# Carbon Management and Reduction Plan 2030





### Contents

| Version History  |    |
|--|----|
| Council commitments  |    |
| Carbon emissions   |    |
| Reducing our organisational emissions                                  |    |
| Monitoring our organisational carbon footprint                         |    |
| Table 1: Organisation Emissions - Carbon Reduction Actions 1-23        |    |
| Table 2: Transport and Air Quality - Carbon Reduction Actions 24-30    | 18 |
| Table 3: Housing and Planning - Carbon Reduction Action 31             | 23 |
| Table 4: Buildings and Infrastructure - Carbon Reduction Actions 32-34 |    |
| Table 5: Monitoring and Evaluation Actions 35-37                       | 27 |
| Table 6: Carbon Offsetting Action 38                                   | 28 |
| Table 7: Further Assessment Organisation Emissions Actions 39-53       | 29 |
| Table 8: List of abbreviations & notes                                 | 3  |
| Abbreviations  |    |
| Notes  | 34 |

# Version History

| Date              | Version     | Comments  |
|-------------------|-------------|---|
| 30 September 2020 | Version 1.0 | Approved See Cabinet <u>item 18/20</u> , 16/09/2020 See Council <u>item no 22/20</u> , 30/09/2020       |
| 08 December 2021  | Version 1.1 | Approved See Cabinet <u>item no. 43/21</u> , 17/11/2021 See Council <u>item no. 8</u> , 08/12/2021      |
| 07 December 2022  | Version 1.2 | Approved See Cabinet <u>item no. 28/22</u> , 16/11/2022 See Council <u>item no. 7. (b)</u> , 07/12/2022 |
| 19 July 2023      | Version 1.3 | Approved See Cabinet <u>item no.13/23</u> , 05/07/2023 See Council <u>item no. 8</u> , 19/07/2023       |
| 3 July 2024       | Version 2   | Approved See Cabinet <u>item no.11/24</u> , 03/07/2024 See Council <u>item no. 20/24</u> , 17/07/2024   |

#### Council commitments

Climate change impacts us all, which is why in 2019 we declared a climate emergency and pledged to become a carbon neutral council by 2030.

We worked to assess our carbon footprint and created the Carbon Footprint Baseline Report (2018/19) for our direct operations, including our Civic Centre and Centres for the Community buildings.

In 2024, we undertook a further assessment of 23 additional operational assets, which were non-tenanted and where we have full repairing responsibility, to include within our carbon footprint. The emissions for these sites, which include pavilions, public conveniences, cemeteries and splash pads, outlined in the further assessment summary, have been included within our 2023-2024 figures.

#### **Carbon emissions**

The reduction of carbon, or greenhouse gas (GHG), emissions are categorised into three scopes.

- Scope 1 direct emissions from owned or controlled sources such as gas and fuel consumption for fleet
- Scope 2 indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company
- Scope 3 includes all other indirect emissions that occur in the organisation's value chain, for example, commuting



#### Reducing our organisational emissions

The climate change mitigation measures for our direct operations organisational emissions (scope 1, scope 2 and selected scope 3) from our baseline and further assessment are set out in this comprehensive Carbon Management Reduction Plan (CMRP).

The plan aims to ensure targets are in place to reduce carbon emitting activities within our operational assets, fleet (scope 1 and scope 2), as well as staff commuting, business travel, waste and water consumption (selected scope 3) and become carbon neutral by 2030.

#### Monitoring our organisational carbon footprint

Our organisational carbon footprint is being monitored and our emissions in tCO2e (tonnes of greenhouse gases equivalent to CO2 impacts) for electricity, gas, electric, water, waste, business travel and commuting are reported on annually.

