

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 05/10/2023

Report by:

Janet Fogg and Catherine Stewart, Climate Change Officers
Tel: 01223 457176, Email: janet.fogg@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 2022/23 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. The report also provides an update on the council's Greenhouse Gas Emissions for 2022/23.

2. Recommendations

The Executive Councillor is recommended to:

1. Note the progress achieved 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. Background

Climate Change Strategy

- 3.1 The Council's current Climate Change Strategy covers the period from 2021-26. It 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 and help to deliver the vision for Cambridge to be net zero carbon by 2030.
- 3.4 A revised and updated Action Plan is presented for approval at Appendix A.

Climate Change Strategy benchmarking

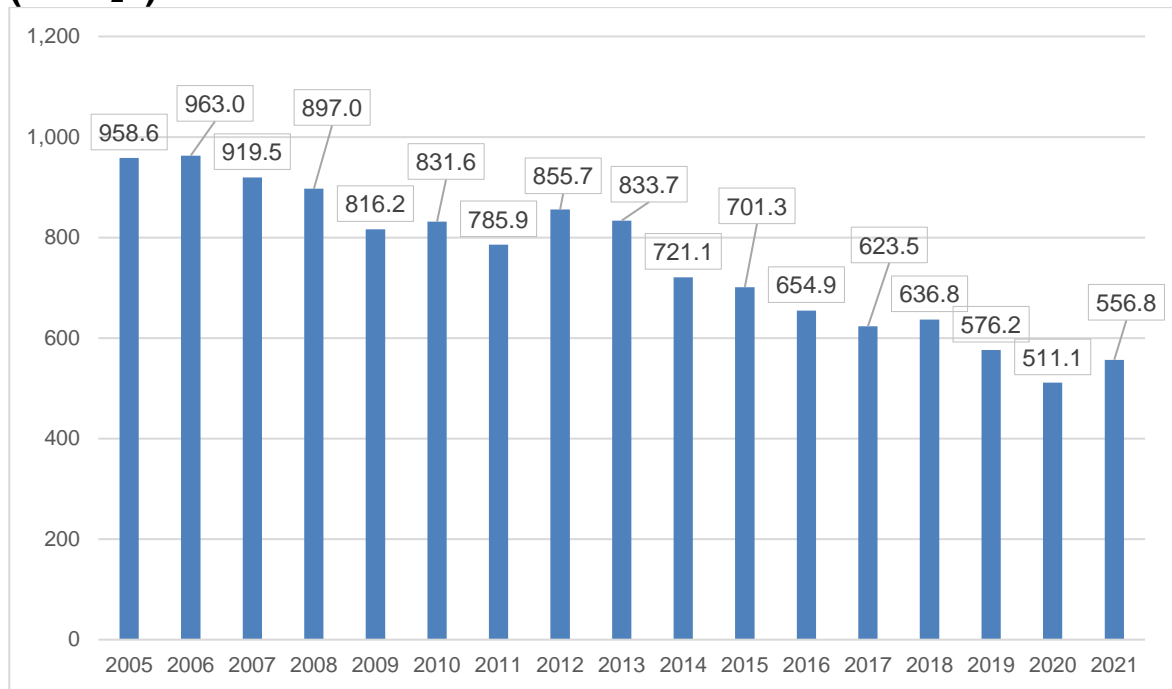
- 3.5 Since 2016 the council has reported the council's activities to reduce the council's and the city's emissions and adapt to climate change to the Carbon Disclosure Project (CDP)¹. CDP run the global disclosure system that enables companies, cities, states and regions to measure and manage their environmental impacts.
- 3.6 The Council's 2022 response was awarded an overall score of B within the 'Management level' scoring band. The Mitigation score of B (higher than the Europe regional average of C) indicates that the Council has an emissions inventory, have implemented a mitigation plan, set a target and are taking action to reduce emissions. The adaptation score of A (higher than the Europe regional average of C and higher than last year's score) indicates that the Council has a clear understanding of the impacts and risks climate change poses and have implemented an adaptation plan and are tracking progress towards our adaptation goals.

Carbon emissions in Cambridge

- 3.7 As shown in Chart 1 below, the latest available national greenhouse gas emissions estimates, published by the Department for Energy Security and Net Zero (DESNZ), show that total emissions in Cambridge have reduced by 42% over the last 15 years, from 958.6 ktCO₂e in 2005 to 556.8 ktCO₂e in 2021.

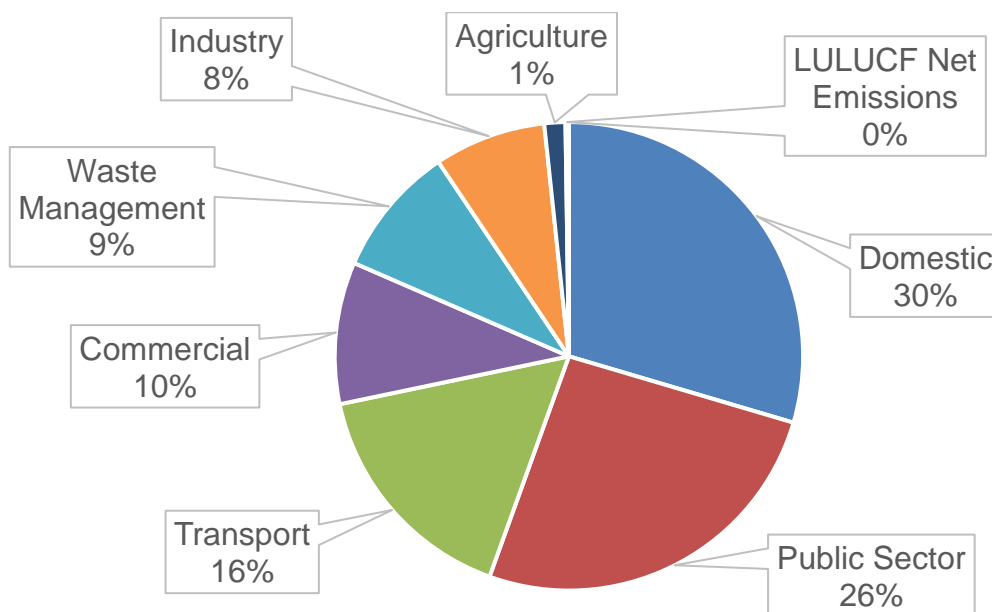
¹ <https://www.cdp.net/en>

Chart 1: Total Greenhouse Gas Emissions in Cambridge 2005-2021 (ktCO₂e)



- 3.8 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 inclusion of higher levels of renewable energy in the national electricity mix.
- 3.9 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, on the next page, the greatest source of greenhouse emissions in Cambridge in 2021 was from energy consumption in domestic properties (heating and powering homes) at 30% (the UK average was 24%), which is almost a third of the city's emissions, emphasising the importance in reducing emissions through retrofit and influencing residents' behaviour in this sector.
- 3.10 The public sector contributes the second highest proportion of emissions in Cambridge at 26%, which is much higher than the UK average of 4% for local authority (LA) areas. This reflects the number and size of councils, health and education bodies in the city.

Chart 2: Sources of Greenhouse Gas Emissions in Cambridge in 2021 (ktCO₂e)



3.11 Transport was responsible for the third highest proportion of emissions in Cambridge at 16%, which is lower than the UK average of 29%. This suggests that actions to reduce emissions from transport are also important in reducing carbon emissions in the city.

3.12 The fourth highest sector contributing to the city's emissions is commercial (shops and businesses) at 10%, a much higher proportion than the UK average of 4% from this emissions source. In contrast, emissions from industry were the second lowest proportion of emissions in Cambridge at 8%, compared to a UK average of 21%.

3.13 Cambridge City Council was only directly responsible for 0.94% of total carbon emissions in the city in 2021, 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.

