Committee: Community and Children's Services	Dated: 11th February 2022
Subject: Housing Action Plan Energy Efficiency Progress	Public
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	5,10,11,12
Does this proposal require extra revenue and/or capital spending?	N
If so, how much?	N/A
What is the source of Funding?	N/A
Has this Funding Source been agreed with the Chamberlain's Department?	N/A
Report of: Andrew Carter, Executive Director Community and Children's Services Report author: Graeme Low Energy Manager, City Surveyor's Department Lochlan MacDonald, Asset Programme Manager, Department for Community and Children's Services	For information

Summary

The purpose of this report is to feedback progress in relation to the Housing portfolio tasks and objectives within the Climate Action Strategy. The work to review the implications of the two scenarios within the Housing Action Plan is expected to complete in Q1 2022/23. We continue to progress identifying opportunities within the existing capital works programme to reduce energy use and carbon emissions. Resource will be firmly in place from February 2022 to support the delivery of Housing specific actions related to carbon reduction.

Recommendation

The Committee is asked to:

- Note the report and its contents.
- Note the introduction of the Centre of Excellence resource.
- Note the status of the Social Housing Decarbonisation Fund (wave 1) bid.

Main Report

Background

1. As previously reported, the UK has set in law a target to bring all its greenhouse gas emissions to net zero by 2050. To help achieve this target, the government's ambition is to improve the energy efficiency of homes, move to cleaner ways of heating homes and to halve the energy use of new buildings by the end of this decade. In October 2020, the City Corporation adopted the Climate Action Strategy

(CAS) in support of the emerging need to decarbonise the City of London Corporation operations and its assets, supporting the mitigation of climate change impacts and improving the climate resilience of its operations.

- 2. The CAS set out three interlinked primary objectives for the City Corporation and the Square Mile:
 - · to support the achievement of net-zero emissions,
 - to build resilience, and
 - to champion sustainable growth.
- 3. The CAS also set out 4 targets for the City Corporation and Square Mile:
 - Net zero by 2027 in the City Corporation's operations
 - Net zero by 2040 across the City Corporation's full value chain
 - Net zero by 2040 in the Square Mile
 - · Climate resilience in our buildings, public spaces, and infrastructure

Considerations

4. Housing Action Plan Progress

The Housing Action Plan was presented to this Committee in September 2021. It modelled scenarios to understand if the identified pathways could reach the CAS targets for 2027 and 2040. It confirms the 2040 target can be met and exceeded, with potential to become carbon negative.

5. For the near term 2027 target two scenarios are presented:

Scenario 1: Retaining communal gas heating systems at York Way and Middlesex St Estates. This scenario will require **5**% (approx. 250 tCO₂) of Housing CO₂ emissions to be reduced elsewhere within the City Corporation's operational emissions.

Scenario 2: Removing all communal gas heating systems alongside introducing energy efficiency measures and Solar Photovoltaics. This scenario exceeds the 2027 target by **7%**, becoming carbon negative.

6. Further survey work is currently being carried out within our wider property portfolio to confirm the best approach. It is anticipated this will be concluded in Q1 2022/23 and the Housing Action Plan re-presented to Committee with confirmation of the benefits related to each scenario in full.

The Housing Action Plan also highlighted a need to begin site surveys within housing estates to build out the detail of measures required to meet the CO_{2 targets}. This will be supported through the Centre of Excellence resource and priority sites will be reviewed in Q1 2022/3.

7. Crescent House - Local Authority Delivery (Phase 2) (LAD2)

The Government has made £300m available through Local Authorities to improve the energy efficiency of low income and low energy performance homes through the LAD2 scheme. The City Corporation have been awarded potential funding of £23,486 based on the fund criteria.

Crescent House (Golden Lane estate) is a potential block which may fit the relevant criteria. Officers are in discussion to progress the scheme which will improve heating and hot water controls, hot water tank insulation and draughtproofing in up to 38 socially rented properties at this block.

