

Report To: Cabinet

Date of Meeting: 1st November 2021

Report Title: Solar for Business

Report By: Assistant Director Regeneration and Culture

Key Decision: Yes

Classification: Open

Purpose of Report

To propose that the Council works with HBC tenants and other local businesses who occupy commercial and industrial units in the town, to consider the installation of solar panels on their roofs and the potential to buy the energy generated by the solar panels through a Power Purchase Agreement (PPA), providing energy at a competitively priced rate.

To further propose that delegated authority be given to the Chief Finance Officer and the Assistant Director Regeneration and Culture, in consultation with the Leader, to sign off individual sites within this programme to expediate the processes.

Recommendation(s)

- 1. To authorise the spend of £1.638 million on the Solar for Business Programme which is the remainder of the £1.76 million as agreed in December 2017 Cabinet decision on ‘An Energy Transition for Hastings’.**
- 2. To delegate authority to the Chief Financial Officer and the Assistant Director Regeneration and Culture, in consultation with the Leader, to agree the assessment of individual sites and to sign off for the installation of individual sites.**
- 3. To agree to the method of analysis for all sites.**

Reasons for Recommendations

1. This Solar for Business programme is a key step within the Climate Emergency response as it reduces businesses energy demand from the grid and therefore helps businesses reduce their emissions and therefore the wider borough emissions.
2. This Solar for Business programme aids the Green Recovery following the COVID crisis as it is designed to save businesses money on their electricity bills with no upfront costs for the business. This will offer businesses peace of mind and enable them to focus on building their business back.
3. The method of analysis has been developed in consultation with the Chief Financial Officer to ensure estimations of performance and financial considerations are as accurate as possible.
4. Delegating authority to the Chief Finance Officer and the Assistant Director Regeneration and Culture, in consultation with the Leader, will ensure each site is reviewed in both an economic and broader local financial and sustainability benefits.

5. Delegating authority to the Chief Financial Officer and the Assistant Director Regeneration and Culture, in consultation with the Leader, will allow for sites to be processed quickly and efficiently from point of identification through to the installation and commissioning of the PV system.

Introduction

1. An Energy Transition for Hastings was brought before Cabinet on December 4th 2017 and requested provision within the Capital Programme of £1.76m for the purchase and installation of solar photovoltaic arrays.
2. This process was started with the installation of the PV systems at Muriel Matters House and Castle Business Centre (East). Both of these systems make use of the Feed in Tariff (now discontinued) to provide a return for the council in addition to the money saved on energy bills by using the electricity generated.
3. To 30 September 2021, these existing systems have produced a combined 130,216 kWh of electricity which has offset 32,474 kg of CO₂e emissions and has an estimated financial benefit of £16,330 (earnings from the feed in tariff plus estimated savings on the electricity bills).
4. Officers have been working on drafting PPAs and Leases (see appendix A for FAQ's and terms) with help from other local authorities who already have this type of programme up and running, as well as identifying and desktop studying the commercial roofspace within the borough for some guide system sizes, locations and returns .
5. Officers have also identified a route to market using a Solar Installation framework set up and managed by Portsmouth City Council that is available to all local authorities in East and West Sussex to use. It is our intention to include proximity as a quality scoring question on the tenders.
6. Given the recent jump in electricity prices (from around 14p/kWh to 19p/kWh) and the knock-on effect that will have on businesses energy bills this PPA scheme should be received favourably as a way for businesses to reduce their rising bills.

Background

7. Following the agreement from Cabinet on December 4th 2017 and the installation of the two sites, subsequent sites were placed on hold until the PPA paperwork was finalised and full understanding of the implications of the end of the feed in tariff was achieved.
8. The timeframe for this project was further lengthened by reassignment of key staff due to the COVID response.
9. A full desktop analysis has been carried out on the commercial properties in Hastings using the financial analysis sheet (see Paragraphs 12-18 and Appendix B). This has provided an initial ordering of sites into Return On Investment (ROI) brackets, both on properties owned by Hastings Borough Council and Third Party owned.
10. We have created a leaflet, which is attached as Appendix C, that will be sent out via email, social media, and targeted mail drop to invite all businesses to express an interest in the scheme.
11. When those expressions of interest come in, we will obtain electrical usage and cost data from them, cross reference against the desktop survey carried out for that building, and create a new proposal. These businesses will form the 'first wave' of installations proposed after a pilot.

12. Once the 'first wave' businesses have been processed we will then look to actively seek out businesses who sit at the top of the list from the desktop surveys, and then move down the list with an aim to speak to every business on the feasibility list.
13. We will proceed in groups of installations (estimated between five and ten at a time) to avoid creating a backlog of paperwork during the COVID business recovery process and also enabling the potential for staff redeployment as a result of the pandemic and any winter pressures which are being planned for currently.
14. We have identified two sites, one owned by the Council one under Third Party Ownership, as part of a Beta test on the Solar Installation Programme, which will allow us to commence the tendering process through the Portsmouth Framework and determine required officer time per business.

