

## **Community Buildings Committee Meeting**

Date: 4th April 2024

Number: CB054

## To consider the proposed quotes for the installation of Solar Panels at the Queen's Hall

#### 1. Introduction

As part of Cuckfield Parish Council's aim to become more energy efficient and Carbon Neutral by 2050, actions have been put in place at the Queen's Hall to reach the targets set in the Carbon Reduction Plan. One of the long-term actions to investigate is the possibility of installing Solar Panels on the Queen's Hall roof. With the help of the Conservation Officer, we have identified the side of the roof where Solar Panels could potentially be installed, subject to planning permission. Two separate companies came to visit the site to assess the potential and give us quotes as a starting point as described below.

All quotes provided below (and in full details attached) are based on the actual electricity usage at the Queen's Hall. Electric Statements with the latest tariffs were provided to allow for a more accurate idea on how the system generation will affect our annual electrical costs.

### 2. Quotes

# ARK-Charge ARK Group Services LTD – Woking, Surrey

https://ark-charge.co.uk/

Two quotes are proposed, one with battery system storage and one without. Both of these proposals are based on our existing rates.

Quote 1 with battery (attached)

£31,200.00 (£0.00 VAT)

50 solar panels with Inverter and Battery Storage system

Quote 2 without battery (attached)

£22,100.00 (£0.00 VAT)

50 solar panels with Inverter

#### Recommendations from ARK:

With the full usage information received, it is clear to say that in the months of March through to September the battery storage makes sense. The ability to store the generated energy and use that throughout the premises later in the day for events will be beneficial.

This is seen quite clearly in the payback time for both systems. Even though the battery storage is an additional £9,100 investment up front the system payback period is only 3 months greater.

For sure through the winter months the battery storage would really benefit further from a better off peak tariff. This would allow CPC to store cheaper rate energy overnight and then discharge it through the day but CPC would have to do a bit of investigation into available commercial tariff's to really understand if this could be worthwhile in the future. The inverter for both systems is the same hybrid inverter allowing CPC to install batteries at a later date if required. The battery storage systems for this system are modular and can be installed at 4.8kw increments up to a total of 33kw if so required in the future. A proposal for a reduced battery system can also be prepared if needed.

Installation for the whole solar panel system would take around 5-6 days. Scaffolding would be required and is included within the proposal. It is recommended that the scaffold stay up for around a week just to make sure there is no issues post installation and generally erected a day before. To be on the safe side, the scaffold would be in place for around 10 days in total to cover the required period for the full installation of the solar panel system.

## Solar Dynamics, Southwater, Sussex

https://www.solardynamics.co.uk/

Three guotes are proposed with a 10% discount that is applied to community buildings:

Quote 3 with battery (attached) £25,274.48 (£0.00 VAT)

50 panels with Inverter and Battery Storage system

Quote 4 without battery (attached) £17,439.43 (£0.00 VAT)

50 panels with Inverter

Quote 5 with battery (attached) £23,241.44 (£0.00 VAT)

40 panels with Inverter and Battery Storage system

## Recommendations from Solar Dynamics:

After looking at CPC power consumption, 50 panels may not be necessary if the building intends to carry on with its normal business as has been demonstrated over the past year's electricity bills, however if more power is going to be required in the future, then the 50 panels may be required (50 panels would future proof the building).

The battery system storage allows for use of the power that CPC would have generated during the day in the evening, or for charging the batteries during the winter from late night discounted rates for use the next day. Batteries are one of the more expensive components in the system and are beneficial if evening use is required and can be added at a later date and as many as 5 batteries can be added to a single inverter.

If Solar Dynamics were to be offered the contract for this project, they can have the installation done during any week of the summer by fast tracking the project and having the scaffolding up and down between Monday and Friday so not to disturb any of the weddings or events that are planned for the building. Solar Dynamics are passionate about serving

## Cuckfield Parish Council Report

Cuckfield as one of the director's parents were the landlords of the White Hart in Cuckfield and were also Mayors of the town.

Solar Dynamics apply a 10% discount to community buildings, and they have applied the same discount to Haywards Heath Rugby Club for which they will be installing a large array to that building in a few weeks' time.

### 3. Recommendation

Both companies provided high level detailed quotes and visited the site to assess the installation potential on the roof and checked the loft space. They also have a good understanding of our electricity consumption.

Based on price and the fact that this company has been employed by Haywards Heath Rugby Club, I would potentially recommend to accept Solar Dynamics' quote(s), should CPC decide to pursue this project and if budget was available, and of course subject to planning permission. Solar Dynamics will also be attending the APM and will therefore be available to answer any further questions you may have.

Name: Noemi Ripert

Title: Communications & Admin Officer

Date: 20<sup>th</sup> March 2024