



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

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

**03 OCTOBER 2022**

#### **UPDATE REPORT ON KEY ENERGY GENERATION PROJECTS AND RELATED ISSUES**

#### **REPORT OF THE DIRECTOR OF CORPORATE ESTATES IN DISCUSSION WITH THE CABINET MEMBER FOR CLIMATE CHANGE & CORPORATE SERVICES**

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

- 1.1 The purpose of the report is to provide an update to the Climate Change Cabinet Sub Committee with regards to the work underway on the development of renewable energy projects and certain other Carbon Reduction related issues.

#### **2. RECOMMENDATIONS**

It is recommended that Members:

- 2.1 Note the contents of this update report as part of the ongoing work of the Climate Change Cabinet Sub Committee.
- 2.2 Receive further reports during 2022 and 2023, providing updates on progress within key areas.

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

- 3.1 The contents of this report provide background information and key updates on the current situation with regards to the issues covered by the Climate Change Cabinet Sub Committee. It provides an update on the proposals for the Council to build and finance potential renewable energy projects that will make a significant contribution to the Council achieving its Carbon targets towards 2030 and also provides an update on other key strategies, plus plans to reduce the Council's Carbon impact.

## **4. BACKGROUND**

- 4.1 Officers have previously reported on 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, with the assistance of the Welsh Government Energy Service (WGES). These are projects which would be primarily developed by the Council, either exclusively or in partnership with other stakeholders. As such, the projects would both contribute to the increase in the renewable energy provision and carbon reduction in the area, whilst also making a positive economic contribution to the financial situation of the County Borough, which could then be invested in further related improvements or other services for the benefit of citizens.

## **5. UPDATE ON RENEWABLE ENERGY PROJECTS**

### **5.1 Solar Farm Installation.**

Plans are well underway for the development of a 'Land Based Solar Farm', to be located on Council owned land. The facility will, when constructed, be an asset owned and operated by Rhondda Cynon Taf County Borough Council. The project, if realised, has the potential to 'offset' over 1,500 tonnes. of carbon per-annum and approaching 54,000t. over the expected lifecycle of the project, and will take the Council's portfolio of renewable energy potential, from Solar alone, to over 8MWp. The project is covered in more detail as part of a separate and specific report.

### **5.2 Geo-Thermal Technology**

The ground-breaking 'geo-thermal heating' project, involving Taff's Well Thermal Spring, was due to be completed during September, with the delivery of the new school extension being the final piece of the jigsaw. The completion of this project, together with the refurbishment of the nearby park pavilion (following recent flood damage), means that the full extent of the heat network project should now be in operation. The estimated annual carbon saving of this project being around 17tonnes.

When complete it is hoped that the lessons learned during this project will act as 'stepping-stones' to future heat recovery networks, involving 'mine water', at targeted locations within the County Borough, or in partnership with adjacent authorities.

Discussions with the Coal Authority are well advanced in regard to some potential 'Pilot' projects within RCT, with one feasibility study report having already been received for an ambitious initiative at Rhondda Heritage Park. An expression of interest has been submitted to WG to obtain grant funding, to help facilitate further research into the proposals, that also involve heating a nearby school, and we are hopeful that this bid will be successful in due course.

### **5.3 Amgen Developments**

Following a meeting in early August, it was established that the 1.5MW wind turbine project at Nant-y-Gwyddon could proceed, and site works have now commenced.

The Amgen board have also agreed to proceed with a 200kW solar PV development, at the Bryn Pica site, to decarbonise the consumption at the wastewater treatment plant, and will be going for planning consent in the third quarter of 2022/23.

### **5.4 Wind Power Aspirations**

The lack of any spare 33kV grid capacity at WPD's Upper Boat distribution hub has been proving a barrier to progress. However, the Council has been successful in obtaining two grid connections from WPD in pursuit of its aspirations to generate wind energy, one for 4.2MW at 11kV and a second for 6MW at 33kV. Discussions have been underway, for some time, with several wind farm developers, who have plans to construct turbines on land adjoining to that owned by the Council.

