

Item

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

To:

Councillor Rosy Moore, Executive Councillor for Climate Change,
Environment and City Centre

Environment and Community Scrutiny Committee 03/10/2019

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 2018/19 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 its estate and operations.
- 1.2 The report also provides an update on:
- 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 2018/19
- A proposed response to Shepreth Wildlife Park's Plastics Pledge

2. Recommendations

The Executive Councillor is recommended to:

1. Note the progress achieved during 2018/19 in implementing the actions in the Climate Change Strategy and Carbon Management Plan.
2. Approve the proposed response to Shepreth Wildlife Park's Plastic Pledge (as set out at Appendix E).

3. Background

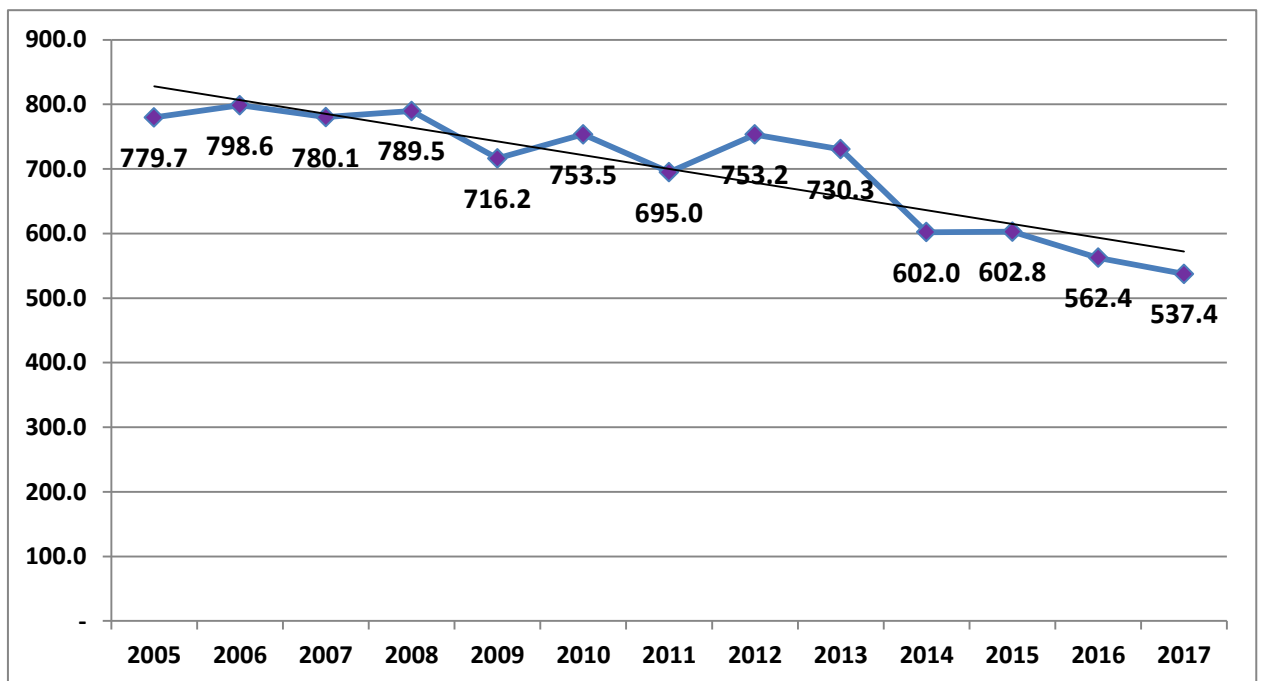
Carbon emissions in Cambridge

- 3.1 In March 2016, the Council set an aspiration for the city of Cambridge to achieve zero carbon status by 2050 in its [Climate Change Strategy 2016-21](#). This timescale is consistent with the recommendations of the UK's independent Committee on Climate Change, and the revised, legally-binding target for the UK to be net zero carbon by 2050 announced by the Government in June 2019.
- 3.2 The aspiration is also consistent with the United Nations (UN) Intergovernmental Panel on Climate Change (IPCC) special report in 2018, which found that in order to limit global temperature increases to 1.5°C "*global net human-caused emissions of carbon dioxide (CO₂) would need to fall by 45% from 2010 levels by 2030, reaching 'net zero' around 2050*"¹.
- 3.3 On 21 February 2019, the Council declared a climate emergency and called on government, industry and regulators to implement the necessary changes to enable Cambridge and the rest of the UK to reach net zero carbon by 2030. The Council will work with residents, business and partners to try to reach net zero carbon in Cambridge as soon as possible.

¹ See: <https://www.un.org/en/sections/issues-depth/climate-change/>

3.4 The latest national carbon dioxide emissions estimates, produced by the Department for Business, Energy and Industrial Strategy (BEIS), show that total emissions in Cambridge have declined steadily over the last 12 years. As shown by the graph below from 2005 to 2017, total emissions from Cambridge reduced by over 31%, from 779.7 ktCO₂ in 2005 to 537.4 ktCO₂ in 2017. The reduction in emissions from Cambridge in recent years has been driven primarily by reduced use of coal in electricity generation and the increased use of renewable sources of energy generation at a national level.

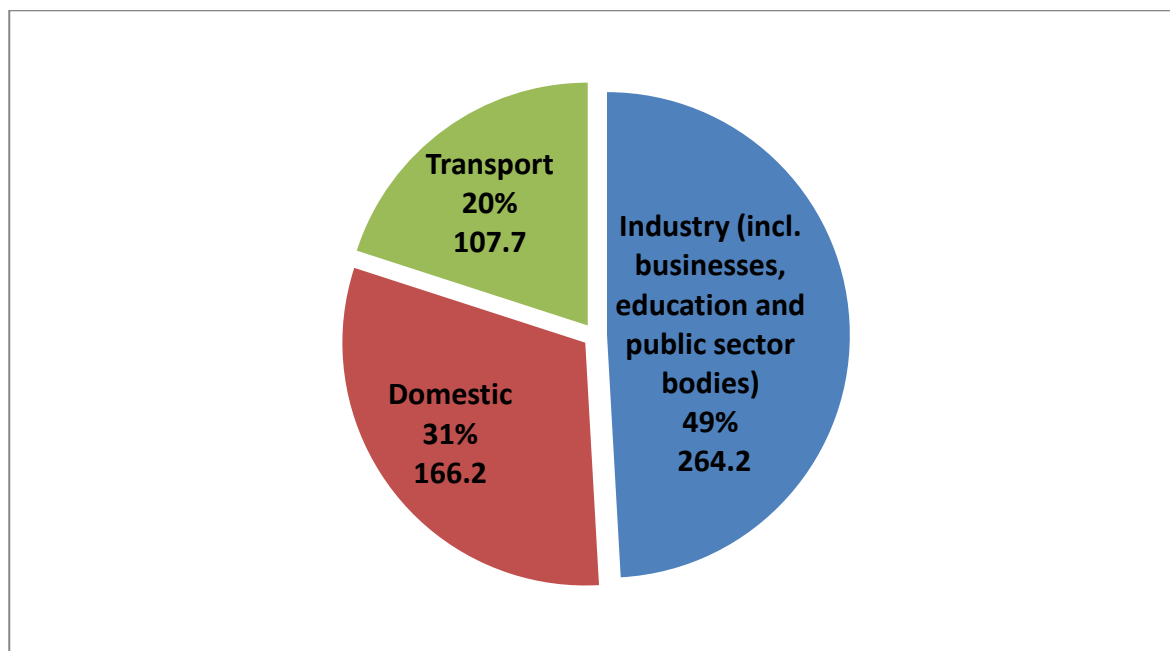
Chart 1: Carbon Emissions in Cambridge 2005-2017 (ktCO₂)



3.5 As shown by the chart on the next page, energy consumption from industrial and commercial properties (including businesses and public sector bodies such as councils, health and education bodies) was the largest source of the city's CO₂ emissions in 2017, accounting for almost half of all the emissions from the city (49%). Industrial and commercial emissions account for a greater proportion of Cambridge's emissions than the UK average (37%). Cambridge City Council was only directly responsible for 1.1% of total carbon emissions in the city, so there is a need for significant action by businesses and other public

organisations in the city, to reduce their emissions if Cambridge is to become zero carbon.