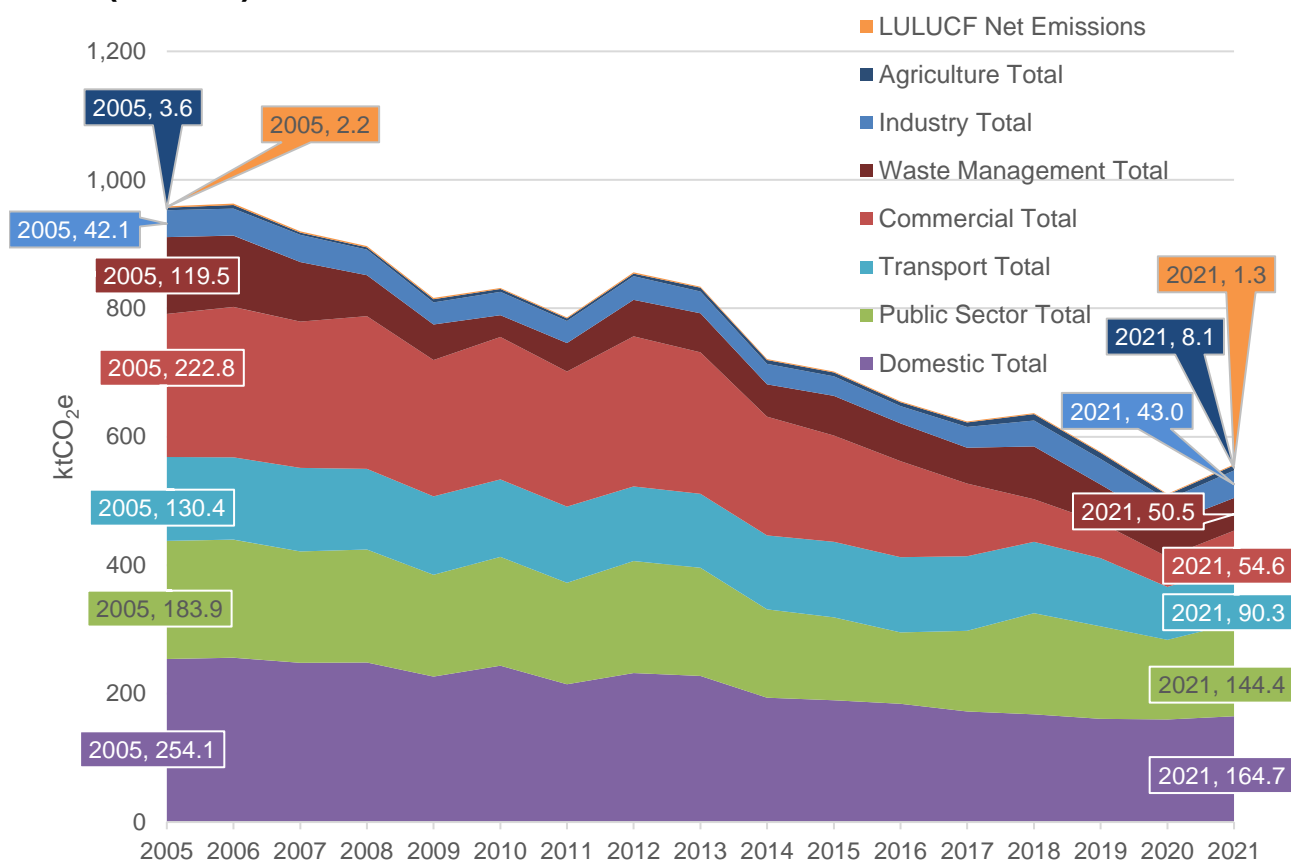
3.14 Waste management (9% of Cambridge's emissions) and agriculture

(1%) were included in the emissions estimates^[OBJ] ² for the first time in 2020, and so the emissions now also cover territorial emissions of methane (CH₄) and nitrous oxide (N₂O) as well as carbon dioxide (CO₂) and so the statistics are now estimates of greenhouse gas emissions.

- 3.15 LULUCF (Land Use, Land-Use Change and Forestry) Net Emissions covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities and at 1.3 ktCO₂ the percentage contribution in Cambridge is about 0.3%, which does not show on Chart 2.
- 3.16 As shown by Chart 3 on the next page, emissions associated with all sectors have reduced between 2005 and 2021, although some sectors have seen a greater reduction than others, and there has been an increase since 2020 as activity returned to normal after Covid restrictions eased.

² <https://www.gov.uk/government/collections/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics>

Chart 3: Sources of Greenhouse Gas Emissions 2005-2021 (ktCO₂e)³



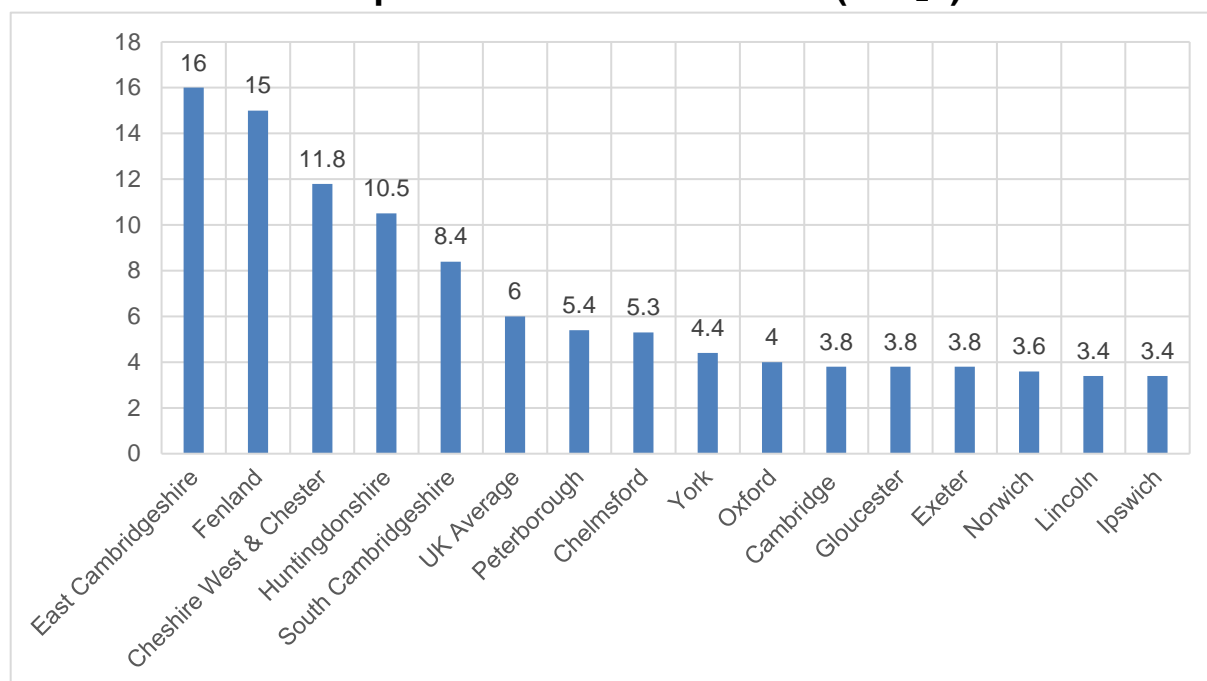
3.17 Chart 4 on the next page shows per capita emissions estimates (emissions per unit of population) in Cambridge compared to other local authorities in Cambridgeshire and also cities in England with comparable populations (ranging from 99,000 to 195,000) and functions.

3.18 Analysis based on the [Climate Emergency UK Scorecards data](#) has identified that Cambridge’s ‘climate twin’ (the council that is most similar, in terms of conditions and challenges around climate action) is Oxford City⁴.

³ 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/ulucf-local-authority-mapping-report-2020.pdf.