### Table 1: Organisation Emissions - Carbon Reduction Actions 1-23

| Ref. | Action   | Description   | Est. Timing         | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|--|---|---------------------|--------------------------------------|-----------------------------|------|
| 1a   | Accommodation Strategy Review – Carbon Reduction & Sustainability Principles | Civic Centre project electricity component  | 25/26 - 26/27       | 32.3                                 |                             | CMB  |
| 1b   | Accommodation Strategy Review – Carbon Reduction & Sustainability Principles | Civic Centre project fuel component   | 25/26 - 26/27       | 77.1                                 |                             | CMB  |
| 2    | Energy Management<br>Responsibility  | Agree overall responsibility and scope of energy management at the Council. Appoint formal responsibility and | 22/23 -<br>complete | 0.0                                  |                             | CMB  |

| Ref. | Action  | Description  | Est. Timing         | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|---|--|---------------------|--------------------------------------|-----------------------------|------|
|      |   | establish points of contact for energy management and data collection to systematically and proactively improve our energy performance across operational buildings. |                     |                                      |                             |      |
| 3    | Energy Management<br>System<br>Assessment                 | Conduct research on the implementation of a procedural Energy Management System (EMS) for our operational sites.   | 23/24 -<br>complete | 0.0                                  |                             | AMPS |
| 4    | Energy Management System Implementation and Certification | Look at implementation of a procedural EMS across our operational buildings dependent on costs benefits analysis.  | 23/24 -<br>complete | 0.0                                  | £4,000                      | AMPS |
| 5    | Building Management<br>System Review                      | Plan for an upgrade and/or replacement of our current Building   | 25/26               | 0.0                                  |                             | AMPS |

| Ref. | Action  | Description  | Est. Timing   | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|---|--|---------------|--------------------------------------|-----------------------------|------|
|      |   | Management System (BMS) to state-<br>of-the-art technology by investigating<br>feasibility, necessary specifications and<br>developing the business case. To date,<br>our BMS controls air condition and<br>heating systems through thermostats. |               |                                      |                             |      |
| 6a   | Building Management<br>System Update - Civic<br>Centre    | Upgrade and/or replacement of our BMS to state-of-the-art technology. This might entail upgrades to (daylight) sensors and linking controls for lighting to the BMS as it currently only controls our heating and cooling systems.               | 25/26 - 26/27 | 10.6                                 | £16,667                     | AMPS |
| 6b   | Building Management<br>System Update -<br>Centres for the | Upgrade and/or replacement of our BMS to state-of-the-art technology. This might entail upgrades to (daylight) sensors and linking controls for lighting   | 25/26         | 6.4                                  | £16,667                     | AMPS |

| Ref. | Action   | Description   | Est. Timing   | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|--|---|---------------|--------------------------------------|-----------------------|------|
|      | Community  | to the BMS as it currently only controls our heating and cooling systems.   |               |                                      |                       |      |
| 6c   | Building Management<br>System Update -<br>operational assets | Upgrade and/or replacement of our BMS to state-of-the-art technology. This might entail upgrades to (daylight) sensors and linking controls for lighting to the BMS as it currently only controls our heating and cooling systems.  | ongoing       | 1.4                                  | £16,667               | AMPS |
| 7    | LED lighting – Civic<br>Centre                               | Upgrade existing fittings at the Civic Centre in accordance with the review of the accommodation strategy. Consider the installation of daylight and occupational sensor to reduce energy consumption additionally. LED lights save energy and improve workplace environment by optimising the office | 25/26 - 26/27 | 15.6                                 | £100,000              | AMPS |

| Ref. | Action   | Description   | Est. Timing                     | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead       |
|------|--|---|---------------------------------|--------------------------------------|-----------------------------|------------|
| 8    | Heating Assessment -<br>Civic Centre                                     | lighting situation.  Plan for future replacement of gas fired boilers and review all options available, including air/ground source, electric, hydrogen etc. solutions with a view to upgrade the system to state of the art technologies at Civic Centre in Phase 2 to reduce/eliminate carbon emissions | 25/26 - 26/27                   | 0.0                                  | £10,000                     | AMPS       |
| 9    | Heating Decarbonisation – Civic Centre  Solar Photovoltaic – Feasibility | (heating feasibility study).  Replace gas fired boilers with state-of-the-art alternatives with low/zero carbon impact to reduce carbon emissions from heating the building.  Conduct a feasibility study to assess suitable roof space, structural   | 25/26 - 26/27  21/22 - Complete | 63.1                                 | £100,000<br>£5,000          | AMPS  AMPS |