Chart 2: Sources of Carbon Emissions in Cambridge in 2017 (ktCO₂)



- 3.6 The next highest proportion of the city's emissions was from domestic sources (heating and powering homes) at 31%. This suggests that continued action is needed to reduce carbon emissions from homes in the city.
- 3.7 Emissions from transport account for a significant proportion of emissions in Cambridge (20%), which suggests that actions to reduce emissions from transport are key to reducing carbon emissions in the city. However it should be noted that the proportion of emissions from transport in Cambridge is much lower than the UK average of 36%. This is mainly due to the fact that there are few major roads within the local authority area.

Climate Change Strategy

- 3.8 The Council's Climate Change Strategy 2016-21 focusses on reducing carbon emissions from the key sources of emissions in the city set out above (industrial and commercial, domestic and transport sources). 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 5 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

3.9 The Council's current Climate Change Strategy covers the period to March 2021. We anticipate revising and refreshing the strategy and action plan during 2020/21.

3.10 The Council is taking a wide range of direct actions which will contribute to reducing emissions in Cambridge through its current strategy. This report provides details of progress on some of the key actions during the third year (2018-2019) of the strategy (see sections 4 to 8 below). Details of progress towards all the 55 actions in the strategy are provided in the 2018/19 Progress Report at: www.cambridge.gov.uk/climate-change-strategy.

3.11 However, district Councils such as Cambridge City Council have limited direct influence over some of the key sources of emissions set out at 3.5 to 3.7 above. The actions in the Climate Change Strategy focus primarily on the limited areas where the Council delivers services (including managing Council homes, planning, environmental health, and recycling and waste collection), has direct policy control or regulatory powers (e.g. through planning policy, licensing, building control, environmental health regulations), or where external funding

opportunities are currently available (e.g. funding for charging points for electric taxis from the Government's Office for Low Emissions Vehicles).

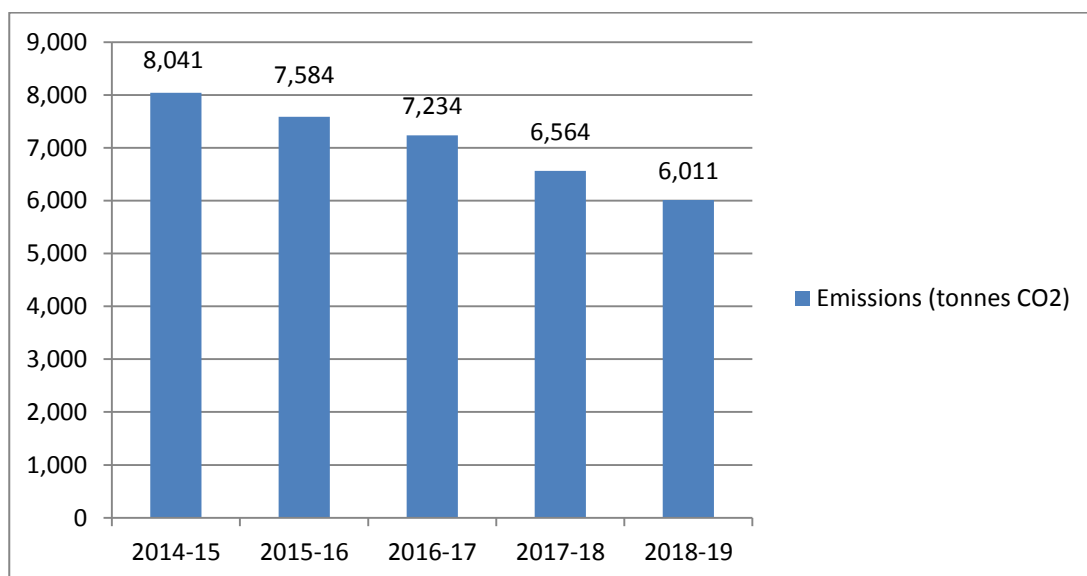
- 3.12 To achieve the zero carbon aspiration for Cambridge, the Council also works in partnership with, and seeks to influence a wide range of organisations in the city that can help reduce carbon emissions. This includes businesses, the Universities, other public sector organisations (including Cambridgeshire County Council, South Cambridgeshire District Council, the Greater Cambridge Partnership, and the Greater Cambridgeshire Combined Authority) and voluntary and community organisations.
- 3.13 For example, the Council has convened meetings of the City Leaders Climate Change Group since July 2017 to bring these partners together to explore how emissions in the city can be reduced. Meetings of the group have focused on themes such as achieving low-energy housing in (November 2017), the circular economy (September 2018), and reducing waste through procurement and the supply chain (February 2019). The October 2019 meeting will focus on how businesses and organisations can help achieve the aspiration for Cambridge to be zero carbon.
- 3.14 The Council has also committed to fund a revised Climate Change Charter, which would provide a series of commitments that local residents and businesses could make to help reduce carbon emissions from the city. During summer 2019, the Council invited local environmental groups to submit tenders to deliver the Charter. It is anticipated that the Charter will be developed and promoted during 2019/20.

Cambridge City Council's carbon emissions and Carbon Management Plan

- 3.15 The Council has set a target 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. We will be revising this target as part of the development of the Council's next Carbon Management Plan for March 2021 onwards.

3.16 The Council is reducing its emissions by investing in carbon reduction projects and rationalising our estate as part of its current Carbon Management Plan (CMP), which covers 2016-2021. Details of carbon reduction projects delivered during 2018/19 are provided in section 4 below, and a table providing further information on these projects is included at Appendix A. Projects that have been installed, are in progress or are to be implemented, subject to further investigation in 2019/20 are set out in Appendix B. Projects that are proposed for installation during 2020/21, subject to further investigation, are set out at Appendix C.

Chart 3. Council's Carbon Emissions (tonnes CO₂)

