

To: Cabinet
Date: 16 June 2021
Report of: Head of Corporate Strategy
Title of Report: Approval of investment in the Ray Valley Solar Project under the Public Sector Decarbonisation Scheme.

Summary and recommendations	
Purpose of report:	To seek a Cabinet recommendation to full Council for the approval of the loan to Low Carbon Hub to support investment in the Ray Valley Solar Project.
Key decision:	Yes
Cabinet Member:	Councillor Hayes, Deputy Leader and Cabinet Member for Green Transport and Zero Carbon Oxford
Corporate Priority:	Zero Carbon Oxford
Policy Framework:	Council Strategy 2020-24
Recommendations: That Cabinet resolves to:	
1.	Recommend to Council the approval of a loan to Low Carbon Hub of up to £3,385,200 together with the associated capital budget for investment in the in the Ray Valley Solar (RVS) local renewable energy project. The investment will be fully funded by the Public Sector Decarbonisation Scheme grant awarded to the council by Salix Finance Ltd a wholly owned Government department funded by the Business Energy and Industrial Strategy Department (BEIS);
2.	Delegate authority to the Head of Corporate Strategy in consultation with the Cabinet Member for Zero Carbon Oxford to enter into a loan agreement with Low Carbon Hub on terms to be agreed by the Head of Financial Services/Section 151 Officer; and the Councils Monitoring Officer;
3.	Note the reduction in the City Council’s carbon emissions of up to an estimated 1,000 tCO ₂ per year from the solar farm investment, evidenced by the transfer of high quality, traceable Renewable Energy Guarantees of Origin (REGOs) from RVS in support of the Council’s 2030 zero carbon target for its estate and operations; and
4.	Note the update provided on the Public Sector Decarbonisation Scheme programme.

Appendices	
Appendix 1	Risk Register

Introduction and background

1. Oxford City Council declared a climate emergency in January 2019. Following Oxford’s Citizens’ Assembly on Climate Change, the Council set out its commitment to become net zero while developing detailed plans “for further projects to accelerate the reduction in the Council’s underlying emissions to achieve a Zero Carbon Council by 2030 or sooner”.
2. The City Council’s 4th Carbon Management Plan (CMP) sets the ambition to be a Zero Carbon Council by 2030 or earlier and highlights the important role of increased renewable energy generation, including via investments in local large scale solar farms, in order to achieve the target. The CMP also identifies an estimated £2.2m investment gap per year to 2029/30.
3. The City Council’s successful two bids to the Public Sector Decarbonisation Scheme (PSDS) grant fund make available a total of £10.9m grant funding for the decarbonisation of some of the Council’s highest emitting sites – potentially filling a quarter of the funding gap needed to achieve Zero Carbon by 2030. This consists of up to £1,636,736.00 for a Hinksey Outdoor Pool decarbonisation project, applying heat pumps and other measures; and up to £9,286,813.17 for installation of heat pumps at five of the council’s largest carbon emitting buildings. The latter grant award is linked to investment in the Ray Valley Solar Farm project being developed by the Low Carbon Hub.
4. To comply with the grant funding conditions, all projects must not breach a ceiling of £500 per tonne of carbon saved over the project lifetime and must complete or have claimed all funding evidenced by invoiced spend or similar by 30 September 2021. A request for an extension to this delivery deadline to 31 March 2021 has been submitted to Salix Finance Ltd (the administrative body managing the grant money on behalf of government¹).
5. The February 2021 Cabinet paper (“Programme Approval and Allocation for Public Sector Decarbonisation Funding”) granted programme approval regarding the development of the decarbonisation proposals to accept and ratify funding agreements to further reduce the Council’s carbon emissions; and any other necessary agreements or contract across the prospective sites.
6. Delegated authority was granted to the Transition Director – whose responsibilities for the Council’s environmental sustainability work have now been passed to the Head of Corporate Strategy - in consultation with the Cabinet Member for Zero Carbon Oxford and Green Transport; the Cabinet Member for Leisure and Parks; the Head of Financial Services/Section 151 Officer; and the Councils Monitoring Officer, to commence expenditure of £10.9 million to carry out the work to develop proposals for funding and subject to their satisfactory conclusion, enter into funding

¹ Salix Finance Ltd is a non-departmental public body, owned wholly by Government. Salix is funded by the Department for Business, Energy and Industrial Strategy (BEIS), the Department for Education, the Welsh Government and the Scottish Government.

and other necessary agreements, including construction contracts, for the purpose of development and delivery of decarbonisation projects across Oxford City Council estate.

7. The February 2021 Cabinet Paper noted that a further report on the arrangements for securing the local renewable energy source and the developed proposals would follow, which is the purpose of this Cabinet Paper.

