OUTLINE BUSINESS CASE (OBC)

REPORT		Complete / select		
Report title		PSDS3b Corporate Buildings Programme Business Case for Decarbonisation and Solar Rooftops Rev October 23		
Author(s) *(include position)*		Helen Butcher, Senior Low Carbon Energy Officer		
Portfolio holder (*change/add name if required)*		Cllr Marisa Heath, Cabinet Member for Environment, Natalie Bramhall, Cabinet Member for Property and Waste, David Lewis, Cabinet Member for Finance and Resources		
Executive Director (*change/add name if required)*		Katie Stewart, Exec Director, Environment Transport and Infrastructure, Leigh Whitehouse, Exec Director, Resources		
ENDORSED BY / CONSULTED		**Complete / select**		
Strategy Portfolio Manager		N/A		
PP Member *(AD)*		Glenn Woodhead		
Service(s) impacted			**2. L&P**	**ETI**
Officers consulted	Finance Business Partner		Louise Lawson	Jane Burns
	Service Head/Lead		Brian Boundy	Katie Sargent
	Executive Director		Simon Crowther	Carolyn McKenzie
	Other (project sponsor)		Brian Boundy (Strategic Advisor)	
Consulted Cabinet Member for *(insert portfolio title)*			Natalie Bramhall	Marisa Heath
CPP Member *(L&P Director)*		Simon Crowther, Director, L&P		
PROJECT OVERVIEW		**Complete / select**		
Project Manager		Helen Butcher		
Property/Properties affected *(include address)*		Shepperton Youth Centre Ruth House Residential Home Camberley Fire Station Dorking Fire Station Farnham Fire Station Egham Fire Station Esher Fire Station		
Project Activity # (*If applicable)*		Delivery of decarbonisation projects under Salix funding and installation of solar rooftops		
Key driver		Desired		
Reason(s) for key driver		To meet SCC target to be carbon net zero in operation as an authority by 2030 and as a county by 2050. Also offering greater security of energy costs to SCC		

FINANCE OVERVIEW	Complete / select
Is this a movement from pipeline to budget?	Partly This business cases relates to Greener Futures Capital Pipeline Additional funding comes from PSDS3b grant funding, and L&P Capital Maintenance budget
If Yes, enter name of pipeline scheme	Greener Futures 2030 Capital Pipeline
Is this an approval for spend on existing budget for significant spend?	Yes
If Yes, enter name of budget scheme	As above
Is this a **Delegated Decision** [1] for spend on an existing scheme/programme?	Yes Delegated decision agreed at Cabinet 27 June (Annex A)
If Yes, is the Delegated Decision Sheet attached as an Annex?	No, to follow
Total scheme cost in £m	£3.1m £1.36m Salix grant £1.01m L&P maintenance budget

	£0.71m Greener Futures capital pipeline

GOVERNANCE [2]: click on relevant check box(es) and enter meeting date(s)		
Property Panel: ☒	**Capital Programme Panel**: ☒	**Cabinet**: ☐
Date: L&P Management meeting 12 September 23	Date: 19 September 23	Delegated

[1] **Delegated Decisions:**	[2] **Approvals guidance:**
All Delegated Decisions must have a completed Delegated Decision Sheet attached to this OBC.	• Up to £250k: Strategic Capital Group (i.e. PP) with CPP noted • £250k - £1m: CPP approval • Over £1m: Cabinet approval If the scheme impacts more than two divisions, check with your Finance Business Partner on whether Cabinet approval is required.

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Property Panel assessment:

PP date	PP decision	Comments
	Choose an item.	

FIVE CASE BUSINESS MODEL

1. STRATEGIC CASE

1.1. Purpose of the report and project outline

This report seeks endorsement of the business case to undertake decarbonisation works and add solar rooftops to 7 corporate buildings.

Surrey's Climate Change Strategy commits Surrey County Council to achieve net zero carbon emissions in its building operations by 2030. This will be done by investing in building decarbonisation works in corporate buildings and generating power through solar PV installations.

SCC has applied for, and been successful in being awarded, over £3m in grant funding to support decarbonisation work across its programmes of corporate and school buildings. The Public Sector Decarbonisation Scheme (PSDS) funding is available because each of the sites has an aging heating system which will need to be replaced imminently and should be replaced with efficient low carbon electric heating rather than gas boilers. The conditions of the funding require that the work be undertaken by 31 March 2024.

