

City of London Corporation Committee Report

Committees: Resource Allocation Sub – for decision Projects and Procurement Sub – for information	Dates: 09 September 2025 30 September 2025
Subject: Climate Action Strategy (CAS) – Optimisation for Sites Connected to Citigen Unique Project Identifier: PV Project ID 12469	Gateway 3/4: Options Appraisal (Regular)
Report of: City Surveyor Report Author: Colm Dowling	For Decision
<h1>PUBLIC</h1>	

1. Status update	<p>Project Description:</p> <p>This project is for the upgrade of internal heating and cooling circuits of City of London owned sites and buildings connected to the Citigen district heating/cooling network. This project aims to reduce energy consumption and therefore carbon emissions and operating costs within the framework of the Climate Action Strategy (CAS) Operational Properties Programme. 50% of the project will be funded by CAS, this paper seeks approval for the remaining 50% to be funded from s106 Carbon Offset Fund. By improving return temperatures to the Citigen Network, improved efficiency will result in greater operational reliability across the network.</p> <ul style="list-style-type: none"> • The buildings and sites in the scope of this project are: <ul style="list-style-type: none"> ○ Guildhall North Wing and West Wing ○ Guildhall Yard East ○ Barbican Arts Centre ○ GSMD Silk St ○ GSMD Milton Court ○ GSMD Sundial Court (Student Accommodation) <p>The project management and design teams have been appointed. They are proceeding with splitting the works into packages based on site, and heating or cooling system. This enables a phased approach to completing the works in the off</p>
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	<p>season of each system. The first works package will be the cooling system at the GSMD Milton Court.</p> <p>RAG Status: Green</p> <p>Risk Status: Medium</p> <p>Total Estimated Cost of Project (excluding risk): £3,525,838</p> <p>Change in Total Estimated Cost of Project (excluding risk): No change</p> <p>Spend to Date: £340,904</p> <p>This has been drawn down for the procurement of the design and project management, as well as for early asbestos surveying, validation of current installation, programme management and project management services.</p> <p>Costed Risk Provision Utilised: none</p> <p>Slippage:</p> <p>The previously discussed application to the Heat Network Efficiency Scheme (HNES) for partial funding was unsuccessful. Instead, the project will be funded by a combination of Section 106 Carbon Offset contributions, and from the Climate Action Strategy capital budget.</p> <p>The start date for the works was previously July 2025, however this is now November 2025. The completion date remains the same.</p>
<p>2. Next steps and requested decisions</p>	<p>Next Gateway:</p> <p>Gateway 5: Authority to Start Work.</p> <p>Note that approval will be sought via delegated authority from the Climate Action Strategy SRO, Damian Nussbaum, for works packages under £1million, in accordance with the CAS finance process.</p> <p>Next Steps:</p> <ul style="list-style-type: none"> • Split the construction works into separate packages to be delivered between November 2025 and October 2026. • Allocate the project for Section 106 Carbon Offsetting Contribution (50% of the works cost). • Draw down funding from the Climate Action Strategy budget (remaining 50% of the works, fees and CRP). <p>The breakdown of funding is as follows:</p> <ul style="list-style-type: none"> • Section 106 - Works: £1,451,721 • Climate Action Strategy - Works & Fees (excluding risk): £ 2,074,117 • Climate Action Strategy - CRP: £ 919,494 <p>For information:</p>

