

<b>Committees:</b> Policy and Resources Committee – for decision Operational Property and Projects Sub Committee – for decision	<b>Dates:</b> 15th Dec 2022 16th Jan 2023
Subject: Climate Action Strategy (CAS) – Capital Delivery Programme for Operational Buildings  <b>Unique Project Identifier:</b> 12372	<b>Gateway 2 Project Proposal:</b> Regular
<b>Report of:</b> City Surveyor  <b>Report Author:</b> Rodrigo Matabuena	<b>For Decision</b>
<h1 style="text-align: center;">PUBLIC</h1>	

## Recommendations

1. Next steps and requested decisions	<p><b>Project Description:</b> This programme covers a portfolio of capital interventions to be delivered to decarbonise the most carbon intensive City of London operational buildings, in line with the Climate Action Strategy net zero targets.</p> <p><b>Next Gateway:</b> Gateway 3-5 or Gateway 3/4</p> <p>Next Steps:</p> <p>To produce Investment Grade Proposals for the projects following the proposed timeline in Appendix 1.</p> <p>Requested Decisions:</p> <ol style="list-style-type: none"> <li>Note that these proposals relate to an element of central funding previously allocated in principle to capital interventions under the Climate Action Strategy.</li> </ol>
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	<ol style="list-style-type: none"> <li>2. Note the total estimated cost of the programme is <b>£5,311,867</b> (excluding risk).</li> <li>3. Note the costed risk budget of <b>£1,274,847</b> to cover potential budget variations attributable to unforeseen inflation fluctuations, potential delays due supply chain issues and asbestos removal. This budget will not be materialised at this stage and is not requested at this stage.</li> <li>4. That a budget of <b>£250,000</b> from the above Climate Action provisions be approved to progress the work to Gateway stages 3 – 5 (£105,000 City Cash, £143,000 City Fund, £2,000 Bridge House Estates)</li> <li>5. Note that for expediency, Policy and Resources Committee members are asked to approve the drawdown of the £248,000 in lieu of the Resource Allocations Sub-Committee (noting £2k is within the remit of the BHE Board).</li> </ol>
2. Resource requirements to reach next Gateway	<p>To reach the next Gateway stage, some projects will require further technical surveys or enabling works (such as planning applications or design studies). A budget of £250,000 is requested to support the development of this portfolio to Investment level.</p> <p>Individual Gateway stage 3 – 5 papers will be produced per each individual projects or building.</p>
3. Governance arrangements	<p>All projects will be reported collectively to the following:</p> <ul style="list-style-type: none"> <li>• SRO: Damian Nussbaum, Director of Economic Development</li> <li>• Corporate Projects Board</li> <li>• Policy and Resources Committee</li> <li>• BHE Board as relevant</li> </ul> <p>However, decision on the GW 3 – 5 papers is expected be obtained by the SRO, under the CAS delegated authority, for projects under £1m.</p> <p>Capital Funding has previously been approved in principle by RASC, but for expediency, P&amp;R Members are requested to approve the drawdown of the £248k required to reach the next gateway (Note BHE Board have approved relevant amounts in principle) .</p> <p>Given the relatively low complexity of some of the projects, in some instances, the GW stages 3 – 5 will be combined. However, capital intensive projects will follow the GW 3/4 and GW5 stages.</p>

## Project Summary

4. Context	<p>4.1 In January 2020, the City of London Corporation (City Corporation) set out on a fast-paced, cross-City Corporation journey to develop an ambitious Climate Action Strategy (CAS).</p> <p>4.2 The City Corporation assessed the carbon footprint across both its own varied property holdings and the Square Mile, to develop a plan to achieve Net Zero by 2027 for scope 1 and 2 emissions and Net Zero by 2040 across the investment portfolio and supply chains.</p> <p>4.3 The CAS marked the start of a new and transformative programme of action. On 8th October 2020, the CAS was adopted by the Court of Common Council for the City Corporation. Fifteen costed project delivery areas have since been consolidated into ten project plans.</p> <p>4.4 This paper refers to the “NZ1 Corporate Property and Housing Landlord Areas” Project Plan. The year 2 plan and the tasks associated with it has been approved at the Policy and Resources Committee on 5<sup>th</sup> May 2022.</p>
5. Brief description of project	<p>5.1 City of London have an existing Call-off-Contract with Vital Energi under GLA’s Retrofit Accelerator for Workplaces Framework (the Energy Performance Contract), for which Vital Energi (the Service Provider) will provide a range of services including High Level Assessments, Investment Grade Proposals and Works Contracts to carry out Energy Efficiency Measures under an Energy Performance Guarantee.</p> <p>5.2 Vital Energi have produced High Level Assessments (HLA) of the top fifteen highest energy consuming sites within the Operational Property Portfolio (see Appendix 1). Each HLA contains recommended projects to reduce consumption (and therefore carbon) with a savings guarantee and a cost estimate. Projects include LED lighting, insulation and draught proofing, ventilation fan upgrades, pump and valve replacements, Building Management System (BMS) optimisation, Solar Photovoltaics (PV) panels, improvements to Heating, Ventilation and Air Conditioning (HVAC) systems, heat pumps, swimming pool covers and humidification systems. Please refer to Annex 1 for further details.</p>