⁴ <https://cape.mysociety.org/twins/cambridge-city-council/>

Chart 4: 2021 Per Capita Emissions Estimates (tCO₂e)



Carbon Management Plan 2021-26

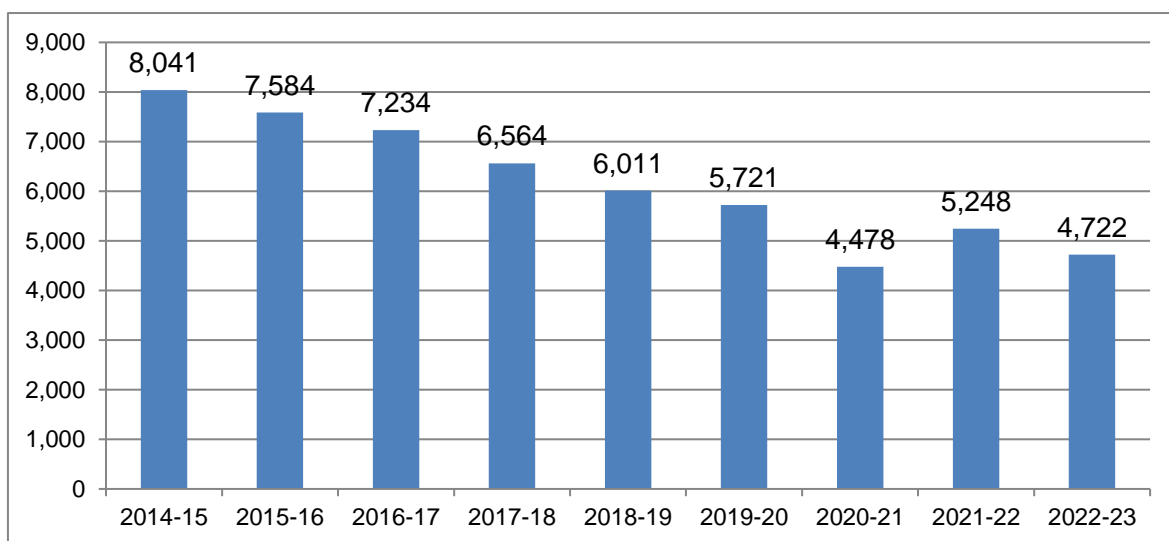
- 3.19 The Council has set a target in the Climate Change Strategy to reduce direct carbon emissions from our corporate buildings (including swimming pools, office buildings, car parks, sheltered housing schemes, community centres, arts venues and the crematorium), fleet vehicles (including vans, trucks and refuse vehicles), and business travel, to net zero by 2030.
- 3.20 The Council has produced a Carbon Management Plan for 2021-26⁵, which sets out the projects that will help reduced carbon emissions from our corporate buildings, fleet vehicles and business travel. Details of the carbon reduction projects that have been delivered during 2022/23 are provided in section 4, and a table providing further information on these projects or 2023/24 and beyond, is included in the Carbon Management Plan at Appendix B.

Cambridge City Council's carbon emissions

⁵ <https://www.cambridge.gov.uk/media/9580/carbon-management-plan-2021-26.pdf>

3.21 The Council calculates its carbon emissions from its estate and operations, and reports these to Government in our annual Greenhouse Gas Report. Included in this year's business mileage emissions are the emissions from train journeys, flights and hotel stays made by staff and councillors as a result of a new booking system which records this data. The report for 2022/23 is available on the Council's website here: www.cambridge.gov.uk/carbon-management-plan.

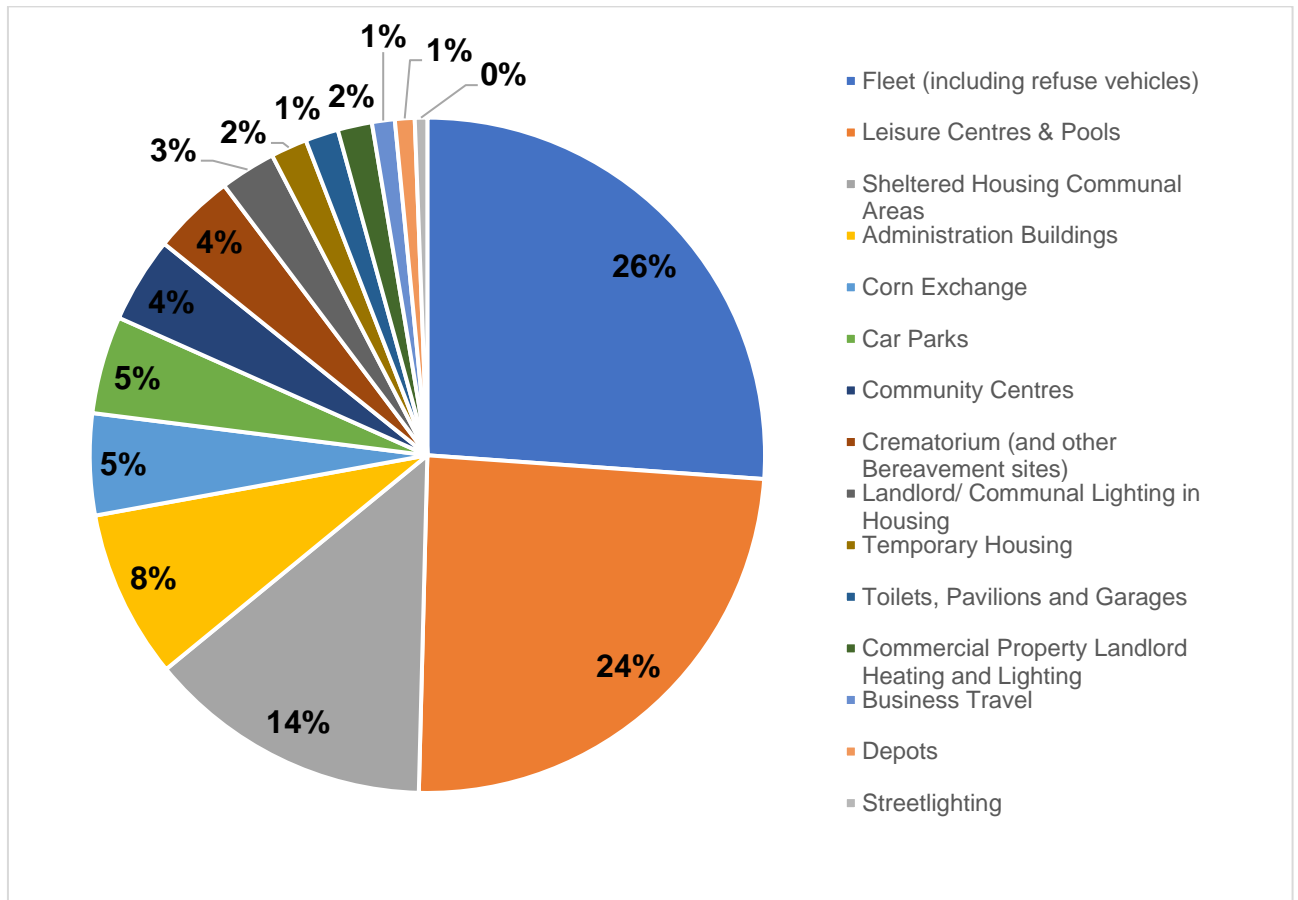
Chart 5. Council's Total Carbon Emissions (tCO₂e)



3.22 As shown by Chart 5 above, from 2014/15 to 2022/23 the Council's carbon emissions have reduced by 41.3%. 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.

