

Proposal No: 1

Date 30/01/19

FAO: Stephen Newbold
 PMP Construction Limited
 Design Office,
 Southgate Office Village,
 Block D, 2nd Floor,
 286 Chase Road,
 London
 N14 6HF

Re: 317 Finchley Road NW3 6EP

Dear Stephen

Thank you for the opportunity to price this project. Please find herein our proposal for the installation of photovoltaic module systems at the above location. Our proposal complies with the information you have provided us and meets the given design criteria.

This proposal includes all modules, inverters, DC cabling and switches, energy meter, connection to the grid, testing, and commissioning according to MIS3002. Envirolec Smart Energy Solutions is fully accredited under the Microgeneration Certification Scheme run by the BRE. All PV products included in this proposal are MCS accredited and are eligible under the Micro Generation Certification scheme for the Feed-in Tariff.

New Build Development	No	Total System Size kWp	Price ex VAT
Number Of 275W Accredited PV Modules	13	3.575kWp	
Frame and fixings			
Three/single Phase PV Inverter			
DC Cabling and Switch Gear			
Generation Meter			
Testing and Commissioning			
			Total

Some network operators may charge a fee for completing the G59 or multi G83 network surveys. Although we include in the price for a G59 application any fees due to the DNO in respect of this are not included in this price. Please see Points 15 to 18 in Clarifications of Tender below.

This proposal is subject to sight of full plans and/or site survey. Please see following pages for tender clarification.



Main Exclusions:

Please note our price does not include the following:

- BCDs or MCDs
- Craneage, lifting to roof level or work face (Envirolec will liaise with site to ensure deliveries are coordinated with existing crane on site to lift direct to roof. Our price is exclusive of any supply of cranes unless stated otherwise)
- Scaffolding, 'man-safe' systems or edge protection at roof level or work face
- Internal roof level access for fixing cable runs within a building where the cable entries are at a height not easily accessible from within the building – no provision has been made for access towers unless stated otherwise
- Offloading (Envirolec will take receipt of all deliveries for materials unless agreed otherwise. Our price is exclusive of the supply of any plant including forklifts or telehandlers for the offloading of materials. Envirolec will utilise delivery vehicles with tail lifts where necessary)
- Storing of panels off site
- Provision of storage on site (not required if panels delivered and lifted to roof the same day)
- Protection of equipment while being stored on site
- Protection of equipment once installed (Envirolec do not include for any protective covering for the solar modules. PV is usually the last trade on site so risk of damage is minimal. After install Envirolec request the site manager to accept that our works are left in a tidy and undamaged state before we leave site)
- Initial design fees are included in this price along with a minor revision if required following approval or confirmation of the design. Any additional re-designs following approval or confirmation will be charged at our prevailing hourly rate.

These prices are based on a continuous working period. The sum of £250 per day/worker will be charged for non-productive time due to circumstances outside our control.

This quote is subject to further due diligence and submitted on a without prejudice basis.

Please note: payment terms to be agreed before placement of an order.

I hope that this quotation meets with your approval. If you have any queries, please do not hesitate to contact us direct on 02080900270



Clarifications of Tender

1. Our quotation is based on normal working hours e.g. 08:30 to 17:00
2. Our quotation excludes BCD/MCD discounts and VAT unless stated otherwise.
3. Payments are to be agreed before placement of an order.
4. Our systems are designed to accommodate only minor discrepancies in structural tolerance.
5. It is assumed that the existing supporting structures will provide the strength and integrity to suit our systems and fixings
6. We have assumed that the main distribution board will accommodate a suitably rated MCB to enable the connection of our system.
7. We will provide design details for the sizing and specification of the protection device.
8. In the absence of specific details, we have made no allowance for providing or installing cable, cableway trays and or conduits for AC cables.
9. It is essential that Envirolec is given good notice to programme these works to avoid misunderstandings and delays, and thus extra works and subsequent costs.
10. Due to the volatility of the PV module market we reserve the right to change the make and or model of the solar panels during the design stage at any point, provided they are of equal or greater value.
11. We reserve the right to change the make or model of the PV inverter during the design process.
12. All quotes and pricings are subject to review pending receipt of drawings in a DWG format.

Power Supply

13. Our three phase systems require that the incoming power supply to the site is a standard TP+N power supply with standard earth arrangements. For single phase systems we also assume standard earth arrangements. To avoid undue performance issues, all power supplies must be within 220 - 245 voltage range. If you supply falls outside this range then additional equipment and or grid alterations may be required.
14. This quotation does not include the cost of any additional equipment, alterations to the power supply or earth arrangements that may be required, either on or off site.

The DNO, G59's and Witnessing

15. A G59/3 relay is a device that protects the grid from generating devices that feed power into the grid. A G59/3 relay may be required by the Distribution Network Operator (DNO). This requirement is completely at the discretion of the DNO for any system with more than one inverter and is over 16 amps per phase. Individual DNO companies operate in different areas and may operate differing policies both for the requirement of and the witnessing of G59 relays.
16. Any witnessing charges made by the DNO or incurred due to engagement of a specialist witnessing company are excluded from this quotation and will be charged as an extra over from this quotation price unless stated otherwise.
17. The DNO may change their policies and or charges regarding the requirement of a G59 relay and witnessing arrangements. Envirolec cannot accept any liability for any change of policy by the DNO nor for any delays caused by the DNO or any other third party. We reserve the right to pass on any charges that are incurred.
18. Some DNOs charge for G59 and or G83 applications. These prices are excluded from our proposal and costs will be forwarded on upon receipt when we make the application. The values are down to the DNOs' discretion. Costs will be forwarded on within five working days of receipt from the DNO.

