

Item

ANNUAL CLIMATE CHANGE STRATEGY, CARBON MANAGEMENT PLAN AND CLIMATE CHANGE FUND UPDATE REPORT

To:

Councillor Rosy Moore, Executive Councillor for Environmental Services and City Centre

Environment and Community Scrutiny Committee 04/10/2018

Report by:

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Wards affected:

Abbey, Arbury, Castle, Cherry Hinton, Coleridge, East Chesterton, King's Hedges, Market, Newnham, Petersfield, Queen Edith's, Romsey,

Not a Key Decision

1. Executive Summary

- 1.1 This report provides an update on progress during 2017/18 on actions to deliver the five objectives of the City Council's Climate Change Strategy 2016-21. As part of this, the report includes an update on progress in implementing the Council's Carbon Management Plan which details the actions the Council will take to reduce carbon emissions from the it's estate and operations.
- 1.2 The report also provides an update on a number of pieces of work including:
 - The current position of the Climate Change Fund, which provides support to projects that help to reduce the Council's own carbon emissions and/or manage climate change risks to Council staff and property.

- The council's Greenhouse Gas Emissions for 2017/18
- An updated Environment Policy Statement
- A new Adaptation Plan which includes additional actions that the council will deliver to further support the city to adapt to the impacts of climate change

2. Recommendations

The Executive Councillor is recommended to:

- 2.1 Note the progress achieved during 2017/18 in implementing the Climate Change Strategy and the Carbon Management Plan (also at Appendix (a)).
- 2.2 Approve the updated Environment Policy Statement at Appendix (b).
- 2.3 Note the Climate Change Fund Expenditure Status Report at Appendix (f).
- 2.4 Approve the new adaptation actions as set out at 3.50.

3. Background

- 3.1. The Climate Change Strategy 2016-21 focusses on reducing carbon emissions in 4 key areas that contribute most to the city's carbon footprint and where the council has the most scope to influence emissions. It also sets out actions to help residents and businesses adapt to the impacts of climate change, particularly those who are most vulnerable. The strategy's five strategic objectives are:
 1. Reducing emissions from the City Council estate and operations
 2. Reducing energy consumption and emissions from homes and businesses in Cambridge by promoting energy efficiency measures, sustainable construction, renewable energy sources, and behaviour change
 3. Reducing emissions from transport by promoting sustainable transport, reducing car travel and traffic congestion, and encouraging behaviour change
 4. Reducing consumption of resources, increasing recycling and reducing waste

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

3.2 This report provides details of progress on some of the key actions during the second year (2017-2018) of the strategy. A full list of progress towards all the 49 actions in the strategy is at Appendix (a).

Progress in delivering the key actions under Objective 1

3.3 Objective 1 of the Climate Change Strategy, 'Reducing emissions from the City Council estate and operations', has been delivered primarily through the Council's Carbon Management Plan for 2016/17-2020/21.

3.4 The Council has set a target in the Carbon Management Plan (CMP) 2016-2021 to reduce carbon emissions from its buildings and services by 15% by the end of March 2021, with an aspiration to reduce emissions by 20% over this period. This is being achieved through developing and investing in carbon reduction projects and rationalising our estate.

Greenhouse Gas Report

3.5 The council is required to submit the Council's carbon emissions from its estate and operations, to Government in our annual Greenhouse Gas report. The report for 2017/18 is available on the Council's website here: www.cambridge.gov.uk/carbon-management-plan.

3.6 The Council's total gross greenhouse gas emissions for the financial year 1st April 2017 to 31st March 2018 was 6,564 tonnes of carbon dioxide equivalent (tCO₂e). This is a reduction in emissions of 1,477 tCO₂e from the 2014/15 baseline when the emissions total was 8,041 tCO₂e. Our emissions have therefore reduced a further 9.3% in 2017/18 from 2016/17 (emissions total was 7,234) and overall have reduced by 18.4% from the 2014/15 baseline. This means that we have already achieved the target set in the Carbon Management Plan.

Emissions Reduction Pledge

3.7 The Clean Growth Strategy (2017) which sets out the government's proposals for decarbonising all sectors of the UK economy through the 2020s, introduced a voluntary target for the wider public and higher

education sectors in England. This target would aim to reduce greenhouse gas emissions across these sectors by 30% by 2020/21, compared to a 2009/10 baseline.

- 3.8 In July 2018, the Department for Business, Energy & Industrial Strategy (BEIS) announced a voluntary target for the wider public sector, called the Emissions Reduction Pledge (ERP). The Council has confirmed to BEIS that the council will participate in the ERP and will report the Council's annual energy use (from the Greenhouse Gas Report calculations) to BEIS, annually, commencing in October 2019.

Carbon Management Plan 2016/17- 2020/21

- 3.9 The Council's CMP sets out 22 projects for 2016/17 and 2017/18. An updated plan detailing the projects delivered in 2017/18 is included at Appendix (c). Projects that have already been installed, or are planned for installation in 2018/19 are set out in appendix (d). New projects that are proposed for 2018/19, subject to further investigation, are set out at appendix (e).

- 3.10 The following 4 projects were completed in 2017/18:

- Abbey Leisure Complex: Solar thermal upgrade and upgrade of the hot water calorifiers. Completion of this project means that heat generated by the solar panels on the roof can, in addition to being used to heat the pools, be used to pre-heat the domestic hot water systems, providing hot water for use in public showers and elsewhere in the building.
- Abbey Leisure Complex: Upgrade and replacement of air handling unit with a new air plant circulation system and heat recovery technology. The air handling unit, previously installed in the 1990s, has been replaced with an energy efficient system which will re-use more of the heat extracted, further reducing the gas and electricity consumption of the pool and allowing better control of the heating and the programming of the Pool Hall temperatures.
- CMP Project 9) School Court: Replacement of existing heating systems with an energy efficient communal heating system.

- Ditton Court: New heating and hot water boilers have been fitted in each of the 27 flats and 2 communal gas domestic boilers now serve all the communal areas.

3.11 The 4 projects completed in 2017/18 cost a total of £581,420 and it is estimated that they will reduce our carbon emissions by 220.2 tCO₂e and deliver on-going annual savings of approximately £40,800 per year.

3.12 The following 4 projects have been completed/ installed so far in 2018/19:

- Replacement of x1 further fleet vehicle with an electric van. The Council now has a total of 10 electric vehicles.
- CMP Project 14) Guildhall: Replace more than 670 existing light fittings with low energy LED light fittings and automation
- CMP Project 16) Mandela House: Replace existing lighting with LED and combined motion/light sensors – This project was completed as part of the wider Mandela house refurbishment works
- CMP Project 17) Mandela House: Upgrade to condensing boiler and pipework and valve insulation - completed as part of the refurbishment works.

3.13 The installation of a number of energy efficiency and renewable energy generation technologies is underway at the Guildhall in 2018/19 as part of a single set of works procured through the County Council's Refit 2 framework, which the Council has accessed. The works are progressing well, although the programme duration has extended due to a number of reasons, including the time taken to obtain Listed Building Consent, the need to remove a significant amount of asbestos discovered in the boiler room, and remedial works to the roof. Works are currently expected to conclude by November 2018.

3.14 It is estimated that in total the projects to be installed at the Guildhall will save 426,767 kWh and 118 tCO₂ per annum and reduce energy costs by £27,462 per annum. In addition to Project 14 detailed at 3.8, the following 7 projects will be delivered as part of this package of works:

- CMP Project 1) Guildhall: Roofing replacement and additional insulation – commenced in July 2018;
- CMP Project 2) Guildhall: 30kw solar photovoltaic (PV) system – to be installed in October 2018;
- CMP Project 15) Guildhall: Warm air heating system improvements (mechanical works to improve the efficiency of the heating and hot water system) will commence following removal of asbestos from plant room areas.
- Building automation measures to increase the level of control over the heating systems, including installing a new Building Energy Management System (BEMS);
- Insulation of pipework and valves in plant rooms to reduce heat loss;
- a combined heat and power system (CHP). The CHP unit uses gas to generate electricity which is used on site. This achieves carbon savings, because gas is a lower carbon fuel than electricity. The heat generated through the electricity generation process, which would otherwise be wasted, will also be utilised in the building, reducing the gas consumption of the Guildhall.
- Secondary glazing in those rooms which do not already have it.

3.15 5 further lighting upgrade projects are currently planned for installation during 2018/19, including some projects re-phased from 2016/17 and 2017/18 and other new projects which have been identified since the CMP was produced. These projects are:

- Abbey Leisure Complex Astro turf: Replacing astroturf floodlight system with new energy efficient LED floodlighting, new control gear and timers (S106 funded) – due to be installed in September 2018.
- CMP Project 10) Ditton Court, Rawlyn Court & Whitefriars: Replacing communal lighting with LED equivalent.

- CMP Project 13) Lighting improvements, including: replacing communal lighting with LED equivalent at New Street hostel; installing PIR motion sensor controls to hallway lighting at New Street hostel; and replacing kitchen lighting with LED equivalent at 116 Chesterton Road
- City Homes Housing Office – LED lighting upgrade
- Ground floor (Customer Service Centre) of Mandela House – LED lighting upgrade

3.16 The government's Feed In Tariff (FIT) scheme is due to end in April 2018 and so to maximise the potential from Solar PV, the following 7 sites have been identified as suitable for Solar PV for installation, to be progressed, subject to further investigation, in 2018/19:

- Parkside Pool – 50kW
- Abbey Leisure Complex – 30kW
- Kings Hedges Pool – 11kW
- Crematorium – 11kW
- City Homes Housing Office – 11kW
- Whitefriars Court – 20kW
- Mandela House – 10kW

3.17 Utilising the County Council's Refit 3 framework, high level assessments will be carried out in 2018/19 by the chosen contractor to assess the feasibility and viability of installing further potential carbon reduction projects at the following sites during 2019/20 and 2020/21:

- Parkside Pool
- Abbey Leisure Complex
- Kings Hedges Pool
- Cherry Hinton Village Centre
- Crematorium
- Corn Exchange
- Grand Arcade Annexe Car Park

- 3.18 Further actions which will reduce the council's emissions include:
- Action 1.5: There are currently 18 pool bikes available for staff to borrow, across the council (Also, 2 electric bikes have been purchased and have been in operation in 2018/19, for the use of Depot staff, following the move from Mill Road to the new site at 130 Cowley Road.
 - Action 1.8: 3C's ICT have removed 60 separate pieces of redundant server room equipment in Mandela House and the Guildhall (network switches and routers) to rationalise the server infrastructure to support HDC, CCC and SCDC, reducing the council's energy consumption.

Climate Change Fund status

- 3.19 The Council's Climate Change Fund, established in 2008, was set up to fund measures that will reduce the carbon footprint of the Council's buildings, fleet and services. Since 2009, an annual status report on the Climate Change Fund has been presented to either Environment Scrutiny Committee or Strategy and Resources Scrutiny Committee depending on the Executive Councillor and Portfolio at that time.
- 3.20 To date, a total of £1,483,820 has been invested in the Climate Change Fund since 2008/09. This includes a total of £300,000 added to the fund in 2017/18 and £250,000 in 2018/19.
- 3.21 A full break down of all expenditure from the Fund is provided in Appendix (g). This shows that, to date, a total of 38 projects have been so far been supported by the Fund, representing a total investment of £888,196. Since 2011/12, the Fund has primarily been used to support the delivery of projects in the Carbon Management Plan.
- 3.22 The current balance of the Fund as of August 2018 is £595,624 following the completion of the two projects at Mandela House. The Guildhall Energy Efficiency Works projects identified at 3.10 and 3.11 which are scheduled for delivery during 2018/19 will result in the use of £267,198 from the Climate Change Fund (except for the secondary glazing) during 2018. As outlined at 3.13 and 3.14, a number of projects

have been identified for installation during 2018/19 for which applications to use some of the remaining balance of the Climate Change Fund (£328,426) will be made.