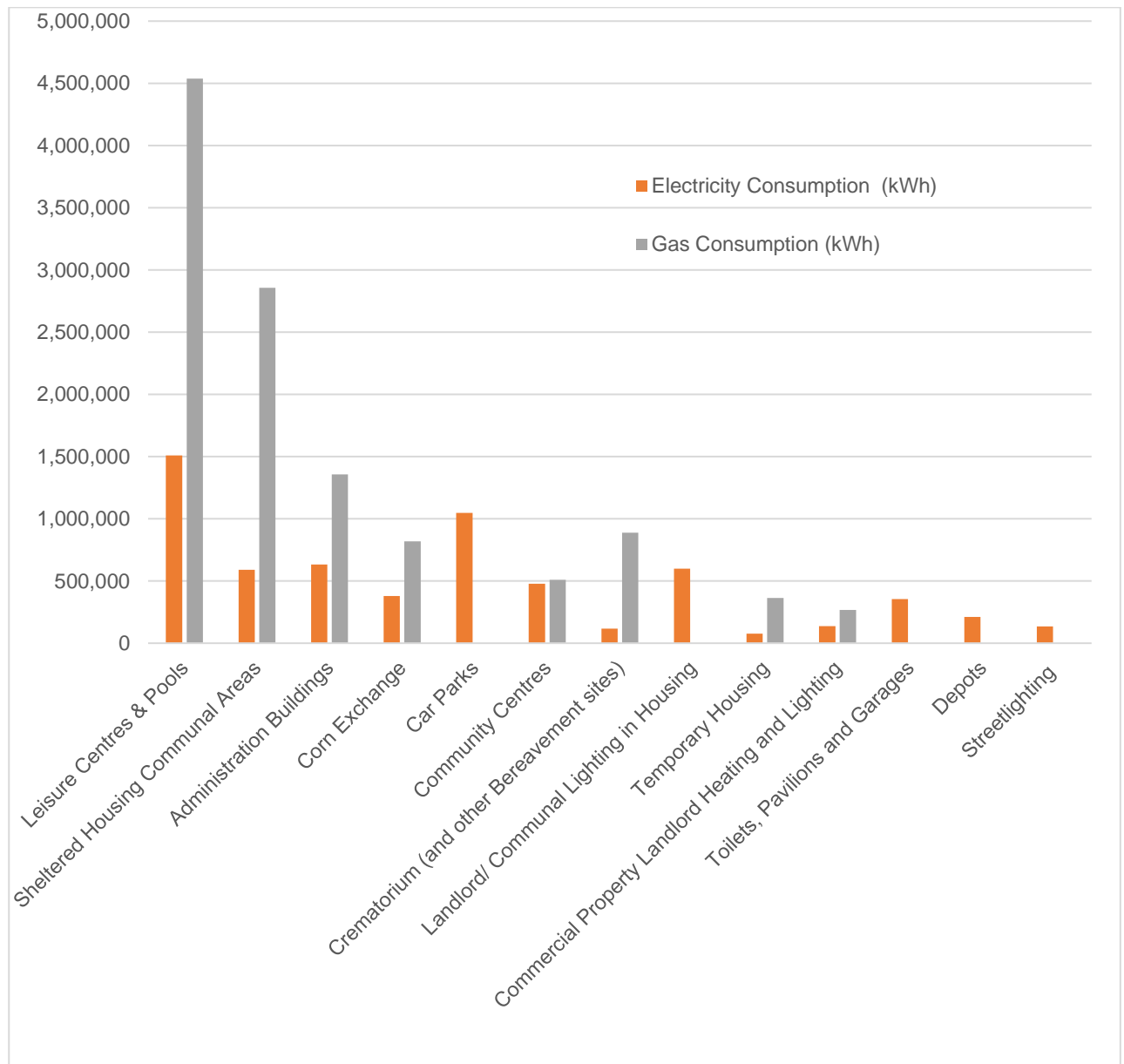
3.23 As shown by Chart 6, below, in 2022/23 the greatest proportion of emissions came from the Council's fleet (26%) followed by leisure centres and pools (24%), sheltered housing communal areas (14%), administration buildings (8%), car parks (5%), community centres (4%) and the crematorium (4%)

Chart 6: Council's Carbon Emissions by Source (tCO₂e) in 2022/23



3.24 Some of 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, Corn Exchange and crematorium. The Council's leisure sites consumed the most gas in 2022/23 (4,538,931 kWh) and the second highest amount of electricity (1,509,286 kWh compared to the car parks which consumed 1,047,810 kWh) as shown in Chart 7 on the next page.

Chart 7: Electricity and Gas Consumption by Source (kWh) in 2022/23



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 2022/23, 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. As of August 2023, 530 members of staff had completed the training.
- 4.3 In addition, 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. 14 training sessions were held from January 2022 - September 2023 and 27 councillors and 94 managers have been trained to date.

Communications and awareness-raising for residents

- 4.4 During 2022/23 the Council engaged residents through a number of different ways to inspire and empower residents to make well-informed low carbon choices about their behaviours. This included providing practical tips and signposting to resources and information to make it easy for residents to adopt more sustainable behaviours. Communications also raised awareness of Council action and projects to address climate change.
- 4.5 The Council funded Cambridge Carbon Footprint (CCF) to develop and deliver a climate change training course for residents, called How to Crack on With It, which aimed to support residents and motivate, empower and enable them to take practical, impactful climate action to reduce their carbon footprint. The training was promoted in Cambridge

Independent, Cambridge Matters and on social media. From January – April 2023, CCF delivered two public training sessions on Zoom and four in-person training sessions. 138 people attended a training session in total. CCF also engaged with residents through 11 outreach stalls reaching a further 335 residents.

- 4.6 Of those who attended an in-person session and provided feedback, 100% reported a greater awareness of local resources to help them to reduce their carbon footprint, 91% felt motivated to share their experience with others, 82% reported having a greater understanding of the relative impact of day-to-day choices on greenhouse gas emissions and 82% felt more motivated to make changes to their lifestyles to reduce the carbon footprint.
- 4.7 The Council also supported Cambridge schools and students working to meet the accredited Eco-School Green Flag Award during the 2022/23 school year by funding school's application costs to the scheme by using money generated from fixed penalty notices issues for environmental crimes. The scheme recognises the achievement of schools in engaging children with environmental issues and empowering them to make a difference, both at school and in their local community.
- 4.8 The Council also hosted two events in October 2022 as part of the Cambridge Zero Climate Change Festival. The first was a lunchtime drop-in session in the Guildhall where Council representatives were on hand to talk to members of the public about the work and programs being delivered to tackle climate change and answer questions. The second event was jointly hosted by the Council and community groups in the Guildhall (see paragraph 4.14).
- 4.9 There have also been regular articles in Cambridge Matters communicating practical information to support residents to make low-carbon choices in their home. Articles provided information and signposted residents to resources to help them save water and make their home more energy efficient, including promoting the Cambridge Retrofit Guide and free thermal imaging camera training run by CCF. In

the summer 2023 magazine, the Council produced a visual graphic for a double page feature depicting the Council's journey to tackling climate change so far, highlighting key projects and actions from 2007 to 2022 which work towards achieving net zero. The graphic will continue to be used in other formats for further engagement.

- 4.10 The Council was awarded the Bronze Green Council Award at the [iESE Public Sector Transformations Awards 2023](#)⁶ for submissions on the work the council and its partners have undertaken to decarbonise transport through facilitating the transition to electric vehicles (EVs). The Green Council award recognises environmental best practice across the public sector in the UK and is awarded to councils that have shown how they have helped the environment and improved sustainability not only in their own operations, but in the surrounding community. The Council also made submissions to the Association of Public Service Excellence (APSE) annual awards relating to its work on housing retrofit and EV charging infrastructure, which contributed to the Council being shortlisted for the Council of the Year award.

Communications and engagement with organisations:

City Leaders Climate Change Group

- 4.11 Since 2017, the Council has convened the City Leaders Climate Change group, which brings together key partners, including businesses, universities, and public sector organisations to explore how carbon emissions in the city can be reduced and to identify ways to collectively amplify impact across the carbon system of Cambridge. During 2022/23 the Council has jointly convened two meetings of the group in partnership with the University of Cambridge's Cambridge Institute of Sustainability Leadership (CISL) and Cambridge Zero. Both events were hosted at CISL's retrofitted building Entopia. The events focused on creating tangible outputs which accelerate progress towards net zero:
- In March 2023, attendees came together to develop a Cambridge

⁶ <https://iese.org.uk/project/the-public-sector-transformation-awards/>

carbon map, capturing the key carbon flows through the city, mapped the key barriers to decarbonisation and then collaboratively developed solutions and opportunities for decarbonisation in Cambridge which would accelerate climate progress through collaborative action. Five solutions emerged from these conversations to be explored further. Presentations were also given on innovative projects taking place in Cambridge which members of the Group can get involved in including a presentation on the district heat network project and the CANNFUND project exploring different routes to finance net zero.

- In July 2023, the group progressed the five co-created solutions by collaboratively developing them further and identifying the next steps for each solution.
- The next meeting is scheduled for November 2023 where the group will progress these five solutions further to define, confirm and prioritise them including the actions, roles and any support required to deliver them.

Green Business Programme

- 4.12 The Council is working in partnership with Huntingdonshire District Council, South Cambridgeshire District Council and the Cambridgeshire and Peterborough Growth Hub, to develop a new support programme for local businesses located in Cambridge City, Huntingdonshire and South Cambridgeshire. The Green Business Programme is part funded by the UK Government through the UK Shared Prosperity Fund (UK-SPF) and overseen by the Cambridgeshire and Peterborough Combined Authority.
- 4.13 The programme will support small to medium sized businesses (SMEs) and offer access to expert advice to develop a practical, tailored net zero road map. Businesses can also apply for a capital grant of up to £5,000 to part-fund investment in carbon-saving technology, equipment or improvements. The programme is expected to launch in September 2023.