The decarbonisation works include replacement of aging heating systems and upgrades to the building fabric to improve energy efficiency. Solar PV panels are also proposed for the rooftops to provide low cost energy to sites. For these corporate sites, this is a direct saving to SCC. The outcomes will be significantly reduced carbon emissions and energy use, with greater security of energy cost and supply.

The scope of work at each site is summarised in Appendix A.

How many electoral wards does this scheme affect?	8

1.2. Priority objectives and contribution to the Community vision for Surrey in 2030

Organisation strategy priority area – select all that apply	**Enter "X"**
Growing a sustainable economy so everyone can benefit	X
Tackling health inequality	
Enabling a greener future	X

Organisation strategy priority area – select all that apply	**Enter "X"**
Empowering Communities	

Contribution to the Community vision for Surrey in 2030 – select all that apply	**Enter "X"**
Children and young people are safe and feel safe and confident	
Everyone benefits from education, skills and employment that help them to succeed in life	
Everyone lives healthy, active and fulfilling lives and makes good choices about their wellbeing	
Everyone gets the health and social care support and information they need at the right time and place	
Communities are welcoming and supporting especially of those most in need and people feel able to contribute to community life	
Residents live in clean, safe and green communities where people and organisations embrace their environmental responsibilities	X
Journeys across the county are easier, more predictable and safer	
Businesses thrive in Surrey	
Everyone has a place they can call home with appropriate housing for all	
Well-connected communities with effective infrastructure that grow sustainably	
Transforming as a Council	X

1.3. Recommendations

It is recommended that Property Panel:

	Recommendations
1.	Endorses the business case to draw down from Greener Futures capital pipeline to fund decarbonisation measures and solar rooftops at seven Surrey corporate buildings
2.	Endorses this business case on the basis that responsibility for approval has been delegated from Cabinet to Cabinet Members (Environment) based on recommendation by CPP and Exec directors in accordance with Cabinet approval on 27 June 23
3.	

1.4. Reason(s) for recommendations

It is recommended that the Property Panel approves the project in order to:

- Allow SCC to benefit from Government grant funding to contribute towards the cost heat pumps and energy efficiency measures in the identified buildings, in order to reduce carbon emissions from these buildings.
- Fully fund solar PV on these sites, the renewable energy generated will offset the potential increase in energy expenditure from switching from gas to electric heating.
- Provide valuable experience and lessons learned to be applied in future similar projects.

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 the Council and the schools in scope. The principles of accepting Government grant funding to enable such projects was agreed by Cabinet in April 2022 (Surrey's Greener Futures Grant Programmes). To make use of this year's funding, the projects have a very short time scale for delivery.

The principles of this business case were considered and approved by Cabinet on 27th June. The paper set out the order of magnitude costs, the benefits, and the time constraints of the programme. The Cabinet paper requested that approval of this business case be delegated to CPP to enable the work to be procured and undertaken within the time constraints of the funding.

Since the Cabinet report was taken in June there have been some changes to the scope of the programme. Four buildings in the corporate estate have been removed from the programme. The decision was subsequently made by Land and Property that two of these buildings would not be retained within the Council's portfolio. A third building had it's aging gas boilers replaced with new boilers, rendering it ineligible for the grant funding and the fourth building was due to be included as part of a wider major refurbishment, which is behind schedule and so would not be possible to deliver within the PSDS grant timescales. It was briefly considered that a primary school that was removed from the PSDS3B school programme would be included in the programme, however including the school was detrimental to the financial business case and so it was removed. The buildings that have been removed were not particularly favourable with regards the cost per tonne of carbon saved (which is what the grant funding contribution is based upon) and so the current grant contribution and carbon savings have not been particularly impacted.

A summary of the costs and funding envisaged at the time of the Cabinet paper, compared with the current business case is made below. This shows that the capital expenditure, and the money required from the Greener Futures capital pipeline, are both significantly reduced compared with the previous estimate. This is a direct result of the removal of the four buildings as well as the development the designs with consultants, such that they are greatly improved in efficiency of operation.

