

<b>Committee(s)</b>	<b>Dated:</b>
Corporate Asset Sub-Committee (CASC)	January 17 <sup>th</sup> 2022
<b>Subject: CAS NZ1, NZ3 and RS3 Workstream update for the Operational Portfolio</b>	<b>Public</b>
<b>Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?</b>	<b>5,11 &amp; 12</b>
<b>Does this proposal require extra revenue and/or capital spending?</b>	<b>Yes</b>
<b>If so, how much?</b>	<b>£2.995m (first 12 months) mix of revenue and capital</b>
<b>What is the source of Funding?</b>	<b>CAS Budget / HRA Capital Works</b>
<b>Has this Funding Source been agreed with the Chamberlain's Department?</b>	<b>Yes</b>
<b>Report of: The City Surveyor</b>	<b>For Information</b>
<b>Report author: Graeme Low</b>	

### Summary

This report presents an update on the key actions of the operational buildings workstreams as part of the climate action strategy (CAS). Progress has been made in the following key areas:

- Vital Energi have started a programme of building energy surveys, ten out of fifteen buildings have received initial surveys.
- £800k Social Housing Decarbonisation Fund bid for William Blake and Southwark Estates.
- Scoping study underway with Etude for whole life cycle carbon assessment.
- Appointment of Arcadis to provide assurance and support to City Surveyors led CAS Projects (NZ1, RS3 & NZ3).
- Two Energy Project Manager posts are currently in recruitment.

### Recommendation(s)

- Note the progress made on actions within the report.
- Note the completion of the review of the Centre of Excellence.

### Main Report

#### Background

1. The Climate Action Strategy (CAS) measured our direct building emissions in 18/19 as 36 ktCO<sub>2</sub>e, by 2026/7 this must reduce to 15.3 ktCO<sub>2</sub>e to reach our net zero target for our corporate properties and Housing portfolio CO<sub>2</sub>e emissions for Housing and Corporate properties are as follows:

**Table 1: Baseline and current carbon emissions by portfolio and 2027 target**

Portfolio	Baseline 18/19	12 months to Sept 21	2026/27 Target
Housing	10.6 kt/CO2e	7.5 kt/CO2e	4.5 kt/CO2e
Corporate Properties	22.2 kt/CO2e	16.8 kt/CO2e	10.8 kt/CO2e

2. To support this goal, the CAS buildings approach was presented at the April Sub Committee with a series of discrete actions which conjoin to deliver the CAS strategy NZ1, NZ3 and RS3 for the Corporate buildings' portfolio – including housing. These actions are summarised in the table 2 below.

**Table 2: NZ1 - Corporate Property and Housing Landlord Areas Actions**

1 - Commission building energy surveys – Corporate assets & Housing
2 - Develop building controls management strategy
3 - Enhance monitoring and targeting programme
4 - Decarbonisation of Heat
5 - Deep fabric retrofit pilot – Commercial asset
6 - Additional energy specialist resources
7 - Capital programme roll-out

## Status Updates

**Action 1 Progress:** Commission building energy surveys – Corporate assets & Housing

### Corporate

3. Through the GLA's retrofit accelerator framework, Vital Energi Ltd. have been appointed as the Energy Performance Contractor.
4. They are providing energy efficiency audits for the PSDS project and additional audits to the top 15 sites (appendix 1) in support of the Climate Action Strategy. Their activities will first involve a high-level assessment of each site, to provide a list of projects that can be immediately undertaken, and a list of projects that rely on other existing CoL projects finishing.
5. To date, ten sites (LMA, Mansion House, Central Criminal Court, Girls School, Boys School, Freeman's School, Tower Bridge, Walbrook Wharf, Smithfield, and New Spitalfields Market) have been through an initial survey, with high level assessment reports due in January. Recommendations will be aligned with strategic decisions related to each property.
6. The remaining sites (Billingsgate, Guildhall, GSMD, Milton Court and the Barbican Arts Centre) will be surveyed initially in January with high level assessment reports due in March, except for Billingsgate which will be received in February.

## Housing

7. The Housing Action Plan has been drafted and presented to Committees for approval in September, returning to the CCS Committee for approval in the first half of 2022/23.
8. We have identified several potential pilot locations to trial energy efficiency measures including Insulation; renewable heat; air tightness and ventilation.
9. An application to the Social Housing Decarbonisation Fund has been submitted for William Blake Estate and Sumner Building (Southwark Estate). The value of this project is £1.6m, with 50% (£800k) grant funding with the remainder funded through the HRA capital works programme. The proposal provided the best fit with the grant funding criteria. A decision is expected in December 2021 (not yet received at the time of writing).

Next Steps – Action 1	
a.	<b>Corporate:</b> Completion of energy surveys / reports fed into Climate Action Strategy project pipeline.
b.	<b>Housing:</b> Commission building surveys and feasibility studies for pilot projects.

