Cambridgeshire County Council

COUNCIL MEETING

AGENDA

19th December 2019

Shire Hall
Cambridge

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SMOKING

The Council operates a **NO SMOKING** policy in all areas of the Shire Hall site.

CAMBRIDGESHIRE COUNTY COUNCIL

NOTICE OF MEETING

The meeting of the County Council will be held at Shire Hall, Castle Hill, Cambridge on Thursday 19th December 2019 at 10.30a.m.

A G E N D A

Prayers led by the Reverend Lynda Davies, Rector of the Benefice of Cottenham with Rampton

Apologies for Absence

1. Minutes – 15th October 2019 (previously circulated)
[available at County Council meeting 15/10/2019]

2. Chairman's Announcements (oral)

3. Declarations of Interests (oral)

[Guidance for Councillors on declaring interests is available at http://tinyurl.com/ccc-conduct-code]

4. Public Question Time (oral)

To receive and respond to questions from members of the public in accordance with Council Procedure Rule 9.3.

5. Petitions (oral)

To receive petitions from the public in accordance with Council Procedure Rule 9.4.

6. Item for Determination from General Purposes Committee (oral)

Treasury Management Report – Quarter Two Update 2019-20

To consider the following recommendation arising from the General Purposes Committee meeting on 26th November 2019 (minute 211 refers):

Forward to Full Council for approval.

Note: a copy of the report discussed by the General Purposes Committee and the minutes of the meeting are available via the following link: General Purposes Committee

(a) Motion from Councillor Jocelynne Scutt

Cambridgeshire County Council notes:

1) Maintained nursery schools are some of the highest performing educational institutions in our education system. They offer an inclusive ethos together with experience in early intervention and effective support for children with special education needs and with a disability.

2) Importantly, nursery schools can transform lives, particularly for some of the most disadvantaged children in our community. Research shows that good early education is a huge factor in promoting social mobility and improving life chances of the most disadvantaged in our society.

3) With more and more children living in poverty, the more and more stark is the vital importance of supporting sustainable nursery school provision in every community, staffed by qualified teachers working alongside qualified support staff.

4) Despite their vital role and achievements, however, the future of maintained nursery schools is in jeopardy because the Government has so far failed to guarantee a third of their funding beyond summer 2020.

Cambridgeshire County Council therefore resolves to take the following steps to support Cambridgeshire Nursery Schools so as to maintain them for all Cambridgeshire children:

1. Write to the Prime Minister requesting that he:

    - take immediate steps to sustain Nursery Schools in Cambridgeshire;

    - adopt and publicise a long-term funding system that secures the future of maintained nursery schools.

2. Support maintained nursery schools in County Council area by postponing any decisions to close or restructure provision until details of the funding situation beyond summer 2020 are known.

3. Make the case for the extension of maintained nursery school provision in Cambridgeshire, given the highly effective and transformative role they perform.

[The Monitoring Officer advises that the motion relates to a matter for the Council to determine and that the motion is therefore in order as drafted]

(b) Motion from Councillor Steve Count

This Council acknowledges the role it can play in improving air quality throughout the County.

Having clean air to breathe is the basic building block in creating a healthy environment for everyone. There are “Hot spots” of poor air quality that impact health, particularly respiratory and cardiovascular disease in Cambridgeshire. Improvements in air quality in districts such as Fenland has not been replicated by other Councils elsewhere. These primarily include urban areas, particularly in Cambridge City and transport corridors such as the A14. In Cambridge city junctions such as Milton Road, or where there is a lot of standing traffic and buses e.g. Drummer Street.

A joint approach is needed to deliver improvements in air quality, but it is our firm belief that the policies we propose should be positive and not punitive, promoting behavioural change and technological advancement and not penalising those who are already at a disadvantage due to their economic circumstances or geography.

This Council believes that:

- The best way to improve Air Quality is to incentivise and prioritise positive measures and policies to effect change

- A substantial improvement to Air Quality can be

targeted through the actions below

- These recommendations will be well received by the General and commuting Public

This Council further believes that:

- Draconian charging solutions, such as Air Quality Charging and Congestion charging are at best a distraction, from implementing permanent and acceptable solutions.

- These types of additional taxation are not a solution and are not a necessary step at this point in time.

- The introduction of charging solutions, alienate the public we were elected to serve, increase social inequality and fail to follow evidence of good practice elsewhere.

There follows a series of recommendations which are based on the Conservative policy document, on Air Quality,

http://cllrstevecount.files.wordpress.com/2019/12/conservative-air-quality-policy-final-1.pdf

Cambridgeshire County Council will improve air quality throughout by:

<u>Increasing green canopy by:</u>

- Working with partners to locate, seek funding and plant at suitable locations, new hedges and trees, as well as technologically advanced “City Trees”, prioritising areas around schools, as well as green walls in appropriate County locations.

<u>Promoting the uptake of low emission vehicles by:</u>

- Consulting on the use of bus lanes for electric vehicles and motorcycles and scooters.

- Accelerate public transport to be early adopters of electric vehicles, by drawing up plans and consulting with stakeholders to deny access to Bus Lanes, with an aspiration to implement from the end of 2021.

- Lobby Cambridge City and other district partners to make available premium green licenses for taxis, and lobby the Traffic Commissioner to refuse non-green bus licenses for those that access Cambridge City centre

- Lobby Cambridge City Council to provide free parking

for electric vehicles, in their car parks.

Improving the alternative to the private motor car:

- Working with the Mayor and the Greater Cambridge Partnership to deliver the CAM metro.

- Continuing to expand the transport hub network, where you can leave your car and get on public transport.

- Continuing to improve the cycle way experience, throughout Cambridgeshire.

- Working with partners to sizeably increase the access to railways offer currently available.

Reducing air pollution at source by:

- Lobbying government for improved initiatives and for grants to help us pilot imaginative projects, such as Swaffham Prior heating and St. Ives solar park.

- Making improvements to our own fleet, and encouraging change in those we contract with

- Working with partners to develop plans for last mile delivery.

To incorporate these decisions into the environmental strategy consultation proposals if agreed by Council today.

[The Monitoring Officer advises that the motion relates to a matter for the Council to determine and that the motion is therefore in order as drafted]

13. Questions:

(a) **Cambridgeshire and Peterborough Combined Authority and Overview and Scrutiny Committee** (Council Procedure Rule 9.1) (pages 116-138)

(b) **Written Questions** (Council Procedure Rule 9.2) (oral)

To note responses to written questions from Councillors submitted under Council Procedure Rule 9.2.

Dated 11th December 2019

Fiona McMillan

Fiona McMillan

Monitoring Officer

The County Council is committed to open government and members of the public are welcome to attend this meeting. It supports the principle of transparency and encourages filming, recording and taking photographs at meetings that are open to the public. It also welcomes the use of social networking and micro-blogging websites (such as Twitter and Facebook) to communicate with people about what is happening, as it happens. These arrangements operate in accordance with a protocol agreed by the Chairman of the Council and political Group Leaders which can be accessed via the following link or made available on request: https://tinyurl.com/Filming-and-Recording

The Council cannot provide car parking on the Shire Hall site so you will need to use nearby public car parks. Details of other transport options are available on the Council's website at: http://tinyurl.com/ccc-carpark

For more information about this meeting, including access arrangements and facilities for people with disabilities, please contact Michelle Rowe at the County Council's Democratic Services on Cambridge (01223) 699180 or by email at: michelle.rowe@cambridgeshire.gov.uk

Agenda Item No:7

PROPOSED REVISIONS TO PART 3 OF THE COUNCIL'S CONSTITUTION

To:	**Council**
Meeting Date:	**19th December 2019**
From:	**Director of Governance and Legal Services and Monitoring Officer**
Electoral division(s):	**All**
Purpose:	**To consider proposed revisions to Part 3 of the Council's Constitution.**
Recommendation:	**That full Council:**

approves the amendments to the Constitution, as set out in Appendices 1 and 2.

	Officer contact:		***Member contact:***
Name:	Michelle Rowe	Name:	Councillor Lis Every
Post:	Democratic Services Manager	Chairman:	Constitution and Ethics Committee
Email:	michelle.rowe@cambridgeshire.gov.uk	Email:	lis.every@cambridgeshire.gov.uk
Tel:	01223 699180	Tel:	01223 706398 (office)

1. BACKGROUND

1.1 Part 3 of the Council's Constitution sets out the responsibility for functions as follows:

Part 3A – Responsibility for Functions
Part 3B – Committees of Council
Part 3C – Joint Committees
Part 3D – Scheme of Delegation to Officers
Part 3E – Shareholder Rights in LGSS Law Ltd.

2. MAIN ISSUES

Health and Wellbeing Board

2.1 An independent test of assurance has been carried out regarding the proposal for Cambridgeshire County Council and Peterborough City Council to move the role of Director of Adult Social Services (DASS) for both these Local Authority Areas, from the Executive Director for People and Communities to the Service Director for Adults and Safeguarding.

2.2 One of the areas of mitigation highlighted in the independent test of assurance is that the DASS is appointed as a member of the Health and Wellbeing Board. It is therefore suggested that the membership of the terms of reference of the Cambridgeshire Health and Wellbeing Board and the Cambridgeshire and Peterborough Health and Wellbeing Board Core Joint Sub-Committee be revised. It is proposed that the Executive Director: People and Communities and the DASS should exercise one shared vote on the Core Joint Sub-Committee in order to maintain the balance in membership with the Cambridgeshire Clinical Commissioning Group. **Appendix 1** sets out the proposed changes to the Constitution with additions in bold.

Scheme of Delegation to Officers

2.3 The Constitution contains delegations to officers in consultation with Members such as the one set out below:

Authority to exercise, in accordance with the relevant policies of the authority and within the budget allocated for the purpose, the powers of the County Council regarding the following issues within the County's administrative boundary. • For all districts except Cambridge City, authority to determine traffic regulation orders/statutory notices where the completion of the statutory consultation process results in objections, as per the relevant Highway, Road Traffic Regulation and Traffic Management legislation, with the exception of traffic regulation orders/statutory notices sought as part of a Greater Cambridge Partnership (formerly City Deal) Infrastructure scheme as defined in the Terms of Reference for Joint Development Control Committee for Cambridge Fringes	Assistant Director, Highways in consultation with the Local Members for all districts, except Cambridge City.

2.4 Policy and Service Committees will also on a regular basis delegate decisions to an officer in consultation with the Chairman/woman.

2.5 However, there is no reference in the Constitution to managing disputes when decisions are made. There may be occasions when a Local Member is reluctant to support the determination of a traffic regulation order in their Division.

2.6 It is therefore proposed to add clarification for managing such disputes in the Constitution. **Appendix 2** sets out the proposed changes with additions in bold.

Source Documents	**Location**
Constitution	https://www.cambridgeshire.gov.uk/council/council-structure/council-s-constitution/

12. CAMBRIDGESHIRE HEALTH AND WELLBEING BOARD TERMS OF REFERENCE

Introduction

The Cambridgeshire Health and Wellbeing Board (HWB) is established as a committee of the County Council under section 102 of the Local Government Act 1972. Its remit is to work to promote the health and wellbeing of Cambridgeshire's communities and its focus is on securing the best possible health outcomes for all residents.

Membership

- Five County Councillors
- Five nominated District Council representatives (supported by Senior District Council officer with Observer Status)
- Three representatives of the Clinical Commissioning Group (CCG) (nominated by the CCG Governing Body)
- One representative of the local HealthWatch*
- Director of Public Health*
- Executive Director: People and Communities*
- **Service Director: Adults and Safeguarding**
- Representative of Cambridge University Hospitals NHS Foundation Trust (CUHFT)
- Representative of North West Anglia NHS Foundation Trust (NWAFT)
- Representative of Papworth Hospital NHS Foundation Trust
- Representative of Cambridgeshire and Peterborough NHS Foundation Trust (CPFT)
- Representative of Cambridgeshire Community Services NHS Trust (CCS)
- Representative of the voluntary and community sector
- Representative of NHS Commissioning Board*

* Statutory members of the HWB. There is also a statutory requirement for at least one Local Authority Councillor, and at least one representative of the CCG, to be a member of the HWB.

12.2 CAMBRIDGESHIRE AND PETERBOROUGH HEALTH AND WELLBEING BOARD CORE JOINT SUB-COMMITTEE: TERMS OF REFERENCE

Membership

- Chairman/woman of Cambridgeshire and Peterborough Health and Wellbeing Boards
- Four representatives of the Clinical Commissioning Group (CCG) (nominated by the CCG Governing Body)
- One representative of the local HealthWatch
- Director of Public Health
- Executive Director: People and Communities**/Service Director: Adults and Safeguarding (*one vote only*)**

Aim: To drive forward and oversee joint commissioning and integration of specific NHS / upper tier local authority services.

Appendix 2

Part 3D - SCHEME OF DELEGATION TO OFFICERS

1. Introduction

This section describes the extent and nature of the authority delegated to officers to undertake functions on behalf of Cambridgeshire County Council. The delegations are made by either the Full Council or one of its committees.

2. General Principles

The Chief Executive and the Chief Officers, where they consider it necessary and expedient, may authorise officers within their respective service Directorates to undertake functions on their behalf. If such authorisations are made, the relevant Chief Officer shall prepare and maintain a written schedule of authorisations to be available for inspection by the Monitoring Officer and published on the Council's website.

Where an officer listed in this Scheme of Delegation is absent for any period, the Chief Executive may nominate in writing another officer to act in his/her place during their absence and shall make a record of all such nominations.

The Chairman/woman of the relevant committee may request an officer not to exercise their delegated power in any particular case and, if so, a report will be taken to the next available meeting of this committee for consideration.

Chief Officers shall agree with the Chairman/woman and Vice-Chairman/woman of the relevant committee the nature and level of information the committee requires regarding the exercise of officers' delegated powers.

Chief Officers shall exercise their delegated powers in accordance with any requirements of the Chief Executive.

General Delegation
The Chief Executive and Chief Officers/Directors are authorised to discharge all the functions of the authority within their areas of responsibility as defined below and subject to the General Conditions and Limitations set out below.

Conditions Relating to the Exercise of Delegated Authority

The exercise of functions delegated to officers under this scheme must comply with:

i) any legal requirement or restriction
ii) any relevant provision in the Council's Constitution
iii) the Council's policy framework and any other plans and strategies approved by the Council
iv) the relevant in-year budget
v) the relevant officers' code of conduct
vi) the Council's Financial and Contract Procedure Rules
vii) the requirements of the Openness of Local Government Bodies Regulations 2014 and any supporting guidance
viii) all other relevant policies, procedures, protocols and provisions.

Limitations to the Exercise of Delegated Powers

Officers in the exercise of functions delegated by this scheme may not:

i) make Key Decisions as defined in the relevant Council's Constitution unless it is specifically delegated to the officer. An officer making a Key Decision specifically delegated to him/her shall first consult with the Chairman/woman and Vice-Chairman/woman of the relevant committee before exercising such delegation.

ii) change or contravene policies or strategies approved by the Council or its committees or joint committees in the absence of specific delegated authority to do so

iii) create or approve new policies or strategies, in the absence of specific delegated authority to do so

iv) take decisions to withdraw public services, in the absence of specific delegated authority to do so

v) take decisions to significantly modify public services without consulting the appropriate committee chairman/woman and vice-chairman/woman before exercising the delegated power.

Consultation

Where an officer takes a decision under delegated authority on a matter which has significant policy, service or operational implications or is known to be politically sensitive, the officer shall first consult with the appropriate committee chairman/woman and vice-chairman/woman before exercising the delegated powers.

If the committee chairman/woman and vice-chairman/woman do not agree with the proposed officer decision, the decision will be taken to the next available meeting of the committee for consideration.

When exercising delegated powers, officers shall ensure that local Members are kept informed of matters affecting their divisions.

If consultation involves a Local Member who does not agree with the proposed officer decision, the officer taking the decision will then consult the chairman/woman of the relevant committee. If agreement cannot be reached, the decision will be taken to the next available meeting of the committee for consideration.

Agenda Item No:8

DRAFT CLIMATE CHANGE AND ENVIRONMENT STRATEGY AND ACTION PLAN

To:	**Council**
Meeting Date:	**19 December 2019**
From:	**Gillian Beasley, Chief Executive**
Purpose:	**To present a draft Climate Change and Environment Strategy, Action Plan and first Annual Carbon Footprint Report for public consultation 20th December – 31st January 2020.**
Recommendation:	**To approve the draft strategy, action plan and Annual Carbon Footprint for public consultation.**

	Officer contact:		***Member contact:***
Name:	Sheryl French	Name:	Councillor Steve Count
Post:	Project Director, MLEI	Chairman:	Chair of General Purposes Committee
Email:	Sheryl.french@cambridgeshire.gov.uk	Email:	steve.count@cambridgeshire.gov.uk
Tel:	01223 728552	Tel:	01223 706398

1. BACKGROUND

1.1. The Council declared a Climate Emergency as a result of Councillor Steve Count's Environment Motion in May 2019. The motion was passed unanimously, and committed the Council to the development of a Climate Change and Environment Strategy and Action Plan. It recognised that our natural and built environment is the most precious inheritance for which we act as caretakers for the next generation and that society is facing global challenges of population growth, climate change and equalisation of living standards not faced before at this scale.

1.2. In June 2019, Government legislated a net-zero carbon target for 2050 as a result of The Committee on Climate Change report 'Net Zero – The UK's contribution to stopping global warming'. This report identified that a net-zero Green House Gas (GHG) target for 2050 was needed to deliver on the UK's commitment signing up to the Paris Agreement.

1.3. The Council has collaborated with young researchers from Cambridge University Science and Policy Exchange (CUSPE) to develop a Carbon Footprint for Cambridgeshire and Peterborough, and projections to 2050. Their report, 'Net-Zero Cambridgeshire – What actions must Cambridgeshire County Council take to reach net zero carbon emissions by 2050?', was adopted as an evidence base by General Purposes Committee in October 2019. This report showed that Cambridgeshire and Peterborough communities produced 6.1 million tonnes of carbon dioxide equivalent (CO2e) in 2017, and that in order to deliver net-zero carbon emissions by 2050, all level of government and Cambridgeshire and Peterborough communities, will need to implement ambitious decarbonisation plans across all sectors.

1.4. In parallel, the Council's Energy Team has developed the Council's own organisational carbon footprint from which carbon emission reductions can be measured moving forward. The outcome of this work is presented as **Appendix A**.

1.5. The development of the draft Strategy and action has been supported by a cross-departmental Officer Steering Group and a politically representative, Member Advisory Group. This process has supported wider learning on carbon footprinting across the organisation, essential to embedding the principles of carbon reduction in services moving forward.

2. MAIN ISSUES

2.1 Carbon Footprint evidence. The CUSPE report shows that the largest share of greenhouse gas emissions across the county of Cambridgeshire is energy use in buildings (including housing, commercial, industrial and others) (48%), followed by transport (39%). Other sources are agriculture (7%), waste (2%) and land use, land use change and forestry[1] (4%).

2.2 The organisational carbon footprint of the County Council has been developed using the UK Government's Environmental Reporting Guidelines for Voluntary Greenhouse Gas reporting. This is based on an internationally recognised standards from the World Resource Institute and World Business Council. The Council emissions are coded under three categories: scope 1, scope 2 and scope 3

[1] Forestry by itself would be a negative number since trees absorb carbon dioxide out of the atmosphere.

where scope 3 is not under the direct control of the Council but where the majority of carbon emissions fall. The largest share of scope 3 emissions is waste treatment and disposal (61%), followed by buildings and utilities (including Council-maintained schools) (19%). In addition, there is a currently unknown quantity of other indirect emissions from purchased goods and services. Of the Council's direct (scope 1 and 2) emissions, the largest share is from energy use in our buildings, followed by transport. A full breakdown of the Council's carbon footprint and methodology is detailed in Appendix A and a breakdown of the Council's carbon emissions can be found in table 1, page 12.

2.3 *Vision and objectives.* Our vision is to deliver net zero carbon emissions for Cambridgeshire by 2050 in partnership with all stakeholders, whilst supporting our communities and Cambridgeshire's biodiversity and environmental assets to adapt and flourish as our climate changes. The purpose of the strategy is to provide a clear statement of the Council's climate change and environmental objectives and to set out how the Council will meet environmental sustainability and climate change challenges. It will describe how we will get our own house in order and how working together with our public sector partners and our communities will support the transformation needed across Cambridgeshire and beyond to tackle these challenges.

2.4 Our Objectives are to:

- Reduce greenhouse gas emissions to mitigate human-made climate change;
- Support our communities and biodiversity to adapt to a changing climate;
- Improve Cambridgeshire and Peterborough's Natural Capital for future generations;
- Empower Cambridgeshire communities and businesses to buy-into and support the delivery of the Strategy vision;
- Work with our public sector partners to join up policies and strategies across different levels of government to deliver net-zero carbon by 2050;
- Deliver our UK100 pledge for 100% clean energy for our communities by 2050.

2.5 *Key themes.* The Strategy has been developed around the three key themes of:

- Quantifying our carbon footprints to inform and deliver climate change **mitigation** through efforts to reduce or prevent carbon emissions;
- **Adaptation** to cope with the existing and future impacts of climate change;
- Enhancing and conserving **natural capital** such as wildlife, plants, air, water and soils.

2.6 *Sphere of influence.* The Strategy is for Cambridgeshire *County Council* (rather than the county of Cambridgeshire). The draft Strategy and Action plan recognise what is within the Council's direct control and what falls under its wider influence. It also recognises that we must work with public and private sector partners and our communities to deliver the decarbonisation of the county whilst also retaining a thriving environment.

2.7 *The Council has identified priority areas for action*.

For climate change mitigation (reducing the Council's carbon footprint) these are:

- Nearly zero energy buildings – improving energy efficiency, installing low carbon heating and other renewable energy.

- Transport – prioritising walking, cycling and public transport, and supporting electric vehicles.
- Waste management strategies to reduce carbon, and
- Afforestation – planting trees.

2.8 Our priority areas for climate change adaptation are:

- Effective adaptation plans and risk management strategies across all services;
- Resilience of our own buildings and staff;
- Our work in flood risk management, and
- Supporting vulnerable people in severe weather or temperatures.

2.9 Our priority areas for natural capital are:

- Restoring and/or creating natural habitats;
- Planning policy to reflect strategic and local objectives for countryside enhancement and green infrastructure, and
- Continued environmental stewardship as part of rural estate management.
- Reducing single use plastics from our goods and services

2.10 The strategy also includes priorities for working with partners in areas that are outside of the Council's direct control. The Draft Action Plan details what actions the Council is planning to take. See **Appendix C**.

2.11 Seven provisional targets have been identified in the Draft Strategy and Action Plan for approval (subject to feedback from the public consultation). Targets 1 to 5 are for the County Council to deliver and targets 6 and 7 will be in collaboration/shared with partners and communities. The provisional targets are:

1. To reduce the Council's organisational net carbon footprint for scopes 1 and 2 by 50% compared to 2018-19 levels, by 2023.

2. All Council Directorates to have implemented measures to ensure that their services are adapted to climate change in line with the National Adaptation Programme recommendations

3. 20% biodiversity net gain delivered across all property and land projects and all wildlife sites

4. Reduce the Council's scope 3 emissions by 50.4% (compared to 2018 levels) by 2030

5. 100% of Council strategies include policies that tackle Climate Change and natural capital enhancement by 2023

6. To sign up to a shared target with partners and the community to deliver 50.4% reductions of greenhouse gas emissions by 2030 for Cambridgeshire compared to 2018 levels.

7. To sign up to a shared target with partners and the community to deliver 100% clean energy and net zero-carbon for Cambridgeshire by 2050.

2.12 As part of the above, it is the intention that all buildings, owned and occupied, by the Council will be fossil fuel free (where possible) along with the Council's car and van fleet by 2025. This is included in the action plan.

2.13 *Public Consultation and Engagement*. A public consultation is ready to launch. In the run-up to this, letters have been sent to District/City and Parish Councils, residents associations and schools regarding the consultation and preparing key stakeholders to engage with us and provide feedback. A diary of events has also been planned which includes key officer and partner meetings and external meetings. The consultation and questionnaire will be coordinated through the website ConsultCambs: https://consultcambs.uk.engagementhq.com/climate-strategy which will be ready to go live on 20 December 2019.

Source Documents	**Location**
Net Zero Cambridgeshire, CUPSE Final report, October 2019	General Purposes Committee documents, October 2019
Climate Change: second national adaptation programme (2018 to 2023)	https://www.gov.uk/government/publications/climate-change-second-national-adaptation-programme-2018-to-2023
The Greenhouse Gas Protocol Corporate Accounting and reporting standard requirements	https://ghgprotocol.org/corporate-standard
HM Government Environmental reporting Guidelines, including streamlined energy and carbon reporting guidance, March 2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf
25 Year Environment Plan	https://www.gov.uk/government/publications/25-year-environment-plan

Appendix A – CCC Carbon Footprint Annual Report 2018-19

Appendix B – Draft Climate Change and Environment Strategy

Appendix C – Draft Climate Change and Environment Action Plan

Cambridgeshire County Council

Carbon Footprint Annual Report 2018-19

Contents

1 Introduction

1.1 What is a carbon footprint?

A carbon footprint is a measure of the greenhouse gases (GHGs) emitted into the atmosphere from sources in a specified region or organisation. It usually includes all relevant greenhouse gases, the most common of which is carbon dioxide (CO_2). Emissions of other GHGs such as methane (CH_4) or nitrous oxide (N_2O), are measured in 'carbon dioxide equivalent' (CO_2e), which takes into account the different global warming potential (GWP) of different gases. Quantities of GHGs are multiplied by their GWP to give results in units of carbon dioxide equivalent (CO_2e).

A number of gases contribute to climate change. The Kyoto Protocol – the international agreement addressing climate change - covers seven main GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and Nitrogen Trifluoride (NF_3).

Different activities emit different gases, for example, burning fossil fuels releases carbon dioxide, methane and nitrous oxide into the atmosphere. Fluorinated gases ("F-gases") are a range of man-made compounds (including HFCs, PFCs, SF_6 and NF_3) used in a variety of industries including refrigeration, air-conditioning and the manufacture of cosmetics, pharmaceuticals, electronics and aluminium. F-gases are extremely potent greenhouse gases with some having GWPs of several thousand or more[1]. The biggest source of greenhouse gas emissions in the UK is transport, closely followed by energy supply.

Nationwide, emissions of CO_2 make up 81% of GHG emissions, with the remainder from methane (11%), nitrous oxide (4%) and fluorinated gases (3%), when weighted by GWP (1).

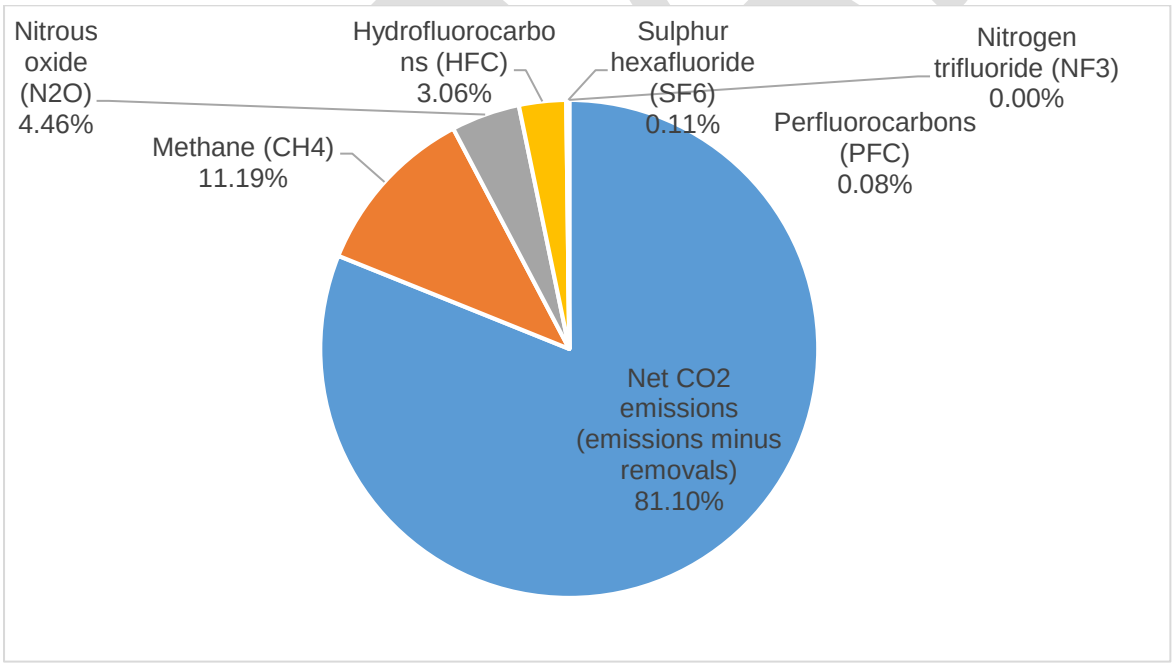

Figure 1: UK-wide Greenhouse Gas Emissions, 2017, by type of gas (tonnes CO2e)

This report examines both the carbon footprint of the geographical area of Cambridgeshire as a whole, and that of Cambridgeshire County Council as an organisation.

[1] BEIS. (2019). Greenhouse Gas Reporting Conversion Factors

1.2 Scopes

Emissions-releasing activities are classified into three groups known as scopes. These are defined in the GHG Protocol Corporate Standard, and are described in Table 1 below. Activities in all three scopes have been included.

Table 1: Scopes

Scope	Definition
Scope 1 (Direct)	Emissions that occur directly from sites or assets owned or controlled by the organisation (e.g. gas boilers at own premises, fleet vehicles)
Scope 2 (Energy indirect)	Emissions from purchased electricity, heat or steam.
Scope 3 (Other indirect)	Emissions that occur due to the organisation's activities / products / services, but at assets not owned or controlled by us (e.g. travel in employee-owned vehicles or public transport, purchased goods and services)

Scope 3 emissions are more difficult to account for, because the required data often lies with other organisations. As a result, there is a higher degree of estimation in the scope 3 categories.

Carbon dioxide produced from biologically-sequestered carbon, e.g. from the combustion of biomass for electricity and / or heat generation, is not included in scopes 1, 2, or 3. This is because the carbon dioxide would have been emitted anyway when the plants - from which the biomass is derived - decayed naturally at the end of their life. However, two other GHGs – nitrous oxide and methane – are commonly emitted when biomass is combusted. These would not be emitted during natural decay and any nitrous oxide or methane emissions from biomass / biofuel consumption is included in the emissions under the three scopes. This is the approach generally taken in international accounting standards.

2 Cambridgeshire's Carbon Footprint

The carbon footprint of Cambridgeshire (county) comprises all GHG emissions that occur in the county – this includes commercial and industrial sources, domestic homes, transport, agriculture, waste and land use.

There are a number of ways to identify the carbon footprint of the geographical area. We have used three methodologies, each of which have different merits:

- CO2 emissions by local authority area, data published by BEIS
- The SCATTER tool
- Research by the Cambridge University Science and Policy Exchange (CUSPE)

Each of these three methods is discussed below.

2.1 BEIS CO_2 Emissions Data for Cambridgeshire

The Government Department for Business, Energy and Industrial Strategy (BEIS) currently publishes detailed data at a local authority (district) level, on emissions of carbon dioxide (2), but does not provide data at a local authority level on emissions of other greenhouse gases. Carbon dioxide (CO_2) emissions account for 81% of nationwide GHG emissions. 2017 is the most recent year of data.

The trend in Cambridgeshire is reflective of the national trend: emissions slowly and steadily declining over the last few years, due mainly to the decarbonisation of the electricity grid. See Figure 2 below.

Emissions from agriculture, waste and peatlands are not included in these figures because they primarily produce methane and this data is for CO_2 only.