It is unlikely that the funding from the Government will be enough to cover all the works identified at the 38 flats if the scheme is approved. Officers are in discussion with grant administrators with a view to obtaining extra funding through unused grants from other authorities. Failing this, match funding from the Housing Revenue Account or CAS budgets, may be requested.

8. Tevatree House Retrofit Pilot

Tevatree House is a small block of seven (2 and 3 bedroom) socially rented dwellings on the Avondale Square Estate in Southwark. The Department of Community and Children's Services are investigating the full retrofit of the block to use as an exemplar of retrofit possibilities, learning from this project will support the wider roll out of retrofit measures and support future grant applications with practical examples of what can be achieved. If such works are undertaken, there will be considerable savings in fuel use and cost to the residents and CO2 emission reductions will support our CAS targets. DCCS are discussing feasibility and survey funding with the Climate Action Strategy Team. If works are approved, central government funding will be sought but cannot be guaranteed.

9. Data and EPC Modelling

The DCCS and the City Surveyors Energy Team plan to undertake a thorough audit of their own records and a sweep of the Government data base to establish a full picture of which properties (including leasehold properties) have current valid EPCs and what these are rated at. Any recommended improvements will be collated and reviewed alongside the emerging delivery plan and onsite surveys. Following on from this, authority and funding will be sought to appoint Domestic Energy Assessors to survey and provide EPCs for any of the socially rented properties without a current certificate, to complete the asset level information.

This would establish the base position of all our rented housing stock, allow for identification of trends and help identify priorities. This modelling will also support improving the quality of future grant funding applications.

10. George Elliston and Eric Wilkins Houses Retrofit and Refurbishment

These blocks are situated on the City's Avondale Square Estate in Southwark and contain a total of 65 dwellings, a mixture of socially rented and leased flats. Approval has been given for the City to progress a full survey of the block to establish the exact extent of repairs needed to the fabric, including the roof and windows, as well as other work that will all combine to improve the energy efficiency of the blocks and the individual dwellings.

Following Gateway two approval, officers are to meet architects to discuss previously undertaken surveys and agree requirements for developing the full retrofit and repairs works. Following on from this, it is expected that a detailed survey of the current position, repair requirements, retrofit possibilities and costed options will be produced for committee to consider. This is expected to be guided by the developing technology and design standards for capital projects that are planned to support the Climate Action Strategy.

11. Capital Works Programme

The DCCS already has a capital programme of works in place which include projects which will help towards reaching CAS targets:

- Window renewal A programme of works across seven estates has already started and when completed, over 1,300 dwellings on City estates will have new, more energy efficient windows installed.
- Roof Renewal works a total of 11 blocks across four estates are due to have roof renewal works undertaken in the next two years. Officers are investigating options for government funding to provide insulation in excess of the building regulations standard and will assess the suitability of the works to include solar and photovoltaic panels as part of the works.
- Heating Renewal Currently, the communal heating systems at the York way and Middlesex Street estates are being replaced with a more efficient system. Whilst the new facilities will be gas fired, they will be markedly more efficient than the current ones. Residents will be able to control their own heating providing further opportunity to reduce energy usage and carbon emissions, and the potential to benefit from cost savings.
- Crescent House and Cullum Welch House at the City's Golden Lane Estate are currently heated by individual gas boilers in each property. The City are to explore options for decarbonising the heating to these blocks, such as renewables, electric heating and communal heating systems. Window and roof replacements planned may also align with any heating replacements, providing a "whole house" approach. This will further help to inform future actions across the housing stock.
- Across the City's residential stock which are currently heated by individual gas boilers within flats, several hundred boilers are likely to require replacement over the next 5 years. The DCCS and Energy team will explore lower carbon options for any individual gas systems that are deemed to need replacing. These relate to our

scope 3 emissions, which we are committed to reaching Net Zero Carbon (NZC) by 2040.

• A Developer, undertaking a construction project within the City has approached the City Corporation with a proposal to use the waste heat from the new building to heat Middlesex Street estate. It is projected that this could provide a significant proportion of the heat required by residents and whatever level of heat was generated from the development would be free at the point of use. Discussions are at an early stage with finer details of the arrangement needed before any formal agreement to proceed can be confirmed.

