Item

ANNUAL CLIMATE CHANGE STRATEGY AND CARBON MANAGEMENT PLAN UPDATE REPORT

To:
Councillor Rosy Moore, Executive Councillor for Climate Change, Environment and City Centre
Environment and Community Scrutiny Committee 06/10/2022

Report by:
Janet Fogg, Climate Change Officer, Catherine Stewart, Climate Change Officer and David Kidston, Strategy and Partnerships Manager
Tel: 01223 457143, Email: david.kidston@cambridge.gov.uk

Wards affected:
Abbey, Arbury, Castle, Cherry Hinton, Coleridge, East Chesterton, King's Hedges, Market, Newnham, Petersfield, Queen Edith's, Romsey, Trumpington, West Chesterton

Not a Key Decision

1. Executive Summary

1.1 This report provides an update on progress on the 2021/22 actions of the Council's Climate Change Strategy 2021-26. As part of this, the report includes an update on progress in:

- Implementing the projects to reduce our direct carbon emissions from our corporate buildings, fleet vehicles and business travel as detailed in the Council's Carbon Management Plan 2021-26.
- Progress on EV charging (see paragraphs 7.6-7.13), recycling and food waste collections (see 8.1-8.10), and insulation and other housing retrofit measures (see 6.1-6.9), as agreed by the Executive Councillor for Climate Change, Environment and City Centre at the Council meeting on 24 February 2022.

1.2 The report also provides an update on:

- The council's Greenhouse Gas Emissions for 2021/22.

2. Recommendations

The Executive Councillor is recommended to:

1. Note the progress achieved in 2021/22 in implementing the actions in the Climate Change Strategy and Carbon Management Plan.
2. Approve the updated Climate Change Strategy action plan presented in Appendix A.
3. Approve the updated Environmental Policy Statement presented in Appendix C

3. Background

Climate Change Strategy

3.1 The Council's Climate Change Strategy 2021-26 shares 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. This vision recognises that, while the Council can take the actions identified in the strategy's Action Plan and use its policies and regulatory powers to influence emissions in some sectors, the actions and choices of national government, businesses, organisations and individuals have a very significant impact on emissions in the city.

3.2 The Council's strategy sets out six key objectives for how we will address the causes and consequences of climate change:

1. Reducing carbon emissions from city council buildings, land, vehicles and services
2. Reducing energy consumption and carbon emissions from homes and buildings in Cambridge
3. Reducing carbon emissions from transport in Cambridge
4. Reducing consumption of resources, reducing waste, and increasing

recycling in Cambridge

5. Promoting sustainable food
6. Supporting Council services, residents and businesses to adapt to the impacts of climate change

3.3 The Council is taking a wide range of direct actions, set out in the Climate Change Strategy Action Plan, which will contribute to reducing emissions in Cambridge to help deliver the vision for Cambridge to be net zero carbon by 2030. This report provides details of progress on some of the key actions during the first six months of the new strategy (see sections 4 to 9 below).

3.4 A revised and updated Action Plan is presented for approval at Appendix A.

Climate Change Strategy benchmarking

3.5 Since 2016 the council has reported the council's activities to reduce the council's and the city's emissions and adapt to climate change to the Carbon Disclosure Project (CDP). CDP run the global disclosure system that enables companies, cities, states and regions to measure and manage their environmental impacts.

3.6 The Council's 2021 response was awarded a score of B within the 'Management' scoring band. The Mitigation score of B (equal to the Europe regional average) indicates that "a Management level city has a clear understanding of their city-wide emissions through their inventory, their action plan is in implementation and the city has emission reduction targets and actions in place to mitigate the effects of climate change". The adaptation score of B (higher than the Europe regional average of C) indicates that "a Management level city has assessed the impacts of climate change; an adaptation plan is in implementation and the city is taking action to adapt to the effects of climate change".

3.7 In January 2021 Climate Emergency UK published independent rankings[1] of all 400 plus local authority climate change strategies and

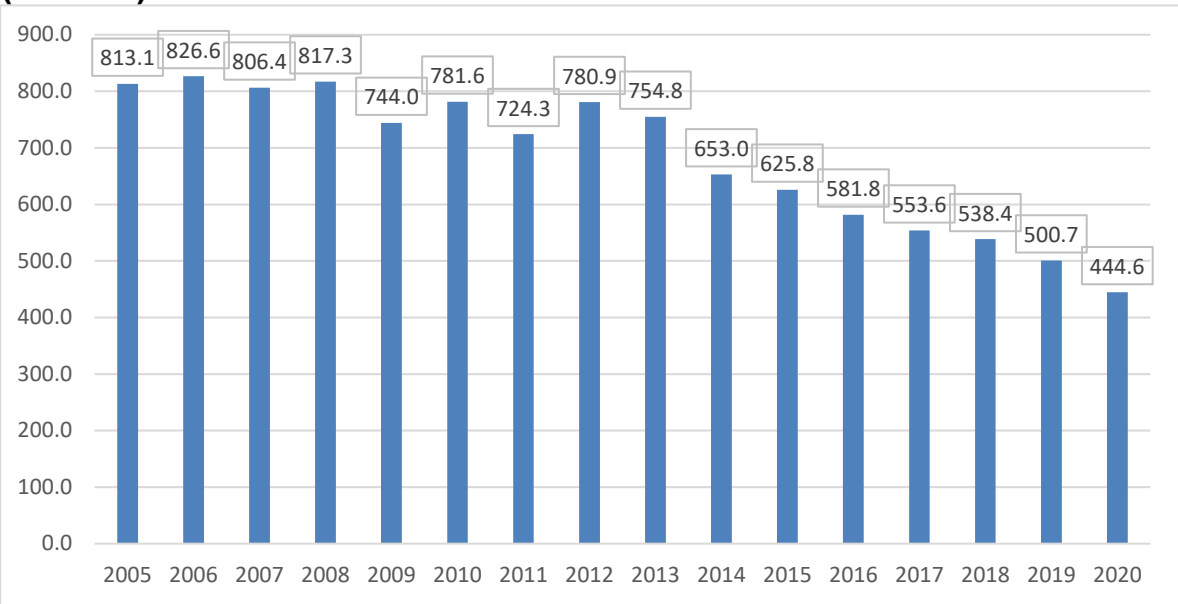
[1] https://councilclimatescorecards.uk/

action plans. The Council was ranked 17th out of 181 district Councils with a score of 64%[2]. The average district score was 43% and the Council scored above average in all of the 9 areas of the scorecard. Our score was higher than a number of similar district council such as Exeter (23rd with 61%), Oxford (60th with 48%) and Norwich (101st with 33%).

Carbon emissions in Cambridge

3.8 As shown in Chart 1 below, the latest available national greenhouse gas emissions estimates, published by the Department for Business, Energy and Industrial Strategy (BEIS), show that total emissions in Cambridge have reduced by 45% over the last 15 years, from 813.1 $ktCO_2e$ in 2005 to 444.6 $ktCO_2e$ in 2020.

Chart 1: Total Greenhouse Gas Emissions in Cambridge 2005-2020 ($ktCO_2e$)

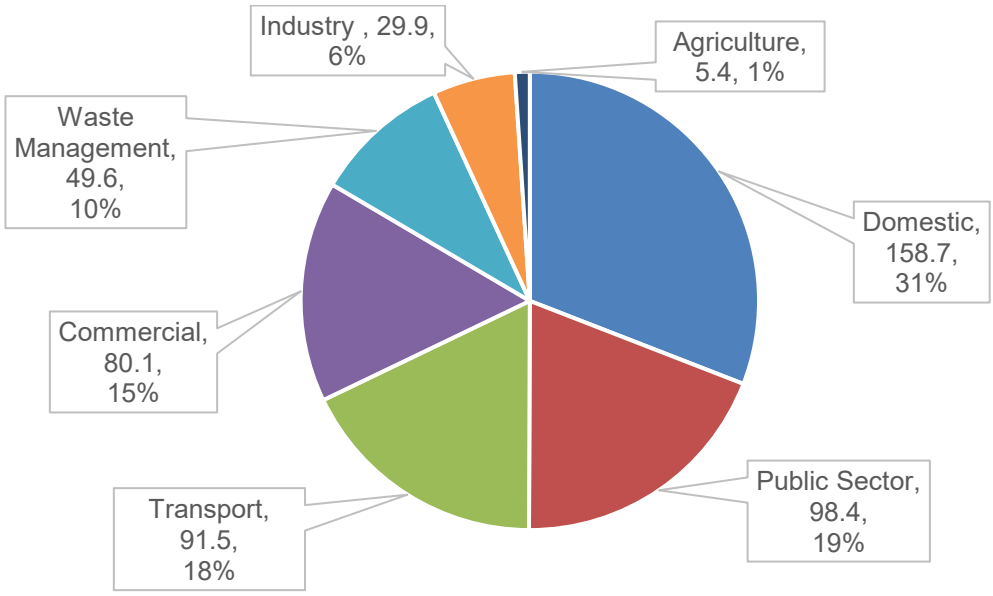


3.9 While the Council, residents and partners in the city have taken a range of actions over this period, the reduction in emissions from Cambridge (and other cities) in more recent years has been driven primarily by reduced use of coal in electricity generation and the increased use of renewable energy generation at a national level.

[2] https://councilclimatescorecards.uk/scoring/district/

3.10 The Council's Climate Change Strategy focusses on reducing carbon emissions from the key sources of emissions in the city and where the Council has most influence. As shown by Chart 2, below, the greatest source of greenhouse emissions in Cambridge in 2020 was from energy consumption in domestic properties (heating and powering homes) at 31% (the UK average was 25%), which is almost a third of the city's emissions, emphasising the importance in reducing emissions through retrofit and changing residents' behaviour in this sector.

Chart 2: Sources of Greenhouse Gas Emissions in Cambridge in 2020 ($ktCO_2e$)



3.11 The public sector contributes the second highest proportion of emissions in Cambridge at 19%, which is much higher than the UK average of 3% for local authority (LA) areas. The reflects the number and size of councils, health and education bodies in the city.

3.12 Transport was responsible for the third highest proportion of emissions in Cambridge at 18%, which is lower than the UK average of 28%. This suggests that actions to reduce emissions from transport are also important in reducing carbon emissions in the city.

3.13 The fourth highest sector is commercial shops and businesses at 15%, a much higher proportion than the UK average of 6% from this emissions source. In contrast, emissions from industry were the second

lowest proportion of emissions in Cambridge at 6%, compared to a UK average of 19%.

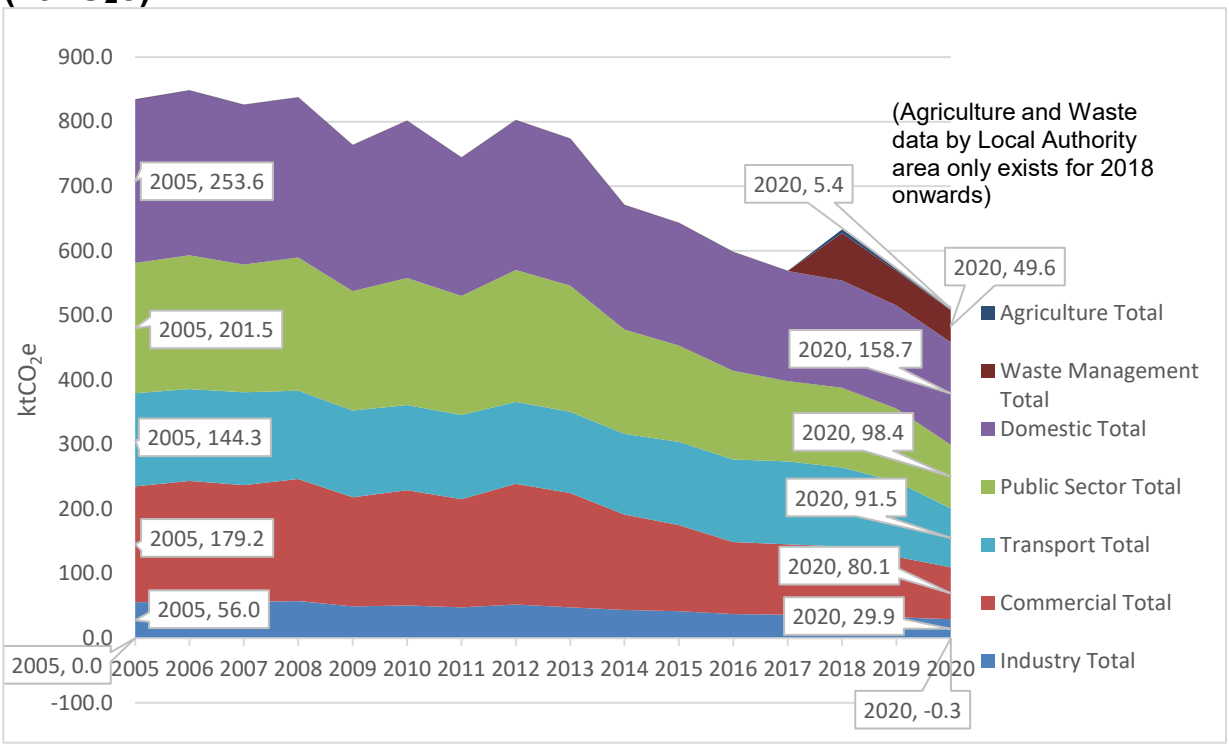
3.14 Cambridge City Council was only directly responsible for 1% of total carbon emissions in the city in 2020, so there is a need for significant action by residents, businesses and other public organisations in the city, to reduce their emissions if Cambridge is to become net zero carbon.

3.15 Waste management (10% of Cambridge's emissions) and agriculture (1%) have been included in BEIS' local authority area emissions estimates[3] for the first time in 2020, and so the emissions now also cover territorial emissions of methane (CH_4) and nitrous oxide (N_2O) as well as carbon dioxide (CO_2). Prior to 2020, the statistics only covered carbon emissions (CO_2) and so the statistics are now estimates of greenhouse gas emissions.

3.16 As shown by Chart 3 on the next page, emissions associated with all sectors have reduced between 2005 and 2015, although some sectors have seen a greater reduction than others.

[3] https://www.gov.uk/government/collections/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics

Chart 3: Sources of Greenhouse Gas Emissions 2005-2020 ($ktCO_2e$)

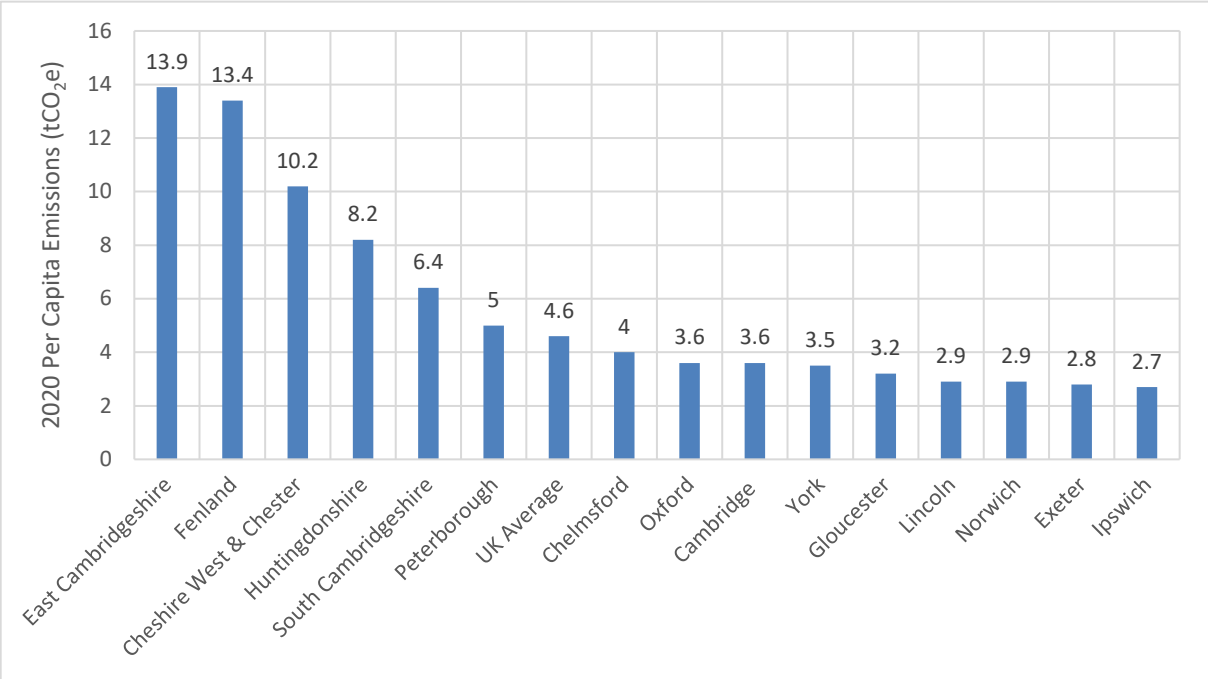


4

3.17 As Chart 4 on the next page shows, per capita emissions estimates (emissions per unit of population) in Cambridge compared to other local authorities in Cambridgeshire and also cities in England with comparable populations (ranging from 99,000 to 195,000) and functions.