In terms of the overall programme, this represents a significant reduction in the capital outlay at this time (a 59% reduction), for a marginal decrease in the grant funding (11% reduction) and the carbon savings (6% reduction). There will be opportunity to swap some of the buildings back into the next Salix programme if appropriate and if the bid is successful.

Programme	**Corporate programme current proposal**	**Cabinet paper estimate**
Scope of programme	7 corporate buildings	11 corporate buildings
Capex for all buildings including low carbon heating systems, building fabric retrofit works and solar rooftops	£3.1m	£7.5m
Funded by:		
Grant funding	£1.36m	£1.6m
SCC funding from FM budget (Land & Property)	£1.01m	£1.2m
Greener Futures only funding	£0.71m	£4.7m

Borrowing cost on Greener Futures funding	£0.92m	£1.7m
Greener Futures funding including borrowing cost	£1.63m	£6.4m

(Note that the borrowing cost for this business case is set at 5%, whereas the borrowing cost at the time of the cabinet paper was only 2.5%.)

1.5. Implications of not undertaking the scheme and options considered

Option	Outline description
Option A	Do nothing.
Option B	Undertake the decarbonisation programme making use of grant funding
Option C	Undertake the decarbonisation programme, making use of grant funding, and add solar PV to the rooftops

For a full description of each option and pros and cons for each, refer to Appendix B.

1.6. Preferred option

Preferred option and key reason(s) why this option is recommended
The preferred option is Option C as it meets the goal of decarbonising the SCC buildings and reducing energy costs, taking advantage of time bound Government funding and reducing future costs.

1.7. Legal implications

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.

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.

Individual schemes under the value of £1,000,000 can be approved by the Capital Programme Panel

1.8. Environmental sustainability

The proposed works mainly encompass conventional FM and building refurbishment work. Installation of solar PV panels on roofs and installation of externally mounted heat pump plant will follow conventional planning policy in terms of noise and visual impact etc. The works are not expected to be adversely affected by environmental conditions locally, nor effect environmental conditions off site.

At all sites, the combination of the heat pumps, insulation measures and the solar PV will result in significant carbon savings from the identified buildings. This scheme will directly contribute towards our 2030 SCC and 2050 county net zero targets.

2. FINANCIAL CASE

2.1. Financial summary

Summary	Complete / select
Total scheme cost in £m	£3.1m
Is the scheme grant funded, or partly grant funded?	Yes
Is Surrey CC funding required?	Yes
If Surrey CC funding is required, will borrowing cost be self-funded?	Yes
Are there revenue savings or income associated on completion?	Yes

2.2. Capital cost profile and funding

Capex and Funding Profile	2022/23 £'m	2023/24 £'m	2024/25 £'m	2025/26 £'m	2026/27 £'m	2027/28 £'m	Total £'m
Total Scheme cost	**0**	**2.3**	**1.6**	**0**	**0**	**0**	**3.9**
Funded by:							
Third Party							**0**
Government Grant		1.36					**1.36**
Revenue Funding							**0**
SCC Funding Required - FM funding		0.31	0.7				**1.01**
SCC Funding Required - GF capital funding		0.3	0.41				**0.71**
Total Funding	**0**	**1.97**	**1.11**	**0**	**0**	**0**	**3.08**

It should be noted that all of the projects in this programme are identified in the MTFS budget for Greener Futures capital pipeline. The combined budget for all of these sites is £3.0m. The cost to SCC under this proposal (FM plus GF cost) is only £1.72m as a result of the grant funding.

Contingency and inflation	Complete / select
What level of contingency has been built into the above table? e.g. 10%	5% Project costs also include internal staff costs
Have you built in estimated inflation into the costs?	No (prices are recent estimates and work start will be immediate) A conservative inflation increase of 4% has been added to L&P contributions which were quoted last year
If Yes, specify rate used and why	

Third party funding details	Third party partner	Government grant
Third party funding from	N/A	Salix PSDS3b
Is the funding secured?		Yes
If TBC, indicate when funding will be secured, e.g. by end Dec 2023		
Is the funding subject to a bid process?		No (bid completed and funding awarded)
If Yes, when does the bid process close, e.g. Dec 2023?		

Leave the table below blank if the scheme is **fully** grant or contribution funded.