The Ray Valley Solar (RVS) Project

8. Ray Valley Solar (RVS) is a project being led and delivered by the Low Carbon Hub, and is a key renewable energy development for Project LEO (with which the City Council is a partner organisation).
9. Low Carbon Hub is a social enterprise originally set up by Oxford City Council in 2011 to develop community-owned renewable energy installations across Oxfordshire that produce clean energy and accelerate the transition to a zero carbon county. Unlike other local authorities, Oxford City Council has sought to move community energy forward rather than develop a publicly-owned energy services company to transform the local energy system.
10. RVS is a 19MW ground mounted solar farm near the village of Arccott with potential for battery storage to be installed in the future. The site itself neighbours an MOD logistics site, HMP Bullingdon, and two existing solar parks, and is expected to comprise c.45,000 solar panels across an 80 acre site.
11. It will be the largest community-owned solar park in the UK, generating enough energy to power the equivalent of over 6,000 homes per year.
12. It is expected that RVS will keep £2.6m of additional clean energy spend in the local economy every year, and provide £13m of community benefit funding over the lifetime of the project (22.5 years).
13. The Low Carbon Hub has secured the relevant permissions for the project to proceed, with work expected to commence in late May.

Decarbonisation Programme updates

14. To date there has been a total capital commitment currently at c£2.6m to allow the programme to move to the final decision point for construction.
15. Positive dialogue with Salix about the realities of delivery of the programme and the challenges and constraints of delivery within the current tight programme timeframe continues. Salix has confirmed no clawback of funds spent up to 30 September if the project is not completed by that date. At the time of writing, a response is awaited from the request to Salix to extend the delivery deadline for the full programme to 31 March 2022.
16. Faithfull & Gould (F&G) Consultancy and a Tier 1 contractor Wilmot Dixon have been appointed to lead on delivery of this Public Sector Decarbonisation Scheme programme, to supply and install heat pumps at all of our leisure facilities and a community centre.

17. In the February 2021 report to Cabinet it was noted that the scope of the projects would need to be developed to ensure that the ambitious timetable associated with the grant funding can be met. The programme has been updated as follows:
- a. Hinksey Outdoor Pool: appraisals are still being made to support a decision around installation of a water source heat pump in Hinksey Lake, or an air source heat pump sited adjacent to the pool.
 - b. Leys Pool & Leisure Centre: two air source heat pumps to heat the “wet side” of the leisure facility only, housed in a compound adjacent to the existing biomass store. Adaption of existing hot water tanks for creation of a compatible thermal store.
 - c. Barton Leisure Centre: two air source heat pumps, to be mounted on the boiler room roof (subject to structural survey) in order to avoid infrastructure constraints associated with a ground level compound. Adaption of existing hot water tanks for creation of a compatible thermal store.
 - d. Rose Hill Community Centre: One air source heat pump, ideally installed in the existing boiler room (to be confirmed) or sited on the roof. Adaption of existing hot water tanks for creation of a compatible thermal store.
 - e. Oxford Ice Rink: one water source heat pump, linked to the existing ice rink chilled water circuit. New heat pump, external store and controls to be housed in a new external plant room.
 - f. Ferry Leisure Centre: two air source heat pumps to heat the “wet side” of the leisure facility only, mounted on the roof (subject to structural survey), ideally in the existing screened plant enclosure. Adaption of existing hot water tanks for creation of a compatible thermal store.
18. The Town Hall site has been removed from the proposal and replaced with Ferry Leisure Centre due to complexities associated with its historic nature and it being a listed building, requiring more time for the project than can be allowed under the timeline for the grant. The Council is actively exploring funding with sufficient timeline for delivery to ensure that the Town Hall site will be decarbonised.
19. An Officer Decision Notice, following consultation on 10th May, gave the go ahead to Wilmot Dixon to place a strategic order for materials of up to £1.75 million as part of a two stage procurement process, to mitigate for delays on long lead-in items against the very short grant funding deadline. The total commitment currently stands at approximately £2.6m out of a grant budget of £10.9m.
20. Site surveys have been undertaken and the most appropriate locations for the equipment have been identified. At present only works at Hinksey Pool are expected to require planning permission. Works at the other locations are expected to be covered under the General Permitted Development Order (GPDO) exemptions.
21. Work remains ongoing on the business case for installing supplementary solar panels and batteries at a number of the sites, to optimise the efficiency of the heat pumps.