[4] LULUCF: land use, land use change and forestry activities. *The LULUCF Sector differs from other sectors in the Greenhouse Gas Inventory in that it contains both sources and sinks of greenhouse gases. The sources, or emissions to the atmosphere, are given as positive values; the sinks, or removals from the atmosphere, are given as negative values, source:* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1087003/lulucf-local-authority-mapping-report-2020.pdf.

Chart 4: 2020 Per Capita Emissions Estimates (tCO_2e)



3.18 The Council is making use of available data tools to identify the transition needed for Cambridge to reach net zero carbon emissions. From October 2020-December 2021 we had a trial subscription to the ClimateView system, which aims to help identify and visualise the interventions (e.g. retrofit of homes and commercial buildings) that would be needed in different thematic areas (e.g. energy, transport and waste) in order for cities to reach net zero carbon. ClimateView was helpful in informing the development of actions for inclusion in the Council's Climate Change Strategy.

3.19 However, we have decided not to continue with the Council's subscription to ClimateView, because much of the data that the system requires (e.g. total number of miles travelled by petrol cars, diesel cars and electric cars per annum) is not currently available for Cambridge. In the absence of local data, the system uses average per capita figures based on national data, which is much less accurate and is difficult to reconcile with the local authority emissions data published by BEIS and presented above. We have explored several alternative data tools, including Scatter, Net Zero Go, Net Zero Navigator and the MacKay Carbon Calculator, and will determine which of these tools to best meets our needs.

Carbon Management Plan 2021-26

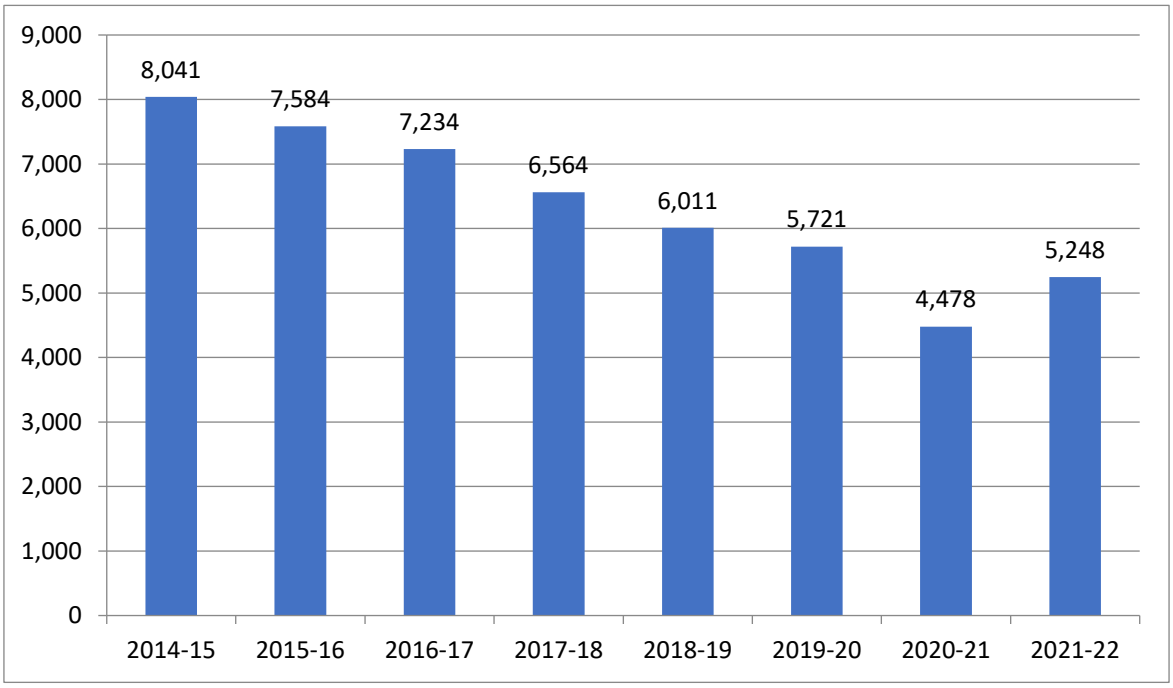
3.20 The Council has set a target in the Climate Change Strategy to reduce direct carbon emissions from our corporate buildings (including swimming pools, office buildings, car parks, sheltered housing schemes, community centres, arts venues and the crematorium), fleet vehicles (including vans, trucks and refuse vehicles), and business travel, to net zero by 2030.

3.21 The Council has produced a Carbon Management Plan for 2021-26, which sets out projects that will help reduced carbon emissions from our corporate buildings, fleet vehicles and business travel. Details of the carbon reduction projects to be delivered during 2021/22 are provided in section 4 below, and a table providing further information on these projects is included in the Carbon Management Plan at Appendix B.

Cambridge City Council's carbon emissions

3.22 The Council calculates its carbon emissions from its estate and operations, and reports these to Government in our annual Greenhouse Gas report. The report for 2021/22 is available on the Council's website here: www.cambridge.gov.uk/carbon-management-plan.

Chart 5. Council's Total Carbon Emissions (tCO_2e)



3.23 As shown by Chart 5 on the previous page, from 2014/15 to 2021/22 the Council's carbon emissions have reduced by 34.7%. This reduction was partly due to steps that the Council has taken, including rationalising its office accommodation, investing in energy efficiency and renewable energy measures in its buildings, and reducing carbon emissions from its fleet vehicles. A significant proportion of this reduction was also due to the decarbonisation of electricity generation at a national level, through the progressive closure of coal-fired power stations and increasing renewable electricity generation.

3.24 However, as shown by the chart above, the Council's greenhouse gas emissions were 17.2% higher in 2021/22 than in 2020/21. Total gross emissions increased from 4,478 tonnes of carbon dioxide equivalent (tCO_2e) in 2020/21 to 5,248 tCO_2e in 2021/22. The 2021/22 emissions are, however, 8.3% lower than the pre-Covid year of 2019/20 when the emissions total was 5,721 tCO_2e.

3.25 It was anticipated that the Council's emissions may increase in 2021/22 compared to 2020/21's emissions total. 2020/21 was an exceptional year, with some Council buildings closed or used on a more limited basis due to restrictions imposed by the government in response to the coronavirus pandemic. As restrictions were lifted during 2021/22, it was anticipated that the use of Council buildings and associated consumption of gas and electricity would increase.

3.26 The main contribution to the increase in the Council's emissions in 2021/22 compared to the previous year was the increased consumption of electricity and gas at the Council's swimming pools and leisure sites. These were closed or had reduced opening hours or capacity for certain periods during 2020/21 and were re-opened in 2021/22. The Corn Exchange also re-opened for performances from August 2021 having been closed during the pandemic.

3.27 Electricity and gas consumption significantly increased at Jesus Green Outdoor Pool, which was open for 12 months during 2021/22 (instead of the usual 5 months) and stayed open later in the evening for the health and wellbeing benefit of users during the coronavirus pandemic.

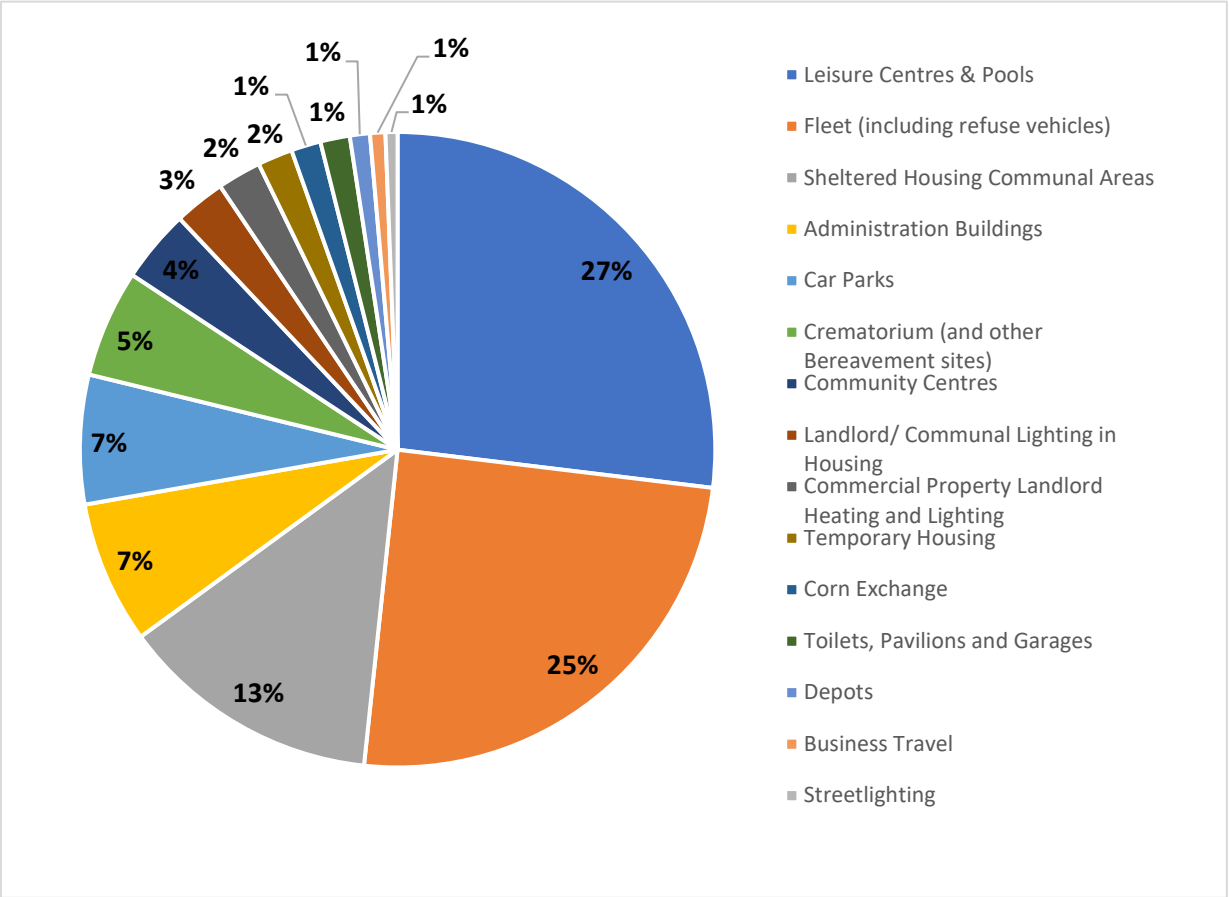
The increased opening of the pool required more electricity to provide lighting, heating for the showers and power for the pool pump filter system. Some sites, such as Cherry Hinton Village Centre were used as Covid vaccination centres and so energy use increased at these sites.

3.28 In contrast, the consumption of electricity and gas in the Council's non-leisure buildings in 2021/22 was lower than in both 2019/20 and 2020/21 due to lower occupancies. The Council's car parks also used significantly lower amounts of electricity in 2021/22 than in the previous two years.

3.29 Carbon emissions from the Council's vehicle fleet has increased since 2020/21 as the Council continues to provide essential services. However, there is still a marked reduction in business mileage for staff and Councillors as a result of a significant number of meetings continuing to be held online, where previously travel was required.

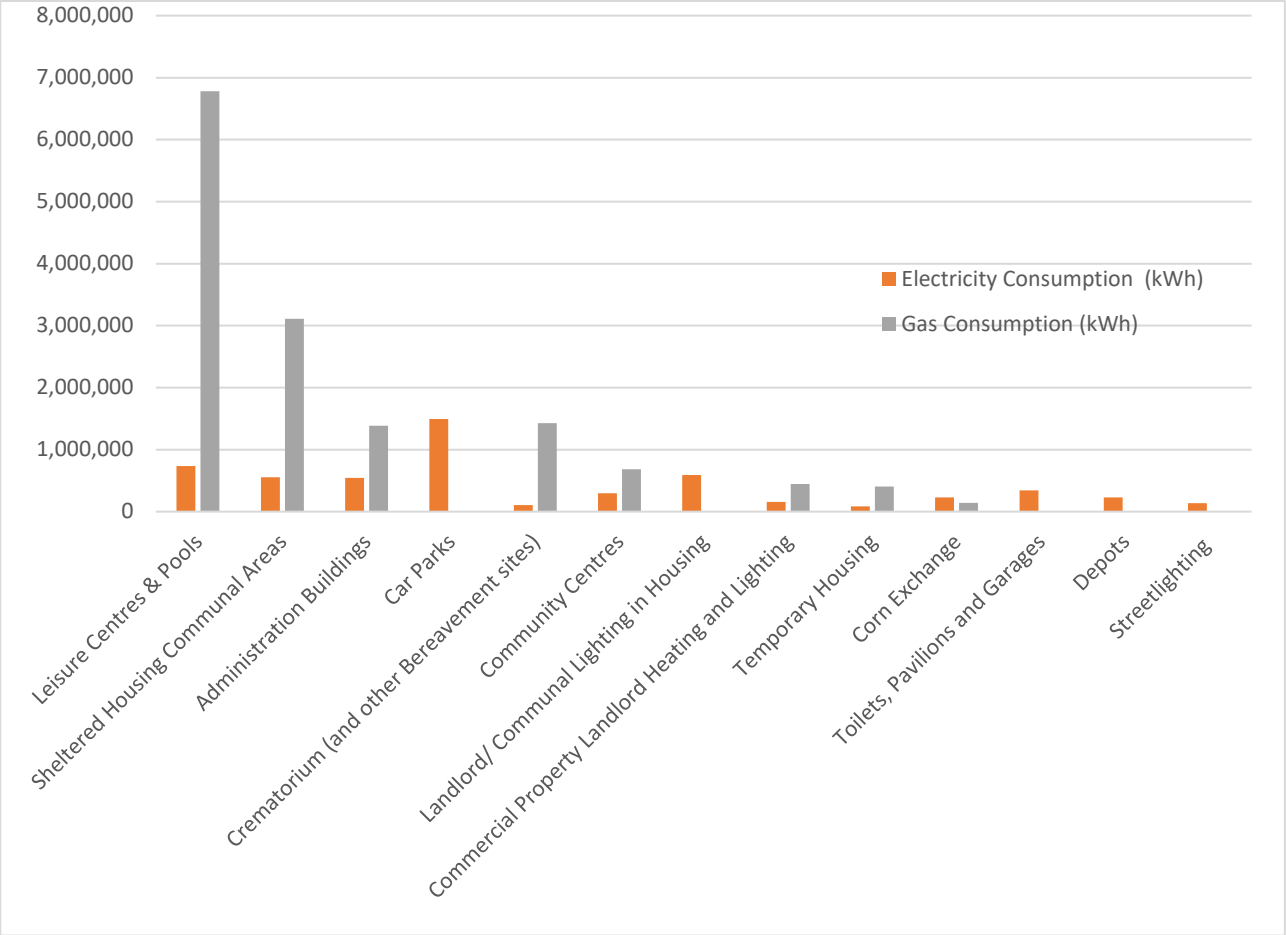
3.30 As shown by Chart 6 on the next page, in 2021/22 the greatest proportion of emissions came from the Council's leisure centres and pools (27%) followed by fleet vehicles (25%), sheltered housing communal areas (13%), administration buildings (7%), car parks (7%), the Crematorium (5%) and community centres (4%).