- 5.3 As a portfolio, these projects have an overall carbon saving of 520 tCO<sub>2</sub>/annum with an energy cost saving of £550,000 per annum at a project cost of £5,338,615 (excluding risk). The average payback of the portfolio is therefore 10.1 years. The overall cost per ton of carbon saved is £10,250 /tCO<sub>2</sub>. Energy cost savings will return to the Build Back Better fund on behalf of City Fund and City's Cash, with savings relating to BHE remaining with their unrestricted income funds. A monitoring and verification process will be conducted in order to confirm savings after each project has completed in order to determine these returns.
- 5.4 The portfolio consists of a mixture of projects which provide carbon and cost savings. The projects have been selected considering the following:
- Investment vs Carbon / Cost reduction (cost effectiveness)
  - Complexity of implementation: including access to the site, disruption to the site's operation, periods of availability for works.
  - Timeframe for delivery
  - Interdependency with other projects
- 5.5 This paper sets out the list of proposed projects for future spend of CAS Y2 and Y3 capital funds.
- 5.6 If approved, the next step will be to proceed to individual "sub-project" GW3-5 papers primarily on a site-by-site basis or combined into projects covering multiple sites if deemed beneficial. The GW3-5 papers will be submitted in the usual way to the Climate Action Strategy Delegated Authority, to request funding for budgets up to £1m. Following approval individual GW3-5 paper, the project will proceed to construction under the Call-Off Contract. It will also be required to commission additional technical surveys to develop the GW3 – 5 papers. Each GW3-5 paper will be appended an overall programme overview to ensure implications to the overall programme are understood while making decisions.
- 5.7 There may be specific scenarios where the project should be procured outside of the existing Call-Off Contract (such as a specialist contractor being required, or tighter control of the project required). This will be explored in more detail during the preparation of the GW3-5 paper and the procurement route identified as necessary.

	<p>5.8 The total value of all sub-projects will not exceed the value set out in the initial GW2 paper. As GW3-5 papers are produced for each sub-project, there may be changes to their budgets as well as some projects which do not progress further. Bi-annual progress reports will be presented to reflect said changes.</p> <p>5.9 The list of projects may change because of numerous factors, such as a change in circumstances at sites, planning conditions, or more beneficial projects identified as a result of further surveys. Such changes will also be updated in the progress reports.</p> <p>5.10 The portfolio of projects is expected to be delivered over the financial years 2022/23 – 2024/25. The budget expenditure timeline is highlighted in Appendix 1.4.</p> <p>5.11 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's Cash as appropriate, and will remain within the unrestricted income funds for BHE. 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>5.12 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> <p>5.13 In the case of locally funded sites, financial savings accrue back to the respective site's operational budget. The appropriate project funding source will be sought in each specific case.</p> <p>5.14 The estimated costs and savings set out in this paper will be regularly reviewed and reported throughout the project. A post-project verification exercise will be carried out, aided by the additional metering equipment and software upgrades included within the project.</p> <p>5.15 A budget of £250,000 will be required to perform additional technical surveys or works such as: heat metering, asbestos surveys, planning advice, etc. This budget has been estimated as a 5% of the capital costs of the proposed works.</p>
6. Consequences if project not approved	<p>6.1 Missed opportunity to reduce the carbon emissions of the City of London Corporation by 520 tCO<sub>2</sub>e/yr which represents a significant proportion of the reduction</p>