Actions to improve the energy efficiency of commercial properties owned by the council

- 3.23 Property Services is currently drafting an Energy Performance Strategy. This outlines how the Council will address the introduction of the Minimum Energy Efficiency Standards (MEES) Regulations, introduced under The Energy Act 2011. This requires properties to comply with minimum energy performance ratings (Energy Performance Certificate or EPC for short).
- 3.24 The strategy includes an action plan detailing how we will address issues in the short and long term, to ensure compliance with the regulations and maintain rental income. The report also addresses the following action in the Climate Change Strategy:
- Action 1.3: 'Taking opportunities to improve the energy efficiency of commercial properties owned by the Council as they arise, and ensuring that where the Council invests in new properties, these have high energy efficiency ratings'.
- 3.25 There are 2 key dates for compliance for compliance with energy efficiency requirements of the Energy Act:
- From 1st April 2018: Vacant property being let must achieve a rating of E or better. Property Services is working with an EPC assessor to find the most cost effective way to achieve this where we have identified properties that are not compliant and is funding works through Property Services revenue budgets.
 - From 1st April 2023: All let property must be compliant. The Energy Performance Strategy will identify steps to make compliant all of our commercial property as required. This may require some future capital bids on some properties between now and 2023. Property Services intend to procure draft EPCs for most properties over that time to help guide and direct this, again working with the EPC assessor to get maximum benefit for our spend.

- 3.26 The Council currently has circa 90 properties with EPCs which have been required under existing legislation for grant of a lease to a new tenant. This is out of a total of 253 directly managed properties that the Council would be required to get an EPC for now or at a future date. The EPC ratings for the 90 properties show that by floor area, about 90% of these properties are compliant and in EPC bands A to E. It is assumed that extrapolating these figures and estimating EPCs is likely to give a similar position across the wider portfolio.
- 3.27 While Property Services is aiming for compliance, some works may deliver a better EPC than mere compliance and the work with the EPC assessor is to help get the best increase for the least cost. EPCs come with recommended works and although they indicate the likely benefit, without further work it is not possible to know whether a small additional spend might push a property into the next higher banding. Each banding has a score range and so if it is close to the next banding, it can be worth doing additional works.
- 3.28 Several energy efficiency improvements have been made to Council properties since September 2017. This has included the installation of LED lighting in Units 13 & 14 Ronald Rolph Court, and 144 Wolfstun Way – increasing the energy rating from a ‘G’ to a ‘D’. Other installations have included an air source heat pump in Office B1 of Dales Brewery, which brought the EPC rating to an ‘E’. Further works are planned across the portfolio. These are on the advice of an energy assessor, who suggests the most economical way of increasing the energy efficiency rating to an ‘E’ or above. Further works such as this are currently underway.
- 3.29 We are working towards compliance across the portfolio rather than trying to achieve the highest EPC rating for all properties, which may be costly given the age of some of the commercial portfolio. Opportunities may come from redevelopment or acquisition to improve the overall performance of the portfolio as well.

- 3.30 The performance measure for Action 1.3 is: 'All commercial properties acquired by the Council to have an EPC rating of C or higher'. During 16/17, the Council acquired 2 new commercial properties, both with good EPC ratings of C or higher. Following this, in July 2017 there were 3 further commercial properties acquired with EPC ratings of C59, C62 and D86 respectively. The D86 rating is for a strategic acquisition with a view to consolidating land ownership and an opportunity for future redevelopment. 4 Clay Farm commercial units are due for completion soon and 3 have EPC ratings of B27 and 1 of B26.
- 3.31 During the remainder of 2017/18 there have been 5 further commercial property investment acquisitions, of which 4 have EPC ratings of C. The only exception being a pair of industrial units at Mercers Row industrial estate where the EPC rating is below a C, at D94 and E116 respectively, as these were a strategic freehold acquisition to complement existing landownership at this location.

Environment Policy Statement

- 3.32 The Council's Environmental Policy Statement, which was created in 2015 is due for review and so has been considered by the members of Environment Policy Group. It has been amended and updated to reflect the objectives of the Council's Climate Change Strategy 2016-21 and is included for approval at Appendix (b).

Progress in delivering the key actions under Objective 2

- 3.33 The latest statistics produced by the Department for Business, Energy and Industrial Strategy (BEIS) shows total emissions in Cambridge have declined steadily over the last 11 years. From 2005-2016, total emissions from the city have reduced by almost 30% (781.8 to 556 = 225.8 ktCO₂ reduction) or an average of 2.6% (20.5 ktCO₂) per year.

3.34 Some of the reduction in emissions in Cambridge is the result of action taken at a local level. However, it should be noted that, according to the Committee on Climate Change (which provides independent advice to government on building a low-carbon economy and preparing for climate change), 75% of emissions reductions in the UK since 2012 have come from the power sector at a national level. This is the result of the decarbonisation of electricity generation, which is shifting progressively from fossil fuels to low carbon and renewable generation.

3.35 Objective 2 of the Climate Change Strategy, 'Reducing energy consumption and emissions from homes and businesses in Cambridge by promoting energy efficiency measures, sustainable construction, renewable energy sources, and behaviour change' is being achieved by:

- using opportunities for funding for projects
- promoting available government schemes
- implementing a number of actions where the Council has responsibility and influence to improve the efficiency of homes and businesses

3.36 The City Council has assisted residents to reduce their carbon emissions through a range of measures in 2017/18 to improve the energy efficiency of existing homes in the City, including:

- Action 2.2: Number of City Council properties with an energy efficiency rating of C or above has increased from 1,651 in 2016/17 to 1,806 properties. The current average EPC score across all properties is 70.72 (a C rating). This rating is higher than the average for domestic properties which is 60 (a D rating).
- Action 2.3: An energy advice service was launched in winter 2017/18 to help Cambridge residents cut household bills and keep their homes warm this winter for less. 'Winter Warmth' was delivered by an environmental charity, Peterborough Environment City Trust (PECT), and provided residents with access to free household energy advice and a free home energy advice visit from an impartial advisor.

- Two new council homes have been constructed by Cambridge City Council employees at Uphall Road. Both houses have high levels of energy efficiency with insulation and solar photovoltaic panels fitted to the roof, which will help to reduce the tenants' electricity bills.
- While the Council is no longer able to set construction standards for new homes, the urban extensions continue to be built to Code for Sustainable Homes as these are classed as legacy sites, with planning permission approved prior to the abolition of the Code. The Council's Annual Monitoring Report shows that in the 2017/18 monitoring period, 613 residential units were due for completion at North West Cambridge (Code level 5), 494 at Clay Farm (Code levels 3, 4 and 5), 42 at Trumpington Meadows (Code 4) and 38 at Bell School (Code levels 3 or 4). Council sites being developed by the Housing Development Agency (HDA), including the Mill Road Depot and Anstey Way, are being built to the standards set in the Cambridge Sustainable Housing Design Guide.
- For non-residential development the following sites achieved sustainable construction standards:
 - New office and hotel at Cambridge Northern Fringe East – BREEAM excellent;
 - New office at 10 and 20 Station Road – BREEAM excellent;
 - Cavendish III laboratory – BREEAM excellent;
 - Shared Facilities Hub (West Cambridge site) – BREEAM excellent;
 - Graduate accommodation for Kings College – Passivhaus;
 - Chesterton Community College – BREEAM very good;
 - John Bingham Laboratory, NIAB HQ – BREEAM excellent.
- Action 2.5: The Council hosted a free energy efficiency training session for small and medium sized businesses (SME) in September 2018 which was delivered by the Carbon Trust and Peterborough Environment City Trust (PECT). The Green Business Fund event aims to help SMEs to save money on energy bills and apply for energy-related grant funding of up to £20,000.

Carbon emissions in Cambridge

- 3.37 The Council has set an aspiration in its [Climate Change Strategy](#) for the city of Cambridge to achieve zero carbon status by 2050. A more detailed statement setting out the rationale for the Council's Zero Carbon Aspiration is available on the Council's website: www.cambridge.gov.uk/media/5605/zero_carbon_cambridge.pdf.

Progress in delivering the key actions under Objective 3:

- 3.38 Objective 3 of the Climate Change Strategy, 'Reducing emissions from transport by promoting sustainable transport, reducing car travel and traffic congestion, and encouraging behaviour change' is being achieved through a number of activities to encourage the use of sustainable travel modes and ensure new developments are designed to support these.
- 3.39 A number of major projects being implemented through the Greater Cambridge Partnership (formerly the City Deal) were progressed in 2017/18, which will help reduce congestion and promote a shift to more sustainable modes of transport in Cambridge:
- A10 cycle link, Shepreth-Melbourn: The project is now complete and the cycleway is operational.
 - City centre capacity improvements/ cross-city cycle improvements: Works at Hills Road were completed in early 2018 including improvements to the Hills Road/Long Road junction. Construction work is underway in Arbury Road to build raised cycle lanes and in Green End Road (Links to Cambridge North Station) to provide kerb segregated cycle lanes. Work is also nearing completion in Fulbourn Road where raised cycle lanes, widened shared use paths and improved crossings are being built.
- 3.40 Other projects delivered in 2017/18 which will promote a shift to sustainable transport included:
- Action 3.3: Following a successful bid to the government's Office for Low Emission Vehicles (OLEV) and a financial contribution from the Council, the council will install more than 20 rapid chargers in

Cambridge and surrounding areas by 2020, to encourage more of the city's taxi fleet to make the move to less polluting electric vehicles. So far, four rapid chargers, which can provide 80% charge to an electric taxi in just 30 minutes, have been installed in Adam and Eve Car Park off East Road and at Arbury Court Car Park. Four more charger points will be installed by the end of September at two locations: Castle Hill car park and an on-street location in Newmarket Road.

- In addition to installing new rapid charger points, changes to taxi licensing regulations and incentives for taxi operators have been introduced by the Council to encourage the shift from diesel vehicles to low or zero-emission alternatives. There are now 58 electric/hybrid taxis licenced in the city. 5 of these are fully electric and 53 are hybrid.
- Action 3.4: A number of proposed schemes to improve facilities for cyclists in Cambridge have been implemented during 2017/18 including:
 - A solar stud lighting installation across a 0.9km section of Coe Fen to improve way-finding along this shared cycle/pedestrian route. Coe Fen is a key off-road cycling route into the centre of the city.
 - Solar studs were also installed along a 0.6km section along the Driftway (access road to Lammas Land car park) to improve wayfinding on a heavily trafficked commuter route from the centre of the city to the west.

Progress in delivering the key actions under Objective 4:

3.41 Objective 4 of the Climate Change Strategy, 'Reducing consumption of resources, increasing recycling and reducing waste' is being achieved through encouraging residents to recycle more of their waste, grow and purchase sustainable food and helping businesses to recycle their food waste. The Council has carried out a number of campaigns to promote recycling to residents and businesses during 2017/18. These have included:

- To reduce waste from the use of single-use plastic, the Council has introduced a regulation in the General & Sunday Charter Market Regulations that all traders selling take away hot food or drinks must use cardboard or paper based cups, trays, dishes or other biodegradable/re-usable packaging for their products.
- Action 4.9: The Shared Waste Service collect recycling from residents as part of the Council's Community Action Days and actively pass good quality items to charities. The service has strong links with the British Heart foundation and support them in their efforts to collect items from students at the end of term. The service will again be working with Arthur Rank Hospice to promote the collection of Christmas trees in January 2019.