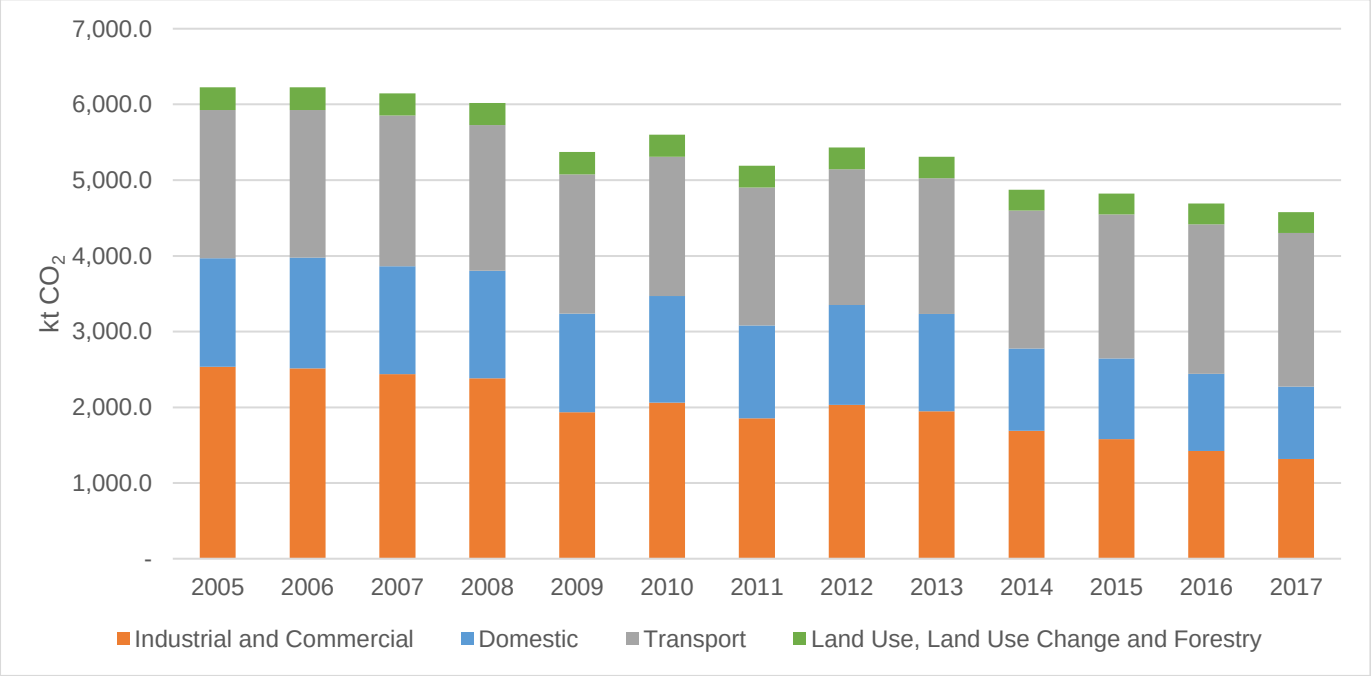

Figure 2: Cambridgeshire CO_2 emissions, 2005 to 2017

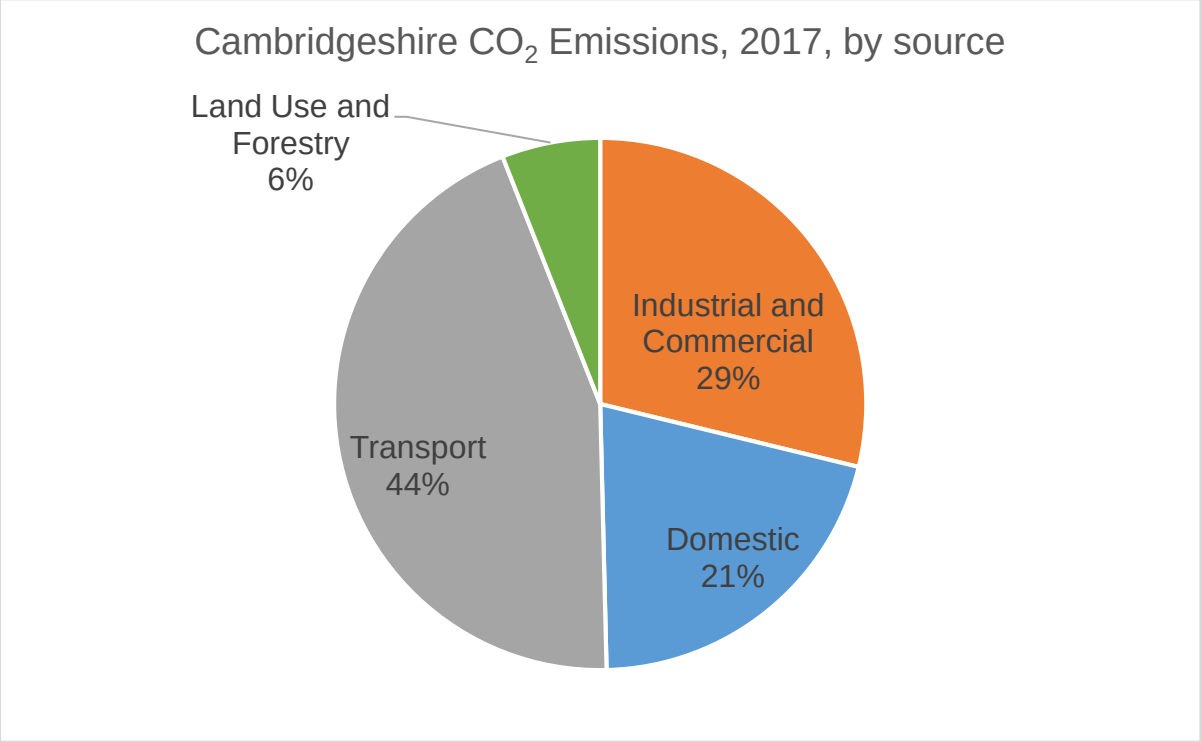

Figure 3

2.2 SCATTER Tool Emissions Inventory

SCATTER (3) is a free tool developed by a collaboration between Anthesis Group, Nottingham City Council, BEIS, Greater Manchester Combined Authority and the Tyndall Centre for Climate Research at the University of Manchester. The tool generates a GHG emissions inventory for local authority areas, using a standardised methodology aligned to international reporting frameworks.

This data includes a much wider range of emissions sources and includes some indirect emissions as well as direct emissions. A graph showing the emissions data for Cambridgeshire is below in

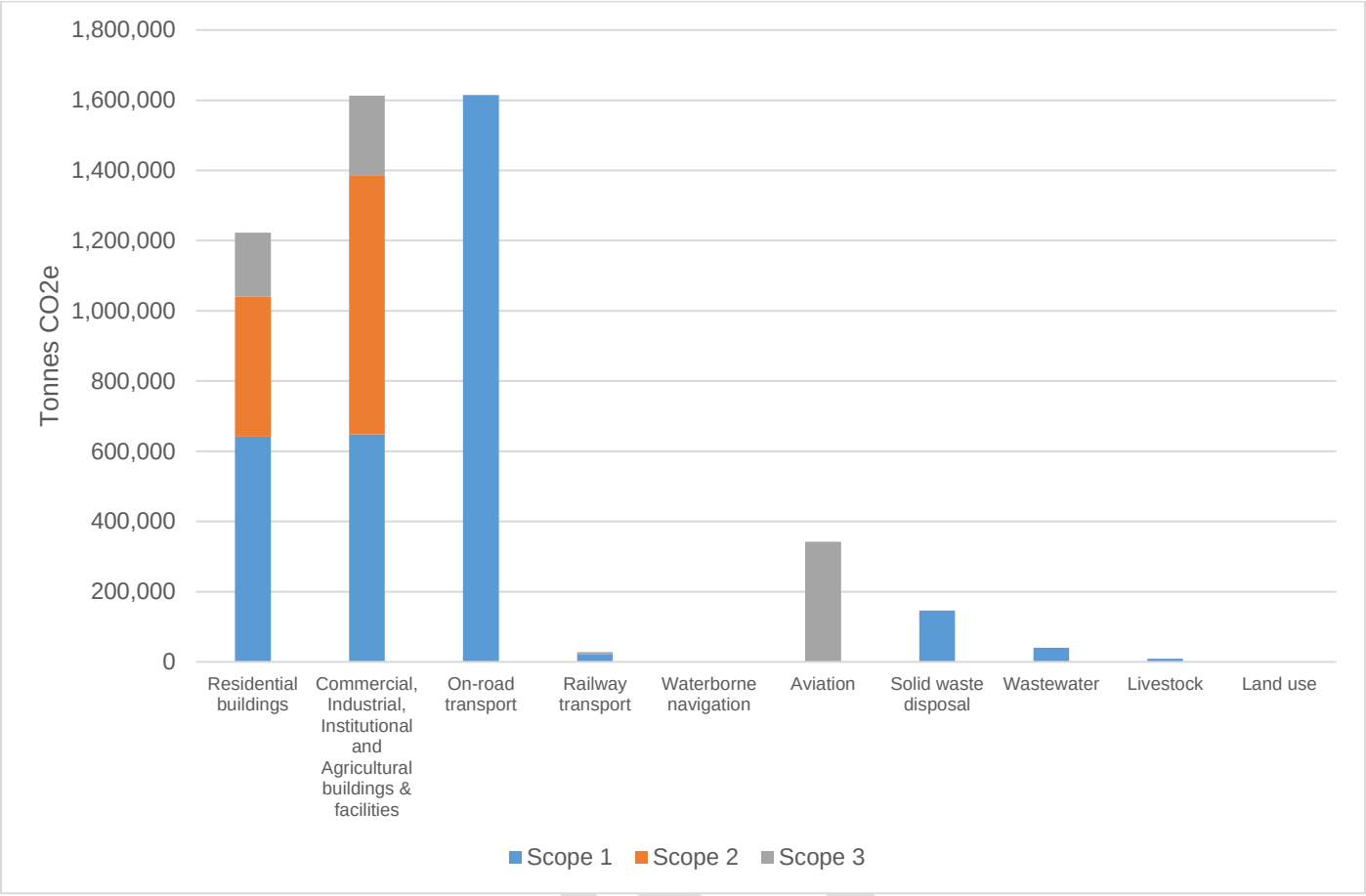

Figure 4.

Like other methodologies, it does not include indirect emissions from imported food or other goods.

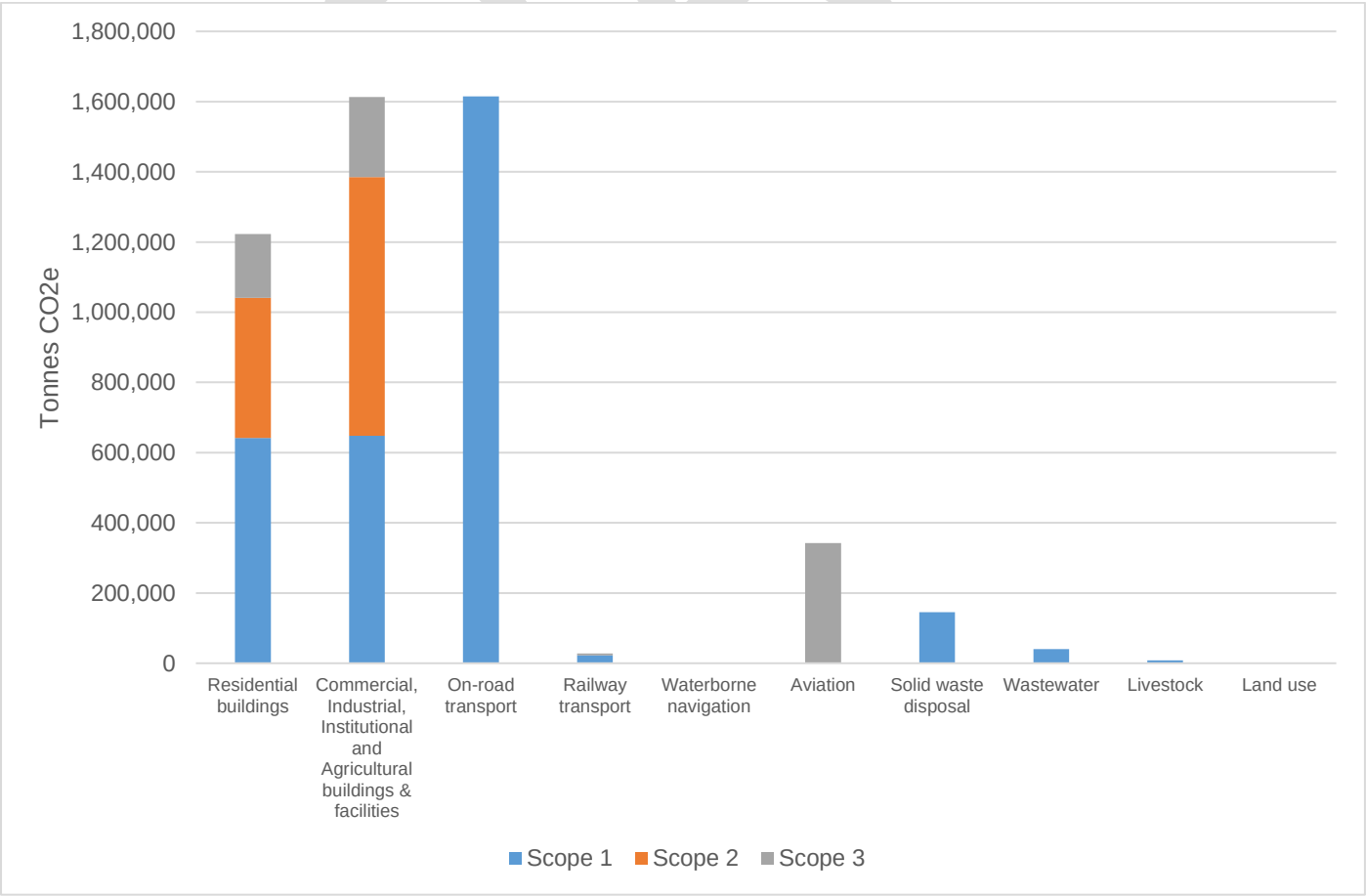

Figure 4 Cambridgeshire GHG emissions data from SCATTER

2.3 CUSPE Carbon Footprint Project

Since 2016, Cambridgeshire County Council has an annual collaboration with the Cambridge University Science and Policy Exchange (CUSPE) society, which brings teams of researchers together to explore challenges faced by the County Council.

In 2019, Cambridgeshire County Council's annual collaboration with the Cambridge University Science and Policy Exchange (CUSPE) brought a team of researchers together to develop an evidence base of current carbon emissions for Cambridgeshire and Peterborough, improving on the 'CO_2-only' data published by the department for Business Energy and Industrial strategy to provide a more accurate carbon footprint for the area.

The Council adopted the CUSPE report as an evidence base for its Climate Change and environment Strategy in October 2019. This report found that Cambridgeshire and Peterborough communities together produced **6.1 million tonnes** of carbon dioxide equivalent (CO2e) in 2017. The breakdown of this is shown in Figure 5 below.

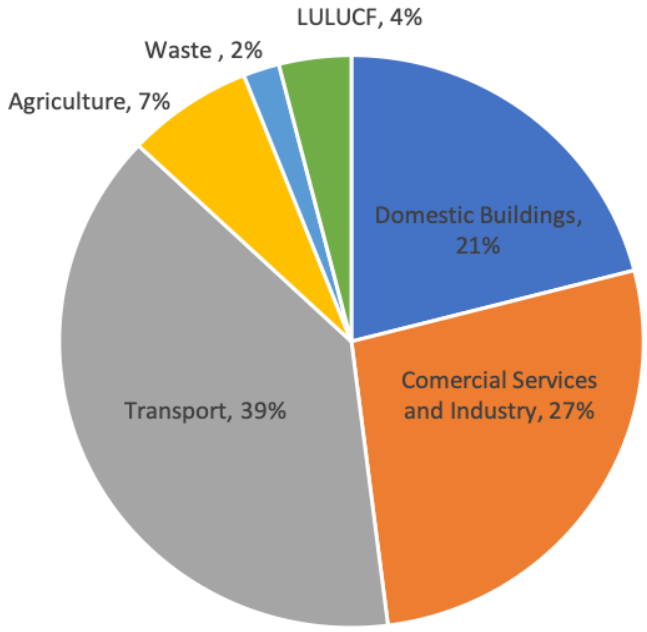

Figure 5: Breakdown of Cambridgeshire and Peterborough GHG emissions by source, 2017.

As well as looking at current emissions, the CUSPE research team also modelled two scenarios projecting future emissions up to 2050; presented as: "business as usual" and "net zero emissions by 2050".

If Cambridgeshire and Peterborough communities continue with 'Business as Usual', emissions could reduce to 3.5 Mt CO2e by 2050. Implementing an ambitious decarbonisation strategy could deliver emissions reduced to 0.6 Mt CO2e by 2050. The difference between the two scenarios highlights the policy gap to reach government's ambition of net zero carbon by 2050. This is illustrated in Figure 6 below.

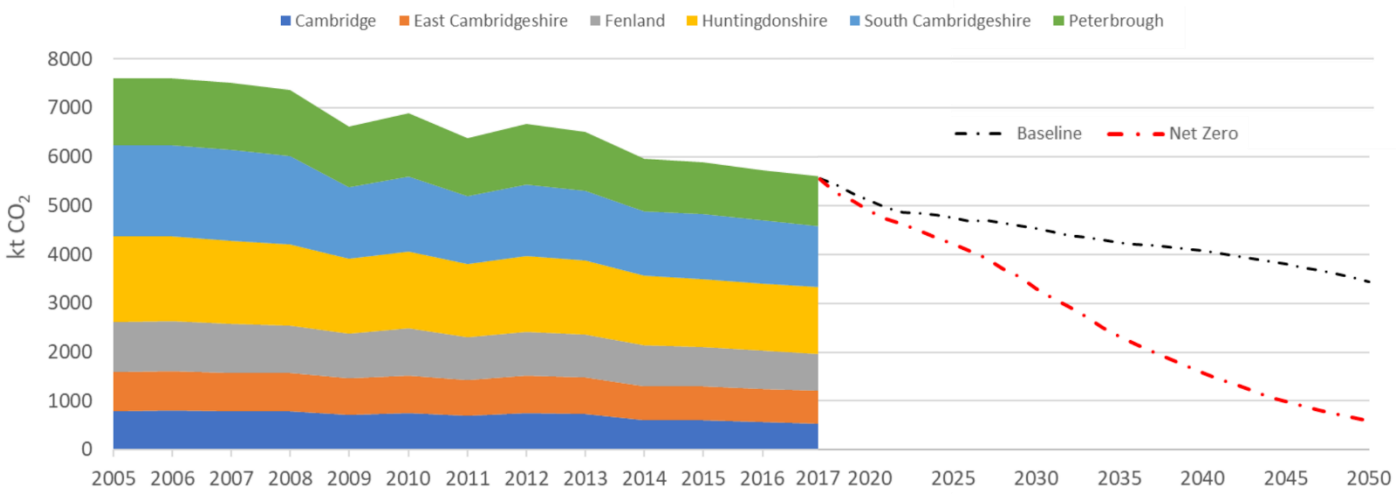

Figure 6

The CUSPE GHG emissions data differ from the SCATTER GHG emissions data in a few key ways:

- CUSPE data includes both Cambridgeshire and Peterborough. SCATTER covers all local authority areas in the UK but we have extracted the data for Cambridgeshire only.
- SCATTER includes more sources of emissions – for example, aviation, railway transport, and some scope 3 (indirect) emissions.
- Some small differences in methodology.

The CUSPE report provides an emissions baseline against which Cambridgeshire and Peterborough communities can measure their performance. In order to achieve net zero, Cambridgeshire and Peterborough communities must build on the existing support for climate action and consider the emissions impact of every future policy decision, from social care to transport, and from buildings to waste.

A summary of the findings from the CUSPE team's research follows (highlighted blue):

Cambridgeshire and Peterborough communities produced **6.1 million tonnes** of carbon dioxide equivalent (CO2e) in 2017. The challenge is to reduce this to net- zero by 2050.

If Cambridgeshire and Peterborough communities continue with 'Business as Usual' projections, emissions could reduce to 3.5 million tonnes (Mt) of CO2e by 2050. Implementing an ambitious decarbonisation strategy could deliver emissions reductions to 0.6 Mt CO2e by 2050. In order to deliver net-zero carbon emissions, Cambridgeshire and Peterborough communities will need to offset the residual emissions through a mix of afforestation, bioenergy with carbon capture and storage (CCS), direct air capture with CCS, demand reductions, peatland restoration and future unknown technologies.

Transport accounts for 39% of emissions in Cambridgeshire and Peterborough and emissions have stayed constant for the last 10 years. An ambitious strategy that requires 100% of cars, LGVs, buses and motorcycles as well as 91% of HGVs to be electric by 2050 would reduce transport emissions from 2500 Kt CO2e to 81 thousand tonnes (kt) CO2e. Electrification of vehicles is not the only solution to decarbonising transport, and other measures that encourage shifting transport away from cars to walking, cycling and public transport must also be included.

Commercial Services and Industrial emissions account for 27% of current emissions in Cambridgeshire and Peterborough, and have decreased from 2543 kt in 2005 to 1538 kt in 2017. The lowest emissions which could be achieved through an ambitious abatement strategy are 137 kt

CO2e. Implementation of low carbon heating and carbon capture and storage are vital for achieving this reduction.

Domestic homes contribute 21% of current Cambridgeshire and Peterborough emissions, arising from energy used for heating and appliances. To deliver ambitious decarbonisation of heat and improvements to the energy efficiency of the housing stock, domestic emissions could fall by 91% by 2050. This would require swift roll out of low-carbon heating technologies, including hybrid heat pumps and district heating, as well as energy saving measures such as improved insulation.

Agriculture currently contributes 405.5 kt CO2e per year, or 7% of Cambridgeshire and Peterborough's emissions, but much of the emissions in agriculture are difficult to abate. In the 2050 ambitious scenario, emissions are projected to be 239 kt CO2, which is 40% of total residual emissions. Achieving the 2050 ambitious scenario involves a significant reduction of food waste, reduction of demand for red meat and dairy by 20%, and on farm measures such as increased fertiliser efficiency, breeding measures, and livestock food additives.

Waste management contributes around 2% of current Cambridgeshire and Peterborough emissions (107 kt CO2e) with emissions from the Waterbeach landfill and compost sites and Peterborough energy recovery facility. In an ambitious scenario, net emissions would be 29 kt CO2e. Deployment of carbon capture storage, increasing capture of landfill and compost gas emissions and electrification of waste transport are considered and identified as priorities.

Afforestation as a means to reduce Cambridgeshire and Peterborough's net emissions has been explored extensively in this report. Land use, land use change and forestry (LULUCF) currently account for 4% of emissions. Abatement costs and total CO2 sequestration were calculated for various scenarios. Afforestation has the potential to play a role in helping to achieve net zero and the scale of afforestation required is calculated.

Peatland emissions are not currently counted in the emissions inventory, but could significantly affect Cambridgeshire's reported emissions - increasing them by as much as 90%. Whilst this is technically just a change in accounting, it does highlight the need for further research on peatland emissions and to prioritise the restoration and preservation of the area's peatland. In time and with the correct investment, peatland has the potential to change from a net emissions source to a net sink.

The CUSPE report provides an emissions baseline against which Cambridgeshire and Peterborough communities can measure their performance. In order to achieve net zero, Cambridgeshire and Peterborough communities must build on the existing support for climate action and implement a range of actions to reduce emissions.

The full report (4) was presented to Cambridgeshire County Council's General Purposes Committee in October 2019, where members unanimously voted to accept the accept the CUSPE research report and its use as part of the evidence base to inform the development of the Council's Climate Change and Environment strategy and Action Plan.

3 Cambridgeshire County Council's Carbon Footprint

3.1 County Council Emissions: Key findings

<Note in draft version: all figures quoted are provisional.>

The carbon footprint of Cambridgeshire County Council (as an organisation) comprises emissions that occur as a result of the Council's own operations. We have calculated the carbon footprint of the County Council's own operations for the financial year 1 April 2018 to 31 March 2019. We found that by including all emissions sources for which we have data, this amounted to **94,186 tonnes** gross CO_2e, including indirect emissions by third parties (scope 3) which accounted for 92% of the total.

Scope 1 (direct) and scope 2 (purchased electricity) emissions amounted to **7,711 tonnes CO_2e**.

Net GHG emissions after deducting the emissions offset through our renewable electricity generation assets and for purchasing 100% renewable electricity, were **84,703 tonnes** CO_2e.

We are unable to compare this to previous years as we did not collect the same data.

The Council's own carbon footprint has been calculated in line with the UK Government's Environmental Reporting Guidelines for Voluntary Greenhouse Gas Reporting (5), which is based on internationally-recognised standards from the World Resources Institute and World Business Council for Sustainable Development: the GHG Protocol Corporate Accounting and Reporting Standard, and the GHG Protocol Scope 3 standard. For further details on the methodology please see section 3.4 below.

The breakdown of emissions sources is shown in Figure 7 (A) and there is also a more detailed breakdown in Table 3 on page 13.

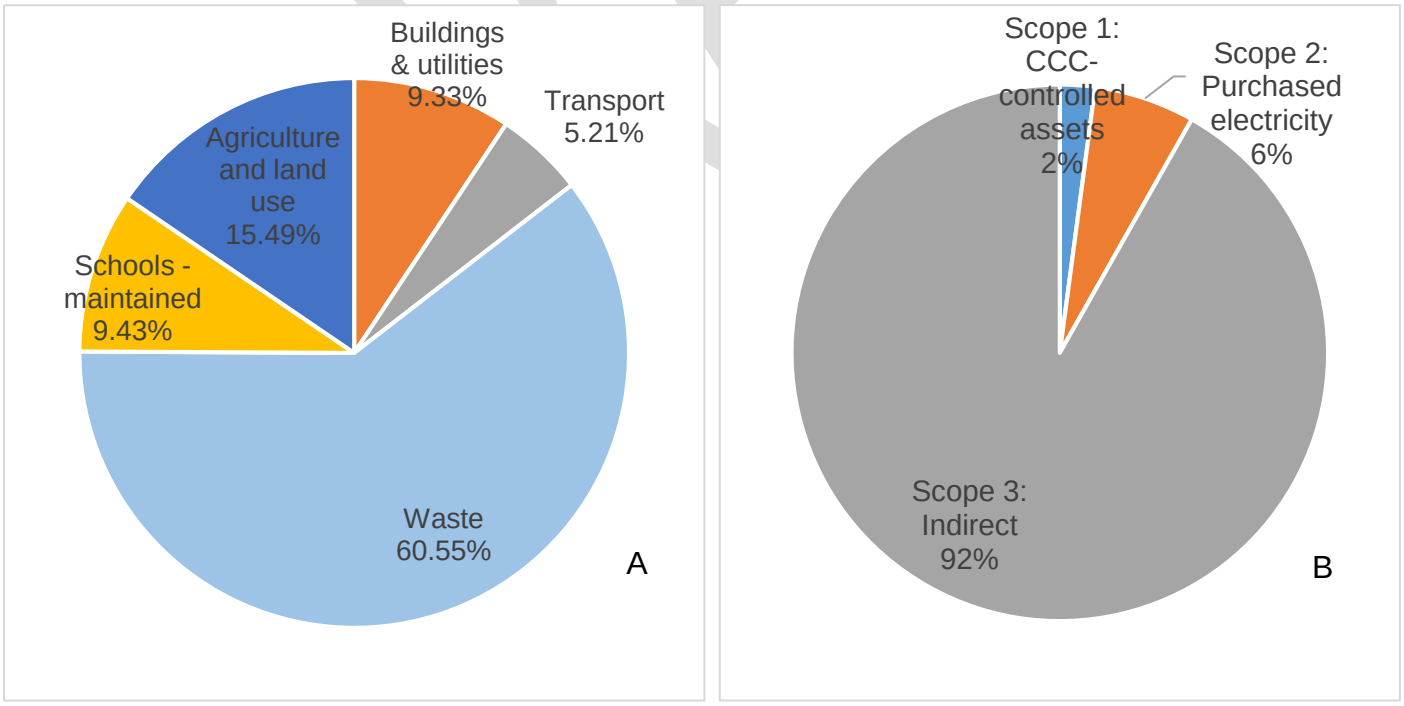

Figure 7: CCC carbon footprint 2018-19, by source (pie chart A) and by scope (pie chart B)

Scope 1 (direct) and scope 2 (purchased electricity) emissions (7,711 tonnes CO_2e) includes emissions from gas and oil for heating our buildings, electricity for our buildings and street lighting etc., emissions from fleet vehicles, and fugitive emissions from air conditioning units.

The vast majority (92% or **86,476 tonnes** CO2e) of gross emissions were scope 3 (indirect) which includes transport emissions from vehicles not under Council control (such as employee's own cars or contractors' travel), emissions from county waste disposal and treatment, emissions from Local Authority maintained schools' energy usage, and agricultural emissions from the County Farms estate. The breakdown by scope is shown in Figure 7 (B). The pie charts above show gross emissions, before any reductions or offsets.

Importantly, emissions associated with purchased goods and services (other than utilities and transport) are not included, because we do not have the relevant data to calculate these. However, this could potentially account for additional scope 3 emissions of up to 200,000 tonnes CO_2e. Our action plan will include steps to identify more of this data in future.

A full list of what has been included and what is excluded, together with reasons for exclusions, is in section 3.5 below.

Intensity ratios

Table 2: Intensity ratios

Scopes	County Council GHG emissions (tonnes CO2e)	Per head of Cambridgeshire population[2]	Per CCC employee[3]
Scopes 1 and 2 only (gross)	7,706	0.0114 tonnes CO2e	2.11 tonnes CO2e
Scopes 1, 2 and 3 (where known) (gross)	93,599	0.1387 tonnes	Not applicable
Scopes 1, 2 and 3 (where known) (net)	85,533	0.1268 tonnes	Not applicable

3.2 Reducing our carbon footprint

Although the gross total emissions was 94,186 tonnes CO_2e**, net** GHG emissions were **84,703 tonnes** CO_2e. There are two reasons for the difference between gross and net emissions.

Firstly, because we buy electricity generated from 100% renewable sources, although the gross emissions for electricity (based on grid-average carbon intensity) are 5,726 tonnes CO2e, the net emissions (based on the supplier fuel mix for the tariff we purchase) are zero.

Secondly, our 12MW solar farm in Soham generated enough electricity to offset 3,758 tonnes CO2e in 2018-19, which is enough to power more than 3000 homes.

Cambridgeshire County Council also already has several other key measures in place to reduce our gross carbon footprint and help mitigate against climate change. These include a range of energy efficiency projects across our property portfolio, such as on-site renewable generation assets (rooftop solar PV), Building Energy Management Systems (BEMS), and installation of LED lighting.

Without these projects, the Council's carbon footprint would have been higher. However, we recognise that there is more work to do. This is set out in our Climate Change and Environment Strategy and Action Plan, currently in development (draft version to be published 20 December 2019) and (following public consultation) final version due to be published in Spring 2020.

[2] Cambridgeshire population in 2018 estimated at 674,466
[3] 3,655 employees as at 1 October 2018

3.3 Breakdown and Analysis of the Council's Carbon Footprint

Table 3: Cambridgeshire County Council Greenhouse Gas emissions 2018-19, breakdown by source and scope

Greenhouse Gas Emissions (Tonnes CO2e)	Scope 1 (Direct)	Scope 2 (Electricity indirect)	Scope 3 (Other indirect)	Total (Tonnes CO2e)
Buildings & utilities	**1,329.17**	**5,725.89**	**1,731.64**	**8,786.70**
Electricity for CCC buildings & sites	0	2,108.43	519.08	2,108.43
Electricity for street lighting	0	3,617.46	890.60	3,617.46
Gas	1,121.43	0	155.88	1,121.43
Oil	90.92	0	18.91	90.92
Refrigerant gases (from air con units)	116.82	0	0	116.82
Water and sewerage	0	0	147.18	147.18
Diesel for generators	Unknown	0	Unknown	Unknown
Transport	**655.46**	**0**	**4,249.45**	**4,904.91**
Highways services	511.46	0	120.99	632.45
Social and education transport	72.73	0	361.97	434.70
Libraries	48.62	0	11.53	60.15
Business travel	17.30	0	142.10	159.40
Long term hire vans	5.35	0	1.26	6.61
Subsidised public bus routes	0	0	657.86	657.86
Employee commuting	0	0	2,953.73	2,953.73
Other transport	Unknown	0	Unknown	Unknown
Schools - maintained	**0**	**0**	**8,881.46**	**8,881.46**
Electricity	0	0	3,696.44	2,966.18
Gas	0	0	4,602.44	4,040.78
Oil	0	0	562.03	465.26
LPG	0	0	20.56	18.26
Waste	**0**	**0**	**57,028.09**	**57,028.09**
Asbestos disposal	0	0	0.23	0.23
CCC site waste	0	0	134.99	134.99
Construction waste	0	0	Unknown	Unknown
County waste disposal and treatment	0	0	56,892.87	56,892.87
Agriculture and land use	**0**	**0**	**14,585.25**	**14,585.25**
Agriculture (estimated)	0	0	14,585.25	14,585.25
Land use, land use change and forestry	0	0	Unknown	Unknown
Purchased Goods and Services	**0**	**0**	**Unknown**	**Unknown**
All other goods and services	0	0	Unknown	Unknown
Construction materials	0	0	Unknown	Unknown
Total (Gross)	**1,984.63**	**5,725.89**	**86,475.90**	**94,186.42**
Reductions	**0**	**-5,725.89**	**-3,757.94**	**-9,483.83**
100% renewable electricity tariff	0	-5,725.89	0	-5,725.89
Electricity generation at solar farm	0	0	-3,757.94	-3,757.94
Net Total	**1,984.63**	**0**	**82,717.96**	**84,702.59**

3.3.1 Buildings and utilities

Buildings and utilities account for **8,787 tonnes CO2e**, which is 8.76% of all known emissions, including 7,055 tonnes or 92% of scope 1 and 2 emissions.

