

CAPITAL INVESTMENT BUSINESS CASE

Heat Decarbonisation Programme, Phase B.1 – Harewood House



EXECUTIVE SUMMARY

The Executive Summary is a short summary of the Business Case and should be the last section you complete, this will enable you to extract or only the key facts from relevant sections i.e. 'project on a page'. The summary is a 'snapshot' of the business case which will need to tell the story and sell the proposal.

Phase B of the PCC Decarbonisation Programme will commence with Harewood House (Ph B.1).

A condition survey and feasibility study determined that the boilers are 10 years old and heating is distributed through air handing units and radiators. The gas consumption is estimated to emit over 16t carbon per year.

A Salix grant was successful to part fund:

- Replace the gas space heating boilers with air source heat pumps (ASHPs)
- Upgrade the electricity capacity to accommodate the heat pump demand
- Install a rooftop solar
- Replace all fluorescent and sodium lamps with LED lighting
- Increase the loft insulation

The grant is available in FY2025/26 with a PCC CEIF contribution covering the period 2024/25 to 2025/26, which is about 76% of the total cost as follows:

- *Tender documents – employer's requirements and reference design - £71,271*
- Project Delivery – Procurement, Legal, PM, TA, EA - £80,000
- Design & Build Contract - £231,256
- Contingency - £75,826
- **Design & Build Total - £387,082**

TOTAL PROJECT COST: £458,353

The project will realise a financial benefit of £3.5k in year 1 and reduce 320t of carbon over the life of the measures.

SECTION I: PROJECT DETAIL

Project Value (indicate capital or revenue)	Value: £458,353 (Capital)	Contingency (show as £ and % of project value)	£75,826 (17% of total)
Programme		Directorate	Place - SP&I
Portfolio Holder	Cllr Tom Briars-Delve	Service Director	Paul Barnard
Senior Responsible Officer (client)	Ann Thorp	Project Manager	Strategic projects tbc and Alastair Gets
Address and Post Code	Harewood House, Plympton, PL7 2AS	Ward	Plympton St Mary

Current Situation: *(Provide a brief, concise paragraph outlining the current situation and explain the current business need, problem, opportunity or change of circumstances that needs to be resolved)*

PCC Decarbonisation Programme – Phase A, covering 8 sites is approaching completion. We are now moving to Phase B Part 1 (Ph B.1), which is a single site: Harewood House. This is to continue with decarbonising PCC's corporate estate to meet our net zero by 2030 ambitions.

Harewood House is in Plympton and is a community leisure centre that was rebuilt in 1985 following a fire.

A condition survey & feasibility study was conducted by Hydrock under Gleeds management in October 2023.

Harewood House has two gas boilers that are 10 years old. The building's heating is distributed through air handling units equipped with coils to the hall, and additional heating to all other rooms are provided via single and double-panel radiators dispersed throughout the facility. The site has two point-of-use electric systems for Domestic Hot Water (DHW).

The gas consumption is within the top 20 sites still on primary gas for heating. It is estimated that the site space heating emits just over 16 tonnes of CO₂e per year.

The building is fully double glazed and may have light loft insulation.

The lighting is mainly fluorescent and sodium lamps with about 10% of the lighting LEDs.

The building is supplied by three phase grid electricity and consumes about 41 MWh/y. There is no renewable generation on site.

Proposal: *(Provide a brief, concise paragraph outlining your scheme and explain how the business proposal will address the current situation above or take advantage of the business opportunity) and (What would happen if we didn't proceed with this scheme?)*

It is proposed that the recommendations of the feasibility study be followed to reduce carbon emissions by 16 tonnes per year and protect PCC against unknown gas price and availability fluctuations in the future.

An application to Salix Public Sector Decarbonisation Scheme (PSDS) was submitted on 7 November to part grant fund the following measures:

- Replace the gas space heating boilers with air source heat pumps (ASHPs)
- Upgrade the electricity capacity to accommodate the heat pump demand
- Install a solar electricity system on the roof (to offset the increase electricity consumption of the ASHPs with a zero carbon source)
- Replace all fluorescent and sodium lamps with LED lighting
- Increase the loft insulation to improve heating efficiency

A PSDS grant was successful and is for spend during FY 2025/26 while the PCC Climate Emergency Investment Fund (CEIF) contribution will cover the period 2024/25 as well as 2025/26.

The PSDS grant has a limit of £325 per tonne of carbon saved over the life of the different measures, as calculated by the Salix tool. This resulted in a successful grant contribution of £108,353 to the project cost. This is 24% of the total cost and requires a PCC to cover the remaining £350,000 of the total cost or 76%.