Roof Ridges & Verges

19. If the roof tiles or slates are fitted before we have fitted Envirolecs roof hooks, Envirolec cannot be held responsible or liable for the removal works required.
20. The attendance of roofers is required during the fixing of Envirolecs roof hooks so that any tiles broken accidentally during our works can be replaced and water proofing or weathering can be made good. Envirolec cannot be held responsible or liable for any disturbance to or breakage of the mortar bond at the ridge tiles or the verges during our works or any subsequent repairs.
21. The fixing of roof hooks on tiled and slate roofs must be planned in a specific sequence depending on the tile or slate type.
22. For new build installations it is advisable that ridges and verges should not be mortared in place where modules are to be fitted near to them. This is so that we can move or remove tiles without breaking the mortar bond.
23. For existing buildings where modules are to be fitted near to mortared ridges and verges, we will make every effort to limit damage, although breaking the mortar bond may be an unavoidable consequence of installing the roof hooks. Unless previously agreed otherwise, Envirolec is not liable for their repair or replacement.
24. Tiles and slates on existing buildings may be in poor condition. We will make every effort to limit damage such as breakages to tiles or slates, although this may be an unavoidable consequence of installing the roof hooks. Unless previously agreed otherwise, Envirolec is not liable for their repair or replacement.
25. For new build tiled roofs, prior to commencement of our installation and to allow easy access to the rafters, we require that the roof is felted and battened and that the tiles are laid but not nailed or clipped in the area where the modules are to be installed. It is preferable that the roofer is in attendance to nail and or clip tiles as required after our hooks are in place. This is so that any alterations needed can be agreed and accommodated to avoid any potential delays.
26. For slate roofs, prior to commencement of our installation and to allow easy access to the rafters, we require that the roof is felted and battened and that the slates are laid below the first roof anchor in the area where the modules are to be installed. It is preferable that the roofer is in attendance to dress flashings and fix slates as required after our hooks are in place. This is so that any alterations needed can be agreed and accommodated to avoid any potential delays.
27. If the roof is not prepared as described or roofers are not in attendance, we cannot be held liable for any delays and reserve the right to charge for delays so caused.



Services

Description	Included	Notes
PV Design	✓	
Design for PV mounting frame and roof fixings	✓	
Delivery of materials and equipment to site	✓	
Structural calculations to indicate the suitability of supporting roof structures for the PV system	×	To be provided by others
Offloading to ground level	✓	
Lifting of materials to roof level	×	To be provided by others
Offloading to roof level	✓	Following lifting by others
Secure on site storage	×	To be provided by others
Scaffolding, edge protection and access equipment	×	To be provided by others
Lifting equipment	×	To be provided by others
Site welfare facilities	×	To be provided by others
Power Supplies (110Vac) within 10m of workface (240V electrical supply would also suffice)	×	To be provided by others
Installation of electrical and mechanical PV components	✓	
Connection of main LV switchboard to utility	✓	
DC and AC circuit inspection and test to the main LV	✓	
Final testing and commissioning	✓	
Instruction of local maintenance team	✓	
Liaison with DNO regarding application, witnessing testing etc.	✓	
Documentation for O&M Manuals etc.	✓	
Performance and/or guarantee bond	×	
Full time non-working site based manager	×	Responsibility for this project will be co-ordinated between site manager and our offices

Equipment

Description	Included	Notes
PV modules	✓	
Mounting frame/hardware	✓	
DC isolator switch(s)	✓	
DC cables, connectors and containment	✓	
Inverter(s)	✓	
AC isolator(s) (local) for inverter(s)	×	
AC cables and containment between inverters & MDB	×	To be provided by others within 1m of the inverter position
AC G59 protection (for under 50 kWp)	✓	Unless specified otherwise
Generation meter(s)	✓	
Warning labels and electrical schematic	✓	
AC disconnect switch/isolator for plant room	×	
Public display with readout of main parameters (cable feed supplied by others)	×	
Data Logging/onsite computer monitoring	×	
Monitoring via web portal	×	
Earth or lightning protection bonding	×	



Warranty

Element	Period and type of warranty
PV Modules	25 Year limited warranty of 80% Power Output 10 Year limited warranty of 90% Power Output
Workmanship	2 Year limited warranty
Inverters	5 Year Warranty (extendable if required)
Complete System	2 Year turnkey warranty covering the elements stated in this table.

Elements Covered	Turnkey Warranty
System becomes inoperable as a result of defects in material or workmanship	Covered
Specified level of power of the solar modules only as per module warranty terms and conditions	Covered
Defective installation (not included in supply only)	Covered
Labour cost	Covered
Specified level of power	Not Covered
Specified level of energy	Not Covered
Damage caused by electrical surges, lightning, fire, flood, pest damage, accidental breakage, actions of third parties, and other events or accidents outside reasonable control not arising under normal operating conditions.	Not Covered

Standard Terms and Conditions

- This quotation is valid for 28 days.
- All prices exclude VAT.
- We reserve the right to substitute the quoted modules for other equal approved modules.
- Because of potential inclement weather and conditions, we cannot guarantee exact installation dates.
- Cancellation must be in writing to Envirolec
- We are committed to continuous product quality improvement. We aim to be as accurate and as consistent as possible in all tasks and procedures.
- All prices, dimensions, specifications, operating conditions and descriptions given in this and in any accompanying literature and on our websites are indicative only and may be subject to change without notice.
- Titles in goods and services do not pass until payment is made in full.
- Contract will be subject to English Law.
- MCS Certificates may not be released until payment has been made in full.