Following negotiations, the 4.2MW grid connection offer has been novated over to a developer to enable them to realise the full potential of the adjacent site. The Council will be given the opportunity to invest further in the project before construction starts, and the agreement arrived at with the developer also secured substantial community benefits, moving forward, irrespective of the outcome of any future talks. Discussions are ongoing and we have now agreed to meet with the developer, on a monthly basis, as they develop their proposals.

The 6MW connection offer is currently being discussed with the adjacent developer and WPD, to determine usage details and the potential for collaborative working in relation to the 'route to grid', together with all other options. The outcome of the discussions will have a major bearing on the future size and shape of the potential project.

Discussions are also underway, with a third developer and an Independent Distribution Network Operator (IDNO), to determine the feasibility of decarbonising a cluster of RCT operated sites within the vicinity of one of our major town centres. This would be achieved by the construction of a mini network to distribute electricity to all the identified sites "behind the meter", and from a central distribution point. Although discussions are at an early stage, the potential outcome, if eventually realised, could have a major impact on the carbon used at the sites identified.

We will continue to hold further dialogue with all the above developers to determine if collaborative working arrangements can be agreed upon, and enacted, for the benefit of both parties.

## **5.5 Hydro Electricity Prospects:**

The Corporate Estates team have identified a series of potential opportunities for Hydro Electric generation within the boundaries of the wider County Borough.

We have engaged with the company that prepared a previous feasibility study (circa 2010) for a potential 'low head' hydro-electric scheme at Treforest Weir. The findings of the initial report appear favourable, and work is now underway to find potential 'offtake sites' in the vicinity to enable the full potential of the project to be realised.

The team have also been reviewing the previously considered 'high-head' hydro sites, of potential, across the County Borough, and specialist providers again were asked to provide a detailed study of a previously published proposal for a scheme at Dare Valley Country Park. It is felt that these proposals have the potential to help decarbonise the site and a decision has been made to pursue the available options further.

In view of the opportunities for development in this field, there are plans to bring several separate and specific reports to the Sub-Committee, at a future date, to further inform Members of details in relation to this work.

## **5.9 Carbon Reduction Programme**

The 2022/23 programme is well underway. The works include a wide range of proposals including such schemes as Solar PV, LED Lighting, Air Handling Units with heat recovery and Boiler Upgrades, etc. The programme for 2022/23 is valued at over £1.5M and could generate estimated annual savings of 2,933,269kWh which is the equivalent to circa. 590 tonnes of CO2 annual savings. When added to savings from previous years, dating back to fy'2009/10, the equivalent CO2 annual savings (resulting from this programme) are now in the region of 6,000 tonnes per annum.

## **6. CLIMATE CHANGE CORPORATE GOVERNANCE (UPDATE)**

### **6.1 Climate Change Working Group (CCWG)**

The Climate Change Working Group was set up to support the work of the 'Climate Change Cabinet Steering Group' in March 2021.

Recently, attendance at the Group has been honed to include mainly key officers from across all Service Areas, including the Chairs and/or Vice-Chairs of the various working groups. Feedback has been positive to date and the workstreams of the various groups are detailed below.

Recently, in view of the current volatility of the wholesale energy market, and the predicted rise in energy prices, Council staff are also now working, across Service Areas, to look at short / medium term measures to help reduce the impact of the energy rises. Details of this current /ongoing work may form the basis of a future report to the Sub Committee.

## **6.2 Carbon Footprint Working Group**

During the Spring of 2021, the Welsh Government published its Welsh Public Sector Net Zero Carbon Scheme to support its stated goal of the Welsh Public Sector being Net Zero Carbon by 2030. Under this scheme, all Welsh public sector organisations are required to report annually, their carbon emissions to the Welsh Government, beginning with the 2019/20 and 2020/21 years.

Although similar to the Carbon Footprint reports, the Welsh Public Sector reporting regime has some differences, notably in how it reports and analyses the emissions resulting from Procured Goods/Services and Capital Assets.