The expected costs are as follows:

Initial Revenue to be capitalised:

- Tender documents – employer’s requirements and reference design - £71,271

Capital

- Project Delivery – Procurement, Legal, PM, TA, EA - £80,000
- Design & Build Contract - £231,256
- Contingency - £75,826
- **Design & Build Total - £387,082**

TOTAL PROJECT COST: £458,353

Why is this your preferred option: *(Provide a brief explanation why this option is preferred) and (Explain why this is a good capital investment and how this would be an advantage for the Council) and (explain how the preferred option is the right balance between the risks and benefits identified below).*

Harewood House suited the Salix grant eligibility and is in the top 20 carbon emitters of buildings remaining on gas heating. The main objective is contributing to PCC’s net zero commitment but there is also a small financial saving each year.

Option Analysis: *(Provide an analysis of ‘other’ options which were considered and discounted, the options considered must be a ‘do Nothing’ and ‘do minimum’ and ‘viable alternative’ options. A SWOT – Strength, Benefit, Opportunity, Threat analysis could be attached as an appendix).*

Do Nothing Option

List Benefits:	Spend CEIF contribution elsewhere
List Risk / Issues:	Miss opportunity of Salix grant contribution of 24% of total cost (47% of design and build contract)
Cost:	£3.5k in year one, increasing by RPI and elec tariffs
Why did you discount this option	Miss grant and delay net zero contribution

Do Minimum Option

	Replace gas boilers with like-for-like boilers with no energy efficiency measures or renewable energy install.
List Benefits:	Smaller capital costs
List Risk / Issues:	The issue is that we will continue to emit around 16 tonnes of carbon per year, we are then not decarbonising our estate and may miss our ambition for net-zero by 2030. Also lose the financial savings.
Cost:	£3.5k in year one, increasing each year by RPI and elec tariffs
Why did you discount this option	Miss grant and delay net zero contribution

Viable Alternative Option

	Just install a heat pump with no energy efficiency measures or renewable energy install.
List Benefits:	This eliminates gas and so reduces the carbon emissions
List Risk / Issues:	With no on-site generation or energy efficiency measures there will be increased energy costs to heat the building.
Cost:	£1.5k in year one, increasing each year by RPI and elec tariffs
Why did you discount this option	Not a proper decarbonisation effort and an increased cost

Strategic Case:

Which Corporate Plan priorities does this project deliver?	Green investment, jobs, skills and better education; Spending money wisely.
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Milestones and Date:		
Contract Award Date	Start On Site Date	Completion Date
Main M&E contract is expected to be awarded by end April 2025 (with design contract awarded in early August 2024)	Early July 2025 (main contract)	Late January 2026

SECTION 2: PROJECT RISK, OUTCOMES AND BENEFITS

Risk Register: The Risk Register/Risk Log is a master document created during the early stages of a project. It includes information about each identified risk, level of risk, who owns it and what measures are in place to mitigate the risks (cut and paste more boxes if required).

Potential Risks Identified		Likelihood	Impact	Overall Rating
Risk	Limited availability of heat pumps due to high market demand thereby increasing supplier lead times jeopardising the heat-on date and completion of the project with the target timescale.	Medium	High	High
Mitigation	Regular contact will be maintained with potential suppliers: to understand their anticipated constraints and current lead times, to share PCC details of the planned delivery and to enable the Council to determine the most appropriate contractors/suppliers for the tender.	Low	Medium	Medium
Calculated risk value in £ (Extent of financial risk)	£300/mo	Risk Owner	PCC Project Team supported by Technical Assistant	
Risk	Spend deadlines set by grant funder are unrealistic, risking that the not all the grant money can be spent	High	High	High
Mitigation	A one-year planning and design phase prior to receiving the grant has been chosen. This will help to ensure PCC and the contractors are ready.	Medium	Medium	Medium
Calculated risk value in £ (Extent of financial risk)	£22k	Risk Owner	PCC Project Team	
Risk	Exceeding Site Electrical Demand / Capacity. Liaison with National Grid required.	Medium	Medium	Medium
Mitigation	Fees have been included for this engagement and site electrical works. Initial checks by the feasibility team show that there is capacity.	Low	Medium	Low
Calculated risk value in £ (Extent of financial risk)	£3k	Risk Owner	PCC Project Team	
Risk	Commissioning will be in the heating season so there is a risk that the building's heating will be disrupted.	High	Medium	High
Mitigation	Temporary electric heating will be made available.	Low	Low	Low
Calculated risk value in £ (Extent of financial risk)	£500	Risk Owner	PCC Project Team	
Risk	Heating energy costs will increase as a result of displacing gas with electricity. This will need to be factored into PCC operating budget.	Medium	Medium	Medium