	<p>requirements to meet the City of London's net zero carbon target.</p> <p>6.2 Missed opportunity to reduce the energy costs to the City of London Corporation by £550,000 /yr.</p> <p>6.3 Most of the projects include the replacement/refurbishment of existing building services which would currently require cyclical replacement, and hence investment, within 5-10 years.</p>
7. SMART project objectives	<p>7.1 Each project achieves specified performance and design parameters, within the framework of the Energy Performance contract with energy and financial savings guarantee.</p> <p>7.2 Each project achieves high levels of stakeholder and user satisfaction. All projects will be developed jointly with local FM teams and asset managers.</p> <p>7.3 Minimise disruption to the site's occupants and services.</p> <p>7.4 Energy cost savings of c.£550k/year.</p> <p>7.5 Carbon emission savings of c.520 tCO<sub>2</sub>e/yr.</p>
8. Key benefits	<p>8.1 Compliant and high-quality building services which satisfies needs.</p> <p>8.2 Lower energy and maintenance costs for the City of London Corporation.</p> <p>8.3 Energy and carbon emission savings to contribute towards City of London Corporation targets.</p>
9. Project category	5. Other priority developments
10. Project priority	A. Essential
11. Notable exclusions	None

12. Overview of options				
	<b>Option</b>	<b>Carbon Savings</b>	<b>Cost Savings</b>	<b>Additional benefits</b>
	Option 1: Not doing anything	Will not deliver any additional carbon savings. Only savings from the electrical grid decarbonisation can be expected.	Will not deliver any additional cost savings to the CoL  This will lead to a higher exposure to energy costs volatility.	It will not require any capital expenditure from the Climate Action Fund. No need to incur in monitoring and evaluating costs.
	Option 2: Develop individual projects as and when maintenance or cyclical replacement is carried out on each site	Some carbon savings will be achieved but some opportunities will be missed. This approach will lead to a slow and limited response when planning carbon-saving interventions.	Similarly, some energy and financial savings will be achieved but not maximised.  Difficult to forecast the total financial savings.	Intermediate level of investment required with potential overlaps with existing maintenance budgets.
	Option 3: Develop the proposed programme	Highest level of carbon emission reductions in the region of 520 tCO <sub>2</sub> /year	Will generate savings in the region of £550,000 per annum	Would allow the CAS budget to be forecasted and planned in the near and mid-term.
	<p>Conclusion:</p> <p>The Option 3 is the only option that will deliver on the Climate Action targets and will also generate significant and predictable cost savings to the Corporation.</p> <p>Inaction is not supportive of the Climate Action Strategy.</p> <p>Relying on performing interventions as and when cyclical works are carried out will be delivering Business as Usual. This will deliver certain benefits but will not be enough to achieve the CAS objectives.</p>			

## Project Planning

13. Delivery period and key dates	<p>Overall project:</p> <p>Sept 2021: Surveys commenced</p> <p>July 2022: Surveys completed</p> <p>Dec 2022: GW2 approval for overall project programme</p> <p>Jan 2023: First GW3-5 Paper for individual projects, with other GW3-5 papers submitted on an ongoing basis. Preparation of Investment Grade Proposals to support GW3-5 papers.</p> <p>Mar 2023: Commencement of construction of individual projects</p> <p>Mar 2025: Completion of construction</p>		
14. Risk implications	<p>Overall project risk: Medium</p> <p>14.1 A costed Risk Register is presented in Appendix 2, covering changes in scope and potential rectifications, additional professional fees and surveys, potential management of asbestos, as well as provision to allow for large inflation rates experienced in the current climate.</p> <p>14.2 The costed risk will not be materialised at this stage and has been presented for information purposes.</p> <p>14.3 A more accurate cost estimation for individual projects, and hence a detailed estimation of the costed risk post-mitigation, will be produced at the next Gateway stage, informed by further project development work undertaken by the requested consultancy resource.</p>		
15. Stakeholders and consultees	Chamberlains: Finance	John James, Sonia Virdee	
	Chamberlains: Procurement	Darren Judge	
	Comptroller	Philip Mirabelli	
	Corporate Property	Pete Collinson, Matt Baker, Richard Chamberlain, Jonathan Cooper, Paul Friend, Peter Young	

	Property specific stakeholders	See Appendix 1.	
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## Resource Implications