Chart 6: Council's Carbon Emissions by Source (tCO_2e) in 2021/22



3.31 The main sources of the council's emissions are the sites that use a significant amount of gas, including the leisure sites, sheltered housing communal areas, administration buildings and the Corn Exchange and Crematorium. The Council's leisure sites consumed the most gas in 2021/22 (6,782,489 kWh) and the second highest amount of electricity (736,934 kWh compared to the car parks which consumed 1,492,689 kWh) as shown in Chart 7 on the next page.

Chart 7: Electricity and Gas Consumption by Source (kWh) 2021/22



4. Communications, engagement and collaboration

4.1 Raising awareness of climate change and encouraging action to help the city to reach net zero carbon emissions is a key priority for the Council. During 2021/22, we have taken forward a range of communications and engagement actions with staff and residents, and we have continued collaborative activities with local businesses, institutions and organisations.

Staff training and awareness

4.2 In 2021/22 a 30-minute online CPD Certified Environmental Awareness course was added to the staff induction programme and all existing staff were asked to complete it.

4.3 A 1.5 hour ‘Climate Change – Net Zero training’ session was developed and delivered by the Council’s Climate Change Officers to groups of senior managers and councillors. Thirteen training sessions were held from January-September 2022 and 25 councillors and 94 managers have been trained to date.

4.4 The training includes key information about climate change, Cambridge’s emissions and the impacts of climate change, the Council’s commitments, the action we are taking and how attendees can contribute to the vision for the city to be net zero carbon by 2030 and the target to reduce its direct carbon emissions to net zero carbon by 2030.

4.5 Feedback following the sessions has shown that the sessions have boosted attendees’ confidence in the subject. Prior to attending, 73% of attendees (who responded to the feedback survey) scored themselves as 1,2 or 3 out of 5 in terms of confidence in this topic (indicating lower levels of confidence). After the session, 97% of respondents scored their confidence as either 3,4, or 5 and 94% agreed or strongly agreed that the course met its learning objectives.

4.6 Attendees were asked to pledge to undertake an action at work and at home that would reduce emissions. Work related pledges included: reducing work-related journeys where possible; reducing energy consumption in council buildings; and working to provide space for residents to grow food. Personal pledges made by attendees included: reducing waste from cooking; cycling more; and trying not to buy new clothes for a year.

Communications and awareness-raising for residents

4.7 During 2021/22 the Council used a variety of communications channels to engage different residents, including: radio interviews; regular articles in every edition of Cambridge Matters; news releases; awards submissions; creating videos; posts on social media; and updates on the Council website. Council communications focused on a range of issues, including raising awareness of Council action to address climate

change and reduce carbon emissions, highlighting the co-benefits of addressing climate change, and helping and encouraging residents to make well-informed low carbon choices about their behaviours such as use of energy, recycling, and food by providing practical tips

4.8 The Council used national awareness days and events to help amplify our messaging, including World Food Day (November 2021), National Tree Week (December 2021), Big Energy Saving Week (January 2022), Earth Hour (March 2022), Food Waste Action Week (March 2022), National Vegetarian Week (May 2022) and Clean Air Day (June 2022). We also ran two longer campaigns:

- a social-media campaign during COP26 (in October 2021) called #OurGreenDay, which showcased the variety of work happening across different Council services to address climate change and encouraged residents to make behavioural changes.
- a communications campaign during national Net Zero Week in July 2022, to raise awareness of work the Council is doing to reach net zero and give practical tips to residents on how they can contribute to the vision of a net zero Cambridge. Other national awareness days that have been used to amplify Council communications

4.9 To continue to raise awareness and support residents to take action on climate change, a climate change training course for residents will be launched during 2022/23. The training, funded and co-designed by the Council, will be delivered by Cambridge Carbon Footprint and will aim to motivate, empower and enable residents to take practical, impactful climate action.

Cambridge Climate Change Charter

4.10 The Council funded Cambridge Carbon Footprint to develop the Cambridge Climate Change Charter, to support residents to make well-informed low carbon choices and commitments and encourage businesses to take steps to reduce their carbon emissions.

4.11 In June 2021, the contract with Cambridge Carbon Footprint (CCF) was

extended until June 2022 to promote the Charter through further activities and events. These included: a “Shrink your Carbon Footprint” stalls at events; a session at the Cambridge Zero Climate Change Festival; a Community toolkit and a launch event and workshops to promote it; two events for SMEs; and the development and promotion of the Cambridge Climate Map, which highlights low carbon shops, businesses and services in the city. Since June 2021, 7 more businesses and 37 more individuals have signed the Charter, equaling 24 business signatories and 171 individual signatories in total.

City Leaders Climate Change Group

4.12 Since 2017, the Council has convened the City Leaders Climate Change, which brings together key partners, including businesses, universities, and public sector organisations to explore how carbon emissions in the city can be reduced. During 2021/22 the Council convened 3 meetings of the group

- In July 2021, Cambridge Zero presented their plans to engage with businesses and support them to reduce emissions.
- In December 2021, following COP26, the Cambridgeshire and Peterborough Independent Commission on Climate presented recommendations for businesses from their recent report and Cambridge Institute for Sustainability Leadership (CISL) presented on leadership and collaboration for climate change. Over 50 representatives from major businesses, institutions and organisations in the city, including senior leaders (CEO’s and Directors), attended the meeting. Attendees explored opportunities to work together and there was a high-level of enthusiasm for action-oriented collaboration.
- In March 2022, we invited a sub-group of members who responded positively to a follow-up survey sent after the December 2021 event to a further meeting. The group discussed potential collaborative actions that the group could deliver, with a particular focus on reducing carbon emission from transport in the city.

4.13 The Council plans to jointly host the next City Leaders Climate Change

Group meeting with CISL at their newly retrofitted building, Entopia, to continue to explore collaboration, with a focus on reducing carbon emissions from energy, another key area of interest for members of the group.

Local Climate Change Forum

4.14 Since July 2021, the Council has convened 5 meetings of the Climate Change Forum, which brings together the Council and local voluntary and community groups (including Cambridge Carbon Footprint, Cambridge Sustainable Food, Carbon Neutral Cambridge, Friends of the Earth and Transition Cambridge) to explore opportunities for collaborative activities to help address climate change. For example, in October 2021, the Council, CCF, CSF and Transition Cambridge hosted a joint online engagement event as part of the Cambridge Zero Festival, which provided advice to residents on the practical steps they can take to reduce their emissions and help Cambridge to achieve net zero carbon emissions. 85 people registered for the event and 37 people attended.

4.15 The Council is currently planning another joint engagement event for October 2022, as part of the Cambridge Zero Climate Change Festival, with members of the Climate Change Forum. The event will take place at the Guildhall and consist of a series of mini talks on community projects in Cambridge which tackle climate change.

5. Progress in delivering the key actions under Objective 1

Emissions from the Council's estate and fleet vehicles

5.1 Action 1.1: Reducing emissions from the Council's building estate
Objective 1 of the Climate Change Strategy, 'Reducing carbon emissions from the City Council's buildings, land, vehicles and services', is being delivered primarily through carbon and energy reduction projects as part of the Council's Carbon Management Plan 2021-26 an update for which is at Appendix B. During 2021/22, the following projects were progressed on the Council's estate:

- Parkside and Abbey Pools: Following successful applications for a total of £1.7m from the Government's Public Sector Decarbonisation Scheme (PSDS), the Council worked with Bouygues Energies & Services via the REFIT 3 Energy Performance Contract[5] to install a number of carbon emission reduction measures at Parkside and Abbey swimming pools.
    - Parkside Pool: Two air source heat pumps[6] (ASHP), additional solar PV, an LED lighting upgrade, BEMS[7] and pipework insulation were installed. The ASHPs will work with the existing CHP[8] unit to provide heat to the air plant and domestic hot water services at the pool. Improved controls will further reduce energy consumption. These measures will reduce the energy consumption of Parkside Pool by approximately 37.5%. They will reduce carbon emissions at the pool by approximately 368.3 tonnes of CO_2, which will reduce the Council's total carbon emissions by approximately 6.4%.
    - Abbey Pool: An air source heat pump (ASHP), BEMS, an LED lighting upgrade, and pipework insulation were installed. These will reduce the centre's energy consumption by approximately 47.5%, reduce carbon emissions by approximately 184 tonnes of CO_2 and reduce the Council's total carbon emissions by approximately 3.2%.

- City Centre Heat Network Feasibility study: The Council is exploring the potential to develop a city centre heat network, which could potentially generate renewable energy to supply city centre buildings owned by the Council and the University of Cambridge. This could include buildings such as the Corn Exchange and Guildhall, which

[5] https://localpartnerships.org.uk/our-expertise/re-fit/
[6] Heat pumps are a form of electric heating where energy is extracted from the air (ASHP) or the ground (GSHP) in order to provide space or water heating at a high efficiency. Installing a heat pump significantly reduces the requirement for gas for heating (which generates high levels of carbon emissions) as they use
[7] Building Energy Management Systems (BEMS) are integrated, computerised systems for monitoring and controlling energy-related building services plant and equipment such as heating, ventilation and air conditioning (HVAC) systems.
[8] Combined heat and power (CHP) is a highly efficient process that captures and utilises the heat that is a by-product of the electricity generation process. By generating heat and power simultaneously, CHP can reduce carbon emissions by up to 30% compared to the separate means of conventional generation via a boiler and power station.

are amongst the hardest Council assets to decarbonise. The Council has been awarded £96,000 of funding from the Heat Network Delivery Unit (HNDU) for a feasibility study, which will explore the technical and economic feasibility of the scheme. The study will be completed by May 2023.

- Asset Management Plan – As agreed at Environment and Community Scrutiny Committee in March 2021, work has been taken forward work to develop an Asset Management Plan for the buildings included in the Greenhouse Gas Report which have the highest carbon emissions. The first stage of this work has been completed, with surveys completed of all the buildings to provide a high-level assessment of the maintenance and carbon reduction needs and costs. An update on this work was provided to Environment and Community Scrutiny Committee in March 2022. Once decisions have been made as part of the Council's Office Accommodation Strategy regarding which buildings should be retained, a full Asset Management Plan will be developed and detailed plans will be prepared for those buildings that are being retained.

5.2 Action 1.5 - Waste fleet replacement: The Greater Cambridge Shared Waste Service is progressively replacing Refuse Collection Vehicles with electric vehicles or low carbon alternatives at the point when they are due for replacement. The first electric RCV has been in operation since 2020 and the Shared Waste Service received the second electric RCV in June 2022, with a third due for delivery in September 2022.

5.3 Waterbeach Renewable Energy Network (WREN) solar project: The WREN project aims to provide a dedicated renewable energy source to support the transition of the Greater Cambridge Shared Waste Service's fleet of RCVs to electric vehicles. The project will develop a ground-mounted solar photovoltaic (PV) array, an energy storage solution and electric vehicle charging infrastructure on land adjacent to the Greater Cambridge Shared Waste Service Depot at Waterbeach depot. This will allow 35 diesel Refuse Collection Vehicles (eRCVs) to be replaced with electric vehicles, reducing the City Council's carbon emissions by approximately 552 tCO_2 per annum. The total cost of the project will be £5.3m and the project team is working with the

Cambridgeshire and Peterborough Combined Authority (CPCA) to secure funding of £2.7m towards the project. It is proposed that the Council would contribute £1.3m to the project, with South Cambridgeshire District Council providing similar funding.

Improvements to Commercial Properties:

5.4 Action 1.6 - Identify and assess the required improvements possible to remaining existing commercial properties (that will not be redeveloped as part of the commercial property redevelopment programme) to achieve net zero carbon, and obtain costs estimates for the improvement works: Since the beginning of 2019, 138 EPC (energy performance certificate) assessments have been carried out on Council-owned commercial properties. Almost all of the Council's commercial properties that require EPCs now have them. This information has been combined with existing EPC data, in order to identify improvements required. The information is also being used to inform an asset review, which will identify properties that are a priority for investment, as well as those to be redeveloped or disposed of.

5.5 Property Services and Estates and Facilities are currently developing plans to manage, procure and implement a programme of improvements. The aim is to have a costed programme for the majority of retained properties by the end of the 2023/4 financial year, in time for budget setting for the 2024/5 financial year. For capacity reasons, works will need to be carried out in a phased manner, meaning the cost will be spread over several years.

6. Progress in delivering the key actions under Objective 2:

Retrofitting energy efficiency and low carbon energy measures in existing homes

6.1 The Council has assisted residents to reduce their carbon emissions through a range of measures in 2021 to improve the energy efficiency and increase low carbon and renewable energy generation in existing homes in Cambridge.

6.2 Action 2.1 - Investing £2.5 million in energy efficiency improvements to Council homes with poor energy efficiency ratings: The Council is investing £2.5 million in energy efficiency improvements to Council homes with poor energy efficiency ratings (predominantly Energy Performance Certificate D to G rated stock) from 2020/21 to 2022/23, with the aim of reaching a minimum EPC C (B where possible). To date, 168 Council homes have been retrofitted by installing external wall insulation and solar PV, with an additional 92 planned for 2022/23. Officers are intending to apply to the Government's Social Housing Decarbonisation Fund for a funding contribution to help support the Council's retrofit programme for 2023/24.

Net zero carbon homes pilot

6.3 In 2020, the Council procured an expert consultancy to carry out a high-level study to establish how existing Council homes could be retrofitted to meet different carbon emissions standards, including net zero carbon emissions. The report focussed on 7 different property archetypes within the Council's housing stock and identified how they could be improved to reach these standards. The report has estimated that reaching net zero carbon in the Council's housing stock will cost over £500m, with a cost of between £56k-101k per property, depending on archetype and based on retrofitting one property at a time.

6.4 Following the Net Zero Carbon Council homes study, the Council has also launched a Net Zero Carbon pilot housing project where it plans to invest up to a further £5m to retrofit 50 Council homes to net zero carbon standards. The pilot will bring benefits to low-income tenants by reducing their energy bills and carbon emissions and will help to stimulate the market for zero carbon retrofit installers in Cambridge. The Council started engagement in July 2022 with interested council tenants to join the pilot project. In August 2022, 25 residents had signed up (half the allocated places on the scheme). Work is expected to start on site in 2023 and complete in 2024.

6.5 Action 2.4 – Commissioning a study to identify measures needed to retrofit different archetypes of private homes: The Council procured an expert consultancy to carry out a retrofit study to identify which energy efficiency and renewable energy measures would need to be installed

for 7 common property archetypes in Cambridge to reach net zero carbon emissions and model the capital costs of these improvements.

6.6 The study found that the 7 archetypes would cost an estimated £85,000 to £125,000 per property to achieve net zero carbon standards. The study recognises that these costs are very high for individual properties and would be out of reach for the majority of households. The total cost to retrofit the 41,000 private housing homes to a net zero carbon standard is estimated at £4.65 billion.

6.7 The study recommends that an 80% carbon reduction, which approximates to the London Energy Transition Initiative (LETI) standards, may be more cost effective. This is because achieving the final 20% of carbon savings incurs disproportionally high costs for measures such as additional external wall insulation (where there is already cavity wall insulation) or triple glazing. To achieve an 80% carbon reduction target would still cost an estimated £60,000 - £90,000 per home and the total cost of retrofitting all private homes in Cambridge would be £3.52 billion. The Council will use the findings of the report to inform future bids to Government for funding for energy efficiency programmes and lobbying Government in relation to the criteria for these schemes.