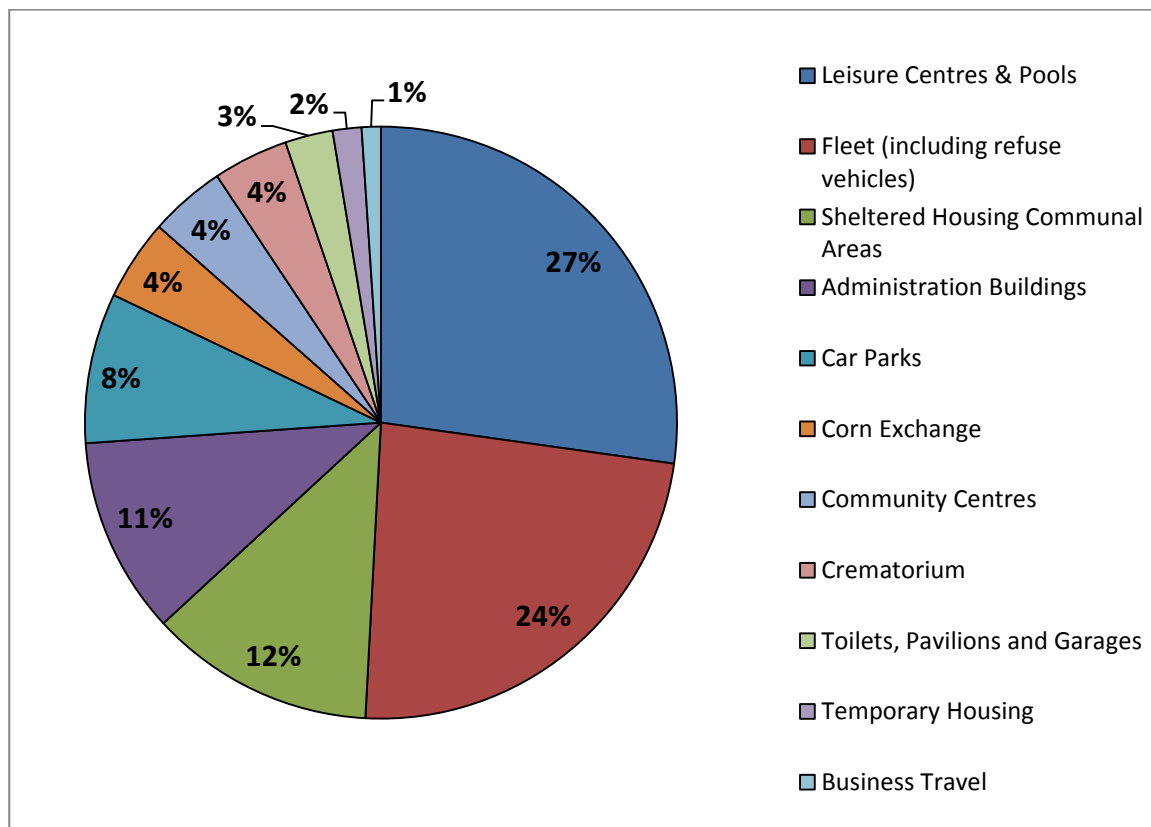


3.17 As shown by the chart above, the Council's greenhouse gas emissions reduced by 8.4% from 2017/18 to 2018/19. Total gross emissions reduced from 6,564 tonnes of carbon dioxide equivalent (tCO₂e) in 2017/18 to 6,011 tCO₂e in 2018/19.

3.18 Overall, the Council's greenhouse gas emissions reduced by 25.2% from 2014/15 (the baseline year for the Carbon Management Plan) to 2018/19. Total gross emissions reduced by 2,030 tCO₂e in this period, from 8,041 tCO₂e in 2014/15 to 6,011 tCO₂e in 2018/19. The 15% target and the 20% aspiration in the Carbon Management Plan have been reached two years ahead of the target date of March 2021.

3.19 The Council’s emissions have reduced partly due to the action the Council has taken to implement carbon reduction projects and rationalise its estate, and partly due to decarbonisation of electricity generation at a national level. The shift from coal-fired power stations to renewable energy sources in recent years has reduced the level of carbon emissions associated with each unit of electricity that we use.

Chart 4: Council’s Carbon Emissions by Source (tCO₂e) in 2018/19



3.20 As shown by the chart above, in 2018/19 the council’s emissions came from a number of different sources. The greatest proportion of emissions come from the Council’s 5 swimming pool and leisure facilities (27%), followed by emissions from the council’s vehicle fleet (24%), sheltered housing communal areas (12%), offices and administrative buildings (11%), and car parks (8%). Through the Carbon Management Plan, we have targeted investment in carbon and energy reduction projects in the areas of activity which contribute most to the Council’s emissions.

Reporting Carbon Emissions

- 3.21 The Council calculates its carbon emissions from its estate and operations, and reports these to Government in our annual Greenhouse Gas report. The report for 2018/19 is available on the Council's website here: www.cambridge.gov.uk/carbon-management-plan.
- 3.22 Since 2016 the council has also reported the council's activities to reduce the council's and the city's emissions and adapt to climate change to [CDP](#) (formerly the Carbon Disclosure Project). CDP run the global disclosure system that enables companies, cities, states and regions to measure and manage their environmental impacts. The Council's 2018 response was awarded a score of B within the 'Management' scoring band. This indicates "an answer that discloses the main risks and impacts of climate change and reports the actions taken to adapt to and reduce these effects. This may be representative of cities that have worked collaboratively with key stakeholders to understand their risks and impacts and now have plans in place to mitigate and adapt".
- 3.23 Cambridge was one of 12 UK cities to report to CDP in 2018, which also included Norwich, Bradford, London, Glasgow, Bournemouth, Cardiff, Leicester, Manchester, Wrexham, Coventry and Southampton. The scores were not reported publically except those who scored A, of which London was the only UK city to achieve this score.

4. Progress in delivering the key actions under Objective 1

Emissions from the Council's estate

- 4.1 Objective 1 of the Climate Change Strategy, 'Reducing emissions from the City Council estate and operations', has been delivered primarily through carbon and energy reduction projects as part of the Council's Carbon Management Plan. The following projects were completed on the Council's estate in 2018/19:

- Mandela House energy efficiency projects: During the refurbishment of the Mandela House offices, a number of energy efficiency measures were installed, including replacing existing lighting with LED lighting and combined motion/light sensors, upgrading the boiler to a condensing boiler, and pipework and valve insulation.
- Guildhall energy efficiency works: A number of energy efficiency and renewable energy generation technologies were progressed at the Guildhall in 2018/19 as part of a single set of works. In 2018/19 a 30kw solar photovoltaic (PV) system was installed and secondary glazing was installed in those rooms which did not already have it.
- Solar PV installations: before the government's Feed In Tariff (FIT) scheme ended in March 2019, solar PV systems were installed at a further 6 Council sites: Mandela House, Parkside Pool, Abbey Leisure Complex, Kings Hedges Pool, and Whitefriars Court sheltered housing scheme. The PV systems will generate renewable energy for use in these buildings, reducing the amount of electricity that the Council needs to buy from the national grid by approximately 156,000 kWh per year. They will reduce the council's carbon emissions by an approximately 48 tonnes of CO₂ every year and save more than £25,000 annually. Any electricity generated by the panels that is not needed in the buildings will be exported to the national grid, generating a further income.
- Waterbeach depot solar PV: a solar PV system was also installed by South Cambridgeshire District Council on the Greater Cambridge Shared Waste Service depot. As the building is a shared service building, the system was 50% match-funded by the city council. The system will generate a saving in electricity consumption for the City Council of 9,560 kWh, an annual saving of approximately £1,500 in energy costs and approximately £800 in income from the Feed-In Tariff.
- Abbey Leisure Complex floodlights: The astroturf floodlights were replaced with energy efficient LED lighting, new control gear and timers to achieve energy savings.

4.2 The projects completed in 2018/19 cost a total of £590,989 and it is

estimated that they will reduce our carbon emissions by 106.5 tCO₂e and deliver on-going annual savings of approximately £39,000 per year.

- 4.3 During 2019/20 so far, a number of carbon reduction projects have been completed on the Council's estate. The communal lighting at Rawlyn Court and Whitefriars sheltered housing schemes has been replaced with LED lighting, and the lighting in the Customer Service Centre has been replaced with LED lighting.
- 4.4 In 2019/20, the Guildhall energy efficiency works have also been further progressed. It is estimated that in total the projects installed at the Guildhall during 2018/19 and 2019/20 will save more than 426,000 kWh of energy and 118 tCO₂ per annum and reduce energy costs by over £27,000 per annum. Since April 2019 the following measures have been installed:
- more than 670 existing light fittings were replaced with low energy LED light fittings and automation;
 - a combined heat and power system (CHP) was installed. The CHP unit uses gas to generate electricity which is used on site. This achieves carbon savings, because gas is currently 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;
 - building automation measures, including a new Building Energy Management System (BEMS), were installed to increase the level of control over the heating systems;
 - mechanical works were undertaken to improve the efficiency of the heating and hot water system; and
 - insulation of pipework and valves was carried out in plant rooms to reduce heat loss
 - the roof covering was replaced and additional insulation was installed.

- 4.5 The Council's contractors are currently developing Investment Grade Proposals (IGP) for potential carbon reduction projects to be delivered during 2019/20 and 2020/21 to further reduce energy consumption at the following sites: crematorium, Corn Exchange, Parkside Pool, Abbey Leisure Complex, Kings Hedges Pool and Cherry Hinton Village Centre
- 4.6 The Council is also working with contractors to develop a feasibility study to upgrade the lighting on housing estates in the city that the council is responsible for maintaining, to low energy LED lighting, including the council's estate street lights (approximately 600) and external communal lights (approximately 3000).