Local Climate Change Forum

- 4.14 During 2022/23 the Council convened 5 meetings of the Local 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.

In October 2022, the Council, CCF, CSF and Transition Cambridge hosted a joint engagement event as part of the Cambridge Zero Festival. The event took place at the Guildhall and gave an insight into the landscape of climate action in the Cambridge community. The session used the engaging Pecha Kucha presentation technique to present a series of nine mini talks about community projects which are tackling climate change in Cambridge, with the aim of inspiring residents to get involved. The talks were grouped by theme: Making things last longer, Reducing energy, Sustainable food and Enhancing nature. 69 people registered for the event and approximately 50 people attended.

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 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 2022/23, the following projects which will reduce the Council's emissions were progressed on the Council's estate:

- Parkside and Abbey Pools: Completion of £1.7m PSDS (Public Sector Decarbonisation Scheme) funded project to install air source heat pumps (ASHPs) and energy efficiency upgrades.
- New Street Hostel: Installation of external wall insulation and

replacement of communal lighting with LED lighting.

- Streetlighting: Replacement of remaining streetlamp columns and lanterns with LED units on Council housing land has been continuing.
- Communal lighting in blocks of flats: Replacement of communal lights within blocks of flats on Council housing estates with LED lamps and appropriate controls has been completed at 11 housing sites during 2022/23 and a further 3 sites will be completed in 2023/24.

5.2 Asset Management Plan: – We have produced a revised Asset Management Plan setting out the carbon reduction needs and costs for all Council buildings. This plan was approved by Environment and Community Scrutiny Committee in March 2023. The plan has been updated to reflect the current environmental performance of properties and how this will be improved to meet key targets, including the Council's net zero carbon target for its corporate buildings (those included in its Greenhouse Gas Report) and the government's Minimum Energy Efficiency Standards, which requires that commercial property achieves an Energy Performance Certificate of at least 'B' by 2030. We will be developing a programme of capital works to reduce carbon emissions from our corporate buildings and reach net zero carbon emissions from these assets. We have recently recruited to several posts that will develop and deliver this programme, including the Energy Manager and Retrofit Project Manager posts.

5.3 City Centre Heat Network: The Council is exploring the potential to develop a city centre heat network in partnership with the University of Cambridge, which could potentially generate renewable zero carbon heat and hot water to supply city centre buildings owned by the Council, the University of Cambridge and University Colleges. This includes the Corn Exchange, Guildhall and Parkside Pools, which are amongst the hardest Council assets to decarbonise. In autumn 2022 the Council was awarded £96,000 of funding from the Heat Network Delivery Unit (HNDU) for a feasibility study. The study, carried out by heat network consultants Aecom, began in January 2023 and concluded in September 2023. The feasibility study identified energy sources for the

network which would be primarily heat pumps, explored energy centre locations, and developed a network route consisting of four phases. The study found that the heat network is likely to be technically and economically feasible. A webpage was developed on the Council's website to inform stakeholders and residents about the project as it progresses.

- 5.4 The Council and University plan to submit a further funding application to HNDU in autumn 2023, for funding for the next phase of the project, Detailed Project Development. If the application is successful, Detailed Project Development is expected to begin in approximately March 2024, which will provide a more thorough assessment of the physical and financial aspects of the network and develop an Outline Business Case.
- 5.5 Action 1.5 - Waste fleet replacement: Greater Cambridge Shared Waste, (GCSW) a partnership between South Cambridgeshire District and Cambridge City Councils, is progressively replacing Refuse Collection Vehicles (RCV) with electric vehicles or low carbon alternatives at the point when they are due for replacement. There are currently 3 eRCVs in operation and a 4th eRCV is on order and is expected to be delivered towards the end of 2023/24.
- 5.6 GCSW ran a trial in July and August 2022 to power 8 RCVs using hydrotreated vegetable oil (HVO) instead of diesel. The trial showed no detrimental effect on operational performance and resulted in at least a 90% reduction in carbon emissions when compared to running the same vehicles on diesel. Following the successful trial, the GCSW have been using HVO as a direct replacement for mineral diesel fuel in 10 of the fleet and further vehicles could be purchased which could be powered by HVO. This would be an interim solution ahead of more electric or hydrogen trucks joining the fleet as and when they become available from manufacturers, and in-line with the depot charging facilities becoming operational.
- 5.7 Waterbeach Renewable Energy Network (WREN) solar project: We have secured funding for a new £6.1m solar farm next to the Greater

Cambridge Shared Waste Service depot in Waterbeach. The scheme will provide renewable electricity to charge up to 20 electric vehicles at the site, enabling diesel RCVs to be replaced. The project could reduce CO2 emissions by 552 tonnes per annum, which would reduce the Council's total CO2 emissions by approximately 9.6%. The Cambridgeshire and Peterborough Combined Authority (CPCA) will provide £2.7m funding towards the project, with the City Council and South Cambridgeshire District Council each contributing £1.7m.

Improvements to Commercial Properties:

- 5.8 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.
- 5.9 The Council's Place group is 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 2022 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 invested £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). In this 3-year period, 264 Council homes have been retrofitted by installing external wall insulation and solar PV panels.
- 6.3 In March 2023 the Council was awarded up to £2.3m under the DESNZ Social Housing Decarbonisation Fund, to which the council plans to contribute an additional £4.3m. This government grant, together with the council's own funds, will be used over the next two years to continue the council's work of insulating its council owned homes, targeting solid-walled properties with an EPC rating of 'D'. The retrofit work will include measures such as external wall insulation, loft insulation and improved ventilation to bring the EPC rating of these homes up to at least a 'C'.
- Action 2.8 – Deliver Net Zero Retrofit pilot to 50 Council homes
- 6.4 The Council has launched a Net Zero Retrofit pilot housing project where it plans to invest up to £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 pilot launched in July 2022 and 50 residents signed up by December 2022. The project is currently awaiting planning permission and the detailed design phase will be completed in September 2023. Following the appointment of a contractor in November, construction work is expected to start on site in January 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 how 7 common property archetypes in Cambridge could reach net zero carbon emissions.

The study found that the 7 archetypes would cost an estimated £85,000 to £125,000 per property to achieve net zero carbon standards. As these costs would be out of reach for the majority of households, the study recommends that aiming for an 80% carbon reduction may be more cost effective. This would still cost an estimated £60,000 - £90,000 per home, making the total cost of retrofitting all private homes in Cambridge £3.52 billion.

- 6.6 As part of the project, the consultants completed an engaging and accessible guidance document for residents, setting out which carbon reduction measures they 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 has promoted this guidance via social media, news releases and Cambridge Matters since it was published in November 2022. Cambridge Carbon Footprint promoted the retrofit guide as part of their Council funded community engagement programme in January-March 2023 and CCF have organised a session for residents on the retrofit guide as part of their Open Eco Homes festival on 25 September 2023.
- 6.7 Action 2.5 - Funding to deliver retrofitting of energy efficiency measures to private homes in Cambridge: The Council and other Cambridgeshire local authorities in the Action on Energy partnership have used Government grant funding to retrofit energy efficiency measures to private home across Cambridgeshire. Using just over £2m from the Government's Green Homes Grant Local Authority Delivery (LAD1b) scheme the consortium supported 152 homes across Cambridgeshire, with 165 energy efficiency measures installed in 2021 and 2022. 94 of these properties are located in Cambridge.

- 6.8 The Council and other Cambridgeshire local authorities in the Action on Energy consortium are using £6.46m from the Government's Sustainable Warmth Scheme (which includes LAD3 and HUG1) to retrofit 143 properties across Cambridgeshire, with 198 measures being installed from April 2022-September 2023. 10 of these properties located in Cambridge. In March 2023 the consortium was also awarded a further £11.5m from the Government's Home Upgrade Grant 2 (HUG2). The first batch of properties has now been approved to deliver retrofitting using HUG2 funding and engagement activity is underway.
- 6.9 The delivery of these scheme are being affected by a range of issues including the complexity of the scheme, local and national supply chain capacity issues and the restrictive criteria of the funding streams. The Council has reported these issues back to Government.
- 6.10 The Council also procured a four-year framework relationship with six contractors to deliver energy efficiency measures in private homes. This framework agreement will help secure supplier capacity to deliver Government-funded schemes such as the Sustainable Warmth Scheme and HUG2. The framework is also 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.
- 6.11 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. The second round of the scheme was launched in February 2022, and resulted in the installation of 329 solar PV systems and 20 battery-only installations in Cambridge, with the final properties currently being completed. A further round of the scheme is currently being considered and awaiting a decision from Cambridgeshire County Council.