Financial implications

22. The figures provided in this section of the report are provisional and based on the upper limit of the Council's proposed investment in RVS. A change in the total sum able to be invested, based on the overall programme meeting the £500/tCO₂ criteria, will result in a proportionate reduction in subsequent figures outlined in this report.
23. It is proposed that the City Council invest a total sum of up to £3,385,200 via a loan to the Low Carbon Hub.
24. The loan will be for a duration of 22.5 years, based on the Salix model basis for the lifetime of the investment in solar PV.
25. The total investment is determined by the units of electricity required from RVS to meet the total electricity demand across the City Council sites within scope including the additional electricity demand resulting from a shift from gas boilers to electric heat pumps.
26. The interest rate is benchmarked against the Public Works Loan Board (PWLB) 22.5 year annuity rate of 1.45% for projects delivered at this value with funding on an annuity basis.
27. The Council will receive an annuity payment of around £177,406.82, which includes the principal and interest paid back to the Council each year by the Low Carbon Hub to honour the loan. This will be paid in a pattern agreed between the Low Carbon Hub and the Head of Financial Services (Section 151 Officer). There are no restrictions around how the annuity income is used.
28. A side agreement is being developed between Low Carbon Hub and Oxford City Council to address any 'overage' as a result of future electricity prices being much higher than expected, generating 'windfall profits' for LCH from the solar farm. The side agreement will ensure the Council is involved in decision-making around how any such windfall - proportionate to the Council's financial interest in the project - is reinvested in carbon-saving measures by LCH for the wider direct benefit of Oxford's communities.
29. In addition to the carbon savings delivered and the annuity from the solar farm, the decarbonisation measures installed across our six sites will also lead to a reduction in gas consumed while increasing electricity consumption. It is difficult to forecast the longer term financial impact, given this will be linked to the differential in gas and electricity prices. Gas prices have reduced through the COVID pandemic, however our total cost of gas has typically been equivalent to around 3p per unit and at this level, the measures would deliver an annual energy bill saving of a minimum of £20,000. If gas prices were to increase to 4p a unit – and to meet longer term decarbonisation objectives Government may seek to increase the level of taxation on gas – this would mean savings of around £65,000 per annum.
30. The City Council will receive a total repayment of up to £3,991,653 over the 22.5 loan period, including the total principal and interest repaid over the loan period. The total interest repaid to the Council over the grant sum will be ca £606,453

(£26,953 per annum), demonstrating the financial and social value of Council investments in community-owned local renewable energy.

Legal implications

31. Often there is little ability for the Council to negotiate the terms of a grant funding agreement and there has been lengthy discussion with Salix Finance to ensure that the proposed loan of the funding by the Council to Low Carbon Hub in respect of the Ray Valley Solar project is compliant with the existing terms of the funding agreement between Salix and the Council. Salix has now confirmed that the proposed loan will be compliant with the terms and conditions of the grant funding agreement providing certain side agreements are reached, including an agreement with Low Carbon Hub on the use of the financial benefits being tied into a community benefits scheme.
32. As the Council will be the accountable body in respect of the grant funding received, a loan agreement will need to be entered into between the Council and Low Carbon Hub, obliging Low Carbon Hub to comply with the terms of the grant funding agreement or indemnify the Council if they fail to do so.

Environmental and community benefits

33. The Council's investment in RVS will support the Council's goal to achieve zero carbon across its estate and operations by 2030 by transferring high quality, traceable renewable energy guarantee of origin (REGO) certificates for the energy generated by the project to OCC which will offset up to 1000² tonnes of CO₂ emissions annually.
34. Current expectations are that the completion of the programme of PSDS projects in 2021 would deliver average annual reductions in CO_{2e}/y equivalent to around 30% of the Council's existing emission levels, representing a very significant contribution towards becoming a zero carbon Council by 2030 nine years out from the target.
35. Investment in Ray Valley Solar will also help to secure benefit to local communities by ensuring that these are tied into schemes in Oxford.

Level of risk

36. The key risks associated with the Ray Valley Solar investment are set out in the risk register in Appendix 1.
37. As the Council will be the accountable body in respect of the grant funding, due diligence checks previously undertaken on Low Carbon Hub will be reviewed such that officers are satisfied before the loan is entered into. Officers will also ensure they are satisfied they have sufficient loan security before entering into the loan agreement.
38. Other risks relating to the programme are being actively managed and monitored via the project management process, and regularly reported to the Council's Project Board.

² Based on the current carbon intensity of the electricity grid including transmission and distribution emissions.

Equalities impact

39. The clear mandate from Oxford's citizens from the Citizens' Assembly on Climate Change has included representatives from a broad cross-section of groups and ages across the city. There are no adverse impacts on any part of the community; however Oxford City Council is mindful of the important leadership role it plays across its communities. The Council will be mindful of communicating clear messages on the purpose of this programme of carbon emissions reduction.

Conclusion

40. Subject to the risks and issues outlined, the PSDS programme currently remains on track for delivery by September 2021 and within the projected budget of £10.9m. A key part of the programme is the investment in Ray Valley Solar, which will unlock the required carbon savings to meet the grant funding criteria, whilst providing community benefit and a financial return to the Council.

Report author	Mish Tullar
Job title	Head of Corporate Strategy
Service area or department	Environmental Sustainability
Telephone	07483 010499
e-mail	mtullar@oxford.gov.uk

Background Papers: None

This page is intentionally left blank