3.42 The Shared Waste Service for Cambridge City and South

Cambridgeshire District Councils has begun collecting residential waste from innovative underground bins at Eddington, the University of Cambridge's new residential district, in the north-west of the city. There are no wheelie bins at the development, instead residents take their waste and mixed recycling to steel bin chutes set into the pavement outside their homes. The items fall into a large underground chamber, and a sensor notifies the council when it is full, so that collections need only take place when needed. Educating residents about what can be recycled has also been a key part of implementing the collection system, with clearly labelled bins provided in kitchens which match the signage on the steel bin chutes outside. Leaflets are provided in new resident packs, and information is available on the online residents' portal along with all other details about living at the development. Signage on the specialist vehicle thanks residents for recycling and motivates them to take part.

3.43 The Council has taken a number of actions to promote sustainable food in Cambridge during 2017/18. For example:

- Action 4.1: The Council has supported Cambridge Sustainable Food, which worked to achieve Sustainable Food City Bronze Award status for Cambridge in April 2016. Work to achieve the Silver award has continued during 2017-2018, with the final submission due in April 2019. The council recently endorsed CSF as the lead partnership

body for sustainable food in the city and published its own sustainable food policy, two essential requirements of the award. Work to address other gaps has included the establishment of the Cambridge Food Poverty Alliance, which has carried out research into the nature of food poverty and local responses to it and will be developing an action plan in October of this year.

- In August 2018, the Council adopted a new Sustainable Food Policy which will further support work already being done in the city by organisations led by Cambridge Sustainable Food. Future activity on sustainable food will include:
 - Investigating the possibility of incorporating sustainable food principles in council catering and at city events;
 - Developing a water bottle refill scheme around the city. The council is looking into installing a new water refill point at Parkers Piece and is in dialogue with city centre retailers in relation to setting up a Refill scheme in Cambridge;
 - Promoting sustainable food practices to local businesses;
 - Promoting the take-up of existing allotments and including new plots in new developments where feasible.

Sustainable City Fund

3.44 We have continued to work with local voluntary and community groups during 2017/18 and helped build their capacity to undertake activities to address climate change in Cambridge.

3.45 During 2017/18 the fund provided a total of £22,200 in grants to 4 local environmental groups, supporting 6 projects which have enabled local residents to:

- learn how to improve their home's energy efficiency
- become aware of emissions from food production, processing, packaging, transport and waste,
- reduce food waste-related greenhouse gas emissions
- reduce the waste of manufactured goods
- learn how to repair and reuse household items

Small businesses were also helped to:

- monitor and reduce their food waste SMEs and encouraged to reduce it through an award scheme.

- understand how to reduce the use of single-use plastics and choose more sustainable packaging

3.46 One of the events delivered by groups in receipt of the Sustainable City Fund was the [World's Biggest Repair Café](#) at the Circular Festival in November 2017, delivered by Cambridge Carbon Footprint. There was a record-breaking 232 successful repairs of 375 items brought along to the event. It involved 550 people, including 46 repairers, and 59 other volunteers, stallholders and speakers. A variety of items were repaired, from lightsabers, phones, and pottery garden fairies, to the more mundane such as bikes, clothing, and small household electricals, preventing items from being thrown away and replaced.

Progress in delivering the key actions under Objective 5:

3.47 Objective 5 of the Climate Change Strategy, 'Supporting Council services, residents and businesses to adapt to the impacts of climate change' aims to improve the resilience of the Council and the city to extreme weather events and is being embedded through a number of projects:

- Action 5.1: A green roof has been installed on the roof of the new community centre which has been built at Clay Farm. The roof will slow water run-off from the centre's roof, reducing the risk from flooding from extreme rainfall.
- Action 5.7: Perennial meadows, which reduce the need for mowing and watering and increase biodiversity in the city's parks and open spaces have been increased. 1200 sq m of perennial turf meadow has been laid at Cherry Hinton Hall and 4 additional perennial meadows are planned for autumn 2018.

Adaptation Plan and additional adaptation actions

3.48 In order to deliver Action 5.10 in the Climate Change Strategy, the Council's officer Environmental Policy Group produced a Climate Change Adaptation Plan using the findings of the UK Climate Change Risk Assessment 2017. The document includes an evidence base of risks for Cambridge based on the information in the assessment, a summary of adaptation actions carried out to date and suggested future

adaptation actions. The full plan can be viewed on the Council website:
www.cambridge.gov.uk/adapt-to-climate-change.

3.49 Of the top six areas of inter-related climate change risks for the UK identified in the UK Climate Change Risk Assessment 2017, the council has the greatest influence on four of the risks:

- Flooding and coastal change risks to communities, businesses and infrastructure.
- Risks to health, well-being and productivity from high temperatures.
- Risks of shortages in the public water supply, and for agriculture, energy generation and industry.
- Risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity.

3.50 Additional adaptation actions and performance measures have been identified in conjunction with council service areas which address the 4 risks identified above:

Activity	Service	Performance measures/outcomes	Expected completion date
Additional performance measure/ outcome for Action 5.5 Providing advice for residents on how to reduce health risks during heat waves and minimise risks of surface water flooding, including via the Council's website and the Cambridge Matters residents' magazine.	Housing	Information and advice provided to residents and tenants of Sheltered Housing and city residents supported via the council's Visiting Support Service on how to stay cool in hot weather, and stay warm in cold weather. Information also included in publications including Open Door, the council's resident's magazine.	On-going to March 2021
5.11 Ensuring that the city's nature reserves and city wildlife sites are being managed favourably for biodiversity. To assist species adaption and dispersal.	Environmental Services	Number of active management plans in place for biodiversity at designated nature conservation sites.	On-going to March 2021
5.12 Enhancing the city's	Environmental	Increase in meadow, wetland	On-going to

<p>parks and open spaces to increase biodiversity. To assist species adaptation and dispersal.</p>	<p>Services</p>	<p>and scrub areas in the city's parks and opens spaces.</p>	<p>March 2021</p>
<p>5.13 The implementation of an Environmental Management System (EMS) is in the Streets and Open Space Operational Plan for 2018/19. An EMS will address resource use by the service, including water consumption; the use of potable water will be reduced. This can be done through the use of rainwater harvesting, where possible, for watering planting, and for flushing toilets if appropriate to install as part of future refurbishments of WCs.</p>	<p>Environmental Services</p>	<p>Rainwater harvesting equipment installed and utilised for watering planting, and other functions, reducing the use of potable water.</p>	<p>On-going to March 2021</p>
<p>5.14 Ensuring that measures to help adapt to climate change are included, where possible, in car park refurbishments</p>	<p>Commercial Services</p>	<p>The following measures will be carried out, included in specifications and installed where possible during refurbishments of car parks: drainage reviews to reduce flooding, rainwater harvesting to utilise rainwater and reduce use of potable water, reduction in heat from mechanical equipment to reduce overheating.</p>	<p>On-going to March 2021</p>
<p>5.15 Promotion of 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.</p>	<p>Customer and Community Services</p>	<p>Messages in conjunction with the local water company promoting use of citywide paddling pools and splash pads.</p> <p>Use of council communication channels and social media to promote indoor and outdoor swimming and paddling pools at times of low rainfall/ and times when hosepipe bans are enforced.</p>	<p>On-going to March 2021</p>
<p>5.16 Consideration given to the impacts of extreme weather in the management of outdoor events</p>	<p>Customer and Community Services</p>	<p>Inclusion of consideration of impact of extreme weather on outdoor events within information and training programme for community event</p>	<p>On-going to March 2021</p>

		organisers, delivered through the Festivals and Events Liaison Group.	
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City Leaders Climate Change Meeting

- 3.51 In July 2017, the city council convened the first meeting of the City Leaders Climate Change (CLCC) Group comprising businesses, other major employers, and voluntary and community sector organisations. The aim was to establish a collective and mutually supportive approach to reduce the city’s carbon footprint and agree an inspiring goal which the whole city can identify with and participate in.
- 3.52 The focus of the first meeting was to share information on activity that is already taking place in the city, discuss opportunities that may exist to work closer together, and identify mitigation and adaptation activities that could be worked on in partnership to reduce the city’s carbon footprint and address climate change.
- 3.53 In order to further develop collaborative activity between the various stakeholders in Cambridge, some of the suggested actions have been taken forward following the initial meeting, including a number of focused workshops and meetings in 2017/18.
- 3.54 In November 2018 Anglia Ruskin University’s Global Sustainability Institute (GSI) and the City Council co-hosted a workshop focused on the future of housing. Entitled ‘Zero carbon Cambridge: achieving low-energy housing via multi-stakeholder collaboration’, the workshop was part of the [SHAPE ENERGY](#) (Social Sciences and Humanities for Advancing Policy in European Energy) Platform. The workshop brought together invited stakeholders, including local councillors, architects, developers, and council officers with interests in energy, housing and planning.
- 3.55 A meeting on the Circular Economy was arranged by Addenbrooke’s and hosted by the city council in March 2018. The aim of the meeting was to discuss the possibilities for working together on the circular economy. A facilitated round table discussion took place with a small

number of local key players, including Addenbrooke's, Cambridge Cleantech, Anglia Ruskin University and NHS England.

3.56 A further meeting of the City Leaders Climate Change Group was hosted by the University of Cambridge in September 2018. The meeting focused on waste and how the businesses, organisations and community groups that are invited could further reduce their waste and work collaboratively to address this issue to mitigate climate change.

4. Implications

(a) Financial Implications

Funding for projects included in the Carbon Management Plan (which is the primary vehicle for delivering Objective 1 of the Strategy) will come from a number of different funding sources, including the Climate Change Fund and existing General Fund or Housing Revenue Account (HRA) budgets for delivering services.

The actions contained in the Climate Change Strategy will be funded through:

- Existing budgets for delivering key services, particularly for projects or actions that will deliver climate change benefits as part of wider planned developments or improvements to key services. These fall within the General Fund or the HRA depending on the services involved.
- Government and other external funding sources for climate change initiatives.

(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 Officer will manage and coordinate the overall delivery of the Carbon Management Plan, with support from the Environment Policy & 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 aims and objectives was carried out when the Climate Change Strategy and the Carbon Management Plan were developed. This did not identify any specific negative impacts, but further Equality Impact Assessments may be undertaken for individual

projects. For example, an EQIA was carried out for the developing the Local Plan.

(d) 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

The Climate Change Strategy includes one action relating to procurement, which focuses on improving the Council's contract management processes to ensure that contractors deliver the sustainability requirements of contracts.

Projects identified in the Carbon Management Plan for the Council's office buildings and sheltered and temporary housing have been commissioned by the Estates and Facilities service and delivered by the Council's planned maintenance contractor, TSG or via new arrangements with Bouygues Group PLC.

In the latter case, the Council signed an access agreement to allow it to make use of the RE-FIT framework specifically designed for energy performance contracting. This allowed us to access Bouygues Group PLC as a contractor to identify and deliver energy efficiency projects. The principle benefit of this arrangement is that Bouygues have guaranteed the energy savings predicted for projects that they deliver for the Council (subject to the new equipment being managed within defined limits).

Bouygues have implemented two major projects included in the Carbon Management Plan (LED lighting installations at the Grand Arcade Car Park and Grafton East Car Park) under RE:FIT framework and are implementing a package of energy efficiency and renewable energy measures at the Guildhall during 2018/19.

