

SURREY COUNTY COUNCIL**CABINET****DATE: 27 JUNE 2023****REPORT OF CABINET MEMBER: MARISA HEATH, CABINET MEMBER FOR ENVIRONMENT****LEAD OFFICER: KATIE STEWART, EXECUTIVE DIRECTOR ENVIRONMENT TRANSPORT AND INFRASTRUCTURE****SUBJECT: GOVERNANCE PROPOSAL FOR SOLAR ROOFTOP AND BUILDING DECARBONISATION PROJECTS****ORGANISATION STRATEGY PRIORITY AREA: ENABLING A GREENER FUTURE****Purpose of the Report:**

The purpose of this report is to gain:

- high level in principal approval of the solar rooftops projects and the buildings decarbonisation projects, from the successful Public Sector Decarbonisation Scheme Phase 3b (PSDS3b) schools and corporate buildings grant application, that are proposed to be taken forward and
- agreement that the approval of the resulting final business cases be delegated to the Cabinet Member for Environment, the Cabinet Member for Property and Waste, and the Cabinet Member for Finance and Resources, on the recommendations of the Executive Director for Environment, Transport and Infrastructure, the Executive Director for Resources, alongside Capital Programme Panel.

Recommendations:

It is recommended that Cabinet:

1. Provides high level in principle approval to the solar rooftops and Public Sector Decarbonisation Scheme Phase 3b (PSDS3b) schools and corporate buildings projects proposed to be taken forward in this report.
2. Delegates business case approval of the solar rooftops and the PSDS3b schools and corporate building decarbonisation projects to the Cabinet Member for Environment, the Cabinet Member for Property and Waste, and the Cabinet Member for Finance and Resources, on the recommendations of the Executive Director for Environment, Transport and Infrastructure, the Executive Director for Resources, alongside Capital Programme Panel.
3. Agrees the delegation of approval based on the costs of the two combined programmes being no more than 10% above the total cost presented here.

Reason for Recommendations:

These projects are set out in the [Greener Futures Climate Change Delivery Plan](#), which was approved by Cabinet in October 2021, and will deliver direct reductions in carbon emissions and generate energy savings for Surrey County Council and the schools in scope. The list of buildings in the decarbonisation and solar rooftops programme is included in Appendix A.

These projects and the associated costs are part of a wider programme of projects and initiatives that put together plot a pathway to achieve net zero 2030 for Surrey County Council as an organisation with the ambition of being overall self financing. The approach to financing SCC's net zero 2030 programme outlined in Greener Futures Finance Strategy is coming to Cabinet for approval in July 2023.

The principles of accepting Government grant funding to enable such projects was agreed by Cabinet in April 2022 ([Surrey's Greener Futures Grant Programmes](#)). The principles of these PSDS3b programmes are as already approved in December 2022 for the previous PSDS3a funded programme and will be adopted for similar future programmes, the next of which will be PSDS3c in autumn 2023. The principles are described further in Appendix B. The principles are fully in line with those which will be presented in the overarching Greener Futures Finance Strategy, which will be brought to Cabinet in July 2023.

A high-level summary of the projects is set out in this paper along with the business case development timescales. To meet the time constraints requiring installation over the summer months it is not possible to bring a fully costed business case for all projects based on final scheme designs to Cabinet, as such this report requests that approval of the final business case be delegated to Cabinet Members via Capital Programme Panel recommendation.

To make use of this year's funding and to maximise the financial savings, the projects need to be undertaken this summer and have a very short time scale for delivery.

Executive Summary:

