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<b>Committees:</b> Resource Allocation Sub Committee for information	<b>Dates:</b> 25 June 2025 Click <a href="#">here</a> to enter a date.
<b>Subject:</b> Mansion House - Air Source Heat Pump & Photovoltaic Prelims (Climate Action Strategy)  <b>Unique Project Identifier:</b> 64800019	<b>Gateway 3/4:</b> <b>Options Appraisal (Regular)</b>
<b>Report of:</b> City Surveyor <b>Report Author:</b> Adam Fjaerem	<b>For Information</b>
<h1>PUBLIC</h1>	

<b>1. Status update</b>	<p><b>Project Description:</b> To design and install an Air Source Heat Pump (ASHP) and Photovoltaic (PV) installation onto the roof of the Mansion House to provide the building with heating, hot water and self-generated electricity.</p> <p>The project team are currently finalising all required documentation with the Planning Permission and Listed Building Consent application being submitted in June 2025. A Pre-planning application is in progress and near completion with regular engagement from the City of London Corporation Planning department and Historic England.</p> <p>The scope of the project has widened due to a requirement to structurally enhance the Mansard roof above the staff bedrooms. This will include new steelwork to support the additional weight, and vibrations, from the ASHP.</p> <p>These staff bedrooms were added to the house in 1930 and most recently refurbished in 1991-3. The Cyclical Work</p>
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	<p>Programme (CWP) has funding in place to provide repair and resurfacing to this roof to prevent water penetration but the steel structural requirements of the ASHP exceed the scope of the CWP works. The steel installation roof works will be led by the ASHP project team with guidance from the minor projects team through their approved architects, structural engineers and delivery team.</p> <p>In addition, the UK Power Networks (UKPN) owned substation in the cellar of the Mansion House has a capacity of 500kVA of which 250kVA is assigned to the Mansion House with the remaining capacity assigned to surrounding buildings.</p> <p>When the building has the ASHP installed it will require 483kVA capacity. Therefore, UKPN are to be instructed to upgrade this substation to remove the requirement to supply the surrounding buildings and make it exclusively for the Mansion House electrical requirements.</p> <p>Finally, this project will require statutory compliance under the new Building Safety Act (BSA). This requirement will be monitored and reported by an independent consultant.</p> <p>Climate Action Strategy (CAS) Funding is being allocated to pay for the additional design works for the roof, the UKPN substation upgrade works, the prelims and the costs of BSA requirements.</p> <p><b>RAG Status:</b> Green (Green at last report to Committee)</p> <p><b>Risk Status:</b> Medium (Medium at last report to committee)</p> <p><b>Total Estimated Cost of the addition design works and the substation upgrade (excluding risk):</b> Estimated cost for these addition works is £250k.</p> <p><b>Total Estimated Cost of Project (excluding risk):</b> Estimated total cost of the installing the ASHP and PV onto the building is £3M</p> <p><b>Change in Total Estimated Cost of Project (excluding risk):</b> £1.5M</p> <p><b>Spend to Date:</b> £60k on pre-planning and planning permission application.</p> <p><b>Costed Risk Provision Utilised:</b> £25k (of which £0 has been drawn down since the last report to Committee).</p>
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	<b>Slippage:</b> The Decarbonisation Gateway 2 paper sets out the whole programme, of which this is one element of one project.										
<b>2. Next steps and requested decisions</b>	<p><b>Next Gateway:</b> Gateway 4,5: Funding request for ASHP and PV if planning permission is awarded. This project will be greater than £1M and so will return to committee rather than seeking approval via delegated authority.</p> <p><b>Next Steps:</b></p> <ul style="list-style-type: none"> <li>• Instruct UKPN works to upgrade substation.</li> <li>• Instruct Vital Energi roof design team to design the structurally enhanced roof and check the ability of the building to support the additional weight of the roof and the ASHP.</li> <li>• Instruct Vital Energi to raise supply orders with their BSA subcontractors.</li> <li>• Submit the full Planning Permission Application and Listed Building Consent.</li> </ul> <p><b>Requested Decisions:</b></p> <p>No decision required as paper For Information Only.</p>										
<b>3. Resource requirements to reach next Gateway</b>	<p>The following sets out the budget <b>for information only</b>.</p> <p>Total estimated cost to cover roof design prelims, UKPN substation upgrade and costs to ensure statutory compliance under the new Building Safety Act including costed risk: <b>£300,000</b> (including a costed risk budget of <b>£50,000</b>).</p> <p>This will be funded by CAS Year 5 Plan.</p> <table border="1"> <thead> <tr> <th>Item</th><th>Reason</th><th>Funds/ Source of Funding</th><th>Cost (£)</th></tr> </thead> <tbody> <tr> <td>Fees: UKPN substation upgrade. Prelims for roof design and BSA statutory compliance.</td><td>Compliance</td><td>CAS Year 5 Plan budget. (this paper, GW3-4 approved budget drawdown)</td><td>250,000</td></tr> </tbody> </table>			Item	Reason	Funds/ Source of Funding	Cost (£)	Fees: UKPN substation upgrade. Prelims for roof design and BSA statutory compliance.	Compliance	CAS Year 5 Plan budget. (this paper, GW3-4 approved budget drawdown)	250,000
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	Cost risk provision budget	Compliance	CAS Year 5 Plan budget. (this paper, GW3-4 approved budget drawdown)	50,000
	<b>Total</b>			<b>300,000</b>
	<p><b>Costed Risk Provision requested for this Gateway: £50,000</b> to cover any addition costs that may come about through the roof design.</p>			
<b>4. Overview of project options</b>	Not applicable as for information only			
<b>5. Recommended option</b>	Not applicable as for information only			
<b>6. Risk</b>	<p><b>Roof replacement prelims cost:</b> That planning permission is refused making the design redundant.</p> <p><b>UKPN Substation:</b> That planning permission is refused making the increase in capacity unnecessary. However, this is not thought to be a risk as electric consumption of the building will only increase over time with electrification of the cooking equipment and future electric heating.</p> <p><b>Building Safety Act:</b> That planning permission is refused making the compliance redundant.</p> <p>Or, that delays, and/or not receiving approval, from the Building Safety Regulator, requiring further design, cost and programme delays</p> <p><b>Reputational Risk</b> lies with the publicity potentially associated with this planning permission application from local, national and building/architectural/heritage media. There could be negative impact against the City of London Corporation planning department if the planning permission is refused, or against the City of London Corporations commitment to achieving its climate goals if planning is awarded, but then not proceeded to installation, due to the costs outlined above.</p> <p><b>Health and safety:</b> the prelims for the roof design will be mainly desk based with some site visits and as such there are negligible</p>			

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	<p>risks from electrical, hot works and other related works within the building.</p> <p><b>Costed Risk Provision requested for this Gateway: £50,000</b> to cover any variations which may be required following planning permission submission.</p>
<b>7. Procurement approach</b>	<p>City of London Corporation have an existing Call-off-Contract with Vital Energi under GLA's Re:fit 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>Vital Energy have undertaken surveys of Mansion House and issued CoL with an Investment Grade Proposal (IGP) in accordance with their contract. The IGP sets out the firm costs, guaranteed savings and Measurement and Verification (M&amp;V) plan for the works.</p> <p>The planning permission application falls under this call off contract and Vital Energi will undertake all the requirements of this paper.</p>

## **Appendices**

<b>Appendix 1</b>	Project Coversheet
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## **Contact**

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