| Ref. | Action   | Description   | Est. Timing   | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|--|---|---|--------------------------------------|-----------------------|------|
|      | Assessment   | feasibility, technologies and cost to install solar photovoltaic panels on the Civic Centre and Centres for the Community roofs, as well as possible battery storage solutions.                         |   |                                      |                       |      |
| 11a  | Solar Photovoltaic –<br>Installation                   | Install solar photovoltaic panels on identified roof spaces, as well as battery storage where feasible. across suitable roof spaces on the Civic Centre (solar car port) and Centres for the Community. | Phase 1 22/23 - Complete                            | 16.9                                 | £300,000              | AMPS |
| 11b  | Solar Photovoltaic –<br>Installation - Civic<br>Centre | Install solar photovoltaic panels on identified roof spaces, as well as battery storage where feasible at the Civic Centre.   | Solar car port - 23/24<br>Complete<br>25/26 - 26/27 | 6.1                                  |                       | AMPS |

| Ref. | Action  | Description   | Est. Timing         | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|---|---|---------------------|--------------------------------------|-----------------------------|------|
| 11c  | Solar Photovoltaic –<br>Installation - Centres<br>for the Community | Install solar photovoltaic panels on identified roof spaces, as well as battery storage where feasible across the Centres for the Community.  | 25/26               | 6.6                                  |                             | AMPS |
| 12   | Green Energy  | Procure renewable electricity. Continue discussions with our energy provider as their green product offers further increase, e.g. green gas or local renewable energy, to include in the contract going forward.        | ongoing             | 137.8                                |                             | AMPS |
| 13   | Heat and Hot Water<br>Review – Community<br>Centres                 | Review heating and hot water schedules at the Centres for the Community so they run as efficiently as possible, e.g. align schedules to only run systems when spaces are utilised. Energy and carbon emission reduction | 22/23 -<br>complete | 5.0                                  |                             | AMPS |

| Ref. | Action  | Description  | Est. Timing         | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|---|--|---------------------|--------------------------------------|-----------------------------|------|
|      |   | from this action are immediate.  |                     |                                      |                             |      |
| 14   | Loft Insulation –<br>Feasibility<br>Assessment    | Conduct a feasibility study to assess the practical feasibility and cost of insulation lofts across our Centres for the Community.   | 21/22 -<br>complete | 0.0                                  |                             | AMPS |
| 15   | Loft Insulation -<br>Centres for the<br>Community | Insulate lofts across the usage roof space based on the outcome of the feasibility study and ROI.  | 25/26               | 19.8                                 | £200,000                    | AMPS |
| 16   | LED lighting – Centres for the Community          | Upgrade existing fittings at the Centres for the Community (e.g. in the communal areas). Consider the installation of daylight and occupational sensor to reduce energy consumption additionally. LED lights save energy and improve workplace environments. | 24/25 - 25/26       | 7.0                                  | £40,000                     | AMPS |

| Ref. | Action   | Description   | Est. Timing   | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|--|---|---------------|--------------------------------------|-----------------------|------|
| 17   | Heating Assessment  – Centres for the Community    | Plan for future replacement of gas fired boilers and review all options available, including air source/ground source heat pumps or other state of the art technologies at Centres for the Community in Phase 2 to reduce/eliminate carbon emissions (heating feasibility study). | 24/25 - 25/26 | 0.0                                  | £20,000               | AMPS |
| 18   | Heating Decarbonisation— Centres for the Community | Replace gas fired boilers with electric or state-of-the-art alternatives with low/zero carbon impact to reduce carbon emissions from heating the building.  | 25/26 - 26/27 | 45.5                                 | £130,000              | AMPS |
| 19a  | Catering Energy Awareness and Sustainable Catering | Provide 'catering energy awareness' guidance (e.g. staff training) for key staff at the Centres for the Community   | 25/26         | 0.7                                  |                       | CS   |