Surrey CC borrowing/borrowing cost	Complete / select
Is it expected that borrowing costs will be offset (or partially offset) by income generation or revenue savings?	Partly
If Yes, how will this be covered? e.g. rental income, pricing, fees and charges, service cost savings etc.	Cost savings will be made in utilities for corporate buildings.
All projects with borrowing costs need to be modelled in the "Capital Project Model" and verified by a Finance Business Partner. Has this been completed?	Yes The capital model is included as Annex 2

2.3. Efficiency savings / Value For Money / Revenue implications

(Cumulative)	2022/23 £'m	2023/24 £'m	2024/25 £'m	2025/26 £'m	2026/27 £'m	2027/28 £'m	Total £'m
Gross Savings/income (input positive)		**0**	**0.044**	**0.044**	**0.044**	**0.044**	**0.176**
Revenue Cost (input positive):							
Employees							**0**
Supplies and Services							**0**
Third Party							**0**
Borrowing Costs		0.014	0.04	0.04	0.04	0.04	**0.174**
Other							**0**
Total Costs	**0**	**0.014**	**0.04**	**0.04**	**0.04**	**0.04**	**0.174**
Net Savings or Income / Cost*	**0**	**-0.014**	**0.004**	**0.004**	**0.004**	**0.004**	**0.002**

* Delete as appropriate: Net Savings or Income / Cost

Note that income and savings incorporate savings in utility bills for corporate buildings. The savings are expected to increase over time with more preferential utility rates, but this has not been factored in.

The borrowing costs above are derived from an interest rate of 5%. It is expected that borrowing will not remain at this rate over the years.

The expected annual energy efficiencies associated with implementing the PSDS3b Greener Futures measures across the operational properties in scope, are circa. 1,181,000kWh out of a current consumption of 1,666,000kWh. This equates to a reduction in spend of £43,800 per year (28% of total current energy spend), based on current consumption levels and unit pricing.

L&P endorses the principle that the financial savings from the energy budget, directly attributed to the measures delivered under PSDS3b on the operational properties, can be made available to fund the "Greener Futures capital contribution" to the programme of £0.71m (plus £0.9m total £1.6m).

Demonstrating VFM	**Complete**
How will the scheme contribute to the Council's requirement to demonstrate we are improving VFM in the service provided?	These measures are being installed as the current heating systems in the identified buildings are at end of life and need to be replaced. The grant funding provides a proportion of the capital costs of the works. Furthermore, the fabric insulation measures are required to reduce the energy consumption of the buildings and these alongside the solar PV, which generates electricity, will reduce the operational energy consumption of the buildings, resulting in reduced energy costs. All of the work will be competitively tendered through compliant frameworks.

Revenue Savings / Income	**Complete / select**
Does the table in 2.3 include revenue savings - detail possible: - revenue savings - income generation	The table in 2.3 includes the savings to SCC from utilities cost savings
Is there expected to be continuous estimated net revenue savings per year after completion, compared to the current 'as is' situation?	Yes
If so, what is the annual ongoing estimate of the saving	£43,800 from savings on utilities
Which Directorate / Service will take on the savings?	SCC will benefit from the savings.
Is there a saving to the General Fund?	No
If Yes, has the saving been put forward to be included in revenue budget proposals?	

Revenue Costs – Temporary Incurred During Project	**Complete / select**
Does the table in 2.3 include temporary incremental revenue costs during the project?	No
If so, what is the total estimated cost over the project life?	
Have the above incremental costs been budgeted for?	

Revenue Costs – Temporary Incurred During Project	Complete / select
Which Directorate / Service will take on the budget for these costs?	
Will there be an arrangement for a virement (partial or full) to cover these costs from another Service?	

Revenue Costs – Ongoing Post Completion	Complete / select
Does the table in 2.3 include an incremental continuous net cost per year after completion, compared to the current 'as is' situation?	No Incremental revenue costs due to maintenance of equipment are expected to be the same as current costs or lower
If Yes, what is the annual ongoing estimate of the cost	
Have the above incremental costs been budgeted for?	Yes in current maintenance allowances
Which Directorate / Service will take on the budget for these costs?	L&P FM
Is there a proposal for a permanent virement if another Service is benefiting from the project?	No
Specify if the additional costs will be funded from:	N/A
Will this require additional growth, has this been captured within Service growth pressures?	N/A

2.4. Key deliverable metric

Key deliverable metric	
Annual savings in fuel costs	£43,800
Carbon savings annual total	225tCO_2e

The table below compares the predicted savings in fuel and carbon emissions for this proposed programme compared with that presented in the Cabinet paper.