6.8 As part of the project, the consultants have completed an engaging and accessible guidance document for residents, setting out which carbon reduction measures could install in their property (based on common property archetypes) and how to go about installing them. The guidance sets out different levels of investment that property owners can make depending on their budget, from low and no-cost measures, through to deeper retrofit measures. The Council will be promoting this guidance to residents during autumn 2022.

6.9 <u>Action 2.5 - Funding to deliver retrofitting of energy efficiency measures to private homes in Cambridge:</u> In February 2021 the Council was successful in its consortium bid with other Cambridgeshire local authorities to the Government's Green Homes Grant Local Authority Delivery (LAD) scheme LAD1b fund and was awarded just over £2m to deliver the project. The project was subsequently extended to run until

August 2022. The project is on schedule to support around 180 homes across Cambridgeshire with energy efficiency improvements, with 98 of these located in Cambridge.

6.10 In December 2021 the Council was successful in its £6.46m consortium bid with other Cambridgeshire local authorities to the Government's Sustainable Warmth Scheme (which includes LAD3 and HUG1). The project aims to support retrofitting private homes with energy efficiency improvements across Cambridgeshire from April 2022 - March 2023. The project is currently being affected by local and national supply chain capacity issues and the restrictive criteria of the funding streams. To combat these issues, the Council are working with BEIS to maximise delivery and adapt the scheme to support as many residents as possible

6.11 The Council will shortly be going out to tender to secure a four-year framework relationship with up to six contractors to deliver energy efficiency measures, including insulation, in private homes. This framework agreement will help increase capacity to deliver Government funded schemes such as the Sustainable Warmth Scheme. The Framework Agreement will also be accessible to residents, helping homeowners who are in a position to pay for measures to navigate the market for suppliers and find contractors to do retrofit work. The suppliers within the framework will be vetted and approved by the Council.

6.12 Action 2.3 - Promoting group-buying schemes for solar PV: The Council has worked with Cambridgeshire County Council to promote a solar PV collective purchase scheme which provides residents with solar PV and battery storage installations at a significantly reduced cost. The scheme is run as an auction, with interested residents registering with iChoosr (at no obligation) and installers then bidding to provide solar PV for the group of interested residents. Through the first round of the Solar Together scheme in 2020, 145 individual property installations took place in Cambridge with a total of 144 solar PV arrays installed and 109 batteries. A second round of the scheme was launched in February 2022. So far, 547 households have accepted the initial offer and

properties are now undergoing additional technical surveys to confirm suitability. The first installations in Cambridge are expected to take place in Autumn 2022.

6.13 Action 2.8 Building control retrofit advice
In autumn 2021, the Council launched a pilot to provide residents with retrofitting advice. As part of Phase 1 of the pilot, virtual seminars on energy and sustainability awareness and updates to building regulations, and CPD sessions on energy efficiency upgrades have been delivered. These online and face-to-face sessions reached audiences between 30-150 people. As part of the next phase of the project, an infographic and guide about sustainability in the home is being finalised, which will be sent to residents.

6.14 Three 3C Building Control team members have undertaken Passivhaus accreditation training, and 8 members of the team will shortly be completing SAP Assessment and Domestic Energy Assessor training, 3C surveyors are also trialling better quality thermal imaging cameras.

6.15 Action 2.6 - Taking enforcement action against private landlords if their properties do not meet the national Minimum Energy Efficiency Standards: From April 2021, the national Minimum Energy Efficiency Standards (MEES) require landlords and property managers to ensure that privately rented homes reach a minimum EPC rating of E. The Council will take enforcement action against private landlords whose properties do not meet these standards. The Council had aimed to intervene in relation to 150 private rented sector properties regarding MEES annually from 2020/21 onwards, but this was not possible due to a combination of Covid restrictions and recruitment issues. However, from April-June 2022, the Council intervened in relation to 45 properties to seek to improve energy efficiency standards of these properties.

Energy efficiency and low carbon energy in new homes

6.16 The Council has assisted residents to reduce their carbon emissions by taking steps to improve energy efficiency and increase low carbon and renewable energy generation in new homes in Cambridge.

6.17 Action 2.2 - Building up to 1000 new homes to Passivhaus standards: The Council is currently building 538 new Council homes for rent, using £70m Government funding via the Cambridgeshire and Peterborough Devolution Deal. Of the 538 homes, 166 have been completed, 370 are on site and 2 are approved. These homes are being built to high sustainability standards, with an average of 8 out of 10 schemes in the programme expected to attain carbon emissions standards of 35% below those required by building regulations.

6.18 In January 2021, the Council committed to build a further 1,000 new Council homes to Passivhaus standards, where technically feasible and subject to funding. The Council will target net zero carbon standards for Council homes built from 2030 onwards. Passivhaus pilot schemes are now on site at Fen Road, Ditton Fields and Borrow Dale, with a further Passivhaus pilot site at Aylesborough awaiting planning permission. Of the 1,000 homes, 111 homes for rent are approved, of which 52 are on site. These homes will be built to high efficiency standards using Passivhaus principles together with a fabric-led approach. There has been significant learning from the pilot schemes and other initiatives on the current programme. The Council is now looking at options for future delivery towards the net zero target, whilst also managing the costs of the programme with issues of economic inflation in the building industry.

6.19 Action 2.7 - Developing new policies requiring high standards on carbon emissions reduction and environmental sustainability for new homes and non-residential developments as part of the new Greater Cambridge Local Plan: The Council is currently working jointly with South Cambridgeshire District Council to prepare a Greater Cambridge Local Plan, which will set policies for new development from the date of adoption to 2041. In autumn 2021, there was a consultation on preferred options, including policies related to net zero carbon homes and buildings. Following consultation on the First Proposals document, officers are now reviewing consultation responses and further developing the policies ahead of consultation on the draft Greater Cambridge Local Plan in autumn 2023.

7. Progress in delivering the key actions under Objective 3:

Improving bus, cycling and walking routes

7.1 The Council has taken a number of steps in 2021/22 to improve transport infrastructure, increase the sustainability of transport, and encourage residents to shift to more sustainable modes of transport, such as bus travel and cycling. These actions include:

7.2 Action 3.1 - Supporting the Greater Cambridge Partnership (GCP) to deliver a range of walking, cycling and bus improvements on key routes into and across Cambridge: The Council is one of the key partners in the GCP, alongside Cambridgeshire County Council and South Cambridgeshire District Council. The GCP is delivering a comprehensive programme of sustainable transport initiatives. The Histon Road project completed significant upgrades in October 2021 including a dedicated bus lane, floating bus stops, and additional and wider cycle lanes. Construction of new bus lanes and active travel links to create more reliable public transport trips and safer walking and cycling journeys along Milton Road began in July 2022. The GCP Executive Board agreed to progress 12 Greenways schemes (providing radial cycling and walking routes connecting Cambridge and surrounding settlements and employment sites) and the public consultation on the plans is underway.

7.3 The GCP launched the first ‘Making Connections’ public consultation in November 2021 asking for people’s views on proposals to improve bus and active travel routes and encourage people to make more journeys by public transport, cycling or walking. Residents were asked to consider how best to reallocate road space to accommodate more buses and active travel routes, as well as options for raising an ongoing funding stream to pay for an improved public transport network in the future. Residents were invited to give their views on a possible form of charging for driving within the city, with options including a flexible charge, a pollution charge or parking charges.

7.4 The findings of the first ‘Making Connections’ consultation have informed a proposed package of measures (as part of a City Access

Strategy) for a further consultation, comprising:

- A transformed bus network, with additional orbital and express services, offering faster, more frequent, more reliable services with longer operating hours and new routes with flat fares to make public transport cheap and accessible.
- Improvements to cycling and walking infrastructure and public realm enhancements with options for new cross-city cycling routes to encourage more active travel.
- A Sustainable Travel Zone consisting of a road user charge designed to fund the bus and active travel improvements and reduce traffic levels to create space for improved bus and active travel journeys.

The Executive Board of the Greater Cambridge Partnership on 28 September 2022 is being asked to agree a public consultation in autumn 2022 on this proposed package of measures to improve public transport services and active travel and introduce a Sustainable Travel Zone comprising a road user charging scheme.

7.5 The Council has produced a new active lifestyles map[9] of the city's indoor and outdoor community sports facilities, which includes the new cycle routes and links around the city.

Supporting the take-up of electric vehicles

7.6 Shifting petrol and diesel vehicles to electric vehicles will make a significant contribution to decarbonising transport, because electric vehicles are more energy efficient and electric power is increasingly being generated from renewable sources. Central government has announced that all new vehicles in the UK will be electric from 2030 onwards, and it is currently providing subsidies of up to 75% of the cost of installing off-street EV charging points.

7.7 However, there is also a role for the Council and its partners in helping to accelerate the installation of electric vehicle charging infrastructure in Cambridge, as this will help increase the viability of electric vehicles for residents and businesses. The Council produced an Electric Vehicle

[9] www.cambridge.gov.uk/media/8264/community-sports-facilities-leaflet.pdf

and Infrastructure Strategy in October 2019, which identifies how the Council and its partners can help to increase the number of electric charging points available within the city.

7.8 In April 2020, the Council implemented a new licensing policy Requiring all new taxis registered in Cambridge to be Ultra Low Emission Vehicles (ULEVs) or zero emissions vehicles from 2020, and all taxis to be ULEVs or zero emissions vehicles by 2028 (Action 3.8) There are currently 49 fully electric (zero emission[10]) and 20 Ultra Low Emission[11] taxis have been licensed, out of a total of approximately 500 licenced taxi vehicles in Cambridge, and numbers of electric taxis are increasing each year.

7.9 Action 3.7 - Completing installation of 18 rapid and 3 fast electric charge points for taxis in Cambridge: The Council is installing electric charge points for taxis with funding from Government (£426,000), the Council (£100,000) and GCP (£100,000). The project was due to complete in 2021, but the Covid pandemic significantly delayed the work of UK Power Networks (UKPN) on the project. 18 chargers have now been installed and are operational. Two of the three remaining sites are in the process of having the last 3 chargers installed, which are all expected to be completed by the end of 2022.

7.10 Action 3.10 - Procuring a commercial partner by 2022 to deliver electric vehicle charging infrastructure in Council car parks and other Council-owned land and sites: Following a procurement process, the Council is working in partnership with Connected Kerb, one of the UK's largest providers of EV charging companies, to provide a network of circa 800 publicly accessible charging points across the Council's car park portfolio. This equates to 1 in 4 spaces with provision to charge an EV.

7.11 A mixture of slow, medium and high-rate charge points, will be installed at 14 sites across Cambridge over the next few years. The first 56 chargers will be installed at Castle Hill, Adam and Eve and Gwydir

[10] Zero emission vehicles are those that emit no emissions during their operation. These include battery electric vehicles, hydrogen fuel cell vehicles, and electric vehicles

[11] Plug-in hybrid vehicles or extended range electric vehicles (E-Rev) with CO_2 emissions less than 75g per km

Street pay and display car parks by the end of October 2022 and a total of 177 charging points are expected to be installed by March 2022.

7.12 Where a maximum stay time is set for EV bays during daytime hours, this will be for four hours maximum stay so the public have access to a substantial charge. The chargers in the car parks will also be accessible to residents, who may have no other charging provision, to charge their electric car overnight from 6pm to 8am Monday to Saturday and Sundays 6pm to 10am with no parking charge, incentivising the move to electric vehicles for residents with only on-street parking.

7.13 The contract with Connected Kerb includes the design, installation, operation (including the provision of energy), marketing, maintenance and any futureproofing for the lifetime of the contract at no cost to the council. Once usage of the chargers achieves gateway usage levels, the contract provides an income to the Council via a percentage of gross turnover.

7.14 Action 3.11 - Working with Cambridgeshire County Council and UK Power Networks to facilitate on-street residential electric charge points where there is no scope for off-street charging: As part of a pilot project, 38 fast 7kw charge points and 4 rapid 50kw chargers are being installed in two residential areas of West Chesterton and Abbey wards where off-street parking is extremely constrained. 32 of the 7kw chargers have been installed to date and the project is now expected to be completed by Autumn 2022. The project is being funded by UKPN (UK Power Networks) and OZEV (Office for Zero Emission Vehicles). The County Council are leading the partnership with involvement from the City Council, as the deployment is predominantly on-street, with the exception of 2 fast and 1 rapid charger at River Lane Car park.

7.15 Action 3.13 - Working with GCP and bus operators to explore opportunities for further investment in electric buses: The Council and the GCP supported a successful bid by the Cambridgeshire and Peterborough Combined Authority (CPCA) for funding from the Department for Transport's (DfT) Zero Emission Buses Regional Area (ZEBRA) scheme. The funding will provide an additional 30 electric buses to operate on the Park & Ride and Citi2 routes in Cambridge,

with the new buses expected to enter service from late 2022 onwards. It is envisaged that the initial 30 buses would form the first stage in a rolling programme to move the Cambridgeshire and Peterborough bus fleet to zero emission vehicles.

8. Progress in delivering the key actions under Objective 4:

8.1 The Greater Cambridge Shared Waste Service (GCSWS) has ongoing plans in place to encourage re-use, repair, waste reduction and further improve recycling rates. These are included in the Circular Resource Strategy which outlines key areas that the GCSWS is working on throughout the year. Further information about what the GCSWS is doing to improve recycling rates can also be found in the Recycling Rates Report provided for this Committee on 6 October 2022.

8.2 GCSWS works in collaboration with the County Council and six other local authorities as part of the RECAP Partnership. RECAP is about to embark on the update of the adopted Waste Strategy to take into account zero waste objectives and meet the anticipated future requirements of the government's national Resources and Waste Strategy, including key aspects such as Deposit Return Schemes (DRS), Extended Producer Responsibility (EPR) and consistent recycling collections nationwide. The strategy update is a major piece of work that should result in a template for the collection and treatment of waste in the Region and lead to much increased diversion of waste from landfill, recycling and composting and overall waste reduction.

8.3 The Council has delivered or funded a number of activities in 2021/22 to encourage and support residents and businesses to reduce their consumption of resources, reduce waste and increase recycling. These actions include:

8.4 <u>Action 4.4 - Extending trials of separate collections of food waste to more households:</u> During 2020 the GCSWS began to trial separate food waste collections to 4000 households in West Chesterton, East Chesterton and Arbury. Phase 3 of the trial was implemented in December 2021 in Trumpington with an additional 5000 households. In total there are 8,147 houses and 1,102 flats in Cambridge using the

scheme. Overall average participation rate is 51% (above the national average of 45%). These trials showed that separate weekly food waste collections significantly increased the volume of food waste recycled per household and reduced food waste (approximately 30% of people generated less food waste since having the weekly collection, confirmed by Waste Analysis).

8.5 The current method of treatment (by the County Council as the Waste Disposal Authority), is 'In Vessel Composting.' This is a fast process which means that food degrades quickly (within six weeks) and therefore any bags that contain the food need to degrade at the same rate to meet DEFRAs standards. One objective of the Council's food waste trial is to understand if it can successfully use bio-degradable bags instead of paper bags to collect the waste, and if the bags meet the required DEFRA standard. To date the trial has shown that there have been no problems. However, further research would be required to check increased volume would still maintain a positive result. Therefore, any expansion needs to be carefully controlled and in consultation with the County Council, and Amey (the Waste Treatment Contractor).

8.6 To date, the food waste trial has been funded from existing budgets and resources. Further details from central government on mandatory separate collection of food waste are still awaited along with information regarding funding. In the meantime, there will be a proposal for both South Cambridgeshire District Council and Cambridge City Council to fund the continuation of the trial to bridge the gap until national funds become available, which is expected to be in 2025. An update report on the food waste trial was presented to the GCSWS Steering Committee on Wednesday 24th August.

8.7 The GCSWS also provides a discounted home composting scheme, working with GetComposting to provide competitive prices for compost bins. GetComposting work with Local Authorities nationally to provide this service. The Circular Resource Strategy includes a goal to further promote and market the scheme to ensure effective take-up. The GCSWS are currently reviewing upcoming GetComposting promotions to utilise them and align communications to residents for maximum

effect. Alongside the discount scheme, a suite of social media artwork has been produced and the next promotional campaign will start as part of Zero Waste Week in September 2022.