| Ref. | Action  | Description  | Est. Timing | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|---|--|-------------|--------------------------------------|-----------------------------|------|
|      | Guidance - Centres for the Community  | to reduce electricity consumption, as well as how to provide meals with a low(er) carbon footprint (e.g. seasonal/regional produce, vegetarian choices).   |             |                                      |                             |      |
| 19b  | Catering Energy Awareness and Sustainable Catering Guidance - Centres for the Community | Provide 'catering energy awareness' guidance (e.g. staff training) for key staff at the Centres for the Community to reduce gas consumption, as well as how to provide meals with a low(er) carbon footprint (e.g. seasonal/regional produce, vegetarian choices). | 25/26       | 3.2                                  |                             | CS   |
| 20   | Decision Making –<br>'Carbon Impact<br>Assessment'                                      | A two-stage process, like our existing 'Equality Impact Assessment' (EIA), to be implemented in our decision making processes to assess climate change   | 25/26       | 0.0                                  |                             | P&P  |

| Ref. | Action  | Description   | Est. Timing  | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead        |
|------|---|---|--|--------------------------------------|-----------------------------|-------------|
|      |   | and carbon impacts for key projects and decisions. Results to be added to Cabinet reports.  |  |                                      |                             |             |
| 21   | Sustainable Procurement – Procedural Procurement Rules and Strategy | Integrate 'sustainability' into procurement requirements (contract procedure rules) and update our procurement strategy. This could include, ensuring that there is consideration of carbon impact into procurement policies and processes, for goods, works and services.  Prioritising low carbon alternatives helps to reduce our total carbon footprint in relation to supply chains. | 24/25 -<br>Sustainable<br>Procurement<br>Strategy -<br>complete<br>25/26 | 0.0                                  |                             | Procurement |
| 22   | Monitor Upcoming  | Procurement forward planning to explore and include options to embed  | ongoing  | 0.0                                  |                             | Procurement |

| Ref. | Action                                      | Description   | Est. Timing | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead        |
|------|---|---|-------------|--------------------------------------|-----------------------|-------------|
|      | Procurements                                | carbon impact requirements (e.g. procurement of new fleet).   |             |                                      |                       |             |
| 23   | Sustainable<br>Procurement<br>Questionnaire | Develop a supplier and service provider sustainability questionnaire to be filled out by contractors as part of the procurement process for goods, works and services. This questionnaire will help to gather valuable information, such as suppliers and supply chains' commitment to a carbon neutral vision, to receive their Scope 1 and 2 carbon emission data, and to understand how they manage and reduce their carbon emissions, etc. The detail of questions will depend on the type of contract. | 25/26       | 0.0                                  |                       | Procurement |

### Table 2: Transport and Air Quality - Carbon Reduction Actions 24-30

| Ref. | Action                      | Description   | Est.<br>Timing        | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|-----------------------------|---|-----------------------|--------------------------------------|-----------------------------|------|
| 24a  | Remote and<br>Agile Working | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational carbon footprint in FY 2022/23. Commuting - Average diesel car miles | ongoing<br>from 25/26 | 31.2                                 |                             | CMB  |
| 24b  | Remote and<br>Agile Working | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational carbon footprint in FY 2022/23. Commuting - Average petrol car miles | ongoing<br>from 25/26 | 122.6                                |                             | CMB  |
| 24c  | Remote and<br>Agile Working | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational  | ongoing<br>from 25/26 | 1.9                                  |                             | CMB  |