1. Surrey County Council (SCC) has committed to achieve net zero carbon for SCC operations by 2030 and a net-zero county by 2050. The Climate Change Delivery Plan requires that the Surrey building estate, as a whole, to be carbon neutral by 2030. Buildings owned and operated by SCC are being decarbonised in a programme up to 2030. In addition, opportunities are being sought to generate electricity via the installation of solar PVs on rooftops of Surrey buildings. This will reduce the energy costs of schools and SCC corporate buildings as well as saving carbon emissions.
2. SCC agreed via Cabinet in April 2022 to accept Government funding to support decarbonisation of the building estate (Public Sector Decarbonisation Scheme PSDS3b). SCC has been awarded up to £6m in grant funding. This will be matched by funding from the Greener Futures capital pipeline and the Facilities Management (FM) Maintenance budget to complete the decarbonisation projects.
3. Investment for solar rooftops will come from the Greener Futures capital pipeline. This will effectively be repaid via savings on SCC fuel bills or via offering reduced energy tariffs to schools via a power purchase agreement (PPA) contract. Greener Futures will bring an overarching Green Finance Strategy to Cabinet in July which sets out the principles of the approach for funding the Greener Futures 2030 net zero programme for SCC of which these projects are a part of.

4. The current decarbonisation and solar projects need to be undertaken this summer, with contracts awarded in June in order to make use of the time-bound Government grant and to minimise disruption to schools. They therefore need business case approval before the overarching Green Finance Strategy will have gained Cabinet approval. In addition, starting the Cabinet approval process only after the full business case financial evidence is secured would mean missing the window of undertaking works this summer.
5. This report is therefore to outline the high-level principles of the business cases for these programmes for agreement by Cabinet and to ask for delegated approval to Cabinet Member for Environment, the Cabinet Member for Property and Waste, on the recommendations of the Executive Director for Environment, Transport and Infrastructure, the Executive Director for Resources, alongside Capital Programme Panel.
6. The list of buildings in the decarbonisation and solar rooftops programme is included in Appendix A. Further information on the programme of works, the costs and benefits and on the principles for investment are detailed in Appendix B.

Consultation:

7. The five Surrey maintained schools (as per Appendix A) have been consulted as part of the development of this project and will continue to be involved in ongoing discussions as we progress the proposals.
8. These projects have been jointly developed by Greener Futures, Land & Property, Finance, Procurement and Education as part of working group meetings which occur fortnightly.
9. The 2030 Climate Change Board has also been involved in the development of these projects from the outset and through each stage to date and the report will have been taken to Property Panel, Infrastructure Board and Capital Programme Panel prior to Cabinet on 27 June 2023.
10. The Cabinet Members for Environment and Property and Waste have been briefed and Members will also be updated via:
 - Asset Strategy Board (24 May 2023)
 - Greener Futures Member Reference Group, subset of the Communities, Environment and Highways Select Committee (17 May 2023)

Risk Management and Implications:

11. The programme has potential risks around the increase in contractor costs and costs of power network electrical upgrades and the relative pricing of gas and electricity. For the full benefit of the programme, schools will need to enter into a PPA which needs to be negotiated with each school. The largest risk is in not completing the building work within the deadline of March 2023 and losing grant funding. These risks are explained further in Appendix B.

Financial and Value for Money Implications:
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12. The solar roof top and decarbonisation projects involve planned capital expenditure, making use of Government grant funding and generating cash savings over the lifetime of the projects. This is summarised in Tables 1 and 2 to illustrate the order of magnitude of costs and savings only.
13. The capital cost of the projects will be met partly by grant funding, part by FM budgets and the remainder by the Greener Futures capital pipeline. It should be noted that the costs to Greener Futures are in line with the envelope allowed for in the 2030 capital pipeline financial model. The costs will be finalised for the full business case.

Table 1: Costs

Programme	Schools	Corporate
Capex for five schools and 11 corporate buildings including low carbon heating systems, building fabric retrofit works and solar rooftops	£3.6m	£7.5m
Funded by:		
Grant funding	£0.95m	£1.6m
SCC funding from FM budget (Land & Property and Greener Futures)	£0.75m	£1.2m
Greener Futures only funding	£1.9m	£4.7m
Borrowing cost on Greener Futures funding (estimate)	£0.7m	£1.7m
Greener Futures funding including borrowing cost	£2.6m	£6.4m

Table 2: Savings

Programme	Schools	Corporate
Savings in fuel costs over 25 years*	£1.63m	£3.92m
Annual savings*	£65,000	£157,000
Payback after borrowing costs (years)**	40	41
Carbon savings annual total	147tCO _{2e}	241tCO _{2e}

*For schools, savings are shared between the school and SCC

**Payback is the total Greener Futures funding plus borrowing costs divided by the annual savings

14. Annex 1 provides a case study illustration of one of the projects in the current PSDS 3a schools programme. This case study is based on the costs received from contractor quotes and the energy savings predicted during design to show how the costs and savings on an individual project arise.