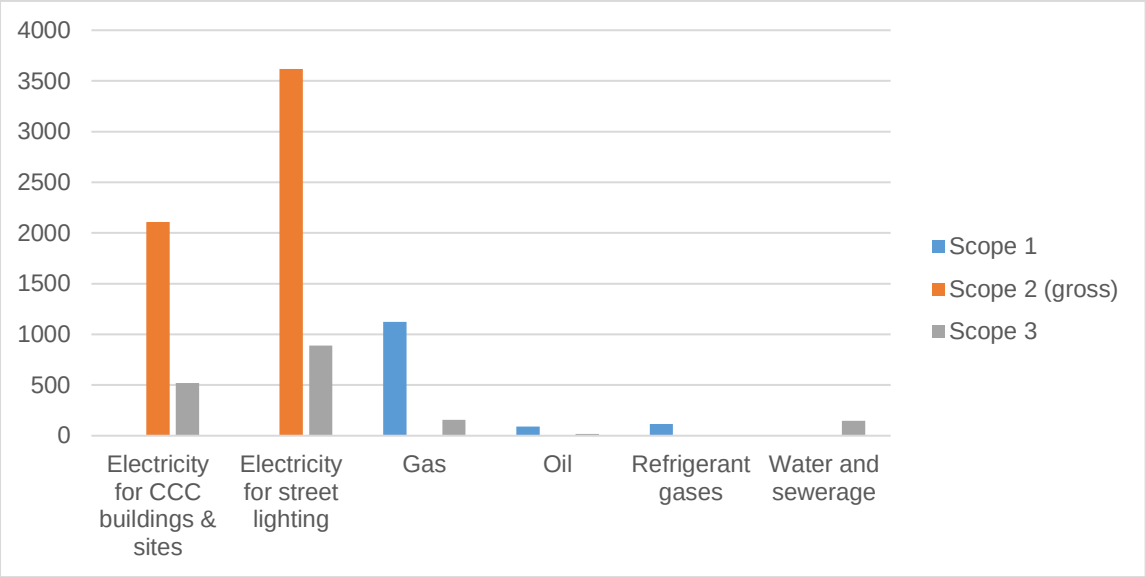

Figure 8: CCC Gross GHG Emissions from buildings and utilities, 2018-19

The biggest source of *gross* greenhouse gas emissions within the buildings and utilities category is electricity usage, accounting for 5,725 tonnes CO2e in scope 2 (2,108 tonnes for buildings and 3,617 tonnes for street lighting). It also accounts for another 488 tonnes for transmission and distribution losses, and 922 tonnes for 'well to tank' (WTT) in scope 3. The Council purchased **20,227,819 kWh of electricity** in 2018-19, 63% of which was for street lighting. However, the 5,725 tonnes gross CO2e for scope 2 is offset to zero in the *net* emissions by purchasing 100% renewable electricity through our supply contract.

The next biggest source of GHG emissions related to buildings and utilities is gas, which accounts for 1,121 tonnes CO2e, plus 156 tonnes for 'well-to-tank' emissions, and is used to heat the majority of our buildings. The Council purchased **6,096,030 kWh of mains gas** in 2018-19.

Figure 9: Grafham Water Outdoor Education Centre, one of CCC's buildings

Oil, although more carbon intensive than gas, accounts for only 91 tonnes CO2e, (plus 19 tonnes for WTT) because there were only four CCC sites that use oil. These used **368,632 kWh of heating oil** in 2018-19.

Water and sewerage services for our buildings accounts for 147 tonnes CO2e, based on an estimated annual water consumption of 150,000 cubic metres, 90% of which is assumed to return to the sewers.

Finally, leakage of refrigerant gases from air conditioning units is estimated at 117 tonnes CO2e.

This section does not include school buildings, which have been counted separately.

3.3.2 Transport

Transport accounts for **4,905 tonnes CO2e** or 5.27% of all the Council's known emissions, including 655 tonnes (8.5%) of scope 1 emissions. The majority of transport emissions are scope 3 because they are from vehicles not under the control of the Council.

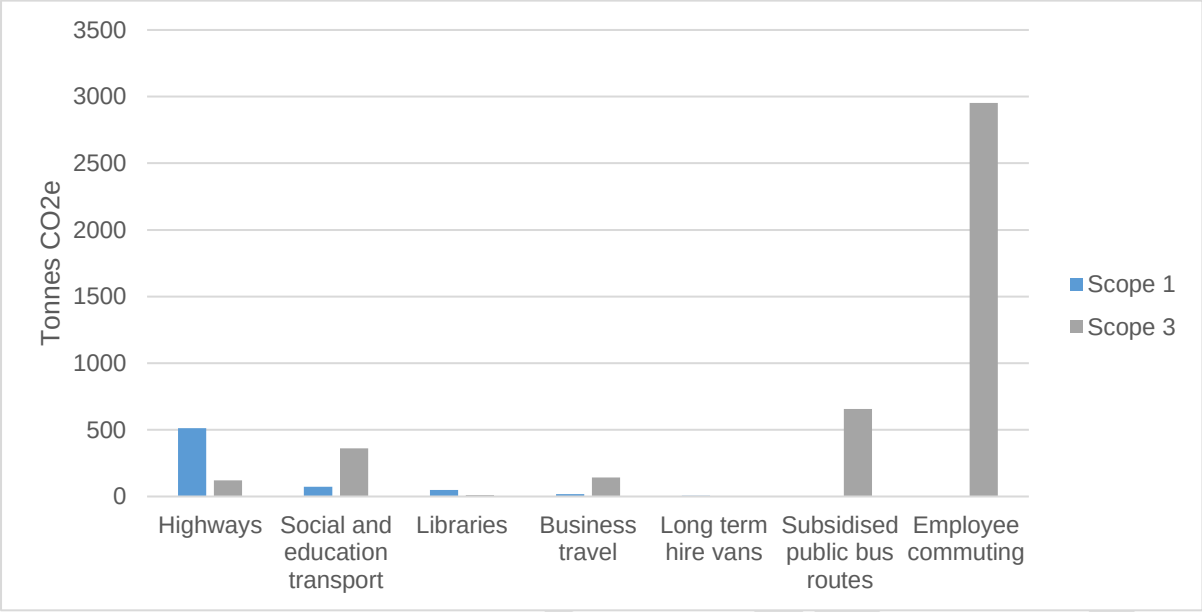

Figure 10: CCC GHG Emissions from Transport, 2018-19

Of the scope 1 (direct) transport emissions, the largest share was from our **Highways services**, accounting for 511 tonnes CO2e. This is based on 181,485 litres of diesel and 6,569 litres of petrol used across the highways fleet, plus 48,968 miles driven in vans[4].

Also in scope 1 transport is the **social and education transport fleet**, which used 26,725 litres of diesel and 1,147 litres of petrol in 2018-19, leading to 73 tonnes CO2e emissions.

Our mobile **libraries** used 8,529 litres of diesel, and the library delivery vans travelled 59,250 miles, in total causing 492 tonnes CO2e.

Figure 11: Some of CCC's Highways gritting fleet

Our **pool cars** for business travel drove 71,342 miles, leading to 17 tonnes CO2e, and we also used 2,038 litres of diesel in **vans on long term hire** (5 tonnes CO2e).

Each of these scope 1 categories will also have further emissions in scope 3 for 'well to tank'.

Scope 3 transport also covers vehicles not under the Council's control.

[4] Transport emissions are calculated based on a mixture of fuel consumption (where known) and mileage (where fuel consumption unknown). For more details, see sections 3.4 and 3.5.

Although the Cambridgeshire and Peterborough Combined Authority is the Transport Authority responsible for any provision of public transport, they have delegated this responsibility back to Cambridgeshire County Council for 2018-19. We have therefore included the transport undertaken by passengers on those **public bus routes** which are subsidised by the Transport Authority, as a Scope 3 emissions source here, accounting for 658 tonnes CO2e. There were 381,620 such passenger journeys in 2018-19, across over 50 bus routes. It is important to note that had these passenger journeys been made by car, total emissions would have been much higher (although outside of the Council's total).

Other social and education transport (including volunteers driving, some contracted out social care journeys and home to school transport by bus and taxi) accounted for 362 tonnes CO2e. (Some of these journeys are estimated.)

Scope 3 **business travel** accounted for 142 tonnes CO2e. This includes emissions associated with business travel in employees' own vehicles (139,744 miles in 2018-19) and travel by public transport (trains, buses and taxis), flight and hotel stays. (Some of these journeys are estimated due to incomplete data.)

The largest part of the transport section is the scope 3 (indirect) from our 3,655 **employees commuting from home to work**, which has been estimated at 2,954 tonnes CO_2e. According to the 2018 staff travel survey, 59% of commuting journeys (equating to 78% of miles) were made by car or motorbike (including car sharing), with 14% of journeys (18% of miles) by public transport. 4% of commuting journeys were walked and 9% cycled. This estimate is based on 215 responses to the survey and has been extrapolated based on the total number employees and assuming an average of 47 weeks worked per year. However, the relatively small sample size of the survey responses means that this is only a rough estimate.

Travel by contractors other than those mentioned above was not included due to not having access to this data.

3.3.3 Maintained schools

Schools emissions (which are all scope 3) for the 138 Local Authority maintained schools in Cambridgeshire account for 8,881 tonnes CO_2e. The largest share of this is 4,041 tonnes CO2e from **21,965,533 kWh of mains gas**, followed by 2,966 tonnes CO2e from **10,478,618 kWh of electricity**, 1,140 tonnes CO2e for 'well to tank' emissions, 465 tonnes CO2e from **183,442 litres of heating oil** and 253 tonnes CO2e for electricity transmission and distribution.

We do not currently have any data for schools' water and sewerage services or air conditioning gases in schools. There are also a few schools for which we do not have gas or oil data.

Academy schools are not included in these figures since these are not under the Council's control.

3.3.4 Waste

Waste accounts for the largest share (61%) of known emissions, at 57,028 tonnes CO_2e.

The vast majority of this (estimated at 56,893 tonnes CO_2e) is due to the Council's statutory responsibility as the Waste Authority for **treatment and disposal of waste** from Cambridgeshire residents. In 2018-19 there were 322,551 tonnes of waste collected from both the household kerbside collections and the Council's 9 Household Waste Recycling Centres. Of that, 143,119

tonnes (44%) went to landfill, whilst the remainder was either composted or recycled. Note that waste collection is the responsibility of the City and District Councils, therefore transport of waste is not included in these figures, whereas treatment and disposal is the responsibility of the County Council and is included.

The remainder of the waste category is from the waste generated at the Council's own sites (220 tonnes of general waste, 222 tonnes mixed recycling and 62 tonnes of confidential waste paper, together accounting for 135 tonnes CO2e emissions), and a very small contribution from our specialist asbestos disposal contractors.

3.3.5 Agriculture and land use

Agricultural emissions from the County Farms estate are estimated at 14,525 tonnes CO2e, or 15.68% of all known emissions in the Council's total carbon footprint. The vast majority of the County Farms estate is cropland, with a small area allocated to livestock.

Other emissions from land use, land use change and GHG removals from forestry have not been included.

3.4 Methodology

The Council's own carbon footprint has been calculated in line with the UK Government's Environmental Reporting Guidelines for Voluntary Greenhouse Gas Reporting[5], which is based on internationally-recognised standards from the World Resources Institute and World Business Council for Sustainable Development: the GHG Protocol Corporate Accounting and Reporting Standard, and the GHG Protocol Scope 3 standard.

Broadly, the methodology used was as follows:

1. Collect data on all activities under Cambridgeshire County Council control that emit GHGs (e.g. energy used, miles travelled, materials purchased). Actual data has been used wherever it is available.
2. Assumptions and estimates are only used where actual data was not available. Some activities have been excluded in cases where there was no data available and no basis upon which to estimate. Where this is the case, this is clearly stated below.
3. Convert data to metric tonnes of carbon dioxide equivalent (CO_2e), to calculate gross emissions using appropriate carbon conversion factors.
4. Note actions taken to reduce emissions (e.g. green energy tariff, solar generation), then also report net emissions.

The reporting period is the financial year 1 April 2018 to 31 March 2019.

The carbon conversion factors used for this reporting period are the 2018 UK Government published carbon conversion factors[6], except where there is no appropriate emissions factor given, or a more accurate conversion factor is available. The only sections where different carbon conversion factors are used are waste and agriculture.

[5] 2019 Environmental Reporting Guidelines, Chapter 3
[6] 2018 Carbon Conversion Factors

3.5 Boundary of Reporting, and Data Sources

All activities under the operational control of Cambridgeshire County Council are in scope, including those outsourced to third parties in cases where the overall control or responsibility still lies with the County Council.

A complete list of emissions sources included is shown below in Table 4.

Table 4: CCC Emissions Sources Included

Area	Activity	Methodology / Data source	Accuracy / Confidence level
Buildings and utilities	Gas burned for heating and hot water at CCC-controlled buildings	Usage data from utility bills	High
Buildings and utilities	Oil burned for heating and hot water at CCC-controlled buildings	Usage data from utility bills	High
Buildings and utilities	Electricity used at CCC-controlled buildings	Usage data from utility bills	High
Buildings and utilities	Electricity used for CCC street lighting, traffic signals and similar	Usage data from utility bills	High
Buildings and utilities	Refrigerant gases leakage from air conditioning units in CCC-controlled buildings	Based on industry average leakage rates applied to CCC list of A/C units, type of refrigerant gas and capacity.	Medium
Buildings and utilities	Water supply and wastewater collection and treatment	Usage data from utility bills. Some of this is estimated.	Medium
Buildings – maintained schools	Gas burned for heating and hot water at Cambridgeshire schools, where purchased through ESPO.	Gas usage data. Some schools will not have gas data because they do not use any gas, for example those with oil heating. A small number of schools we do not have data for.	Medium
Buildings – maintained schools	Electricity used at Cambridgeshire schools, where purchased through ESPO.	Electricity usage data.	High
Buildings – maintained schools	Oil and LPG used for heating at some Cambridgeshire schools.	Heating fuels usage data provided by the schools.	Medium
Transport	Travel in CCC pool cars. Travel in hire cars.	Data from a combination of mileage reports for pool cars and invoices for hire cars. Based on miles travelled and type of car where known.	Medium
Transport	Social and education transport in own fleet. Social and education transport by volunteer drivers.	Data from a combination of fuel card reports for some vehicles and estimated mileage for others. Fuel consumption data and type of fuel is used where known. Actual mileage records used if no fuel usage data available. Estimated mileage used if neither fuel usage nor actual mileage available.	Medium
Transport	CCC-provided home to school transport	Estimated based on pupil numbers and modes of travel to school.	Medium

Area	Activity	Methodology / Data source	Accuracy / Confidence level
Transport	Highways maintenance vehicles. Gritting fleet. Streetworks team vans.	Data from fuel usage (covering most highways vehicles) and estimated mileage for others (mileage used only where fuel usage is unknown).	High
Transport	Mobile libraries and library delivery vans	Data from fuel usage (for mobile libraries) and mileage for library delivery vans.	Medium
Transport	Employee travel on CCC business in own vehicles	Data from miles claimed on employee expenses system.	High
Transport	Travel by public transport incl flights, trains, buses and taxis, where known	Currently only have partial data on this. Some train and bus travel estimated from spend.	Low
Transport	Hotel stays on CCC business	Currently only have partial data on this. Estimated from spend.	Low
Transport	Subsidised public bus routes	Responsibility of the C&P Combined Authority, delegated back to CCC. Estimated based on routes and passenger numbers data. Total route distance calculated from maps and assumed that average passenger travels 50% of total route distance.	Medium
Transport	Employee home to work commuting	Estimated based on staff travel survey in October 2018. 215 employees provided detailed information on their modes of travel and distance travelled for one week. Assumed this was representative of all employees and based on a typical week. Extrapolated to all employees and assumed working 47 weeks per year.	Low
Waste	Waste produced from CCC sites – general waste, recycling and confidential paper waste	Data from waste transfer notes / invoices.	High
Waste	Disposal / treatment of Cambridgeshire waste (as the statutory waste authority)	Based on waste volumes collected by all the City and District Councils in Cambridgeshire, and from all of the Household Waste Recycling Centres in Cambridgeshire, and proportions of waste recycled, composted and landfilled. Landfill gas emissions modelled using same method as CUSPE report (4), applied to updated data set.	Medium
Agriculture and land use	County farms / rural estates land use	Estimated based on area of land used for livestock, number of cattle, number of sheep, and area of land used for crops, with UK average GHG emissions rates for these uses applied.	Low

3.6 Exclusions

The following activities have been excluded from this carbon footprint calculation:

Table 5: Exclusions

Area	Activity	Reason for exclusion
Buildings and utilities	Diesel used for on-site generators	No data currently available. Unable to estimate. Expect this to be very low.
Buildings and utilities	Energy used at sites outside of CCC control e.g. space in a shared building, third party premises, CCC-owned sites let to commercial or private tenants.	We do not have access to this data.
Buildings and utilities	Biomass	There are currently no biomass facilities at any CCC sites or maintained schools.
Schools	Gas used at those schools that do not purchase energy through ESPO.	We do not have access to this data.
Schools	Electricity used at those schools that do not purchase energy through ESPO	We do not have access to this data.
Schools	Oil and other heating fuel data for some schools	We only hold partial data for heating fuels used at schools.
Schools	All data for Academy schools.	These schools are outside of Council control.
Transport	Travel by public transport other than that included in scope above.	We do not have access to this data.
Transport	Other travel by third parties, contractors and suppliers (where not mentioned in scope)	We do not have access to this data.
Waste	Other waste streams from CCC sites not mentioned in scope above e.g. batteries, WEEE, skip waste, green waste.	We do not have access to this data.
Waste	Construction waste from CCC capital projects	We do not have access to this data.
Waste	Collection and transport of Cambridgeshire waste	This is not CCC's responsibility.
Waste	Transport, disposal and treatment of private / third party commercial waste	This is not CCC's responsibility.
Purchased goods and services	All goods and services purchased by CCC not accounted for elsewhere	Only spend data available. No accurate method available to convert to emissions.
All	All other activities not mentioned in scope above.	No known GHG emissions other than those already listed.

4 Glossary

Expression	Meaning
Carbon	Used as abbreviation for carbon dioxide or carbon dioxide equivalent
Carbon Budget	An amount of carbon dioxide that a country, company, or organization has agreed is the largest it will produce in a particular period of time.
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent: A standard unit for measuring carbon footprints. It expresses the impact of each different greenhouse gas in terms of the amount of CO2 that would create the same amount of warming, using GWPs.
GHG	Greenhouse gas: a gas that absorbs and emits radiant energy within the thermal infrared range. Greenhouse gases cause the greenhouse effect.
Greenhouse effect	The heating of the earth's surface caused by solar radiation trapped by atmospheric gases (rather like a greenhouse roof).
GWP	Global Warming Potential: this is a measure of how efficient a chemical is at trapping heat in the atmosphere relative to carbon dioxide. For example, methane has a GWP of 34 and nitrous oxide has a GWP of 298[7]. (6) By definition, CO2 has a GWP value of 1. Quantities of GHGs are multiplied by their GWP to give results in units of carbon dioxide equivalent (CO_2e).
Kt	kilotonne = 1000 metric tonnes
LULUCF	Land Use, Land use change and forestry.
Mitigation	Methods to reduce or prevent greenhouse gases entering the atmosphere.
Net zero	Achieving an overall balance between emissions produced and emissions taken out of the atmosphere. This can take place on different scales and is often achieved through offsetting.
Offset	An action intended to compensate for GHG emissions by an equivalent quantity of reductions elsewhere or removals.
Sequestration	
WTT – Well to tank	The emissions associated with extracting, refining and transporting fuels to the point of purchase.
Zero carbon	No emissions of GHGs at all

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Cambridgeshire County Council

DRAFT
Climate Change and Environment Strategy

2020 - 2025

Draft version for publication 20 December 2019

DRAFT Foreword

[SIGNATURE]

Councillor Steve Count, Leader

Climate Change is the greatest environmental challenge of our time and of any time before. Driven by human activities, our climate is changing at an unprecedented pace and scale that threatens all life on Earth. There is an urgent need for stronger and more integrated action.

I put forward a motion to declare a Climate and Environment Emergency in May 2019. This was agreed by Full Council and sets Cambridgeshire County Council on a pathway to securing a sustainable future for our County and its residents.

Our strategy is focussed on reducing greenhouse gas emissions, so that climate impacts will be less severe and biodiversity improved for future generations.

We must build on the good things we already do on the environment. We are proud of our work on renewable energy, flood risk, plastics pollution, efforts to increase modal shift and creating new green spaces, but more is needed. We must strengthen our policies across all areas of our work and find new financing mechanisms to support rapid and sustained change in how we do things. It is vital we work alongside and communicate with our communities about the actions we must take. Tackling climate change requires everyone, our citizens, all levels of government and businesses, to work in the same direction whilst protecting and caring for the most vulnerable in our society.

Our vision for Cambridgeshire as a whole, is to deliver net zero carbon emissions by 2050 in partnership with all stakeholders. We have started this journey and proud to tell you that since our solar park near Soham went live generating clean electricity in 2017 and buying only green electricity for our buildings, we have saved 28,452 tonnes of greenhouse gas emissions.

For the first time this year, we have developed carbon footprints for Cambridgeshire and also for our own organisation. Young researchers from Cambridge University's Science and Policy Exchange (CUSPE) developed the County –wide footprint and this has informed our draft strategy and action plan.

It is our intention that by 2025 all buildings owned and occupied by the Council will be fossil fuel free and all the Council's car and van fleet will be electric.

In addition, we pledge to:

- Reduce the Council's carbon footprint on by 50% on 2018-19 levels, by 2023 (on scopes 1& 2);
- Adapt our services to manage the impacts of climate change to benefit service users
- Improve air quality, increase biodiversity and natural capital across our estate and wildlife sites;
- Work with our supply chain to deliver 50% reduction on our 'scope 3' carbon emissions by 2030;
- Develop all Council strategies to include policies to tackle Climate Change and enhance our natural capital;
- Collaborate with Cambridgeshire businesses, residents and the public sector to deliver our ambitious targets, and net zero carbon by 2050
- Work with Government, partners and stakeholders to support the 10,000 homes dependent on oil for heating and hot water in Cambridgeshire to switch to 100% clean energy by 2050

Executive Summary

The Council declared a Climate Emergency through the Environment Motion in May 2019, which was passed unanimously, and committed us to the development of a Climate Change and Environment Strategy and Action Plan.

Our vision is to deliver net zero carbon emissions for Cambridgeshire by 2050 in partnership with all stakeholders, whilst supporting our communities and Cambridgeshire's biodiversity and environmental assets to adapt and flourish as our climate changes.

The purpose of this strategy is to provide a clear statement of the Council's climate change and environmental objectives and to set out how the Council will meet environmental sustainability and climate change challenges. The Strategy is for Cambridgeshire *County Council* and focusses primarily on what the Council itself can achieve. However, tackling climate change, adapting to its ongoing impacts and protecting and enhancing our natural capital is bigger than any one organisation. So the Strategy also identifies how we must work with public and private sector partners and communities across the county to support the transformation needed to tackle these challenges together.

This Strategy has been developed around the three key themes of:

- Quantifying our carbon footprints to inform and deliver climate change **mitigation** through efforts to reduce or prevent carbon emissions;
- **Adaptation** to cope with the existing and future impacts of climate change;
- Enhancing and conserving **natural capital** such as wildlife, plants, air, water and soils.

Our priority areas for the climate change **mitigation** theme (reducing our carbon footprint) are:

- Nearly zero energy buildings – improving energy efficiency and installing low carbon heating.
- Transport – prioritising walking, cycling and public transport, and supporting the uptake of electric vehicles.
- Waste management strategies to reduce carbon, and
- Afforestation – planting trees.

Our priority areas for the climate change **adaptation** theme are:

- Effective plans and climate change risk management strategies across all services;
- Resilience of our own buildings and staff;
- Our work in flood risk management, and
- Supporting vulnerable people in severe weather or temperatures.

Our priority areas for the **natural capital** theme are:

- Restoring and/or creating natural habitats;
- Planning policy to reflect strategic and local objectives for countryside enhancement and green infrastructure;
- Supporting heritage assets, and
- More tree planting and continued environmental stewardship as part of rural estate management.

We have also identified further priority areas for collaboration with partners and our communities for all three key themes.

Seven provisional targets have been identified in the Action Plan. Targets 1 to 5 are for the County Council to deliver, which are reflected in the pledge above, and targets 6 and 7 will be in collaboration with partners and communities.

Note: This strategy is a draft and is subject to feedback following the public consultation.

Contents

1 Introduction

1.1 Why have we declared a Climate and Environment emergency?

In May 2019, Cambridgeshire County Council declared a climate and environment emergency and committed to the development of a Climate Change and Environment Strategy.

It recognised that our natural and built environment is the most precious inheritance for which we act as caretakers for the next generation and that society is facing global challenges of population growth, climate change and equalisation of living standards not faced before at this scale. It is a highly time sensitive problem; every day action is delayed it becomes more likely we will pass irreversible environmental tipping points.

Human driven climate change is one of the most complex issues facing us today. It poses significant risk to our health, our economy, our environment, and endangers the wellbeing of future generations. Air borne, water and land pollution is also another global environmental concern. It involves many dimensions – science, economics, society, politics and moral and ethical questions – and is a global problem, felt on local scales, that will be around for decades and centuries to come.

People of all ages, all walks of life and all social and economic backgrounds in Cambridgeshire are becoming increasingly concerned they will leave or inherit an environment that is irreparably damaged, forcing others to live with the consequences of the decisions we make today. Carbon dioxide, the greenhouse gas that has driven recent global warming, lingers in the atmosphere for hundreds of years, and the planet (especially the oceans) takes a while to respond to warming. So even if we stopped emitting all greenhouse gases today, global warming and climate change will continue to affect future generations.

All governments (national, regional and local) have a duty to limit the negative impacts of environmental change by cutting carbon emissions, protecting biodiversity and reducing pollution. The necessity of reaching net-zero was enshrined in UK law on 27th June 2019, with a target requiring the UK to bring all greenhouse gas emission to net zero by 2050.

1.2 The Impacts of Climate Change

Climate change is occurring and, human activities contribute significantly to the increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level.

The International Panel on Climate Change (IPCC) estimates that human activities have already caused 1°C warming above pre-industrial levels (1). If temperatures increase at the current rate, warming is likely to reach 1.5°C between 2030 and 2052, leading to regional scale changes to climate including dramatic increases in the frequency and intensity of flood or drought events across the world including the UK. These risks are set to increase should warming reach 2°C, and the longer that temperatures remain high, the harder it becomes to reverse the damage.

Please see section 9.1 for further information on the impacts of Climate Change.

1.3 Population and growth

Cambridgeshire is one of the fastest growing counties within the UK. With growth comes the demand for more housing, food security, water resources and efficient public transport, all of which compete for land use and put pressure on our natural environment. Some land use changes bring negative effects to our environment for example damage to landscape from minerals extraction for building

materials, loss of natural habitat, increased air pollution from power generation, unsustainable travel and the impact of agricultural pesticides on water quality and biodiversity.

The County Council recognises the need for sustainable growth and must balance the demands of growth such as minimising the need to travel, providing sustainable transport options and reducing the carbon emissions from buildings, whilst enhancing its natural assets through restoring local heritage, providing increased green spaces for people and nature and increasing tree planting to assist with shade and urban cooling. Detailed analysis of the different types of environmental assets can be found in section 9.4.

1.4 Imperatives for Action

Reaching and sustaining net zero global human-made CO_2 emissions, and reducing net emissions from other greenhouse gases can "halt human driven climate change" within decades if we act at all levels and across all sectors to mitigate carbon emissions and plan for impacts that we know will happen as a result of current irreversible warming. There are three clear imperatives for action, as outlined by the Global Commission for Adaptation (2) which will directly impact our ability to serve our communities in the most effective way.

The Human Imperative

Climate change exacerbates existing challenges to our services and the communities we serve. Increasing frequencies of heatwaves, flooding and its contamination of water supplies, pose a particular threat for our most vulnerable residents. Climate refugees, people displaced from their homes as a result of the impacts of climate change, are likely to bring increased pressure on our social care delivery by 2050. It also puts an unfair burden on future generations who will have to cope with the challenges we are leaving them.

The Environmental Imperative

The natural environment is our first line of defence against extreme environmental events such as floods, droughts and heatwaves. A thriving natural environment is fundamental to effective and lasting adaptation. Yet, one in four species is facing extinction, about a quarter of all ice-free land is now subject to degradation, and ocean temperatures and acidity are rising. Climate change will bring adverse effects on our natural environment everywhere. We must protect and work with nature to build resilience and reduce climate risks at all scales before the damage has gone too far.

The Economic Imperative

Mitigation and adaptation are now in our strong economic self-interest: the cost of doing nothing far outweighs the cost of taking positive action now. The Global Commission on Adaptation has demonstrated that the overall rate of return on investments in improved resilience is high, with benefit-cost ratios ranging from 2:1 to 10:1, and in some cases even higher (2). Introducing climate adaptation considerations into our financial decision making will have commercial benefit to our economy in the long run.

1.5 Building on the work we already do

Cambridgeshire County Council has a history of leading work on environmental improvements and more recently tackling climate change at the local level. Over the years much has been achieved. See Table 1 below.

However, there is an urgent need for stronger and more integrated action. This is a challenge we have not faced before. We must build on the good things we already do, strengthen our policies across all areas of our work to tackle climate change and environmental degradation, and find new solutions and financing mechanisms to bring rapid and sustained change in how we do things. Most

importantly of all, we and our partners must talk to and be guided by our communities about the actions we must take to bring about the change that is needed.

Table 1 Work the Council and its partners are already doing through its environmental and related strategies

Corporate Energy Strategy	• Reducing carbon emissions, improving energy efficiency and investing in renewable energy projects to displace fossil fuels
Plastics Strategy	• To eliminate avoidable single use plastics to protect the biodiversity of our local freshwater systems, oceans and marine life
Cambridgeshire and Peterborough Local Nature Partnership	• Managing and protecting our County wildlife sites and their biodiversity
Joint Municipal Waste Management Strategy	• Taking measures to reduce waste and employ best environmental options for the waste that we are responsible for, taking account of carbon and greenhouse gas outputs • Advocating responsible approaches to waste for residents and businesses within the Cambridgeshire area.
Minerals and Waste Management Plan	• Ensuring all planning proposals take account of climate change and the need to reduce carbon emissions, whilst exploring opportunities to use decentralised and renewable or low carbon energy
Local Flood Risk Management Strategy	• Supplementary planning guidance to improve land use planning embedding approaches that minimises flood risk, reduce water consumption and improve biodiversity • Supporting better natural management of flooding and improved community resilience to flood risk from climate change
Environmental stewardship: advice and support	• For Natural England's farm payments schemes to manage historic assets, maintain hedgerows, create new woodlands and support arable reversion and peat management

What is the Council already doing to Mitigate and Adapt to climate change and enhance Natural Capital?

ADAPTATION

DOMESTIC
Working with communities to develop Flood Action Plans to prepare for and act in the event of a flood
Providing guidance for developers for improving sustainable drainage within their projects to increase flood resilience as well nature benefits

WASTE MANAGEMENT
Landfill sites are carefully designed and managed to minimise the risk of flooding. When closed, they are capped and restored to prevent water entrance and prevent leachate escape

COMMERCIAL & INDUSTRIAL
Minerals and Waste applications are reviewed for their potential to provide benefits for flood risk and biodiversity

AGRICULTURE
Tenant farmers share grain storage to reduce fossil fuel usage per tonne of crop, and to minimise vehicle movements as orders are taken only from a central store

TRANSPORTATION
Flood warning systems have been installed on the highway to warn motorists and trigger closures of flood affects roads

LAND USE
Natural Flood Management projects to develop catchment wide flood management to promote natural processes

MITIGATION

TRANSPORTATION

Traffic management to reduce congestion

Busway and public transport improvements

Increasing the amount of recycled materials used in road surfacing

Trialling bio-fuel for maintenance vehicles

COMMERCIAL & INDUSTRIAL

£11.8m investment into renewable energy and energy efficency on county assets and schools

12MW Triangle Solar Farm, Soham

Pipeline of solar projects totalling 42MW under developoment

DOMESTIC

Working with Swaffham Prior Community Land Trust to move the village off oil and onto renewable heat. Expected to save 29,445 tonnes CO_2e over 30 years

Helping Parish Councils apply for residential EV chargepoint funding

WASTE MANAGEMENT

Diverting waste from landfill via improved recycling and re-use

Capturing gas emitted from landfills and using to generate electricity

Incentivising Districts and City Councils to collect recyclable materials

AGRICULTURE

Planted over 250,000 trees in small woodlands across the rural estate

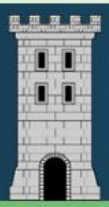
Encourage our farm tenants to join agri-environment schemes to reduce their carbon impacts c.60% of tenants have either a basic or higher level scheme

LAND USE

Coordinating the Local Nature Partnership (LNP) which includes projects such as the Great Fen Project (Wildlife Trust) and Wicken Fen (National Trust) to restore and manage peatland as a carbon sink

NATURAL CAPITAL

Working with communities to create "Friends Groups" who volunteer to help maintain nature reserves and promote their importance



Working with developers to create greenspace through 'preservation in situ' schemes to protect the historic and natural environment

Encouraging our farm tenants to join agri-environment schem to promote biodiversity

Working with the Local Nature Partnership to maintain and manage nature reserves for the benefit of biodiversity and people

Agree sustainable Travel Plans for new developments to improve air and water quality

Review of mineral site plans to ensure suitable restoration and seek opportunities for biodiversity and green infrastructure benefits

Supporting Natural Cambridgeshire's vision to Double Nature by seeking ways to increase green spaces and biodiversity

2 About Our Strategy

2.1 Our Vision for 2050

Our vision is to deliver net zero carbon emissions for Cambridgeshire by 2050 in partnership with all stakeholders, whilst supporting our communities and Cambridgeshire's biodiversity and environmental assets to adapt and flourish as our climate changes.