8.8 Action 4.3 – Reducing plastics usage at Council-run events such as Cambridge Festival and the Big Weekend: To reduce the use of plastics at Council-run events, the Council has implemented a ban on the use of single use plastics by on site caterers and backstage at Council-run events. To further increase the sustainability of Council-run events, the Council has also worked in partnership with Cambridge Water to provide refillable containers and free drinking water at events to reduce the number of single-use plastic bottles and containers being used.

8.9 Action 4.5 - Continue communications campaigns to raise awareness and encourage residents to recycle more: Recycling communication campaigns continued in 2021/22, using national awareness days to reach wider audiences and raise awareness. For example, social media messages have been shared for The Big Plastic Count campaign in May 2022 and World Oceans Day, World Environment Day and World Refill Day during June 2022. A communications campaign focused on contamination of waste is being planned for 2023 to target households that regularly contaminate bins to reduce the contamination rate to below 7%.

8.10 Action 4.1 – Funding activities through the Council's Sustainable City Grants by voluntary and community groups to reduce consumption and increase repair, re-use and recycling: The Council agreed to fund a number of activities during 2022/23 which will encourage residents and businesses to reduce consumption and repair, re-use and recycle goods. Papworth Trust will provide free bicycle repairs and refurbished bicycles to low-income residents referred to the project, reducing travel by fossil fuelled vehicles. Cambridge Carbon Footprint will run a 'climate advice festival' with a programme of talks and a sustainable fashion campaign, promoting clothes swops and supporting groups to run events and build on their existing repair café programme.

9. Progress in delivering the key actions under Objective 5

9.1 The Council has taken a number of actions to help promote sustainable food in Cambridge in 2021/22. These actions include:

9.2 Action 5.4 - Working with the Cambridge Sustainable Food network towards achieving the Sustainable Food Cities Network Gold Award for Cambridge. The Cambridge Sustainable Food Partnership, which includes the Council, launched its #Gold Food Cambridge bid in May 2022 to be the UK's third Gold Award winner in June 2024[12]. The partnership achieved the Bronze Award in 2016, and the Silver Award in July 2021 from Sustainable Food Places, one of the first six cities in the UK to have achieved the silver award. A plan for the Gold Award has been submitted to Sustainable Food Places which focusses on six key themes and two areas of excellence including 'Action on climate and biodiversity' and 'From food insecurity to food justice: developing a new approach to ensure good food for all'. The submission of interest will be prepared by the end of December 2023.

9.3 Action 5.8 - Working with local voluntary and community groups and other partners to promote sustainable food practices to local businesses: The Council has agreed to fund CoFarm through the Sustainable City Grants have been funded to deliver open co-farming sessions in 2022/23, engaging the community to produce sustainably grown food which is then distributed through community food hubs in the city. The Council will also fund Cambridge Sustainable Food to deliver a range of activities during 2022/23, including running events and working in depth with 3 food businesses on the sustainable sourcing module of the business awards scheme, and holding a 'food and climate festival' for resident to learn about the importance of local/seasonal/sustainably produced food and how to access it.

9.4 Action 5.2 - Work in partnership with local voluntary and community groups to address food poverty, including working with Cambridge Food Poverty Alliance and Cambridge Sustainable Food to develop a food re-distribution hub: During 2021/22 the Council supported a programme of

[12] https://cambridgesustainablefood.org/goldfoodcambridge/about

free lunches delivered by local partners for low-income families during school holidays in areas of highest need in Cambridge. As Covid restrictions eased, hot lunches were made available through local food hubs in 7 wards. The Council also organised a food justice event in Cambridge in May 2022 to bring together local partners to discuss opportunities to collaborate. Following this event, a food poverty and sustainability conference is planned for May 2023.

9.5 The Council has progressed the food distribution and community kitchen project (formally known as the Food Hub project). The project will relocate from Buchan Street Neighbourhood Centre in 2022, moving into temporary accommodation on Barnwell Drive. Following this, the project plans to be housed at the North-East Cambridge meanwhile site for up to 15 years (subject to planning approvals).

9.6 Action 5.1 - Incorporating sustainable food principles in council catering and at Council-run events where possible: At Council-run events, when procuring catering, through the formal tendering process, the Council strongly encourages vegan and vegetarian units to apply. Sustainability is also a requirement of catering contracts for example, fair trade products and sustainable products are required to be used, and any meat that is sold should be of a certain standard. In May 2022, the Council passed a plant-based food motion which recognised the importance of reducing meat consumption to help to reduce carbon emissions and aims to normalise plant-based food and resolved to:

- Begin to transition to fully plant-based catering for all future Council meetings where food is served.
- Investigate the practicalities of using Civic events to promote and showcase plant-based food options.
- Ensure that there is a minimum of one plant-based food option available at City Council run events and events on City Council open spaces which involve catering.
- When re-tendering for suppliers, require that plant-based food and drink options will be available at kiosks on City Council open spaces and cafes.
- When re-tendering for suppliers for Council run cafes, specify that plant-based options are listed above non plant-based options.

10. Progress in delivering the key actions under Objective 6 (adaptation)

10.1 The Council recognises that in addition to reducing carbon emissions to mitigate climate change, it is equally important to ensure that Cambridge adapts to the impacts of climate change, such as increases in flood events; water shortages and droughts; and increased summer temperatures and overheating. In July 2019, the highest temperature on record in the UK was recorded at the Botanic Gardens in Cambridge at 38.7ºC. This was exceeded in number of places in July 2022, and a new UK record temperature was confirmed at 40.3 ºC in Coningsby, Lincolnshire. The July 2022 heatwave in England led to water shortages and wildfires and contributed to fatalities caused by drowning and overheating.

10.2 During the heatwave the Council focused its social media channels on messages to keep people stay safe in the extreme heat. This included:

- extra support for rough sleepers and homeless people
- promoting safety messages from the fire service and NHS
- sharing posts from Cambridge Water reminding people to use water sparingly during the ongoing warm weather.

10.3 The council has implemented a number of actions in 2021/22 to support Council services, residents and businesses to adapt to the impacts of climate change, including heatwaves, water shortages and flooding:

10.4 Action 6.5 - Exploring opportunities to manage climate risks through policies in the new Local Plan: The First Proposals for the Greater Cambridge Local Plan included options related to responding to a changing climate. They set out requirements to mitigate the risk of overheating in new developments, as well as options related to flood risk and sustainable draining. Following consultation on the First Proposals document, officers are now reviewing the consultation responses and further developing the policies ahead of consultation on the draft Greater Cambridge Local Plan in autumn 2023.

10.5 A planning informative has also recently been developed in relation to

the new Part O requirements from Building Regulations, to ensure that new developments meet the requirements of that standard in relation to overheating and that any changes to the design of proposals required to meet these new requirements are submitted to the local planning authority for approval.

10.6 The Council has implemented a number of actions to reduce overheating in new Council homes and new build private homes including:

- Using the PassivHaus Planning Package (PHPP) toolkit for all new Council homes schemes, which enables an assessment of energy consumption, overheating and comfort in homes and has resulted in schemes designed to mitigate overheating through their orientation.
- Installing mechanical ventilation in new Council homes, which provides fresh cool air.
- Reviewing how effective measures have been in Council homes through post occupancy evaluation feedback.

10.7 Action 6.6 – Increasing the tree canopy cover through tree planting and protection on public and private land, and using parks, open spaces and other green infrastructure in the city to help regulate temperatures: During 2021/22 the Council planted 594 trees in streets and parks, and planted two small wooded areas at Logans Meadow and 5 Trees, Chesterton which consisted of a further 860 trees approximately. Through the Free Trees for Babies scheme and the Neighbourhood Canopy Campaign scheme, the Council gave away an additional 360 trees. The Council has also served 38 Tree Preservation Orders to protect trees of high amenity value and ran 9 public tree planting events with the Community Engagement Team to raise awareness about the importance of tree cover for climate change adaptation.

10.8 Action 6.9 - Delivering a measurable biodiversity net gain on the City Council's estate: In June 2022 the final Biodiversity Strategy and Action Plan 2022-2030. was approved for adoption at Environment & Scrutiny Committee. The Strategy was informed by the biodiversity audit and consultation carried out in July-November 2021. The Strategy will focus on delivering a measurable biodiversity net gain on the Councils estate

from a DEFRA metric baseline. The actions in the strategy are grouped under three themes:

- Biodiversity Mainstreaming: embedding biodiversity across all council services
- The Core: enhancing the key wildlife sites and habitats the Council manages
- Nature in your Neighbourhood: working in partnership with other organisations and individuals to increase biodiversity across the city.

10.9 Action 6.11 - Implementing projects to manage water courses and improve biodiversity, including a project to improve rare chalk stream habitats in Cambridge: In June 2021, watercourse restoration work was completed at Cherry Hinton Brook and Vicar's Brook. This included reduction of scrub to let in more light to the watercourse, bank reprofiling to improve their flow and storage capacity and introduction of gravels and dead wood features for spawning fish and invertebrates to deliver wider biodiversity benefits. The Council also worked in partnership with Abbey People to secure funding from the Pebble fund[13] in October 2021. The funding was used for two projects at Coldham's Brook next to Barnwell West LNR: in December 2021 tree and scrub management along the brook, and in March 2022, channel enhancements were implemented for approximately 200m. A bid to the Flourishing Environment Fund[14] has been submitted for additional works in 2022/23.

11. Implications

a) Financial Implications

Funding for projects included in the Carbon Management Plan comes from a number of different funding sources, including the Council's Climate Change Fund and existing General Fund or Housing Revenue Account (HRA) budgets for delivering services. The Council plans to make further allocations to the Climate Change Fund to deliver Carbon Management Plan projects through the Council's annual budget setting process. The

[13] PEBBLE Fund (cambridge-water.co.uk)
[14] Flourishing Environment Fund (Anglian Water)

Council will also seek Government funding (e.g. from the Public Sector Decarbonisation Scheme) for projects in the Carbon Management Plan, as opportunities arise.

The actions contained in the wider Climate Change Strategy will be funded through primarily through existing budgets for delivering key services. These fall within the General Fund or the HRA depending on the services involved. We will also seek Government and other external funding sources for specific climate change initiatives, where this is available (e.g. from the Sustainable Warmth Scheme, Social Housing Decarbonisation Fund, Office for Zero Emissions Vehicles etc).

b) Staffing Implications

Lead officers have been identified for projects in the Climate Change Strategy and Carbon Management Plan who have the capacity to deliver the projects within the stated timescales. The Climate Change Officers co-ordinate the overall delivery of the Climate Change Strategy and Carbon Management Plan, with support from the Environment Policy and Project Group, which is a corporate group that includes many of the lead officers.

c) Equality and Poverty Implications

An Equalities Impact Assessment (EqIA) of the Climate Change Strategy and Carbon Management Plan has been carried out and is published on the Council's website: www.cambridge.gov.uk/equality-impact-assessments The EqIA did not identify any negative equality impacts from actions and projects identified in the strategy.

d) Net Zero Carbon, Climate Change and Environmental Implications

The Climate Change Strategy and the Carbon Management Plan will have a high positive impact on the environment by setting out a planned approach to: reducing the Council's carbon emissions; setting high standards for residents, businesses and organisations to reduce their carbon emissions and manage climate risks; and working in partnership with, influencing and learning from other organisations to address the causes and effects of climate change.

e) Procurement Implications

Recent projects identified in the previous Carbon Management Plan have been delivered through the national REFIT 3 framework, which allowed us to access Bouygues Group PLC as a contractor to identify and deliver energy efficiency projects. The projects were delivered on an energy performance contracting basis, which meant that Bouygues guaranteed the energy savings predicted for the projects (subject to the new equipment being managed within defined limits). In April 2020, Cambridgeshire County Council led a consortium of local authorities, including Cambridge City Council to procure a partner for future energy efficiency and renewable energy schemes. Bouygues were appointed as the contractor through this process.

f) Community Safety Implications

The Climate Change Strategy and Carbon Management Plan have minimal impact on Community Safety.

12. Consultation and communication considerations

To inform the development of the Climate Change Strategy, we carried out: 5 online workshops in November 2020 attended by a total of 75 residents; an online consultation survey completed by 252 residents; a workshop with key businesses and institutions in Cambridge in January 2021; 3 Climate Change Forum meetings with local environmental groups; regular meetings with Cambridge Zero and other University of Cambridge and Anglia Ruskin academics with climate change expertise.

The content of this report, and in particular the updated Action Plan, will be communicated to residents and businesses through a news release, articles in Cambridge Matters and made available on the council's website.

13. Background papers

No background papers were used in the preparation of this report.

14. Appendices

- Appendix A – Climate Change Strategy – Action Plan
- Appendix B – Carbon Management Plan - 2021/22
- Appendix C – Environmental Policy Statement

15. Inspection of papers

To inspect the background papers or if you have a query on the report please contact David Kidston, Strategy and Partnerships Manager, tel: 01223 457043, email: david.kidston@cambridge.gov.uk

Appendix A – Climate Change Strategy – Action Plan

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
1.1	Deliver energy efficiency and renewable energy projects identified in the Council's Carbon Management Plan for 2021-2026 to reduce carbon emissions from corporate buildings (including swimming pools, sheltered and temporary housing, administrative buildings, car parks, community centres, the Corn Exchange and the crematorium).	Officers throughout the council. Climate Change Fund.	2021/22 Projects completed - March 2022	2022-26 projects identified, funding identified / applied for and measures installed/ implemented - March 2026		Ongoing to March 2026	Net zero carbon emissions by 2030 for our corporate buildings
1.2	Bid for future central government funding and other green energy funding available for investments in energy efficiency and decarbonisation measures in the Council's corporate buildings	Corporate Energy Manager	Identify and prepare information in preparation for future funding rounds - PSDS Funding Round 3 to Open Sept - Dec 2022	Apply for PSDS round if appropriate project. TBC (Dec 2022?)	Apply for PSDS or other funding round if appropriate March 2023/25	Ongoing to March 2026	Reduce emissions in the Council's corporate buildings.
1.3	Review the Council's Office Accommodation Strategy, including an assessment of whether existing office buildings should be retained or rationalised	Business Transformation resource required. Business case to be prepared to identify resource needs.	Prepare business case to agree approach, identify requirements post Covid/ Business Transformation programme, actions and outcomes and resource requirements. Oct 2021	Business case and resources approved and in place - April 2022	Report to Committee with recommendations – October 2022	March 2023	TBC

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
1.4	Purchase Ultra Low Emission Vehicles (ULEV) when replacing vans and trucks in the Council's fleet (where there is a suitable ULEV alternative and the infrastructure allows)	General fund BSR	Project reliant on EV charging infrastructure 2022/23	Vehicle specifications agreed with end user April 2023 and ongoing	Delivery of vehicles to spec September 2023 and ongoing	Annually to2030	4.39 $ktCO_2$
1.5	Purchase ultra-low emission vehicles (electric or hydrogen) when replacing refuse lorries	Mainstream budget	June 2022 vehicle 2 and September 2022 vehicle 3 commissioned	March 2025 vehicle 4 commissioned	March 29 vehicle 5,6,7 commissioned	Annually to 2029	6 vehicles commissioned by 2029
1.6	Identify and assess the required improvements possible to remaining existing commercial properties (that will not be redeveloped as part of the commercial property redevelopment programme) to achieve net zero carbon, and obtain costs estimates for the improvement works	Property Services, Estates & Facilities	Complete assessment of all Energy Performance Certificates for commercial properties - August 2021	Action plans for all properties to be prepared to identify prioritisation and asset management decisions for costed programme through to 2030 - November 2022	Budget bids to be prepared for 2023/24 onwards for any costs not within existing allocated capital spend on commercial property - August 2023	Annually through to 2030	TBC although savings may be to tenants in occupation
1.7	Identify and assess the performance standards to achieve net zero carbon for any new commercial buildings or redevelopment of existing buildings	Existing staff resource and working with designers on a scheme-by-scheme basis	April 2022 – First General Fund redevelopment scheme proposal	As and when redevelopment schemes are proposed as each scheme may differ depending upon use/type		Ongoing for duration of General Fund redevelopment programme	Ongoing as schemes come forward and each scheme will be reported to Committee.
1.8	Consider the use of the Council's reserves to invest in innovative "green investments" to facilitate measures to offset climate change.	General Fund Reserves	MTFS 2021 - will identify prudent minimum balance of reserves and the amount of reserves required	MTFS 2022 - will identify prudent minimum balance of reserves and the amount of reserves required	N/A	As and when suitable green investments come forward for funding	N/A