	<ol style="list-style-type: none"> 1. The total estimated cost of the project is £3,525,838 (excluding risk). 2. The total estimated cost of the project is £4,445,332 (including risk) 3. The costed risk budget of £919,449 to cover potential budget variations attributable to unforeseen variations, enabling works, site disruption, inflation fluctuations and asbestos removal. 4. This budget will not materialise at this stage and so is not requested at this stage. <p>Requested Decisions:</p> <ol style="list-style-type: none"> 1. Approve use of Section 106 Carbon Offset funds as a replacement of the HNES funding which had been outlined in Gateway 2 (Option 1 as set out below). <p>There is no change to the costs, and remains the same as the sum approved in the Gateway 2 paper.</p> <p>Following the initial design process and discussion with contractors, the inflation of costs may have exceeded what was allowed for in the project works budget. Therefore, we anticipate to draw from the CRP to cover increased construction costs.</p>
5. Resource requirements to reach next Gateway	<p>For option 1, this will be requested via delegated authority from the Climate Action Strategy SRO.</p> <p>Costed Risk Provision requested for this Gateway: None</p>
6. Overview of project options	<p>This Gateway 3 4 is for decision to change the funding strategy of the project since the Heat Networks Efficiency Scheme (HNES) grant funding was not successful.</p> <p>The Option 1 funding mix would be a combination of existing Climate Action Strategy Funding already allocated, and Section 106 Carbon Offset Contributions funding as an alternative to the HNES funding. This paper outlines this strategy, with the intention of securing final funding approval during GW5, once the project has been defined further.</p> <p>In addition, the works will be split into packages according to the building/site and either heating, cooling or controls system. The proposed packages are as follows:</p> <ul style="list-style-type: none"> • Barbican Arts Centre - Cooling • GSMD Milton Court - Cooling • GSMD Sundial Court - Heating • GSMD Silk Street - Heating • GSMD Milton Court - Heating • Barbican Arts Centre - Heating

	<ul style="list-style-type: none"> • Barbican Arts Centre - Controls • Guildhall Main - Heating • Guildhall GYE – Heating <p>Note the packages are subject to change as the works progress and lead-in of plant items are known.</p> <p>Option 2 would be to reduce the project works cost in proportion to the funding available from the Climate Action Strategy. It is anticipated that we would only be able to draw down funds for the following packages:</p> <ul style="list-style-type: none"> • Barbican Arts Centre - Cooling • GSMD Milton Court - Cooling • Barbican Arts Centre - Heating • Barbican Arts Centre - Controls
7. Recommended option	Option 1; We will continue with the project with combined funding from the Section 106 Carbon Offset contributions and Climate Action Strategy capital budget, and split the works into packages.
8. Risk	<p>The Costed Risk Provision has not changed and remains the same as in the Gateway 2. The Costed Risk Provision follows normal construction allowances for scope variations, enabling works, disruption, inflation and Asbestos.</p> <p>Costed Risk Provision Utilised at Last Gateway: none utilised</p> <p>Change in Costed Risk: no change</p> <p>We are anticipating using some of the CRP, however this is anticipated to be approved under delegated authority with the Climate Action Strategy SRO. The total CRP for the project is £919,494.</p> <p>Further information available in the Risk Register (Appendix 2) and Options Appraisal.</p>
9. Procurement approach	<p>The procurement route will be determined for each individual package, but will likely be sourced from Measured Term Contracts, open tender, or other appropriate procurement frameworks. This will be determined following the design stage and quantity surveying of packages.</p> <p>Primary Route:</p> <ul style="list-style-type: none"> • Minor Works Measured Term Contracts (MWMTC), with Sykes delivering the first two cooling sites. <p>Alternative Options (to manage tight timelines):</p> <ul style="list-style-type: none"> • Instructing Facilities Management Contractors for packages that cannot be delivered by Sykes. • Procuring a contractor via the South East Consortium (SEC) Framework, which is available to the City of London Corporation. And looking at existing framework contractors.

Appendices and background papers

Appendix 1	Project Coversheet
Appendix 2	Risk Register (for recommended option)
Background Paper	P&R Report Carbon Offsetting FINAL 15-11-2018

