

Item

Asset Management and Decarbonisation Plan – progress report

To:

Councillor Rosy Moore, Executive Councillor for Climate Change, Environment and City Centre 24th March 2022

Report by:

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Wards affected:

All

Non-Key Decision

1. Executive Summary

The Council has commissioned surveys of corporate buildings, prioritising those with gas boilers, to start to develop a programme to incorporate the decarbonisation of these buildings by 2030 within a planned maintenance programme. This report provides a progress update and the next steps.

2. Recommendations

The Executive Councillor is recommended to:

Note the contents of the report.

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3. Background

The Council's Climate Change Strategy 2021-2026 sets out "a vision for Cambridge to be net zero carbon by 2030, subject to Government, industry and regulators implementing the necessary changes to enable the city and the rest of the UK to achieve this." It sets a target for the Council to be net zero carbon by 2030.

At the meeting of the Environment and Community Scrutiny Committee on 25th March 2021, as part of the discussion around the Council's Carbon Management plan 2021-26, it was agreed:

The Council will prepare a list of existing gas fired heating systems under council control and their remaining expected service life.

Scope: All gas consumers included in Appendix 4 Figure 10 (page 123 of reports pack)

Target date: Next committee cycle

In addition, the committee notes the already recognised need to complete an asset management plan for all the council's corporate building, and additionally recommends that the council ensure that plan addresses the following points:

For all systems with less than 5 years life remaining prepare a report on the:

- 2) Extent of insulation, heating system or other work required to ensure feasibility of low carbon heating
- 3) Current gas consumption
- 4) Estimated combined costs of remedial work and low carbon heating system

Output: Prioritised (by tCO2/£) list of urgent works required to avoid future replacement of existing heating systems with gas fired boilers at end of life

Target time frame: 12 months.

This report provides a progress update, and next steps.

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4. Achieving net zero carbon in our existing Council buildings

The Council owns a wide range of built assets. There is a distinction between Housing Revenue Account and General Fund properties. This report deals with proposals for General Fund properties where the CO2 emissions are the responsibility of the Council and are reported in the annual greenhouse gas report. Housing Revenue Account properties are excluded (apart from the Housing Office at 171 Arbury Road) as these are covered under the HRA Asset Management Strategy.

Within the General Fund, the Council has a portfolio of built assets used for various purposes including:

- Offices
- Community Buildings
- Commercial property
- Car parks
- Operational buildings, including the Corn Exchange and Crematorium

For the purposes of this report, assets that are currently being redeveloped are excluded (e.g. the Meadows Community Centre), as are assets that the Council does not own (e.g. 130 Cowley Road).

Many of our existing Council buildings have gas boilers for space and water heating. We are looking at replacements for gas heating systems by 2030, and in line with government advice and good practice we are planning to adopt a "whole building, fabric first" approach to decarbonisation and energy efficiency.

To date we have commissioned a number of reports to help identify how the Council's corporate buildings can be decarbonised and the estimated cost of doing this.

- Report by Bouygues (Energies and Services UK) Cambridge City Council Net Zero Carbon Assessment 2021- decarbonisation measures only
- 2. Reports by Potter Raper Ltd. 2022– building condition surveys and thirty-year investment plans plus decarbonisation measures
- 3. Estates and Facilities mechanical and electrical plant surveys and condition reports

The reports by Bouygues and Potter Raper both make recommendations for measures that could be used to achieve net zero carbon in the Council's existing buildings and include high-level cost estimates.

The Bouygues report includes specific proposals for decarbonisation measures and the details of these are referred to in the Council's Climate Change Strategy and are listed on the Council's website. Proposed measures include:

- Improved building energy management systems (BEMS)
- Additional LED lighting
- Heat pumps (where appropriate) to replace gas boilers
- Solar panels
- Connection to district heating systems

The Bouygues report does not cover any works to the building fabric (walls, roofs, doors, windows etc)

The Potter Raper report looks at total planned building maintenance requirements over a thirty-year period (including building fabric improvements) and how net zero carbon measures could be integrated with this by 2030.

Estates and Facilities' mechanical and electrical plant surveys and condition reports look in detail at the current condition of mechanical and electrical plant. These have not yet been developed into a costed maintenance programme.

The buildings considered and estimated costs of planned building maintenance (over thirty years), energy efficiency works and works to achieve net zero carbon by 2030 are shown in the table below.

Building – in order of current carbon emissions (highest first)	Gas boiler replacement due date	CO2 emissio ns (tonnes) 2020/21	Estimated thirty- year maintenance cost including zero carbon by 2030.
Parkside Pools*	2021	957	£4,654,926
Abbey Pools*	2035	380	£4,377,821
The Crematorium	2029	245	£3,130,119
The Guildhall	2032	294	£13,560,899
Corn Exchange	2041	225	£4,779,935

Grand Arcade Car Parks	n/a	176	£5,555,918
Mandela House - offices	2032	155	£5,272,072
Clay Farm Centre	2037	92	£4,504,176
Queen Anne Car Park	n/a	88	£3,868,219
Cherry Hinton Village Centre	2035	32	£2,026,631
Grafton East Car Park	n/a	31	£4,530,105
Grafton West Car Park	n/a	31	£2,425,200
Trumpington Pavilion	2021	tbc	£743,000
Barnwell House	2035	22	£1,902,840
Brown's Field Youth and Community Centre	2031	18	£1,616,579
3 Parsons Court - offices	2021	15	£1,437,171
171 Arbury Road (HRA)	2028	13	£1,206,284

^{*}Note some works are already and underway. We are using £1.7m funding from Government to install heat pumps, additional solar PV panels and other measures at these sites which will reduce carbon emissions by 440 tonnes per year.

Notes on estimated costs included in this report

Estimated costs shown in the table above are planned building maintenance costs over a thirty-year period including allowances for carbon reduction measures by 2030.

Estimated costs include contractor's costs, design costs and contingency based on December 2021 costs.

Further work will be required to determine the full detail of works to achieve net zero carbon at each building. This will include detailed energy modelling, (informed by the condition surveys already undertaken) and a full measured mechanical and electrical services survey. This work will be carried out once an asset management strategy is approved to avoid any unnecessary investment.

5. Next steps and development of a Corporate Asset Management Strategy

There is an existing corporate Asset Management Strategy that was produced in May 2019. A separate Housing Revenue Account (HRA) Asset Management Strategy was approved in September 2019.

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A revised corporate Asset Management Strategy is currently being developed and will be brought to committee for approval once ready.

Any future decarbonisation and energy efficiency projects will be considered and sequenced considering the revised corporate Asset Management Strategy and other corporate strategies, such as the "Our Cambridge" programme, which will help inform the purpose and shape of the Council going forward and consequently its asset requirements.

After the corporate Asset Management Strategy is confirmed, financing for any consequent, unbudgeted new decarbonisation investments will need to be sought and the projects built into the Capital Plan. They will also be built into an updated version of the Council's Carbon Management Plan, which sets out the steps the Council will take across it's full ranges of services, assets, and fleet to work towards our net zero target.

6. Implications

a) Financial Implications

There are no financial implications arising from this update report

b) Staffing Implications

None from this update report

c) Equality and Poverty Implications

None from this update report

d) Net Zero Carbon, Climate Change and Environmental Implications

None from this update report.

e) Procurement Implications

None from this update report

f) Community Safety Implications

N/a

7. Consultation and communication considerations

A range of officers from various Council teams have been consulted in the development of this report.

8. Background papers

Climate Change Strategy 2021-26

9. Appendices

None

10. Inspection of papers

To inspect the background papers or if you have a query on the report please contact Will Barfield, Asset Manager

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