Figure 1 Cambridgeshire County Council's Vison for 2050

2.2 Purpose of the Strategy

The purpose of the strategy is to provide a clear statement of the Council's climate change and environmental objectives and to set out how the Council will meet environmental sustainability and climate change challenges. It will describe how we will get our own house in order and how working together with our public sector partners and our communities will support the transformation needed across Cambridgeshire and beyond to tackle these challenges.

Our Objectives are to:

- Reduce greenhouse gas emissions to mitigate the impacts of human-made climate change
- Support our communities and biodiversity to adapt to a changing climate
- Improve Cambridgeshire and Peterborough's Natural Capital[1] for future generations
- Empower Cambridgeshire communities and businesses to buy-into and support the delivery of the Strategy vision
- Work with our public sector partners to join up policies and strategies across different levels of government to deliver net-zero carbon by 2050
- Deliver our UK100 pledge for 100% clean energy for our communities by 2050

2.3 Our Approach

To deliver the vison and objectives of the Strategy we will engage with Officers, Members, partners, businesses and our communities to build a shared understanding of the challenges and grow our collective knowledge, capacity and skills to create the place we want for our children's future. This will include:

- Identifying the carbon footprint for the whole of Cambridgeshire and Peterborough and placing our organisational carbon footprint within this broader context.

[1] This is defined as the elements of nature that directly or indirectly produce value to people, including ecosystems, species, freshwater, land, minerals, the air and oceans.

- Developing carbon targets and tracking carbon emissions reductions for the Council's operational footprint and the broader impact of its activities and policies
- Co-designing an action plan with our staff, communities and partners that shows how we are going to deliver our Strategy, where we will lead or where we must support others to lead
- Demonstrating leadership and setting a good example, through using our numerous statutory responsibilities and duties such as planning and regulation, highways and public transport, waste treatment and disposal, delivery of major infrastructure projects, education, social and other services to bring forward positive change
- Financing the delivery of the Strategy and Action Plan and providing a framework for the Council to inform its budget setting and delivery of its Corporate priorities for the people of Cambridgeshire

2.4 Identifying the Key themes to build our Strategy and Action Plan

To build a coherent strategy, a number of key themes have been identified covering technical, organisational and engagement aspects to provide the context and how we work with partners and our community.

Three technical themes

1. Quantifying our carbon footprints to inform and deliver climate change **mitigation** through efforts to reduce or prevent carbon emissions;
2. **Adaptation** to cope with the existing and future impacts of climate change;
3. Enhancing and conserving **natural capital** such as wildlife, plants, air, water and soils.

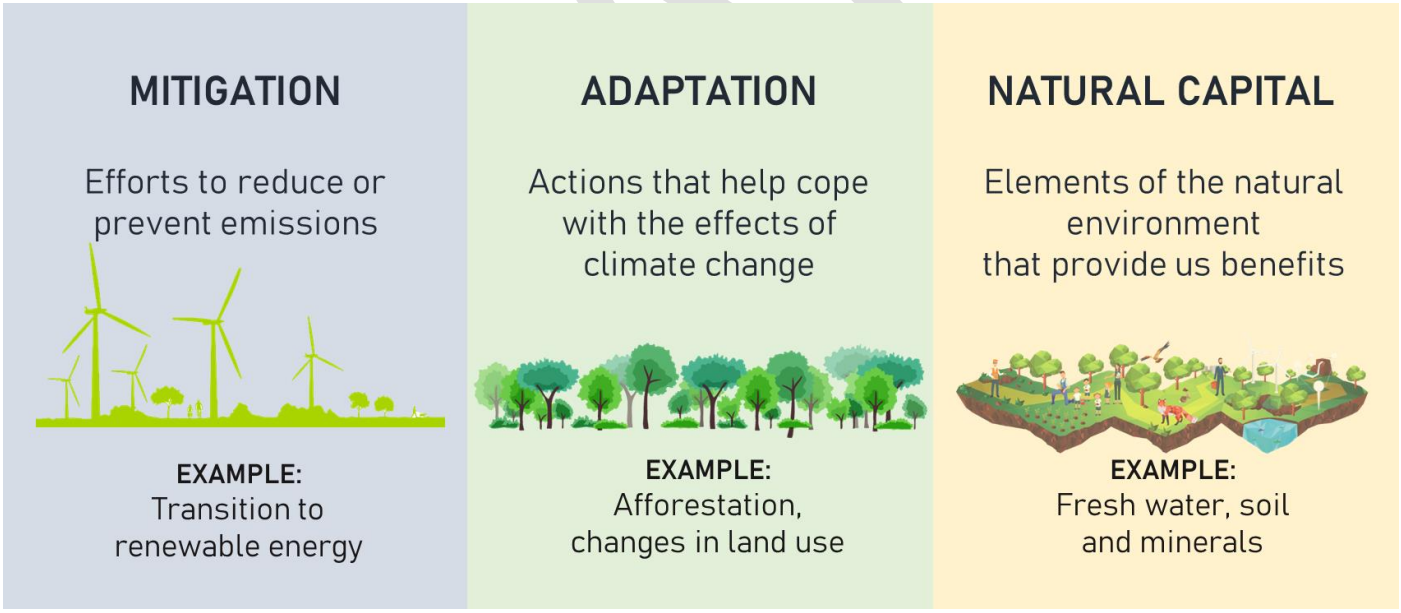


Figure 2 Mitigation, adaptation and natural capital

Mitigation of carbon emissions addresses the causes of climate change. It describes those actions which reduce, prevent or capture greenhouse gas emissions. A strong strategy must be informed by robust evidence. The current carbon footprints of both the County Council itself as an organisation, and that of the entire geographical area of Cambridgeshire will inform our action planning as well as the views of our communities. See chapter 3.

Adaptation consists of those actions that enable us to deal with the effects of climate change, such as flood risk management in response to heavier more frequent rainfall. The adaptation actions the council can take are discussed in Chapter 4.

Natural capital comprises our 'stock' of waters, land, air, species, minerals and oceans. This stock underpins our economy by producing value for people, both directly and indirectly. Goods provided by natural capital include clean air and water, food, energy, wildlife, recreation and protection from hazards (3). Improving our natural capital addresses how to enhance our existing nature reserves, improve biodiversity and tackle air, land and water pollution to keep our planet healthy for all species. See Chapter 5.

2.5 Control and influence of the strategy

This is a strategy for Cambridgeshire *County Council* (rather than the county of Cambridgeshire) and identifies how we must work with our public and private sector partners and communities across Cambridgeshire. As part of its strategy, the Council recognises what is under its direct control and wider influence, as shown in Figure 3.

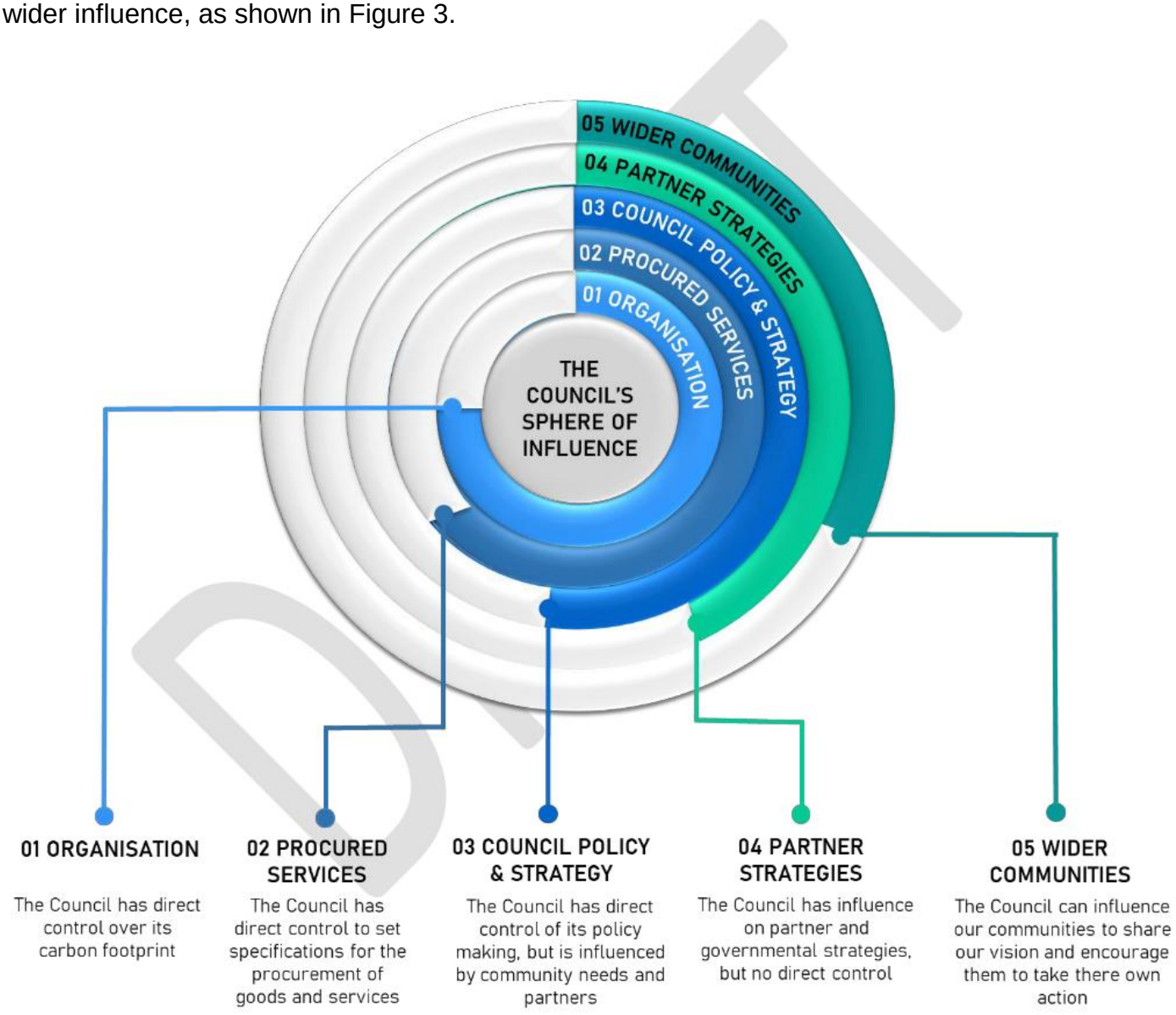


Figure 3: Defining our levels of control over different causes and consequences of climate change.

2.6 Financing the Strategy

All governments (national, regional and local) have a duty to limit the negative impacts of environmental change by cutting carbon emissions, protecting biodiversity and reducing pollution. The challenging financial and resource pressures we face as a County Council, is common to many Local Authorities. However we cannot use any of these challenges as an excuse for not finding new ways of living, working and sharing low carbon lifestyles. We can find realistic and genuine ways to make positive changes that limit our impact on and improve our environment.

Already the County Council has invested £22 million into schools, a solar PV park and energy performance of its office buildings. It has committed a further £56million of investment into a pipeline of energy projects up to 2023/24 to tackle carbon emissions from buildings, generate renewable energy for local consumption and to support electric vehicle charging. It is using a number of green finance models, see below, to facilitate these projects and is keen to build on this work to secure deeper and faster change.

These models include:

The invest to save model: Capital investment into energy measures to save money on energy bills. For example, £11million has been invested into Cambridgeshire's schools.

The Innovations/future market model: Risk capital is borrowed from Public Loan Work Board and designed to pioneer innovation in low carbon technology, renewable energy community projects, and new business models to shape the market for a net zero carbon 2050. Attracting Government grant funding towards project development and demonstrator projects is also important. We have two projects under development, St Ives Park and Ride Smart Energy Project and working with Swaffham Prior Community Land Trust to take the village off oil onto renewable heat and hot water, where grant is required as new business models are developed to share widely with the market.

The Income Generation model: A capital loan designed to bring forward projects to generate a profit (over the project lifetime) and hence contribute to carbon reduction and generate income for services. For example, £10million was invested into Triangle Solar Farm which generates approximately £1million gross revenue per annum.

The capacity and skills model: Investment to build new skills for the future. For example, the Council secured a grant from Mobilising Local Energy Investment Project funded by Intelligent Energy Europe for £1million to build the capacity of staff and politicians to develop and invest in energy projects. We now have £22million of investments in Cambridgeshire and a £56 million pipeline of investment.

Future financing of the Strategy will build on the above work. In July 2019, the Government launched its Green Finance Strategy (4) which supports strong and sustainable growth, and the delivery of domestic and international commitments on climate change, the environment and sustainable development. This includes green finance concepts and products, for example green bonds, which could play a large role in the implementation of the Government's 25 Year Environment Plan.

3 Mitigating Climate Change

3.1 What is climate change mitigation?

Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, reducing consumption and waste, or changing management practices or consumer behaviour, to reduce or prevent emission of greenhouse gases and limit the magnitude or rate of long-term global warming due to human emissions of greenhouse gases.

It is important to understand that the sooner mitigation of carbon emissions occurs, the greater the overall reduction of carbon emissions generated by 2050. For example, if you reduce 20 tonnes of CO_2 in 2020, this reduces the cumulative impact of 600 tonnes by 2050.

'**Net Zero Carbon**' means the reduction of greenhouse gas emissions to the lowest possible level and any remaining emissions, offset through carbon removal methods such as tree planting or carbon capture and storage, so we have net zero emissions to the atmosphere. This does not mean that high levels of offsetting will get us to net zero, as the scale of emissions is so large. For the UK as a whole, the net zero target legally must be reached by the end of 2050.

Figure 4 Pathway to Net Zero Carbon

3.2 Current Carbon Footprints

3.2.1 Cambridgeshire's Carbon Footprint

In 2019, Cambridgeshire County Council's annual collaboration with the Cambridge University Science and Policy Exchange (CUSPE) brought a team of researchers together to develop an evidence base of current carbon emissions for Cambridgeshire and Peterborough, improving on the 'CO_2-only' data published by the department for Business Energy and Industrial strategy to provide a more accurate carbon footprint for the area.

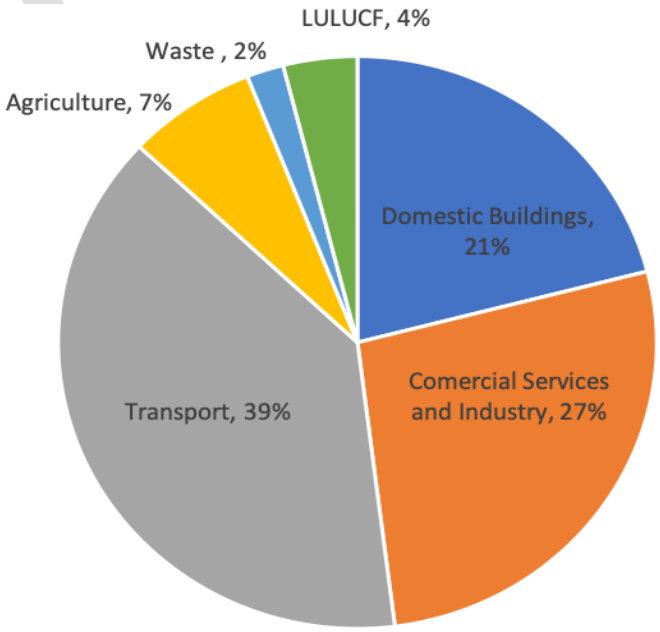


Figure 5 Breakdown of Cambridgeshire and Peterborough GHG emissions by source, 2017.

The Council adopted the CUSPE report as an evidence base for its Climate Change and environment Strategy in October 2019. This report found that **Cambridgeshire and Peterborough communities together produced 6.1 million tonnes of carbon dioxide equivalent (CO2e) in 2017**. The breakdown of this is shown in Figure 5.[2]

[2] LLUCF – Land use, land use change and forestry

As well as looking at current emissions, the research team also modelled two scenarios projecting future emissions up to 2050; presented as: “business as usual” and “net zero emissions by 2050”. The difference between the two scenarios highlights the policy gap to reach government’s ambition of net zero carbon by 2050. This is illustrated in Figure 6.

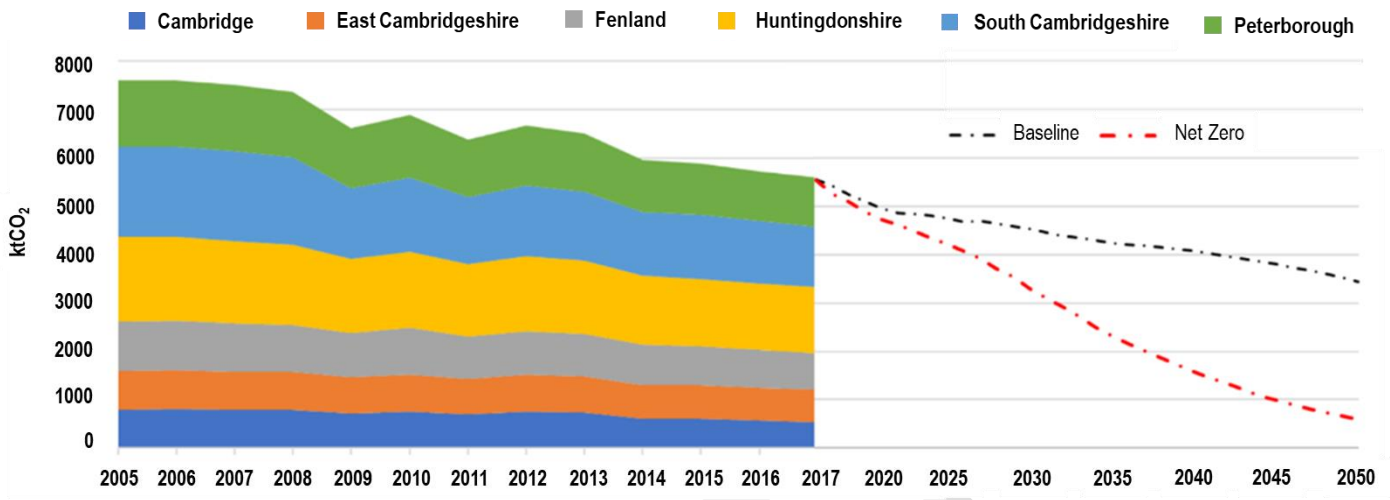


Figure 6: GHG Emissions Pathways to 2050

To achieve the ambitious reduction scenario, the report highlighted the key areas the Council and its partners should consider incorporating into new policy, including:

- Decarbonisation of heat and improvements to the energy efficiency of the housing stock;
- Implementation of low carbon heating and carbon capture and storage in commercial and industrial buildings;
- All cars, vans, buses and motorcycles and most HGVs to be electric, as well as shifting more transport away from cars to walking, cycling and public transport;
- A significant reduction of food waste, reduction of demand for red meat and dairy by 20%, and increased fertiliser efficiency, breeding measures, and livestock food additives;
- Deployment of carbon capture and storage on waste sites, increasing capture of landfill and compost gas emissions and electrification of waste transport;
- Extensive afforestation;
- Further research on peatland emissions and to work with experts to find the best solution to ameliorate the current impact of our peatland areas.

The full report from the CUSPE team can be viewed online here (5).

3.2.2 The County Council’s Carbon Footprint

Cambridgeshire County Council has calculated the carbon footprint of its own operations for the financial year 2018-19. By including all emissions sources for which we have data, this amounted to **94,186 tonnes** gross CO_2e, including indirect emissions by third parties (scope 3) which accounted for 92% of the total. Scope 1 (direct) and scope 2 (purchased electricity) emissions amounted to **7,711 tonnes CO_2e**.

Net GHG emissions after deducting the emissions offset through our renewable electricity generation assets and for purchasing 100% renewable electricity, were **84,703 tonnes** CO_2e.

We are unable to compare this to previous years as we did not collect the same data.

A breakdown of the sources of emissions is shown in Figure 7. Scope 1 (direct) and scope 2 (purchased electricity) emissions (**7,711 tonnes CO_2e**) includes emissions from gas and oil for heating our buildings, electricity for our buildings and street lighting etc., emissions from fleet vehicles, and fugitive emissions from air conditioning units.

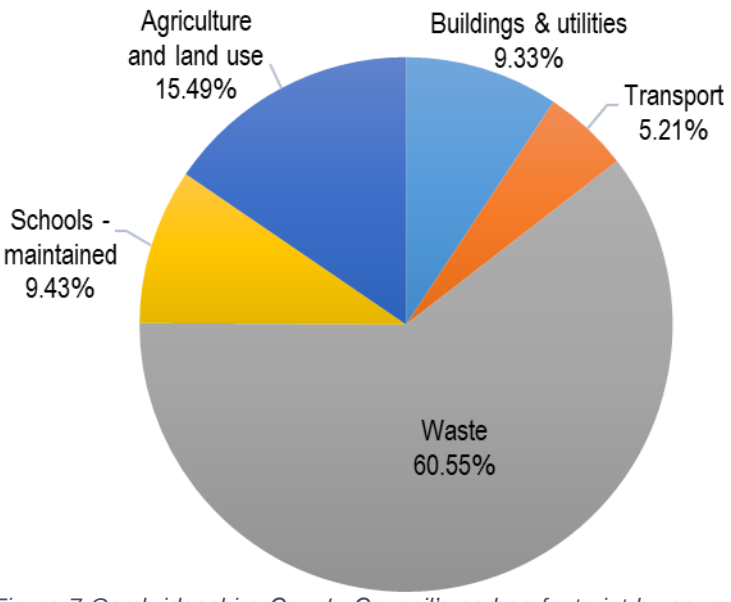


Figure 7 Cambridgeshire County Council's carbon footprint by source, 2018-19

The vast majority (92% or **86,476 tonnes CO2e**) of emissions were scope 3 (indirect) which includes transport emissions from vehicles not under Council control (such as employee's own cars or contractors' travel), emissions from county waste disposal and treatment, emissions from Local Authority maintained schools' energy usage, and agricultural emissions from the County Farms estate. The figures above show gross emissions, before any reductions or offsets.

Importantly, emissions associated with purchased goods and services (other than utilities and transport) are not included, because we do not have the relevant data to calculate these. However, this could potentially account for significant additional scope 3 emissions. Our action plan will include steps to identify more of this data in future.

A more detailed breakdown and full analysis of the Council's carbon footprint can be found in our Carbon Footprint Annual Report 2018-19. Link to full carbon footprint document

3.3 Priority areas for mitigation within the Council's control

Priority areas have been identified based on where the council can have the greatest impact. Many of these areas will have significant co-benefits to our communities such as to health through reducing air pollution or to community cohesion through better transport connections.

Nearly zero energy buildings. The Council has over 200 offices, a schools portfolio of 260 buildings (including 138 Council-maintained schools) and new schools being built. It is a priority for the Council to design and build new buildings to higher policy standards that deliver net-zero carbon by 2050. It will look to substantially improve the energy efficiency of its existing buildings as a priority. It must also consider higher standards for construction, greater emphasis on carbon lifecycles for new and existing buildings and bring forward new opportunities for installing ground source and air source heat pumps to electrify heat and minimise fossil fuel use in all buildings.

Transport: As the managers of the local highways network, how we prioritise walking, cycling and public transport ahead of the private car to minimise carbon emissions and improve air quality, must be further developed. Active network management systems must allow all communities, but especially rural communities, to access alternatives such as autonomous vehicles and EV charging infrastructure to reduce carbon emissions. Our 'transport network' has many assets along with the Council's offices and rural estate – we must plan for EV charging at Council offices for staff and visitors, EV pool cars, switch work travel onto public transport (where possible) and use our assets to contribute to a credible EV charging infrastructure accessible to all.

Waste management: The Council's waste PFI contract with Amey includes carbon targets. These targets will need to become more stringent to improve carbon savings. A review of opportunities for carbon savings from reducing transport of waste and recyclable materials to adopt local closed loop

recycling solutions and make use of technology. Improved carbon capture from landfill and composting operations must be achieved. A review of waste treatment options for a wider range of waste types can help improve recycling and waste treatment processes.

Afforestation and land use: The County is a major landowner across all four rural districts which presents a potential opportunity to plant new woods and create wildlife habitats for the long term. Planting woodlands and forests can play a role in the offsetting of carbon emissions that cannot be reduced to zero and provide for biodiversity enhancement, although some areas of the county will not be suitable for woodland. We can also develop energy projects on parts of our rural estate, (preferably on brown field or grade 3 land), to bring forward local decarbonised heat and power for the county.

3.4 Priority areas for mitigation through collaboration with partners and our communities

Peatland: Between 60 – 80% of wasted peatland in the UK is located within Cambridgeshire with estimated carbon emissions of up to 5.5 $MtCO_2e$ (5). Peatland degradation is an international challenge and Cambridgeshire is well placed to lead nationally and use our extensive land holdings to work with the scientific community to trial innovative projects as well as building on the work of The Wildlife Trust at Great Fen, The National Trust at Wicken Fen and collaborate with the Agri-businesses to find solutions of international interest.

Commercial and industrial buildings: Working with our business to support decarbonisation of buildings and operations, whilst actively looking for opportunities to commercialise and export products. We will look to develop circular economy principles such as reuse, sharing, repair, refurbishment, remanufacturing and recycling to create a closed-loop system, minimising the use of resource inputs and the creation of waste, pollution and carbon emissions. The circular economy aims to keep products, equipment and infrastructure in use for longer, improving the productivity of these resources. All 'waste' should become an input for another process. It is a regenerative approach in contrast to the traditional linear economy, which has a 'take, make, dispose' model of production. On this basis, Cambridgeshire's waste should be dealt with in Cambridgeshire which should be replicated by Counties elsewhere.

Transport: Working with the Combined Authority, we will collaborate on the development of the Local Transport Plans to prioritise public and mass transport solutions and active travel that reduce CO_2 emissions. Using our highways network, transport and building assets, the County will need to works with local partners to help deliver coherent County-wide electric-vehicle (EV) infrastructure, and provide sites for EV charging facilities.

Domestic Buildings: The Planning System and Building Regulations are key mechanisms for delivering improvements to new homes standards. Facilitating growth is a shared accountability across Local Government with district councils having responsibility for local plans and the Combined Authority for the non-statutory spatial plan. Our role will be to influence and support our partners bringing forward zero carbon growth plans.

4 Adapting to Climate Change

4.1 What is adaptation?

Adaptation is the process of adjusting to climate change and its effects, and to seek to moderate harm or exploit the beneficial opportunities of climate change (6). Historically, climate change adaptation has received far less attention than climate change mitigation (6). Although some of the effects of climate change can be reduced or prevented, many are now irreversible and inevitable, leaving us with no choice but to adapt to these changes.

Most importantly, ignoring the climate change implications of decisions will 'lock-in' make the delivery of related goals more costly; known as 'lock in'. In contrast, adaptation actions taken today to manage these risks will have benefits long into the future.

4.2 What Changes do we need to adapt to?

In July 2019, Cambridgeshire was the hottest place in the UK reaching an all-time high temperature of 38.1 C. The latest UK climate projections (UKCP18) suggest that the UK climate will continue to warm over the rest of this century, and on average, rainfall is expected to increase in winter and decrease in summer, though individual years may not conform to this pattern. This will result in hotter and drier summers, warmer and wetter winters.

Sea levels around the UK have increased and will increase significantly more according to the latest climate change projections. By 2100, sea level on the coast near London, for example, is expected to rise by between 29 – 70 cm under a low emissions scenario and by between 53 – 115 cm under a high emissions. Even if net zero is achieved globally, our climate will continue to warm in the short-term, and sea level will continue to rise for centuries. We must plan for this reality. For a low lying region of East Anglia and Cambridgeshire sea level rises of this magnitude will change significant change to the places we live and work.

The Committee for Climate Change's recent evaluation of the second UK National Adaptation Programme (July 2019) identified that priority must be given to adaptation, as many areas are not prepared for even a 2°C rise in global temperature, let alone more extreme levels of warming (7).

4.3 What adaptation measures are already happening?

Some sectors such as the water sector, are making detailed plans for dealing with a range of future water availability scenarios and looking to reduce consumption and water leaks. The Environment Agency is also in the process of developing an ambitious flood and coastal erosion risk management strategy, which has the potential to form an overarching national strategy for flooding, with clear objectives and targets.

The finance sector, led by FTSE 100 companies and the insurance sector, are making significant progress towards better assessment and disclosure of the physical risks from climate change. Their focus to date has been on only a 2°C global temperature rise and not the 4°C relevant for adaptation risks, but it's a start. Infrastructures such as road, energy and rail are developing long term plans to improve resilience, identifying where key vulnerabilities lie and what needs protection.

Managing the impact of climate change is about risk management. The more we can do today through our plans and policies to adapt infrastructure, homes, our natural environment, business and people to the reality of a different climate, the better future quality of life for everyone, especially vulnerable people.

Leaving adaptation responses solely to local communities and individual organisations without a strategic plan, will not manage the risks from climate change. Individuals can build resilience in their

own homes and buildings but as individual businesses, organisations or the public, they cannot take adaptation actions at a scale that is effective and efficient, and that accounts for social costs and benefits.

The National Committee for Climate Change has developed a risk matrix (Figure 8) to identify progress in managing climate change adaptation risks across different sectors (7). For Cambridgeshire, it will be important to review its vulnerability and exposure to climate change to prioritise actions it now needs to take to build infrastructure resilience. The risk table scores each adaptation priority on the quality of plan, where higher numbers are better, and the x-axis scores each adaptation priority on the extent to which progress is being made in managing vulnerability and exposure to climate change risks. The result is a numerical score (1 to 9). The higher the score the better management is in place.

