Agenda Item 18

TITLE	Solar Farms delivery within WBC Climate Emergency Action Plan
FOR CONSIDERATION BY	Climate and Emergency Overview and Scrutiny Committee on 14 th March
WARD	All
DIRECTOR	Graham Ebers – Director, Corporate Services and Simon Dale – Interim Director, Place & Growth
LEAD MEMBER(S)	Cllr Sarah Kerr – Executive Member for Climate Emergency and Residents Services Cllr Clive Jones – Leader of the Council and Executive Member for Business and Economic Development Cllr Imogen Shepherd-DuBey – Executive Member for Finance

OUTCOME / BENEFITS TO THE COMMUNITY

The delivery of solar farms is a key priority of the Council's Climate Emergency Action Plan. The renewable energy generated through our solar farms will reduce our dependency from fossil fuels, limit energy-led carbon emissions and air pollution, and have positive implications on the quality of life of our residents. The income generated through the solar farms will support the Council to deliver residents services.

RECOMMENDATION

That the Committee notes the rationale behind reducing the solar farm projects from five to two in the third CEAP progress report, approved by Council in September 2022, and the carbon implications of this decision.

SUMMARY OF REPORT

The Climate Emergency Action Plan third progress report, approved by Council in September 2022, includes a commitment to deliver two *solar farms* by 2030. This represents a change from the initial draft of the Climate Emergency Action Plan, approved by Council in January 2020, which included a commitment to deliver *five solar farms in five years*.

The Committee has requested to understand the rationale behind the change from "five" to "two" solar farms. This report explains this decision and clarifies the carbon implications of it.

Background

The initial version of the Climate Emergency Action Plan, approved by Council in January 2020, six months after declaring a climate emergency, included the following commitment: "the council plans to develop five largescale solar PV farms throughout the

Borough over the next five years". The estimated costing was £3.5M in 2020/21, £6.5M in 2021/22 and £8M in 2022/23. It is recognised that the initial CEAP included aspirational targets and aimed at building a vision for the Borough for 2030. Subsequent financial and feasibility studies led to amendments to the targets, to ensure the projects were practically deliverable and based around DESNZ (formerly BEIS) data calculations.

In July 2020, six months after the publication of the first CEAP, the Climate Emergency Action Plan first progress report was approved by Council. Feasibility and financial considerations led to the reduction of the solar farm project from five to four proposed solar farms. The estimated carbon savings were 20,448 tCO2e. The cost of one farm, now the Barkham solar farm, was £18m.

The Climate Emergency Action Plan second progress report approved by Council in July 2021 included four proposed solar farms. The estimated carbon savings were 23,306 tCO2e and the cost of the Barkham solar farm was £21m.

The Climate Emergency Action Plan third progress report approved by Council in September 2022 includes two proposed solar farms. The estimated carbon savings are 14,058 tCO2e and the combined cost is £50m.

In the latest progress report, WBC has reduced the CEAP solar farm projects from four to two. This has been a result of financial considerations, to ensure budgetary prudence, and was informed by the latest information on costs and finance coming out of the planning and feasibility work for the Barkham solar farm. The decision was also motivated by the need to ensure the CEAP included a number of solar farms that was deliverable by 2030, as this is the timeframe covered by the plan. As mentioned below, the CEAP is a predictive tool as well as a working document. Targets may be amended in each progress report, subject to feasibility work and discussion.

This has also meant a change in the estimated carbon savings from these projects by 2030, based on the MWh produced from the farms, which has also been affected by numerous other factors such as Distribution Network Operator connections. Hence the total estimated savings have been reduced by 6,390 tCO2e from the initial 2020 plan, which is incorporated into the latest CEAP.

The timing and deliverability of solar farms is also influenced by the availability of sites in WBC ownership and also connections into the grid. Informed by our experience for Barkham Solar Farm, where we have negotiated the first full grid application, even with complete will and determination by all parties involved we are still at the behest of SSEN in terms of the timing of grid connections for solar farms. SSEN are currently working to a four-year minimum standard for grid connections.

The expected capital costs associated with the delivery of the solar farms has increased since the original CEAP in 2020. Since early 2020 the construction industry has experienced significant turmoil and uncertainty due to the effects of the pandemic, the war in Ukraine, the cost-of-living crisis and significantly increasing inflation, all which have contributed to rising costs. These could not have been foreseen when the original budget figures were included in the CEAP. Current cost estimates for the solar farms are informed by real-time cost information we have received through the procurement process for the Barkham solar farm and confirmation of the grid connection fee at Barkham.

Next steps

The Climate Emergency Action Plan is a predictive tool, which enables us to assess the direction of our work to decarbonise the Council and the Borough and is updated with the most available information at that date. It remains a working document, and so targets may be amended in each iteration to the latest information, subject to discussions and agreement of all relevant parties.

The CEAP only includes projects that are planned to be delivered by 2030. We do reserve the right to carry out renewable energy farms where budgets are agreed, and suitable financial payback is achievable. Initial feasibility work is currently being undertaken on two sites within WBC ownership within the Borough to identify the location(s) of the next renewable energy farms. This work is being informed by lessons learned through our experiences of the early feasibility, design and planning work undertaken at Barkham solar farm. Officers expect to report on this feasibility work later this year and a decision to proceed or not will be taken by Members through the correct governance processes. A decision to proceed would trigger the preparation and submission of a planning application, the process of securing vacant possession of the site, early negotiations re grid connections and completion of the financial business case to inform a bid to the Medium-Term Financial Plan to secure the necessary capital funding.

In this regard, as we complete feasibility, we will include this in the next CEAP progress report, which is planned to be submitted to Council in September 2023.

FINANCIAL IMPLICATIONS OF THE RECOMMENDATION

The Council faces severe funding pressures, particularly in the face of the Covid-19 crisis. It is, therefore, imperative that Council resources are focussed on the vulnerable and its highest priorities.

	How much will it Cost/ (Save)	Is there sufficient funding – if not quantify the Shortfall	Revenue or Capital?
Current Financial Year (Year 1) Next Financial Year (Year 2) Following Financial Year (Year 3)	To be confirmed following feasibility work on the next solar farm(s), including preparation of the financial business case.		Capital

Other financial information relevant to the Recommendation/Decision

The solar farms will be subject to location, site specific and grid capacity requirements. All these factors will affect the cost of the project and will not be known until proper feasibility assessments are completed. Therefore, the real cost and carbon savings for each solar farm can only be confirmed once the necessary studies are finished. The approved business case for the Barkham solar farm demonstrates the principles of how the business case for the next solar farm(s) is likely to work.

Cross-Council Implications

The delivery and operation of a solar farm involves a number of teams across the Council. The income generated by the solar farm will be returned to the General Fund to use for delivering services.

Public Sector Equality Duty

The CEAP, which identifies solar farm delivery, has been subject to Equalities Impact Assessment. Equalities Impact Assessment will be undertaken on any specific solar farm proposals as part of the feasibility assessments.

Climate Emergency – The Council has declared a Climate Emergency and is committed to playing as full a role as possible – leading by example as well as by exhortation – in achieving a carbon neutral Wokingham borough by 2030 Generation of renewable energy through investment in solar farms is identified as a key priority under the Climate Emergency Action Plan (CEAP).

List of Background Papers
None

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