### **Action 2 Progress:** Develop building controls management strategy.

10. The Building Analytics (Smart Buildings) platform contract is being finalised; we expect this to commence mobilisation stage in January 2022.
11. The Building Energy Management System Upgrade Phase 1 is currently at GW 2. Site surveys are being carried out to prepare GW3/4 report. Following submission of a GW2 issues report to CASC detailing increased project costs, additional, existing capital and CWP funding has been approved for reallocation to the project. This paper is due to go before RASC on 17<sup>th</sup> December '21 for final approval.
12. Guildhall Internet of Things (IoT) sensors - Proof of Concept project in progress, currently at the design stage. We anticipate mobilisation in Q1 of 2022.

### **Action 3 Progress:** Enhance monitoring and targeting programme.

13. The TEAM Sigma software has been procured and is going through Beta testing. Training began in October. Following user engagement, the system will be rolled out early in January 2022.

### **Action 4 Progress:** Decarbonisation of Heat

14. Citigen - 4MW of heat pumps due to be installed December 2021 – E.On estimate 25% carbon reduction.
15. Corporate estate – Capital works assessment being undertaken by PSDS partners to remove/ reduce fossil fuel derived heat provision. Further consultancy work will be required to develop.

16. Housing – Additional consultancy work will need to be commissioned as part of the programme to review opportunities focused on reducing fossil fuel-based heat provision.

<b>Next Steps – Action 4</b>	
a.	Identify additional funding streams for decarbonisation support.
b.	Continue with Citigen decarbonisation studies prior to review period in 2024.
c.	Undertake review of housing opportunity.

**Action 5 Progress:** Deep fabric retrofit pilot – Corporate asset

17. This project will be a proof of concept to inform our wider design and resilience standards. Scoping and delivery will be driven by the dedicated design resource within the Centre of Excellence.

**Action 6 Progress:** Additional energy specialist resources.

18. A review of the Centre of Excellence (CoE) structure and roles has been completed. We are actively recruiting two Energy Project Managers to support the delivery of NZ1. Initial approaches to resource all the Centre of Excellence roles via service procurement was unsuccessful and we are currently procuring this via a consultancy service approach. The Energy Project Managers will develop the asset-based decarbonisation plans from identified interventions.

19. We anticipate the CoE will be resourced from mid-January with the following:

<b>Centre of Excellence roles (proposals received)</b>	
Sustainable Investment Property Specialist	Heat Decarbonisation Engineering Support
Resilience and Sustainable Design	Energy Project Services (Housing)
Building Management Systems Operations	

20. This resource will also address the NZ3 and RS3 work streams plus the Investment portfolio (NZ4) approach. The Monitoring and Targeting support identified in the CoE is being procured separately and we anticipate this resource will be in place early in the new year.

<b>Next Steps – Action 6</b>	
a.	Appointment of Energy Project Managers and remaining resource requirement.
b.	Actions 1,2,3,4 & 5 are reliant on the mobilisation of the Centre of Excellence in Mid-January 2022.

**Action 7 Progress:** Capital programme roll-out

21. The main capital programme roll-out will flow from opportunities identified in action 1 energy surveys. It should be noted that existing carbon saving projects are also currently in progress with the £9.5m PSDS project (completing in March 2022),

Phase 1 & 2 of the Energy Reduction Programme (completion 22/23) and £4.5m Guildhall Cooling replacement project (completion expected summer 23).

Next Steps – Action 7	
a.	Project resource requirement to be addressed as per the CAS project plans and embedded within the CSD Surveying and Engineering Projects team.

### **NZ3 Capital Projects Design Standards and RS3 Resilient Buildings**

22. The Energy and Sustainability Team are working closely with the Capital Projects team and liaising with DBE to identify synergies and opportunity for shared working. A scoping exercise has been commissioned via the projects team as the first step in the delivery of a suite of design standards to inform our future projects.

### **Project support activities**

23. Arcadis have been appointed by the City Surveyor, to provide project support across each individual project (NZ1, RS3 & NZ3). As part of this brief support will be in place to cover initial assurance support; ongoing assurance; establishing and promoting the Centre of Excellence and to lead the development of an auditable energy management system

### **Key Risks**

Risk	Mitigation
Delays in securing resource Impacts project delivery.	Review of Centre of Excellence completed to address this issue.
Funding gap emerges following investment grade proposals.	Existing funding allocation to be complemented with grant funding applications. Investigate Energy Performance Contracts option to minimise capital investment.
Carbon grid factors adversely affected.	Keep in review BEIS grid factors and their impact on reach the 2026/27 Targets.

### **Corporate & Strategic Implications**

#### **Strategic implications:**

24. This suite of actions drives the objectives of the Climate action strategy, buildings stream and will provide linkage and co-ordination with ongoing property management, capital schemes and cyclical works

#### **Financial implications:**

25. The CAS tasks in this report are covered within the overall Climate Action Strategy programme. Capital and resource costs are estimated at £21m for the 6-year term for the tasks related to these project plans. This funding forms part of the £68m agreed at RASC and P&R committees in September 2020.

**Climate implications:**

26. This action stream will deliver the Net zero carbon goals of the Corporation and support the climate residence goals of the broader programme

**Conclusion**

27. The City Surveyor has commenced the mobilisation of the 4 workstreams, 3 being relevant to this Sub Committee. We have encountered constraints around the supply of resource which has led to a review of the Centre of Excellence, now complete. A flexible approach will support our ability to moving the programme forward and meeting key milestones.

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