(f) Community Safety Implications

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

5. Consultation and communication considerations

Public consultation was carried out on a draft version of the Climate Change Strategy for 13 weeks, starting on 14 October 2015 and finishing on 12 January 2016. The views expressed by respondents to the consultation were taken into consideration in developing the final strategy and were presented to the Executive Councillor and members of the Environment Scrutiny Committee before the Strategy was approved.

6. Background papers

Background papers used in the preparation of this report:

- (a) Cambridge City Council Climate Change Strategy 2016-21
- (b) Cambridge City Council Carbon Management Plan 2016-21

Both documents can be viewed on the Council's website at:

www.cambridge.gov.uk/our-work-towards-a-sustainable-cambridge

7. Appendices

- (a) Climate Change Strategy actions delivered in 2017/18
- (b) Environmental Policy Statement
- (c) Details of Carbon Management Plan projects implemented in 2017/18
- (d) Details of Carbon Management Plan projects installed/ to be implemented in 2018/19
- (e) Details of Carbon Management Plan projects installed/ to be implemented in 2018/19 subject to further investigation
- (f) Climate Change Fund expenditure up to August 2018

8. Inspection of papers

To inspect the background papers or if you have a query on the report please contact Janet Fogg, Climate Change Officer Strategy, tel: 01223 457176, email: janet.fogg@cambridge.gov.uk.

Appendix (a): Climate Change Strategy actions delivered in 2017/18

Actions to deliver Objective 1 - Reducing emissions from the City Council estate and operations

Activity	Service	Performance measures/outcomes	Progress	Expected completion date
1.1 Delivering new Carbon Management Plan for 2016-2021, which sets out 22 new projects to reduce energy and fuel consumption and carbon emissions from the City Council's estate and operations.	Corporate Strategy	Target of a 15% reduction in Greenhouse Gas emissions from the Council's estate and operations by 2021, measured against the 2014/15 emissions baseline	The Council's total gross greenhouse gas emissions for the financial year 1st April 2017 to 31st March 2018 were 6,564 tonnes of carbon dioxide equivalent (tCO ₂ e). This is a reduction in emissions of 1,477 tCO ₂ e from the 2014/15 baseline when the emissions total was 8,041 tCO ₂ e. Our emissions have therefore reduced a further 9.3% in 2017/18 from 2016/17 (emissions total was 7,234) and overall have reduced by 18.4% from the 2014/15 baseline.	March 2021
	Estates and Facilities	Aspiration for a 20% reduction in Greenhouse Gas emissions from the Council's estate and operations by 2021, measured against the 2014/15 emissions baseline	Through the delivery of the projects detailed in the Council's Carbon Management Plan 2016-21 and the identification and installation of additional carbon reduction projects, the Council will build on the 18.4% reduction in carbon emissions in achieved by March 2018 and work towards the aspiration for a 20% reduction in Greenhouse Gas emissions by 2020/21	
1.2 Ensuring that the City Council's Office Accommodation Strategy takes into consideration opportunities to reduce emissions from City Council office buildings. The Strategy will set out plans for consolidating and improving the Council's office accommodation in response to changing service needs and arrangements.	Property Services	Hobson House and Mill Road Depot vacated, and staff relocated to retained premises, new operational premises, or the premises of our partner organisations	The refurbishment and construction projects are completed and all staff have moved to their new locations. Mill Road Depot and Hobson House have now been fully vacated, and 130 Cowley Road and the Cowley Road Depot are now occupied.	June 2018
	Corporate Strategy			
1.3 Taking opportunities to improve the energy efficiency of commercial properties owned by the Council as they arise, and ensuring that where the Council invests in new properties, these have high energy efficiency ratings	Property Services	All commercial properties acquired by the Council to have an EPC rating of C or higher	Property Services is drafting an Energy Performance Strategy which will outline how the Council will address the introduction of the Minimum Energy Efficiency Standards (MEES) Regulations, requiring let commercial properties to comply with minimum energy performance ratings. The report includes an action plan detailing how we will address the requirements to ensure compliance across the portfolio. Several energy efficiency improvements have been made to Council properties since September 2017. The Council also acquired 2 new commercial properties during 16/17, both with good Energy Performance Ratings of C or higher.	On-going from March 2016

			There were 3 further commercial properties acquired in July 2017, 2 with EPC ratings of C and 1 with a D rating. During the remainder of 17/18 there have been 5 further commercial property investment acquisitions, of which 4 have EPC ratings of C. The property purchases with an EPC below C were strategic acquisitions.	
1.4 Exploring the potential for introducing Environmental Management Systems in key services and sites (e.g. Streets and Open Spaces)	Environmental Services	Business benefit of Environmental Management Systems assessed as part of wider work on business transformation	Completed	Completed - March 2017
		EMS introduced in Streets and Open Spaces service, subject to availability of external advice	The implementation of an Environmental Management System (EMS) is in the Streets and Open Space Operational Plan for 2018/19 and will address resource use by the service.	March 2019
1.5 Implementing the Council's Employee Travel Plan, including promoting and incentivising alternative methods of transport for Council business, e.g. through provision of pool bikes, cycle mileage allowance, travel warrants for train travel, and access to car club vehicles	Finance	18 pool bikes provided	There are currently x18 pool bikes available for staff to borrow, across the council (x6 at the Guildhall, x6 at Mandela House, x4 at Mill Road, x1 at the Meadows Centre and x1 new bike at City Homes Office). Also, x2 electric bikes have been purchased and have been in operation in 2018/19, for the use of Depot staff, following the move from Mill Road to the new site at Cowley Road.	On-going to 2021
		4,619 business miles travelled by bicycle per annum	The cycle miles claimed through business mileage in 2017/18 by CCC employees was 3,807 miles	
		626 travel warrants issued for train travel per annum	x43 travel warrants issued x466 transactions for train tickets through Trainline	
		45 members of staff are signed up for lift share scheme	Due to a low take-up, the council ended its membership with the lift share scheme in 2017/18.	
1.6 Reviewing the quick procurement guide for staff on sustainable procurement, and auditing a sample of contracts to check that they comply with the Council's Environmental Procurement Policies	Corporate Strategy	New quick procurement guide on sustainable procurement produced	All procurement guidance is currently under review and revision, including guidance on sustainable procurement. Under the Public services (Social Value) Act 2012, environmental factors will be included in the council's Invitation to Tender documents to ensure that all procurements consider the economic, social and environmental wellbeing of the city and the surrounding area. A new version of the Sustainable Procurement Guide has been drafted.	On-going to 2021
	Procurement			

	Internal Audit	Audit of sample of contracts completed and actions identified and implemented by services	This work will take place 6 months after the Sustainable Procurement Guidance has been implemented.	March 2021
1.7 Working with partners such as the University of Cambridge to develop partnership projects to reduce greenhouse gas emissions from our estates, such as exploring the potential for District Heating Schemes	Head of Estates & Facilities	Business case explored for developing a district heating scheme linking the University of Cambridge's New Museum site, the Corn Exchange and the Guildhall as part of Phase 3 of the New Museums Site redevelopment.	Following exploration of the business case, it was decided that it would not be economically viable for the Guildhall to be connected to the university's Combined Heat and Power System (CHP).	Completed - June 2017
	Planning			
		Reduction in energy consumption and carbon emissions in the Guildhall due to heat provided by district heating scheme, subject to viable business case and implementation of the scheme	Reduction in energy consumption in the Guildhall will result from installation of a CHP system being installed as part of the Guildhall Energy Efficiency Works. CHP uses gas to generate electricity which will be used on site. The building will use most of the electricity produced by the system, reducing electricity consumption and will benefit from the waste heat generated as a result of the electricity generation process, reducing requirements for gas.	October 2018
1.8 Working with partner Councils in shared service arrangements and new delivery bodies (e.g. Cambridge Live, the Tourism Destination Management Organisation) to ensure climate change and environmental sustainability considerations are addressed	Director of Business Transformation	Climate change and environmental sustainability considerations are addressed in shared service arrangements and new delivery bodies	3C's ICT have been rationalising the server infrastructure to support HDC, CCC and SCDC. 3C's ICT are replacing the desktop hardware across the City Council in 2018/19, replacing many ageing PC's with laptops to support smarter ways of working. A new cloud-based Financial Management system has been implemented across CCC, HDC and SCDC and this will complement the rationalisation of server infrastructure with the retirement of physical servers.	On-going to March 2021

Actions to deliver Objective 2 - Reducing energy consumption and emissions from homes and businesses in Cambridge and tackling fuel poverty, by promoting energy efficiency measures, sustainable construction, renewable energy sources and behaviour change				
Activity	Service	Performance measures/outcomes	Progress	Expected completion date
2.1 Supporting residents to improve the energy efficiency of their property through the Action on Energy scheme.	Environmental Services	Number of completed installs of domestic energy efficiency measures facilitated through Action on Energy	Due to the closure of Green Deal Communities, changes in national policy, and a lack of alternative funding opportunities work for 2017/18 has not gone through Action on Energy. However there still remain opportunities that a Countywide group can maximise for the benefit of Cambridge. In the last year we have tried to develop these opportunities and should be in the position to benefit from the Energy Company Obligation (ECO) local authority Flexibility scheme and Warm Homes Fund.	On-going to March 2021
2.2 Progressively improving the energy efficiency of harder-to-treat City Council homes, with the aim of bringing them up to at least a C-rating.	Estates and Facilities	Number of hard-to-treat City Council properties where energy efficiency ratings have been improved	The Council is maintaining a data base of EPCs for City Council homes. EPCs have been used to identify any loft insulation required in properties and a programme of loft insulation has targeted those without 200mm. The Council has commissioned a programme of external wall insulation on properties that were currently rated D. We are putting Gas Central Heating into supported housing. For properties that currently have storage heaters, we are bidding for funding to install gas heating for vulnerable residents.	On-going to 2021
		Number of City Council properties with an energy efficiency rating of C or above	The Council's EPC database shows that 1,806 properties have an energy efficiency rating of C or above (in 16/17 there were 1,651). The current average EPC score across all properties is 70.72 (a C rating). This rating is higher than the average for domestic properties which is 60 (a D rating).	
2.3 Implementing the City Council's Fuel and Water Poverty Action Plan (linked to the Anti-Poverty Strategy), including:	Environmental Services	Number of residents in low income target areas taking up either energy or water saving measures	We continue to provide one to one support through the Fuel and Water Poverty officer, and we also conducted the Winter Warmth campaign that was delivered by PECT. In 2017/18 we achieved the following: <ul style="list-style-type: none"> • 176 households took up energy or water saving measures • 249 home visits completed 	March 2018

Piloting water meters in a selection of 1 or 2 bedroom council-owned properties			<ul style="list-style-type: none"> • Estimated savings generated for residents from activity was £109,194 <p>This year we have led on developing a partnership bid with Registered Social Landlord (RSLs) and other local authorities into the national Warm Homes Fund which will be submitted at the end of September 2018. The release of the national Energy Company Obligation (ECO) consultation also means we can develop our support utilising this funding.</p>	
Developing a water conservation information leaflet for inclusion in welcome packs for tenants moving into council-owned properties and at City Homes offices		Number of residents in low income target areas taking up water meters or moving to an assessed rate	<p>We continue to promote the benefits of water efficiency and installing water meters as part of our general activity and specific water related promotions. However the data provided by Cambridge Water makes it very difficult to report the direct impact of our work. Therefore we are no longer able to report numbers, but we continue to target areas of deprivation and offer general support alongside the fuel poverty activity. This activity includes:</p> <ul style="list-style-type: none"> • targeted mail shots • community events and engagement • referral networks with local partners (i.e. Cambridge CAB) • Leaflet drop, advertisements • Drop in sessions • Home visits and tailored advice. 	
Drop in sessions to distribute water and energy saving measures and provide information on energy efficiency measures to residents				
Targeted promotion to private landlords on the benefits of installing energy and water savings measures.				
2.4 Working with partners in Cambridge Retrofit to mobilise public and private finance for investment in large-scale retrofit of buildings and estates in Cambridge and promote exemplar projects and good practice	Environmental Services	<p>Value of public and private finance invested in large scale retrofit of buildings in Cambridge</p> <p>Number of exemplar retrofit schemes delivered in Cambridge</p>	This project is no longer live.	Completed