Section 151 Officer Commentary:

15. Significant progress has been made in recent years to improve the Council's financial resilience and the financial management capabilities across the organisation. Whilst this has built a stronger financial base from which to deliver our services, the increased cost of living, global financial uncertainty, high inflation and government policy changes mean we continue to face challenges to our financial position. This requires an increased focus on financial management to protect service delivery, a continuation of the need to be forward looking in the medium term, as well as the delivery of the efficiencies to achieve a balanced budget position each year.
16. In addition to these immediate challenges, the medium-term financial outlook beyond 2023/24 remains uncertain. With no clarity on central government funding in the medium term, our working assumption is that financial resources will continue to be constrained, as they have been for the majority of the past decade. This places an onus on the Council to continue to consider issues of financial sustainability as a priority, in order to ensure the stable provision of services in the medium term.
17. The cost of the projects set out in this paper would be funded from a combination of Government grant and Council borrowing, with the latter expected to be repaid through energy savings and income from solar. Projects would proceed subject to scrutiny and approval of a detailed business case by the Council's Capital Programme Panel, including consideration of risks. As such, the S151 Officer supports the recommended approach.

Legal Implications – Monitoring Officer:

18. Where overarching capital programme strategies are approved by Cabinet, Cabinet may delegate the approval of individual schemes over £1,000,000 to the relevant Cabinet Member(s) and Executive Director(s), subject to scrutiny of business cases by the Cabinet Programme Panel. Individual schemes should initially be reviewed by Capital Programme Panel and then be signed off by the relevant Executive Director(s). Final approval will be via the relevant Cabinet Member(s) via a formal delegated decision sheet which will be published and subject to call in processes.
19. In these cases, the Cabinet Member, Executive Director and Capital Programme Panel will also be responsible for ensuring, in consultation with Strategic Capital Groups, that the overarching strategy approved by Cabinet remains deliverable within the overall programme budget and that key metrics, will be delivered.
20. Individual schemes under the value of £1,000,000 can be approved by the Capital Programme Panel

Equalities and Diversity:

21. These proposed projects are a key part of the Climate Change Delivery Plan approved by Cabinet in October 2021. An Equalities Impact Assessment was conducted for the Delivery Plan. This has been reviewed and is appended (Annex 2) and is found to still be representative of the equality issues relating to this policy.
22. The Delivery Plan was not found to have any negative impacts on any groups of residents. Implementation of the policy to certain projects such as supported

independent living will result in lower energy bills and improved thermal comfort for residents.

Other Implications:

23. The potential implications for the following council priorities and policy areas have been considered. Where the impact is potentially significant a summary of the issues is set out in detail below.

Area assessed:	Direct Implications:
Corporate Parenting/Looked After Children	No direct or significant implications arising from this report.
Safeguarding responsibilities for vulnerable children and adults	No direct or significant implications arising from this report.
Environmental sustainability	The proposed projects are replacing end of life heating systems with much more environmentally sustainable solutions and providing on site power generation.
Compliance against net-zero emissions target and future climate compatibility/resilience	The proposed projects are a fundamental part of delivering the commitment to achieving net zero in Council operations by 2030, by decarbonising SCC buildings and providing solar power generation.
Public Health	No direct or significant implications arising from this report.

What Happens Next:

24. The current activities to progress these projects are:

- Undertaking specialist design of heating systems and solar arrays.
- Specification and tendering of building fabric works.
- Consultation with schools to obtain an agreement in principle for them to purchase electricity via a PPA.

25. As of mid-May, these activities are enabling greater cost certainty for the full business. Following business case approval by CPP, contractors can be appointed to undertake the works.