Programme	Corporate business plan proposed	Cabinet paper estimate
Savings in fuel costs over 25 years*	£1.1m	£3.92m
Annual savings*	£43,800	£157,000
Payback after borrowing costs (years)**	39	41
Carbon savings annual total	225tCO_2e	241tCO_2e

*For corporate sites, the savings are direct utilities savings.
**Payback is the total Greener Futures funding plus borrowing costs divided by the annual savings

Note fuel savings have reduced since the Cabinet paper as a result of taking a more cautious approach to the likely generation of electricity generated and used at each site,

following further design development. This will be explored further to see whether savings can be further increased once the specialist contractor has been appointed.

Financial savings in fuel are expected to increase over time as the differentials between gas and electricity prices change over time to be more favourable, supporting the energy transition. This future improvement in savings has not been taken into account as it is not guaranteed.

The borrowing rate used for the Cabinet paper was 2.5%, as advised at the time. The current borrowing rate assumed is 5%. This has made a significant increase to the borrowing cost and the resulting payback. Over time, it is expected that borrowing costs will return to a slightly lower level and revenue savings will increase, reducing the actual payback period.

The carbon savings remain very positive, as this is mostly driven by the gas saved by removing fossil fuel heating systems. Efficiencies in the design, as a result of design development have meant that the same carbon savings are predicted to be gained now with lower capital outlay.

3. SOCIO-ECONOMIC CASE

3.1. Social / non-financial benefits of undertaking the scheme

	Social / non-financial economic benefits to the Council and local residents
1.	In alignment with SCC Climate Change Strategy.
2.	Provides experience and lays foundations for further decarbonisation work across corporate buildings
3.	Solar PV and heat pump structures will be visible to the local residents and businesses and allows SCC to set an example on decarbonisation and demonstrate the actions that we are taking.
4.	
5.	

3.2. Outcomes the project will deliver

	Outcomes
1.	Measurable carbon reductions achieved which will contribute towards our 2030 net zero target (corporate estate)
2.	Positive return on investment from the solar installations which will result in reduced energy utility costs to the Council
3.	Energy utility savings for services when budgets are particularly stretched
4.	
5.	

3.3. Benefit summary

Decarbonisation Projects

1. 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.

2. 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.

3. 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. Other sites, where grant funding was awarded but where the balance of carbon savings to economic viability was not favourable, have been removed from this current programme. These removed sites will be reconsidered for a future programme if a different business model can be found.

4. Specialist design for all sites has been completed. To provide best value and best quality from contractors, a mixture of procurement routes is proposed. At some sites, 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. At other sites, the work will be let via a single main contractor.

5. Early appointment of the FM building contractors also allows them to start work on site early, spending the grant funding within the deadlines.

Solar Rooftop Projects

6. 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.

7. This will be a significant programme of solar installations covering eight corporate buildings and will inform subsequent programmes to enable cost, quality and time efficiencies in the future.

8. Outline design for the solar arrays has been undertaken. These will then be tendered competitively via a specialist framework.

Project Outcomes

9. On completion of the decarbonisation projects, the services will see significant savings in energy use and in carbon emissions, as well as improved security over future gas prices.

10. 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.

11. 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.

	Benefit description	How will success be measured? What are the Key Performance Indicators if applicable (KPIs)?	Benefit realisation date	Who is responsible for assessing benefit realisation? E.g. service	Is baseline data required*
1.	Energy reduction at corporate estate sites	kWh reduction per annum (in gas and electricity)	Annually in April	Net zero 2030 team	Yes
2.					

