



MELTON PARISH COUNCIL

MPC(22)67.06

Solar Photovoltaic (PV) Installation

As part of a move towards being more sustainable and to reduce our carbon footprint, three companies were approached to provide quotations to have solar PVs installed at 17 Riduna Park.

Two companies have completed site visits and produced comprehensive quotation documents.

The other company provided a guide quote over email to be followed up with a site visit. I am yet to hear with regards to an engineer appointment and have been chasing since February.

Company	Total ex VAT	No of Panels	Installed Capacity of System	Estimated annual output (kWp x Kk x SF) kWh
1	£ 4,900.00	8 x JA Solar 385W	3.08kWp	2,673.44 kWh/year
2	£9,750 Guide price	-	9.6kWp	-
3	£6,364.05	12 x QCell 345Wp	4.14kWp	3,465 kWh

Although the roof space available could support additional solar PV both companies have targeted the annual consumption of the office.

The overall consumption for 17 Riduna Park is considered low, totalling approximately 3,350kWh a year. If an Electric Vehicle charging point were to be placed at the office site then this would of course increase the consumption. The annual cost for office electricity in 2021/22 was £595.15.

Funding

Solar panels would not meet the first test for CIL funding as it's not for wider community benefit, rather more of an environmental benefit. Neighbourhood CIL could be used to fund the EV Charger as this has a wider public use.

The Green Suffolk Fund offer grants up to a maximum of £2000, and this could be explored.

Members are asked to:

- Note and comment on this report
- Decide if they wish to proceed with installing solar PV equipment

Fliss Waters

Assistant Clerk, Melton Parish Council

June 2022

Additional Notes

Company 1

System Performance & Quotation

Installation Data

Installed capacity of PV system - kWp (stc)	3.08 kWp
Orientation of the PV system – degrees from South °	20
Inclination of system – degrees from horizontal °	10
Postcode	IP
MCS region	12

Calculations

kWh/kWp (Kk) generated from region irradiance data	868.00 Kk
Shade factor (SF)	1.00 SF
Estimated annual output (kWp x Kk x SF) kWh	2,673.44 kWh/year
Approx CO2e Savings Per Year	0.62 tCO2e/year

Quotation to supply install a 3.08kWp roof mounted PV system

Panels	8	JA Solar 385W
Inverters		Ginlong Solis Electrical Materials
Mounting System		
Installation and Certification		
Access and edge protection		

Total Ex VAT £ 4,900.00

VAT @ 20% £ 980.00

TOTAL £ 5,880.00

Company 2

A guide price for 9.6 Kwp completed installation would be circa £9750+Vat.

If this is of interest to you, we can put together a full design and financial breakdown for you to asses.

This price has been provisionally given prior to a site survey, confirmation of an exact price will be given in writing after a site survey.

Company 3

Solar PV Array Proposal

The company are pleased to offer this 4.14kWp solar PV array for Melton Parish Council for the sum of £6,364.05 excluding VAT.

The following details items that are expressly included or excluded from the scope of works. If there is any doubt as to whether an item is included or excluded please seek clarification in writing before proceeding with the services offered.

Included within the Proposal

The following are included within our proposal:

- Full solar PV system design

- G99 Application process
- 12 x QCell 345Wp monocrystalline solar PV modules
- Renusol Variosole+ standing seam sheet mounting solution
- 1 x Solis 4kW three phase inverters
- 1 x Solis Data Logger
- Scaffolding, access and lifting equipment
- DC string cabling from PV modules to inverters
- DC String isolators adjacent to inverters
- Cable containment for DC string cables and AC cables to inverters
- AC Radial circuits from your existing supply to the inverters
- Generation Metering
- Full installation, including AC and DC testing, inverter commissioning and handover
- Remote Monitoring solution through the manufacturers portal/app

Excluded from this Proposal

The following are excluded from our proposal:

- Planning Permission (where required)
- Any additional costs levied by the DNO from the G99 application
- Single phase electricity supply for AC connections
- Internet Connectivity at the inverter location for monitoring
- Site welfare facilities and storage of materials during the project
- Unloading facilities at your premises
- Export metering fees from tariff supplier

Purchase Cost of system ex VAT (£)	£6,364.05
Imported electricity cost per unit (£/kWh)	£0.25
Exported electricity cost per unit (£/kWh)	£0.05
PV system output over 25 years (kWh)	69,304kWh
Self-Consumption rate (%)	50%
System Export (%)	50%
Annual degradation of system (%)	0.5%
Import electricity inflation (%)	5%
Retail Price Inflation (%)	5%
System size (kWp)	4.14kWp