



## **RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL**

### **CLIMATE CHANGE CABINET SUB-COMMITTEE**

**21<sup>st</sup> December 2023**

### **UPDATE REPORT ON THE PROPOSED SOLAR FARM**

**REPORT OF THE DIRECTOR OF CORPORATE ESTATES IN DISCUSSIONS WITH THE CABINET MEMBER FOR CLIMATE CHANGE AND CORPORATE SERVICES, COUNCILLOR C. LEYSHON**

**Author(s): David Powell, Director of Corporate Estates, and Anthony Roberts, Head of Energy & Carbon Reduction.**

#### **1. PURPOSE OF THE REPORT**

- 1.1 The purpose of the report is to provide a further update to Members with regards to the work underway in the development of a 'Land Based Solar Farm', to be located on Council owned land located at Coed Ely, on an 84-acre 'terraced' former colliery site, near Tonyrefail. The facility will, when constructed, be an asset owned by Rhondda Cynon Taf County Borough Council.

#### **2. RECOMMENDATIONS**

It is recommended that Members:

- 2.1 Note the contents of this report as part of the ongoing work in response to our climate change ambitions and agree to the further progress of the project proposals, in line with the contents of this report.
- 2.2 Receive further report(s) to provide updates on progress as/when deemed appropriate.

### **3. REASONS FOR RECOMMENDATIONS**

- 3.1 The contents of this report provide key information updates on the proposal where the Council has plans to build and finance a credible solar farm, that will make a vastly significant contribution to the Council's ability to offset its Carbon Footprint, and towards achieving its Carbon Neutral target.

### **4. BACKGROUND**

- 4.1 Previous reports have described the ongoing work to investigate the potential of using RCT owned land for the development of major renewable energy projects for both wind and solar generation, including proposals developed with the assistance of the Welsh Government Energy Service (WGES). This project will be primarily developed by the Council and as such would both contribute to the increase in the renewable energy provision and carbon reduction/offsetting in the area, whilst also making a positive, long term, economic contribution to the financial situation of the Council, for the benefit of citizens.
- 4.2 The project is described as a 6MW Solar Farm, comprising a 5MW array (at 33kV) connected to the National Grid, and also a 1MW array (at 11kV) to be connected to a 'public sector' partner, via a private wire arrangement.
- 4.3 The project has the potential to generate a long-term income for the Council, over and above the term cost of financing and operating the scheme and can provide a financial benefit once the said term has passed. The project will also 'offset' a significant amount of Carbon over the expected 35yr 'minimum' lifecycle of the project, as explained in more detail in section 8.
- 4.4 Consent was granted, following the presentation of the previous reports to the CCCSC in March 2023 (plus March and October 2022), to proceed with the proposals and permission was given to move plans forward, through to the planning stages.

### **5. UPDATED PROJECT INFORMATION**

- 5.1 A multi-discipline consultancy was commissioned to produce a preliminary design of the solar farm, allowing RCTCBC to submit a planning application. The consultant's commission also includes support as an owner's technical engineer role throughout the contractor procurement process, detailed design, construction and the first 2 years of operation.
- 5.2 The project team have recently undertaken a Pre-planning Application Consultation process (PAC) where residents and statutory consultees are consulted on the project proposal, and a planning application has been submitted to the local planning authority and was approved in the meeting held on 23/11/23. It is now expected that, subject to funding approval (see section 10), construction will be able to start during 2024.

- 5.4 Good progress has been achieved with the Heads of Terms for the private wire connection arrangement and Power Purchase Agreement (or Offtake Contract) with Royal Glamorgan Hospital, which is now fully agreed by both parties. It is anticipated that the related 'private wire' element of the Project will need to be partly completed during the Spring of 2024, to coincide with completion of the A4119 road scheme in early Summer.
- 5.5 A Heads of Terms agreement has also been established with the local Farmer, who is a Tenant with historic access to/over the land with grazing rights. The full agreement, when completed by the lawyers, will safeguard the future management of the land on which the solar farm is to be built. It is intended that the Tenant will make a positive contribution to the future running of the Council's proposed asset, and also assist in enhancing biodiversity at the site.
- 5.6 Both the development costs and the headline estimated figures for the capital cost of the project have now been updated (*refer to section 10 below*) to take account of the latest project information and high inflation since the previous initial budget proposals were compiled. Two streams of income for the asset have been included within the cost model, firstly the remuneration from the private wire to the hospital, and secondly the income generated via a sleeving agreement to export energy to a designated section of RCT's building portfolio, via the grid. It should be noted that other income options will be considered at the appropriate time, if deemed more beneficial (*and as future guidance on Carbon reporting develops, in consultation with Welsh Government*).
- 5.7 The solar farm is expected to generate electricity for upwards of 40 years, with inverter replacements projected at years 15 and 30. The PV panels will degrade at no more than a fraction of a percentage each year and will still have substantial generation potential throughout the project lifecycle.
- 5.8 The 1MW section of the solar farm has a Power Purchase Agreement (PPA) agreement in place with Royal Glamorgan Hospital which has been agreed for the full lifecycle of the solar farm project. The remaining 5MW will export to the National Grid and will initially be subject to a small degree of curtailment, which has been considered within the financial modelling. A specialist study was completed to understand the expected curtailment characteristics, which are anticipated to be 5.42% p.a. up until 2030, and then expected to be no more than 4.28% p.a. (or less) thereafter (*following programmed grid infrastructure improvements*).
- 5.9 Periodic updates will be provided to Members during the progress of the project, and at each notable stage of development.