12. Social Housing Decarbonisation Fund Phase 1- application progress

In October 2021, Officers applied to the Social Housing Decarbonisation Fund (SHDF) in relation to planned works at 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 and includes measures to 66 properties including: front entrance doors with improved energy and fire safety rating, low energy lighting; double glazing, hot water cylinder jackets (where applicable), heating controls and thermostatic radiator valves.

In applying these measures, we anticipate these properties will reach an EPC C standard (part of the grant funding criteria). A decision was expected in December 2021; however, BEIS have now informed applicants that any decisions will be delayed until February 2022, with expected delivery dates adjusted accordingly. Committee will be advised of the decision from BEIS once this is received. Future waves of SHDF funding are expected in Q1 / Q2 2022/23, we will continue to review the opportunities for these future funding bids, which we anticipate will be enhanced by the support from an established centre of excellence in February 2022.

13. Centre of Excellence - resource

Resource Support to ensure the mobilisation and delivery of Climate Action Strategy project plans is now in place with a planned start date of February 1st, 2022. Arcadis are now contracted to provide these services until April 2023 with an option to extend the contract for a further 12 months.

The Centre of Excellence is funded through the Climate Action Strategy and includes specific support for Housing to drive forward project plans. Additionally, the Centre of Excellence includes:

Resilience and Sustainable Design	2. Heat Decarbonisation Engineer
Coordinator	
3. Energy Project Services Housing role	4. BMS Operations Engineer role

Corporate & Strategic Implications

- 14. **Strategic implications:** Our energy performance helps to shape outstanding environments for our residents through the reduction of CO2 emissions and our commitment to procuring clean renewable energy. In this way our energy performance helps shape outcomes 5, 11 and 12 of the Corporate Plan.
- 15. **Financial implications:** Works to the housing stock is generally funded from The Housing Revenue Account, which is made up from rental and service charge incomes. There is already considerable strain on the HRA finances and this needs to be borne in mind when planning energy efficiency works. Chamberlains' advice will be sought on what funding from the HRA and other central City sources may be available.
- The CAS has earmarked £6m for DCCS to help achieve the scope one and two
 objectives across the housing stock however, substantially more funding is likely
 to be required. A delivery plan will be developed to use CAS funding to maximise
 grant opportunities and increase the specification of elements of the capital works
 programme such as roof insulation where viable benefits are possible.
- The City will actively pursue any external funding for the works including the SHDF, LAD, Energy Company Obligation (ECO). We will work with other local authorities where possible to achieve improvements across more properties at lower costs.
- 16. Climate implications: The Housing portfolio is a significant contributor to the City of London Corporation's CO₂ emissions and features in the agreed plans to tackle these emissions to reach the scope 1 and 2 NZC targets for 2026/7 and scope 3 targets for 2040. Progress continues to be made to ensure these targets remain achievable.

Conclusion

17. Progress in identifying and supporting the opportunities for carbon reduction within the Housing portfolio, continues. With further resource coming on board in February 2022, advances will be made in the delivery of the tasks highlighted within the Climate Action Strategy. This includes supporting the enhanced specification of capital projects that will impact on energy and carbon, continued applications to future rounds of grant funding and further data modelling and heat decarbonisation. The survey work across the wider building's portfolio will ensure the Housing Action Plan can return to Committee with detailed consideration of the scenarios.

Background Committee Papers

- CCS Committee: Climate Action Strategy Housing Update 5th March 2021
- CCS Committee: Housing Net Zero Carbon Action Plan 24th September 2021

Appendices

Appendix 1– Climate Action Strategy

Graeme Low

Energy Manager, City Surveyors Department

T: 07857665662

E: graeme.low@cityoflondon.gov.uk

Lochlan MacDonald

Asset Programme Manager, Department of Community and Children's Services

T: 07785 723501

E: lochlan.macdonald@cityoflondon.gov.uk