| Ref. | Action                      | Description   | Est.<br>Timing        | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|-----------------------------|---|-----------------------|--------------------------------------|-----------------------|------|
|      |                             | carbon footprint in FY 2022/23. Commuting - Average electric car miles  |                       |                                      |                       |      |
| 24d  | Remote and<br>Agile Working | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational carbon footprint in FY 2022/23. Commuting - Medium petrol hybrid car miles | ongoing<br>from 25/26 | 6.6                                  |                       | СМВ  |
| 24e  | Remote and<br>Agile Working | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational carbon footprint in FY 2022/23. Commuting - Other                          | ongoing<br>from 25/26 | 0.0                                  |                       | CMB  |
| 24f  | Remote and<br>Agile Working | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational carbon footprint in FY 2022/23. Commuting - Train                          | ongoing<br>from 25/26 | 2.3                                  |                       | CMB  |

| Ref. | Action                       | Description  | Est.<br>Timing        | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|------------------------------|--|-----------------------|--------------------------------------|-----------------------|------|
| 24g  | Remote and<br>Agile Working  | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational carbon footprint in FY 2022/23. Commuting - Local Bus (Outside London)                              | ongoing<br>from 25/26 | 2.9                                  |                       | CMB  |
| 25a  | Travel Plan and<br>Hierarchy | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational carbon footprint in FY 2022/23. Fuel switching cars (by size) - Business Mileage Average Diesel Car | ongoing<br>from 25/26 | 2.9                                  |                       | СМВ  |
| 25b  | Travel Plan and<br>Hierarchy | Review of hybrid working, ways of working and desk ratios as part of space planning. Employee commuting accounted for 26% of our operational carbon footprint in FY 2022/23. Fuel switching cars (by size) - Business Mileage Average Petrol Car | ongoing<br>from 25/26 | 11.7                                 |                       | CMB  |

| Ref. | Action                                      | Description  | Est.<br>Timing                 | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|---|--|--------------------------------|--------------------------------------|-----------------------|------|
| 26   | EV Charging Infrastructure                  | Roll-out of EV (twin) charging points at appropriate locations in the borough, for our operational fleet (i.e. at our CS depot) and for staff at the Civic Centre, to improve the local low carbon transport infrastructure. | 20/21 -<br>23/24 -<br>Complete | 0.0                                  | £100,000              | AMPS |
| 27   | Fleet<br>Electrification                    | Deliver the Green Fleet Strategy and Vehicle replacement programme, which will see the council operational fleet transition to electric/ ultra-low carbon vehicles by 2030.  | ongoing                        | 51.4                                 | tbc                   | CS   |
| 28   | Fleet Electrification – EV Pool Car Upgrade | Review existing electric vehicle fleet and increase number of our EV pool cars to decarbonise the fleet by 2030.   | 23/24 -<br>complete            | 2.4                                  | tbc                   | P&P  |
| 29a  | Fleet<br>Management                         | Seek CMB decision who oversees and manages the Council's total fleet, its operations and vehicle renewals. Appointing clear responsibility to manage   | 23/24 -<br>complete            | 0.0                                  |                       | CMB  |

| Ref. | Action                   | Description  | Est.<br>Timing | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|--------------------------|--|----------------|--------------------------------------|-----------------------|------|
|      |                          | the fleet comprehensively will help to monitor and understand our fleet's carbon emissions as well as reducing them.   |                |                                      |                       |      |
| 29b  | Fleet Behaviour training | Effective mileage reduction of 20% in best case by 2030, created by driver training to improve efficiency, staggered from 2024.  | ongoing        | 21.4                                 |                       | CS   |
| 30   | Fleet Mileage            | Review our CS operations to achieve a reduction of total mileage driven and CO2 emissions/mile driven effectively. Explore and identify how this will be achieved, through detailed transport and fleet analysis (e.g. analysis of vehicle routes, average passenger numbers, passengers per vehicle, overall passenger capacity and utilisation etc.) | ongoing        | 24.3                                 |                       | CS   |