2.5 Commissioning voluntary and community groups to provide advice to businesses on reducing energy consumption and emissions as part of wider advice on sustainability	Corporate Strategy	Up to 15 businesses taking up advice on reducing their energy consumption and wider sustainability issues	The Council is planning to hold a free Carbon Trust energy management workshop in September 2018. The workshop will help small and medium-sized businesses to identify behavioural and low cost opportunities to reduce energy costs in their workplace and how to make the most of funding available including the Carbon Trust Green Business Fund. Through the Sustainable City funded projects, small businesses were also helped to: <ul style="list-style-type: none"> • monitor and reduce their food waste SMEs and encouraged to reduce it through an award scheme. • understand how to reduce the use of single-use plastics and choose more sustainable packaging 	On-going to 2021
2.6 Encouraging landlords to improve the energy efficiency of their properties.	Environmental Services	Number of private landlords provided with assistance to improve the energy efficiency of their properties.	Due to lack of national funding and closure of the landlord accreditation scheme we have not provided any funding to landlords within 2017/18. New requirements on energy efficiency were introduced in April 2018 to set minimum standards for energy efficiency in the private rented sector, and we are currently looking at how these can be best utilised to improve the efficiency of rented properties in Cambridge.	On-going to 2021
2.7 Requiring new non-domestic properties to be constructed to BREEAM Excellent sustainability standards, through policies in the new Local Plan	Planning	Percentage of new non-domestic properties to be constructed to BREEAM Excellent sustainability standards in Cambridge	The Inspector's Report has been found sound. In the past year for non-residential schemes, six schemes were targeting the BREEAM excellent standard, with one scheme achieving BREEAM 'very good'. The outline application for the West Cambridge site proposed that all new development on the site would meet at least BREEAM excellent, with BREEAM outstanding, which is the highest possible target, being sought for two buildings on the site.	On-going from the adoption of the new Local Plan in autumn 2018
2.8 Working with developers to deliver sustainable housing developments in Cambridge and promoting sustainable construction methodologies, including the new Home Quality Mark standard currently being developed by the Building Research Establishment (BRE) and the Council's own Sustainable Housing Specification once developed.	Housing Development Agency, Planning	Numbers of new homes delivered by private developers which meet the BRE's Home Quality Mark, the Council's Sustainable Housing Specification, or other sustainable construction methodologies	Private developer led schemes - Developments with legacy planning conditions related to the Code for Sustainable Homes such as the Clay Farm, Trumpington Meadows and North West Cambridge sites are still achieving certification to Code Levels 3, 4 and 5. One scheme for Graduate Accommodation proposed to utilise Passivhaus certification.	On-going to March 2021
2.9 Working in partnership with social landlords, developers and architects	Housing Development	Successful engagement with partners in the Good	Complete – The Housing Design Guide is now in use for HDA schemes. The Council remains a member of the	Completed - March 2016

through the Good Homes Alliance to share knowledge and learning on sustainable construction and promote the application of these principles in new developments in Cambridge.	Agency, Planning	Homes Alliance, including to inform development of Sustainable Housing Specification	Good Homes Alliance and is currently engaged in work to develop guidance for planners on overheating in new homes. We are also a member of the UK Green Building Council and are engaged in work on net zero carbon policy and the role of local planning authorities in setting sustainability standards for new developments.	
2.10 Constructing all new City Council homes and housing delivered with partners to a new Sustainable Housing Specification, incorporating the Good Homes Alliance standards, which seek to ensure homes which promote good health and wellbeing for residents, have proven performance and are low carbon	Planning	City Council Sustainable Housing Specification developed	City Council Sustainable Housing Specification is now adopted.	Completed – February 2017
	Housing Development Agency	Sustainable Housing specification applied to schemes delivered by the HDA.	The Housing Design Guide is included as part of the brief and contract for all City Council developed schemes.	March 2017 onwards
2.11 Promoting low carbon and renewable energy provision in new developments through Local Plan policies	Planning	Number of low carbon and renewable energy installations by type requiring planning permission	During the past year, we have continued to apply the Council's adopted policies and supplementary planning document on renewable energy to all major developments. Photovoltaic panels were the most commonly utilised technology (installed on 27 schemes out of a total of 41 applicable schemes), followed by heat pumps and Combined Heat and Power systems. Figures from Cambridgeshire County Council show that in 2016/17 a further 0.0840 MW of photovoltaic capacity was installed in Cambridge.	On-going from adoption of the new Local Plan in autumn 2018
		Total installed capacity of low carbon and renewable energy technologies by type		
2.12 Engaging in partnership working where appropriate, including County-wide and EU funded projects, to promote energy efficiency and low carbon energy.	Planning	Whether we have engaged effectively in partnership working; and project-specific measures to be identified as projects are developed.	Work has continued with Cambridgeshire County Council and the Cambridgeshire and Peterborough LEP to address infrastructure capacity issues, with a bid recently submitted to Innovate UK for the development of a Cambridge Smart Energy System Demonstrator Project. Partners in this bid include the University of Cambridge, UK Power Networks, Anglian Water and other Cambridge organisations and businesses. The Council has also actively engaged with work led by the LEP to develop a tri-LEP Energy Innovation Strategy, which has recently been endorsed by the Council. Delivery of the strategy will be led by the Greater South East Energy Hub, which will be based in Cambridgeshire (www.energyhub.org.uk).	On-going to March 2021
	Corporate Strategy			

2.13 Developing a coordinated and comprehensive communications programme to encourage behaviour change by residents and businesses and reduce their carbon footprint	Corporate Strategy	Awareness of climate change issues and changes in behaviour amongst residents and businesses	The Sustainability section on the council's website (www.cambridge.gov.uk/sustainability) has been kept updated providing information for residents and businesses in Cambridge to help them to reduce their carbon emissions and help us to achieve the objectives of the Climate Change Strategy. A number of press releases have been produced to promote the measures that have been carried out by the council, including the solar thermal upgrade and air handling unit replacement at Abbey Leisure complex. Cambridge Matters, the council's newsletter, regularly features sustainability-related articles on the activity of the council and how residents can act, often linking in with national awareness-raising campaigns such as World Environment Day and Earth Hour. The council's publication 'Greening Your Home' which helps residents with what they can do to reduce their carbon emissions and save money has continued to be made available at the Customer Service Centre, libraries, events, through community-action groups, and has been promoted on the council's social media channels. It is available to download at: www.cambridge.gov.uk/greening-your-home .	On-going to 2021
2.14 Introduce consequential improvements policy as part of the Local Plan	Planning	Numbers of applications to which the policy is applied and types of measures installed	The Inspector's Report has been found sound on the Local Plan.	On-going from adoption of the new Local Plan in autumn 2018

Actions to Deliver Objective 3 - Reducing emissions from transport by promoting sustainable transport, reducing car travel and traffic congestion and encouraging behaviour change				
Activity	Service	Performance measures/outcomes	Progress	Expected completion date
3.1 Investing in improvements to public transport and cycling infrastructure through the Greater Cambridge Partnerships (GCP) to tackle congestion, reduce journey times, reduce greenhouse gas emissions and improve air quality		Key schemes progressed, including: Milton Road bus priority	Consultation on the Preferred Option for Milton Road bus priority scheme will take place in September / October 2018. Procurement for the Detailed Design will take place from August - November 2018	Ongoing
		Madingley Road bus priority	The Madingley Road bus priority project is currently being reviewed as part of the ongoing engagement with the Combined Authority, in particular to consider its future	

			potential alignment with the Mayor's emerging priorities.
		Histon Road bus priority	The Consultation Analysis Report on the Histon Road bus priority scheme has been completed. All aspects of the scheme received more support than opposition. Work is now required to apply what was learnt from the consultation to develop the final preliminary design. GCP is on target to bring the final preliminary design to the Executive Board in Dec 2018.
		A428 to M11 segregated bus route/A428 corridor Park & Ride	The Cambourne to Cambridge project is currently being reviewed as part of the ongoing engagement with the Combined Authority, in particular to consider its future potential alignment with the Mayor's emerging priorities. The next programmed key decision (subject to that review) would be for officers to recommend to the GCP an alignment for a future scheme for Phase 1 of the project (between Madingley Mulch and Cambridge City Centre) on the basis of the business case work done to date (termed the Interim Outline Business Case).
		City Centre capacity improvements/cross-city cycle improvements	Cross City Cycle improvement - Hills Road was completed in early 2018 including improvements to the Hills Road/Long Road junction. Construction work is underway in Arbury Road to build raised cycle lanes and in Green End Road (Links to Cambridge North Station) to provide kerb segregated cycle lanes. Work is also nearing completion in Fulbourn Road where raised cycle lanes, widened shared use paths and improved crossings are being built. Works to commence the scheme in Fen Ditton (Links to East Cambridge and National Route 11 of the National Cycle Network - NCN11) start shortly. All works should be substantially complete by May 2019
		A1307 corridor bus priority/ additional Park & Ride	Outline business case for Phase 1 of this project has been completed, now moving into implementation stage and final business case. Strategic outline business case for Phase 2 has been completed, now working on outline business case.
		Chisholm Trail off-road walking and cycling route	Phase 1 & bridge – The pre-commencement planning conditions for the Bridge have now discharged and approvals have been obtained from the navigation authority. The Bridge Order has been completed with no objections. Phase 2 - Network Rail have offered to undertake works

			for Phase 2 that are on their land, but are seeking a significant financial contribution.	
3.2 Ensuring through planning policy that new developments are located in Cambridge or in locations served by high quality public transport connections, as well as making provision for cyclists and pedestrians	Planning	Monitoring of policy usage as part of the development management process.	The Inspectors' have consulted on main modifications to the Local Plan at the start of 2018. The Inspector's Report has been found sound and the Council can adopt in Autumn 2018.	On-going from adoption of the new Local Plan in autumn 2018
3.3 Promoting low-emissions buses and taxis in partnership with the County Council, bus companies and taxi companies (including current funding bids to the Office for Low Emissions Vehicles)	Environmental Services	First low emission buses in place	There has been no change in the number of low emission buses in 2017/18, but the Council is working through the GCP to secure air quality improvements to buses	December 2020
		% of buses in Cambridge which are low emission		March 2025
		No. of taxis licenced by the City Council that are hybrid or electric	Total number of electric/ hybrid taxis = x58. Broken down as follows: Electric: x5 (of which x2 private hire and x3 Hackney carriages) Hybrid: x53 (of which x16 private hire and x37 Hackney carriages)	March 2025
3.4 Delivering a programme of public realm improvements including through a three-year Environmental Improvement Programme (EIP), involving improving cycle routes, improvements to access and cycling facilities, remodelling street corners and junctions, and changing yellow lines on streets	Environmental Services	Improvement of cycling facilities, cycle routes, street corners and junctions in Cambridge	<ul style="list-style-type: none"> New high quality bus shelters in Hills Road, Cherry Hinton Road, Madingley Road, Histon Road and Campkin Road, Solar powered and LED way-finding path lighting in Rackham Close and across Coe Fen, New dropped kerbs for pedestrians and mobility scooters in Brandon Place and Trafalgar Street, Introduction of further restrictions on parking in Gurney Way, Hurst Park Avenue, Ascham Road, Courtney Way, Green's Road, Herbert Street, Kings Hedges Road and Ramsden Square improving access for pedestrians and cyclists, Streetscape improvements in St. Matthew's Street - included environmental landscaping with new (drought resistant) planting. 	March 2019
		<i>N.B. subject to continued availability of funding for EIP</i>		
3.5 Work with partners to facilitate provision of electric charging hubs for all types of vehicles in Cambridge, including bikes.	Environmental Services	Number of electric charging hubs provided in Cambridge	Electric car recharging points are currently available at: Grafton East car park (level 1): slow charging unit (up to 3kW - will fully charge a vehicle between 6-8 hours). Queen Anne Terrace car park (level 3 – Ground Floor): fast charging unit (7-22Kw - will fully charge a vehicle between 3-4 hours). As part of the electric chargers for taxis project, 2 rapid charge points (50kw / dual AC DC)	On-going to March 2021