6.12 Action 2.8 Building control retrofit advice

In autumn 2021, the Council launched a pilot to provide residents with retrofitting advice. During 2022/23 3C Building Control have created a template which helps to provide advice for residents on retrofitting and includes images. Site visits have also been undertaken which have been written up to create two case studies, designed to show some real-life examples of locating issues in existing properties, to illustrate where thermal images could support the need for retrofitting. The case studies will be added to the Council's website which was also updated with new sources of advice for residents and signposting to other relevant bodies such as Cambridgeshire County Council and South Cambridgeshire District Council.

6.13 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 is taking enforcement action against private landlords whose properties do not meet these standards. In 2022/23, the Council contacted 277 landlords/property managers and conducted 21 in-depth interventions to ensure that these properties were improved to above an EPC F or G. In addition, three Compliance Notices were issued by the Council and three Financial Penalty Notices for £1000 were issued.

Energy efficiency and low carbon energy in new homes

6.14 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.

6.15 Action 2.2 - Building up to 1000 new homes to Passivhaus standards:

The Council is currently building 537 new Council homes for rent, using £70m Government funding via the Cambridgeshire and Peterborough Devolution Deal. Of the 537 homes, 448 have been completed, 88 are on site and 1 is awaiting start. 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.

- 6.16 In January 2021, the Council committed to build a further 1,000 new Council homes targeting Passivhaus performance levels, where technically feasible and subject to funding, and scheme by scheme viability. Passivhaus pilot schemes are in contract and progressing on site at Fen Road, Ditton Fields and Borrow Dale. A further three sites will be delivered to Passivhaus principles: of which Aragon and Sackville Close are at pre-contract stage, and demolition has commenced at Aylesborough. Of the 1,000 homes, 105 are now on site (21 certified) and 136 are approved. These homes will be built to high efficiency standards using Passivhaus principles together with a fabric-led approach. 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. The Council will target net zero carbon standards for Council homes built from 2030 onwards.

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 2022/23 to support the improvement of 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, which included a dedicated bus lane, floating bus stops, and additional and wider cycle lanes to encourage more people to walk, cycle or take the bus along Histon Road, was completed at the end of 2021. 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 and is expected to take two years to complete. Construction work on sections of six of the 12 Greater Cambridge Greenways (Barton, Melbourn, Sawston, Comberton, Haslingfield and Horningsea) started this summer as part of the £76m scheme (while work continues on the Linton Greenway). The Greenways scheme will provide radial cycling and walking routes connecting Cambridge and surrounding settlements and employment sites.

- 7.3 Making Connections - Between October and December 2022, the GCP carried out a 10-week public consultation on proposals for a Sustainable Travel Zone charge for Cambridge, operating between Mondays to Fridays (7.00am to 7.00pm) in order to help fund bus improvements and improvements to sustainable transport/active travel infrastructure.
- 7.4 Over 24,000 questionnaire responses were received alongside other forms of consultation feedback. A detailed analysis of those consultation responses was reported back to the GCP's Joint Assembly and Executive Board in June 2023 alongside three new scenarios to explore how the proposals could be adapted to take account of the consultation feedback. An outline business case, supported by an options appraisal and a range of impact assessments, was published in August 2023. This was considered by further meetings of the GCP Joint Assembly and Executive Board in September 2023.
- 7.5 Walking and cycling promotion – Council services carried out a number of activities to support and promote cycling and walking. The Streets and Open Spaces team have continued awarding a programme of walking, cycling and active travel promotional grants, led the multi-partner work that has helped reduce reported cycle crime levels in and around Cambridge over the last 3 years by c60%, and supported partner agencies such as the Police and Camcycle with their events programmes, including cycle security registration and marking. The Council's Active Lifestyles team have run several cycle repair workshops at local centres and pavilions in the city with over 60 attendances. The Council's Sustainable City Grant also supported

Papworth Trust's OWL Bikes to carry out 130 free bicycle repairs and refurbish 13 bicycles for free for low-income residents of Cambridge city referred to the project.

Supporting the take-up of electric vehicles

- 7.6 During 2022/23 the Council has taken forward a number of projects to support the transition from petrol and diesel vehicles to electric vehicles (EVs) and to provide new charge points for EVs.
- 7.7 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 59 fully electric (zero emission⁷) and 28 Ultra Low Emission⁸ taxis that have been licensed, out of a total of approximately 500 licenced taxi vehicles in Cambridge, and numbers of electric taxis are increasing each year.
- 7.8 Action 3.7 - Completing installation of 18 rapid and 3 fast electric charge points for taxis in Cambridge: The Council has completed the installation of a further 6 EV charge points (bringing the total number installed to date to 18) for use by licensed taxis with grant funding from the Ultra-Low Emission Taxi Infrastructure Scheme and match funding from the Council and the Greater Cambridge Partnership. 3 further sites are in progress and are due to be completed in December 2023.
- 7.9 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: The Council is working in partnership with Connected Kerb, one of the UK's largest providers of EV charging infrastructure, to provide a network of more than 600 publicly accessible EV charging points over the next few years, at 14 public car

⁷ Zero emission vehicles are those that emit no emissions during their operation. These include battery electric vehicles, hydrogen fuel cell vehicles, and electric vehicles.

⁸ Plug-in hybrid vehicles or extended range electric vehicles (E-Rev) with CO₂ emissions less than 75g per km

parks across Cambridge.

- 7.10 The first 15 EV charging points were switched on in July 2023 at Adam and Eve Car Street Park. Another 55 new charging points have been installed and will be ready for use soon at Arbury Court (12 chargers), Campkin Road (12), Castle Hill (23) and Gwydir Street (8) car parks. Queen Anne Terrace multi-storey car park is also in the process of having 39 chargers installed as part of the first phase of the deployment plan. The programme aims to make it significantly easier for people in Cambridge to charge electric vehicles, with free parking available overnight between 6pm and 8am for anyone using the charge points.
- 7.11 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: Using funding from UK Power Networks (UKPN) and OZEV (Office for Zero Emission Vehicles), the Council has been working with Cambridgeshire County Council to install on-street residential charge points where there is no scope for off-street charging. By August 2023 the pilot project had installed all 42 charge points in two residential areas in Cambridge where off-street parking is extremely constrained.
- 7.12 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 provided an additional 30 electric buses to operate on the Park & Ride and Citi2 routes in Cambridge, which entered service from early 2023. It is envisaged that the initial 32 buses in total (the GCP previously funded two electric buses) will 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 Council has delivered or funded a number of activities in 2022/23 to encourage and support residents and businesses to reduce their

consumption of resources, reduce waste and increase recycling. These actions include:

- 8.2 Action 4.3 – Reducing plastics usage at Council-run events such as Cambridge Folk Festival and the Big Weekend: Following the ban on the use of single use plastics by on site caterers and backstage at Council-run events, there has been no single use plastic usage at Council festivals and events for over five years. In May 2023, events at the Corn Exchange and Guildhall also stopped using single-use plastic cups and swapped to reusable cups. Based on the estimate of two drinks per guest visiting the Corn Exchange per year, this is expected to save over 330,000 single-use plastic cups being wasted.

The Council's next step will be to encourage attendees to bring their own reusable food containers to further increase the sustainability of Council-run events. This is estimated to take three years to fully implement. The Council also intends to provide resources at festivals that can be shared, such as pumps and mallets, to try to reduce the amount attendees need to carry and therefore reduce the need to drive to the festival and encourage them to consider a more sustainable form of transport to travel.

- 8.3 Action 4.5 - Continue communications campaigns as documented in Circular Resource Strategy to encourage residents to recycle more, generate less waste and contaminate less: A number of recycling communication campaigns have been run in 2022/23: a Digital Metal Matters campaign has been run to increase the capture of metals packaging in blue recycling bins. Waste reduction campaigns are also underway including support for repair cafes, the launch of Wipe out Waste (targeting reusable wipes), and free menstrual products. The Love Food Hate Waste message continues to be shared through a targeted sticker campaign on black bins.