### Table 3: Housing and Planning - Carbon Reduction Action 31

| Ref. | Action                                 | Description   | Est.<br>Timing | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost<br>(£) | Lead    |
|------|--|---|----------------|--------------------------------------|--------------------------------|---------|
| 31   | Partnership Working and Communications | Continue to support partners such as Action Surrey to distribute impartial information and advice on energy efficiency measures to residents, e.g. identify qualifying households to access energy efficiency funding and promote the benefits to residents and the environment of installing energy saving measures and changing behaviour to reduce energy use. Legislation is also used to ensure that privately rented properties meet the current energy efficiency standards, contributing to the reduction of fuel poverty and energy use. Continue our communications to tenants, homeowners, (social) landlords etc. including how to save energy or encourage them to take up smart meters to measure energy usage. | ongoing        | 0.0                                  |                                | Housing |

Table 4: Buildings and Infrastructure - Carbon Reduction Actions 32-34

| Ref. | Action                                     | Description   | Est. Timing                     | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead     |
|------|--|---|---------------------------------|--------------------------------------|-----------------------|----------|
| 32   | Local Plan – Planning Application Criteria | The new Local Plan will play a central role in addressing the climate emergency by setting out a development strategy and policies that seek to reduce carbon dioxide emissions and support the transition to a low carbon future. As well as delivering improvements to green and blue infrastructure, flood risk, air quality, recycling and waste management. The Local Plan will form the basis on which planning applications in the borough will be determined. | With adoption of new Local Plan | 0.0                                  |                       | Planning |
| 33   | Local Plan –<br>Supplementary<br>Planning  | The SPD will set out detailed guidance to applicants in terms of how the policies in the new Local Plan can be met. Focusing on   | After the new<br>Local Plan     | 0.0                                  |                       | Planning |

| Ref. | Action                                  | Description   | Est. Timing   | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead     |
|------|---|---|---|--------------------------------------|-----------------------|----------|
|      | Document (SPD)                          | climate change mitigation, adaption and resilience, guidance will include ensuring the buildings are located in sustainable locations benefiting from a reduced need to travel / travel by public means; designed and positioned to benefit from passive solar gain; and how to incorporate low carbon technologies into new developments / which are most appropriate. | adoption  |                                      |                       |          |
| 34   | Green & Blue<br>Infrastructure<br>Study | This evidence base document will inform the policies of the draft Local Plan and guidance contained within the SPD. It will include opportunities for reducing carbon emissions such as contributing to a greener active travel network thus reducing the need to travel by private vehicle and, tree planting to capture carbon dioxide emissions. The Study will set  | Published<br>alongside the<br>draft Local<br>Plan (Reg. 19) -<br>Complete | 0.0                                  |                       | Planning |

| Ref | Action | Description  | Est. Timing | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|-----|--------|--|-------------|--------------------------------------|-----------------------|------|
|     |        | out G&BI opportunities appropriate to the location and size of development that should be incorporated into the design of schemes. |             |                                      |                       |      |

# Table 5: Monitoring and Evaluation Actions 35-37

| Ref. | Action                                   | Description  | Est.<br>Timing | Est.<br>carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost<br>(£) | Lead |
|------|--|--|----------------|--------------------------------------|--------------------------------|------|
| 35   | Monitoring<br>and<br>Evaluation          | Review our progress of the 'Carbon Management and Reduction Plan' annually.  | ongoing        | 0.0                                  |                                | P&P  |
| 36   | Monitoring<br>and External<br>Evaluation | Calculate the operational EBC carbon footprint annually. Consider calculating the total carbon footprint with the support of external partners, such as the Carbon Trust, every few years  | ongoing        | 0.0                                  |                                | P&P  |
| 37   | Stakeholder<br>Engagement                | Actively manage and work with external/internal stakeholders and partners, i.e. sharing knowledge, seeking feedback and promoting organisational change supporting the Council to transition to become carbon neutral. Keep carbon reduction on the Council's high-level agenda, manage expectations and recognise achievements. | ongoing        | 0.0                                  |                                | P&P  |