			have been installed and are operational at Adam and Eve Car park. 2 further rapid chargers have been installed at Arbury Court Car Park in the north of the city. 4 further charge points have been priced and programmed for installation by the end of September 2018. Most of the civils work for the third site are in place at Castle Hill Car Park and work is underway to secure connection to the electricity grid.	
3.6 Securing additional car club spaces through planning policy and planning permissions for major developments	Planning	Number of additional car club spaces delivered at major developments in Cambridge	On-going – The Council is continuing to work with partners in delivering additional car club spaces.	On-going to March 2021
3.7 Providing core funding for the Travel for Cambridgeshire's (formally known as Travel for Work) work to develop travel plans for employers in the City and encourage employees to travel to work using sustainable modes of transport, until the Partnership becomes financially self-sustaining	Corporate Strategy	Number of employment sites that Travel for Cambridgeshire has worked with to develop employee sustainable travel plans	The core funding agreement ended in March 2017. Travel for Cambridgeshire continues to provide support for businesses under a self-financing model.	Completed – March 2017
		Number of commuters working at employers with sustainable travel plans supported by Travel for Cambridgeshire		

Actions to deliver Objective 4 - Reducing consumption of resources, increasing recycling and reducing waste				
Activity	Service	Performance measures/outcomes	Progress	Expected completion date
4.1 Working with partners in the Cambridge Sustainable Food network to achieve Sustainable Food City status for Cambridge and delivering key actions in Sustainable Food Action Plan	Corporate Strategy	Sustainable Food City status achieved for Cambridge	Sustainable Food City status was achieved in April 2016 - and Cambridge achieved the Bronze award. Work to achieve the Silver award has continued with any gaps in the evidence base to meet the award's criteria identified and plans made to help address these. The council recently endorsed CSF as the lead partnership body for sustainable food in the city and published its own sustainable food policy, two essential requirements of the award. Work to address other gaps has included the establishment of the Cambridge Food Poverty Alliance that is looking to present the findings from its research into the nature of food poverty and local responses to it and	Ongoing in 2018/19

			proposals for an action plan in October of this year. The timetable for "Silver" award submission is as follows: 14 October 2018 is the first outline draft submission; 14 February 2019 is the full draft submission, and; 27 April 2019 final application submission date.	
		Council-led actions in the Sustainable Food Action Plan delivered	The officer group continues to help guide and coordinate the council's sustainable food work. The paper submitted recently to Environment and Communities scrutiny committee highlighted the range of work that the city council is currently engaged in around sustainable food. Members asked officers to look at a number of issues and these will be considered when the group next meets.	On-going to March 2021
4.2 Maintain the current level of occupancy rates at existing allotments and support take-up of new community gardens and allotments in growth sites to encourage residents to grow their own food	Environmental Services	Existing allotments continue to be fully occupied	There are currently 295 allotment plots, of which 3 are currently vacant (all under offer)	On-going to March 2021
		Numbers of new community gardens and allotments taken up in growth sites	Transfer of growth sites still awaited	On-going to March 2021
4.3 Including guidance in the forthcoming update to the Sustainable Design and Construction Supplementary Planning Document (SPD) to encourage developers to incorporate food growing into existing and new developments through the creation of roof gardens and/or growing spaces in residential housing and commercial developments.	Planning	Sustainable Design and Construction Supplementary Planning Document adopted	The Inspector's Report has been found sound. Work to produce an update to the Sustainable Design and Construction SPD is underway, with the document being a joint SPD with South Cambridgeshire District Council. A draft SPD will be brought to committee for consultation approval in mid-2019. In the interim, officers will develop guidance for development management officers on the information required to demonstrate compliance with new policies related to sustainable design and construction.	Following adoption of Local Plan in autumn 2018
		Number of developments including an element of on-site food growing provision.	The Inspector's Report has been found sound. Work to produce an update to the Sustainable Design and Construction SPD is underway, with the document being a joint SPD with South Cambridgeshire District Council. A draft SPD will be brought to committee for consultation approval in mid-2019. In addition to new allotments being provided on the growth sites, schemes are starting to come forward with informal plot provision, such as roof gardens with provision for food growing at the Eddington site.	On-going from adoption of the SPD – autumn 2018

<p>4.4 Developing and delivering a programme of local cooking skills sessions across Cambridge to encourage healthy eating and reduce reliance on processed and packaged food</p>	<p>Corporate Strategy</p>	<p>Number of cooking skills sessions delivered, numbers of attendees benefitting from advice on sustainable cooking, and changes in eating behaviour assessed through continuing contact with the individual and their family.</p>	<p>During 2017/18, 39 cookery skills sessions were held around the city in Abbey, Kings Hedges, Romsey and Trumpington. 193 people benefited from the sessions, including families and older people. In addition to supporting low income families to develop cookery skills and promoting healthy eating, the sessions have helped to promote sustainable food sources. One of the groups in the North of the city is being supported to continue meeting, and older people have been signposted to other groups in Trumpington.</p>	<p>Completed - March 2017</p>
<p>4.5 Promoting healthy and sustainable produce to food businesses through the Healthier Catering Commitment for Cambridgeshire (HCCC) project, including food businesses providing eat-out food to lower income areas of Cambridge</p>	<p>Environmental Services</p>	<p>Number of businesses taking part in scheme and visible changes to menus or recipes</p>	<p>We actively support the Cambridgeshire Healthier Options Programme in conjunction with neighbouring Cambridgeshire Authorities. We advise businesses during routine inspections to gauge interest, and then support them in applying. We also undertake the assessment visits and ensure they are listed on the website once they have passed. We currently have 5 businesses that have achieved the award: www.healthier-options.org.uk/members.</p>	<p>On-going to March 2021</p>
<p>4.6 Increasing food waste collections from commercial properties</p>	<p>Shared Waste Service</p>	<p>Increasing the monthly tonnage of commercial food waste recycled to 40 tonnes</p>	<p>April 17: 36.26 May 17: 37.90 June 17: 34.56 July 17: 31.02 Aug 17: 26.16 Sept 17: 31.66 Oct 17: 34.16 Nov 17: 30.14 Dec 17: 23.88 Jan 18: 28.8 Feb 18: 31.74 Mar 18: 33.49 Total = 379.77 tonnes</p>	<p>On-going to March 2021</p>
		<p>Increasing the monthly tonnage of dry, mixed recyclables – thereby reducing waste to landfill</p>	<p>April 17: 163.86 May 17: 274.02 June 17: 295.02 July 17: 281.36 Aug 17: 229.54 Sept 17: 261.62 Oct 17: 282.94 Nov 17: 267.56 Dec 17: 215.73</p>	

			Jan 18: 252.52 Feb 18: 213.70 Mar 18: 271.73 Total = 3,009.60 tonnes	
4.7 Exploring opportunities to increase opportunities to recycle at 'bring banks' through increasing the range of materials that can be recycled and the number of sites	Shared Waste Service	Opportunities for increased range of materials or new bring bank sites explored	We are focussing our efforts this year on capturing more material at existing sites and ensuring they complement the kerbside collection scheme. There are no new materials that we can collect at present.	On-going to March 2021
4.8 Continuing to carry out targeted recycling and waste reduction awareness campaigns, including promoting national Zero Waste week and Love Food Hate Waste, and campaigns to encourage greater recycling by Houses in Multiple Occupation	Shared Waste Service	Run 4 Love Food Hate Waste (LFHW) events dovetailing into Cambridge Sustainable Food initiative	We will continue to support Cambridge Sustainable Food where they need it. We have been actively promoting the use of kitchen caddies at many events over the summer. Recycle Week this year will be focussed on plastic recycling in line with the national and global concern about this material. We will be linking this with plastic reduction messages during Zero Waste Week	March 2018
		Visited 50 HMOs to carry out face to face engagement to increase recycling.	This Campaign is scheduled for Autumn 2018	March 2018
4.9 Helping to promote voluntary and community groups, e.g. Cambridge Reuse, Emmaus and other recycling and reuse charities	Shared Waste Service	Number of articles in Council publications and press release issued which promote local voluntary and community groups involved in recycling and reuse activities	We actively pass good quality items to charities as part of the Community Action Days. We have strong links with the British Heart foundation and support them in their efforts to collect items from students at the end of term. We will again be working with Arthur Rank Hospice to promote the collection of Christmas trees in January 2019. The Council's Sustainable City Fund providing grant funding to Cambridge Re-Use to raise awareness of the quality and type of stock that is available by making photos and prices of the furniture and bulky household goods available to be viewed online, diverting it from landfill and avoiding carbon emissions and materials consumption associated with the manufacture of new goods.	On-going to March 2021
	Corporate Strategy			
4.10 Reducing consumption of resources by working with community groups to engage and support people in choosing things carefully, making them last well and then re-homing or recycling them.	Corporate Strategy	Evidence of behaviour change amongst residents supported by community groups	The Sustainable City Fund 2017/18 supported Cambridge Carbon Footprint (CCF) to run their Circular Cambridge events, including the World's Largest Repair Café, which engages different audiences and results in goods being fixed, re-homes and recycled. Over 1,500 people attended CCF's Circular Cambridge events and talks.	On-going to March 2021

Actions to deliver Objective 5 - Supporting Council services, residents and businesses to adapt to the impacts of climate change