For the 2021/22 year and beyond, the reporting requirement has been modified to include carbon emissions from Home Working, Staff Commuting and Business Travel (e.g. staff using their own vehicles for Council duties), which are areas that were not covered during previous financial years.

Compiled with the assistance of colleagues across the Authority, reporting to the Sub-Group, the 2021/22 Emissions Report is in the final stages of validation and analysis (at the time of writing), before being submitted to the Welsh Government by the deadline of 9<sup>th</sup> September 2022.

By March 2023, all public sector organisations in Wales will be required to publish their plans to achieve net zero. Beginning in April 2022, working in conjunction with the Carbon Trust, the Council embarked on a project to produce a Decarbonisation Strategy for RCTCBC, together with an accompanying Action Plan. The Decarbonisation Strategy is expected to be completed during the 3<sup>rd</sup> quarter of 2022/23. Also, the content and conclusions of the Strategy and Action Plan will be used to guide future policy direction and activities in this area, as the Council strives towards its NZC ambitions.

## **6.2 Electric Vehicle Charging & Transportation Working Group**

A new EV Charging Strategy for RCT was agreed by Cabinet during November 2021, then went through further planned scrutiny during December, with the strategy then published in January 2022.

The Group have now produced an 'accompanying' EV Charging Implementation Plan and a 'public facing' Action Plan. This group of documents are devised to both inform the public and to enable all service areas to understand the essential roles they need to play in support of the Council's EV Charging journey.

The Implementation Plan (included as Appendix 'A') also comprises an 'Action Plan' (in Appendix 'B') which states clear goals for the Council to aspire towards, including short, medium and long-term targets in the transition to the use of electric vehicles. This is Action Plan is intended to be 'Public Facing' and the milestones contained therein are linked to the Council's 'Climate Change Strategy'. The Council will use this 'link'

to monitor improvements in the delivery of charging infrastructure by providing updates on progress against the Action Plan.

The Group have also compiled an accompanying document, an Internal Delivery Plan (IDP) which is retained for internal use only. The purpose of the IDP is to support the other two documents in providing actions and milestones for all service areas of the Council, with the named Officers and Service Areas responsible for the delivery of each task / milestone clearly identified.

The Council recognises the need to establish a recommended order of processes that installers should follow in the delivery of charging infrastructure. As such, these steps will be identified and summarised in the form of a Delivery Model applicable to off-street charging. Using this model will ensure the necessary processes are adhered to, in supporting the delivery of charging infrastructure across the County Borough. In conjunction with this, a Pre-Installation Checklist of questions to consider is being developed with the aim of providing guiding through the selection process. Whilst this is included as a milestone in the IDP, work has already started and an example of what this may look like is included in Appendix 'C'.

Key members of the Group have also been involved in feasibility works to inform the Ultra-low Emissions Vehicles (ULEV) Transition Plan, and this has recently been the subject of a separate Cabinet Report with the purpose of decarbonising the Council's fleet.

In addition to the above, the Council's progress to date, includes:

- Liaising with Cardiff Capital Region (CCR) to put in place 82 EV charging bays at 31 locations during this f/y 2022/23
- Continuing discussions with the CCR to increase the number of charging points over the next 12 months
- Ongoing assessment of further potential locations in order to increase the availability of EV charging points
- Setting up dedicated EV charging web presence and email address to enable residents to make direct contact with their queries
- Providing relevant comms on the progress of the programme via a dedicated campaigns page
- Continued support to WG with the electric vehicle taxi pilot
- Cabinet approval has been given to move forward with the multi-faceted ULEV Fleet Transition Plan (as mentioned above).

### **6.3 Natures Assets Working Group**

The Group are looking at carbon capture and sequestration opportunities by restoring failing peatlands and naturalising areas, greening of town centres and ongoing tree planting, whilst also improving ecology and biodiversity. Such potential projects could have a substantial impact on the Council's carbon footprint, as well as improving air quality, whilst also assisting with ground water management.