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Options Appraisal Matrix

<i>Option Summary</i>	<i>Option 1</i>	<i>Option 2</i>
1. Brief description of option	<p>This option proceeds with the project, however with updated funding from Section 106 Carbon Offset Contributions instead of HNES grant.</p> <p>Following the Gateway 2 approval to procure a design team for the construction works, we have procured Northsouth Consultants as project managers and HDR Consulting Ltd as engineering designers.</p> <p>The scope has not changed from the feasibility and includes a series of mechanical works to reduce recirculation, replacement of heat exchangers, insulation, pump replacements, controls modifications, replacement of control valves, maintenance / replacement of instrumentation.</p> <p>As a portfolio, this project has an overall carbon saving of 300 tCO₂/annum with an energy cost saving of £345,000 per annum at a project cost of £4,445,332 (including risk). The average payback of the portfolio is therefore 13 years. The overall cost per ton of carbon saved is £15,000 /tCO₂.</p> <p>Energy cost savings will return to the Build Back Better fund on behalf of City Fund and City Estate. A monitoring and verification process will be conducted in order to confirm savings after each project has completed in order to determine these returns. The savings are estimated to be as follows:</p> <ul style="list-style-type: none"> • Barbican: £140,000 per annum 	<p>Reduce the project works cost in proportion to the funding available from the Climate Action Strategy.</p> <p>There is no unallocated budget left in the Operational and Housing capital budget. Therefore, the Climate Action Strategy team would need to reallocate funding from other workstreams into the Operational Properties and Housing workstream capital budget.</p> <p>The scope of the project could be reduced to match the available funding from the Climate Action Strategy. Namely these would be the projects with the least Carbon savings below:</p> <ul style="list-style-type: none"> • GSMD Silk Street – Heating • GSMD Sundial Court – Heating • Guildhall GYE – heating • GSMD Milton Court – Cooling • Guildhall main – Heating

Option Summary	Option 1	Option 2
	<ul style="list-style-type: none"> • GSMD: £120,000 per annum • Guildhall: £50,000 per annum <p>The project will also improve return temperatures of Low Temperature Hot Water (LTHW) and Chilled Water (CHW) back to the Citigen network. This will help to improve efficiencies of the network now and into the future as heat generation equipment is transitioned away from combustion based sources and towards heat pump based sources.</p> <p>The works will be spread over the next 12 months to cover a full heating season and a full cooling season. The works for the Chilled circuits will start in November 2025 and be completed by March 2026. The works for the heating circuits will start in May 2026 and finish is September 2026. Therefore, there will be no disruption to the service of heating and cooling to our buildings.</p> <p>To spread the works across the sites and buildings, the works will be procured in different packages based on site and heating or cooling system and controls packages. This is proposed to be as follows:</p>	<p>The works cost could be reduced to £1,969,575. Any further reduction in scope would limit the Climate Action Strategy's carbon emissions target.</p>

Option Summary		Option 1					Option 2	
		Building / Site	System	Programme dates	Works Costs (excluding risk)	Carbon savings (tCO2)		
		Barbican Arts Centre	Cooling	November 25 to March 26	£516,292	81		
		GSMD Milton Court	Cooling	November 25 to March 26	£262,350	17		
		GSMD Sundial Court	Heating	May 26 to September 26	£117,218	7		
		GSMD Silk Street	Heating	May 26 to September 26	£257,074	12		
		GSMD Milton Court	Heating	May 26 to September 26	£145,711	81		
		Barbican Arts Centre	Heating	May 26 to September 26	£923,170	32		
		Barbican Arts Centre	Controls	May 26 to September 26	£535,297	19		

Option Summary	Option 1						Option 2
	Guildhall Main	Heating	May 26 to September 26	£ 439,154	52		
	Guildhall GYE	Heating	May 26 to September 26	£ 329,571	3		
	Total			£ 3,525,838	304		
	<p>Note this split is not finalised and is subject to change based on discussions/negotiations with contractors undertaking the works.</p> <p>These packages may change in value depending on the outcome of the design stage, however all packages will be within the funding envelope of the project set out at GW2.</p>						
2. Scope and exclusions	<p>This option progresses with the full project as approved with the Gateway 2 paper. This options outlines how the HNES funding will be replaced by Section 106 Carbon Offset contributions, and how the team proposes to procure the works.</p> <p>No items have been excluded.</p>						This option reduces the scope to match the available Climate Action Strategy funding.
Project Planning							
3. Programme and key dates	<p>Overall project: On-site works completed and commissioned by March 2026 and final project completion by end of March 2027.</p> <p>Oct 2024: GW2 approval.</p> <p>Nov 2024: Grant funding application window – not successful</p> <p>May 2025: Design/PM/QS consultant appointed</p>						<p>Overall project: On-site works completed and commissioned by March 2026 and final project completion by end of March 2027.</p> <p>Oct 2024: GW2 approval.</p>