Building Analysis

15. Appendix B shows the financial analysis spreadsheet (with commercially sensitive information redacted). Each site will be analysed using this spreadsheet. This sheet also calculates the benefits to the business over the life of the PPA which will form part of the proposal when in discussions with the businesses.
16. The energy generation is calculated using the standard Microgeneration Certification Scheme (MCS) methodology. MCS is the governing body of renewable energy installations and provide detailed calculations and assumptions for predicting the performance of a solar PV system.
17. In order to calculate the potential energy demands of a specific building the building occupant will need to provide their energy consumption data. For the purposes of the desktop study it is estimated that 75% of the energy generated by the solar system will be used on site.
18. For the majority of buildings an assumed cost of 14p/kWh has been used for the purchase of electricity from the grid (which is the Councils average rate). For larger buildings this has been amended downwards due to better purchasing power of the tenant. Due to the current electricity price increase this may need to be averaged up.
19. Annual income is calculated from the value of the electricity supplied under the PPA and value of exported electricity. From this figure the costs for annual maintenance, annual management, and loan repayment are taken off to result in the annual benefit for the council.
20. This annual benefit is then shown as a ROI %. For each of the sites identified in the google earth and desktop survey they have been grouped together in %ROI bands.
21. Exact PPA rates and terms will be set once the tender has been completed and full costings and modelled system performance have been received from contractors.
22. The Council will utilise Public Works Loan Board (PWLb) funding and the loan repayments have been factored in to the financial appraisal of the sites.
23. The Council should achieve between 10% and 15% Gross ROI (between 3% and 6% net ROI after repayments and maintenance/management costs).
24. Installing solar panels on the businesses should lower their overall emissions by between 6% and 10%.

25. Following engagement with the business over the solar panel installation we will also promote other business support schemes local businesses can access such as LOCASE and Locate East Sussex. This will help the businesses further reduce their emissions.

Power Purchase Agreement (PPA) Setup

26. When a business has been engaged (either through direct contact or an expression of interest from the business), the financial analysis spreadsheet will be updated with accurate data on energy demand profile and site set up, and potential system layout following a site visit.
27. Once the revised financial analysis has been carried out, it will be reviewed alongside the Chief Financial Officer and the Assistant Director Regeneration and Culture, in consultation with the Leader, to ensure it satisfies the Councils requirements in terms of carbon offset and financial returns. Once reviewed it will be sent to the business as a proposal.
28. If the business decides to progress the PPA based on the proposal then a draft PPA and Airspace lease with the figures from the proposal will be sent out, and once signed the building will be sent forward to the tender stage.
29. Once tendered the proposal will be updated (if required) based on the tendered costs and performance modelling. This updated proposal will form the basis for the Final PPA and Airspace lease that once signed by the business will allow the installation to commence.
30. Following installation, the Council will monitor and maintain the system for the period of the PPA, and raise invoices to the businesses for the electricity that is used from the solar PV installation.

Timetable of Next Steps

31. The Key Steps are as follows:

Action	Key milestone	Due date (provisional)	Responsible
Cabinet	Receive Delegated Authority to proceed with developing the programme and delivering the schemes when signed off	1 st November 2021	Cabinet
Commence Discussion with HBC Buildings and Third-Party Buildings	Develop Scheme Programme	November 2021	Energy Development and Delivery Manager
Create Initial tender through	Tenders received	February 2022	

Portsmouth Framework	and reviewed		Energy Development and Delivery Manager
Install Beta Test Schemes	Commissioning of the sites	March 2022	Energy Development and Delivery Manager
Initiate Solar for Business Launch and expressions of interests	Expressions of interest received	June 2022	Energy Development and Delivery Manager
Annual report	Report to Cabinet in line with Climate Emergency Action Plan	February and October	Tackling Climate Change Programme Manager

Wards Affected

All

Policy Implications

Reading Ease Score: 32.8

Please identify if this report contains any implications for the following:

Equalities and Community Cohesiveness	N
Crime and Fear of Crime (Section 17)	N
Risk Management	Y

The full RAID Log can be found in Appendix 4. The Risks associated with setting the project up along with operational risks have been considered and mitigated against. These risks include (but not limited to):

- Fire damage
- Building Damage
- Staffing Resources
- Estates Strategic Review

Environmental Issues & Climate Change	Y
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The Solar for Business Programme is an important step in the Climate Emergency Response and is the first stage of the Climate Theme of Generating Renewable Energy. The potential greenhouse gas reduction from the widespread installation of Solar PV systems is a key target on the Boroughs route to Carbon Neutrality.

Economic/Financial Implications	Y
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As the local businesses are starting their economic recovery due to the COVID pandemic they have been further hit by the potential of a 35% increase in their electricity costs per kWh due to the latest price rises. The installation of solar PV on suitable buildings will reduce the impact of those price rises by offering discounted electricity from the renewable electricity generated on their own rooftop. The Solar for Business programme will also generate an income for the Council to aid its own recovery from the pandemic.

Human Rights Act	N
Organisational Consequences	Y

The Solar for Business programme will link various colleagues from Climate Change, Estates, Building Surveyors and Legal and will require full council support to effectively reduce the boroughs emissions.

Local People's Views	N
Anti-Poverty	N
Legal	Y

The Solar for Business programme will require the input from the Legal team in relation to the preparation of the PPA and Lease documents and any disputes that may arise over the operational life of the scheme.

Additional Information

Appendix A – Solar For Business FAQ's
Appendix B – Example Financial Analysis (redacted)
Appendix C – Solar for Business Flyer
Appendix D – Solar For Business Raid Log

Officer to Contact

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