certainty due to the variability of the amount of solar radiation (sunlight) from location to location and from year to year. This estimate is based upon the standard MCS procedure and is given as guidance only. It should not be considered as a guarantee of performance.

### Solar Irradiance Calculations

The information used to calculate the annual performance is in the table below:

Installation data – South Array	
Installed capacity of PV system – kWp	15.99kWp
Orientation of the PV system – degrees from South	10
Inclination of system – degrees from horizontal	10
Postcode zone	1
Calculations – South Array	
kWh/kWp (Kk) from table*	895
Shade factor (SF) – see attached horizon chart	1
<b>Estimated annual output (kWp x Kk x SF)</b>	<b>14,311kWh</b>

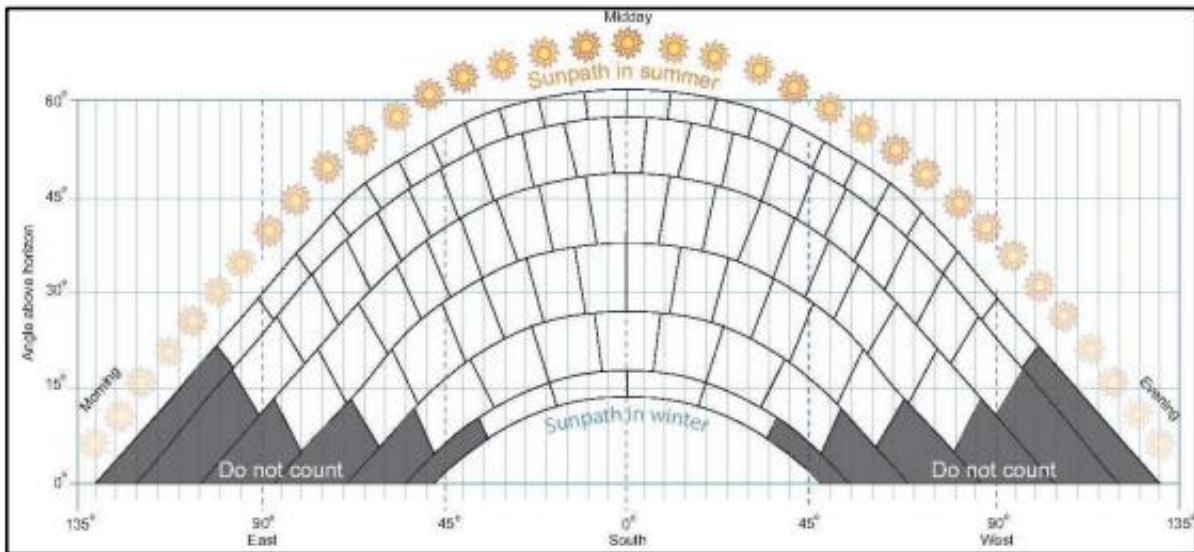
\*kWh/kWp table: The table referred to is the official table used to calculate a Solar PV array's performance based on geographical location, orientation and angle. By using the table we can devise the Kk figure of your array which is the estimated number of kWh your system will produced per kW of capacity installed.

This assessment has been undertaken using the standard MCS procedure - it is estimated that this method will yield results within 10% of the actual annual energy yield for most systems.

Slope	0	5	10
0	828	828	828
1	835	835	835
2	843	843	843
3	850	850	850
4	857	857	857
5	864	864	864
6	871	871	870
7	878	877	877
8	884	884	883
9	890	890	889
10	896	896	895

### Shading Calculation

For this property, there is no shading therefore the shading impact is 1.



## Why Amelio Solar Energy?



We would be delighted to work for you and are able to offer the following:

- A **personal service**, with Richard Jones, fully involved from the point of providing initial advice through to a successfully completed installation
- Accredited design and advice from a **Chartered Building Surveyor**
- We are **independent**; we don't favour any one particular solution, manufacturer or product. We only use the products that are best suited to your property
- We use high quality **standard or premium technology** Solar PV modules with the world's best inverters
- We are a **local company**, enjoying **national purchasing power and technical support** alongside research and development of the latest technologies
- We provide full assistance in completing the necessary forms to assist you in to **claim the Smart Export Guarantee**
- Our **professional installation** team delivers a fully accredited quality service
- We work to the **RECC Customer Code of Practice**; this is an insurance backed guarantee scheme through RECC for your deposit
- We were voted **Renewable Energy Installer of Year 2014 and 2015** at the Lincolnshire Energy Awards



For more information about Amelio Solar Energy, please visit <https://amelio-solar-energy.co.uk>