Emissions from the Council's vehicles and business mileage

- 4.7 During 2018/19 a number of measures were taken to reduce carbon emissions from the Council's vehicle fleet and employee travel as part of the Carbon Management Plan and other policies:
- Fleet vehicle replacement: 30 fleet vehicles were replaced with more efficient models at a cost of over £2.4 million. 1 electric panel van was purchased, bringing the total number of electric fleet vehicles to 10. A further 18 Euro 4 panel vans, 2 caged tipper trucks and 9 refuse trucks were replaced with Euro 6 emissions compliant vehicles. It is estimated that these replacement vehicles will reduce our carbon emissions by 30 tCO₂e.
 - Fleet review: The Council is currently carrying out a Fleet Review which will look in detail at the council's vehicle fleet usage. A three-month data collection period commenced in August 2019. It is hoped that ultimately the review will help identify the route to a wholly electric fleet and the timeframe in which this will be achieved.
 - Pool Bikes: To assist staff to travel to meetings and site visits in a sustainable way, 22 pool bikes are now available across the council's main sites for staff to book and borrow. 2 electric bikes were purchased in 2018/19, following the purchase of 2 electric bikes in 2017/18. These bikes are available for use by staff based at the Guildhall, Mandela House and 130 Cowley Road. When used instead of cars and vans for work trips, these bikes will help reduce

our fuel use and emissions, as well as providing health benefits to staff and helping to tackle congestion.

- Car Club Scheme: A new car club contract has been jointly procured by the council and the County Council in a joint tender, led by the city council (see 6.1 below for further details). As part of the scheme, Council staff can use the vehicles to attend meetings or make site visits if a vehicle is required, instead of bringing their own car into the city, reducing congestion and mileage. 75% of the car club vehicles are ultra-low emissions hybrid vehicles. The provider will establish an electric vehicle charging steering group with the aim of providing the infrastructure required to achieve a 100% electric vehicle fleet in the future.

Improvements to Commercial Properties:

- 4.8 The Council has developed a Commercial Property Energy Efficiency Plan, which aims to make all of its commercial property compliant with the Minimum Energy Efficiency Standards (MEES) Regulations. From April 2018, the regulations require that any vacant property that will be let in future must achieve an EPC (Energy Performance Certificate) rating of band E or better. From 1 April 2023, landlords must not continue letting a non-domestic property which is already let if it has an EPC (Energy Performance Certificate) rating below band E.
- 4.9 EPCs for each commercial property include a benchmark rating for typical existing stock. The council has a costed plan to achieve at least the benchmarked rating for every Council-owned commercial property that has an EPC. There are currently 114 properties that do not have an EPC. The Council has instructed assessors to complete 73 draft certificates by October 2019, with the remainder to be completed by early 2020 to inform upgrades as part of the Energy Efficiency Plan.

Additional Council carbon reduction actions

- 4.10 Other actions taken to improve the sustainability of the council during 2018/19 included:

- Since October 2016 the council has had a 100% green tariff from 100% renewable sources (solar, wind and hydro/wave energy) for all its electricity supplies.
- All budget bids and capital projects are rated as to their positive or negative impact on mitigation of and adaptation to climate change to help inform decision-making.
- All Council services were invited to put forward carbon saving ideas for the Council or their service area.

5. Progress in delivering the key actions under Objective 2

5.1 The Council has assisted residents and businesses to reduce their carbon emissions through a range of measures in 2018/19 to improve the energy efficiency of existing homes in the City, including:

- Making energy efficiency improvements to Council homes. The number of City Council properties with an energy efficiency rating of C or above has increased from 1,651 in 2016/17 to 1,977 properties in 2018/19. The current average EPC score across all properties is 71 (a C rating). This rating is higher than the average for all domestic properties, which is 60 (a D rating).
- Helping 228 households to install energy or water saving measures in 2018/19. 81 home visits were carried out in this period by the Council's Fuel and Water Poverty Officer.
- Including the Cambridge Sustainable Housing Design Guide (which uses standards which exceed national planning policy guidelines) in the brief and contract for all new City Council housing schemes. During 2018/19 construction started on 132 new City Council-owned homes at a number of different sites across the city, including Uphall Road (Romsey), Nuns Way and Wiles Close (Kings Hedges), Anstey Way (Trumpington), and Mill Road (Petersfield).
- Approving proposals to build 295 new sustainable homes, including 118 new council homes, on the former Ridgeons site off Cromwell Road in Romsey in June 2019. The homes will be built in line with standards in the Cambridge Sustainable Housing Design Guide, incorporating features such as: green roofs; sustainable urban

drainage; denser insulation and wall thickness to minimise heat loss; and photovoltaic panels on roofs of houses and apartments.

- Funding Cambridge Carbon Footprint through the Council's Sustainable City Fund to deliver a range of activities, including: 2 Open Eco Homes days allowing 218 residents to visit 10 homes where carbon reduction measures have been installed; 5 energy saving workshops attended by 131 people; and training 39 people to use thermal imaging equipment at 4 sessions.
- Hosting a training session for small and medium sized businesses (SME) to help them identify energy efficiency opportunities and apply for energy-related grant funding. The workshop was delivered by the Carbon Trust and the Business Energy Efficiency Cambridge and Peterborough (BEECP) programme. Following the event, BEECP awarded a grant of £18,000 to Kelsey Kerridge Sports Centre to replace the main sports hall lighting with LED alternatives.

5.2 The Council has continued to use the opportunities that exist within the current national planning policy framework and building control regulations to mitigate the impacts of new developments on climate change. For example, in 2018/19 and 2019/20:

- The Council adopted a policy on consequential improvements in its 2018 Local Plan, which was implemented in October 2018. Under the policy, any planning applications for extensions to existing homes or the conversion of ancillary residential floor space to living accommodation are required to include cost-effective improvements to the energy efficiency of the existing home (such as cavity wall insulation, loft insulation, upgrading of boilers and heating controls and draft proofing measures) where these have not already been installed.
- The Greater Cambridge Shared Planning Service developed the Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (SPD). Consultation on the SPD took place until 23 September 2019, and it is currently being finalised for adoption. The SPD will help implement climate change and sustainable design and construction policies including in the 2018 Cambridge Local Plan. It sets out the information that should be

submitted with planning applications to demonstrate how schemes meet the Councils requirements.

- 3C Building Control (a partnership between Cambridge, Huntingdon and South Cambridgeshire Councils) provided advice to domestic and commercial applicants on energy efficiency and sustainability requirements in the building control process. To raise awareness of how development can mitigate climate change, the team participated in a number of events in partnership with the University of Cambridge, the Good Homes Alliance and local architects.

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

6.1 The Council took a number of steps in 2018/19 to improve transport infrastructure, increase the sustainability of transport, and encourage residents to shift to more sustainable modes transport, such as bus travel and cycling. These actions included:

- Installing new rapid electric charging points for taxis using funding from the government's Office for Low Emission Vehicles (OLEV) and a financial contribution from the Council to encourage the take-up of low-emissions electric taxis. 6 charge points have been installed to date (at Adam and Eve Car Park, Arbury Court and Newmarket Road). In total up to 21 rapid charge points will be installed through the project, including the completion of charge points at Castle Hill car park and Eddington in autumn 2019. The conditions of the OLEV grant require that these charging points are to be used by taxis only for the first 3 years, but after this period residents will be able to use the charging points.
- Changing taxi licensing regulations and introducing incentives for taxi operators to encourage the shift from diesel vehicles to low or zero-emission alternatives. Together with the installation of charging points, this has contributed to an increase in the number of fully electric taxis operating in Cambridge from 2 in 2017/18 to 30 in 2018/19. There are now a total of 87 electric (zero emissions) and hybrid (low emission) taxis licenced in the city.