- 8.4 To further encourage recycling and awareness, nine Community Action Days have been organised since April 2023 which enable local residents to take part in community action on tidying up neighbourhoods. The aim of these days is to educate about re-using

and recycling, support residents to recycle, pass on items for reuse, and reduce the likelihood of fly tipping. These events have been attended by approximately 300 people, including residents, external partners and Council teams.

- 8.5 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 2023/24 which will encourage residents and businesses to reduce consumption and repair, re-use and recycle goods. Cambridge Carbon Footprint will run a ‘net zero climate engagement event’. This includes a programme of talks (including how to run a repair café), a sustainable fashion campaign, running a clothes swap event and promoting and supporting groups to run their own clothes swap events and run a repair café. Trumpington Repair Café Group have received funding towards the costs of running 4 repair café events to repair items which will demonstrate repair as an alternative to costly replacement of household goods and clothing.

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 2022/23. These actions include:

Action 5.4 - Working with the Cambridge Sustainable Food network towards achieving the Sustainable Food Cities Network Gold Award for Cambridge. Since achieving 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 award) 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 2024⁹. 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 final application for the Gold

⁹ <https://cambridgesustainablefood.org/goldfoodcambridge/about>

Award is due to be submitted in December 2023 and the outcome is expected by March 2023. Cambridge Sustainable Food are currently preparing case studies to support the application to highlight the impact being made by organisations in the city, which will include joint work with the Council.

- 9.2 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 to deliver open co-farming sessions in 2023/24, engaging the community to produce sustainably grown food which is then distributed through community food hubs in the city.
- 9.3 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 redistribution hub: The Council's food distribution and community kitchen project (formally known as the Food Hub project) was launched as part of the early response to the Covid-19 pandemic. The Council is shifting the focus of the project to a food justice model, to provide a more sustainable solution for the city which tackles the root causes of poverty and ultimately reduce reliance on food parcels. As part of this shift, the programme will now focus on a long-term revenue model and having a sustainable plan going forwards and will be reviewing the governance required for the programme and the funding requirements in autumn 2023. The Council is also organising a food justice conference for October 2023.
- 9.4 Action 5.1 - Incorporating sustainable food principles in council catering and at Council-run events where possible: The Council continues to incorporate sustainable food principles at Council-run events and in November 2022 the Cambridge Folk Festival was awarded an 'Outstanding' award at the Green Festival Awards due to its sustainability credentials.
- 9.5 Council teams have also embedded sustainability requirements into contracts when seeking a new caterer including a requirement for the food offer to contain a good mix of plant-based products and that focus must be given to reduce the volume of meat products sold.

- 9.6 A plant-based food motion was passed by the Council in May 2022, which resolved to transition council catering at Council cafes and kiosks and City Council run events to providing more plant-based food. In January 2023 the Council agreed to increase the amount of plant-based options provided at civic events, recognising that plant-based foods generally creates less carbon emissions than other foods.

Catering at the Annual Full Council meeting in May 2023 consisted of 75% plant-based options, which will increase to 100% in 2024 providing that suppliers can fulfil this at the same cost as non-plant-based foods. The Council also agreed that catering at all other civic events in 2023 will consist of 25% plant-based options which will increase in 25% increments each year (subject to plant-based choices being consumed). The Council also agreed not to procure and serve beef and lamb and civic events due to their impact on greenhouse gas emissions. We will seek to procure services from social enterprises for civic events, recognising the social value social enterprises bring to the local community.

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

- 10.1 The Council recognises that in addition to reducing carbon emissions, it is equally important to ensure that Cambridge adapts to the impacts of climate change, including increased summer temperatures and overheating; water shortages and droughts; and flood events.
- 10.2 Adaptation Plan: We are working with Cambridgeshire County Council and other public sector stakeholders as part of a Climate Risk Subgroup of the CPCA Climate Programme Board, which will commission an evidence base for climate risk across Cambridgeshire and Peterborough which will enable complementary Adaptation Plans to be prepared by local Councils. We are also currently in the process of updating the Council's Adaptation Plan (originally produced in 2018) to develop a Climate Risk and Vulnerability Assessment.

- 10.3 The council has implemented a number of actions in 2022/23 to support Council services, residents and businesses to adapt to the impacts of climate change, including heatwaves, water shortages and flooding.
- 10.4 Design of new Council homes – Measures to reduce overheating are considered as part of the design work for new Council homes and they are included as part of the planning applications for new schemes. Key features include:
- Mechanical ventilation in new Council homes, which provides fresh cool air.
 - Using the PassivHaus Planning Package (PHPP) toolkit for all new 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.
 - Reviewing how effective measures have been through post occupancy evaluation feedback.
- 10.5 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.
- 10.6 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: We have continued to plant trees, which help support biodiversity and increase resilience to a changing climate by providing shade and cooling during hot weather. During 2022/23, we planted trees in 469 locations in Cambridge and a further 178 trees were distributed to residents as part of the Free Trees for Babies scheme. As part of the Neighbourhood Canopy Campaign, 13 trees were planted on Coldham’s Lane in Romsey and Cambridge’s first ‘tiny forest’ was

delivered at Five Trees in Chesterton. We have held 7 public tree planting events to raise awareness of the importance of tree cover.

Cambridge City Council has partnered with the charity 'Trees for Streets' to make it easier for residents to fund tree planting in streets and parks across the city. Residents can choose to sponsor a 'Street Tree' outside their house or sponsor a 'Celebration Tree' in one of the parks or recreation grounds.

- 10.7 Action 6.9 - Delivering a measurable biodiversity net gain on the City Council's estate: The Council's strategic objectives in relation to biodiversity are set out in our Biodiversity Strategy¹⁰. During 2022/23, we carried out a number of projects to ensure designated sites and priority habitats are in good or favourable condition and connected. These projects will help increase resilience to a changing climate and contribute to the Cambridge Nature Network. We have continued to maximise the potential of our buildings, parks, open spaces, watercourses and tree stock to support biodiversity, whilst balancing their multifunctional needs. For example, we have increased areas of long grass and meadows on parks and road verges and continued to implement the Happy Bee Streets scheme for pesticide free streets.
- 10.8 Action 6.11 - Implementing projects to manage water courses and improve biodiversity, including a project to improve rare chalk stream habitats in Cambridge: With support from the Wild Trout Trust we have delivered enhancements to the fish pass at Byron's Pool Local Nature Reserve (LNR) and we have worked with the Wildlife Trust to undertake invertebrate surveys and extensive habitat enhancement at the Coldham's Lane lakes. We have also secured funding for future projects, including Cambridge Water Pebble Funding with Abbey People to deliver community focussed restoration work along Coldhams Brook, and Cambridgeshire and Peterborough Combined Authority funding for wetland creation at Logan's Meadow, due to be delivered in autumn 2023.

¹⁰ [Biodiversity Strategy 2022-2030 - Cambridge City Council](#)

10.9 Action 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: – Following a review of the Council’s 2021 Herbicide Reduction Plan in early 2023, which included an evaluation of the two herbicide free wards (Newham and Arbury) and the herbicide free street scheme, two further areas, West Chesterton and Trumpington were added to the Council’s herbicide free trial. Herbicides will no longer be used in the public areas in these wards. Instead, vegetation growth such as weeds will be managed through methods like mechanical sweeping and hand tools such as hoes and spades. Residents can also get involved by adopting their street through the Happy Bee scheme and volunteering to help manage unwanted weeds and plants on the pavement by hand. These streets will then be taken out of the herbicide spraying schedule helping to improve biodiversity, soil health and water quality.