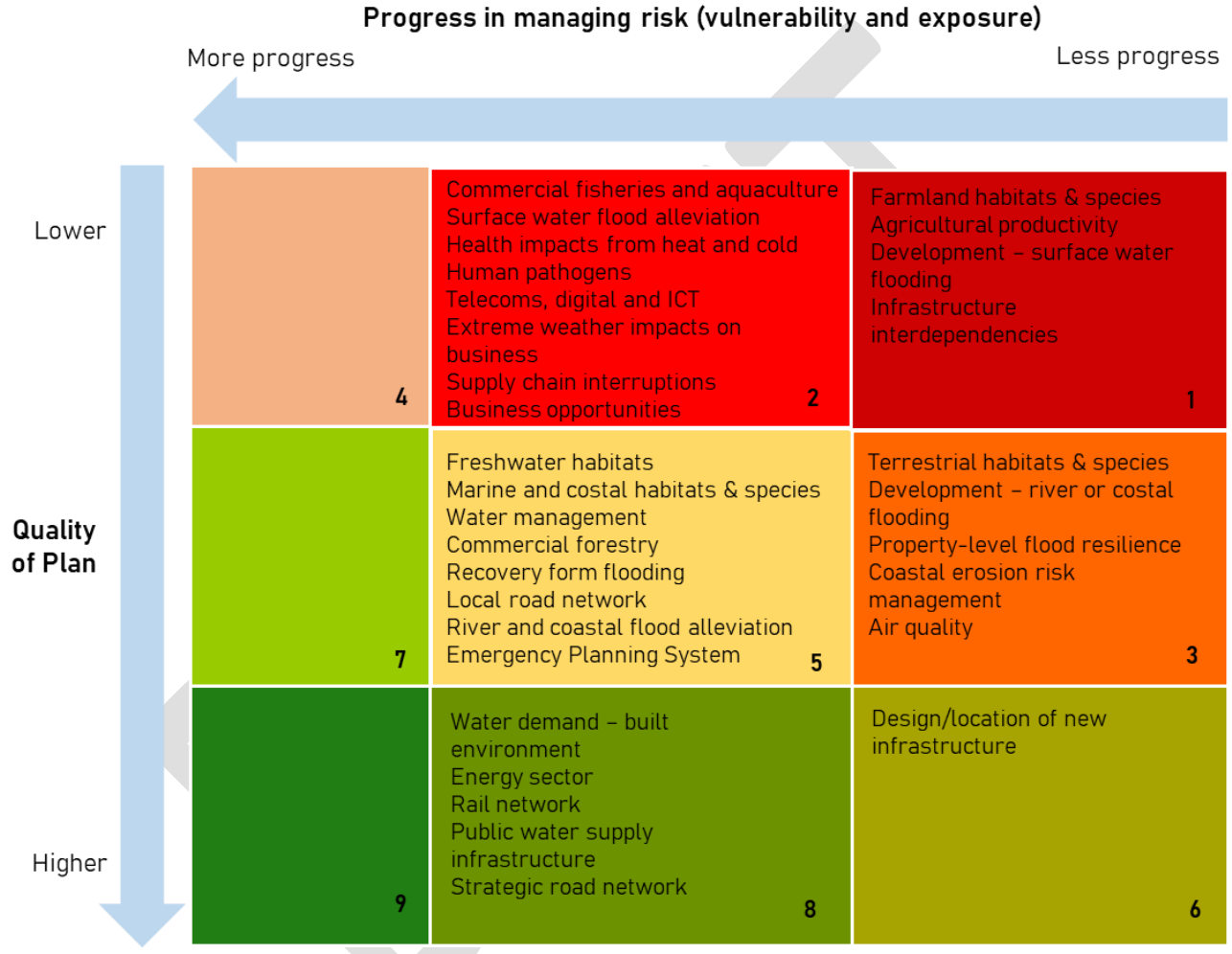


Figure 8 Adaptation progress risk matrix taken from: Committee for Climate Change, Progress in preparing for climate change report, 2019 Report to Parliament

4.4 Cambridgeshire's ability to adapt to Climate Change

The types of adaptation measures that will help manage key risks associated with infrastructure, people and health, buildings and finance are described in figure 9 and section 9.3. The Council will develop plans to address the different areas of adaptation it can lead and collaborate with partners, businesses and the community in areas where they are best leading. Climate change adaptation measures can be incorporated into both existing and new infrastructure.

Buildings and infrastructure can be adapted to become more resilient to flooding, heat waves, drought and air pollution. For example, incorporation of water and green spaces into developments can provide urban cooling whilst also providing opportunities for water storage. This can allow us to adapt to both heat waves and flooding. Furthermore, planting of trees provides shading to locally adapt to higher temperatures and also provides adaptation to flooding by increasing rainwater interception. The introduction of more green spaces to towns and cities also encourages more rainfall to be absorbed into the ground, which recharges groundwater supplies and aquifers, allowing adaptation to climate change related droughts.

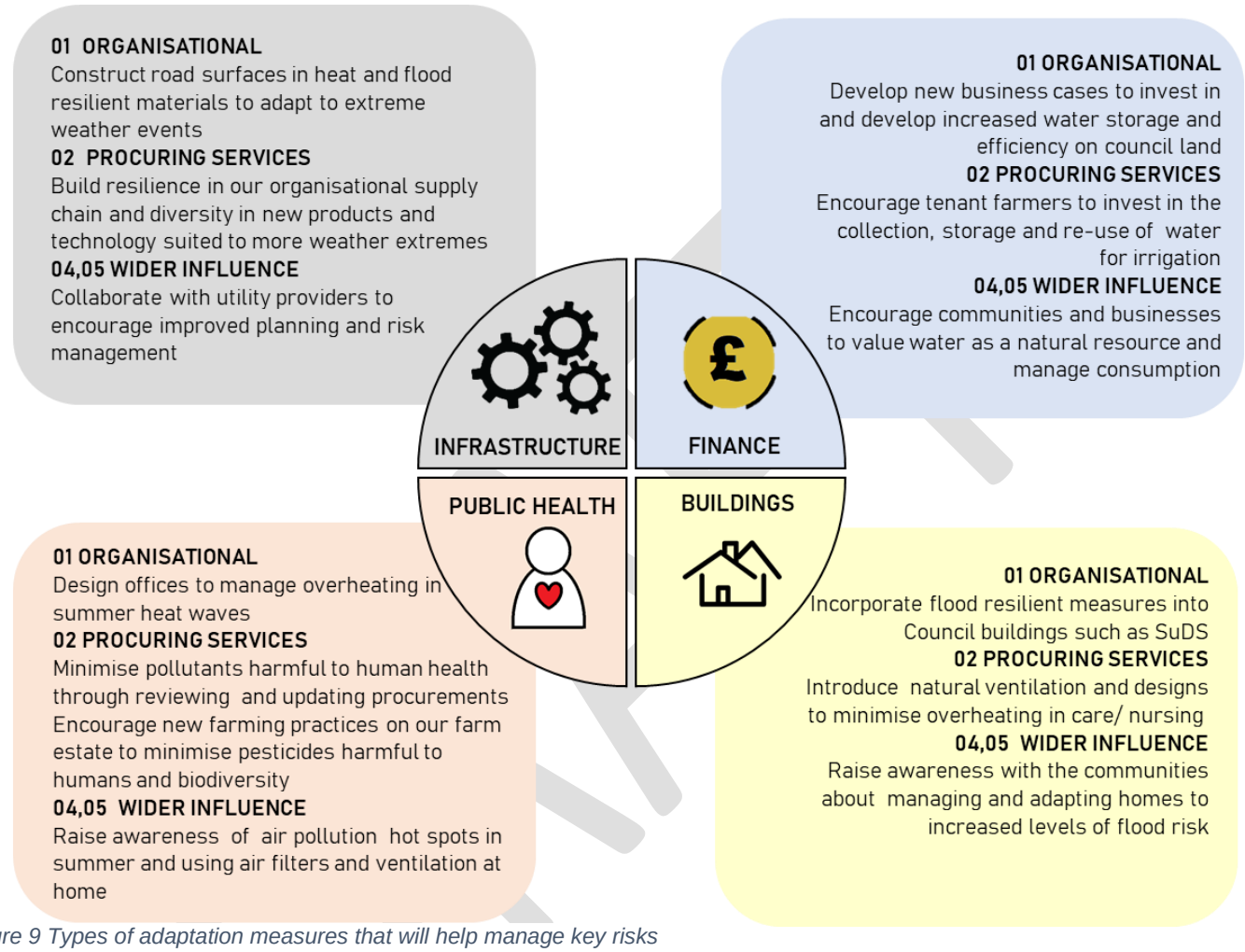


Figure 9 Types of adaptation measures that will help manage key risks

4.5 Priority areas for adaptation within the Council's control

The Council has statutory responsibility for a number of important functions. For example, it is the Lead Local Flood Authority for Cambridgeshire, the Highways Authority (designing and maintaining our roads, cycle and walking assets) and the Planning Authority for Minerals & Waste. Importantly, the council also cares for the vulnerable, supports the education of young people, and manages a large rural estate, over 200 buildings and a number of nature reserves.

Design effective plans and climate change risk strategies across all the Council's services. This will highlight the interdependencies between services, the scale of impact and the actions which can provide multi-benefits. Indicators and suitable data collection mechanisms need to be established to be able to report progress and support national adaptation programmes.

Adapt the Council's estate (buildings and land holdings) to be resilient to the impacts of climate change, supporting staff to work effectively and to ensure continuity of service.

Flood risk - Greater innovation and adaptive approaches will be needed to enable the county to maintain flood risk at current levels and adapt to unpredictable weather events. Significant investment will be required to improve the situation from today's levels. The County's Local Flood Risk Management Strategy will be updated in 2020 and will support the long term objectives set out in the new National Flood and Coastal Erosion Risk Management (FCERM) Strategy (due early 2020) and the National Planning Policy Framework.

Highways Management approaches will be reviewed to provide enhanced resilience to climate change and its impacts across our extensive highways network. This will include the materials we use to build our roads and pavements as well as the methods we use to maintain them to find opportunities for alternative maintenance, such as increasing biodiversity through roadside verge management practices or placing renewable energy technologies on verges to generate clean energy.

Impacts on vulnerable people of severe weather, such as increasing temperatures, will be managed through our Public Health, Social Care and Emergency Planning recovery functions, including care homes. Action will be needed to prevent the vulnerable in our communities becoming more susceptible to the impacts of climate change.

4.6 Priority areas for adaptation through collaboration with partners and our communities

Water availability is a key risk for Cambridgeshire as it is in the driest part of the UK and subject to increasing drought. There are some areas of the County where water supplies for growth will be predicated on reducing water waste in existing communities. This may mean that policy trade-offs nationally between higher resilience and keeping water bills low will need to be examined. The demand for water resources is also putting our region's natural capital at risk in terms of water quality, aquatic habitat and biodiversity. The county will work with partners like our Local Planning Authorities, Water Resource East and our tenant farmers to look at future resilience options.

Resilient Infrastructure: The County is a fast growing area and growth needs to be underpinned by resilient infrastructure whether that is water, electricity and heating, highways and transport options etc. Nationally 41% of transport and utility infrastructure and 10% of roads are in areas at risk of flooding (8). The Council needs to work with its partners to ensure that adaptation to the effects of climate change is a key priority. Key examples would be working with the Cambridgeshire and Peterborough Combined Authority on delivery of the Local Transport Plan.

Infrastructure interdependencies need to be considered as part of all adaptive approaches being undertaken. For example a shift from liquid fuels (petrol/diesel) for vehicles reduces the local impacts on air and water (highways runoff) pollution in a hotter climate and reduces risks from issues with liquid fuel supply and distribution. However supply and distribution disruption risks are moved to electricity networks. Or, if the council adapts to weather conditions which make travelling more challenging by using telecommunications applications, the risk to our services from loss of Wi-Fi or poor internet speeds increases.

Resilient economy - supporting businesses to plan for climate-related risks and opportunities. The Green Finance Taskforce and Environmental Audit Committee consider that physical risks to climate change need to be addressed by businesses informed by appropriate climate scenarios and data.

Maximising the creation, co-benefits and longevity of **multi-functional green and blue (water) infrastructure** to reduce vulnerability and exposure to climate change will be essential. We will work with partners to deliver a local response to the 25-year Environment Plan for example 'Doubling Nature' (9) with the Local Nature Partnership, with our tenant farmers on the Environmental Land Management Scheme (ELMS) and with other flood risk management partners to ensure joined up flood and water management across all sources of risk.

5 Conserving and Enhancing Natural Capital

5.1 What is Natural Capital?

How the environment supports 'Quality of Life'

> *"We are the first generation that has a clear picture of the value of nature and the enormous impact we have on it. We may also be the last that can act to reverse this trend."*
>
> Living Planet report, 2018: Aiming higher

Our environment provides numerous benefits to humanity (also known as ecosystems services), many of which are fundamental to our lives (Figure 10). It enables the food we eat to grow and plants for medicines – providing for us to live. It also offers shelter from widespread disease, clean air to breathe and water. This is referred to as the 'regulating' services or benefits we get from nature. We also derive cultural, mental health and wellbeing benefits.

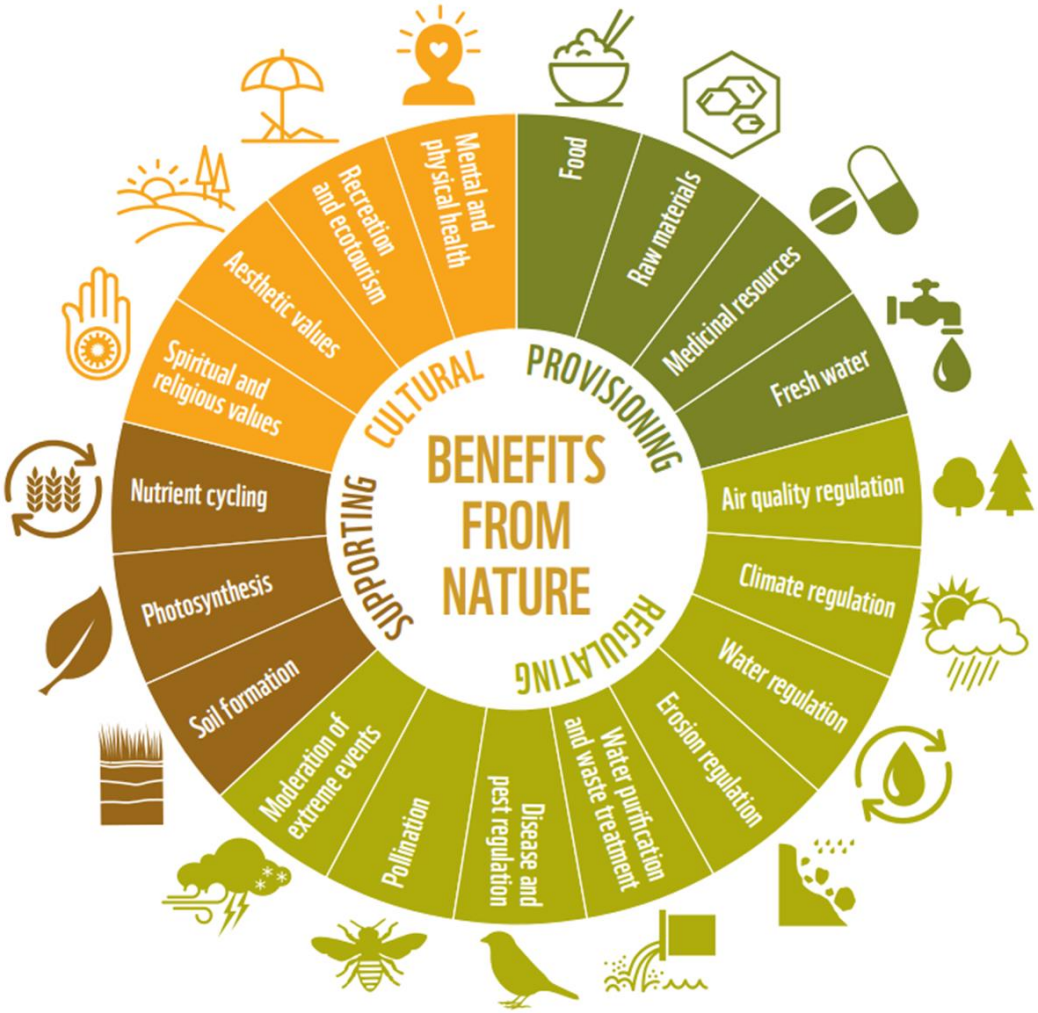


Figure 10 Benefits from nature, adapted from Millennium Ecosystem Assessment, 2005

Our reliance on the environment for these services is important for quality of life. Damaging our natural benefits beyond recovery and repair will mean a diminished quality of life for future generations.

Components of Natural Capital

Natural capital is our 'stock' of water, land, air, species, minerals and oceans. From this stock goods and services are produced, including clean air and water, food and pollination, energy, wildlife, recreation and protection from hazards, (Figure 11), (3).These services provide economic, social, environmental, cultural, and well-being benefits.

Biodiversity, our flora and fauna, is an essential component of natural capital stocks and an indicator of the stocks' condition and resilience. It provides benefits directly to people, for example, the pollination of plants to produce seeds. This benefits society primarily through food provision, and has a global economic value of approximately £120 billion and within the UK alone in the region of £690 million each year (9)

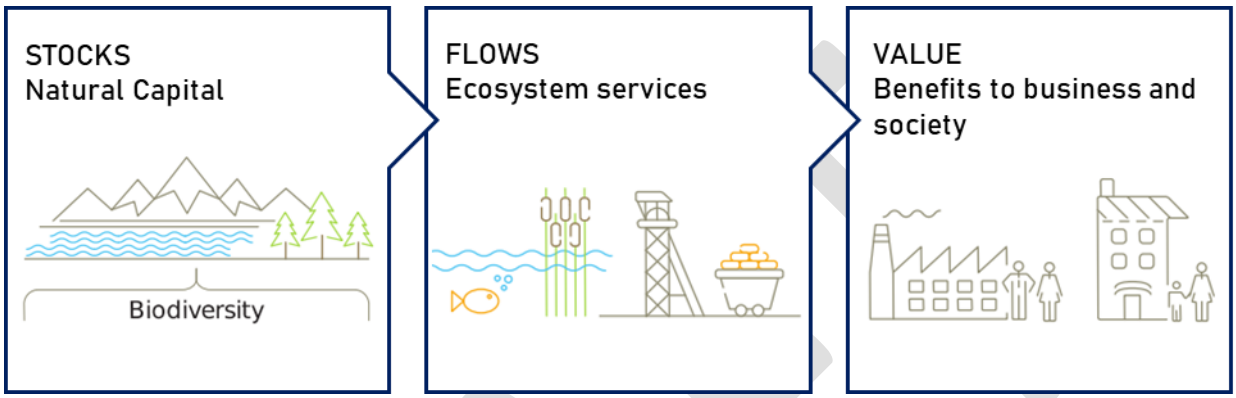


Figure 11 Process of valuing natural capital. Taken from Parliamentary Postnote 542 December 2016: Natural Capital: an overview

There are a range of established methodologies now available to value these benefits and quantify these financially to allow for easy incorporation into decision making: it will be important that these methodologies become common place through learning and education, to inform decision making, similar to those we will need around valuing carbon emission reductions. By providing a financial value to our ecosystems it can demonstrate to decision makers the full cost of exploiting our environment for short term gain rather than enhancing and protecting it. This is known as the 'natural capital approach'.

As an example, currently, the UK consumes resources equivalent to three planet earths - this is not sustainable, and we must therefore become resource efficient and reduce consumption and waste. Our environment takes time to replenish itself. The most recent financial crisis in 2008, has shown what happens when individuals and organisations live beyond our means. Credit based consumption becomes dangerous when it outstrips our ability to build up financial reserves, so our economic growth is put at risk when our natural capital cannot replenish.

The UK government published 'A Green Future: Our 25 Year Plan to Improve the Environment" recognising that natural capital is crucial in the formation of all parts of society's wealth and will either directly or indirectly impact value to individuals. Natural capital needs to be protected but also expanded to sustain forecast population growth.

5.2 Natural Capital components and how they are being impacted

Now is a critical time to act. If growth over the next five to ten years takes advantage of our rich natural capital without supporting its recovery, degradation of local, regional or even global ecosystems is inevitable. The drivers of natural capital degradation have been established through rigorous research, with our consumption-based culture driving many of the threats facing our environment (Figure 12).

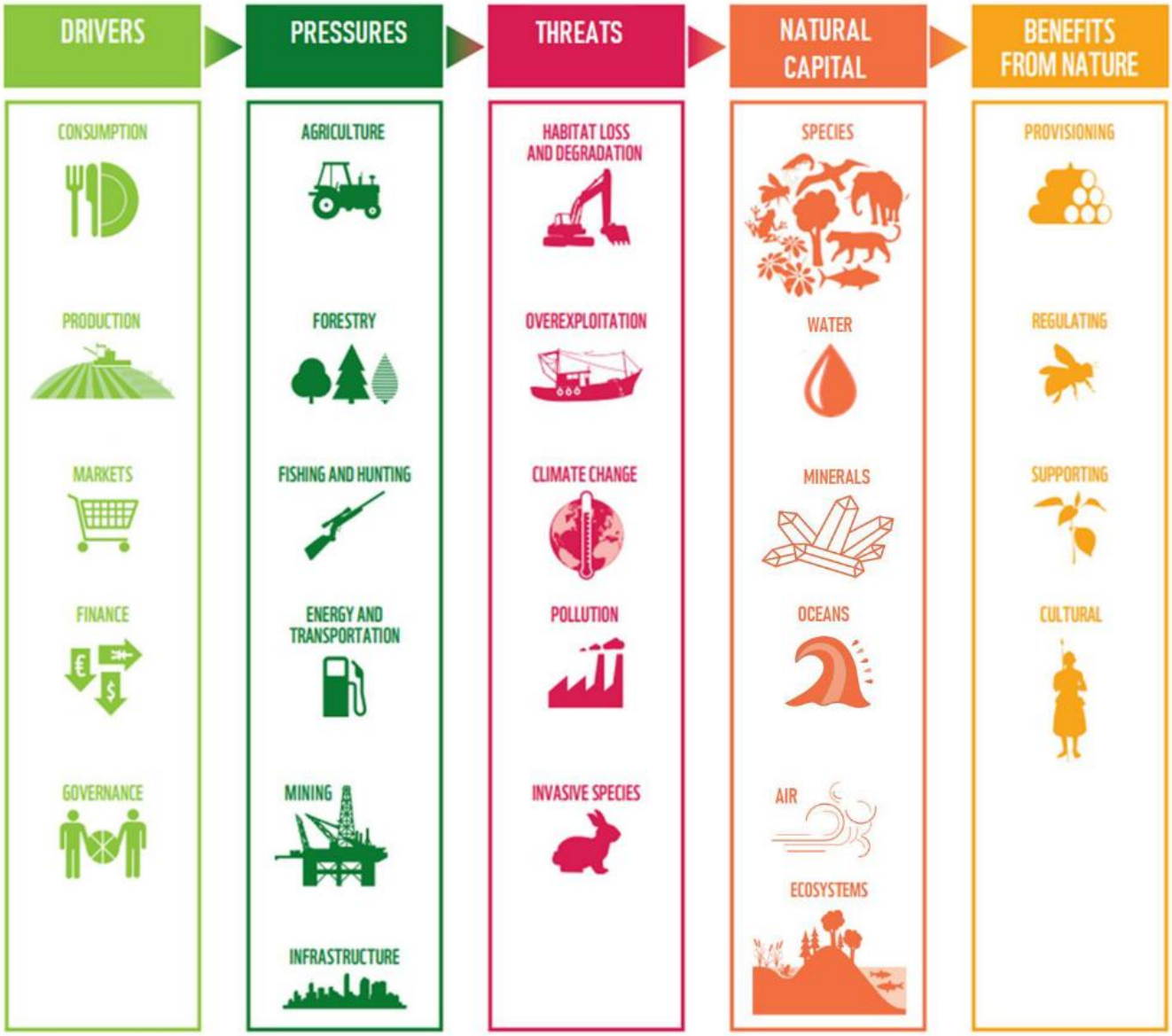


Figure 12 Threats to nature and the drivers and pressures behind them. Adapted from Living Planet Report, 2018

All of these could have major impacts on the world economy and there is increasing evidence that we already experiencing some of these. Natural capital has been used for free for so long, and it is now important that it becomes valued in our financial and economic modelling to protect it for the benefit of all.

Examples of how this could play out include:

- The agricultural sector will suffer from the changing and more erratic weather patterns.
- Declining numbers of bees reduces pollination activity resulting in less future seed stores
- Fish stocks are expected to decline due to rising temperature of the oceans.
- Sea level rise impacts coastal communities leading to increased migration
- Industry and energy sectors will have to deal with reduced water availability, higher temperatures and changing agricultural productivity.
- The transport, insurance, infrastructure, real estate, and tourism sectors all have to deal with rising temperatures, more erratic rainfall patterns and higher probabilities of extreme weather events and corresponding damages.
- Insufficient tree re-growth could reduce our stock of building materials and carbon storage

5.3 What are the key factors that affect natural capital in Cambridgeshire?

Climate Change

Climate change impacts species and ecosystems, and therefore the services they provide, in many ways. Changes in prevailing weather conditions (temperature, precipitation, seasonality) directly affect ecosystem processes as well as species survival, encourage the spread of pathogens, and disrupt the timing of life cycle events. It decouples evolutionary relationships and undermines complex processes that underpin ecosystem function. There are many lines of evidence that show that species are already being affected by climate change (10). With the damage to this natural capital come impacts on the services they provide us, and the development of feedback loops which exacerbate bother the cause and effects of this damage.

Without these services, the effects of climate change will be felt more keenly, and. Heat, drought, flood risk, sea level rise, and increased air pollution create significant risks for the natural environment. Risks include:

- Damage to crops from severe weather/lack of water,
- Loss of top soils due to floods or
- Changing temperatures impacting wildlife through changes to habitat and food chains.
- Damage to historic buildings from air pollution,

Pollution

Clean air is one of our natural capital 'stocks' but air pollutants generated by a mixture of natural and human-made processes are creating health and environmental damage. The main challenge is the production of particulates and nitrogen dioxide (NO2) resulting from the combustion of fossil fuels, causing unacceptable impacts on health. Particulates, when inhaled can lodge in the lungs and exacerbate existing respiratory problems whilst NO2 can increase asthma impacts in children. Our wildlife is also impacted by poor air quality reducing new growth and vulnerable species not thriving.

The Cambridgeshire Transport and Health Joint Needs Assessment identified the following

- levels of air pollution in Cambridgeshire impact health, as evidenced by respiratory and cardiovascular admissions to hospitals
- 257 deaths in 2010 were attributable to air pollution in Cambridgeshire
- Over 5% of Cambridgeshire's population mortality is attributed to air pollution.
- Hot spots of pollution include urban areas and arterial and trunk roads such as the A14.
- New developments in Cambridgeshire are often sited near poor air quality areas.
- Small particulates from traffic also contribute to indoor air pollution, where people spend most of their time and receive most of their exposure to air pollutants.

Managing the impacts of air pollution from cars and power stations is possible and this is included as a priority in section 5.6 below. Indeed, there are many synergies between approaches to manage air pollution and reduce carbon emissions.

Polluting our rivers and oceans from single-use plastics and agricultural run-off poses a significant threat to marine-life and reduces the ability of our oceans to nurture and restock itself. In July 2019, the Council developed a plastics strategy and action plan to make a difference on this issue.

- An estimated 79% of all plastic waste ever created is still in our environment and needing to be cleaned up.
- Waterways become clogged with plastic pollution, preventing natural functioning of the systems and harming wildlife when consumed

- Agricultural run-off, for example of fertilisers, cause oxygen levels in waterways to diminish such that flora and fauna cannot survive

Population Growth and Development

Cambridgeshire is one of the fastest growing counties in the UK. Growth necessitates the provision of more housing, food and water, which must be managed sustainably to minimise the environmental impact of our county's success. There are numerous examples globally of economic development taking place to the detriment of nature. Examples have included:

- damage to landscape from minerals extraction for building materials
- loss of natural habitat to make way for new homes or road building programmes
- increasing air pollution from burning fossil fuels for travel
- the impact of agricultural pesticides on water quality and biodiversity

To achieve sustainable growth it is important that everyone takes action to conserve and enhance our natural capital. Using Cambridgeshire's growth as an opportunity, natural capital can be developed and enhanced through:

- restoring local heritage
- provision of increased green spaces for people and nature
- increasing tree planting to assist with shade/urban cooling, air quality and biodiversity
- switching from cars to more active travel choices such as walking, cycling and mass transport solutions

5.4 The Council's role in conserving and enhancing natural capital

The Council is a land and asset owner, as well as responsibilities for mineral and waste planning and other policy. This places us in a position to maintain and enhance natural capital in many ways. Greater detail can be found in section 9.5.

Land Owner and Guardian for the Future

The Council owns seven Local Nature Reserves. Managing the impacts of climate change and growth will mean the planting of more trees and hedgerows using a mix of species that complement Cambridgeshire's natural habitats while also thriving under different weather patterns. This planting will also help store excess water at times of excessive rainfall helping manage flood risk. Through the Council's rural estate, its land forms part of some of these important wildlife sites and we must support our partners in the careful management of these sites. The County is a partner to the Local Nature Partnership and Cambridgeshire & Peterborough Biodiversity Group.

Over and above this key opportunity for conservation action, Cambridgeshire is home to a number of nationally and internationally important wildlife and historic sites. It has a number of Sites of Scientific Interest (SSSI) including Devil's Dyke, Cherry Hinton Chalk Pits, Thriplow Peat Holes, Upware South Pit, Whittlesford- Thriplow-Hummocky Fields, Cam Washes and Grafham Water. It also hosts three Ramsar sites; the Nene Washes, Great Ouse Washes and Chippenham Fen, as well as a number of Special Areas of Conservation (SACs) including Eversden and Wimpole Woods and Fenland SAC. Through our partnerships we can help to maintain these valuable sites in positive conservation status.

Policy Maker

While the Council owns a number of designated and non-designated heritage assets, many of which can be managed to create a better environment for residents and for heritage itself, we also have a key role in advising on environmental stewardship schemes to help landowners to extract the best environmental and heritage related outcomes from sites. We advise on planning applications and

work closely with developers to maximise the potential for open spaces in developments by use of 'preservation in situ' schemes that create greenspace to protect the historic environment

Our role in development and enforcement of the County Minerals and Waste Plan provides a key opportunity to design and implement policies to create new habitats as well as deliver strategic flood water storage as a restoration option. Similarly our role as the Lead Local Flood Authority for Cambridgeshire, entails close working with our District and City Councils to seek sustainable drainage systems and the protection of water resources for new developments. Availability of water is a key challenge for Cambridgeshire, the driest part of the country and likely to face water shortages ahead of other areas. Tackling this issue will important and we must look to support our partners with leading roles on this issue.

As the local managers of the highways network, the County Council manages protected roadside verges and maintains Rights of Way that supports green infrastructure and biodiversity.

5.5 Priority areas for natural capital within the Council's control

There are some areas that the Council can lead but many areas in natural capital enhancement that others lead and we will look to support their efforts. Our leadership priorities include:

Habitat restoration through enhanced planning policy that requires mineral and waste management restoration proposals to reflect strategic and local objectives for countryside enhancement, green infrastructure and greenhouse gas emissions. Emphasise will placed upon restoring habitats and species that have been displaced or degraded through quarry activity, and the implementation of robust restoration ecology approaches to re-establish lost ecosystem dynamics.

Land management for nature: Shift our land and asset management approach to place greater emphasis on positive environmental outcomes. Support additional tree planting on our rural estate and manage our road verges better for biodiversity. Enhance the natural environment through Council owned Local Nature Reserves, as well as continuation of participations in Governmental environmental stewardship schemes through the new Environment Land Managements Scheme (ELMs). Sustainable soil management policy on the rural estate will be established using emerging natural capital based soil metrics and management approaches to measure and evaluate the approaches supported.

Biosecurity: Changing climate is aiding the spread of plant and animal disease and invasive species across the UK. Ash dieback (*Hymenoscyphus fraxineus*), for example, has been prolific in recent years and is projected to kill up to 95% to ash trees across the UK changing our landscape forever and threatening many species which rely on it. The cost to society of this disease is predicted to be in the region of £15 million (11). Similarly the spread of the highly invasive Japanese Knotweed (*Fallopia japonica)* has been an ongoing challenge for the last 35 years. This species is spreading as the UK's climate becomes milder, and emerging research suggests it reduces soil's capacity to sequester carbon. We will pro-actively manage our rural estates and assets to improve the speed of identification disease symptoms and invasive species, and enhance our management approach to dealing these challenges. We will ensure all tenant farmers are able to react speedily to any disease or invasive event, and that biosecurity measures are incorporated in planning applications where relevant.

Engagement with our tenant farmers to provide support through government policy changes and new guidelines. The 25-year Environment Plan outlines Government's plans to reduce the impact of farming on the natural environment through the development of many new approaches, frameworks and regulations for the types of agricultural practice that will be acceptable going

forward. We will aid our tenant farmers to keep informed of these changes, particularly where new subsidies may provide an opportunity to hasten "greening" of our estate.

Reducing plastic pollution. The Council buys services and goods to deliver its statutory responsibilities. It will look to improve its procurements and work with its supply chain to find better, more sustainable options to replace single use plastics.

5.6 Priority areas for natural capital through collaboration with partners and our communities

Peatland: The CUSPE carbon footprint highlighted Cambridgeshire's peatland is producing 5.5million tonnes of CO2e per annum. This is almost the equivalent of all other emissions from all sectors across Cambridgeshire. Cambridgeshire's fen peatlands are among the UK's most diverse habitats for wildlife, but much have been lost to drainage and agriculture practices (12). These habitats rely on a delicate balance of water volume and quality to maintain their diverse range for flora and fauna many of which are internationally recognised. Nationally, peatland research and restoration has focused on upland systems. With its extensive lowland systems with complex human-nature interactions, and rich research and technological communities, Cambridgeshire is well placed to take the lead in developing and implementing new sustainable management practices for the benefit of communities and nature. Already there are projects such as Wicken Fen (the National Trust) and the Greater Fen Project (Wildlife Trust) working to conserve and re-wet our peatlands. This work must continue and extend to include agritech and other farming interests to find solutions to the carbon footprint.

Green Spaces: Cambridgeshire has one of the smallest percentage of land managed for nature in the country. Currently only 8.5% of the county is covered by natural or green spaces. Doubling the county's natural and green spaces by 2050 will *"secure access to high quality natural green spaces within 300m of everyone's home"*. Nature Cambridgeshire, the Cambridgeshire and Peterborough Local Nature Partnership is a partnership with district councils, the County Council, the Cambridgeshire and Peterborough Combined Authority, Natural England, the Environment Agency, the National Farmers Union and a number of others to reach the 'Doubling Nature' target of 17% natural and green space coverage.