- Developing an Electric Vehicle and Infrastructure Strategy which identifies how the Council and its partners, including Cambridgeshire County Council, can help to increase the number of electric charging points available to the public within the city. As part of this, the Council is currently looking into options to increase the provision of charging points within Council car parks for all electric vehicle users.
- Procuring a new car club scheme jointly with Cambridgeshire County Council, which allows residents to hire vehicles for short periods, reducing the need for private car ownership or for employees to bring their car into the city for work purposes. 75% of the car club vehicles are ultra-low emissions hybrid vehicles and the provider will establish an electric vehicle charging steering group with the aim of providing the infrastructure required to achieve a 100% electric vehicle fleet in the future.
- Undertaking a feasibility study into the development of a Clean Air Zone for Cambridge in partnership with the Greater Cambridge Partnership (GCP). If the scheme was implemented, it would place significant restrictions on the use of diesel buses, taxis, delivery vehicles and private cars within the Zone.
- Increasing cycle parking provision, by providing 55 new stands with 110 parking spaces across a number of sites. This included: 27 new stands and 2 cargo bike parking bays at Queen Anne Terrace car park; a new cycle parking area on East Road; and increased cycle parking provision at Jesus Green Lido to meet demand from increased usage of the pool during warmer months.
- Through our partnership in the GCP, delivering improved cycle routes across the city, such as improvements to Hills Road (including improvements to the Hills Road/Long Road junction), Arbury Road (raised cycle routes), Green End Road (kerb-segregated cycle routes), Fulbourn Road (raised cycle lanes, widened shared use paths and improved crossings), Fen Ditton (improved paths and crossings) and initial work on the Chisholm Trail.
- Installing smart information screens in the reception areas at the Guildhall and Mandela House, which feature live bus and train updates and other travel information, helping staff and customers to plan their journeys and use sustainable modes of transport. The

screens were developed by GCP, Smart Cambridge and the University of Cambridge. There are also existing smart panels at Cambridge Station, the central library, Shire Hall and the City Council's Cowley Road offices.

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

7.1 The Council delivered or funded a number of activities in 2018/19 to encourage and support residents and businesses to reduce their consumption of resources, increase recycling and reducing waste. These actions include:

- Promoting recycling to residents, including through face-to-face talks and presentations, social media, leaflets and magazines. This campaign by the Greater Cambridge Shared Waste Service has helped to increase the Greater Cambridge recycling rate to over 50% and reduce the amount of recycling contamination by nearly 3%.
- Collecting bulky waste at 15 community days across the city, including 6 in areas of the city with higher levels of deprivation, The bulky waste collected at the community days ranged from 7.14 tonnes collected at Queen Edith's (of which 4.36 tonnes was recycled) to 20.3 tonnes collected at Thorpe Way (of which 6.3 tonnes was recycled). The Shared Waste Service also supports the British Heart Foundation to collect items from students at the end of term and the service will again be working with Arthur Rank Hospice to promote the collection of Christmas trees in January 2019.
- Encouraging local businesses to recycle more of their trade waste and leading the Cambridgeshire and Peterborough Waste Partnership (RECAP) to help resolve current challenges.
- Funding a series of 6 composting workshops across the city through the Council's Sustainable City Fund, which support environmental projects led by voluntary and community groups. Garden Organic delivered the 2 hour workshops, which explained how to compost and informed attendees of available waste collection services.
- Funding Cambridge Carbon Footprint through the Council's Sustainable City Fund to run a series of waste reduction events as

part of their Circular Cambridge project. These included Cambridge's first Sustainable Fashion Festival in November 2018, which was attended by 850 people. Activities at the event included: a sewing repair café, a swish (clothes swap), an upcycling Christmas jumper workshop, styling workshops, a sustainable clothing pop-up market, and a workshop exploring the circular economy and overconsumption.

- Continuing to support the Cambridge Sustainable Food Network to work towards the Sustainable Food Cities Network's Silver Award for Cambridge, including through the adoption of a Sustainable Food Policy Statement for the Council and associated actions in July 2018. During 2018/19 the Council also funded Cambridge Sustainable Food to work with 10 local food businesses and organisations to help them to monitor and reduce their food waste.
- Working with local churches (including Barnwell Baptist Church, Church of the Good Shepherd, Christ the Redeemer, and St Thomas's) to provide a total of 2,737 free lunches for families during the school holidays in city council community centres and local churches. The holiday lunches group have agreed to ensure that wherever possible they: minimise flight and journey miles for vegetables used in the lunches; ensure they have no food waste and distribute any leftovers; and try to reduce use of meat and dairy products and use more vegetable products where possible.

7.2 The Council delivered or funded a number of activities in 2018/19 to encourage and support Council staff, residents and businesses to reduce single-use plastics, including:

- Supporting the national Refill campaign, which promotes use of free drinking water taps to help reduce plastic waste. The council promoted the 100 plus drinking water taps in Cambridge which can be found on the Refill app, including free drinking taps and fountains provided by the Council such as the new drinking water fountain installed at Parkers Piece, the kiosk on Christ's Pieces, the drinking tap at the Market Square, and Cherry Hinton Village Centre.

- Reducing plastics usage at Cambridge Folk Festival. The festival is accredited as an outstanding Greener Festival, and for a number of years the festival has required traders to use bio-degradable consumables (cutlery, cups, straws etc.) and not to offer plastic bags and single serve condiments to customers. Reusable polycarbonate glasses rather than plastic glasses are used at the festival's bars and in 2019 no single use plastic bottles were to be sold or provided to staff/artists on site.
- Reducing plastics usage at the 2019 Big Weekend event by: providing additional drinking water stand pipes for the public; provided free refillable water bottles for the public, staff and artists in partnership with Cambridge Water; using returnable recyclable pint cups and a deposit scheme at the onsite bar; requiring no plastic water bottles to be offered or used backstage; using reusable cable ties, fabric banners, and chalkboard signage; and a marketing campaign to encourage the public to take litter home, and to use refillable water bottles and re-usable coffee cups.
- Funding Cambridge Eco-Living Initiative through the Council's Sustainable City Fund to deliver an event at the Judge Business School focussed on helping local businesses to reduce plastic waste, which was attended by 17 SMEs.
- Removing plastic drinking cups from the Guildhall drinking water fountains and replacing them with glasses for the meeting and committee rooms.
- Making re-usable water bottles available for staff who work externally and do not have regular access to kitchens in the main Council buildings. Staff are encouraged to make use of the free Refill drinking water points in the city to refill their bottles.

7.3 The Council has been approached by Shepreth Wildlife Park to sign the Cambridge Plastic Pledge. A proposed response to the pledge is included at Appendix A for approval. The response details the actions the council has already taken to reduce the use of plastic at question 5, and the further changes it will look to make, at question 8.

8. Progress in delivering the key actions under Objective 5:

8.1 The Council has taken a number of actions in 2018/19 to support Council services, residents and businesses to adapt to the impacts of climate change, including:

- Declaring a biodiversity emergency in May 2019. During 2019/20 the Council will undertake a number of new actions to promote biodiversity, including: making the Council estate, including parks and open spaces more hospitable to a wide range of plants and animals; publishing a Parks Biodiversity Toolkit to encourage community engagement with habitat creation, such as flowering meadows for pollinating insects; and prioritising particular open spaces for protection and enhancement.
- Creating additional perennial meadows at Parkers Piece, Histon Recreation Ground and Arbury Park, which reduce the need for mowing and watering and increase biodiversity in the city's parks and open spaces. The council's annual bedding contract expires in 2019 and will be reverted to perennial or annual flowering meadows.
- Applying the water efficiency policy included in the 2018 Local Plan. 18 new residential schemes have been required to implement water efficiency measures to limit water consumption to 110 litres per person per day. 13 new non-residential schemes have achieved a 40% reduction in water use and 2 non-residential schemes have achieved a 50% reduction in water use.

9. Implications

(a) Financial Implications

Funding for projects included in the Carbon Management Plan comes from a number of different funding sources, including the Council's Climate Change Fund and existing General Fund or Housing Revenue Account (HRA) budgets for delivering services. The Climate Change Fund was established in 2008 to fund measures that will reduce the carbon footprint of the Council's buildings, fleet and services. A total of £1,583,820 has been invested in the Climate Change Fund since 2008/09. This includes a total of £250,000 added to the fund in 2018/19 and £100,000 in 2019/20.