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 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 coordinate 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 - 2022/23

15. Inspection of papers

To inspect the background papers or if you have a query on the report please contact Janet Fogg, Climate Change Officer, tel: 01223 457176, email: janet.fogg@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 within Asset Management Team	Identify and prepare information in preparation for future funding rounds - PSDS Funding Round 3C to Open Autumn 2023	Apply for PSDS round if appropriate project in Autumn 2023	Apply for PSDS or other funding round if appropriate I future years	Ongoing to March 2030	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	A project manager is appointed and additional resource for a Senior Development Manager and consultancy support was approved in July 2023 with recruitment/procur	Prepare business case/project documentation to agree approach, identify requirements in line with Business Transformation programme, actions, outcomes and resource requirements.	Business case and resources approved and in place - January 2024	Report to Committee with recommendations – early 2024	Mar 2024 for approval to business case and approach	TBC

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
		ement underway.	November 2023				
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 2024/25	Vehicle specifications agreed with end user April 2025 and ongoing	Delivery of vehicles to spec September 2025 and ongoing	Annually to 2030	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 and Asset Management/Commercial Development teams will lead on this. Funding approved in July 2023 for additional resource for both commercial development and retrofit works to progress this.	An Asset Management Plan including meeting the Council's targets was approved in March 2023	Action plans for all properties to be prepared to identify prioritisation and asset management decisions for costed programme through to 2030 - November 2022 as set out in the Asset Management Plan.	Budget bids to be prepared for 2024/25 onwards for any costs not within existing allocated capital spend on commercial property - 2024/25 budget cycle	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 in Property and Asset Management/Commercial Development	The Asset Management Plan setting out proposed timescales was approved in March 2023	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.

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
		teams and working with designers on a scheme-by-scheme basis will develop proposals and approach					
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 to support the transformation programme. The balance would be available for investment.	MTFS 2022 - will identify prudent minimum balance of reserves and the amount of reserves required to support the transformation programme. The balance would be available for investment	N/A	As and when suitable green investments come forward for funding	N/A
1.9	Review standard tender packs to include the Council's 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.

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
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, Procurement Team				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 of budget bids, business cases for capital projects and committee reports	Climate Change Officer, Procurement Team	Tool updated and communicated to staff - August 2021			August 2021	

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 standard or equivalent low carbon standard (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	November 2021- first Passivhaus pilot sites with planning permission	August -22 first Passivhaus scheme start on site	Ongoing from July 2023 until 6-12 months post completion	August 2024	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
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

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
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.	October 2021 - Cambridgeshire local authority consortium LAD3 and HUG1 bid is successful Consortium delivering £6.46m of support from April 2022 – March 2023	March 2023 – Sustainable Warmth scheme managed closure agreed to extend delivery of signed up jobs	March 2023 - Cambridgeshire local authority consortium awarded £11.5m of HUG2 funding. A Delivery Assurance Check passed in May 2023 to allow delivery to start	Ongoing, dependent on funding	50 properties to be supported through funding each year in Cambridge f
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	2022/23 - 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 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	Existing Greater Cambridge Shared Planning Service service budgets	Autumn 2021 - consultation on preferred options including policies related to net zero carbon buildings	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	All new homes/non-residential buildings to meet the net zero carbon buildings requirements set out in the new Local Plan

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
2.8	Building control retrofit advice	Existing Team staff resources	A pilot will start in autumn 2021 to provide residents with retrofitting advice.	Team updated websites, adverts in both CCC and SCDC magazines. Email contact have been responded to with advice. Process in place for this.	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
2.9	Develop and deliver Net Zero Retrofit pilot to 50 Council homes	Existing Team staff resources (dedicated Net Zero Retrofit Officer)	December 2022 – 50 homes were signed up to programme, project design kick off	September 2023 – project to receive planning, detailed design phase to be completed and be issued for tender	Autumn/Winter 2023 – construction works to start	2024	Net zero operational energy. Target space heat demand 25-50 kwh/m2/yr (existing homes are between 210-325 kwh/m2/yr)
2.10	Deliver External Wall Insulation (EWI) to 289 solid-walled Council homes, of which 185 are part-funded by Social Housing Decarbonisation Fund (SHDF) Wave 2.1 grant	Existing Team staff resources	April 2023 – commencement of works to first 44 homes using an existing contract	November 2023 – sign contract for second phase of works to 245 homes	March – September 2025 – completion of programme, monitoring to take place over winter period	2025	Minimum EPC C – in line with 2035 council target

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: <ul style="list-style-type: none"> • 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 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 	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	
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	August 2022, then ongoing	10% of homes on strategic sites to be prioritised for applicants living within an agreed radius of the development; and 5% on non-strategic sites
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

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
3.4	<p>Promote sustainable modes of transport through the planning system by:</p> <ul style="list-style-type: none"> • 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 transport infrastructure is a key aspect in decision making in preparing the Greater Cambridge Local Plan. 	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
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 and communities (through Council funding for active travel and the Active Lifestyles Team). This will support and complement parallel work stream being delivered via partner organisations including the County Council, Combined Authority, GCP and voluntary sector.	The former Active Travel Officer (vacant) is no longer intended to be recruited to, with the role and main responsibilities absorbed within the wider Streets & Open Spaces Development Unit team. A programme of activities promoting walking, cycling and use of public transport will be	The Council's programme of promotional grants for walking, cycling and active travel has been revisited with updated publicity communications, web page and process for inviting and considering applications. Complete – July 2023.	Consultation paper on changes within City Services group management structure published. Complete – July 2023.	Consultation paper on OC2 (Organisational Change 2) structural changes within City Services published – anticipated from April 2024. This will help inform how the Council supports and resources active travel promotional work in the years ahead.	From 2021 onwards.	Formal transformation changes to City Services, and Communities, groups expected to be embedded during 2024.

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
		developed and undertaken working across the Council.					
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 taxis in Cambridge by 2021	£100k City Capital; £100k GCP capital; £426k OLEV Grant Funding	Four Sites (8 Rapids by March 2019) Completed	Remaining 13 Chargers installed by end of December 2021 (4 of 13 are installed and operating	18 of 21 chargers are installed and operational, 3 remaining sites are in progress.	December 2023	
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	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
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	First installation completed in August 2023		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 July 2021)	All 42 on street charging points for public use have been installed by August 2023	August 2023	
3.12	Working with Cambridgeshire County Council and the CPCA on a wider electric vehicle charging strategy.					Ongoing	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
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 early 2023	2023	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	By March 2023 – total of 9,205 HH across the GCSWS area were served by the trial. 2025 – outcome of national waste strategy to guide future development	March 2023	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	2022 – 148 total business customers in 2022	2023 – 174 total business customers in 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 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 hosepipe 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. Urban Tree Challenge, Local Authority Treescape Fund, Interreg 2 Seas)	Complete our commitments to the Nature Smart Cities across the 2 Seas project – extended to March 2023 (completed)	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 manage climate change-related flood risks.	Existing staff resources	Continuing to work with the partnership including inputting into the local flood risk management	Local flood risk management strategy action plan approval due- December 2021	Action plan approved 2022	Objectives to delivered by 2027	

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
			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.	Review LNR management plans 2023 - 2026			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.	Partner with Cambridge Conservation initiative on evidence based local projects and citizen science			Ongoing. Strategy through to 2030	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.	Existing Drainage revenue, EIP and S106. Combined Authority Grant. Additional external grants e.g. Anglian Water Get River Positive, OFWAT, Cambridge Water, Natural	August 2023 - CPO Sign off of Greater Cambridge Chalk Stream Project	September 2023 - Creation of external partner stakeholder group	Stakeholder and technical workshops to understand opportunities and constraints and priority action	March 2026	Ongoing

Ref	Action	Resources	Milestone 1	Milestone 2	Milestone 3	Completion date	Target
		England and Environment Agency					
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

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 2023
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.

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	Completed December 2022
2023-24 Projects	Cost	Climate Change Fund contribution	Contribution from other sources	Estimated annual energy savings (kWh)	Estimated annual carbon savings (tCO₂e)	Estimated annual financial savings	Financial payback	LATEST UPDATE ON PROJECT AS OF AUGUST 2023
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 was delivered in July 2023. A 4 th eRCV is on order and is expected to be delivered towards the end of 2023/24.
STREETLIGHTING								
Streetlighting: Replacement of remaining HRA streetlamp columns and lanterns with LED units. Estimated 63%	£513,826.00	-	£513,826.00	97,925	27.2	TBC	TBC	In Progress: Replacement works started in September 2022 to upgrade lanterns and columns and are expected to be

reduction on the baseline.								completed by the end of 2023.
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: 11 sites have been completed during 2022/23 and a further 3 sites will be completed in 2023/24 prioritising sites where emergency lighting has been identified as a requirement.
CREMATORIUM								
Crematorium: HVAC improvements, BEMS, LED lighting, insulation.	Estimated: £39,902	-	£39,902	141,932	28	£4,327	9.2	Further Investigation Required: Ongoing.