16. Total estimated cost	Likely cost range (excluding risk): £5,000,000 - £5,312,000 Likely cost range (including risk): £6,000,000 - £6,587,000																						
17. Funding strategy	Choose 1: Partial funding confirmed	Choose 1: Internal - Funded wholly by City's own resource	<table border="1"> <thead> <tr> <th></th><th>Total project cost - Excluding risk (£)</th><th>Total costed Risk (£)</th><th>Total Project cost (inc. risk)</th></tr> </thead> <tbody> <tr> <td>City's Cash</td><td>£2,221,609.50</td><td>£533,186.00</td><td>£2,754,794.00</td></tr> <tr> <td>City Fund</td><td>£3,043,612.50</td><td>£730,466.00</td><td>£3,774,078.00</td></tr> <tr> <td>Bridge House Estates</td><td>£46,645.00</td><td>£11,195.00</td><td>£57,839.00</td></tr> <tr> <td><b>TOTAL</b></td><td><b>£5,311,867.00</b></td><td><b>£1,274,847.00</b></td><td><b>£6,586,711.00</b></td></tr> </tbody> </table> <p>Financial savings where this relates to City's Cash and City Fund will return to the Build Back Better Fund. Those for BHE will remain within unrestricted income funds.</p>		Total project cost - Excluding risk (£)	Total costed Risk (£)	Total Project cost (inc. risk)	City's Cash	£2,221,609.50	£533,186.00	£2,754,794.00	City Fund	£3,043,612.50	£730,466.00	£3,774,078.00	Bridge House Estates	£46,645.00	£11,195.00	£57,839.00	<b>TOTAL</b>	<b>£5,311,867.00</b>	<b>£1,274,847.00</b>	<b>£6,586,711.00</b>
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18. Investment appraisal	<p>18.1 The Chamberlain have requested that financial savings that are made will accrue back to the City as a contribution to the Build Back Better Fund held in City Fund or City's Cash. As a consequent departmental local risk budgets will be adjusted accordingly. Savings for BHE will remain within the unrestricted income funds of the charity.</p> <p>18.2 The majority of projects are for the upgrade and replacement of existing building services with more energy efficient equivalents, such as LED lighting. This will result in a reduction in the outstanding maintenance liabilities and future cyclical replacement costs to the City Corporation.</p> <p>18.3 Payback and NPV are the main financial indicators used to prioritise the projects.</p>																						

	The estimated costs and savings set out in this paper will be regularly reviewed and reported throughout the project.
19. Procurement strategy/route to market	<p>19.1 The City Corporation have an existing Call-off-Contract with Vital Energi under the Greater London Authority's Retrofit Accelerator for Workplaces framework, for which Vital Energi (the Service Provider) will provide a range of services including High Level Assessments, Investment Grade Proposals and Works Contracts to carry out Energy Efficiency Measures under an Energy Performance Guarantee.</p> <p>19.2 Vital Energy have undertaken surveys at the sites listed in this paper and produced High Level Assessments (HLAs) documents. On approval of this paper, Investment Grade Proposals (IGPs) will be produced in support of future individual GW3-5 paper.</p> <p>19.3 The project works set out in this paper are to be carried out through entering into a new works agreement with Vital Energi, under the Call-off-Contract. Vital Energi will undertake the design and construction of the works and undertake the duties of Principal Contractor and Principal Designer. Following project completion, Vital Energi will undertake a Monitoring and Verification (M&amp;V) exercise, in accordance with an agreed method and best practice industry standards, to evidence the achieved savings.</p>
20. Legal implications	20.1 There will be individual contracts per site or per group of measures. It is envisaged that the contracts will be JCT Design & Build.
21. Corporate property implications	<p>21.1 Investment in energy efficiency and decarbonisation projects is required to meet the targets set by the Climate Action Strategy.</p> <p>20.2 Projects will align with existing site plans in order to minimise disruption and maximise opportunities during installation.</p> <p>20.3 The projects will be planned in consultation with local FM teams and Asset Managers to ensure there is transparency in dates and deadlines.</p>
22. Traffic implications	22.1 Not available at this stage. Any traffic disruption will be addressed in GW 3-5 papers.
23. Sustainability and energy implications	<p>5. The project will achieve best practice/ industry leading standards (please provide further detail or evidence)</p> <p>23.1 The programme will deliver carbon and energy efficiency improvements in the most energy intensive operational buildings.</p>

	<p>23.2 The Energy and Sustainability Team will be further consulted during the design and specification drafting stage to ensure all designs are compliant with existing City Corporation plans. All measures to be installed are consistent with the Climate Action targets and they go above and beyond the legal and regulatory energy performance obligations of the Operational Buildings.</p> <p>23.3 The programme is aimed to improve the resilience of the City Corporation operations and reduce the overall cost of operation.</p>
24. IS implications	<p>24.1 Consultation with the City Corporation IT will be required for some projects which rely on IT networks e.g., Building Energy Management Systems Upgrades.</p> <p>24.2 No cost implications are envisaged for the City Corporation IT department.</p>
25. Equality Impact Assessment	25.1 An equality impact assessment will not be undertaken
26. Data Protection Impact Assessment	26.1 The risk to personal data is less than high or non-applicable and a data protection impact assessment will not be undertaken

## Appendices

Appendix 1	Detail Project Information
Appendix 2	Risk Register
Appendix 3	Project Briefing

## Background Information

Resource Allocation Sub (Policy and Resources Committee) Committee, Monday 7<sup>th</sup> Sept 202

## Contact

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