A full break down of all expenditure and savings from the Fund is provided in Appendix (d). This shows that, to the end of 2018/19, a total of 43 projects have been supported by the Fund, representing a total investment of £1,113,854. The balance of the Fund as of March 2019 was £469,966. The projects delivered to date in 2019/20 will result in the use of £299,494 from the Climate Change Fund, leaving a balance of £170,473 as at October 2019.

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

- Existing budgets for delivering 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 (such as OLEV funding for electric charging points for taxis).

(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 co-ordinate the overall delivery of the Climate Change Strategy and Carbon Management Plan, with support from the Environment Policy and Project Group, which is a corporate group that includes many of the lead officers.

(c) Equality and Poverty Implications

An Equalities Impact Assessment (EqIA) of the 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 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

Recent projects identified in the Carbon Management Plan (including LED lighting installations at the Grand Arcade Car Park and Grafton East Car Park, the Guildhall energy efficiency works and the programme of solar PV installations) have been delivered through the national REFIT framework. The Council has signed access agreements 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 the projects they have delivered for the Council (subject to the new equipment being managed within defined limits).

(f) Community Safety Implications

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

(g) 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) Details of Carbon Management Plan projects installed in 2018/19

- (b) Details of Carbon Management Plan projects installed, in progress or to be implemented, subject to further investigation, in 2019/20
- (c) Details of Carbon Management Plan projects to be installed/ implemented in 2020/21 subject to further investigation during 2019/20 and 2020/21
- (d) Climate Change Fund expenditure and savings up to August 2019
- (e) Response to Shepreth Wildlife Park's Cambridge Plastic Pledge

8. Inspection of papers

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

Appendix (a): Details of Carbon Management Plan projects installed in 2018/19

| No. | Service Area | Building Type | Project | Scheduled date/ expected month of delivery | Installation/ completion date | 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 | £54,544 | 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 |
| | Sport & Leisure | Leisure Facility | Abbey Leisure Complex: Replacement of astroturf floodlights with energy efficient LED lighting, new control gear and timers. | N/A | October 2018 | £65,560 | - | £65,560 | 42,672.00 | 15.0 | £4,690 | 14.0 |
| | Estates & Facilities | Office buildings | Guildhall EE Works: Secondary glazing installed | N/A | December 2018 | £29,337 | - | £29,337 | 5,658.67 | 1.0 | £170 | 172.8 |
| | Sport & Leisure | Leisure Facility | Parkside Pool – 50kW Solar PV Array | N/A | March 2019 | £74,450 | £74,450 | - | 47,314 | 14.5 | £6,676 | 11.2 |
| | Sport & Leisure | Leisure Facility | Abbey Leisure Complex – 30kW Solar PV Array | N/A | March 2019 | £47,374 | £47,374 | - | 25,661 | 7.9 | £4,293 | 11.0 |
| | Sport & Leisure | Leisure Facility | Kings Hedges Pool – 11kW Solar PV Array | N/A | March 2019 | £16,902 | £16,902 | - | 7,762 | 2.4 | £1,279.22 | 13.2 |
| | Commercial Services | Crematorium | Crematorium – 11kW Solar PV Array | N/A | March 2019 | £17,983 | £17,983 | - | 7,229 | 2.2 | £1,209.46 | 14.9 |
| | Estates & Facilities | Sheltered Housing | Whitefriars Court – 20kW Solar PV Array | N/A | March 2019 | £31,295 | £31,295 | - | 15,048 | 4.6 | £2,630 | 11.9 |
| | Estates & Facilities | Offices | Mandela House – 30kW Solar PV Array | N/A | March 2019 | £46,708 | £46,708 | - | 28,571 | 8.8 | £4,779.99 | 9.8 |
| | Shared Waste | Waste Depot | Waterbeach Shared Waste Depot - 30kW Solar PV Array | N/A | March 2019 | £18,200 | £18,200 | - | 9,560.50 | 2.9 | £1,457 | 12.5 |
| 2 | Estates & Facilities | Office buildings | Guildhall EE Works: Install 30kW solar photovoltaic system | N/A | March 2019 | £33,180 | £33,180 | - | 24,450.00 | 7.5 | £4,257 | 7.8 |

| 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) |
|---------|--------------|---------------|---|--|-------------------------------|----------------------------|--------------------------------------|---|---------------------------------------|---|--|-----------------|
| | Fleet | Vehicles | Vehicle Fleet: Replacement of fleet vehicles with electric vans and fuel efficient vans and truck. 19 panel vans were replaced in Estates & Facilities. 1 of these was electric. The other 18 Euro 4 vehicles were replaced with Euro 6 emissions compliant vehicles. 9 refuse trucks were replaced in Shared Waste Service (Euro 6). 2 caged tippers were replaced in Streets & Open Spaces. | N/A | March 2019 | £2,436,000 | - | £2,436,000 | N/A | 30.0 | - | - |
| TOTALS: | | | | | | £3,026,989 | £349,636 | £2,681,897 | 348,890 | 136.5 | £38,941 | |

Appendix (b): Details of Carbon Management Plan projects installed, in progress or to be implemented, subject to further investigation, in 2019/20

| 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 | | | | | | | | | | | | |
| | Estates & Facilities | Office buildings | Guildhall EE Works: 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). | N/A | May 2019 | £37,785 | £37,785 | - | 174,497.45 | 32.5 | £5,196 | 7.3 |
| 1 | Estates & Facilities | Office buildings | Guildhall EE Works: Replacement of roofing and additional insulation | N/A | May 2019 | £100,502 | - | £100,502 | 60,980.00 | 11.2 | £1,765 | 50.0 |
| 14 | Estates & Facilities | Office buildings | Guildhall EE Works: Replace more than 670 existing light fittings with low energy LED light fittings and automation | N/A | May 2019 | £76,731 | £76,731 | - | 76,528.00 | 29.4 | £8,081 | 9.5 |

| | | | | | | | | | | | | |
|---------------------|----------------------|---|---|----------------|------------|-----------------|----------|-----------------|--|------------|-----------|----------|
| 10 | Estates & Facilities | Sheltered Housing | Whitefriars: Replace communal lighting with LED equivalent | N/A | May 2019 | £13,753 | - | £13,753 | 13,602 | 5.17 | £1,496.22 | 5.9 |
| | | | Rawlyn Court: Replace communal lighting with LED equivalent | N/A | May 2019 | £15,468 | - | £15,468 | 9,399 | 3.58 | £1,033.89 | 10.1 |
| 15 | Estates & Facilities | Office buildings | Guildhall EE Works: Mechanical works to improve the energy efficiency of the heating and hot water systems. | N/A | June 2019 | £46,945 | £46,945 | - | 89,659.00 | 16.5 | £2,496 | 18.8 |
| | Estates & Facilities | Office buildings | Guildhall EE Works: Insulation of pipework and valves in plant rooms. | N/A | July 2019 | £7,778 | £7,778 | - | 24,597.00 | 4.5 | £712 | 10.9 |
| IN PROGRESS | | | | | | | | | | | | |
| | Estates & Facilities | Office buildings | Mandela House Ground Floor: LED lighting upgrade | September 2019 | TBC | £29,505 | - | £29,505 | 15,339 | 5.83 | £1,687.26 | 2.04 |
| | Progress | Currently under installation (August 2019) as part of RE:FIT 3 Phase 1. | | | | | | | | | | |
| | Estates & Facilities | Office buildings | Guildhall EE Works: Installation of a Combined Heat and Power (CHP) unit | September 2019 | 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 2 framework. Installed and due to be commissioned. | | | | | | | | | | |
| | <i>Fleet</i> | <i>Vehicles</i> | Vehicle Fleet: Replacement of fleet vehicles with fuel efficient vans and trucks. | <i>TBC</i> | <i>TBC</i> | <i>£662,000</i> | <i>-</i> | <i>£662,000</i> | <i>N/A</i> | <i>TBC</i> | <i>-</i> | <i>-</i> |
| | <i>Progress</i> | <i>8 vehicles in Estates & Facilities will be replaced with Euro 6 emissions compliant vehicles and plant equipment (tractors etc.) which will be more fuel efficient. 6 vehicles in Streets & Open Spaces will be replaced, including x1 hybrid van. 1 vehicle and 1 truck will be replaced in Shared Waste. 1 further Estates & Facilities van is likely to be replaced with an electric van.</i> | | | | | | | | | | |
| UNDER INVESTIGATION | | | | | | | | | | | | |
| 13 | Estates & Facilities | Temporary Housing | New Street Hostel: 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 | TBC | TBC | £4,000 | - | TBC | 1,730.89 | 0.8 | £500 | 0.8 |

| | | | | | | | | | | | | |
|--|----------|--|-----------------|--|---------|------------|----------|----------|---------|-------|---------|--|
| | | | Chesterton Road | | | | | | | | | |
| | Progress | Will be included in the Investment Grade Proposal being prepared by the contractor as part of RE:FIT 3 Phase 2a. | | | | | | | | | | |
| | | | | | TOTALS: | £1,059,247 | £234,019 | £762,502 | 442,388 | 124.3 | £29,598 | |