* Description of baseline data needed	
•	
1.	Energy consumption data for the identified sites – this data is available through energy team (mostly from on site energy meters)

4. COMMERCIAL CASE

4.1. Risk management

	Risk description	RAG	Mitigation action/strategy
1.	There is a risk that prices received from contractors exceed the budgeted costs and change the business case.		Costs have been revised recently with designer and QS estimates of fully designed systems. Contingency is included. All works will be competitively tendered.
2.	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).		Costs for major upgrades have been estimated based on similar projects confirmed this year, so are realistic in terms of magnitude at any site. The number of sites which will require an upgrade has been estimated on the high side for caution
3.	Savings in energy use may not be realised		The programme replies 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

	Risk description	RAG	Mitigation action/strategy
			decarbonisation works more favourable.
4.	Loss of Salix grant money if it cannot be spent before 31 March 24		This business case has to be approved in September, in order not to delay the appointment of contractors and the start of work on site within the funding deadline. The works have been planned to maximise the work that can be done early and use the grant funding, against works that can be undertaken at a later date
5.	Solar generation is limited and therefore limits the savings which help to fund the works		Reviews of roofs and their suitability for solar PV so far have been only visual. If a structural survey identifies that a roof is not suitable or requires extensive upgrade then the savings potential will be reduced. Surveys will be the first activity of an employed contractor and suitability will be confirmed before any PV orders placed.
6.			

Cost risks	Complete / select
Are there any costs that could change, and render the proposal unaffordable?	Yes
If Yes, provide detail	DNO costs are outside SCC control and are very high per site. However a conservative estimate has been made thus far. Structural surveys of roofs may identify that extra work is required to enable installation of PVs. If solar generation from PV is much reduced then this significantly affects the savings achievable
Have you made any provision for dealing with the financing of any time or cost overruns?	The project has a short programme dictated by the grant funding deadline. This will minimise the cost and time over run potential.

4.2. Commercial case

Cost risks	Complete / select
Outline the required products/ services	The outline scope of work for each site is provided in Annex A
Can the proposal be effectively delivered through a workable commercial deal(s)?	Yes
If Yes, describe how you will leverage the best available deal	Building fabric works will be procured where possible through the current FM frameworks, providing tried and tests best value. Heat pump and heating works and the solar installations will each be procured via frameworks

Cost risks	Complete / select
	of specialist suppliers to obtain best quality installations without attracting additional main contractor costs.
What procurement does the proposal require?	Procurement via frameworks
Give a brief outline of the procurement strategy. (not required to be included here, but you should consider the routes to market options, including what is possible under regulations)	As above
Is there a market to trade this service or product being purchased capital expenditure being incurred?	N/A
Are there any personnel implications? E.g. TUPE.	No
If Yes, give a brief outline.	

5. MANAGEMENT CASE

5.1. Delivery team

	Proposal role	Responsible	Department	Position
1.	Sponsor	Brian Boundy	Land & Property	FM Strategic Advisor
2.	Senior Responsible Officer- Commissioning	Melania Tarquino	Greener Futures	Strategic Energy Lead
3.	Senior Responsible Officer - Delivery	Stuart Clayton	Land & Property	Building Management Manager
4.	Programme Manager Commissioning	Jared Sneath	Greener Futures	Net Zero & Decarbonisation Programme Manager
5.	Programme (and Contract) Manager - Delivery	Ade Durojaiye	Land & Property	Senior Programme Manager
6.	Project Manager - Delivery	A number of L&P PM's across the programme	Land & Property	
7.	Procurement Lead	Rob Davis	Procurement	Strategic Procurement Manager

Resource availability	Complete / select
Is feasibility work required?	No, completed
What are the resources required to build up the proposal?	Proposals complete
Are these resources available?	N/A

Resource availability	Complete / select
Where will the resources be sourced from?	Currently FMR team and Pellings, then transfer to Mace
Are Line Managers aware that their staff capacity will be required?	Yes
Will the use of internal resource stop delivery of other Surrey CC outcomes/ priorities?	N/A
Are external resources required to deliver the scheme?	Yes as above
Is the Procurement process in place to procure external resource?	Yes

5.2. Timeframes

Key milestones	Start DD MMM YYYY	Complete DD MMM YYYY
Tender and award contract for heat pump and fabric works	15 Nov 2023	1 Dec 2023
Fabric works on site	5 Jan 2024	30 Mar 2024
Tender and award contract for solar works	5 Jan 2024	5 Feb 2024
Solar works on site	30 Mar 2024	30 June 2024
Heat pumps works on site	1 Mar 2024	1 Oct 2024
Completion	30 Oct 2024	