Mitigation	Decarbonisation in line with PCC Corporate Carbon Reduction plan. Continued work to improve efficiency and reduce burden. Maintenance costs will be less.	Low	Medium	Low
Calculated risk value in £ (Extent of financial risk)	£0	Risk Owner	PCC Project Team supported by PCC Finance Team	

Outcomes and Benefits	
<p>List the outcomes and benefits expected from this project. (An outcome is the result of the change derived from using the project's deliverables. This section should describe the anticipated outcome) (A benefit is the measurable improvement resulting from an outcome that is perceived as an advantage. Benefits are the expected value to be delivered by the project, measurable whenever possible)</p>	
Financial outcomes and benefits:	Non-financial outcomes and benefits:
<p>The financial outcome is: No reliance on gas or maintenance of old gas boilers, however higher energy costs (gas is currently cheaper than electricity in the UK), this is offset by solar PV.</p> <p>The financial benefit is: Total, including all measures, is estimated at about £4k per year of gas and electricity savings/costs plus solar avoided grid electricity. The avoided boiler maintenance minus the ASHP maintenance is £540/y. The result is £3.5k net benefit in year 1.</p>	<p>Non-financial outcomes are improved air quality around boilers due to the reduction in gas use and contribution to the climate emergency by the reduction in carbon emissions.</p> <p>The Non-financial benefit to PCC's carbon net zero by 2030 commitment is 16 tonnes of CO₂e reduced per year or about 333 tonnes of CO₂e reduced over the life of the measures.</p>

Low Carbon	
What is the anticipated impact of the proposal on carbon emissions	16 tonnes of CO ₂ e reduced per year or about 333 tonnes of CO ₂ e reduced over the life of the different measures.
How does it contribute to the Council becoming Carbon neutral by 2030	This building is in the top 20 highest emitters of carbon for the remaining gas heated buildings, so these measures contribute greatly to carbon neutrality. The project directly supports the Climate Emergency Declaration and Climate Emergency Action Plan.
Have you engaged with Procurement Service?	Yes
Procurement route options considered for goods, services or works	<p>This is a medium value and medium risk procurement which falls below the GPA threshold for Works contracts.</p> <p>Sourcing Options Although this requirement falls below the regulated threshold, it will be delivered in line the best procurement practice, the Council Contracts Standing Orders and Procurement Regulation (Procurement Act 2023). The following sourcing options have been considered:</p> <p><u>Option 1 - Request for Quotation (RFQ)</u></p> <p>This compliant process enables the Council to achieve value for money, support Small and Medium Enterprises (SMEs) and local economy.</p>

	<p>In line with the Council’s Contract Standing Orders the Procurement will seek at least 3 written quotations, from local supplier market, where possible. Suppliers that the Council thinks may be capable of delivering the contract in its entirety will be invited to participate in the Request for Quotation, which is a one-stage process. The contract will be awarded to the most advantageous tender (MAT) criteria.</p> <p><u>Option 2 - Framework route</u> Undertaking further competition under an existing framework. Due to the niche and specialised nature of this requirement no suitable framework has been deemed suitable. Furthermore, national frameworks do not tend to include SMEs nor local suppliers, which if used would limit opportunities to the local economy. For those reasons, the Framework route has been discounted.</p>
<p>Procurements Recommended route.</p>	<p>It is recommended that Option 1 – Request for Quotation is used in sourcing this opportunity. The Council will carry out a PCC’s own sourcing process, which is compliant with the Council Contracts Standing Orders. The Council will invite 3 to 5 suppliers to bid for this opportunity using an appropriate tender portal.</p> <p>Should a change in circumstances occur and the recommended procurement route cannot be undertaken or no longer represents best value for the Council any subsequent procurement route undertaken will be in accordance with the Council’s Contract Standing Orders and Procurement Law.</p> <p>The sourcing process will be supported with an appropriate set of terms and conditions. Advice of external consultants will be considered. Where required, external legal support should be sourced to advise on the detail of the contract.</p> <p>Management of the appointed contractors and consultants will either be through the PCC in-house staff, or an external resource will be appointed and dedicated to deliver this project.</p>
<p>Who is your Procurement Lead?</p>	<p>Gosia Anthony</p>
<p>Is this business case a purchase of a commercial property No</p>	
<p>If yes then provide evidence to show that it is not ‘primarily for yield’</p>	
<p>Which Members have you engaged with and how have they been consulted (<i>including the Leader, Portfolio Holders and Ward Members</i>)</p>	<p>Cllr Tom Briars-Delve briefed by presentation on 5 September 2023 and approved the Project Mandate on 5 October 2023, with updates on 23 July 2024</p>

SECTION 4: FINANCIAL ASSESSMENT

FINANCIAL ASSESSMENT: *In this section the robustness of the proposals should be set out in financial terms. The Project Manager will need to work closely with the capital and revenue finance teams to ensure that these sections demonstrate the affordability of the proposals to the Council as a whole. Exact amounts only throughout the paper - not to be rounded.*