Appendix (c): Details of Carbon Management Plan projects to be installed/ implemented in 2020/21 subject to further investigation during 2019/20 and 2020/21

| 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 | Corn Exchange: Heating (boilers and air plant) and lighting improvements | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC |
| | Progress | Feasibility of possible measures to be investigated as part of RE:FIT 3 Phase 2a Investment Grade Proposal, being carried out by Bouygues in 2019-2020. | | | | | | | | | | |
| | Commercial Services | Crematorium | Crematorium: Heating and ventilation improvements/ Building Energy Management System (BEMS), LED lighting, insulation | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC |
| | Progress | Feasibility of possible measures to be investigated as part of RE:FIT 3 Phase 2a Investment Grade Proposal, being carried out by Bouygues in 2019-2020. | | | | | | | | | | |
| | Sport & Leisure | Leisure Facility | Parkside Pool: Heating, ventilation and lighting improvements | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC |
| | Progress | Feasibility of possible measures to be investigated as part of RE:FIT 3 Phase 2b Investment Grade Proposal, being carried out by Bouygues in 2019-2020. | | | | | | | | | | |
| | Sport & Leisure | Leisure Facility | Abbey Leisure Complex: Heating, ventilation and lighting improvements | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC |
| | Progress | Feasibility of possible measures to be investigated as part of RE:FIT 3 Phase 2b Investment Grade Proposal, being carried out by Bouygues in 2019-2020. | | | | | | | | | | |
| | Sport & Leisure | Leisure Facility | Kings Hedges Learner Pool: Heating, ventilation and lighting improvements | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC |
| | Progress | Feasibility of possible measures to be investigated as part of RE:FIT 3 Phase 2b Investment Grade Proposal, being carried out by Bouygues in 2019-2020. | | | | | | | | | | |
| | Sport & Leisure | Leisure Facility | Cherry Hinton Village Centre: Heating, ventilation and lighting improvements | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC | TBC |
| | Progress | Feasibility of possible measures to be investigated as part of RE:FIT 3 Phase 2b Investment Grade Proposal, being carried out by Bouygues in 2019-2020. | | | | | | | | | | |

Appendix D - Climate Change Fund expenditure and savings up to August 2019

| Year | Project Location and Type | Cost (£) | Estimated Annual Saving (£) | 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 | 15,400 | | (184,770) |
| | Market Stall LED lighting | 12,030 | n/a | | |
| | Market Stall LED lighting -Balance Returned to Fund | (12,030) | n/a | | |
| | Tree Canopy Study | 10,870 | n/a | | |
| | Community Centres energy efficiency measures | 9,800 | n/a | | |
| | Heat recovery at the Crematorium | 11,600 | 2,600 | | |
| | Water and energy saving measures in changing rooms at Parkside Pool | 35,000 | 10,300 | | |
| | LED audit of multi-storey car park lighting | 5,420 | n/a | | |
| | Refund from Power Perfector for Voltage Optimisation at Guildhall | (1,044) | n/a | | |
| | Total Spend: | 171,646 | | (396,269) | |
| 2012/13 | LED Lighting at the Grand Arcade Annex Car Park | (5,900) | n/a | | (129,050) |
| | Tree Canopy Study | 4,130 | n/a | | |
| | LED audit of multi-storey car park lighting | 1,080 | n/a | | |
| | CM Plan Ref 22: Corn Exchange LED House Lights | 25,700 | 4,500 | | |
| | CM Plan Ref 12: Abbey VSD and BMS (38177) | 24,650 | 20,200 | | |
| | CM Plan Ref 16: Parkside VSD and BMS | 42,640 | 20,000 | | |
| | CM Plan Ref 15: Pool covers for Abbey and Parkside & consequent changes to heating system | 23,270 | 11,400 | | |
| | 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 | 3,800 | | |
| | CM Plan Ref 11: Voltage Optimisation at Grafton East Car Park. Including additional £900 for Parkeon to be onsite. | 13,921 | 2,100 | | |
| | CM Plan Ref 30: Upgrade to LEDs & lighting controls in Grafton West Car Park | 30,000 | 3,100 | | |
| | Voltage Optimisation rebate for Mandela House and Grafton East Car Park | (3,232) | n/a | | |
| | Total Spend: | 62,649 | | (347,100) | |
| 2016/17 | Grand Arcade Main Car Park - Replace existing lighting with LED. | 189,227 | 27,300 | | (120,000) |
| | Grafton East Car Park - Replace existing lighting with LED. | 131,771 | 18,850 | | |
| | Crematorium - Upgrade loft insulation. | 1,478 | n/a | | |
| | 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 | 5,300 | | (300,000) |
| | Total Spend: | 40,000 | | (404,624) | |
| 2018/19 | Mandela House - Replace existing lighting with LED and combined motion/light sensors. | 54,544 | 5,000 | | (250,000) |
| | Mandela House - Upgrade to condensing boiler and pipework and valve insulation | 9,000 | 2,500 | | |

| | | | | | |
|----------------|---|----------------|--------|------------------|-----------|
| | Guildhall - Building automation. Implementation of a number of measures to increase the level of control over the heating systems, including installing a BEMS. | | 5,200 | | |
| | Guildhall - Replace more than 670 existing light fittings with low energy LED light fittings and automation | 202,914 | 8,100 | | |
| | Guildhall - Mechanical works to improve the energy efficiency of the heating and hot water systems. | | 2,500 | | |
| | Guildhall - 30kW solar photovoltaic system | | 2,600 | | |
| | Guildhall - Insulation of pipework and valves in plant rooms. | | n/a | | |
| | Waterbeach Shared Waste Depot - 29.7kW solar PV | | 18,200 | 1,457 | |
| | Total Spend: | 284,658 | | (369,966) | |
| 2019/20 | Parkside Pool – 49.7kW solar PV array | 74,450 | 4,731 | | (100,000) |
| | Abbey Pool – 29.7kW solar PV | 47,374 | 2,566 | | |
| | Kings Hedges Pool – 8.53kW solar PV | 16,902 | 776 | | |
| | Crematorium – 9.45kW solar PV | 17,983 | 723 | | |
| | Whitefriars Court – 17.6kW solar PV | 31,295 | 1,505 | | |
| | Mandela House – 29.7kW solar PV | 46,708 | 2,857 | | |
| | Guildhall - Installation of a Combined Heat and Power (CHP) unit. | 64,779 | 6,600 | | |
| | Total Spend: | 299,491 | | (170,473) | |

Appendix (e) Response to Shepreth Wildlife Park's Cambridge Plastic Pledge

Cambridge Plastic Pledge

www.swccharity.org/cambridge-plastic-pledge/

We have teamed up with *Visit Cambridge* and *Great Days Out In & Around Cambridge* to bring you the *Cambridge Plastic Pledge*.