Asset life and Componentisation	Complete / select
Estimated asset life.	20 year minimum
Will the asset have two or more components which will have different useful economic lives?	Yes, however this business case has been simplified by considering an average asset life of 20 years for all the components
If yes, please provide details,	*ASHP – 35 Years* *PV Panels – 35 Years* *Inverters – 10- 15 Years* *Insulation measures – 50 years* *LED lights – 20 years*

Appendices

Appendix A: Scope of Work

Appendix B: Consideration of Options

Annexes

Annex 1: Cabinet paper - Governance Proposal for Solar Rooftops and Decarbonisation Projects Part 1

Annex 2: Capital Model

Appendix A Scopes of Work

Shepperton Youth Centre, Shepperton
A 5.4kWp array of PV panels will be installed on the flat areas of the roof, with the appropriate access, structure, inverters and metering. The lighting will be upgraded to low energy LED and improved controls. The existing end of life boilers will be replaced with new air source heat pumps serving the space heating and hot water demand for the building. The work includes the associated civil, mechanical and electrical works, upgraded controls and buffer tank. Some of the existing pipe distribution systems and most of the radiators will be replaced. The incoming electrical supply will be upgraded to cover the heat pump electrical demand.
Ruth House, Woking
A 32.4kWp array of PV panels will be installed on the south facing area of the roof, with the appropriate support, inverters and metering. The existing end of life boilers will be replaced with new air source heat pumps serving the space heating and connecting to the existing hot water system. The work includes the associated civil, mechanical and electrical works, upgraded controls and buffer tank. The existing water filled radiator systems will be removed and new radiators installed within the radiator covers. New pipework will connect the heat pumps into the existing distribution systems. The incoming electrical supply will be upgraded to cover the heat pump electrical demand.
Camberley Fire Station, Camberley
A 9kWp array of PV panels will be installed on the flat areas of the roof, with the appropriate access, structure, inverters and metering. Additional thermal insulation will be added to the uninsulated roof spaces and to the cavity walls. The lighting throughout will be upgraded to low energy LED and improved controls. The existing end of life boilers will be replaced with new air source heat pumps serving the space heating and hot water demand of the building. The work includes the associated civil, mechanical and electrical works, upgraded controls and buffer tank. The existing water filled radiator systems will be removed and new radiators installed. The incoming electrical supply will be upgraded to cover the heat pump electrical demand.
Dorking Fire Station, Dorking
A 7.2kWp array of PV panels will be installed on the flat areas of the roof, with the appropriate access, structure, inverters and metering.

Additional thermal insulation will be added to the cavity walls. Existing single glazed windows will be replaced with double glazing.

The lighting throughout will be upgraded to low energy LED and improved controls.

The existing end of life boilers will be replaced with new air source heat pumps serving the space heating and hot water demand of the main building. The work includes the associated civil, mechanical and electrical works, upgraded controls and buffer tank. The existing water filled radiator systems will be removed and new radiators installed.

The incoming electrical supply will be upgraded to cover the heat pump electrical demand with allowance made for a new sub station.

Farnham Fire Station, Farnham

A 19.8kWp array of PV panels will be installed on the flat areas of the roof, with the appropriate access, structure, inverters and metering.

Additional thermal insulation will be added to the uninsulated roof spaces and to the cavity walls. Existing single glazed windows will be replaced with double glazing.

The existing end of life boilers and the un-used CHP will be replaced with new air source heat pumps serving the space heating and hot water demand of the main buildings. The work includes the associated civil, mechanical and electrical works, upgraded controls and buffer tank. The existing water filled radiator systems will be removed and new radiators installed.

The incoming electrical supply will be upgraded to cover the heat pump electrical demand with allowance made for a new sub station.

Egham Fire Station, Egham

A 9.9kWp array of PV panels will be installed on the flat areas of the roof, with the appropriate access, structure, inverters and metering.

Additional thermal insulation will be added to the uninsulated roof spaces. Existing single glazing will be replaced with double glazing.