# Table 6: Carbon Offsetting Action 38

| Ref. | Action               | Description   | Est.<br>Timing | Est.<br>carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|----------------------|---|----------------|--------------------------------------|-----------------------|------|
| 38   | Carbon<br>Offsetting | Despite the carbon reductions achievable from the implementation of the actions outlined in this Plan, we will still be emitting CO2e in 2030. For us to meet our carbon neutral target we will need to consider offsetting any remaining carbon emissions. There are numerous methods for offsetting carbon emissions, each with their pros and cons. It is therefore recommended to explore methods and principles for offsetting, which will require funding and the development of an offsetting approach setting out the Council's principles and standards. | ongoing        | 0.0                                  | tbc                   | P&P  |

### Table 7: Further Assessment Organisation Emissions Actions 39-53

| Ref. | Action   | Description  | Est.<br>Timing        | Est. carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|--|--|-----------------------|-----------------------------------|-----------------------------|------|
| 39a  | Waste - not recycled -<br>Centres for the<br>Community | Zero waste to landfill   | ongoing<br>from 25/26 | 0.1                               |                             | AMPS |
| 39b  | Waste - recycling - Civic<br>Centre                    | Reduce recycled paper material by 75%                                    | ongoing<br>from 25/26 | 0.0                               |                             | AMPS |
| 39c  | Waste - recycling - Civic<br>Centre                    | Reduce recycled plastic material by 75%                                  | ongoing<br>from 25/26 | 0.1                               |                             | AMPS |
| 39d  | Waste - recycling - Centres for the Community          | Reduce recycled plastic material by 75%                                  | ongoing<br>from 25/26 | 0.1                               |                             | AMPS |
| 40a  | Water consumption - Civic Centre                       | 50% reduction in water consumption through water efficiency and improved | ongoing<br>from 25/26 | 0.8                               |                             | AMPS |

| Ref. | Action   | Description   | Est.<br>Timing        | Est. carbon<br>savings<br>(tCO2e) | Est. Capital Cost (£) | Lead |
|------|--|---|-----------------------|-----------------------------------|-----------------------|------|
|      |  | appliances  |                       |                                   |                       |      |
| 40b  | Water consumption - Centres for the Community    | 50% reduction in water consumption through water efficiency and improved appliances | ongoing<br>from 25/26 | 0.7                               |                       | AMPS |
| 41   | BEMS and behaviour -<br>Operational Assets       | Behavioural Change Programme  | ongoing<br>from 25/26 | 0.3                               | £1,500                | AMPS |
| 42   | BEMS and behaviour -<br>Operational Assets       | Building Energy Management System (BEMS)  | ongoing<br>from 25/26 | 1.2                               | £24,564               | AMPS |
| 43   | Fuels Improvements -<br>Operational Assets       | Gas heating controls  | ongoing<br>from 25/26 | 3.7                               | £499                  | AMPS |
| 44   | Electricity Improvements -<br>Operational Assets | Lighting upgrade  | ongoing<br>from 25/26 | 0.5                               | £4,456                | AMPS |
| 45   | Electricity Improvements -                       | Motion sensors (PIRs)   | ongoing               | 0.0                               | £783                  | AMPS |

| Ref. | Action   | Description  | Est.<br>Timing        | Est. carbon savings (tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|--|--|-----------------------|-----------------------------|-----------------------------|------|
|      | Operational Assets                               |  | from 25/26            |                             |                             |      |
| 46   | Fuels Improvements -<br>Operational Assets       | Natural Gas Consumption Review   | ongoing<br>from 25/26 | 1.6                         | £200                        | AMPS |
| 47   | Fuels Improvements -<br>Operational Assets       | Pipework lagging   | ongoing<br>from 25/26 | 0.2                         | £563                        | AMPS |
| 48   | Electricity Improvements -<br>Operational Assets | Sub meters   | ongoing<br>from 25/26 | 0.6                         | £1,852                      | AMPS |
| 49   | Electricity Improvements -<br>Operational Assets | Mobile heater removal  | ongoing<br>from 25/26 | 0.3                         | £0                          | AMPS |
| 50   | Renewables - Operational<br>Assets               | Solar PV & Battery (best option taken for each site from audit results based on ROI) | ongoing<br>from 25/26 | 2.4                         | £68,600                     | AMPS |
| 51   | Fuel switching -                                 | Convert gas boilers to electric  | ongoing               | 2.0                         | £7,144                      | AMPS |