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
			to support the transformation programme. The balance would be available for investment.	to support the transformation programme. The balance would be available for investment			
1.9	Review standard tender packs to include the Councils expectations around climate change.	Climate Change Officer	Instruction to Bidders document (which forms part of the Tender Pack) - Environmental Factors section reviewed and updated - August 2021.	Updated Environmental Factors section included in Instruction to Bidders document – August 2021		August 2021 and then reviewed annually	Reduce emissions from future council contracts.
1.10	Provide written guidance for contract managers on climate change measures that could be included in contracts and include this information in procurement and contract management training for staff.	Climate Change Officer	Provision of guidance and inclusion in procurement and contract management training for staff - November 2021			November 2021 and then reviewed annually	Reduce emissions from future council contracts.
1.11	Explore the potential for a review of climate change and sustainability commitments by the Council's existing suppliers, and work with these suppliers to improve their performance.	Climate Change Officer				Starting July and working through a programme	Reduce emissions from current council contracts.
1.12	Revise and update the existing Climate Change Assessment tool to include net zero carbon considerations and use this to assess the climate change impacts	Climate Change Officer	Tool updated and communicated to staff - August 2021			August 2021	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
	of budget bids, business cases for capital projects and committee reports						

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
2.1	Investing £2.5 million in energy efficiency improvements to Council homes with poor energy efficiency ratings (predominantly Energy Performance Certificate D to G rated stock) from 2020/21 to 2021/22.	Energy Assessor/surveyor role and part of Corporate Energy Manager time	August 2021 Phase 1 of works completed.	March 2022 completion of project	n/a	March 2022	To reach a minimum of EPC C (B where possible) in at least 140 Council Properties that are currently an EPC D or below. Can provide $ktCO_2$ on completion of post EPCs.
2.2	Building 1000 new homes to Passivhaus standards (where technically feasible and subject to funding) and targeting net zero carbon standards for Council homes built from 2030 onwards.	Housing Development Agency (HDA) project teams	June 2021- first Passivhaus pilot site with planning	August -22 first Passivhaus scheme start on site	December 2023 – initial review of pilot scheme	2021 onwards	To deliver new housing as low carbon- at least 35% reduction on 2013 building regulations and 80% with new SAP calculations
2.3	Promoting group-buying schemes, including working with Cambridgeshire County Council to promote the Solar Together collective scheme to homeowners, which provides residents with solar PV and battery storage installations at a significantly reduced cost	Environmental Projects Team Leader	First auction held in September 2020	A further round is being considered for later in 2021.	A second round of Solar Together was run in February 2022	Ongoing to March 2026	150 properties supported

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
2.4	Commissioning a study to identify measures needed to retrofit private homes in Cambridge to net zero carbon standards and producing detailed guidance for homeowners and landlords	Allocated – Climate Change Research and Projects budget	Procurement completed and contract awarded – September 2021	Final report – December 2021	Guidance for homeowners and landlords – March 2022	March 2022	N/A
2.5	Bidding for central government funding available for retrofitting energy efficiency measures to private homes, including future rounds of the Green Homes Grant Local Authority Delivery (LAD) scheme.	Environmental Projects Team Leader & Project Officer recruited from funding.	Cambridgeshire local authority consortium £6.46m bid into the Sustainable Warmth Scheme (includes LAD3 and HUG1). Scheduled to be implemented from January 2022 - March 2023 if bid is successful.	LAD1b funding extended to August 2022	Cambridgeshire local authority consortium LAD3 and HUG1 bid successful. So consortium is delivering £6.46m of support from April 2022 - March 2023 under the Sustainable Warmth scheme	Annually as opportunities arise	55 properties to be supported through the Sustainable Warmth Scheme in Cambridge
2.6	Targeted enforcement of Minimum Energy Efficiency Standards Regulations where appropriate (EPC F and G rated private rented housing stock)	Existing Team staff resources	2021 / 22 - 150 MEES interventions any follow up action taken in line with Regulations, officer procedure & corporate enforcement policy.	Milestone 1 rolled over for action / completion within 2022/23		Ongoing review milestones end 2022/23	2021 / 22 - targeted intervention in relation to 150 private rented sector properties and seeking to improve energy efficiency standards of these.
2.7	Developing new policies requiring high standards on carbon emissions reduction and environmental sustainability for new homes and non-residential	Existing Greater Cambridge Shared Planning Service service budgets	Autumn 2021 - consultation on preferred options including policies related to net zero	Autumn 2023 - consultation on draft Greater Cambridge Local Plan (Reg 18)	Proposed submission consultation (Autumn 2024), with Submission	Following examination	All new homes/non-residential buildings to meet the net zero

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
	developments as part of the new Greater Cambridge Local Plan, taking into account the outcomes of the net zero evidence base study and other evidence informing the plan, as well as the national planning policy framework		carbon buildings		to Secretary of State for examination (Summer/Autumn 2025)		carbon buildings requirements set out in the new Local Plan
2.8	Building control retrofit advice	Existing Team staff resources	A pilot will start in autumn 2021 to provide residents with retrofitting advice.		Phase 2 – purchasing of thermal imaging cameras, template of advice for residents including signposting and images of properties	2023	For domestic projects (i.e. new homes, extensions and refurbishments) 60% utilising Council building control teams

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
3.1	Supporting the Greater Cambridge Partnership (GCP) to deliver a range of walking, cycling and bus improvements on key routes into and across Cambridge, including: • The Chisholm Trail cycling route connecting Cambridge and Cambridge North Stations • 12 Greenways, providing radial cycling and walking routes connecting Cambridge and surrounding settlements and	GCP Officer time, CCC support where required	Completion of initial projects, Histon Road and Chisholm Trail Phase 1 completed in late 2021	Approval of construction for Milton Road, Greenways and other cycling, walking and bus improvements by end of 2025	Construction of schemes ongoing to March 2026	Ongoing to March 2026	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
	employment sites. • Bus, cycling and walking priority schemes on Histon Road and Milton Road • Public transport corridor schemes to connect growing communities to employment hubs						
3.2	Implementing the Local Lettings Plan framework for new Council housing developments, which will give priority to people working within an agreed geographical radius of the development. This measure is intended to help reduce commuting by car from tenants of new Council housing developments	Existing staff resources	Darwin Green Local Lettings Plan developed as a pilot – published May/June 2021	Consultation with Registered Providers (RPs) of social housing on wider framework by December 2021	Publication by March 2022	March 2022	
3.3	Building new Council housing developments in Cambridge with a target of less than one car parking space per home to encourage travel by walking, cycling or public transport, subject to individual development requirements	Existing staff resources	New sustainable housing design guide to include car parking ratios	New sustainable design guide issued – Summer 2021	Review of car parking on delivered schemes 2024	Ongoing	Encourage travel by walking, cycling or public transport
3.4	Promote sustainable modes of transport through the planning system by: • Applying policies in the current Local Plan to support housing and non-residential development which prioritises access by walking, cycling and public transport. • Develop new policies related to promoting sustainable transport and ensure that the accessibility of new development sites to sustainable	Existing services budgets (note that for planning applications, advice related to sustainable transport is led by Cambridgeshire County Council)	Autumn 2021 - consultation on preferred options including policies related to sustainable transport	Autumn 2023 - consultation on draft Greater Cambridge Local Plan (Reg 18)	Proposed submission consultation (Autumn 2024), with Submission to Secretary of State for examination (Summer/autumn 2025)	Following examination	Sustainable transport policies identified in new Local Plan implemented in new developments

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
	transport infrastructure is a key aspect in decision making in preparing the Greater Cambridge Local Plan.						
3.5	Developing and undertaking a programme of activities in the city to promote walking, cycling and the use of public transport across a range of settings including schools, colleges, workplaces, open spaces and communities (through the Active Travel Officer and Active Lifestyles Team)	Active Travel Officer (new post) Responsible for developing and undertaking a programme of activities in Cambridge City to promote walking, cycling and the use of public transport across a range of settings including schools, colleges, workplaces, and communities.	Job description agreed and evaluated	Consultation paper on changes within Streets and Open Spaces structure	Implementation of structure changes and recruitment to Active Travel Officer	From 2021 onwards.	Recruitment to post autumn 2022
3.6	Encouraging attendees and contractors at Council run events, including the Cambridge Folk Festival and Corn Exchange, to consider more sustainable transport options when travelling to events, and working with the County Council transport team to ensure the city evening economy is served by sufficient bus transport taking people back out to outlying towns and villages.	Existing budget and staff resources.	Oct 21 and ongoing - Devise and implement a marketing campaign within the event marketing to communicate sustainable transport options.	Oct 21 and ongoing - Establish a joint marketing and services with Stagecoach and other public transport providers i.e. Shuttlebus from the station to Big Weekend.	Increase cycle parking at Bonfire Night and Big Weekend.	Ongoing to March 2026	
3.7	Completing installation of 18 rapid and 3 fast electric charge points for	£100k City Capital; £100k	Four Sites (8 Rapids by March	Remaining 13 Chargers installed		December 2022	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
	taxis in Cambridge by 2021	GCP capital: £426k OLEV Grant Funding	2019) Completed	by end of December 2021 (4 of 13 are installed and operating			
3.8	Requiring all new taxis registered in Cambridge to be Ultra Low Emission Vehicles (ULEVs) or zero emissions vehicles from 2020, and all taxis to be ULEVs or zero emissions vehicles by 2028	Early adopter fee waiver budget of £150k, all other costs within normal revenue	Policy adopted; June 2019	Policy implemented from 1st April 2020	All Licensed Taxis ULEV by 31st December 2028	2028	
3.9	Using guidance in the Sustainable Design and Construction Supplementary Planning Document to require provision of electric vehicle charging points in future new housing and non-residential developments and consider the need for new policies in the Greater Cambridge Local Plan to support the electrification of transport.	Existing staff resources from Greater Cambridge Shared Planning Service (GCSP) and Environmental Health	Autumn 2021 - consultation on preferred options including policies related to EV charge point provision	Autumn 2023 - consultation on draft Greater Cambridge Local Plan		Ongoing	Every new development has the amount of charge points as set out in the SPD
3.10	Delivery of electric vehicle charging infrastructure in Council car parks through a commercial partner	Net zero capex/opex for the Council solution	Award of contract Sept/Oct 21	August 2022 - In delivery phase	First installation due August 2022	December 2030	
3.11	Working with Cambridgeshire County Council and UK Power Networks to facilitate on-street residential electric charge points where there is no scope for off-street charging. 3 initial pilot schemes for 'charging collectives' will be procured during 2021.	£100K City Council Capital allocation; £119k OZEV ORCS Funding; £ 1 million+ UKPN Green Recovery Fund	Funding Secured from UKPN and OZEV completed in June 2021	Procure contractor for supply, installation, running, maintenance of charge points. (BP Chargemaster Pulse awarded	Install and deliver 38 in street charging sockets for public use by October 2022	October 2022	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
				July 2021)			
3.12	Working with Cambridgeshire County Council and the CPCA on a wider electric vehicle charging strategy.					Ongoing	
3.13	Working with GCP and bus operators to explore opportunities for further investment in electric buses.	City, GCP and CPCA officer time	February 2020 – launch of electric bus trial	August 2021 – CPCA submission of bid for DfT ZEBRA funding for 30 additional electric buses	Deployment of additional buses from late-2022	Ongoing	Reduction in carbon emissions in Cambridge as a result of reduced diesel fuel consumption by buses

Ref	Action - please review wording	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
4.1	Funding activities through the Council's Sustainable City Grants by voluntary and community groups to reduce consumption and increase repair, re-use and recycling	Climate change Officer - assessment of applications for funding from the Sustainable City Grant (SCG) and Grants Team officers - administration of grants process.	Applications for the 2022/23 SCG are assessed, and funding agreements finalised.	Applications for the 2023/24 SCG are assessed, and funding agreements finalised.	Applications for the 2024/25 SCG are assessed, and funding agreements finalised.	Annually	Reduction in emissions in the city as a result of reduced energy consumption, waste or reduced transport powered by fossil fuels.
4.2	Supporting the national Refill campaign by promoting over 100 free drinking water taps in Cambridge, including a number of drinking taps and fountains provided by the Council.	Within existing staff resource and use of S106 monies (when appropriate)	Web site and Web App presence. www.refill.org.uk/refill-cambridge/	Additional water fountains installed.		Ongoing	

Ref	Action - please review wording	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
4.3	Reducing plastics usage at Council-run events such as Cambridge Folk Festival and the Big Weekend	Within existing budgets and staff resource	Oct 21 - Require caterers to not use single use plastics or plastic condiment sachet	Dec 2021 - Devise and implement influencing campaign to influence other departments and contractors	Jun 2022 - implement analysis of each event (by section) to provide quantitative data to measure against	Ongoing	
4.4	Maintain trials of separate collections of food waste to approximately 10k households (evidence to date suggests this increases recycling of food waste and ultimately reduces the amount of household food waste).	Within existing budget and, in the future, internal funding to be sought for 2022-2025, central government funding should be available in 2025	December 2020 – phase 2 of trial implemented to make 4,000 HH on trial in total	December 2021 – phase 3 of trial implemented to add a further 5,000 on the trial	2025 – outcome of national waste strategy to guide future development	Annually	Reduction of amount of food waste in the black bin, currently 30% as confirmed by Waste analysis
4.5	Continue communications campaigns as documented in Circular Resource Strategy to encourage residents to recycle more, generate less waste and contaminate less. Using communications channels such as events, social media, leaflets and residents' magazines	Within existing budget	May 2022- social media messages delivered on The Big Plastic Count campaign	June 2022- social media messages delivered on World Oceans Day, World Environment Day and World Refill Day	March 2023- deliver a contamination campaign to target households that regularly contaminate bins	Ongoing	Recycling rate 52% Contamination rate below 7%
4.6	Encouraging businesses to take-up recycling and food-waste collections provided by the Council on a commercial basis	Within existing budgets	April 2022 – number of new customers of proceeding year	April 2023 – number of new customers of proceeding year	April 2024- number of new customers of proceeding year	Ongoing	60 per year

Ref	Action - please review wording	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
4.7	Working with leading businesses and manufacturers to reduce packaging and make products more re-useable and recyclable	Within existing budgets	December 2024 - review outcome of national waste strategy and impact of packaging production			Ongoing	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
5.1	Incorporating sustainable food principles in council catering and at Council-run events where possible	This is dependent of food providers at council run events that are directed by the fair terms and conditions set out in council licenses and contracts.	Contracts and licenses are continually being reviewed to incorporate sustainable food principles, where possible, within the legal frameworks that apply.			Ongoing	
5.2	Work in partnership with local voluntary and community groups to address food poverty, including working with Cambridge Food Poverty Alliance and Cambridge Sustainable Food to develop a food re-distribution hub	a) use of Cambridgeshire County Council funds to support fuel/food poverty projects b) £100K capital funds allocated for redistribution hub c) Staffing resourced through community services baseline budget	August 2021: £30K (county funding) redistributed to voluntary organisations s for summer holiday, food/fuel poverty programmes	Redistribution hub moves from temp home at Buchan St prior to premises demolition	Work on sustainable business plan for project beyond life of council funding - Present to Sept 2023	Re-distribution hub re-locates on/before Autumn 2022	
5.3	Supporting the work of local	Staffing resourced	Funding provided	8x food hubs	Review	Ongoing	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
	Community Food Hubs to provide free, sustainable food to residents affected by the Covid-19 pandemic	through community services baseline budget. Funding provided through Covid funding streams	to: CECF /CSF/Foodbank to support emergency food/ pandemic recovery	working together with food poverty alliance to agree next steps Oct 2022	emergency food parcel provision post pandemic June 2022		
5.4	Working with the Cambridge Sustainable Food Partnership towards achieving the Sustainable Food Cities Network Gold Award for Cambridge.	CSF CIC has provided resources in terms of officer time to assemble and submit applications. Partners to contribute actions.	The Silver Award was assigned by Sustainable Food Places to Cambridge City on 2 July. Work has begun to prepare an outline submission for Gold Award - launched in May 2022.	Prepare a submission of interest for Gold Award for the city by the end of December 2023.	Final application for Gold Award submitted by March 2024.	June 2024	Gold Award achieved in June 2024
5.5	Encouraging residents to choose sustainable, local food and to reduce meat consumption through corporate communications messages	Existing staff resource	Communications prepared to coincide with COP26 in November 2021	Communications prepared to coincide with upcoming national awareness days: Food Waste Action Week (March 2022) and National Vegetarian Week (May 2022)		Ongoing to March 2026	Ongoing