Option Summary	Option 1	Option 2						
	September 2025: GW3 4 paper October 2025: Allocating Section 106 Carbon Offset contributions or Reallocating Climate Action Strategy Operational Properties & Housing capital budget November 2025: GW5 Authority to start work (via delegated authority) November 2025: Start on site – cooling systems May 2026: Start on site – heating systems Sept 2026: Practical completion on all sites Sept 2027: GW6 report / final project completion	Nov 2024: Grant funding application window – not successful May 2025: Design/PM/QS consultant appointed September 2025: GW3 4 paper October 2025: Reallocating Climate Action Strategy Operational Properties & Housing capital budget. November 2025: GW5 Authority to start work (via delegated authority) November 2025: Start on site – cooling systems May 2026: Start on site – heating systems Sept 2026: Practical completion on all sites Sept 2027: GW6 report						
4. Risk implications	Overall project option risk: Medium <table><tr><th>Risk</th><th>Impact</th></tr><tr><td>Additional surveys needed at design stage</td><td>Could delay design completion and approvals.</td></tr><tr><td>Compliance with the Building Safety Act</td><td>Non-compliance could result in legal/regulatory issues, redesign, or stop-work notices.</td></tr></table>		Risk	Impact	Additional surveys needed at design stage	Could delay design completion and approvals.	Compliance with the Building Safety Act	Non-compliance could result in legal/regulatory issues, redesign, or stop-work notices.
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Additional surveys needed at design stage	Could delay design completion and approvals.							
Compliance with the Building Safety Act	Non-compliance could result in legal/regulatory issues, redesign, or stop-work notices.							

Option Summary	Option 1	Option 2
	<p>Variations in design / increased scope</p> <p>Delayed construction</p> <p>Asbestos removal</p> <p>Out of hours working to minimise site disruption</p> <p>Inflation</p> <p><i>Summarise the main risks and their impact for each option.</i></p> <p>Further information available within the Risk Register (Appendix 2). <i>(keep this text for the recommended option only)</i></p> <p>Same for both options.</p>	<p>May increase costs and extend timelines.</p> <p>Could push back practical completion and commissioning dates.</p> <p>Specialist removal may introduce delays and additional costs.</p> <p>Increases operational complexity and potential cost.</p> <p>Higher material or labour costs may impact the project budget.</p>
<p>5. Stakeholders and consultees</p>	<p>Local co-ordination has been carried out with the Barbican Renewal team to discuss elements of the work to be carried out, in order to ensure a lower risk of abortive works. These works do not negatively impact planned upgrades to HVAC services in 2025, and the Renewal project is aware of potential works in other areas. Significant works on secondary heating/cooling distribution circuits as part of the Renewal project are unlikely to occur until 2029/2030, if approved. As this occurs after the 'Net Zero' deadline of FY26/27 and HNES grant funding is time limited, it is recommended that this project proceeds with the intent of obtaining grant funding, and further design work is carried out during the next stage to minimise any abortive works.</p> <p>Local co-ordination with Guildhall School of Music & Drama (GSMD) has been carried out and is expected to have low/no impact on existing and upcoming projects/CWP. A separate GW2 paper</p>	

Option Summary	Option 1	Option 2
	<p>“Guildhall School of Music & Drama Heating, Cooling & Ventilation Replacement” approved at RASC on 30th Nov 2023 will have a complimentary effect on this project.</p> <p>Consultation with Guildhall complex has been carried out and it is expected to have low/no impact on existing and upcoming projects/CWP. Further consultation will be carried out during the design stage in order to ensure that changes to heating systems in this building are amenable to the site’s operations, whilst aiming to achieve CAS aims and objectives.</p>	
6. Benefits of option	<ul style="list-style-type: none"> • Energy cost savings of over £300 k/year. • Carbon emission savings of c.300 tCO₂e/yr. • Improve the performance of the heating and cooling systems at the sites. • Lower return temperatures for heating and higher return temperatures for cooling, resulting in better CO₂ emissions and reliability performance from the Citigen network. • Replacement of equipment and higher reliability of supplies from the Citigen network. • Lower energy and maintenance costs for the City of London Corporation. • Each project achieves high levels of stakeholder and user satisfaction. All projects will be developed jointly with local FM teams and asset managers. • Energy and carbon emission savings to contribute towards City of London Corporation targets. • Most of the projects include the replacement/ refurbishment of existing building services which would 	<ul style="list-style-type: none"> • Energy cost savings of c.£231-£345 k/year. • Carbon emission savings of c.213 - 300 tCO₂e/yr. • Project stays within the currently approved funding limits. • Same as option 1, however savings are reduced.