Activity	Service	Performance measures/outcomes	Progress	Expected completion date
<p>5.1 Including policies in the Local Plan which will support residents to adapt to the impact of Climate Change, including policies on:</p> <p>Designing buildings which are simple to keep cool and do not overheat in hotter weather;</p>	<p>Planning</p>	<p>Local Plan adopted, including policies on heat management, SuDS and water efficiency in new buildings and developments</p>	<p>The Inspector's Report has been found sound. Overheating is an issue that is now discussed as part of pre-application discussions and is also raised in comments on applications where the risk of overheating is a concern. A planning condition has been developed for outline applications requiring the submission of Overheating Analysis and use of the cooling hierarchy as part of subsequent reserved matters applications. Further guidance will be developed as part of the update to the Sustainable Design and Construction SPD.</p>	<p>Autumn 2018</p>
<p>Requiring applications to include Sustainable Drainage Systems (SuDS) and ensuring that development is not at risk from flooding and that it does not increase the risk of flooding elsewhere;</p> <p>Requiring new domestic properties to meet high water efficiency standards (no more than 110 litres of water to be consumed per day) along with standards for non-domestic properties</p>	<p>Planning, Environmental Services</p>	<p>Policies on heat management, SuDS and water efficiency in new buildings and developments implemented</p>	<p>The Inspector's Report has been found sound. Planning conditions are already being used to ensure housing schemes meet water efficiency requirements of no more than 110 litres/person/day, and to date have been recommended for 22 schemes.</p>	<p>On-going from 2017 onwards</p>
<p>5.2 Exploring opportunities to install Sustainable Drainage Systems (SuDS) on Council property and open spaces as part of new City Council developments</p>	<p>Environmental Services</p>	<p>SuDS to be installed on any new City Council developments - target 100%</p>	<p>A meeting was held to discuss the detailed design of SuDS for discharge of condition on Mill Rd. Other smaller Cambridge Investment Partnership sites are including some SuDS provisions such as permeable paving.</p>	<p>On-going to March 2021</p>
<p>5.3 Working with Cambridgeshire County Council and other partners in the Cambridgeshire Flood Risk Management Partnership to manage climate change-related flood risks</p>	<p>Environmental Services</p>	<p>Attendance at Cambridgeshire Flood Risk Management Partnership quarterly meetings. Target 100%</p>	<p>Council officers attended 100% of partnership meetings in 2017/18</p>	<p>On-going to March 2021</p>
<p>5.4 Contributing to Cambridgeshire-wide planning advice on minimising flood risk and incorporating this into local planning</p>	<p>Environmental Services</p>	<p>Cambridgeshire-wide planning advice on minimising flood risk</p>	<p>The Inspector's Report has been found sound. On receipt of this, the SPD will be taken to committee for adoption as an SPD alongside the new Local Plan.</p>	<p>Autumn 2018</p>

policy through the new Local Plan	Planning	written. Local Plan submitted for examination, including policies on minimising flood risk		
5.5 Providing advice for residents on how to reduce health risks during heat waves and minimise risks of surface water flooding, including via the Council's website and the Cambridge Matters residents' magazine. Promotion of advice to be linked to specific climate events (e.g. heat wave guidance to be published in spring ahead of possible heat-wave events).	Planning	Information for residents on how to reduce health risks during heat waves and minimise risks of surface water flooding published in Cambridge Matters and regularly updated on the Council's website	During this year's heatwave the Council has used its social media outlets to warn residents of the risks associated with heatwaves and to point them to further advice on the NHS heatwave website.	On-going to March 2021, with timing linked to specific weather events
5.6 Implementing the City Council's new tree strategy, which sets out the Council's policies for managing and increasing the city's tree stock	Environmental Services	New tree strategy completed	<ul style="list-style-type: none"> • Since 2017 and for this year we have simplified, streamline and invested in the online process. • We have delivered x170 'Free Trees for Babies' in 2017/18. The administration of the scheme is now largely automated, with a web form. We intend to increase take up in 2018/19 to x400 trees. • Tree cover has been defined as the area of leaves, branches, and stems of trees covering the ground as viewed from above. Tree cover in Cambridge was last assessed in 2013 and stood at 17%. • We have produced a 10 year strategy and action plan to raise tree cover to 19% by the 2030s. • We have revised our own management procedures to ensure that all publically accessible areas are routinely inspected and worked upon and a record is kept. • We have set up an annual ash tree survey using a randomised and statistically valid sample of own ash trees to inform us about the impact of Chalara ash decline. • We now monitor how many trees we remove and plant to ensure sustainability. We currently plant slightly more than we remove thus increasing our stock. • We now review species profiles in areas targeted for planting to see if we can improve species 	Completed – July 2016
		Tree strategy reviewed, including assessment of numbers of trees in Cambridge		On-going to March 2021
		Increase tree canopy cover across the city centre by 2%		On-going to March 2030

5.7 Ensuring that planting in open spaces owned or managed by the City Council is drought resistant and requires less watering	Environmental Services	Percentage of planting in open spaces owned or managed by the City Council that is drought resistant and requires less watering	1200 sq. m of perennial turf meadow was laid at Cherry Hinton Hall. 4 additional perennial meadows (which are re-sown every year but do not require watering or cutting) are planned for autumn 2018.	On-going to March 2021
5.8 Working with members of the Cambridgeshire and Peterborough Local Resilience Forum to ensure that plans are in place to respond to climate change risks (including issuing alerts in the event of severe weather, increased temperatures and flooding) and that these are regularly tested and reviewed	Estates and Facilities	Plans are in place to respond to severe weather, heatwaves and flooding emergencies and are regularly reviewed and tested	The plans have recently been updated in 2018 in light of recent flood map changes and severe weather events.	On-going to March 2021
5.9 Management of watercourses to enhance their flow and storage capacity and deliver wider biodiversity benefits	Environmental Services	Annual maintenance undertaken based on watercourse maintenance schedule – target 100%	100% of watercourse maintenance work set out in the maintenance schedule was completed.	On-going to March 2021
		Projects undertaken to increase flow, storage capacity and /or biodiversity benefits – target 2 per year	A number of projects were undertaken in 2017/18. A non-native weed, Crassula helmsii is being managed in Cherry Hinton Brook and clearance continues in 2018. We are awaiting a grant funding decision on a project to install a 'fish pass' at Jesus Green weir. Restoration of Snobbs Mill Race was completed, along with sensitive dredging of ditches on Sheep's Green & Coe Fen. Gravel riffles have been created along Cherry Hinton Brook	On-going to March 2021
5.10 Develop an evidence base for climate change adaptation to enable us to have a better understanding of the climate risks facing the city and the adaptation actions that will have the greatest benefit across the city.	Corporate Strategy	Evidence base on climate change adaptation developed and further actions identified to manage climate change risks	Climate Change Adaptation Plan was produced using the findings of the UK Climate Change Risk Assessment 2017. The document, which was presented to the officer Environment Policy Group, consists of an evidence base of risks for Cambridge based on the information in the assessment and a summary of current adaptation actions. Additional adaptation actions have been identified and developed with council service areas.	October 2018
	Planning			
	Environmental Services			

Appendix (b) Environment Policy Statement



CAMBRIDGE CITY COUNCIL

ENVIRONMENT POLICY STATEMENT

One of Cambridge City Council's visions is 'A city that takes robust action to tackle the local and global threat of climate change, both internally and in partnership with local organisations and residents, and to minimise its environmental impact by cutting carbon, waste and pollution'. The Council is committed to deliver the vision by promoting a high quality and sustainable environment which maximises the opportunities to improve energy efficiency, biodiversity and resilience.

The council's Climate Change Strategy 2016-2021 has 5 objectives which detail how the council will address the causes and consequences of climate change:

1. Reducing emissions from the City Council estate and operations. The Council has set a target in its [Carbon Management Plan](#) (CMP) 2016-2021 to reduce carbon emissions from its buildings and services by 15% by the end of March 2021, with an aspiration to reduce emissions by 20% over this period.
2. Reducing energy consumption and emissions from homes and businesses in Cambridge by promoting energy efficiency measures, sustainable construction, renewable energy sources, and behaviour change
3. Reducing emissions from transport by promoting sustainable transport, reducing car travel and traffic congestion, and encouraging behaviour change
4. Reducing consumption of resources, increasing recycling and reducing waste
5. Supporting Council services, residents and businesses to adapt to the impacts of climate change

The Council has set an aspiration in its [Climate Change Strategy](#) for Cambridge to be carbon neutral by 2050.

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

The following actions will be taken:

- **The use of water, energy and carbon dioxide emissions and other greenhouse gases, directly linked to our activities, will be reduced.** This will include reducing our reliance on fossil fuels and increasing the proportion of energy coming from low and zero carbon technologies;
- **Waste to landfill will be reduced** by increasing recycling rates for the City Council and Cambridge;
- **The environmental impact of transport and travel will be reduced** through our work with the Cambridgeshire and Peterborough Combined Authority, Greater Cambridge Partnership, County Council, businesses, organisations and others and we will promote and plan for sustainable modes of transport that reduce environmental impacts;
- **The environmental quality, resilience and performance of our buildings and assets will be improved.** We will work with partners to promote and facilitate improvements to the environmental performance of buildings and the wider landscape and public realm across the city;
- **The environmental quality, resilience and biodiversity of our land, water bodies and landscapes across our city will be protected, enhanced and maintained** where possible;
- **The elderly, vulnerable and those facing hardship will be protected from the wider effects of our changing climate,** and this will include the impact of fuel and water poverty.
- **All tenderers will be required to incorporate our commitment to ensuring that all procurements consider the economic, social and environmental well-being of the City and surrounding area,** in their submissions
- **Targets will be set, progress reviewed and we will publish information regularly, where appropriate, including in the council's Annual Climate Change Strategy Report** (without duplicating existing reporting processes);
- **Appropriate training, instruction, and supervision to all our employees will be provided** such that they are able to perform their duties in a way supports our environment policy and objectives;
- **This policy statement will be reviewed periodically,** and not later than March 2021.
- **This policy will be communicated to everyone working for or on behalf of Cambridge City Council.**

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

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

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

Signed:

Antoinette Jackson	Councillor Rosy Moore	Councillor Lewis Herbert
Chief Executive	Executive Councillor	Leader

Dated:

Appendix (c): Details of Carbon Management Plan projects implemented in 2017/18

No.	Service Area	Building Type	Project	Scheduled date/ expected month of delivery	Installation/ completion date	Estimated capital cost (£)	Climate Change Fund contribution (£)	Funding contribution from other sources (£)	Estimated annual energy savings (kWh)	Estimated annual carbon savings (tCO ₂)	Estimated annual financial savings (£)	Payback (years)
COMPLETED												
11	Sport & Leisure	Swimming Pools	Abbey Pools: Solar thermal upgrade and upgrade of the hot water calorifiers - to utilise more of the heat in the hot water system	N/A	July 2017	£48,700	£40,000	£8,700	114,938	21.2	£4,597.51	10.6
	Sport & Leisure	Swimming Pools	Abbey Pools: Upgrade and replacement of air handling unit with a new air plant circulation system and heat recovery technology.	N/A	July 2017	£78,377	-	£78,377	737,071	148.4	£25,208.00	3.1
	Estates & Facilities	Sheltered Housing	Ditton Court: New heating and hot water boilers fitted in each of the 27 flats which each have their own gas meter fitted for their individual gas consumption. Now 2 communal gas domestic boilers serve all the communal areas.	N/A	July 17	£56,400		£56,400	250,000	46.0	£10,000	5.6
9	Estates & Facilities	Sheltered Housing	School Court: Replacement of individual flat system (boilers) by a communal system with a more energy efficient boiler.	N/A	Dec 17	£397,943	-	£397,943	25,000	4.6	£1,000	397.9
					TOTALS:	£581,420	£40,000	£541,420	1,127,009	220.2	£40,805.51	

Appendix (d): Details of Carbon Management Plan projects installed/ to be implemented in 2018/19