Report Author:

Helen Butcher, Low Carbon Energy Officer, 07890 894958

Consulted:

Marisa Heath, Cabinet Member for Environment

Natalie Bramhall, Cabinet Member for Property and Waste

David Lewis, Cabinet Member for Finance and Resources

Katie Stewart, Executive Director, Environment transport and Infrastructure

Carolyn McKenzie, Director, Environment

Senior Management Team, Greener Futures, Surrey County Council

Senior Management Team, Land & Property, Surrey County Council

Finance, Procurement and Education teams, Surrey County Council

Appendices:

Appendix A: Buildings included in the decarbonisation and solar rooftops programme

Appendix B: Schools Programme Details

Annexes:

Annex 1: Case study Clifton Hill School

Annex 2: Equality Impact Assessment from the Climate Change Delivery Plan – October 21

Sources/background papers:

[Surrey's Climate Change Strategy 2020](#)

[Greener Futures Climate Change Delivery Plan 2021-2025](#)

Cabinet report, Oct 2021, 190/21 [Surrey's Greener Futures Climate Change Delivery Plan](#)

Cabinet report, Apr 2022, 76/22 [Surrey's Greener Futures Grant Programmes](#)

Appendix A: Buildings included in the decarbonisation and solar rooftops programme

Kingswood Primary School, Lower Kingswood

Beauclerc Infant School, Sunbury

St Peters Medical Centre, Egham

Worplesdon Primary School, Worplesdon

Park Mead School, Cranleigh

Ash Library

Chertsey Library

Shepperton Youth Centre

Woking Adult Learning Centre

Ruth House children's home, Woking

Squirrel Lodge supported living, Woking

Camberley Fire Station

Dorking Fire Station

Farnham Fire Station

Egham Fire Station

Esher Fire Station

Appendix B: PSDS3b Programme Details

This programme enables the decarbonisation of five Surrey maintained schools and 11 corporate buildings and the addition of solar PV at each site. The programme is part funded by Salix and part funded by FM, where costs would have been incurred as part of ongoing maintenance programmes. The remainder of the costs will be met by Greener Futures capital pipeline.

Principles of the Greener Futures Finance Strategy

1. The principles proposed by the Greener Futures Finance Strategy to set the framework for the approval of future decarbonisation and solar rooftop projects are:
 - Make the necessary investment in estate to achieve net zero carbon by 2030
 - Take a service or site-based approach to avoid unnecessary future costs and disruption
 - Take a reduce consumption first approach through improved energy management
 - Prioritise measures that are cost effective in reducing carbon emissions, reducing emissions over offsetting
 - Maximise external funding such as grants
 - For investment in low carbon assets, create a balanced budget across the programme, where income and saving pay back the investment.

2. In particular for schools, which come under Surrey's 2050 targets, the principles for investment include:
 - Maximising external funding on behalf of schools
 - Aiming to self-finance or generate income
 - Delivering co-benefits.

Solar Rooftop Projects

3. Generating power via solar PV panels on the roofs of buildings or ground mounted (such as solar car ports) is a key investment proposed by the Climate Change Delivery Plan. Solar provides carbon emission free energy to the site and reduces fuel costs for electricity which would otherwise have been taken from the grid.
4. This will be the first programme of solar installations made at scale (up to 19 sites) and will inform subsequent programmes to enable cost, quality and time efficiencies in the future.
5. In corporate buildings, the energy saved will be directly realised to save on building energy costs. In the short term, the savings will offset changes in energy costs which arise from electric low carbon heating systems. Long term, the savings will start to pay off installation costs and provide more energy and price security for SCC.
6. Outline design for the solar arrays is underway. These will then be tendered competitively via a specialist framework.
7. In schools, where schools pay their own energy bills, a power purchase agreement will be offered. This allows schools to purchase electricity at a rate lower than a commercial provider (saving them money) while still providing savings revenue to

SCC. The Infrastructure Board and the Children, Families and Lifelong Learning Capital Board and CPP have approved the solar PPA to be piloted in five primary schools. This allows officers to develop the business case for wider roll out of the programme.

8. The power purchase legal agreement has been completed and the framework for setting utility rates with the individual schools is being negotiated.