## **6. EQUALITY AND DIVERSITY IMPLICATIONS / SOCIO-ECONOMIC DUTY**

- 6.1 This supporting report is for the purpose of an update and consequently an Equality Impact Assessment is not required in regard to this report.

## **7. WELSH LANGUAGE IMPLICATIONS**

- 7.1 This supporting report is for the purpose of an update and consequently Welsh Language Impact Assessment is not required with regard to this report, however a copy can be made available in Welsh if requested.

## **8. CLIMATE CHANGE IMPLICATIONS**

- 8.1 The intent of this report is in furthering the ambitions for the Council's Climate Change Agenda.
- 8.2 As previously reported, the project has the potential to 'offset' over 1,100 tonnes of carbon per-annum and around 47,000 tonnes over the expected 40yr lifecycle of the project (*subject to final detailed design*).

## **9. CONSULTATION / INVOLVEMENT**

- 9.1 A Pre-planning Application Consultation process (PAC) was undertaken prior to submitting a planning application to the local planning authority.

## **10. FINANCIAL IMPLICATION(S)**

- 10.1 Development costs for the project for the current financial year 2023/24 are estimated at around £400k and these costs have been met from within existing budgets. This figure includes for planning application charges and SAB fees that will be payable to service areas within the Council.
- 10.2 The previous budget estimate for the full development and construction costs for the entire project have now been reassessed, in the light of high inflation and all the additional information we now have available, and considering current market conditions, etc. The estimated budget requirement is just over £9.6M and includes all identified development costs and allowance for the provision of the private wire installation.
- 10.3 Funding options are currently being explored to facilitate the progress of the project, details of which will be included in a future report.
- 10.4 Officers are continuing to monitor the availability of grant funding to help with the cost of developing the Solar Farm. In support of this applications have been approved by Ystadau Cymru that provided £75k worth of grant development funding towards project expenditure in the financial year 2022/23, with an additional £250k awarded for 2023/24, which will be expended if the project receives approval to proceed.

## **11. LEGAL IMPLICATIONS OR LEGISLATION CONSIDERED**

- 11.1 It is anticipated that the project activities will be subject to due legal process at appropriate stages within the development timeline.
- 11.2 A binding agreement (the PPA) has been signed with Royal Glamorgan Hospital to cover the future offtake of power from the solar farm. The agreement as it stands is based on the feasibility stage cost plan analysis and the agreement will need to be reviewed once the actual costs of the project are fully understood, following a tender process.
- 11.3 Heads of Terms to manage the land, on which the solar farm will stand, have been agreed with the tenant farmer, however these will also need a final review once the detailed design of the project is finalised.
- 11.4 Legal contracts for the construction phase of the project will need to be entered into, at the appropriate stages identified in the project timeline.

## **12. LINKS TO THE CORPORATE AND NATIONAL PRIORITIES AND THE WELL-BEING OF FUTURE GENERATIONS ACT.**

- 12.1 The purpose of the report is to provide an interim update report relating to the work of the Climate Change Cabinet Sub Committee with regards to the work underway on the development of key renewable energy projects and certain other related issues. Any future actions that arise because of the recommendations of the Climate Change Cabinet Sub Committee report will be considered by the Council's Cabinet and it will take full regard to the seven national wellbeing goals.

## **13. CONCLUSION**

- 13.1 This report outlines the proposals for the Council's first land based Solar Farm at Coed Ely, as previously reported in March 2023, which is one of the key areas of work covered by the Climate Change Cabinet Sub-Committee.

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**Contact Officers:                      David Powell                      01443 424144**  
**Anthony Roberts                      01443 281146**

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