#### Carbon Management and Reduction Plan 2030

| Ref. | Action                                 | Description                                   | Est.<br>Timing        | Est. carbon<br>savings<br>(tCO2e) | Est.<br>Capital<br>Cost (£) | Lead |
|------|--|---|-----------------------|-----------------------------------|-----------------------------|------|
|      | Operational Assets                     |   | from 25/26            |                                   |                             |      |
| 52   | Fuel switching -<br>Operational Assets | Convert gas calorifier to electric calorifier | ongoing<br>from 25/26 | 1.9                               | £7,200                      | AMPS |
| 53   | Fuel switching -<br>Operational Assets | Replace gas boiler with electric panels       | ongoing<br>from 25/26 | 3.5                               | £2,500                      | AMPS |

#### Table 8: List of abbreviations and notes

#### **Abbreviations**

| Abbreviation       | Description  |
|--------------------|--|
| AMPS               | Asset Management and Property Services   |
| Approx.            | Approximately  |
| BMS                | Buildings Management System (computer-based systems used to monitor and control building |
|                    | services such as heating, ventilation and air conditioning, fire alarms etc.)            |
| CMB                | Council Management Board   |
| CS                 | Community Services   |
| CO2                | Carbon dioxide   |
| e.g.               | exempli gratia (for example)   |
| EMS                | Environmental Management System  |
| Est.               | Estimated  |
| Etc.               | Et cetera  |
| EV                 | Electric vehicle   |
| FY                 | Financial year   |
| GHG emissions      | Greenhouse gas emissions (e.g. carbon dioxide, methane, nitrous oxide)                   |
| G&BI               | Green and blue infrastructure  |
| kWh                | Kilowatt-hour  |
| LED                | Light-emitting diode   |
| m2                 | Square meter   |
| n/a                | Not applicable   |
| Operational assets | Civic Centre, Centres for the Community and further assessment sites                     |

| Abbreviation      | Description                                |
|-------------------|--|
| Operational sites | Civic Centre and Centres for the Community |
| P&P               | Policy & Performance                       |
| PV                | Photovoltaics                              |
| Ref.              | Reference                                  |
| REGO              | Renewable Energy Guarantees of Origin      |
| ROI               | Return on investment                       |
| SPD               | Supplementary Planning Document            |
| tbc               | to be confirmed                            |
| tCO2e             | Tonnes of carbon dioxide equivalent        |

#### **Notes**

- The terms carbon, CO2, CO2e, GHG emissions are used synonymously. "The term "carbon" refers to carbon dioxide, which is a colourless, odourless and non-poisonous gas formed by combustion of carbon and in the respiration of living organisms. It is considered a greenhouse gas. Emissions means the release of greenhouse gases or their precursors into the atmosphere over an area during a period of time" (Organisation for Economic Cooperation and Development Dictionary).
- Ref. 1, 5, 6, 7, 8, 9, 11, and 18 are pending due to their interdependencies on the transformation and accommodation review process.
- The CMRP Ref items are categorised into the following emission types:
  - o Electricity Ref. 1a, 2, 3, 4, 5, 6, 7, 10, 11a, 11b, 11c, 12, 16, 19a, 41, 42, ,45, 48, 49, 50
  - o Fleet Ref. 27. 28, 29a, 29b, 30
  - o Gas Ref. 1b, 8, 9, 13, 14, 15, 17, 18, 19b, 43, 46, 47, 51, 52, 53
  - o Selected Scope 3 Ref. 20, 21, 22, 23, 24a-g, 25a, 25b, 26, 31, 32, 33, 34, 35, 36, 37, 38, 39a-d, 40a, 40b