The existing end of life boilers will be replaced with new air source heat pumps serving the space heating and hot water demand of the main buildings. The work includes the associated civil, mechanical and electrical works, upgraded controls and buffer tank. The existing water filled radiator systems will be removed and new radiators installed.

The incoming electrical supply will be upgraded to cover the heat pump electrical demand.

Esher Fire Station, Esher

A 9.9kWp array of PV panels will be installed on the flat areas of the roof, with the appropriate access, structure, inverters and metering.

Additional thermal insulation will be added to the uninsulated roof spaces.

The lighting throughout will be upgraded to low energy LED and improved controls.

The existing end of life boilers will be replaced with new air source heat pumps serving the space heating and hot water demand of the main buildings. The work includes the

associated civil, mechanical and electrical works, upgraded controls and buffer tank. The existing water filled radiator systems will be removed and new radiators installed. The incoming electrical supply will be upgraded to cover the heat pump electrical demand.

Appendix B

Consideration of Options

Option	Outline description
Option A	**Do nothing** **Positives** - Save spending money from the capital pipeline. However the pipeline is set up to spend money on projects of this kind **Negatives** - SCC must return over £2m from the PSDS3b grant to Salix. This might harm SCC's relationship with Salix and/or reduce their trust towards SCC. - Financial benefits not realised – Council will continue to be impacted by rising energy costs. - Carbon emissions not reduced in line with 2030 target. - L&P must spend at least £1m to replace end-of-life gas boilers for a like for like replacement
Option B	**Install decarbonisation measures** **Positives** - SCC can benefit from grant funding to contribute towards cost of installing decarbonisation measures - Significant carbon reduction is achieved in relation to SCC 2030 net zero target - Savings are made in energy bills and future energy security **Negatives** - Switching from gas heating to electrically powered heat pumps (without solar to offset) may potentially result in energy cost increases due to the higher unit cost for electricity. - Capital expenditure from pipeline with long payback period
Option C	**Install decarbonisation measures and install solar rooftops** **Positives** - SCC can benefit from grant funding to contribute towards cost of installing decarbonisation measures - Significant carbon reduction is achieved in relation to SCC 2030 net zero target - Savings are made in energy bills and future energy security - Revenue impact of switching from gas to electrically powered heat pumps is negated by installation of solar PV at sites and enables better security of energy supply and cost - Investment in solar in the county **Negatives** - Capital expenditure from pipeline with long (but lesser) payback period

Option A - No nothing

If the decarbonisation projects are not undertaken, the buildings will still require new heating systems in the next couple of years. Surrey County Council does not want to install any new gas boilers and has made a commitment to low carbon heating systems. If the decarbonisation project is not undertaken now, then any replacement of the heating system will have to be made by FM without the advantage of the Salix Government funded grant.

The projects include work to the building fabric and to lighting to improve energy efficiency and reduce energy consumption. If the projects do not go ahead, SCC will continue to pay for the higher energy consumption at these sites. If the solar rooftops do not go ahead then SCC will not be able to take advantage of lower and more predictable energy costs.

Option B - Undertake the decarbonisation programme making use of grant funding

This option will enable these sites to have a new heating system and improved energy efficiency measures, reducing FM liability for these measures in the short term. SCC will be able to make use of Government grant funding for part of the capital cost. The running costs of the new systems are expected to be similar to those of the existing systems.

Option C - Undertake the decarbonisation programme making use of grant funding and install solar PV to rooftops.

This option will enable the buildings to have a new heating system and improved energy efficiency measures and make use of Government grants. It will also enable SCC to see reduced energy costs and more stable energy liabilities. The savings in energy costs will reduce the running costs.

DO NOT DELETE. LEAVE BLANK FOR CPP ASSESSMENT ONLY:

Capital Programme Panel Assessment:

	Y/N
Does the proposed scheme demonstrate Value for Money?	
Does the proposed scheme meet the Council's Corporate Ambitions?	
Is the proposed scheme affordable?	
Does the proposed scheme support the Financial Resilience Plan?	

CPP Recommendation to the Asset Strategy Board:

Recommendation:	**Reason for recommendation:**
Based on the strength of the business case and Value for Money, CPP recommends that the proposed project **is / is not recommended** for inclusion in the Capital Programme	

Post Implementation Review

Post implementation review required?	**Y/N**
If YES, date of review to CPP	