Work with tenant farmers to develop best routes to aid reductions in impacts from pesticides, herbicides and nitrogenous fertilisers on our land while ensuring that that crops are produced sustainably and profitably. For example, ammonia escape from slurry stores can be reduced through the use of store covers, or the use of metaldehyde for slug control could be replaced with alternative chemicals that are easier to remove from drinking water (as demonstrated through the Anglian Water trial with Cambridgeshire farmers located near to Grafham Water).

Tackling the causes of air pollution by working with our city and district councils, Health, Greater Cambridge Partnership and Combined Authority to switch to low emission and electric vehicles and buses and encouraging greater levels of walking and cycling instead of car use. Planning new developments to reduce air pollution and its impact on health both internal and external to buildings and to use County powers and responsibilities to support change. This approach will also have co-benefits for reducing carbon emissions from new developments.

6 Tackling Climate Change and Environmental Challenges Together

6.1 Collaboration is essential

Tackling climate change, adapting to its ongoing impacts and protecting and enhancing our natural capital is bigger than any one organisation. Success will only happen if we all choose to work together and share responsibility for changes in the way we live and work. Aligning our endeavours will allow us to make changes as fast as possible and at the least cost. This means policies and strategies across Government at all levels must be complementary and that we use the power of the market to bring forward new working practices, technological and other innovations and that society reacts positively to this shared responsibility.

Looking back to the past it's important to learn lessons but we must also recognise that no previous generations have experienced the choices that we must now make today to stop human-driven climate change. It is a new path for all of us which we need to create together. It must use resources sustainably, respect our natural capital and flourish without degrading the environments we so rely on. The scenario of runaway climate change is a bleak prospect for everyone, not just in the UK but globally, as faster sea level rises will damage coastal communities and cities, desertification will force mass migrations across continents and flooding will be commonplace.

There are a number of ways that the Council can work with communities including:

Building awareness of the impacts of climate change and how households can adapt to hotter summers and wetter winters including increased flood risk.

Supporting Parish Councils, Community Land Trusts and other organisations to shift rural communities off oil onto renewables by using our land assets where possible to build and operate community energy centres to benefit communities, access procurements for specialist energy services to design and construct projects and work with our in-house team to identify grants and share best practice from existing projects.

Engaging with young people is vital. Many schools have developed Eco-Councils. Working with headteachers, schools and eco-councils we will look to develop the idea of school climate change and environment strategies and link these to future skills provision, improving careers advice and guidance and building behavioural change.

Creating a sustainable future and quality of life for young people must involve the voices of, and engagement with young people. Current and future generations are inheriting a changing climate as a result of fossil fuel combustion worldwide and will experience even greater impacts of more extreme weather in their everyday lives, to that which we are experiencing today. The infrastructure developed now: housing, transport, energy and digital, will shape the way young people live their lives.

Education, from early year's provision through to schools, colleges and universities, is working hard to equip young people with the knowledge and skills on climate change impacts and preparing them for their future responsibilities. Tomorrow's decision makers, engineers and technologists already exist and it will be important to bring their new ideas and ambitions into the infrastructure we are designing and decisions we are taking now. Planning the transition from today's workforce to the future workforce needs development, ensuring the skills and knowledge are in place to make a successful and happy succession.

The **business community** can be a powerful force for change through product innovation. For example, energy efficiency improvements of 'white goods products' has reduced carbon emissions.

On the other hand if robust governmental regulation and policy is not delivered, damaging practice such as the recent car emissions cheating scandal can emerge.

Individuals are highly influential of the 'market' and the provision of goods and services by businesses. For example, fast fashion is driven by consumer choices bringing significant carbon impact and waste challenges for society.

Following feedback from the public consultation, the next version of this Strategy will identify what actions residents and businesses and other organisations are already looking to take to share responsibility.

6.2 Cultural Change

All products and services that are accessed or bought have a carbon footprint through the use of resources (extraction from the ground for example), production of goods (energy to make the clothes or smart phones), distribution of these goods (energy for transportation), and then ultimately the treatment and disposal of the waste. Efforts to reduce or change consumption can impact positively on our carbon footprint and this comes from new consumer choices and political interventions. Positive examples of these changes includes consumers choosing to avoid single use plastics to minimise polluting our oceans, and the shift towards LED lighting. Initially, LED lighting was not favoured by consumers but is now culturally accepted and in widespread use.

Fossil fuel consumption has been widely promoted by successive Governments and the market, in its drive to prosperity and economic growth. Until recently, policy instruments were developed without fully taking into account the impacts of fossil fuel consumption on climate change. Although the scientific evidence on the causes and impacts of climate change has been known for some time, there has been a delay in societal acceptance of the urgent need for change. The transition to a low carbon society wrestles with difficult trade-offs between competing priorities whilst policy begins to align across all sectors and all levels of government in a shared ambition to reach net zero by 2050. In some cases it may take regulation and/or fiscal incentives to bring about cultural change, for example the 5p plastic bag charge.

Young people are worried that homes built now will continue to be inefficient and reliant on fossil fuels, where they need to be affordable with clean energy, smartly managing energy for efficiency and warmth whilst minimising waste. Public transport is also a particular concern for young people. It can offer opportunities to meet friends and work but people in rural areas don't have sufficient access to this, pushing them towards driving cars, often older and inefficient and more polluting models.

Broadly, the interaction between politics and consumer choices is changing our culture from one which did not consider its carbon or polluting impacts to one of greater knowledge and more discerning choices. We need to keep building on these changes together, learning from each other and sharing responsibility.

The diagram below (Figure 13) charts the journey we are making as a society to tackle climate change.

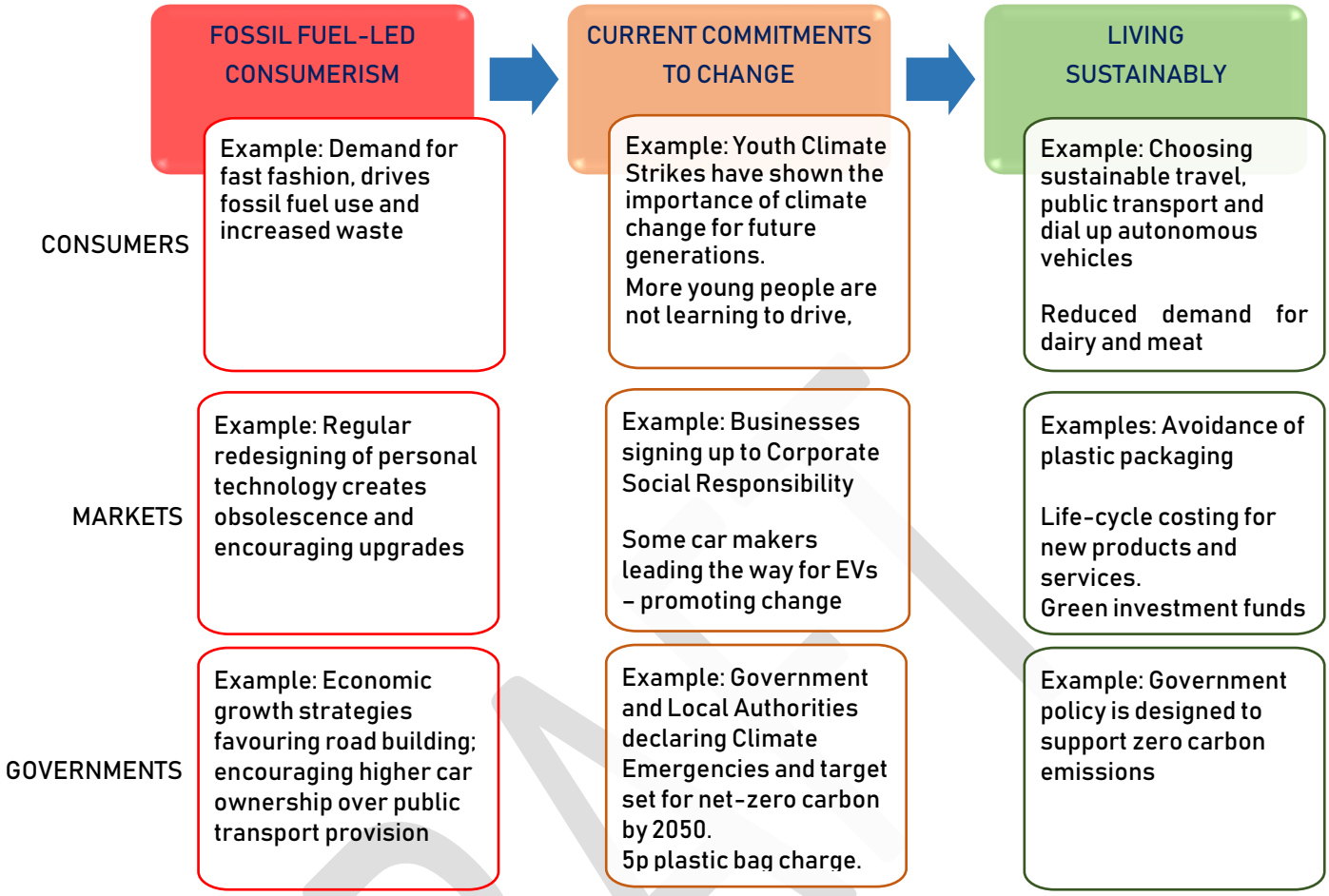


Figure 13 Cultural Change – consumer, market and political change

6.3 Next steps for this Strategy

(This section will be removed in the final version post consultation.)

This Draft Strategy, along with the County Council Carbon Footprint Annual Report 2018-19, and the Draft Climate Change and Environment Action Plan, will be presented to the County Council at its meeting on 19 December 2019.

The Strategy and Action Plan will then be put to a public consultation. The consultation period will run from 20 December 2019 to 31 January 2020.

All stakeholders will be able to take part in the consultation and give their feedback on the dedicated website: https://consultcambs.uk.engagementhq.com/climate-strategy

A series of engagement events will also be held to promote the Strategy to our partners and communities.

Following feedback from stakeholders, an updated and final version of the Strategy and Action Plan will return to Full Council in March 2020 for approval.

See also: Action Plan (add link)

7 Glossary

Expression	Meaning
Adaptation	Methods to lower the risks posed by the consequences of climate change by improving resilience.
Carbon	Used as abbreviation for carbon dioxide or carbon dioxide equivalent
Carbon Budget	An amount of carbon dioxide that a country, company, or organization has agreed is the largest it will produce in a particular period of time.
Carbon capture and storage (CCS)	The process of capturing and storing carbon dioxide before it is released into the atmosphere or used in other industrial processes. Current technology can capture up to 90% of carbon released by burning fossil fuels in electricity generation and industrial processes such as cement production.
Carbon dioxide equivalent (CO_2e)	A standard unit for measuring carbon footprints. It express the impact of each different greenhouse gas in terms of the amount of CO2 that would create the same amount of warming, using global warming potentials.
Carbon offset	A reduction in emissions of carbon dioxide or other greenhouse gases in order to compensate for emissions made elsewhere. This reduction could be through minimising emissions or capturing emissions. Offsets are measured in tonnes of carbon dioxide-equivalent.
Circular Economy	An economy in which resources are kept in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.
CO_2	Carbon dioxide
EV	Electric Vehicle
Global Warming Potential (GWP)	A measure of how efficient a chemical is at trapping heat in the atmosphere relative to carbon dioxide. For example, methane has a GWP of 34 and nitrous oxide has a GWP of 298 (6). By definition, CO2 has a GWP value of 1. Quantities of GHGs are multiplied by their GWP to give results in units of carbon dioxide equivalent (CO_2e).
Green House Gas (GHG)	Any gas that absorbs heat and then emits it. These gases prevent heat from leaving the Earth's atmosphere, driving the warming of the planet. Common gases include: carbon dioxide, water vapour and methane.
Green/Blue Infrastructure	A network of multi-functional green space and other green features (or water), urban and rural, which can deliver quality of life and environmental benefits for communities.
Kt	kilotonne = 1000 metric tonnes
LULUCF	Land Use, Land use change and forestry. Category within the Green House Gas Protocol.
Low carbon technology	Methods of generating energy that produce little to no carbon dioxide. These tend to be technologies that do not rely on combustion of fossil fuels.

Mitigation	Methods to reduce or prevent greenhouse gases entering the atmosphere. This can include carbon capture and storage.
Natural Capital	Natural assets, such as fresh water, minerals and biodiversity which confer a benefit to humans. These benefits are expressed in terms of their monetary value.
Net zero	Achieving an overall balance between emissions produced and emissions taken out of the atmosphere. This can take place on different scales and is often achieved through offsetting.
Peat	The remains of wetland plants and animals that build-up in more or less permanently saturated conditions, and represents an important store of carbon. Peat soils in England have been accumulating carbon since the retreat of the last glaciers approximately 10,000 years ago.
Resilience	The ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate. Improving climate resilience involves assessing how climate change will create new, or alter current, climate-related risks, and taking steps to better cope with these risks
Carbon sequestration	The long-term removal and storage of carbon dioxide from the atmosphere to reduce atmospheric concentrations.
Wasted peatland	A technical term for deep peat that has been substantially degraded following years of drainage and cultivation so that the peat is now more dominated by underlying mineral material (12)

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9 Appendices

9.1 Appendix 1: Impacts of Climate Change

Climate change has many impacts. These will be released by the Council in a variety of different ways. The table below summarises some of these.

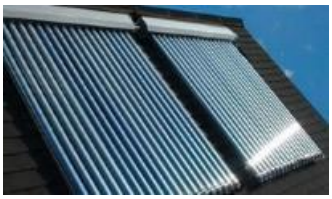
Impact	Description	Possible Impacts for the Council
Flood Risk	Projected increases in extreme rainfall will bring increased risk of flooding (6). The nature of surface water rainfall means that many areas will be affected by increased flooding. Runoff from compacted or impermeable areas will increase and water will accumulate in low spots. As temperatures increase more and sea levels rise areas like the Fens will become more under threat.	**Infrastructure**: Disruption to transport links (13) could affect staff travel to work and access to parts of the County for meetings. Disruption to travel could disrupt Council response processes by restricting access to some parts of the County. There may be increased risk of power outages associated with flooding and thunderstorms, which could cause disruptions to transport, logistics and processes.
		Finance: Increased costs of flood related damage and flood investigations. Increased costs of providing flood resilient infrastructure to existing buildings. Increased social costs associated with providing support for people suffering from emotional issues associated with flooding and uncertainty.
		People and health: Council employees may suffer from increased stress or mental health problems associated with flooding of their homes or the uncertainty associated with increased flood risk.
		Property: Council buildings and property may be damaged by flooding if located within flood risk areas.
Heat Waves	Climate change is projected to bring an increase in warm temperature extremes and it is very likely that heat waves will occur more frequently and last longer (6). Cambridgeshire is one of the warmer parts of the country, so could be significantly impacted by these changes. Cities will be impacted more than rural areas (14).	**Infrastructure**: Disruption to transport links could affect staff travel to work and meetings at various council buildings. Disruption to travel could also disrupt Council response processes by restricting access to some parts of the County.
		Finance: Increased costs associated with summer cooling (15) in Council buildings. Increased costs associated with installation of air conditioning and heat resilient infrastructure.
		People and health: Working conditions may become unsuitable for staff which could impact employee concentration and performance (13).
		Property: Office spaces may become unsuitable to work in during heat wave conditions. This will have implications on the design, construction and maintenance of existing and new office space.
Drought	With increased temperatures extremes and more frequent and longer lasting heat waves will mean increased water restrictions in Europe (6). Cambridgeshire is already one of the driest counties in England so could be significantly impacted by this. The frequency of drought is likely to increase in presently dry regions by the end of the 21st century (6).	**Infrastructure:** Roads can be affected under drought conditions and subject to cracking.
		Finance: Increased water costs for office buildings. Increased social costs as more people fall below the poverty line as a result of increased food and water costs.
		People and health: Employees may be emotionally or physically impacted by reduced food and water availability and increased costs associated with this.
		Property: Reduced water availability in the environment would affect council farms (irrigation restrictions) and nature reserves (natural water reserves) as well as other council business use.

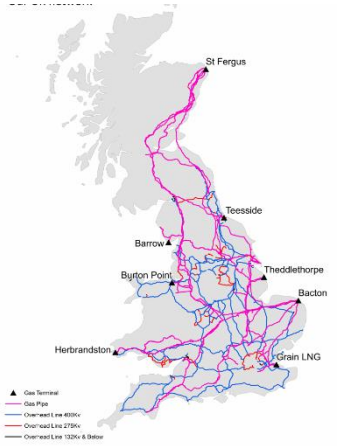
Impact	Description	Possible Impacts for the Council
Sea Level Rise (SLR)	Rising global temperatures are causing polar ice to melt and oceans to expand, resulting in global sea level rise. Global sea levels rose by circa 0.19 metres between 1901 and 2010 (6). Cambridgeshire is one of the most low-lying counties in England so could be significantly impacted by sea level rise in tidal and fen areas. It is anticipated that the East of England could experience a dramatic sea level rise of up to 0.54 metres by 2100 under a high greenhouse gas emission scenario (15).	**Infrastructure:** Transport links may be impacted by SLR in low-lying parts of the county. SLR could restrict or prevent access to low-lying parts of the County, disrupting access for social care, flood risk management and other service provision.
		Finance: Costs of re-locating Council buildings, infrastructure and Council housing away from high risk areas and provision of SLR resilient infrastructure. Council farms could become unproductive for current agriculture processes.
		People and health: Council staff and communities in low-lying regions may be emotionally affected by the uncertainty surrounding sea level rise and re-location. Increased pressure on social care to provide increased support.
		Property: Council buildings in low-lying parts of the County may become inaccessible under a high risk scenario and require relocation.
Air pollution	Transport is a major source of short-lived greenhouse gas pollutants, which can result in direct damage to human health (16). Road transport (particularly diesel traffic) is a significant contributor to air pollution such as particulate matter (PM) and ground-level ozone (O_3) (16). Rising temperatures are also projected to increase levels of ozone (17), as are other greenhouse gases such as carbon monoxide, methane and nitrogen oxides (18). Short-lived greenhouse pollution can also cause acid rain (18). Air pollutants have been linked to health conditions such as asthma (19) and eczema (20).	**Infrastructure:** Ground level ozone could create a risk of damage to infrastructure, ecosystem services and functions. This could in turn influence agricultural productivity and water supply.
		Finance: Increased social costs associated with providing support to people impacted by pollution related health impacts. Increased costs associated with repair of council buildings impacted by acid rain.
		People and health: Poor air quality can pose a risk to employee health issues such which could lead to more sick days. Air pollution has been associated with the development and worsening of asthma and can also make people who already have asthma more sensitive to asthma triggers (19). Air pollutants have also been associated with health implications such as eczema (20). Urban air pollution can increase risk of cardiovascular, respiratory diseases and cancer (16). Council staff travelling for or to work may be particularly impacted by air pollution from vehicles.
		Property: Ozone pollution can cause acid rain (18) which could cause damage to Council buildings. Indoor air pollution could increase mould and damp in office space.

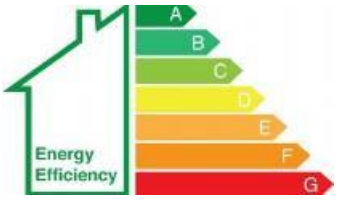
9.2 Appendix 2: Climate Change Mitigation Measures

Climate change mitigation measures can be incorporated into both existing and new infrastructure to reduce carbon emissions and improve energy efficiency. There are a number of ways to do this, and the following table describes some of these measures.

Table 2 Methods to mitigate carbon emissions

	Mitigation measure	How does this mitigate carbon emissions?	Description
Renewable Energy and Storage	Solar Panels  Photo ©michiganradio	Reduces fossil fuel usage for electricity and heating (if electric).	Sunlight is absorbed by the photovoltaic panels and is used to generate electricity.
	Solar Thermal  Photo ©Greentech Media	Reduces fossil fuel usage for water heating.	Heat from the sun is used to warm water running in pipes through the panel. Depending on the temperature the water reaches, the temperature can be "topped up" using conventional methods.
	Battery Energy Storage  Photo ©Greentech Media	Enables intermittent renewable energy sources to become viable alternatives to fossil fuels.	Stores electricity for use at times when generation is low.
	Air Source Heat Pump  Photo ©burtonwright	Reduces or removes fossil fuel usage for heating.	Air is used to heat liquid refrigerant. The pump uses electricity to compress the refrigerant to increase its temperature then condenses it back to release stored heat. This heat is sent to radiators and stored as hot water.
	Ground Source Heat Pump  Photo ©Homebuilding & Renovation	Reduces or removes fossil fuel usage for heating.	Coils or pipes containing refrigerant are buried in the ground. Heat from the ground is used to warm the refrigerant and an electric heat pump is used to raise this temperature further. This heat is transferred from the refrigerant via a heat exchanger in the building to providing hot water and heating.

	Mitigation measure	How does this mitigate carbon emissions?	Description
	Hydrogen  Photo ©National Grid	Reduces or removes fossil fuel usage for heating.	Hydrogen, produced through electrolysis of water using solar or renewable energy, or, produced using natural gas but using carbon capture and storage, is being considered heating homes.
	Planning  **National Planning Policy Framework** Presented to Parliament by the Secretary of State for Housing, Communities and Local Government by Command of Her Majesty February 2019	Enables standard requirements for mitigation actions within developments	The Planning System in England is 'plan-led.' The Plan contains policies that set out what development is needed where – either by identifying specific sites or general types of site. When a planning application is submitted, it is tested against those policies to see whether or not it should be approved.
	Building Regulations  	Can be set to reduce energy demand of homes (e.g. through energy efficiency measures below) and incorporate renewable energy generation.	These are statutory minimum standards for design, construction and alterations to virtually every building.
Energy Efficiency	Passive House  Photo ©Magnetitte	Little to no domestic heating requirements	Homes designed to combine ultra-low energy consumption with consistently good air quality. They are built with superinsulation, low-volume heat recovery ventilation systems and tightly controlled rates of air infiltration, which combine to make sure the building's carbon footprint is as small as possible. These types of buildings do not require conventional heating systems.

	Mitigation measure	How does this mitigate carbon emissions?	Description
	Fabric First/Insulation  Photo ©MyBuilder.com	Reduces heat loss from buildings, reducing heating requirements	Materials used to reduce heat loss from buildings – these can be built into new builds or retrofit. It can come in many forms specific to the area being insulated including: • Pipe insulation • Roof insulation • Wall insulation
	Other energy efficiency measures  Image ©Base Energy	Reduce energy consumption, thereby reducing emissions from generation.	Various methods to reduce energy consumption. eg. LED Lighting and double glazing
	District Heating/Heat Networks  Image ©Energy Saving Trust	Facilitates low carbon heating.	Groups of co-located (eg a village or town) buildings sharing the same heating source. They are directly connected via insulated pipes to a local renewable heating source, such as a ground source heat pump. This enables faster transition to renewables.
Transportation	Active transport eg. Cycling, walking  Photo ©The Independent	Zero carbon.	Avoids travel by vehicles.
	Car Sharing/Car Clubs  Photo ©Pacific Rent-A-Car	Reduces the number of vehicles on the road.	Car sharing is the sharing of car journeys so that more than one person travels in a car, and prevents the need for others to have to drive to a location themselves. Car clubs are a model of car rental where people rent cars for short periods of time, often by the hour.
	Public Transport  Photo ©intelligenttransport.com	Reduces the number of vehicles on the road.	Public Transport reduces the number of vehicles on the road, but provides far greater benefits than car sharing as more people can use the same vehicle.

	Mitigation measure	How does this mitigate carbon emissions?	Description
	Electric Vehicles (private and public) and Chargepoints  Photo ©Rolec  Photo ©Electrek	Removes combustion of fossil fuels as the direct source of energy.	Electric vehicles (EVs) do not rely on the internal combustion engine (ICE) burning petrol or diesel to function. Instead they contain batteries which charge on electricity, removing their carbon emissions as well as reducing air quality impacts. If the electricity comes from renewable sources, use of these vehicles is carbon free.
	Hydrogen Vehicles  Photo ©intelligenttransport.com	Removes combustion of fossil fuels as the direct source of energy	For larger vehicles, Hydrogen could be used as a fuel source. This is where Hydrogen is electrolysed to produce electricity. Water vapour is the only by-product emitted from the exhaust.

9.3 Appendix 3: Adaptation measures

Climate change adaptation measures can be incorporated into both existing and new infrastructure to reduce the effects of climate change. This is done by improving our resilience to the changes that are anticipated to come forward over the coming years. There are a number of ways to do this, and the following table describes some of these measures.

Table 3 Methods to adapt to climate change impacts

Adaptive measure	What change does this adapt to?	Description
Rainwater harvesting/ water butts  ©SusDrain 2019	Flood and drought	Rainwater is collected in water butts and used as a non-potable water resources such as toilet flushing. Harvested water can also be used for gardening and small-scale infrastructure.
Grey water harvesting  © The Green Age	Flood and drought	Wastewater from baths, showers, washing machines, dishwashers and sinks can be re-used for portable water sources.
Sustainable Drainage Systems (SuDS)  ©SusDrain 2012	Flood, heat waves and drought.	SuDS mimic nature and manage rainfall at the source. They slow the flow of surface water and treat it before it enters watercourses. They provide areas to store water at the surface and allow green and blue infrastructure to be incorporated into urban spaces.
Property Level Resilience (PLR)  ©Flood Protection Solutions	Flood, SLR	Protective measures installed in existing homes and buildings to offer protection from flooding. This is best suited for existing buildings located in high flood risk areas which are expected to be impacted most by high intensity flooding and sea level rise associated with climate change.

Adaptive measure	What change does this adapt to?	Description
Green space and low level vegetation  ©Cambridge Independent	Flood, drought, heat waves	Can be incorporated into both new and existing developments. Areas of green space can be used as flood storage providing adaptation to flooding. They also allow water to be absorbed into the ground, recharging drinking water supplies to provide adaptation to drought.
Tree planting  ©Cambridge City Council	Air pollution, flood, heat waves and drought.	Trees provide shading and urban cooling to allow adaptation to increased temperatures and heat waves. They provide adaptation to increased rainfall and flooding by intercepting rainfall. The interception of rainfall allows more water to be absorbed into the ground providing groundwater recharge and thus adaptation to drought. Trees can improve air quality by removing particles and gases from the air (14).
Resilient building design  ©Building Green	Heat waves, flooding, sea level rise, air pollution, drought.	Buildings designed better to adapt to changing temperatures through installation of energy efficient air conditioning, window shading and tinting. Buildings can also be designed with air pollution filters, ventilation to reduce indoor air pollution. Green walls can be a successful air pollution adaptation measure in city areas (21), as planting of large trees along narrow streets can obstruct wind flow, limiting their ability to absorb pollutants (22). Buildings can be designed with floor levels above the projected flood or sea level to adapt to flooding and sea level rise. Buildings can also be adapted to include water re-use/ recycle measures and water saving features such as automatic taps to adapt to drought.
Locating services  ©The Independent	Flooding, sea level rise.	Infrastructure services such as power supplies, property and transport links should be located in areas at less risk of flooding and sea level rise.

9.4 Appendix 4: Natural Capital Components and Impacts

Natural capital will be impacted in Cambridgeshire primarily through Growth and Climate Change.

Table 4 summary of potential ways growth and climate change may affect natural capital

Natural capital component	Example of benefit	How are climate change and growth expected to impact this area within Cambridgeshire?
Flora / Fauna	Flora and Fauna provides us with numerous benefits such as: • Clean water • Clean air • Food (pollination) • Timber • Flood protection • Recreation (accessible green space/rights of way)	**Climate Changes** may have the following impacts (23): • Severe or altered weather patterns causing damage to habitats and species • Earlier onset of seasonal events, resulting in disruption of ecosystem, with early migrations & mismatch of predator-prey relationships • Species distributions shifting northwards in response to warmer temperatures, resulting in loss of species at edge of their range but increase in southern / continental species (e.g. Great Green Bush Cricket), including new risks to local biodiversity, agriculture and health • Summer drought result in significant impact on tree species, leading to changes in woodland structure and timber production • Higher temperatures are not suitable for crops grown within Cambridgeshire, impacting food security • Milder winters lead to increased microorganisms and insect populations which can adversely affect health and agriculture **Growth** may have the following impacts: • Increased demand for food with a possible increase in the intensity of agricultural practices • Increased agricultural practices may reduce carbon storage and soil stability • Increased population may result in an increase in demand for, and an adverse impact on, existing green spaces and sensitive habitats and species • Fragmentation and isolation of habitats reducing ability for species to move through the landscape & adapt to climate change • Increase in light, air and water pollution affecting quality of habitat and species populations and their resilience to climate change

Natural capital component	Example of benefit	How are climate change and growth expected to impact this area within Cambridgeshire?
Water	Fresh water is required for: • Drinking • Cooking • Cleaning • Irrigation (e.g. Farming) • Industrial uses e.g. Cooling • Wetland habitats	**Climate Change** may have the following impacts (24): • Impacts on hydrological processes, including changes in temperature, evaporation and precipitation. Impacting the availability of water resources • Increased drought conditions through the reduction in surface water and groundwater resources • Increase in the demand for water resources to grow crops and to maintain important protected habitats • Increased flood risk especially in terms of sudden and intense thundery showers **Growth** may have the following impacts (25): • Demand for water will increase which may cause environmental damage to surface water and groundwaters • Increasing concentrations of pollutants in water bodies • Increases in impermeable areas leading to increased flood risk
Clean Air	Air provides the oxygen we need to breath.	**Climate Change** may have the following impacts: • Higher summer temperatures will increase potential for more atmospheric pollution • These pollutants include nitrogen oxides, particles, carbon monoxide and hydrocarbons • Air pollutants can travel great distances and cause harmful effects from a far • Pollutants being emitted into the atmosphere will have an impact on human health • Also impacting the surrounding natural environment **Growth** may have the following impacts: • Exponential growth expected will result in a heavy reliance upon the use of fossil fuels to provide energy • There is a correlation between growth and the number of cars on the roads • This will in turn will reduce the quality of the air (26)

Natural capital component	Example of benefit	How are climate change and growth expected to impact this area within Cambridgeshire?
Heritage	Education/ understanding history of Cambridgeshire Provides our sense of community, identity and culture	**Climate Change** may have the following impacts: • Impacting preservation of the historic environment • Impacting the historic built environment (pollution) • Rise in water levels in fenland environments • Changes in agricultural practice rising from Climate Change • Impacts on land use viability refocussing development areas It is worth pointing out that Cambridgeshire has adapted to changing environments and Climate Change in past, with rising and falling water levels in fenland environments influencing human interactions with those environments. We can see these actions through the historic environment. Studying paleo-environments can help understand reactions to and environmental changes arising from Climate Change. These include an understanding gained through palynology and environmental responses to sea level rises. It also helps understand the nature and development of the peat deposits, the management of which is intrinsic to managing the county's carbon footprint. **Growth** may have the following impacts: • Demand for land on new developments could lead to greater pressure on heritage assets
Green Infrastructure	Provides multi-functional uses (e.g. recreational, cultural experiences) • Clean water • Clean air • Food (pollination) • Timber • Flood protection • Recreation (accessible green space/rights of way)	**Climate Change** may have the following impacts: • Increased demand for green spaces due to increasing air temperature • Changes in water availability may cause damage **Growth** may have the following impacts: • Increase in formal green spaces • Reduction in natural green spaces

Natural capital component	Example of benefit	How are climate change and growth expected to impact this area within Cambridgeshire?
Minerals	Minerals provide raw material to build infrastructure and property.	**Climate Change** may have the following impacts: • Increased sea level rises could lead to mineral sites not being accessible and therefore capable of being worked • Increased water table could result in areas of the mineral resource being unable, or uneconomic, to be worked **Growth** will have the following impacts: • reduce the raw materials available for building / infrastructure through either the use of the mineral, or through sterilisation of the reserve by alternative development such as housing • Population increase may lead to intensification of agriculture which could in turn stop the underlying mineral being worked
Soils	High quality soils are essential for agriculture, carbon storage and habitat	**Climate Change** may have the following impacts: • Reducing in soil quality for agriculture/flora/fauna • Decay of peat land • Reduction in carbon storage **Growth** may have the following impacts: • Population increase may lead to intensification of agriculture which in turn may lead to increased use of pesticides and/or loss of natural habitat • Reduction in habitat for species

9.5 Appendix 5: How the Council can approach natural capital conservation

The Councils can play a role in protecting Natural Capital through a variety of approaches.

Table 5 Summary of ways in which the council can protect Cambridgeshire's Natural Capital.