The group appointed a specialist to investigate and report on RCT's peatland assets, the outcome of which is the subject of a separate and specific report.

The group are also looking at sequestration opportunities as well as 'greening' our town centres by introducing rain gardens, natural tree regeneration, hedgerows and tree planting projects. A positive step forward together with recent successful application for recognition under the 'Queens Green Canopy' initiative, where one of our ancient woodlands has been recognised and awarded the honorary title. The Group's woodland work will form part of the proposed Tree Planting Proposals, and this has already been detailed in the form of a verbal update at a previous meeting.

#### **6.4 Community Activity, Comms and Engagement**

The group continues to support the Council's work to reduce carbon emissions both within the Council and across the County Borough through the delivery of the Council's Climate Change Strategy – 'Think Climate RCT', and in particular 'Think Climate -People'. Progress in the work programme to date is as follows.

Continuing to identify, categorise and map current 'Community Activity' linked to Climate or other Environment related projects across the County Borough. Since the start of this work, agreement has been reached with the Cwm Taf Public Services Board to resource the project within its support arrangements and further develop this project so that all PSB partners, can share and maximise resources and information. The mapping categories to date include relevant Nature-Based projects, Energy Generation, Food Production, Arts and Reuse projects.

Continuing to identify existing networks and contributing to the development of new community networks e.g. the RCT Community Action Network. Attitudes to Climate Change within communities currently ranges from excellent ground-breaking projects to clear resistance. Knowing and using this information will help to inform and shape our engagement activity to encourage and support the lifestyle choices that residents can make to tackle climate change.

Working with third sector partners to seek, encourage and support relevant funding bids to support community projects.

Implementing a 'Comms' programme that provides useful information to residents, showcases the Council's work, complements related engagement projects e.g. EV Charging, 'Lets Talk Wildflowers' and the Tree and Woodland Strategy, and also supports national campaigns through social media and the Council's Climate Change Web presence, which is currently being refreshed.

Strengthening our plans to continue the Climate Change Conversation using new and creative 'Engagement' methods and working more closely with the third sector and communities to capture and understand local impact and share ideas to maximise our joint impact. Part of this work includes refreshing the 'Let's Talk' web platform and content, for

climate related projects in particular. An update of the engagement programme and associated projects is scheduled for the Climate Change Sub Committee in December.

Accelerating our work with schools and with representative groups of young people in particular through the Youth Forum and YEP Service.

Widening engagement with staff through Staff Net Zero Network and Teams Green Space. Most recently a Welsh Channel has been established within the Green Space which will facilitate and encourage staff networking on climate related matters in the medium of Welsh as well as provide an opportunity for people to use and practice their Welsh Language skills in a safe supportive internal space.

The wider work programme is expected to expand with the publication of the 'Think Climate RCT' Strategy, the launch of Council wide Climate Change training and awareness raising, the Climate Change Cabinet Sub Committee's work programme and developments arising from the and involvement of the Council's new Climate Champion.

## **6.5 Built Assets & Construction Working Group**

This Group was formed later than the other groups, during early 2022, with the 'purpose' of the group being to assist in the coordination and development of a programme to address net zero across the corporate portfolio, and to compliment and augment the currently running 'Carbon Reduction Programme'. The 'focus' will be to assess the Council's assets with a strategic approach to make the assets as efficient as practical and prepare for a phased transition to low carbon solutions as the utility networks adapt.

The Group currently are looking at the corporate building assets portfolio and bringing together service areas to review and assess decarbonisation strategies. They have commissioned a pilot sample of net zero reports, from specialists and, having recently received the proposals, are now currently assessing their value.

Following the publication of the RCTCBC Decarbonisation Strategy & Action Plan, expected in Q3 of 2022/23, the Group will then move forward following with this as overarching guidance.

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

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

## **8. WELSH LANGUAGE IMPLICATIONS**

- 8.1 This supporting report is for the purpose of 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.