CAPITAL COSTS AND FINANCING

Breakdown of project costs including fees surveys and contingency	Prev. Yr.	23/24	24/25	25/26	26/27	27/28	Future Yrs.	Total
	£	£	£	£	£	£	£	£
Reference Design and Tender docs			54,300	16,971				71,271
Project delivery			10,000	70,000				80,000
Design & Build Contract				231,256				231,256
Contingency			18,000	57,826				75,826
TOTAL capital spend			82,300	376,053				458,353

Provide details of proposed funding: Funding to match with Project Value								
Breakdown of proposed funding	Prev. Yr.	23/24	24/25	25/26	26/27	27/28	Fut Yrs.	Total
	£	£	£	£	£	£	£	£
CEIF (revenue to be capitalised)			54,300	16,971				71,271
CEIF (capital)			28,000	250,729				278,729
Salix PSDS Grant (applied for)				108,353				108,353
TOTAL			82,300	376,053				458,353

Which external funding sources been explored	Salix PSDS grant application was submitted 7 November 2023, and we were notified of success in April 2024.
Are there any bidding constraints and/or any restrictions or conditions attached to your funding	There is a spend period and deadline on the Salix funding: to be spent in financial year 2025/26.
Tax and VAT implications	The project will relate to the generation of VAT-exempt income in the form of the hiring of rooms or premises at Harewood House. The VAT incurred on the capital and any associated revenue costs will need to be included therefore in the Council's partial exemption calculation. It is likely, however, that the amount of VAT concerned will be able to be accommodated within the 'de minimis' limit and there will be no adverse impact on the Council's overall partial exemption position. The VAT incurred on the cost of the project will be fully recoverable

Tax and VAT reviewed by	Sarah Scott
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REVENUE COSTS AND IMPLICATIONS

Cost of Developing the Capital Project (To be incurred at risk to Service area)

Total Cost of developing the project	£22,433.00
Revenue cost code for the development costs	2256/3015/C4185
Revenue costs incurred for developing the project are to be included in the capital total, some of the expenditure could be capitalised if it meets the criteria	No
Budget Managers Name	Giles Perritt

Ongoing Revenue Implications for Service Area

	Prev. Yr. £	23/24 £	24/25 £	25/26 £	26/27 £	27/28 £	Final Yrs. £
Service area revenue cost							
Energy (increase in elec for ASHP)					3,266	3,364	5,727
Maintenance ASHP					1,234	1,271	2,163
Loan repayment (terms agreed with Treasury Management)	0	0	0	0	0	0	0
Total Revenue Cost (A)					4,500	4,635	7,890
Service area revenue benefits/savings							
Gas Saving (boiler replaced)					2,277	2,345	3,993
Annual electricity saving (LED and Solar PV)					5,080	5,232	8,907
Maintenance saving (boiler replaced)					692	712	1,213
Total Revenue Income (B)					8,049	8,289	14,113
Service area net (benefit) cost (B-A)					3,549	3,654	6,223
Has the revenue cost been budgeted for or would this make a revenue pressure	No revenue pressure, modest financial saving (large carbon saving)						
Which cost centre would the revenue pressure be shown	N/A		Has this been reviewed by the budget manager			Y	
Name of budget manager	Giles Perritt						
Loan value	£	Interest Rate	%	Term Years	Annual Repayment	£	
Revenue code for annual repayments	N/A						
Service area or corporate borrowing	N/A						

Revenue implications reviewed by	Rebecca Trott
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Version Control: *(The version control table must be updated and signed off each time a change is made to the document to provide an audit trail for the revision and update of draft and final versions)*


Author of Business Case	Date	Document Version	Reviewed By	Date
Alastair Gets	18/12/2023	v 1.0	Lynn Walter	18/01/2024
Alastair Gets	08/02/2024	v 2.0	Lynn Walter	12/02/2024
Alastair Gets	18/07/2024	v 3.0	Lynn Walter	25/07/2024

SECTION 6: RECOMMENDATION AND ENDORSEMENT

Recommended Decision

It is recommended that the Leader of the Council:

- Approves the Business Case
- Allocates **£458,353** for the project into the Capital Programme funded by Salix PSDS grant and CEIF
- Authorises the procurement process
- Delegates the award of the contract to Service Director for SP&I where they would otherwise not have authority to do-so under the Scheme of Delegation

Councillor Tudor Evans OBE (Leader of the Council)		Paul Barnard, Service Director for SP&I	
Either email dated:	14/08/2024	Either email dated:	date
Or signed:		Signed:	
			
Date:		Date: 05.08.2024	