Biodiversity	
Influences	**How can the council respond to these changes?**
01 Organisation, 02 Procured Services	Continue to maintain and enhance Council owned Local Nature Reserve assets, the following actions will be taken against Climate Change and Growth: • Store water for re-use • Plant more trees that are capable of thriving under predicted changes to weather patterns • Promote Natural Flood Risk Management • Provide new/improve new greenspaces to accommodate population increase • Restore or create natural habitats that have been used for quarrying , prioritising species of conservation concern and providing complimentary habitat for international sites that are degrading due to changes in weather patterns (e.g. flooding of ground nesting birds) • Planning policy and in the determination of planning applications • landowner of agricultural land, including managing SSSIs • highways and Rights of Way maintenance, including management of Protected Road Verges
04 Partner Strategies	The council can collaborate through: • Partnership working with the Local Nature Partnership and Cambridgeshire & Peterborough Biodiversity Group • Biodiversity Net Gain • Future Parks Accelerator • Greenspaces Management • Local Nature Partnership incentives
04 Wider Communities	Working closely with other organisations and developers to help create, promote, conserve and enhance biodiversity as natural capital. • Decision made by the general public (e.g. fly tipping) • Decision made by the general public (e.g. fly tipping) • Farmers – agricultural intensification, including removal of habitats (e.g. removing hedgerows) and air, water and soil pollution (e.g. pesticides and herbicides) • National infrastructure projects resulting in significant land take and severance of the local habitats • Water abstraction causing very low summer flows

Green Infrastructure (leisure and recreation space etc)	
Influences	**How can the council respond to these changes?**
01 Organisation, 03 Council Policy & Strategy	• planning policy which requires mineral and waste management restoration proposals to reflect strategic and local objectives for countryside enhancement and green infrastructure
04 Partner Strategies,	• Work with partners to design and implement green infrastructure through planning policy

Water	
Influences	**How can the council respond to these changes?**
01 Organisation	Work towards higher efficiency of water usage in the county council's offices and other owned buildings. Introducing new incentives (both behavioural and implementing new technologies).
02 Procured Services, 03 Council Policy & Strategy	The council has a direct influence through: • Working with suppliers / contractors regarding use of water and the water footprint in making our products. • Implementing SuDS features in new developments • Planning policy which seeks to protect water resources, and to deliver strategic flood water storage bodies through the restoration of mineral sites.
05 Wider Communities	The way that our farmers abstract water and use it for irrigation.

Clean Air	
03 Council Policy & Strategy	• planning policy which requires mineral and waste management development to minimise greenhouse gas emissions • Setting Public Health policy to incorporate adaptive measures to air pollution
04 Partner Strategies	• Working with partners to incorporate air quality measures into transport Plans

Heritage	
01 Organisation	The Council owns numerous designated and non-designated heritage assets, many of which can be managed to create a better environment for residents and for heritage itself.
03, Council Policy & Strategy, 04 Partner Strategies	• planning policy, and in the determination of planning applications, seeking in the first instance to avoid harm to the historic environment • Advising on environmental stewardship schemes to help landowners to extract the best environmental and heritage related outcomes from sites on their holdings • Working with developers to maximise the potential for open spaces in developments by use of 'preservation in situ' schemes that create greenspace to protect the historic environment
05 Wider communities	The Council is a leader in the management of the historic environment across the county and acts as an exemplar to others. Other organisations and individuals come to us for advice and guidance.

Mineral	
03 Council Policy & Strategy Direct Influence Wider influence	Continue to maintain control through adopted mineral planning policy to address: • Climate Change, • Soil preservation, • Restoration, • Aftercare, • Biodiversity benefits • Sustainable transport options etc. To allow full consideration of such matters ahead of mineral planning decisions being made. • Planning application decisions • Mineral site restoration plans and S106 legal agreements securing long term maintenance requirements • Net gain requirement through the National Planning Policy Framework • Negotiation with developers with regard to the extent of biodiversity gains within a scheme • Consideration of the proposals in line with adopted mineral planning policy • Allocating sites for the provision of mineral to meet the County's needs, including sand and gravel, and brickclay • Encouraging the production and use of secondary and recycled aggregates in preference to virgin minerals

Soil	
03 Council Policy & Strategy, 04 Partner Strategies Direct Influence	The Development Plan, which includes planning policy documents adopted by both the County Council and the City / District Councils, provide policies to preserve agricultural soils in relation to climate change. The council has a direct influence through: • Planning policy and in the determination of planning applications • Minerals and waste site restoration and aftercare plans which can reduce the erosion of, and conserve, valuable high quality soils e.g. through the creation of lowland wet grassland

Cambridgeshire County Council - Climate Change and Environment Strategy 2020-2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	KEY THEMES: ADAPTATION	KEY THEMES: NATURAL CAPITAL
TARGET 1: To reduce the Council's organisational net carbon footprint for scopes 1 and 2 from 1979.28 tonnes per annum in 2018-19 by 50% by 2023. **TARGET 2: All Council Directorates to implement measures to ensure their services are adapted to climate change in line with the National Adaptation Programme recommendations** **TARGET 3: Deliver 20% biodiversity net gain across all Council property, land projects and wildlife sites**						
	All	**Organisational learning**	Develop compulsory training courses for all staff and training workshops for Members on climate change mitigation, adaptive measures and key environmental policies (e.g. NERC Act - to conserve biodiversity). Target 100% of staff trained by 2023.	√	√	√
			Establish a group of Climate Champions to pilot Carbon Literacy training (https://carbonliteracy.com/) and Natural Capital Protocol decision making framework (https://naturalcapitalcoalition.org/wp-content/uploads/2018/05/NCC_Protocol_WEB_2016-07-12-1.pdf) to test these approaches for improved environmental decision making	√	√	√
			New Staff and Member inductions to include Climate Change and Environmental impacts including carbon footprint impacts and understanding adaptation	√	√	√
			All committee paper templates to be updated to incorporate a requirement for officer clearance of implications of climate change impacts, carbon footprints and adaptation and environmental impacts, to help inform decision making	√	√	√
			Identify mechanisms to improve the data provision for carbon footprinting, such that all data relevant to scope 1 and 2 greenhouse gas emissions is accurately measured and collected	√	–	–

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
SATION	All	Financing change	Reform the annual budget planning process to reduce the Council's carbon footprint and to support wider decarbonisation of service delivery and the communities we support.	√	√	√
			Provide financing solutions for 'climate change mitigation, adaptation and natural capital'	√	√	√
	MITIGATION: Nearly Zero Energy Buildings, ADAPTATION: Resilience NATURAL CAPITAL: Land management	Buildings and utilities	Continue to purchase 100% green electricity for all buildings and street lighting under County Council control.	√	–	–
			Reduce the use of the electricity Transmission and distribution network through solar photovoltaic (PV) generation on our assets.	√	–	–
			Increase energy efficiency standards for existing buildings and develop a programme of improvements using 'invest to save' principles to reduce energy consumption by 20% by 2023.	√	–	–
			Implement plan of property retrofitting to all buildings owned and occupied by the Council - aiming to be fossil fuel free (using renewable heating sources instead of gas or oil) by 2025.	√	–	–
			Ensure all new buildings, extensions and retrofits are designed to the highest energy efficiency standards, incorporating renewable generation where feasible and Electric Vehicle (EV) chargepoint provision. Assessment of all buildings and implementation plan in place by 2023.	√	–	–
			Improve measurement of refrigerant gases leakage, and replacement of air conditioning equipment with newer models that use gases with lower global warming potential and have lower leakage rates	√	–	–
			Ensure all new buildings, extensions and retrofits are designed to incorporate measures to boost resilience to severe weather such as investing in new heat resistant /reflective materials, measures to enable staff to cope with extreme heat such as additional shading, and improved drainage design. Assessment of all buildings and implementation plan in place by 2023.	–	√	–
			Audit properties and maintenance plans to identify opportunities and deliver enhancement to CCC's natural capital (e.g. enhancement of soft landscape for biodiversity)	√	√	√
			Ensure all new buildings, extensions and retrofits are designed to incorporate measures to deliver environmental and biodiversity net gain including management plans. For example sustainable urban drainage systems	–	√	√

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
01 ORGANIS			Ensure all buildings supporting important wildlife (e.g. bat roosts) have positive ecological management plans for their wildlife interest	–	–	√
			All buildings to have water saving devices	–	√	√
			New buildings to consider greywater reuse and include where possible	–	√	–
			Develop business continuity plans for sites and public buildings that will be subject to unacceptable increases in flood risk or sea level rise. Plan of potential locations in place by 2023.	–	√	–
	MITIGATION: Transport **ADAPTATION: Flood risk** **NATURAL CAPITAL: Land management, biosecurity**	**Transport**	Investigate opportunities for zero or low emission highways, libraries and other fleet vehicles.	√	–	–
			Implement replacement of all pool cars and hire cars and vans to only use electric vehicles - aim to complete by 2025.	√	–	–
			Scope all Council buildings with car parks for suitabilty for work-place electric vehicle chargepoints, with chargepoints installed at all suitable sites by 2025	√	–	–
			Encourage staff to use public transport where possible to minimise other business travel carbon emissions	√	–	–
			Review Social and education transport, including consideration for how children can be best accommodated in local schools to reduce the need for education transport	√	–	–
			Management of highways and other assets for climate change adaptation. E.g. Construct road surfaces with heat and flood resilient materials/designs to adapt to extreme heat and rainfall	–	√	√
			Management of highways to deliver environment net gains, including management of verges for biodiversity value & ensure all wildlife sites are in positive conservation management. Assessment of all highways assets and implementation plan in place by 2023. Fully implement by 2030.	–	–	√
			Ensure all new transport schemes (e.g. cycleways, busways and roads) deliver environmental and biodiversity net gain. Assessment of all highways assets and implementation plan in place by 2023. Fully implement by 2030.	–	√	√
	ADAPTATION: Vulnerable people	**Services**	Through our Public Health, Social Care and Emergency Planning recovery functions, find ways to help manage the impacts on vulnerable people of severe weather or temperatures, including care homes, to prevent the vulnerable in our communities becoming more susceptible to the impacts of climate change.	–	√	–

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	KEY THEMES: ADAPTATION	KEY THEMES: NATURAL CAPITAL
	MITIGATION: Afforestation and Land Use, NATURAL CAPITAL: Land management, Engagement with tenant farmers	Farm Estate and other Land assets	Management of county council land to deliver environment and biodiversity net gains (e.g. management for wildlife, tree planting and flood storage) to double land for nature by 2030.	√	–	√
			Plant new woodlands on County Council land (capacity for tree planting to be investigated and detailed plan to be developed)	√	√	√
			All Council services scope their natural capital assets to deliver environmental and biodiversity net gain	–	–	√
			Ensure all wildlife sites (Local Nature Reserves, County Wildlife Sites and Sites of Special Scientific Interest) are in positive conservation management (e.g. surveyed every 5 years and managed for the benefit of their biodiversity interest) - complete by 2030	–	–	√
	NATURAL CAPITAL: All	Waste	Develop management and restoration plans for closed landfill sites to create natural habitats	–	√	√
			Work with the waste industry to identify disposal options for alternative to single use plastics			√

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
	TARGET 4: To reduce the Council's scope 3 emissions by 50.4% by 2030 (subject to review whilst data collection methods for unknown emissions are set up during 2020/2021 to get a better understanding of total tonnes of CO2e)					
	MITIGATION: Nearly Zero Energy Buildings, **NATURAL CAPITAL: Green spaces**	**Maintained Schools**	Support maintained schools to retrofit their buildings to improve energy efficiency, offering finance mechanisms to support schools to choose to make these improvements.	√	–	–
			Lifecycle heating and hot water replacements to be fitted with low carbon solutions, offering energy performance contracts and heat agreements for schools to support this change	√	–	–
			Encourage 100% purchasing of green electricity	√	–	–
			Support maintained schools to enhance and manage their sites for natural capital, such as SuDS and biodiversity enhancement	–	–	√
			Work with greenspaces and community groups to deliver Forest Schools on the Council's greenspaces	√	–	√
	All	**Update Procurement processes**	100% of renewals of existing tenancies and contracts include carbon reduction targets	√	–	–
			100% of all new procurements include carbon reduction, adaptation and environmental solutions (including single use plastic reductions)	√	√	√
			Develop training for procurement advisors on climate change, carbon footprint, adaptation and the environment to build awareness and the important role of procurement supporting change	√	√	√
			Update procurement guidance and standard contractual terms to include climate change impacts, mandatory carbon reporting and reporting environmental net gain	√	√	√
			Monitor compliance for climate change and carbon reporting for all new contracts commissioned by the Council and the reasons for any exception requests	√	–	–
			Commissioning managers to identify key review points for existing contracts and to work with existing contractors to prepare them for carbon and environmental reporting (e.g. biodiversity net gain and reduction of single use plastics)	√	√	√
			Monitor the potential impact on service procurements resulting from mandatory inclusion of carbon and environmental impacts into the evaluation of contracts.	√	–	√
S	**MITIGATION: All**	**Purchased goods and services**	Work with Cambridge University Science and Policy Exchange (CUSPE) to develop a methodology for calculating the carbon footprint for indirect carbon emissions (scope 3) (estimated 200,000 tonnes CO2e)	√	–	–
			Work with finance and services to improve data collection to inform the carbon footprint and other environmental impacts	√	–	√

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
02 PROCURED SERVICE	**MITIGATION: Waste management**	**Waste Disposal**	Review disposal and treatment mechanisms for waste to identify solutions and their implementation that reduce carbon emissions, support circular economy principles and reduce plastic pollution, in line with the contract timescales. The monitoring and measuring of these reductions will also be required.	√	–	√
	MITIGATION: All	**Construction - use of materials**	Apply lifecycle analysis to the purchasing of construction goods and services to ensure minimisation of carbon emissions and waste (Please note: calculation currently unknown for construction materials but likely to be significant)	√	–	√
	MITIGATION: Afforestation and Land Use, Domestic buildings, NATURAL CAPITAL: Farming	**Farm tenants**	Farm tenancy renewals to require (or where appropriate include) encouragement for carbon reduction measures, adaptation measures (i.e. water reservoirs to use in drought) and positive management of wildlife interest as part of the tenancy arrangements (current estimated baseline: 14585 tonnes CO2e)	√	√	√
			Homes on farm tenancies to be upgraded from oil or gas to low carbon heating solutions	√	√	√
	MITIGATION: Nearly Zero Energy Buildings, Commercial and Industrial buildings	**Properties let to commercial tenants**	Develop business models to upgrade commercial properties and to share in the energy reductions with commercial tenants	√	–	–
	TARGET 5: 100% of Council strategies include policies that tackle Climate Change and natural capital enhancement by 2023					
	All	**Strategy development and**	For each Council strategy, identify contributions to both the organisational and wider Cambridgeshire carbon footprints, the wider Climate Change and environmental impacts	√	√	√
			Work with staff, Members, partners and service users to identify how best to manage Climate Change and environmental impacts on sector strategies e.g. highways, rural estate, health	√	√	√
			Manage the Council's own estate better for biodiversity and to create new habitats for storing carbon e.g. woodland	√	√	√
			Continue to designate and support non-designated heritage assets, many of which can be managed to create a better environment for residents and for heritage itself.	–	√	√

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
POLICY AND STRATEGY		updates	Design effective plans and climate change risk / adaptation strategies across all the Council's statutory and discretionary services.	–	√	–
			Apply circular economy principles to our woodland and waste management e.g. using traditional woodland management techniques and the waste generated for local use	√	√	√
			Identify opportunities on County Council assets to trial new technologies, including electrolysis of hydrogen using solar PV and carbon capture and storage mechanisms	√	–	–
	ADAPTATION: Flood risk, NATURAL CAPITAL: Planning policy	Planning policy and advice	Update county council planning policy to include flood adaptive measures such as SuDS and mitigation measures where applicable	√	√	–
			Build county evidence base to support the development of new policy aiming for a target of 20% biodiversity net gain	–	–	√

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
03 COUNCIL	All	Monitoring and measurement of change	Annual carbon footprint calculations to be published to demonstrate progress	√	–	–
			Measure progress delivering 20% biodiversity net gain across the Council's estate / land management	–	–	√
			Set baseline carbon and environmental indicators for every Council strategy and mechanisms to measure and collect data	√	–	√
	All	Improving the Council's evidence base for policy making	Continue to collaborate with the Cambridge University Science and Policy Exchange (CUSPE) programme to identify key climate change and environmental challenges for young researchers to provide evidence to inform policy making	√	√	√
	All	Independent advice and guidance to inform policy making	Review outcomes from Citizen Assemblies and consultations run by the County, GCP, CPCA and Local Authority partners on issues relating to climate change and environment and use these findings to inform the Council's policy making or lobbying of government and other agencies	√	√	√
			Work with Cambridgeshire and Peterborough service providers on 'Think Communities' to support training and development of our communities on Climate Change and its impacts to build community resilience	√	√	√

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
	TARGET 6: To sign up to a shared target with partners and the community to deliver 50.4% greenhouse gas emissions reductions by 2030 in tonnes/CO2 per annum for Cambridgeshire based on 2018 baseline					
	All	**Local Growth Plans**	Support Cambridgeshire and Peterborough Local Authority Partners to develop local growth plans that include policies to reduce carbon emissions in line with agreed government and local targets, incorporate adaptive measures to the changing climate and deliver positive environmental and biodiversity net gain for green spaces. biodiversity metric established and being used by 2023	√	√	√
			100% of new housing developments deliver climate change mitigation technologies, adaptation design and biodiversity net gain	√	√	√
			Collaborate with the Greater Cambridge and Greater Peterborough Combined Authority on its non-statutory spatial plan to ensure energy, water and electrified transport infrastructure facilitates carbon emissions reductions, supports adaptation measures to climate change impacts and delivers 20% net gain	√	√	√
			Update Cambridgeshire & Peterborough Green Infrastructure Strategy for Growth to reflect the Doubling Nature Vision	–	–	√
	NATURAL CAPITAL: Air Pollution	**Air Quality**	Support new community designs that minimise air pollution both internally and externally to improve health outcomes			√
			Work with partners to encourage commercial fleets – including buses and delivery vehicles in urban areas (where many of the air quality exceedances are) – to move to electric vehicles	√	–	√
			Tackle poor air quality around schools, using Regulation 3 applications for new Schools, and through developing a pilot for a “no car zone” around a Cambridge School.	√	–	√
			The council will work in partnership to achieve shift to public and active transport to reduce air pollution, through measures to promote walking, cycling and public transport use	√		√

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
04 PARTNER STRATEGIES	MITIGATION: Transport	Local Transport Planning	Collaborate with the Cambridge and Peterborough Combined Authority on the carbon footprint of transport policy measures to reduce carbon emissions, improve climate change adaptation requirements for transport infrastructure, reduce air and other pollutants by 2050.	√	√	√
			Reducing air pollution through more walking and cycling provision, electric vehicle infrasturcture provision and alternatives to using the car (e.g. low emission mass transit)	–	–	√
			100% of new transport projects deliver climate change mitigation, adaptation design and biodiversity net gain	√	√	√
			Research options for 'clean hydrogen fuelling' for heavy/large vehicles	√	–	–
	MITIGATION: Transport	Greater Cambridge City Deal	Support proposals to ensure public transport and active transport is more competitive and attractive than the private car	√	–	–
			Working with GCP to ensure our communities are aware of options to travel sustainably and encouraged to take these up.	√	–	√
			Working with the GCP to deliver new sustainable transport infrastructure to improve journeys made by public transport, walking and cycling	√	–	√
			Support the Greater Cambridge Partnership to deliver infrastructure to support the decarbonisation of housing, jobs and transport through collaborations on electricity infrastructure upgrades, electric vehicle charging facilities, low carbon heating solutions and net gain.	√	–	√
	MITIGATION: All	Government strategies	Work in partnership with the public and private sector to design, develop and deliver new infrastructure across the Cambridge-Oxford ARC that supports new communities to live net -zero carbon lifestyles.	√	–	–
			Develop Cambridgeshire case studies and pilot projects that offer solutions and evidence to inform Government clean growth targets and policy challenges	√	–	–
			Work with the Education Funding Agency and Academy schools to continue to offer finance solutions for energy retrofitting opportunities to support academies to improve energy efficiency and generate renewable energy	√	–	–

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
			Work with the Local Resilience Forum to ensure climate change impacts are included on its risk register including specific response measures for key groups	√	√	–
	MITIGATION: All	**Health and Well Being Strategies**	Collaborate with partners in the Cambridgeshire and Peterborough Health and Wellbeing Board and Sustainability and Transformation Partnership to support the reduction of the carbon footprint of health and care services.	√	–	–
	MITIGATION: Waste management	**Waste Management**	Make use of potential waste streams e.g. highways verge harvesting, to improve biodiversity net gain	√	–	√
			Work with developers to influence waste collection infrastructure and collection options for new developments.	√	–	–
			Work with Cambridgeshire District and City councils to develop more sustainable waste management practices.	√	–	–
			Work with the Cambridgeshire Local Authorities on circular economy principles for waste management and economic development. In particular Cambridgeshire's Waste to be managed within County.	√	–	√
	ADAPTATION: Flood risk, Water availability, Infrastructure	**Water Management**	As Lead Flood Authority, working in partnership with the Environment Agency and other partners, to secure sufficient storage and flood risk management capacity for new and existing buildings and assets on the basis that weather impacts will increase due to human-made climate change	–	√	–
			Support the Environment Agency, Anglian Water and Cambridge Water to plan for the next 100 years water availability to support Cambridgeshire's people, businesses and biodiversity. For example, plan for water neutrality, significant water reductions in existing assets and for new reservoirs that can create leisure and biodiversity benefits.	–	√	√
			Work with the Environment Agency to introduce sea level rise (SLR) resilient measures to protect parts of Cambridgeshire at risk	–	√	–
			Work with partners to develop Natural Flood Management (NFM) projects to allow catchment-wide adaptation to flooding and sea level rise	–	√	–
			Work with the County's main water suppliers to deliver higher resilience to droughts	–	√	–

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	KEY THEMES: ADAPTATION	KEY THEMES: NATURAL CAPITAL
	TARGET 7: Deliver Government's net zero-carbon target for Cambridgeshire by 2050					
	MITIGATION: All, ADAPTATION: All	**Cambridgeshire and Peterborough Climate Commission**	Work with the Cambridgeshire and Peterborough Climate Change Commission to provide independent advice on setting and meeting carbon budgets and preparing for climate change	√	√	–
	All	**Communities**	Ensure that all communities are able to access information that allows them to understand how they will be impacted by climate change and any adaptive measures they need to take to address this	–	√	–
			Use our Libraries as a focal point of information provision on climate change and environmental matters.	√	√	√
			Signpost communities to funding opportunities to support climate change action e.g. National Lottery climate change fund	√	√	–
	MITIGATION: All, NATURAL CAPITAL: Farming	**Farming**	Collaborate with the National Farmer's Union on ideas and opportunities for carbon, fertiliser and pesticide reductions	√	–	√
	MITIGATION: Peatland, NATURAL CAPITAL: Peatland	**Commercial and Industrial**	Work with Agritech businesses, the Council's rural estate tenants, Cambridgeshire Acre, National Trust and other partners to establish Cambridgeshire as an international model for peatland management to reduce carbon emissions, enhance biodiversity and new economic compensation models . See section 03, line 47	√	–	√
	MITIGATION: Domestic	**Domestic Housing**	Building on work with the Swaffham Prior Community Land Trust, support other oil based communities to find low carbon heating and hot water solutions to reduce carbon footprints and tackle fuel poverty	√	–	–
			Facilitate residential access to reduced cost renewable energy technology through collective purchasing schemes, such as solar PV with iChoosr	√	–	–

2025 - DRAFT ACTION PLAN

DRAFT version to be published 20 December 2019

Level of control	Related Priority Area (from the Strategy)	Action Area	Actions	KEY THEMES: MITIGATION	ADAPTATION	NATURAL CAPITAL
05 WIDER COMMUNITIES	buildings		Encourage residents to reduce water waste through installing technologies that minimise water use and recycle it	√	√	–
			Develop property level demonstrator locations to educate and encourage residents to invest in adaptation and mitigation technologies	√	√	–
	MITIGATION: Waste management	Waste	Encourage residents and businesses to minimise food and other waste to reduce carbon emissions e.g. foodcycle, foodhub	√	–	–
			Encourage residents to repurpose and recycle to avoid the need to buy from new e.g. access or set up repair cafes	√	–	–
			To promote waste awareness & encourage sustainable approaches to waste to local residents and businesses	√	–	–
	MITIGATION: Transport	Transport	Provide more active travel choices for individuals through the provision of supportive infrastructure	√	–	–
			Develop a wider range of alternatives to the car	√	–	
			Provide educational guides on how best to manage and charge your EV to overcome perceptions of running out of power	√	–	–
			Work with District and City Councils, our communities, and businesses to identify suitable locations and deliver EV charging infrastructure to support both urban and rural needs	√	√	–
	ADAPTATION: Infrastructure	Land use change	Work with the Local Nature Partnership on the 'Doubling Nature' project and promote the benefits of blue/green infrastructure for their adaptaiton benefits to communities	–	√	√

Agenda Item No: 9

PROPOSAL TO DELEGATE CAMBRIDGESHIRE COUNTY COUNCIL POWERS TO THE DISTRICT COUNCILS IN RELATION TO ENERGY PERFORMANCE CERTIFICATES AND SUBSTANDARD RENTAL PROPERTIES

To:	**Council**
Meeting Date:	**19 December 2019**
From:	**Peter Gell, Head of Regulatory Services, Peterborough City Council – Manager of the Trading Standards Shared Service**
Purpose:	**To present a proposal from Trading Standards for Cambridgeshire County Council to delegate its powers in relation to energy performance certificates and substandard rental properties to the District Councils.**
Recommendation:	**That subject to Cambridgeshire District Councils accepting the delegation, full Council:** **- agrees to repatriate the Energy Performance of Buildings (England and Wales) Regulations 2012 in so far as they relate to Energy Performance Certificates to the Council with immediate effect.** **- delegates to Cambridgeshire District Councils the 2012 Regulations in so far as they relate to Energy Performance Certificates and the Energy Efficiency (Private Rented Property)(England and Wales) Regulations 2015 in full, and to Peterborough City Council for those District Councils who do not wish to accept the delegation.**

Officer contact:		***Member contact:***	
Name:	Peter Gell	Name:	Councillor Ian Bates
Post:	Head of Regulatory Services	Chairman:	Economy and Environment Committee
Email:	peter.gell@peterborough.gov.uk	Email:	ian.bates@cambridgeshire.gov.uk
Tel:	07920 160701	Tel:	01223 706398

1. BACKGROUND

1.1 The Energy Performance of Buildings (England and Wales) Regulations 2012 introduced a requirement that an Energy Performance Certificate must be commissioned before a property (commercial or domestic) is put on the market for sale or rent and the certification must have been completed within 7 days of it going on the market. The owner/landlord must then make the Energy Performance Certificate available to any prospective buyer or tenant, free of charge and shall ultimately give it to them, free of charge, on completion of the purchase/tenancy.

1.2 Trading Standards was given statutory responsibility to enforce this legislation, with powers to insist on the production of Energy Performance Certificates for inspection purposes and the power to issue Penalty Charge Notices for breaches where the provision of advice was not an appropriate or sufficient intervention. The penalty for breaching the requirements of the legislation is £200 per dwelling; or between £500 and £5,000 for non-domestic dwellings, based on 12.5% of the rateable value of the hereditament.

1.3 Subsequently the Energy Efficiency (Private Rented Property)(England and Wales) Regulations 2015 were introduced. These Regulations prohibit the letting of 'substandard' domestic or non-domestic private rented properties (non-domestic Privately Rented properties are those that are let under a tenancy but which is not a dwelling). 'Substandard' is defined as those which fall below the minimum level of energy efficiency, the minimum being 'E'. This prohibition applies to new tenancies granted after 1st April 2018, and the renewal or extension of a tenancy after this date, and from 1st April 2020 to anyone who continues to let a property that does not meet this standard. Exemptions are on the grounds of tenant or third party refusal to the recommended energy efficiency improvement measures or that it would de-value the property by more than 5% of its market value. In relation to domestic rental properties, a penalty notice can be issued for up to £4,000 dependant on the length of the breach (can increase to £5,000 where in addition misleading information was provided). In relation to non-domestic properties, the penalty notice can be issued for up to £10,000 or 20% of the rateable value of the property, whichever is greater, plus an additional £5,000 for providing misleading information.

1.4 Trading Standards now operates a statutory minimum service, focussing its enforcement activities on those issues causing the greatest risk of harm to consumers and the local economy, as determined by Intelligence. In the last 12 months it received no complaints about breaches of energy efficiency legislation. As a result, the service has taken no enforcement action, nor carried out any proactive work in this regard.

2. MAIN ISSUES

2.1 Cambridgeshire and Peterborough Trading Standards has been approached by Cambridge City Council and Fenland District Council to seek delegation of these powers to them, thereby enabling them to take enforcement action in relation to private rental properties. Although the District Councils receive very few complaints about EPCs, the most notorious landlords invariably flout the energy efficiency requirements. With these powers the District Councils could insist on their landlords producing a valid Energy Performance Certificate, and if they cannot, they can insist they acquire one for each of their properties. Furthermore, if the

property is classified as ‘substandard’, they can serve a notice stating the necessary measures to bring it up to the required standard and impose a Penalty Notice. If the Landlord fails to make these improvements within the specified timeframe, further penalty notices can be issued. Invariably this will improve the quality of life for some of the county’s most vulnerable tenants, helping to make their accommodation warmer and reducing heat loss, thereby aiding them financially by reducing their energy bills.

2.2 Trading Standards is in support of such a delegation. Trading Standards has no involvement with private rental dwellings, private rented non-domestic dwellings nor private landlords. To proactively enforce it would require officers to carry out inspections that it would not otherwise carry out, based on minimal Intelligence. In contrast, District Council Housing Departments have constant dealings with this sector and comprehensive Intelligence as to those landlords causing greatest harm. Their inspections can determine a multitude of offences, in addition to energy breaches, making such inspections far more cost and time effective. Furthermore, it reduces the ‘regulatory burden’ on those concerned by combining the powers under a single regulator rather than potentially duplicating inspections.

3. DELEGATION

The Power to Delegate the Function

3.1 The County Council is able to lawfully delegate the functions set out above under Section 101 of the Local Government Act 1972, Regulation 7 of the Local Authority (Arrangements for Discharge of Functions) (England) Regulations 2000 and Section 13 and 19 of the Local Government Act 2000.

3.2 Cambridgeshire County Council’s Trading Standards Team merged with Peterborough Trading Standards, and the Shared Service is now managed by Peterborough City Council. Under the Shared Service delegation, Cambridgeshire County Council delegated responsibility to Peterborough City Council for the enforcement of a large number of statutes, including the Energy Performance of Buildings (England and Wales) Regulations 2012. These Regulations comprise three main elements – Energy Performance Certificate (EPC) requirements, Display Energy Certificate (DEC) requirements in respect of Local Authority buildings, and air conditioning energy consumption requirements in respect of Local Authority buildings.

3.3 In order to delegate the EPC elements to District Councils, the Council will need to agree the repatriation of these services first. However, it will only need to agree to this repatriation if District Councils agree to take them on. It is therefore possible that in relation to this element the Council may need to delegate to those District Councils who request this power and re-delegate these powers to Peterborough City Council in respect of those District Council jurisdictions who do not wish to accept the delegation.

3.4 The 2015 Regulations were not delegated to Peterborough City Council, having come into force in 2018 by which time discussions over delegation had begun. There is therefore no need for these powers to be repatriated and can be delegated directly to the Districts and Peterborough City Council as appropriate.

The Council's Constitution

3.5 In accordance with Article 10 of the Council's Constitution, the Council may delegate functions to another local authority (Article 10.04(a)). Therefore the authority of the Full Council is required to enable the proposed delegation.

Authority to whom it is proposed to delegate

3.6 It is proposed to delegate the 2012 Regulations in so far as they relate to Energy Performance Certificates, and the 2015 Regulations in full, which will delegate the powers under these Regulations to the Cambridgeshire District Councils who wish to receive the delegation. The delegation will be made on the following basis:

- No payment would be made to the District Councils for their exercise of these powers, and their use of these powers would be entirely down to their discretion. However, any monies paid under the Penalty Notices would be retained by the District Council concerned.

- A term would be included to ensure any liability arising from the exercise of these powers would fall to the District Council, with Cambridgeshire County Council fully indemnified.

- An additional term would require each District to report to the County Council annually on the number of enforcement actions and interventions it had taken within the previous 12 months period in order for the County Council to meet its statutory reporting requirements.

3.7 Whilst the formal request was made by Fenland District Council and Cambridge City Council; Huntingdonshire, East Cambridgeshire and South Cambridgeshire District Councils are also very interested in receiving this delegation, subject to being satisfied with the terms of the delegation agreement.