Option Summary	Option 1	Option 2
	currently require cyclical replacement, and hence investment, within 5-10 years.	
7. Disbenefits of option	<ul style="list-style-type: none"> Disruption to site due to works. Works require a significant amount of coordination between contractor and BMS contractor and FM. 	<ul style="list-style-type: none"> Missed opportunity to maximise carbon savings. Disruption to site due to works. Works require a significant amount of coordination between contractor and BMS contractor and FM.
Resource Implications		
8. Total estimated cost	<p>Total estimated cost (excluding risk): £3,535,838</p> <p>We are confident the project can be delivered for this cost. The scope can be reduced to match the total cost.</p> <p>Total estimated cost: (including risk): £ 4,445,332</p>	<p>Total estimated cost (excluding risk): £2,251,224 to £3,535,838</p> <p>We are confident the project can be delivered for this cost. The scope can be reduced to match the total cost.</p> <p>Total estimated cost: (including risk): £2,838,793 to £ 4,445,332</p>
9. Funding strategy	This option is proposed to be funded by both Climate Action Strategy and Section 106 Carbon Offset contributions. 50% of the works cost will be funded from Section 106 Carbon Offset	This option is proposed to be funded solely by the Climate Action Strategy.

Option Summary	Option 1	Option 2
	<p>Contributions. The remaining works costs, fees and CRP will be drawn down from Climate Action Strategy.</p> <p>Section 106 Carbon - works: £1,451,721 Climate Action Strategy - works & fees (excluding risk): £2,074,117 Climate Action Strategy CRP: £ 919,494</p> <p>The funding application to Heat Network Efficiency Scheme was unsuccessful. This is because our works related to the City of London's building heating and cooling systems, and not the heat networks.</p>	<p>Climate Action Strategy - works & fees (excluding risk): £ 3,525,838 Climate Action Strategy CRP: £ 919,494</p>
10. Investment appraisal	None	
11. Estimated capital value/return	<p>The project has an estimated payback of 13 years of total costs with risk. The financial savings is estimated to be over £300,000 per year with current energy prices.</p>	<p>The project has an estimated payback of 13 years of total costs with risk. The financial savings is estimated to be over £200,000 per year with current energy prices.</p>
12. Ongoing revenue implications	In the case of centrally funded sites, financial savings that are made will accrue back to the City Corporation as a contribution to the Build Back Better Fund held in City Fund or City Estate as	

Option Summary	Option 1	Option 2
	<p>appropriate. Therefore, departmental local risk budgets will be adjusted accordingly. A monitoring and verification process will be conducted and reported on at GW6 to confirm the energy savings.</p> <p>The financial performance of the proposed projects (paybacks) has been aligned to the assets management plan, ensuring that the paybacks are within the period of occupation / operation of the buildings.</p>	
13. Affordability	Funded by Climate Action Strategy and Section 106 Carbon offsetting contributions.	Funded by the Climate Action Strategy solely.
14. Legal implications	None	
15. Corporate property implications	None	
16. Traffic implications	None	
17. Sustainability and energy implications	The project will provide a significant energy and carbon savings achieving the City Surveyor's targets on energy reduction.	
18. IS implications	N/A	

<i>Option Summary</i>	<i>Option 1</i>	<i>Option 2</i>
19. Equality Impact Assessment	N/A	
20. Data Protection Impact Assessment	N/A	
21. Recommendation	Recommended	Not recommended