Decarbonisation Projects

9. Under the PSDS3b SCC was successful in gaining grant funding for a programme of school buildings and a programme of corporate buildings. At all sites, boilers and heating systems were deemed to be nearing the end of their life and the heating systems are proposed to be replaced by air source heat pumps, removing the need to burn gas and making the buildings fit for the future. The projects at each site also include upgrades to the building fabric, such as wall or loft insulation and replacement of windows and lighting, to reduce the heat loss and energy consumption of the buildings.
10. As well as grant funding, some of these measures will be funded by FM forward maintenance, where they have been included in current agreed programmes, as they cover replacement works which would have been required in the next five years. The remainder of the funding will be provided from Greener Futures capital pipeline.
11. The portfolio of projects has been extensively reviewed between SCC's Greener Futures and Land & Property teams for value for money, operational urgency, deliverability, and against the medium-term property retention strategy. As a result, the schools programme will decarbonise five schools. The corporate programme will decarbonise 11 corporate buildings, including five fire stations. Where site have been evaluated for value for money and omitted from this programme, they will still be prioritised for future programmes where the business case condition are more favourable.
12. Grant funding has also been secured for the decarbonisation of Woodhatch Place. However this will be presented as a separate Cabinet paper dues to its size and complexity.
13. Specialist design for the projects is currently underway. To provide best value and best quality from contractors, the building fabric works will be undertaken by the FM framework of contractors, tendered competitively. The heating works will be tendered competitively to specialist heat pump designers via a specialist framework.
14. Early appointment of the FM building contractors also allows them to undertake work in the summer holidays to minimise disruption in schools. In corporate buildings, undertaking work before next winter's heating season is also beneficial and targeted.
15. In order to claim the offered grant funding, the projects need to be substantially completed by the end of March 2024, which is a very tight programme.

Project Outcomes

16. On completion of the decarbonisation projects, the schools and corporate buildings will see significant savings in energy use and in carbon emissions, as well as improved security over future gas prices.
17. As electricity is currently more expensive than gas, the savings in fuel usage may or may not result in overall reductions in current fuel bills at a particular site. (Fuel price differences are expected to lessen, favouring cost savings, but this is not guaranteed.) However, generation of electricity by solar PV will offset any immediate increase in fuel costs due to the electric heating and will significantly reduce the site's electricity consumption from the grid, generating savings.
18. Using the PPA with schools offers them savings on their fuel bills overall while delivering decarbonisation measures that the schools would not otherwise afford.
19. Savings through solar generation on SCC corporate buildings over the next 20 years will be fed back into the Greener Futures capital pipeline to fund future projects.
20. Fuel savings and carbon emission savings will be monitored continuously via remote metering and recorded in SCC building management databases. This will allow analysis of the carbon savings and the overall cost effectiveness of the decarbonisation and solar measures over the next few years for feedback into future projects.

Risk Management and Implications

21. This paper is based on the costs provided by designers, with some contingency applied. There is a risk that prices received from contractors exceed the budgeted costs and change the business case. Once contractor costs are received for the building fabric works and updated estimates for the specialist works are received, the full business case will be presented to CPP for approval.
22. One area of cost risk is in estimating costs incurred for electrical upgrades. These costs take some months to be confirmed by the Distribution Network Operator (DNO). To date, costs have been estimated based on similar projects confirmed this year. However, there is still some risk around the final confirmed cost and its potential effect on the business case if all sites need a significant electrical upgrade.
23. It is most beneficial financially for the schools if they enter into a power purchase agreement to allow installation of the solar PV and then pay for electricity via SCC. A draft PPA is available, however the schools have not yet completed agreement to this route. Without the PPA, the schools may not see the cost savings of the decarbonisation programme.
24. The programme relies on savings generated by reduced gas and electricity usage. There is a risk that the relative prices of utilities change in a way that reduces the predicted savings and extends the payback. This is possible, but the opposite is expected long term, i.e. electricity prices will not rise as fast as gas, making the savings from decarbonisation works more favourable.
25. If the business case cannot be approved in mid-June, then this will delay the appointment of contractors to undertake work over the school summer holidays, during the peak solar generation period, and before the winter heating season. This

will add a risk that the decarbonisation programmes cannot be delivered by the end of the financial year and some or all of the grant funding will be lost.