Source Documents	**Location**
Constitution	https://www.cambridgeshire.gov.uk/council/council-structure/council-s-constitution/

Agenda Item No: 10

SHIRE HALL SITE: APPLICATION FOR A DEFINITIVE MAP MODIFICATION ORDER TO REGISTER A PUBLIC FOOTPATH

To:	**Council**
Meeting Date:	**19 December 2019**
From:	**Steve Cox, Executive Director for Place and Economy**
Purpose:	**To delegate the Council's function to process and determine the application for a Definitive Map Modification Order to register a public footpath at the Shire Hall site.**
Recommendation:	**That subject to Suffolk County Council accepting the delegation, full Council delegates to Suffolk County Council (SCC) the processing and determination of the application for a Definitive Map Modification Order to register a public footpath at the Shire Hall site.**

	Officer contact:		***Member contact:***
Name:	Camilla Rhodes	Name:	Councillor Mathew Shuter
Post:	Asset Information Manager	Chairman:	Chair of H&I Committee
Email:	camilla.rhodes@cambridgeshire.gov.uk	Email:	mathew.shuter@cambridgeshire.gov.uk
Tel:	01223 715621	Tel:	01223 706398

1. BACKGROUND

1.1 Cambridgeshire County Council is the Order Making Authority ('OMA') for applications for orders to modify the Definitive Map and Statement ('DM&S') for its administrative area. The DM&S is the legal record of public rights of way for Cambridgeshire, and the OMA has a statutory duty to continuously review the Definitive Map and Statement to keep it up-to-date. This includes the processing of applications to register unrecorded public rights of way.

1.2 A public right of way is a highway and classes that are registered on the DM&S are: footpaths, bridleways, restricted byways and byways open to all traffic. Registration on the DM&S is conclusive evidence of its legal existence that can only be changed by a further legal event. This serves to protect the right of way from development or encroachment, and ensures that the recorded route remains available for the public to use in perpetuity without interference.

1.3 Anyone can apply to the OMA for a Definitive Map Modification Order ('DMMO') to register a public right of way under section 53 Wildlife & Countryside Act 1981.

1.4 An application has been received by the County Council to register a public footpath at the Shire Hall site, between Castle Street adjacent to The Castle pub, over the car park and up to the top of Castle Mound. If registered, this would serve to protect the right of way for use by pedestrians, with such usual accompaniments as dogs, prams or pushchairs. Wheelchair users can also use public footpaths where physically appropriate.

1.5 The County Council is also the registered owner of the land which is subject to the application and is currently engaged in negotiations regarding the future of the Shire Hall site.

1.6 The Wildlife & Countryside Act requires OMAs to determine applications to record public rights of way, but no special provisions have been included in the legislation for OMAs to deal with applications relating to land in their ownership.

2. MAIN ISSUES

Potential Perceived Conflict of Interest

2.1 Whilst officers undertaking the role of the OMA would always act independently and impartially, there is a clear potential tension created where the Council is both the determining authority and the landowner. It is therefore important in this case that the risks of any perceived bias are properly recognised and addressed.

2.2 Under current arrangements and in accordance with the Place and Economy Scheme of Delegation to Officers, not only would officers process the application, but the authority to determine such applications is delegated to the Assistant Director – Highways in a quasi-judicial role. If, following the formal investigation, it is determined that an order to register a public right of way should be made, the OMA will make the order and at that point must support its order. If objections are received, the order must be sent to the Planning Inspectorate for determination, which may involve the OMA supporting the order at public inquiry.

2.3 The potential for a perceived conflict of interest or bias is exacerbated as the County Council made a Landowner Deposit, under Section 31(6) of the Highways Act 1980 dated 10th January 2019 for the land in question. This Deposit has the effect of stopping public rights of way accruing from the date of the deposit, provided that it is followed within twenty years with a Declaration confirming that no further public rights of way have been dedicated. It has no effect on any rights that may have accrued prior to that date.

2.4 The DMMO application received on 3rd October 2019 was confirmed as being duly made on 9th October 2019, and so it must proceed to be considered.

The Power to Delegate the Function

2.5 The County Council is able to lawfully delegate both the processing and determination of the application to another authority, in accordance with the Local Government Act 1972 and associated regulations.

The Council's Constitution

2.6 In accordance with Article 10 of the Council's Constitution, the Council may delegate functions to another local authority (Article 10.04(a)). Therefore the authority of the Full Council is required to enable the proposed delegation.

Authority to whom it is proposed to delegate

2.7 It is proposed to delegate both the processing and determination of this application to Suffolk County Council (SCC), who have significant experience and expertise in these matters. The work would be undertaken by the SCC's Definitive Map Team, which sits in the Suffolk Highways Service within the Growth, Highways and Infrastructure Directorate. This is a separate service to SCC's Legal Services team, which is undertaking the delegated village green application.

2.8 SCC would undertake the processing of the application, carrying out all relevant work such as holding a public consultation, gathering evidence and providing a report and recommendation to SCC's Development and Regulation Committee to make the decision as to whether a DMMO should be made to register the footpath. If a DMMO is made and objections are received, SCC would send it to the Planning Inspectorate for determination. As set out at 2.2 above, this would involve SCC as the OMA supporting the DMMO at any potential inquiry. The Planning Inspectorate's decision would be binding and Cambridgeshire County Council would update its DM&S accordingly if it were to be determined that a footpath exists and should be registered.

2.9 In the event of SCC's Development and Regulation Committee deciding that a DMMO should be made and that no objections are received to the DMMO, SCC would then legally confirm the DMMO, which would be binding on CCC. If SCC's Development and Regulation Committee determines that there is insufficient evidence and that no DMMO should be made to register a footpath that decision of SCC would also be binding (though may be subject to appeal to the Planning Inspectorate by the applicant).

2.10 SCC have agreed in principle to accept this delegation, subject to the approval of SCC's Monitoring Officer. The Authority would need to pay SCC's reasonable costs, which have been very broadly estimated at £30,000, including legal fees.

These costs would be at least partially offset by the relevant Cambridgeshire County Council officers being able to undertake other work instead of processing the application, some of which generates income to the County Council.

Source Documents	**Location**
Constitution	https://www.cambridgeshire.gov.uk/council/council-structure/council-s-constitution/

CAMBRIDGESHIRE COUNTY COUNCIL
APPOINTMENTS TO OUTSIDE BODIES: COUNTY COUNCIL APPOINTMENTS

NAME OF BODY	MEETINGS PER ANNUM	REPS APPOINTED	REPRESENTATIVE(S)	GUIDANCE CLASSIFICATION	CONTACT DETAILS
Greater Cambridge Partnership Executive Board	Quarterly	1	**Chairman of the Economy and Environment Committee – Councillor Ian Bates** **Deputy Leader of the Council – Councillor Roger Hickford (substitute)**	Other Public Body	Greater Cambridge Partnership, Box SH1317, Shire Hall, Castle Hill, Cambridge, CB3 0AP wilma.wilkie@cambridgeshire.gov.uk
Cambridgeshire and Peterborough Combined Authority	11	1	**Leader of the Council – Councillor Steve Count** **Deputy Leader of the Council – Councillor Roger Hickford (substitute)**	Other Public Body	Democratic Services Room 117 Shire Hall Cambridge CB3 0AP richenda.greenhill@cambrdigeshire.gov.uk
Cambridgeshire and Peterborough Combined Authority – Overview and Scrutiny Committee	11	2	**Councillor David Connor** **Councillor Jocelynne Scutt** **Substitutes:** **Councillor Lina Nieto** **Councillor Linda Jones**	Other Public Body	Katarina O'Dell Cambridgeshire and Peterborough Combined Authority katarina.odell@cambridgehsirepeterborough-ca.gov.uk

NAME OF BODY	MEETINGS PER ANNUM	REPS APPOINTED	REPRESENTATIVE(S)	GUIDANCE CLASSIFICATION	CONTACT DETAILS
Cambridgeshire and Peterborough Combined Authority – Audit and Governance Committee	5	1	**Councillor Mark Goldsack** **Substitute:** **Councillor David Wells**	Other Public Body	Katarina O'Dell Cambridgeshire and Peterborough Combined Authority katarina.odell@cambridgehsirepeterborough-ca.gov.uk
Cambridgeshire and Peterborough Fire Authority	3	13	**1. Councillor Barbara Ashwood** **2. Councillor Simon Bywater** **3. Councillor Ian Gardener** **4. Councillor Derek Giles** **5. Councillor John Gowing** **6. Councillor Linda Harford** **7. Councillor Sebastian Kindersley** **8. Councillor Mac McGuire** **9. Councillor Kevin Reynolds** **10. Councillor Terry Rogers** **11. Councillor Jocelynne Scutt** **12. Councillor Michael Shellens** **13. Councillor Mandy Smith**	Other Public Body	Democratic Services Room 117 Shire Hall Cambridge CB3 0AP dawn.cave@cambridgeshire.gov.uk
County Councils' Network Council	3-4	4	**1. Councillor Steve Count** **2. Councillor Roger Hickford** **3. ~~Councillor Lucy Nethsingha~~** **Councillor L Dupré** **4. Councillor Joan Whitehead**	Unincorporated Association	Lisa Wood Local Government House, Smith Square, London, SW1P 3HZ
East of England Local Government Association	1 minimum	1	**Leader of the Council – Councillor Steve Count**	Unincorporated Association	Ms Celia Tredget West Suffolk House Western Way Bury St Edmunds IP33 3YU

NAME OF BODY	MEETINGS PER ANNUM	REPS APPOINTED	REPRESENTATIVE(S)	GUIDANCE CLASSIFICATION	CONTACT DETAILS
Greater Cambridge Partnership Joint Assembly	Quarterly	3	*Political proportionality of Cambridgeshire County Council seats on the Assembly shall reflect that amongst the Council's elected members for the divisions within South Cambridgeshire District Council and Cambridge City Council administrative boundaries and that the representatives shall be drawn from those divisions and will be appointed on the nomination of the relevant Group Leaders* **Currently:** 1. **Councillor Noel Kavanagh** 2. **Councillor John Williams** *3.* **Councillor Tim Wotherspoon**	Other Public Body	Greater Cambridge Partnership, SH1317, Shire Hall, Cambridge, CB3 0AP Wilma.Wilkie@cambridgeshire.gov.uk
Local Government Association National representative body of all Local Authorities	3-4	4	1. **Councillor Steve Count** 2. **Councillor Roger Hickford** 3. ~~**Councillor Lucy Nethsingha**~~ **Councillor Lorna Dupré** 4. **Councillor Joan Whitehead**	Unincorporated Association	Fatima de Abreu Member Services Assistant Local Government Association

CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY | JAMES PALMER CAMBRIDGESHIRE & PETERBOROUGH MAYOR

Agenda Item: 13(a)

Cambridgeshire & Peterborough Combined Authority

Reports from Constituent Council Representatives on the Combined Authority

Meeting	Dates of Meeting	Representative
Overview and Scrutiny	**28th October 2019** **25th November 2019**	**Councillor D Connor** **Councillor J Scutt**
Combined Authority Board	**30th October 2019** **27th November 2019**	**Councillor S Count**

The above meetings have taken place in October and November 2019.

Overview and Scrutiny Committee – Monday 28th October 2019 and 25th November 2019

The Overview and Scrutiny Committee met on 28th October and 25th November 2019, the decision summaries are attached as **Appendix 1 and 2.**

Combined Authority Board – Wednesday 30th October and 27th November 2019

The Combined Authority Board met on 30th October and 27th November 2019, the decision summaries are attached as **Appendix 3 and 4.**

The agendas and minutes of the meetings are on the Combined Authority's website – Links in the appendices

Appendix 1

CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY | JAMES PALMER CAMBRIDGESHIRE & PETERBOROUGH MAYOR

OVERVIEW AND SCRUTINY COMMITTEE - Decision Summary

Meeting: **28 October 2019**

Agenda/Minutes: Overview & Scrutiny Committee - 28th October 2019

Chair: Cllr Lorna Dupre

Summary of decisions taken at this meeting

Item	Topic	Decision *[None of the decisions below are key decisions]*
1.	Apologies	Apologies received from: Cllr Connor, Cllr Scutt and Cllr Gehring, Cllr Heylings (substituted by Cllr Fane)
2.	Declaration of Interests	There were none.
3.	Minutes	The minutes of the meeting held on the 23 September 2019 were agreed and signed by the Chair.

4.	Public Questions	There were no public questions received.
5.	Mayor of the Combined Authority	The Mayor for the Combined Authority was welcomed to the Overview and Scrutiny meeting. Members asked the Mayor a series of questions to which they received responses, including: In response to a question about the progress of the Mayor's transport plans, the Mayor explained that a survey conducted to look at whether the Metro in Peterborough was feasible, had come back as positive. The Mayor noted he had been working hard to find a way to get the Metro beyond the South of Cambridgeshire and noted that he had had positive conversations with Homes England and Urban & Civic to explore options of bringing the Metro from St Ives to Alconbury. The Mayor further explained that he was wishing, through the Combined Authority, to create a better bus service and had been working since the initial Bus Review to improve relationships between the Combined Authority and Cambridgeshire's major player – Stagecoach. The Mayor explained the Combined Authority had already seen a positive trial at Addenbrooke's Hospital for a reduced bus rate for NHS staff, and Stagecoach had agreed to move that trial to other areas. In a response to a further question regarding the carbon neutral growth, the Mayor noted that policies put forward by the Combined Authority would allow to create carbon neutral growth and further stressed that the plans that he and the Combined Authority advocated, were a significant way forward in creating a new environmental standard not only for Cambridgeshire but for the UK as well. In response to a question about the Housing Revenue Account (HRA), the Mayor acknowledged that the housing solution in Cambridgeshire and Peterborough was not a "one size fits all" solution and that the Combined Authority needed to create a solution to best fit the entirety of the area. The

		Mayor further explained that traditional ways of developing homes, through Market and Social Housing Associations, had not provided the housing necessary to prevent the housing crisis in Cambridgeshire and Peterborough. The Mayor further stressed that the Combined Authority needed to create other possible ways to deliver the housing required and that the Combined Authority was leading the way in trying to bring new models into the market. Responding to a question on the status of Thomas Cook's former employees, the Mayor informed Members of a meeting he had had with Thomas Cook recently and the quick action of the Combined Authority by holding a jobs' fair with over 110 companies.
6.	Update from the Task and Finish Group	As the Chair of the Task & Finish Group, Councillor Price updated Members on the last CAM Metro Task & Finish Group meeting that had taken place on 11 September 2019 at Cambridgeshire County Council. **RESOLVED:** a) That the update from the Chair of the Task &Finish Group for the CAM Metro be noted. b) That the outstanding actions, as well as responses to questions, would be followed up with officers and provided to the Chair of the CAM Metro Task & Finish Group.

7.	Governance (decision-making) Review	The Interim Monitoring Officer presented the report and outlined key proposed solutions to issues raised at the O&S Committee meeting in September. **RESOLVED:** a) That the recommendations in the Governance Review Report be accepted, with the number of lead Members for each Executive Committee be reduced to one, instead of two. b) That the Committee would invite the Chairs of the Executive Committees to attend meetings of the Committee on a rotation basis. c) That the lead Members for Executive Committees are to be: Cllr Coles – Skills Executive Committee, shadowed by Cllr Miscandlon; Cllr Murphy – Housing and Communities Executive Committee; Cllr Sharp – Transport and Infrastructure Executive Committee.
8.	Review of Combined Authority Board Agenda	The Committee reviewed the agenda for the Combined Authority Board meeting on Wednesday 30 October 2019 and identified questions to the Board as below: <u>2.1 Budget Monitor Update</u> Q: In light of the Budget Monitoring Report indicating that a lot of projects are slipping, what are the reasons for this? <u>3.1 100k Homes and Community Land Trusts (CLTs)</u> Q: With only 935 Community Land Trust homes built so far in the whole country and the 56 affordable homes funded through the £40m revolving fund, is too much emphasis being put on Community Land Trusts rather than the more tried and tested use of housing associations, when there is a crisis for affordable

		housing in parts of the Combined Authority area? How does the Combined Authority intend to encourage the Constituent Councils to promote CLTs? <u>Transport Plan</u> Q: What funding options are being looked as part of the Outline Business Case for the CAM Metro? <u>Transport levy</u> Q: Given the financial difficulties both the County Council and the Peterborough City Council have been facing, please can you clarify whether transport levy funding passed back to those councils is ring fenced for transport functions? <u>Employment and departure of the former CEO and CFO</u> Q: Audit and Governance Committee had been asked to carry out a review of the employment and dismissal procedures relating to the departures of the former Chief Executive and Chief Finance Officer. Can there be a confirmation of what progress has been made or if this has now been completed? <u>Climate Emergency</u> Q: Does the Combined Authority intend to declare a Climate Emergency? **RESOLVED:** a) That the CA Board agenda be noted. b) That the questions be submitted to the Combined Authority Board at its meeting on 30 October 2019.

9.	Combined Authority Forward Plan	The Committee considered the Combined Authority Forward Plan. **RESOLVED:** a) That the Combined Authority Forward Plan be noted. b) That the Transport and Infrastructure Executive Committee Chair and lead officer be invited to the Committee meeting in December. c) That the Budget Item be allocated as a new Standing Item for the next three Committee meetings.
10.	Overview and Scrutiny Work Programme	The Committee received the report which outlined the Work Programme for the Committee for the municipal year 2019/20. The Committee asked for the following items to be added to the Work Programme: i) Budget (November, December and January) ii) Transport – Chair and officer to attend the Committee meeting in December iii) Housing (November) iv) Programme Development – Cohesion issues and tackling inequality v) Climate Change **RESOLVED:** That additional items identified be added to the Committee Work Programme.
11.	Date and Location of the next Committee meeting	The Committee agreed that the next meeting would be held on the 25 November 2019 at 11:00am, Huntingdonshire District Council.

		The pre-meeting on the 25 November 2019 at 10:00am, Huntingdonshire District Council.

Appendix 2

CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY | JAMES PALMER CAMBRIDGESHIRE & PETERBOROUGH MAYOR

OVERVIEW AND SCRUTINY COMMITTEE - Decision Summary

Meeting: **25 November 2019**

Agenda/Minutes: Overview & Scrutiny Committee - 25th November 2019

Chair: Cllr Lorna Dupre

Summary of decisions taken at this meeting

Item	Topic	Decision *[None of the decisions below are key decisions]*
1.	Apologies	Apologies received from: Cllr Chamberlain, Cllr Gehring, Cllr Heylings (substituted by Cllr Fane) and Cllr Price (substituted by Cllr Davey).
2.	Declaration of Interests	Cllr Davey declared a non-pecuniary interest.
3.	Minutes	The minutes of the meeting held on the 28 October 2019 were agreed and signed by the Chair.
4.	Public Questions	There were no public questions received.

Item	Topic	Decision *[None of the decisions below are key decisions]*
5.	Combined Authority Draft Budget and Medium-Term Financial Plan	Deputy S73 Officer explained that the Committee would have the opportunity to look at the Draft Budget and Medium-term Financial Plan three times. He explained the process the Combined Authority had gone through so far in terms of the next year's Budget and that the consultation would be starting on Thursday 28 November 2019 and concluding on 31 December 2019. The Committee would have the opportunity to look at this report again at its December meeting, which would be during the consultation period. It would have the opportunity to draft a response to go back into the consultation process, which would be responded to at the January meeting of the Combined Authority Board. The final look at the Budget paper would be at January Committee meeting, which would be two days before the Budget was presented to the Combined Authority Board. Deputy S73 Officer presented and explained to the Committee the draft, timetable and principles that had been taken into account when drafting the Budget. He explained that while the key overarching objective was to set an affordable balanced budget, the Combined Authority had gone beyond that and developed its budget in line with key principles that had been established through feedback from Members and Officers throughout the process. **RESOLVED:** That the Combined Authority Draft Budget and Medium-term Financial Plan be noted.

Item	Topic	Decision *[None of the decisions below are key decisions]*
6.	Affordable Housing Programme Update	The Director of Housing and Development provided a brief update on the progress of the Programme since the last update in June 2019, explaining the objective of £170m Affordable Housing Programme being the delivery of 2500 homes. It was further noted that some good progress had been made in recent months. Homes with funding approved have increased from 777 to over 1100, money paid to date had gone from £3.5m to £28m. Looking ahead to the rest of this financial year, it is anticipated approximately 1230 units would be approved by the end of March with a significant jump in numbers of homes starting on-site. **RESOLVED:** a) That the update from the Director of Housing and Development be noted. b) That a more informed discussion was to be held at the February meeting, when more information will be available.
7.	Review of Combined Authority Board Agenda	The Committee reviewed the agenda for the Combined Authority Board meeting on Wednesday 27 November 2019 and identified questions to the Board as below: <u>3.3 Climate Change</u> Q: How will the Commission and its work align with the work of its constituent authorities and of Cambridgeshire County Council's technical group on air quality? We note that Cambridgeshire County Council publishes its pre-consultation Climate Change and Environment Strategy next month. Q: How can the Commission effectively address the environmental effects of transport when the Local Transport Plan is going to the Combined Authority's Transport Committee in early January and will be approved by the Combined

Item	Topic	Decision *[None of the decisions below are key decisions]*
		Authority Board at the end of January, given the importance of transport to climate change? Q: How will the Commission influence the decision-making processes of the Cambridgeshire and Peterborough Combined Authority? Q: Whom will the Commission consult as part of its work? Q: How will the Commission work with the Executive Committees of the Combined Authority? Q: Will the Commission's interim report be made available before the pre-election period for the May elections? Q: How soon does the Cambridgeshire and Peterborough Combined Authority expect the Panel to be recruited and hold its first meeting? Q: Will the Cambridgeshire and Peterborough Combined Authority appoint a lead officer for Climate Change?
8.	Combined Authority Forward Plan	The Committee considered the Combined Authority Forward Plan. The Chair identified the following items for the Committee's consideration: January - Local Transport Plan January – Skills Committee Business plan University of Peterborough Market Towns March – Local Enterprise Partnerships

Item	Topic	Decision *[None of the decisions below are key decisions]*
		RESOLVED: That the Combined Authority Forward Plan be noted.
9.	Overview and Scrutiny Work Programme	The Committee received a report which outlined the Work Programme for the Committee for the municipal year 2019/20. Identified items to be added to the Work Programme for February meeting: i) Item on Housing ii) Item on Trading companies **RESOLVED:** That the items be added to February agenda.
10.	Date and Location of the next Committee meeting	The Committee agreed that the next meeting would be held on 16 December 2019 at 11:00am, at South Cambridgeshire District Council with a pre-meeting at 10am

Appendix 3

CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY | JAMES PALMER CAMBRIDGESHIRE & PETERBOROUGH MAYOR

CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY BOARD - Decision Summary

Meeting: **30 October 2019**

Agenda/Minutes: Cambridgeshire and Peterborough Combined Authority Board - 30th October 2019

Item	Topic	Decision
Part 1 – Governance Items		
1.1	Announcements, Apologies and Declarations of Interest	Apologies were received from Councillor G Bull (substituted by Councillor R Fuller) and Councillor L Herbert. No declarations of interest were made.
1.2	Minutes – 25 September 2019	The minutes of the meeting on 25 September 2019 were confirmed as an accurate record and signed by the Mayor.
1.3	Petitions	None received.

1.4	Public Questions	None received.
1.5	Forward Plan – September 2019	It was resolved to note and approve the Forward Plan.
1.6	Designation of Scrutiny Officer	The Board considered a report recommending the appointment of a new Interim Scrutiny Officer. It was resolved to: Designate Katarina O'Dell as the Combined Authority's Interim Scrutiny Officer for the remainder of the maternity leave of the Scrutiny Officer.
1.7	Appointments to Executive Committees and Appointment of Chairs and Lead Members	The Board considered a report seeking agreement for the Membership of the Executive Committees, the appointment of Chairs and the appointment of Lead Members for the remainder of the 2019/20 municipal year. It was resolved to: a) Note and agree the nominations for membership of the Executive Committees, Chairs and Lead Members for the remainder of the 2019/20 municipal year, as set out in Appendix 1. b) Approve the Monitoring Officer to accept any consequential changes to membership and confirm that on receipt such changes would be immediately in effect.
Part 2 – Finance		
2.1	Budget Monitor Update	The Board considered a report providing an update on the 2019/20 financial position of the Cambridgeshire and Peterborough Combined Authority as at 31st August 2019.

		It was resolved to: Note the updated financial position of the Combined Authority for the year.
Part 3 - Combined Authority Matters		
3.1	£100k Homes and Community Land Trusts	The Board considered a report providing further information of the £100k Homes and Community Land Trusts and seeking approval for the immediate expenditure required to develop the formal business cases for approval. It was resolved to: a) Delegate to the Chief Executive, in consultation with the Chair of the Housing and Communities Committee, authority to draw down the £250,000 allocated from the non-transport feasibility budget for the creation of community land trusts and for the operational costs of delivering the £100k Housing project, subject to the phasing set out in the Medium Term Financial Plan (MTFP); and b) Confirm that the monitoring of spend on the development of the business cases for Community Land Trusts and £100k Homes would be reported to the Housing & Committees Committee; and c) Confirm that the business cases for Community Land Trusts and £100k Homes would be reported to the Combined Authority Board for approval in due course, subject to consultation with the Housing & Communities Committee.

Appendix 4

CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY | JAMES PALMER CAMBRIDGESHIRE & PETERBOROUGH MAYOR

CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY BOARD - Decision Summary

Meeting: **27th November 2019**

Agenda/Minutes: Cambridgeshire and Peterborough Combined Authority Board - 27th November 2019

Item	Topic	Decision
Part 1 – Governance Items		
1.1	Announcements, Apologies and Declarations of Interest	Apologies were received from Councillor G Bull (substituted by Councillor R Fuller) No declarations of interest were made.
1.2	Minutes – 30 October 2019	The minutes of the meeting on 30 October 2019 were confirmed as an accurate record and signed by the Mayor.
1.3	Petitions	None received.
1.4	Public Questions	None received.
1.5	Forward Plan	It was resolved to approve the Forward Plan.

1.6	Performance Report	The Board considered a report proposing an amendment to the performance reporting update that is received by the Combined Authority Board. It was resolved to: Note and approve proposed changes to the Performance Reporting process.
1.7	Assurance Framework	The Board considered a report seeking approval of the final amended version of the Assurance Framework. It was resolved to: a) Agree the adoption of the single Assurance Framework as amended to meet the requirements of the Ministry of Housing, Communities & Local Government (the amended Assurance Framework forms the Appendix to this report - amendments are highlighted in bold) with an additional amendment to paragraph 3.3.33 of the Assurance Framework to replace the word “nine” with the word “fourteen” and the word “seven” with the word “twelve” and to delegate authority to the Monitoring Officer to amend the Constitution accordingly.
Part 2 – Finance		
2.1	Draft Budget 2020-21 and Medium Term Financial Plan 2020-2024	The Board considered a report proposing the Combined Authority’s draft Budget for 2020/21 and the Medium-Term Financial Plan (MTFP) and Capital Programme for the period 2020/21 to 2023/24. The report also set out the proposed timetable for the consultation and approval of the draft Budget and MTFP. It was resolved to:

		a) Approve the Draft Budget for 2020/21 and the Medium Term Financial Plan 2020/21 to 2023/24 for consultation purposes. b) Approve the timetable for consultation and those to be consulted.
Part 3 - Combined Authority Decisions		
3.1	£100m Affordable Housing Programmes Scheme Approvals (Non-Grant) November 2019 – Linton Road, Great Abington	The Board considered a report seeking approval for the provision of a 21 month repayable loan facility capped at £5.78m to Linton Road (Great Abingdon) LLP for the development of a housing scheme at 734 Linton Road, Great Abingdon, South Cambridgeshire, CB21 6AA. It was resolved to: a) Approve the provision of a loan facility of £5.78m to Linton Road (Great Abingdon) LLP for a scheme of no less than 13 units based on the heads of terms detailed in the exempt Appendix 1. b) Authorise the Director of Housing and Development, in consultation with the Interim Legal Counsel and the Lead Member for Investment and Finance, to conclude any necessary legal documentation to secure the loan, to include taking a charge upon the land
3.2	Appointment of the Chair of Angle Holdings Ltd and Angle Developments (East) Ltd	The Board considered a report seeking approval for the appointment of the successful candidate to the role of Chair of Angle Holdings Limited and Angle Developments (East) Limited. It was resolved to: Approve the appointment of Brian Stewart OBE as the Chairman of both Angle Holdings Limited and Angle Developments (East) Limited.

3.3	Climate Change	The Board considered a report recommending the establishment of an independent Commission on Climate Change. It was resolved to: a) Approve the establishment of an Independent Commission on Climate Change with a mandate to report within the next 12 months; b) Agree the proposed terms of reference of the Commission set out in the Annex to this paper; c) Authorise the chief executive, in consultation with the Mayor, to appoint a chairman and members of the Commission; and d) Approve a revenue budget of £125,000 to support the commission's work
By Recommendation to the Combined Authority **Part 4 – Business Board recommendations to the Combined Authority**		
4.1	For approval as Accountable Body – Local Growth Fund Project Proposals November 2019	The Board considered a report seeking approval for the allocations of the Growth Fund. It was resolved to: a) Approve projects number 3 and 6 in the table at paragraph 2.8; b) Approve funding for the projects numbered 5, 7 and 8 in the table at paragraph 2.8; c) Agree that the Director of Business and Skills be granted delegation to approve the application numbered 1 in the table at paragraph 2.8 in the report subject to legal advice to confirm that approval would be lawful in the context of the Bus Review

4.2	For approval as Accountable Body – Local Growth Fund Update November 2019	The Board considered a report providing an update on the Local Growth Funds' performance since April 2015. It was resolved to: a) Delegate authority to the Director of Business and Skills, in consultation with the Chair of Business Board, to approve grants to SMEs under the Small Business Capital Grant Programme. b) Approve the allocation of £100,000 from the Small Business Capital Growth Grant Programme to a new Entrepreneurs' Accelerator Fund to be ring-fenced for Thomas Cook employees or affected supply chain companies' employees who have been made redundant and are exploring starting up a business. c) Approve delegated authority to the Director of Business and Skills, in consultation with the Chair of the Business Board, to adopt appropriate application evaluation criteria and award processes for the Entrepreneurs' Accelerator Fund.
4.3	Local Industrial Strategy Delivery Plan – Business Growth Service Outline Business Case	The Board considered a report presenting the Outline Business Case for the Business Growth Service, providing an overview of the financial and commercial strategies and recommending the actions needed to implement the Local Industrial Strategy Delivery Plan. It was resolved to: a) Endorse the Outline Business Case and agree to establish a Growth Service Management Company initially to be a wholly owned subsidiary of Angle Holdings Limited as set out in Section 4 below.

		b) Approve the making of a bid for Local Growth Fund monies as set out in paragraph 4.3 below: c) Approve the making of a bid for European Regional Development Fund (ERDF) and European Social Fund (ESF) monies as set out in paragraph 4.4 below: d) On condition that recommendation (a) above was accepted and the bids referred to at recommendations (b) and (c) above were successful, agree to allocate £2.185m funding from a combination of Enterprise Zone receipts and funding within the Medium Term Financial Plan and from Enterprise Zone receipts, as set out in paragraph 4.5 of the report, to the Growth Service Management Company to part fund the procurement of the Business Growth Service. e) Note that the Skills Committee has resolved, subject to all the remaining public funding set out at paragraph 4.5 below being secured, to approve the allocation of £50,000 per annum for three years starting in 2020/21 from the £150,000 per annum Skills Strategy Implementation Budget set out in the Combined Authority's Medium Term Financial Plan, for the part funding of the Skills Brokerage element of the proposed new Business Growth Service f) Subject to all the remaining public funding set out at paragraph [4.5] being secured, to delegate to the Director for Business and Skills authority to manage the procurement process, to bring forward a Full Business Case in March 2020 and to contract with the successful bidder(s), subject to confirmation of award of the funding components from the Local Growth Fund, European Regional Development Fund and European Social Fund

		g) Delegate to the Director of Business and Skills authority to task the Business Growth Service with the administration of the Small Business Capital Growth Investment Fund, as set out at paragraph 5.4 below.
4.4	Enterprise Zones	The Board considered a report providing an overview on the progress being made on each of the Enterprise Zone sites and to set out associated National Non-Domestic Rates (NNDR) income profiles for the CPCA. It was resolved to: a) Note the progress being made with delivery on each of the area's Enterprise Zone sites, and the associated Enterprise Zone National Non-Domestic Rates income profile for the Combined Authority as per table 1. b) Note the existing financial commitments and allocations from the Combined Authority share of Enterprise Zone National Non-Domestic Rates income in supporting core Local Enterprise Partnership services as set out in table 2.
Part 5 – Transport and Infrastructure Committee recommendations to the Combined Authority		
5.1	A605 Alwalton to Lynchwood	The Board considered a report requesting funding approval for the A605 Alwalton to Lynchwood scheme. It was resolved to: Approve the additional £795,000 of funding required to progress with construction