Many companies are already taking great steps to help reduce the amount of single-use plastic they use. It is estimated that approximately 12 million tonnes of plastic ends up in our oceans every year harming marine life and everything else up the food chain, including us.

Becoming plastic-free is a difficult task, but making small changes can be achievable, and adding together all these small changes create BIG change. We are asking every business and organisation in Cambridge to just make one small change this year, so we can all become part of the bigger solution to a better planet.

If your company or organisation would like to sign up to the *Cambridge Plastic Pledge* and make just one positive change this year, please visit this link: www.surveymonkey.com/r/TVK2WYZ

Let's make the change today, so our children can have a tomorrow.

Question Title

1. Type of business or organisation

OK

Question Title

2. How concerned are you about plastic in our oceans?

- Extremely concerned
- Very concerned
- Slightly concerned
- Not at all concerned

OK

Question Title

3. Did you know Europeans generate 25m tonnes of plastic waste, but less than 30% is recycled?

- Yes
- No

OK

Question Title

4. Which single-use plastic items does your business / organisation use most of?

- Plastic straws
- Plastic water bottles**
- Coffee cups with plastic lids
- Plastic bags
- Plastic cutlery
- Plastic party cups
- Plastic takeaway containers
- Balloons
- Yoghurt / milk cartons**
- Sellotape**

OK

Question Title

5. What changes have you already made to reduce single-use plastic at work?

- None so far
- Please see my changes below

Estates & Facilities (The service incorporates responsibility for the provision of facilities management services in the council's primary office accommodation buildings and management of the depot): The Facilities Team do not use bubblewrap. Cleaning supplies are purchased in bulk in 5 litre tubs where possible such as hand soap for the dispensers which are refillable.

Main Council Office Buildings: Plastic drinking cups were removed from the Guildhall drinking water fountains in 2019 and replaced with glasses for the meeting and committee rooms and are not provided at City Homes Offices, 130 Cowley Road or Mandela House following its refurbishment.

Outdoor working council staff: Re-useable water bottles for council staff have been made available to those who work externally and do not have regular access to the main sites' kitchens. Staff are encouraged to make use of the over 100 free Refill drinking water points in the city to refill their bottles. The council works to promote the national Refill initiative to residents, businesses and visitors to the city.

Clay Farm Community Centre: Plastic party cups have been replaced with reusable hard plastic beakers which are washed at the end of each day and reused. Glue and sticky putty is used wherever possible instead of sellotape.

Leisure Centres (Provide swimming and sports facilities at Parkside Pool, Kings Hedges Learner Pool, Abbey Leisure Complex, Cherry Hinton Village Centre): Plastic bags previously used for 'goody bags' for sports development events have been replaced with reusable tote bags. Single use plastic cutlery has been removed/reduced wherever possible. The leisure sites sell re-useable coffee cups and offer a discounted hot drink if customers use these or bring their own re-useable cup. Plastic coffee cup lids are not automatically provided and water is available at all the centres for service users to fill their own bottles.

Cambridge Live/ Event Venues (Includes the Corn Exchange, Folk Festival and Big Weekend): Plastic straws are not used in the council's venues. Cambridge Folk Festival is accredited as an outstanding Greener Festival. In terms of plastics at the festival, the following has been in place for a number of years:

- 1. Traders are required to use bio-degradable consumables (cutlery, cups, straws etc.)*
- 2. Traders must not offer single serve condiments*
- 3. Traders must not provide plastic bags to customers*
- 4. No single use plastic bottles to be sold or provided to staff/artists on site – newly implemented in 2019*
- 5. No single use plastic glasses are used at the bars – they are reusable polycarbonate glasses*

Markets: The Charter Market Regs were amended in 2018 to require hot food and drink traders to not use single use plastics to dispense the food and drink that they sell.

Supported Housing (The council's sheltered housing schemes are predominantly for people aged over 60 who wish to carry on living independently but who require some support in order to do so): The service does not use straws or plastic cutlery at their centres, only metal. If there is a point where a resident needed different cutlery (or needed a straw because of problems swallowing for example) they would look for alternative products that do not contain plastic. Plumbed in water coolers are used as opposed to water bottles. Food is delivered to residents in metal/ ceramic dishes, and larger bottles of condiments as opposed to single sachets are used.

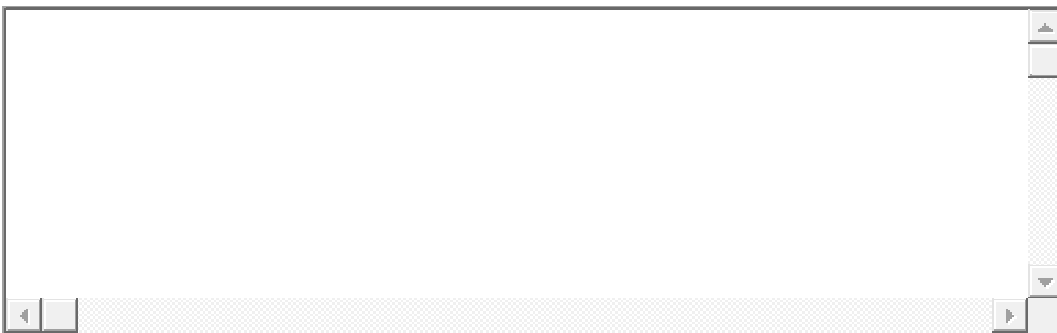
An empty text input field with a light gray background and a thin border. It features a vertical scrollbar on the right side and a horizontal scrollbar at the bottom, both with standard arrow and track icons.

OK

Question Title

6. What brands / companies do you use to supply your business with plastic-free alternatives?

- N/A
- Please see my list below

An empty text input field with a light gray background and a thin border. It features a vertical scrollbar on the right side and a horizontal scrollbar at the bottom, both with standard arrow and track icons.

OK

Question Title

7. Would you like to sign your company / organisation up to the *Cambridge Plastic Pledge*?

We will hold your contact details until 31st December 2019. All contact data will be deleted after this date. If you do not wish to leave your contact details on this survey, but would like to be involved in this pledge, please email us at swcc@sheprethwildlifepark.co.uk

No

Yes, I would like to sign up and will answer Q.8

My company/organisation name and email address is below.

Cambridge City Council. sustainablecity@cambridge.gov.uk

OK

Question Title

8. I promise to make the following change to my business / organisation before 31st December 2019.

- I will replace plastic straws with paper or no straws
- I will replace bottled water for canned or carton water
- I will replace plastic forks, knives and spoons for wooden or similar alternatives
- I will replace Sellotape with masking tape
- I will replace plastic party cups with re-usable cups or cups made from plastic, which can be recycled
- I will replace plastic Bubblewrap with a paper alternative
- I will order supplies in bulk
- I will replace plastic individual portions with large re-fillable alternatives for customer use
- Other (please specify)

The council is committed to reducing its use of single-use plastic and where possible will change to re-usable or biodegradable alternatives.

The council will work with event organisers to reduce or eliminate the use of single use plastics at events on our parks and open spaces and at our venues, including the Corn

Exchange and will explore if the council can further reduce its use of single-use plastic through catering and other contracts.

The leisure provider will look to remove blue overshoes and introduce flip flops that people can keep in their swim kit bags instead of using the blue plastic overshoes which are provided to reduce contamination in the changing rooms and poolside. They are looking to run a trial before the end of the year at Abbey Leisure Complex to look to remove or heavily reduce the use of blue overshoes at the centres.

OK

Question Title

9. I would like to attend the launch of the *Cambridge Plastic Pledge* at Shepreth Wildlife Park and receive a £50 entrance ticket gift voucher as a thank you for my company's / organisation's commitment to the environment.

I would not be able to attend, but would still like to make my pledge and receive my entrance gift voucher

I would love to attend and have listed the names of my two guests below

OK

Question Title

10. Thank you for signing up to the *Cambridge Plastic Pledge*. If you would like to receive the electronic SWCC (Shepreth Wildlife Conservation Charity) *Cambridge Plastic Pledge* information pack, please let us know here.

No thank you

Yes, please email to the address below