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
5.6	Maintaining the current level of occupancy rates at existing allotments and supporting take-up of new community gardens and allotments in growth sites to encourage residents to grow their own food	Existing staff resource	Regular inspections for non-cultivation, followed by enforcement leading to termination so plots can be allocated to those on the waiting lists	Allocation of new and existing plots as soon as they are made available		Ongoing	Ongoing
5.7	Using guidance in the Sustainable Design and Construction Supplementary Planning Document (SPD) to encourage developers to incorporate food growing in new housing and non-residential development (e.g. providing fruit trees, roof top gardens and growing space as part of landscape design)	Existing service budgets				Ongoing until new Greater Cambridge Local Plan comes into force	
5.8	Working with local voluntary and community groups and other partners to promote sustainable food practices to local businesses	Use of Sustainable City Grant to fund activities	Projects funded for delivery in 2022/23	Projects funded for delivery in 2023/24	Projects funded for delivery in 2024/25	Ongoing to March 2026	Ongoing (annually through Sustainable City Grants)

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
6.1	Developing an Environmental Management System (EMS) for Environmental Services activity and seek ISO40001 accreditation. This will include a focus on reducing water consumption, potentially through reduce plant watering and sourcing water through rainwater harvesting systems for plant watering and public toilets.	Existing staff resource	Audit and draft an EMS for S&OS.	Implement and carry out first assessment of EMS effectiveness	Modify EMA and seek achievement if accreditation to ISO 14001	March 2022	March 2022
6.2	Working with Cambridge Water to promote water saving messages to residents and businesses	Existing staff resource	Communications prepared to coincide with upcoming national awareness days			Ongoing to March 2026	Water consumption of homes and businesses reduced
6.3	Promoting the use of council pools/ paddling pools/ splash pads in the event of hosepipe bans in conjunction with the local water company, to encourage residents to utilise council facilities instead of using water to fill up garden paddling pools etc.	Social media and web-based messaging.	This action will only be implemented if there is a hose pipe ban and will come into actioning then	N/A	N/A	N/A	Ongoing
6.4	Requiring new housing to meet the water efficiency standards in the current Local Plan (maximum of 110 litres/person/day) and explore where higher standards may be needed in the new Local Plan.	Existing service budgets	Autumn 2021 - consultation on preferred options including options related to enhanced levels of water efficiency	Autumn 2023 - consultation on draft Greater Cambridge Local Plan		Ongoing until adoption of the Greater Cambridge Local Plan	All housing developments to achieve 110 litres/person/day

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
6.5	Exploring opportunities to manage climate risks through policies in the new Local Plan, subject to the outcomes of the current national consultation on planning reforms. This could include: water efficiency policies to help reduce water consumption and manage water resources; designing buildings that are simple to keep cool; and Sustainable Drainage Systems (SUDs) measures to help reduce flood risk.	Existing service budgets	Autumn 2021 - consultation on preferred options including options related to designing for a changing climate and flood risk and sustainable drainage	Autumn 2023 - consultation on draft Greater Cambridge Local Plan	Proposed submission consultation (Autumn 2024) with Submission to Secretary of State for examination (Summer/Autumn 2025)	Following examination	
6.6	Increasing the tree canopy cover through tree planting and protection on public and private land, and using parks, open spaces and other green infrastructure in the city to help regulate temperatures.	Existing service budgets and grant funding (e.g. Interreg funding for the Nature Smart Cities across the 2 Sea project and the Cambridge canopy project pilot)	Complete our commitments to the Nature Smart Cities across the 2 Seas project. 2022	New tree strategy. 2026	2% increase in tree canopy cover. 2050	2050	330.3 tCO_2
6.7	Providing advice to residents on how to reduce health risks during heatwaves	Existing staff resources	Communications prepared to coincide with summer / usual heatwave periods			Ongoing to March 2026	Increased awareness of health risks during heatwaves
6.8	Working with Cambridgeshire County Council and other partners in the Cambridgeshire & Peterborough Flood and Water Management Group (CP FloW) to	Existing staff resources	Continuing to work with the partnership including inputting into the	Local flood risk management strategy action plan approval due- December 2021		Ongoing	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
	manage climate change-related flood risks.		local flood risk management strategy action plan - October 2021 deadline for review of the most recent draft				
6.9	Delivering a measurable biodiversity net gain on the City Council's estate through enhanced management of existing Local Nature Reserves and making parks and housing open spaces more hospitable to wildlife through creation of meadows, scrub and woodland.	Adoption and implementation of new Biodiversity Strategy and Action Plan- existing revenue budgets, S106 and EIP projects.	30/11/21 Complete consultation on draft Biodiversity Strategy, amend and create Action Plan	June 2022 - Present final Biodiversity Strategy and Action Plan for adoption at Environment & Community Scrutiny Committee		Ongoing	Measurable biodiversity net gain on the City Council's estate
6.10	Engaging and influencing individuals, institutions and businesses to take steps to make their land more hospitable and permeable to wildlife and help create a citywide network of sites.	Adoption and implementation of new Biodiversity Strategy and Action Plan- existing revenue budgets, S106 and EIP projects.	30/11/21 Complete Consultation on draft Biodiversity Strategy, amend and create Action Plan	June 2022 - Present final Biodiversity Strategy and Action Plan for adoption at Environment & Community Scrutiny Committee		Ongoing	Ongoing
6.11	Implementing projects to manage water courses and improve biodiversity, including a project to improve rare chalk stream habitats in Cambridge. Initial work will focus on Cherry Hinton Brook, Vicars Brook at Coe Fen, and Coldham's Brook on Stourbridge Common.	June 2021 Cherry Hinton Brook and Vicars Brook works complete	Secure Pebble Funding - October 2021	December 2021 - Implement tree and scrub works along Coldham's Brook	March 2022 - Implement in channel Coldham's Brook enhancements approx. 200m	Ongoing	Ongoing

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
6.12	Move to cease the use of herbicide on grass road verges and trial using a new grass cutting and collecting machine, which will reduce cuttings left on verges, reduce the fertility of the soil for wildlife and support biodiversity.	New resource secured on a temporary contract	Scope the use of a Trial following the Council Motion on the 22 July 2021.	Report to Committee in late 2021 or early 2022	Trial underway in agreed locations Spring 2022	March 2022	January 2023 Review of trial from 2022

Appendix B – Carbon Management Plan projects

2021-22 Projects	Cost	Climate Change Fund contribution	Contribution from other sources	Estimated annual energy savings (kWh)	Estimated annual carbon savings (tCO_2e)	Estimated annual financial savings	Financial payback	LATEST UPDATE ON PROJECT AS OF AUGUST 2022
LEISURE SITES								
Parkside Pool: Installation of 2 ASHP, additional solar PV, LED lighting, BEMS and pipework insulation.	£988,946	-	£988,946 PSDS application	1,739,437	336	£27,689	35.7	Completed June 2022.
Parkside Pool: Replacement and reduction of boiler provision	£227,370	-	£227,370 Capital	175,674	32.3	£4,392	51.8	Completed June 2022.
Abbey Leisure Complex: Installation of a 300kW ASHP, BEMS, LED lighting and pipework insulation.	£717,601	-	£717,601 PSDS application	872,384	184	£1,046	686	Completed June 2022.
CORN EXCHANGE								
Corn Exchange: New heating boilers, HVAC and insulation of pipework, BEMS and LED lighting.	£119,208	-	£119,208 Capital	208,534	43	£7,074	26.4	Completed May 2022.
CREMATORIUM								
Crematorium: HVAC improvements, BEMS, LED lighting, insulation.	Estimated: £39,902	-	£39,902	141,932	28	£4,327	9.2	Further Investigation Required: Ongoing.

LANDLORD LIGHTING IN AUTHORITY OWNED HOUSING								
Sackville Close: Replacement of communal lights with LED lamps and appropriate controls.	£ 36,905.90	-	TBC	TBC	TBC	TBC	TBC	Completed: September 2021 subject to resolution of operational issues.
FLEET								
Shared Waste Service: Purchase of 5 further electric Refuse Collection Vehicles (RCV) for use across the service.	TBC	-	TBC	TBC	TBC	TBC	TBC	In Progress: The second electric Refuse Collection Vehicle (eRCV) was received in June 2022 and a third is due for delivery in September 2022.
CAR PARKS								
Grand Arcade Annex: Air Handling Unit replacement	£38,564	-	£38,564	TBC	TBC	TBC	TBC	Completed: New fan motors and a building energy management system (BEMS) were installed in February 2022. The new fans are more efficient and a new the BEMS (Building Energy Management System) will improve control and therefore the efficiency of the operation of the fans.

2022-23 Projects	Cost	Climate Change Fund contribution	Contribution from other sources	Estimated annual energy savings (kWh)	Estimated annual carbon savings (tCO_2e)	Estimated annual financial savings	Financial payback	LATEST UPDATE ON PROJECT AS OF AUGUST 2022
STREETLIGHTING								
Streetlighting: Replacement of remaining HRA streetlamp columns and lanterns with LED units. Estimated 63% reduction on the baseline.	£513,826.00	-	£513,826.00	97,925	27.2	TBC	TBC	In Progress: Expected to start replacement works in September 2022 to upgrade 300 lanterns, 172 columns and 5 bollards and be completed this year.
LANDLORD LIGHTING IN AUTHORITY OWNED HOUSING								
New Street Hostel: Insultation and lighting improvements: Installation of external wall insulation and replacing communal lighting with LED equivalent.	£175,000	-	TBC	TBC	TBC	TBC	TBC	In Progress: Quotes obtained and expected to be installed during 2022/23
Communal lighting in blocks of flats: Replacement of communal lights within blocks of flats on housing estates with LED lamps and appropriate controls.	£887,600	-	TBC	TBC	TBC	TBC	TBC	In Progress: prioritising those sites where emergency lighting has been identified as a requirement

Appendix C – Environmental Policy Statement

CAMBRIDGE CITY COUNCIL
ENVIRONMENT POLICY STATEMENT

Vision

Tackling climate change and making Cambridge cleaner and greener is a key priority of the Council. The Council's vision is for Cambridge to be 'A city that takes robust action to tackle the local and global threat of climate change, both internally and in partnership with local organisations and residents, and to minimise its environmental impact by cutting carbon, waste and pollution'.

The Council is committed to deliver this vision by promoting a high quality and sustainable environment which maximises the opportunities to lower carbon emissions, reduce waste and consumption of resources, and improve biodiversity, air quality and climate change resilience.

This commitment is highlighted in our Corporate Plan for 2022-2027 which sets out our four key priorities for the city:

- Leading Cambridge's response to the climate change and biodiversity emergencies
- Tackling poverty and inequality and helping people in greatest need
- Building a new generation of council and affordable homes and reducing homelessness
- Modernising the council to lead a green city that is fair for all

Commitments

Climate Change and carbon reduction: The Council declared a Climate Emergency in February 2019, and the Council's Climate Change Strategy 2021-2026 shares a vision for Cambridge to be net zero carbon by 2030. The strategy has also set a target to reduce the Council's direct carbon emissions from its corporate buildings, fleet vehicles and business travel to net zero by 2030.

Biodiversity and the local environment: The Council declared a Biodiversity Emergency in 2019, and the Council's Biodiversity Strategy 2022-2030 aims to secure a measurable net gain in biodiversity across the City by 2025 and support the Natural Cambridgeshire Doubling Nature Vision by 2030.

Through the strategy, the Council commits to: biodiversity mainstreaming so that nature is considered and embedded into everything we

do, ensuring a coherent resilient nature network through Cambridge and ensuring nature is understood and experienced by all.

The Council will make its streets and open spaces and communities more resilient to the impacts of climate change and manage the city's streets and open spaces for the benefit of both wildlife and people by ensuring that protection and enhancement of biodiversity is taken into account in all development decisions and management practices.

Trees: The Council will work to ensure a resilient tree population and will manage the city's trees so as to maximise the benefits they offer whilst ensuring that the trees we leave for future generations, and the character they bring to our City, are better than those we have inherited. The Council's Tree Strategy 2016-2026 sets a target to increase tree canopy cover across the city by 2% to 19% by 2030**.**

Water: The Council is tackling issues of water quality and water scarcity in the city which are mainly caused by abstraction, wastewater treatment discharges and agricultural diffuse pollution. To address these issues the Council has commissioned an Integrated Water Management Study to inform the new Greater Cambridge Local Plan. The study will help to develop a sustainable development strategy for the Local Plan and robust policies on water quality and efficiency. The Council is working collaboratively with a number of bodies on this, including Water Resources East, who are planning regional solutions to address these issues. The current Cambridge Local Plan (adopted in 2018) includes policies to increase water efficiency including a target for new developments to ensure water efficiency does not exceed 110litres/per/day and that they are designed to optimise the opportunities for efficient water use, reuse and recycling, including integrated water management and water conservation.

Waste: The Council is committed to increasing recycling in the city in order to maximise use of finite resources, thereby minimising energy use and waste disposal. The Council develops services that result in reductions in carbon emissions and support the waste hierarchy: putting waste prevention first, supporting and enabling reuse, and encouraging recycling. The Council supports national and European pressures for change to reduce the amount of biodegradable waste that is sent to landfill. The Council will coordinate and enhance the treatment (by the Waste Disposal Authority) of collected material waste from across the city in the most economical and environmentally responsible manner available, in accordance with statutory requirements and will provide help, advice and education where required.

Commercial Waste: In providing commercial waste collection services for businesses and organisations in Cambridge, the Council will ensure that concern for the environment actively influences our working practice every day. Our business and operational activities demonstrate commitment to the prevention of pollution and continual improvement, whilst complying with all relevant legislation and other environmental guidelines relating to the organisation's environmental aspects.

Transport: The Council will lead by example to tackle emissions from transport in the city and reduce concentrations of air pollutants and the Electric Vehicle and Infrastructure Strategy outlines the Council's commitment to increase uptake of electric vehicles and supports the transition to electric vehicles (EVs) in Cambridge. The Council will also reduce its direct travel emissions by increasing the number of staff not driving to/from work, and increasing the number cycling to work, choosing healthy commuting options.

Air Quality: The Council's Air Quality Action Plan 2018-2023 sets out how Cambridge City Council will improve areas of poor air quality

in the city and maintain a good level of air quality in a growing city. Cambridge City Council has worked with the Greater Cambridge Partnership and Cambridgeshire County Council to identify a range of actions which are required to tackle air quality and will take responsibility for ensuring they are progressed. The new Air Quality Action Plan 2023 will take into account legal changes brought in by the Environment Act and will include more action on smoke from solid fuels as well as transport emissions. The Council has also committed to the renewal and replacement of the network of air quality monitors by the end of 2022, which will ensure that policy is underpinned by accurate data.