No.	Service Area	Building Type	Project	Scheduled date/ expected month of delivery	Installation/ completion date	Estimated capital cost (£)	Climate Change Fund contribution (£)	Funding contribution from other sources (£)	Estimated annual energy savings (kWh)	Estimated annual carbon savings (tCO ₂)	Estimated annual financial savings (£)	Payback (years)
COMPLETED												
16	Estates & Facilities	Office buildings	Mandela House: Replace existing lighting with LED and combined motion/light sensors.	N/A	April 18	£150,000	£50,000	100,000	52,359.42	24.2	£5,000	30.0
17	Estates & Facilities	Office buildings	Mandela House: Upgrade to condensing boiler and pipework and valve insulation	N/A	April 18	£60,000	£9,000	£51,000	82,604.73	15.4	£2,500	24.0
14	Estates & Facilities	Office buildings	Guildhall: Replace more than 670 existing light fittings with low energy LED light fittings and automation	N/A	June 2018	£76,731	£76,731	-	76,528.00	29.4	£8,081	9.5
IN PROGRESS												
	Fleet	Vehicles	Vehicle fleet: Replacement of fleet vehicles with electric vans and fuel efficient vans and trucks	TBC	TBC	£2,436,000	-	£2,436,000	N/A	30.0	TBC	TBC
	Progress	19 panel vans have been replaced in Estates & Facilities. 1 of these was electric. The other 18 Euro 4 vehicles have now been replaced with Euro 6 emissions compliant vehicles. 9 refuse trucks have been replaced in Shared Waste Service - Euro 6. 2 caged tippers are still to be received to replace vehicles in Streets & Open Spaces.										
1	Estates & Facilities	Office buildings	Guildhall: Replacement of roofing and additional insulation	August 2018 onwards	TBC	£100,502	-	£100,502	60,980.00	11.2	£1,765	50.0
	Progress	Will be completed as part of single package of works at the Guildhall procured by the Council through the County-wide RE:FIT framework										
DUE TO COMMENCE												
	Sport & Leisure	Leisure Facility	Abbey Leisure Complex: Replacement of astroturf floodlights with energy efficient LED lighting, and new control gear and timers.	September 2018	TBC	£65,560	-	£65,560	42,672.00	15.0	£4,690	14.0
	Progress	Will be completed using Outdoor ports S106 funding										

No.	Service Area	Building Type	Project	Scheduled date/ expected month of delivery	Installation/ completion date	Estimated capital cost (£)	Climate Change Fund contribution (£)	Funding contribution from other sources (£)	Estimated annual energy savings (kWh)	Estimated annual carbon savings (tCO ₂)	Estimated annual financial savings (£)	Payback (years)
2	Estates & Facilities	Office buildings	Guildhall: Install 30kW solar photovoltaic system	October 2018	TBC	£33,180	£33,180	-	24,450.00	9.4	£2,582	12.9
	Progress	Will be completed as part of single package of works at the Guildhall procured by the Council through the County-wide RE:FIT framework										
	Estates & Facilities	Office buildings	Guildhall: Building automation. Implementation of a number of measures to increase the level of control over the heating systems, including installing a Building Energy Management System (BEMS).	October/ November 2018	TBC	£37,785	£37,785	-	174,497.45	32.5	£5,196	7.3
	Progress	Will be completed as part of single package of works at the Guildhall procured by the Council through the County-wide RE:FIT framework										
15	Estates & Facilities	Office buildings	Guildhall: Mechanical works to improve the energy efficiency of the heating and hot water systems.	October/ November 2018	TBC	£46,945	£46,945	-	89,659.00	16.5	£2,496	18.8
	Progress	Will be completed as part of single package of works at the Guildhall procured by the Council through the County-wide RE:FIT framework										
	Estates & Facilities	Office buildings	Guildhall: Installation of a Combined Heat and Power (CHP) unit.	October/ November 2018	TBC	£64,779	£64,779	-	-23,944.00 (95,560 reduction in electricity, 119,504 increase in gas, lower in carbon emissions)	14.7	£6,631	9.8
	Progress	Will be completed as part of single package of works at the Guildhall procured by the Council through the County-wide RE:FIT framework										
	Estates & Facilities	Office buildings	Guildhall: Insulation of pipework and valves in plant rooms.	October/ November 2018	TBC	£7,778	£7,778	-	24,597.00	4.5	£712	10.9
	Progress	Will be completed as part of single package of works at the Guildhall procured by the Council through the County-wide RE:FIT framework										

	Estates & Facilities	Office buildings	Guildhall: Secondary glazing installed	October/ November 2018	TBC	£29,337	-	£29,337	5,658.67	1.0	£170	172.8
	Progress	Will be completed as part of single package of works at the Guildhall procured by the Council through the County-wide RE:FIT framework										
					TOTALS:	£3,108,597	£326,198	£2,782,399	610,062.27	203.8	£39,823	

Appendix (e): Details of Carbon Management Plan projects installed/ to be implemented in 2018/19 subject to further investigation												
No.	Service Area	Building Type	Project	Scheduled date/ expected month of delivery	Installation/ completion date	Estimated capital cost (£)	Climate Change Fund contribution (£)	Funding contribution from other sources (£)	Estimated annual energy savings (kWh)	Estimated annual carbon savings (tCO ₂)	Estimated annual financial savings (£)	Payback (years)
	Sport & Leisure	Leisure Facility	Parkside Pool – 50kW Solar PV Array	By March 2019	TBC	£61,171	TBC	TBC	45,000	17.1	£4,950	12.4
	Sport & Leisure	Leisure Facility	Abbey Leisure Complex – 30kW Solar PV Array	By March 2019	TBC	£42,293	TBC	TBC	20,400	7.75	£2,244	18.9
	Sport & Leisure	Leisure Facility	Kings Hedges Pool – 11kW Solar PV Array	By March 2019	TBC	£16,410	TBC	TBC	9,130	3.47	£1,004.30	16.3
	Commercial Services	Crematorium	Crematorium – 11kW Solar PV Array	By March 2019	TBC	£15,839	TBC	TBC	9,240	3.51	£1,016.40	15.6
	Estates & Facilities	Offices	City Homes Housing Office – 11kW Solar PV Array	By March 2019	TBC	£16,410	TBC	TBC	9,350	3.55	£1,028.50	16.0
	Estates & Facilities	Sheltered Housing	Whitefriars Court – 20kW Solar PV Array	By March 2019	TBC	£29,678	TBC	TBC	13,600	5.17	£1,496	19.8
	Estates & Facilities	Offices	Mandela House - Solar PV - Solar PV Array	By March 2019	TBC	£14,839	TBC	TBC	8,750	3.33	£962.50	15.4
10	Estates & Facilities	Sheltered Housing	Ditton Court: Replace communal lighting with LED equivalent	By March 2019	TBC	£7,243	TBC	TBC	4,513	1.72	£496.43	14.6
			Whitefriars: Replace communal lighting with LED equivalent	By March 2019	TBC	£8,775	TBC	TBC	13,602	5.17	£1,496.22	5.9
			Rawlyn Court: Replace communal lighting with LED equivalent	By March 2019	TBC	£10,418	TBC	TBC	9,399	3.58	£1,033.89	10.1

	Estates & Facilities	Office buildings	Mandela House Ground Floor - LED lighting upgrade	By March 2019	TBC	£23,811	TBC	TBC	15,339	5.83	£1,687.26	2.04
	Estates & Facilities	Office buildings	City Homes Offices - LED lighting upgrade	By March 2019	TBC	£7,661	TBC	TBC	6,937	2.64	£763.02	10.04
13	Estates & Facilities	Temporary Housing	Lighting improvements, including: a) replacing communal lighting with LED equivalent at New Street hostel, b) installing PIR motion sensor controls to hallway lighting at New Street hostel, c) replacing kitchen lighting with LED equivalent at 116 Chesterton Road	By March 2019	TBC	£4,000	TBC	TBC	1,730.89	0.8	£500	0.8
					TOTALS:	£258,548	TBC	TBC	166,990.89	63.62	£18,678.52	

Appendix (f): Climate Change Fund expenditure up to August 2018

Year	Project Location and Type	Cost (£)	Balance remaining at end year (£):	Additional contribution to Fund (£)
2008/09	Funding Available:	250,000		
	Pilot of Electric Bin Lifts	2,100		
	Chesterton Road Toilet Modernisation	900		
	Corn Exchange Christmas Lighting Lamps	600		
	Arbury Court WC Rainwater Harvesting	2,500		
	Total Spend:	6,100	(243,900)	
2009/10	Romsey Rec Rainwater Harvesting	2,500		
	Energy Audit of Pools & Leisure Centres	3,750		
	Grand Arcade Annex Car Park Fan system	21,700		
	Public Conveniences & Park St Car Park Energy Survey	2,730		
	Community Centres Energy Audits	2,995		
	Corn Exchange LED lighting	2,760		
	Total Spend:	36,435	(207,465)	
2010/11	Watercourses Flood Risk Survey	4,510		(250,000)
	Mill Road water efficiency (1)	36,000		
	Mill Road water efficiency (2)	11,700		
	Replacement boiler - Barnwell House	3,150		
	Guildhall Voltage optimisation	17,960		
	Market Stall LED lighting	1,000		
	Total Spend:	74,320	(383,145)	
2011/12	LED Lighting at the Grand Arcade Annex Car Park	100,000		(184,770)
	Market Stall LED lighting	12,030		
	Market Stall LED lighting -Balance Returned to Fund	(12,030)		
	Tree Canopy Study	10,870		
	Community Centres energy efficiency measures	9,800		
	Heat recovery at the Crematorium	11,600		
	Water and energy saving measures in changing rooms at Parkside Pool	35,000		
	LED audit of multi-storey car park lighting	5,420		
	Refund from Power Perfector for Voltage Optimisation at Guildhall	(1,044)		
	Total Spend:	171,646	(396,269)	
2012/13	LED Lighting at the Grand Arcade Annex Car Park	(5,900)		(129,050)
	Tree Canopy Study	4,130		
	LED audit of multi-storey car park lighting	1,080		
	CM Plan Ref 22: Corn Exchange LED House Lights	25,700		
	CM Plan Ref 12: Abbey VSD and BMS (38177)	24,650		
	CM Plan Ref 16: Parkside VSD and BMS	42,640		
	CM Plan Ref 15: Pool covers for Abbey and Parkside & consequent changes to heating system	23,270		
	Total Spend:	115,570	(409,749)	
2013/14	CM Plan Ref 17: Voltage Optimisation at Mandela House (capital bid C2736 refers). Including £3,223 of additional IT costs.	21,960		
	CM Plan Ref 11: Voltage Optimisation at Grafton East Car Park. Including additional £900 for Parkeon to be onsite.	13,921		
	CM Plan Ref 30: Upgrade to LEDs & lighting controls in Grafton West Car Park	30,000		
	Voltage Optimisation rebate for Mandela House and Grafton East Car Park	(3,232)		
	Total Spend:	62,649	(347,100)	
2016/17	Grand Arcade Main Car Park - Replace existing lighting with LED.	189,227		(120,000)
	Grafton East Car Park - Replace existing lighting with LED.	131,771		
	Crematorium - Upgrade loft insulation.	1,478		
	Total Spend:	322,476	(144,624)	
2017/18	Abbey Pools - Adjustments to hot water system to allow excess heat generated to be used	40,000		(300,000)
	Total Spend:	40,000	(404,624)	
2018/19	Mandela House - Replace existing lighting with LED and combined motion/light sensors.	50,000		(250,000)
	Mandela House - Upgrade to condensing boiler and pipework and valve insulation	9,000		
	Guildhall - Building automation. Implementation of a number of measures to increase the level of control over the heating systems, including installing a BEMS.	37,785		
	Guildhall - Replace more than 670 existing light fittings with low energy LED light fittings and automation	76,731		
	Guildhall - Mechanical works to improve the energy efficiency of the heating and hot water systems.	46,945		
	Guildhall - Installation of a Combined Heat and Power (CHP) unit.	64,779		
	Guildhall - Install 30kW solar photovoltaic system	33,180		
	Guildhall - Insulation of pipework and valves in plant rooms.	7,778		
	Total Spend:	326,198	(328,426)	