Contaminated land: The Council is actively committed to identifying and dealing with damaging pollution of the environment in the city within the constraints of national legislation to protect and improve the quality of our environment. The Council's Contaminated Land Strategy details how the Council will fulfil its statutory inspection duty to identify and remediate contaminated land in Cambridge and restore it to safe, meaningful and climate resilient use.

Objectives

The Council has identified a range of environmental objectives relating to its own buildings, vehicles, land, services, and to the wider city of Cambridge.

The Council's medium-term objectives includes to: Promote Cambridge as a sustainable city, in particular by reducing carbon dioxide emissions and the amount of waste going into landfill in the city and sub-region.

The Council's Climate Change Strategy 2021-2026 has six objectives which detail how the Council will address the causes and consequences of climate change:

1. Reducing carbon emissions from City Council buildings, land, vehicles and services. The Council's Carbon Management Plan 2021-2026 will help to deliver the target of reducing direct carbon emissions from its buildings, fleet vehicles and business travel to net zero by 2030.

2. Reducing energy consumption and carbon emissions from homes and buildings in Cambridge by promoting energy efficiency measures, retrofitting homes and buildings, sustainable construction, renewable energy sources, and encouraging behaviour change.

3. Reducing carbon emissions from transport in Cambridge by promoting sustainable transport, installing electric vehicle charging points as part of our Electric Vehicle and Infrastructure Strategy, reducing car travel and traffic congestion, and encouraging behaviour change.

4. Reducing consumption of resources, reducing waste, and increasing recycling in Cambridge by piloting household food waste collections, reducing single-use plastics, and encouraging behaviour change.

5. Promoting sustainable food by encouraging sustainable food practice and procurement, enabling and celebrating locally grown food, promoting behaviour change, and working in partnership with local voluntary and community groups

6. Supporting Council services, residents and businesses to adapt to the impacts of climate change by promoting water efficiency measures, retrofitting flood measures, reducing overheating in buildings, increasing biodiversity and increasing the tree canopy cover.

The Biodiversity Strategy 2022-2030 contains seven objectives which detail how the Council will protect and enhance biodiversity in Cambridge:

1. To secure a measurable net gain in biodiversity across the City by 2025 and support the Natural Cambridgeshire Doubling Nature Vision by 2030.

2. To ensure designated sites and priority habitats are in good / favourable condition and connected, where possible, to increase resilience to a changing climate and contribute to the Cambridge Nature Network.

3. To promote awareness of biodiversity and wellbeing, supporting coordinated action in our communities, businesses and institutions.

4. To ensure that biodiversity is considered by all council service functions and projects.

5. To maximise the potential of our buildings, parks, open spaces, allotments and community gardens, watercourses and tree stock to support biodiversity, whilst balancing their multifunctional needs.

6. To harness the wealth of local professional and amateur knowledge and experience in identifying and solving local issues.

7. To establish long term, species and habitat surveys and monitoring to measure the impact of activities and identify new threats and opportunities across the city.

The Council's Tree Strategy 2016-2026 details four aims:

1. To sustainably manage the Council's own trees and those it manages by agreement.

2. To foster a resilient tree population that responds to the impacts of climate change and urban expansion.

3. To raise awareness of trees being a vital community asset, through promoting continued research, through education via the provision of advice and through partnership working.

4. To make efficient and strategic use of the Council's regulatory powers for the protection of trees of current and future value.

The Electric Vehicle and Infrastructure Strategy 2019 commits to supporting the uptake of electric vehicles in Cambridge through four objectives:

1. To identify sources of funding to develop and install EV Charging infrastructure and where appropriate pursue that funding.

2. To robustly consider EV as a preference for all City Council fleet replacement and new vehicle purchase, where appropriate vehicles are available and meet our operational needs.

3. For the City Council to develop a commercial project to deliver charge points in our car parks in the short term and wider property holdings in the medium term.

4. To promote funding opportunities and provide support for partner organisations to deliver EV charging infrastructure where they are the most appropriate lead (e.g. County Council / on street charging).

The Air Quality Action Plan 2018-2023 sets out three priorities for maintaining and improving air quality in the city:

1. Reduce local traffic emissions as quickly as possible to meet National Air Quality Objectives.

2. Maintain pollutant levels below National Air Quality Objectives.

3. Improve public health by reducing population exposure to air pollutants.

The Commercial Waste Service (CWS) short-term and long-term strategy identified the following as objectives important for the CWS, and the larger Greater Cambridge Waste Service, to achieve:

1. Reducing waste to landfill by increasing recycling.

2. Assist businesses and organisations to reduce their carbon emissions through more effective waste management of waste.

3. To reduce the Council's carbon dioxide emissions and manage the risks to its staff, property and functions, from climate change

The Contaminated Land Strategy details the Council's priorities in detailing with contaminated land:

1.To protect human health

2.To protect controlled waters

3.To protect designated ecosystems

4.To prevent damage to property

5.To prevent any further contamination of land

6.To encourage voluntary remediation

7.To encourage re-use of brownfield land

The Council adopted the current Cambridge Local Plan in 2018 which includes a number of policies designed to ensure that new development in Cambridge reduces its environmental impact by minimising carbon emissions, flood risk, pollution and pressure on resources such as water and helping to protect and enhance biodiversity including:

- A minimum 19% reduction in carbon emissions on 2013 Building Regulations requirements (now superseded by the latest Building Regulations which require a 31% reduction in emissions on 2013). Non-residential development is required to achieve BREEAM excellent.
- Support for the provision of renewable and/or low carbon energy generation, including community energy networks, district heating schemes and solar energy.
- A requirement to prepare sustainability statements as part of planning applications, which sets out how developers will achieve carbon reductions through reducing energy demand, energy efficiency measures and on-site renewable energy generation, as well as integrating measures into developments to enable them to adapt to our changing climate and water efficiency measures.
- Water efficiency requirements for all new residential and non-residential development
- A green belt policy which states that new development in the Green Belt will not be approved except in very special circumstances, in line with Green Belt policy in the National Planning Policy Framework.

- A policy to protect the River Cam: development proposals that are situated along the River Cam should where possible enhance the natural resources of the River and provide opportunities for renaturalisation of the river
- Supporting climate change adaptation by requiring that any flat roofs should be a green or brown roof and requiring the use of sustainable drainage systems for all new development
- A policy to support climate change measures in heritage assets
- Requirements related to electric vehicle charging provision
- The above measures are supported by guidance in the Greater Cambridge Sustainable Design and Construction SPD and Biodiversity SPD

Actions

The Council has a community leadership role and will deliver its vision through its own activities, the services it provides and partnership working to demonstrate good practice and encourage residents, businesses and organisations to also take action to reduce environmental impacts.

The following environmental issues are identified within the medium-term objectives as priority areas for action:

- To tackle the causes and consequences of climate change
- To encourage sustainable waste management
- To promote more sustainable modes of transport
- To raise awareness of environmental issues and promote sustainable lifestyles
- To manage growth to achieve sustainable neighbourhoods

The following actions will be taken to reduce the Councils environmental impact and to improve the environment in the City:

Actions to reduce the Council's environmental impact

 The use of water, energy and carbon dioxide emissions and other greenhouse gases, directly linked to our activities, will be reduced. This will include reducing our reliance on fossil fuels to achieve net zero carbon emissions by 2030, increasing the proportion of energy coming from low and zero carbon technologies and ensuring the efficient use of energy and water;

Sustainable travel choices for staff will be enabled and encouraged by incentivising more sustainable forms of employee travel to and from the place of work, promoting working arrangements and policies which reduce the requirement to travel and improve work-life

balance, and providing facilities which support alternative sustainable travel options;

Emissions from our fleet vehicles will be lowered by using technology to optimise fleet routes and purchasing ultra-low emission vehicles (vans, trucks, refuse collection vehicles) when they are due for replacement which could lead to a fully electric Council fleet by 2028;

The environmental quality, resilience and performance of our buildings and assets will be improved. We will work with partners to promote and facilitate improvements to the environmental performance of our buildings (such as administration buildings, community centres and swimming pools) and the wider landscape and public realm across the city to reduce energy consumption, heat loss and carbon emissions from these buildings; including through implementing a range of carbon reduction projects and energy efficiency measures such as solar PV, air source heat pumps where possible, LED lighting, investing in building fabric such as insulation to reduce heat loss and require less heating, and building management control systems to minimise heat and water usage;

Further investment in our buildings and facilities will be obtained through applying for Government funding and grants (where eligible and relevant) to implement further carbon reduction schemes and measures;

The environmental quality, resilience and biodiversity of our land, water bodies and landscapes across our city will be protected and enhanced including through tree planting, implementing management plans for all City Council owned nature reserves and wildlife sites, reducing use of herbicides, and implementing sustainable measures to reduce surface water and river flooding

An Environmental Management System will be developed and implemented for the Streets & Open spaces team which we will seek accreditation to ISO14001, which will help to ensure that biodiversity constraints and opportunities are embedded into the work the team undertake and that positive steps for promoting biodiversity are enacted;

Regular engagement with businesses and local organisations will focus on the objectives of the Climate Change Strategy, working collaboratively and enabling change which supports our net zero carbon vision for Cambridge;

All tenderers will be required to demonstrate actions to support our net zero carbon vision for Cambridge and the Council's net zero target, ensuring that all procurements consider the environmental, social and economic well-being of the City and surrounding area, in their submissions;

Voluntary and community groups will be supported to deliver activities in Cambridge that will help achieve the objectives of the Council's Climate Change Strategy, through the Council's Sustainable City Grant;

Targets will be set, progress reviewed, and we will publish information regularly, where appropriate, including in the council's Annual Climate Change Strategy Report (without duplicating existing reporting processes);

Appropriate training, instruction, and supervision to all our employees will be provided such that they are able to perform their duties in a way that supports our environment policy and objectives, including mandatory environmental awareness training and supplementary net zero carbon training for managers;

Actions to improve the environment in the city

 Air quality in the city will be improved by reducing emissions from traffic through: licensing policies to increase the number of electric and hybrid taxis, parking policies, the provision of electric vehicle charge points for residents and taxis, and working with partners to reduce the need to travel and provide lower emission travel alternatives, such as low/zero emissions buses;

 The environmental impact of transport and travel will be reduced through our work with the Cambridgeshire and Peterborough Combined Authority, Greater Cambridge Partnership, County Council, businesses, organisations and others and we will promote and plan for sustainable modes of transport that reduce environmental impacts;

 Waste to landfill will be reduced by encouraging a shift to a circular economy, reducing the use of single-use plastics and packaging, continually exploring opportunities to increase the types of material that can be recycled, and increasing recycling rates through engagement with residents and businesses. Residents and businesses are actively encouraged to recycle through the provision of free kitchen caddies and green bins to residents and through the provision of pricing incentives for commercial customer;

The quality of recycling will be improved through regular review of reports of contamination to identify frequency of contamination and implementing a set education process (including reviewing signage to ensure it is adequate, letters, leaflets and door-knocking) to raise awareness and reduce contamination of waste;

Waste minimisation and recycling will be ensured and promoted through identifying opportunities in the development of the Greater Cambridge Local Plan, including the minimisation of construction waste;

Biodiversity across the city will be enhanced by supporting and working with the Cambridge Nature Network to enhance and link core sites through the City, enhancing water sources for fish stocks, promoting the use of retrofit green roofs on garden buildings and extensions and establishing grassland restoration trials;

Brownfield land within the city will be identified and cleaned up where contamination has occurred, it will be restored to safe, meaningful and climate resilient use, working in partnership with developers. The redevelopment of brownfield sites reduces the pressure on greenfield land and allows for the sustainable use of formerly underdevelopment/derelict land throughout the City;

Water quality will be restored in chalk streams through the promotion of sustainable management of water resources, working in partnership with key stakeholders;

 Existing Local Plan policies will continue to be implemented on climate change mitigation, water efficiency, sustainable drainage systems (SuDS), and permeable paving and surfaces, and will continue to develop policies in the new Greater Cambridge Local Plan to deliver net zero carbon buildings, manage water supply and flood risks and address potential overheating and wider climate risks in new developments;

The Council will explore how the Greater Cambridge Local Plan can do more to improve natural and semi-natural spaces across the Greater Cambridge area including how to make use of new powers to mandate biodiversity net gain, and a proposed requirement for new development to deliver a minimum of 20% Biodiversity Net Gain

Renewable energy generation, the Circular Economy and carbon sequestration will be supported by developing related policies in the Greater Cambridge Local Plan;

The environmental impact of food in Cambridge will be improved by working with local partners and stakeholders in the Cambridge Sustainable Food network, to improve the sustainability of food production, consumption and procurement where possible. This includes supporting partners in the network to achieve the Sustainable Food Places Silver Award for Cambridge and supporting efforts to pursue the Gold Award for the city;

Sustainable food will be promoted through engagement with residents and providing grant funding to local projects. This includes working collaboratively with partners Cambridge Sustainable Food to raise awareness of the impact of food on carbon emissions and promote the benefits of a more sustainable diet, and providing grant funding to sustainable food projects such as CoFarm, who engage the community to produce sustainably grown food and distribute it through community food hubs;

The Council will engage and communicate with residents to build knowledge and awareness about environmental issues. This includes information about practical actions to reduce carbon emissions, public health impacts of air quality and guidance on recycling. Residents will be encouraged and supported to make choices and decisions with low carbon impacts to reduce their environmental impact;

The Council will engage with local businesses and voluntary and community organisations to share best practice on sustainability issues and utilise opportunities to work together to reduce emissions in the city;

The Council will work with local partners to protect older people, vulnerable residents and those facing hardship from the wider effects of our changing climate, and this will include the impact of fuel and water poverty;

This policy statement will be reviewed periodically, and not later than March 2024.

This policy will be communicated to everyone working for or on behalf of Cambridge City Council.

Cambridge City Council expects all staff and all residents to protect the environment and take personal responsibility for their actions. The Council will work with partners, businesses, organisations and community organisations to help residents, businesses and others understand how to protect, maintain and develop the environmental quality of the city.

The Council will use its statutory planning and regulatory powers appropriately to achieve and set high standards of environmental quality in the built and natural environment and in the behaviour of organisations, businesses, residents and communities. It will promote the outcomes listed above to its partners and to other organisations in the city, including through its contracting and commissioning activities,

where appropriate.

The Council will use its powers to take action where necessary against those who cause harm or detriment to the environmental quality of the city. We will set out detailed actions to further the policy goals set out in this statement in our service operational plans.

Signed:

Robert Pollock	**Councillor Rosy Moore**	**Councillor Anna Smith**
Chief Executive	Executive Councillor	Leader
Dated:		

Appendix 1

Key Indicators

The risk and impact of the climate change and biodiversity emergencies is reduced, as measured by:

- Number of air quality monitoring points exceeding Nitrogen Dioxide legal limit
- Direct emissions (tCO_2) from council assets and activities
- Kilogrammes of residual waste per household (black bin)
- % recycling rate (blue bin)
- % of all journeys undertaken by bicycle, public transport and on foot
- Number of electric vehicles in the council's fleet
- Number and percentage of ultra-low/electric taxi vehicles licensed
- Number of low-income households whose homes have been improved with home energy interventions
- Energy and environmental performance of our housing stock (average RdSAP score)
- % of homes delivered at Passivhaus level carbon reduction or above (on schemes delivered by the Council's Housing Development Agency)
- Average Net gain % biodiversity on new Council housing sites
- Number of private sector homes that have been improved for health and safety and energy standards
- Volume of herbicide used on managing city streets and open spaces

City Council environmental targets

- Reduce the Council's direct carbon emissions to net zero by 2030

- Secure a measurable net gain in biodiversity across the City by 2025
- Support the Natural Cambridgeshire Doubling Nature Vision by 2030: to double the area of rich wildlife habitats and green space from 8.5% to 17%.
- Increase tree canopy cover across the City by 2% to 19% by 2030
- 30% electric or petrol hybrid taxi fleet in Cambridge by 2023 and 100% electric or petrol hybrid taxi fleet by 2028.
- 100% current regular bus and coach fleet in Cambridge Euro VI or better; all additional buses/coaches to be zero-emission capable.