

# ENVIRONMENT AND GREEN INVESTMENT COMMITTEE



**Thursday, 03 October 2024**

**Democratic and Members' Services**  
Emma Duncan  
Service Director: Legal and Governance

**10:00**

New Shire Hall  
Alconbury Weald  
Huntingdon  
PE28 4YE

**Red Kite Room**  
**New Shire Hall, Alconbury Weald, Huntingdon, PE28 4YE**

## **AGENDA**

**Open to Public and Press**

### **CONSTITUTIONAL MATTERS**

- 1 Apologies for absence and declarations of interest**  
*Guidance on declaring interests is available in [Chapter 6 of the Council's Constitution \(Members' Code of Conduct\)](#)*

- 2 Minutes - 11 July 2024 and Action Log** **5 - 18**

- 3 Petitions and Public Questions**

### **KEY DECISIONS**

- 4 Climate Change and Environment Strategy Progress Report and Annual Carbon Footprint 2023-2024** **19 - 100**
- 5 School Low Carbon Heating Project** **101 - 114**

## OTHER DECISIONS

<b>6</b>	<b>Finance Monitoring Report - August 2024</b>	<b>115 - 142</b>
<b>7</b>	<b>Agenda Plan, Training Plan, and Appointments to Outside Bodies and Internal Advisory Groups and Panels</b>	<b>143 - 146</b>

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The Environment and Green Investment Committee comprises the following members:

Councillor Lorna Dupre (Chair) Councillor Nick Gay (Vice-Chair) Councillor Anna Bradnam Councillor Steve Corney Councillor Steve Count Councillor Piers Coutts Councillor Stephen Ferguson Councillor Ian Gardener Councillor John Gowing Councillor Ros Hathorn Councillor Peter McDonald Councillor Catherine Rae Councillor Mandy Smith Councillor Steve Tierney and Councillor Andrew Wood

Clerk Name:	Jenna Harron
Clerk Telephone:	01945482685
Clerk Email:	jenna.harron@cambridgeshire.gov.uk



## Environment and Green Investment Committee Minutes

Date: 11 July 2024

Time: 10:00 a.m. – 10:53 a.m.

Venue: New Shire Hall, Alconbury Weald

Present: Councillors Lorna Dupré (Chair), Nick Gay (Vice-Chair), Anna Bradnam, Steve Corney, Steve Count, Piers Coutts, Stephen Ferguson, Ian Gardener, John Gowing, Ros Hathorn, Catherine Rae, Mandy Smith, Steve Tierney, Graham Wilson and Andrew Wood

### 202. Notification of Chair and Vice Chair

The Committee noted the appointments by Council of Councillor Lorna Dupré as Chair and Councillor Nick Gay as Vice Chair of the Environment and Green Investment Committee for the municipal year 2024/25.

### 203. Apologies for Absence and Declarations of Interest

Apologies for absence were received from Councillor Peter McDonald (substituted by Councillor Graham Wilson).

Councillor Wilson declared an interest in Item 6: March Household Waste Recycling Centre Redevelopment, in that he had worked for the Environment Agency prior to his retirement but had no dealings with waste.

### 204. Minutes – 18 April 2024

The minutes of the meeting held on 18 April 2024 were agreed as a correct record and signed by the Chair.

While discussing the Minutes Action Log, members were informed there was one update to note. A briefing note on whether the Council had considered using methane produced by landfill as a source of hydrogen for fuel was circulated to Members in February, therefore that action was complete.

### 205. Petitions and Public Questions

No petitions were received.

A question was presented by local resident Darren Green who asked the Committee to consider recommending that the Council adopted a 100% plant-based internal catering

policy in line with its Climate Strategy Plan. In support of this request, Members were informed of the record-breaking global temperatures in 2023, the Council's recognition of this crisis evidenced in its own Climate Change and Environment Strategy, and the environmental concern over greenhouse gas emissions linked to the production of animal-based foods. Mr Green also referenced the National Food Strategy published in 2021 recommending a transition toward more plant-based eating.

The Chair stated that the Committee would be considering the Council's carbon footprint later in the year and would want to consider this issue in light of that review. Mr Green would receive a written response to his question within ten working days of the meeting.

## 206. Proposed Uplift in Framework Value for Re:fit 3

The Committee received a report on the proposal to increase the target value of the procurement arrangements for the delivery of the Council's energy projects. The County Council conducted a mini-competition under the Re:fit 3 Framework in 2017 for the delivery of energy projects. The report sets out the case to increase the target value from £50m to £75m. The extent and value of the project pipeline was not clear at the time the original framework was approved. Since then, the project pipeline was developed and approved and the construction industry had undergone a period of unprecedented change. The procurement of the mini competition was undertaken prior to Covid and the war in Ukraine and 18 months after EU Exit, before the effects on projects were fully clear. The report proposed increasing the price by the maximum 50% of the original value in accordance with the Public Contract Regulations (2015) Regulation 72(1)(b) and (c)(iii).

While discussing the report, individual Members:

- queried the realistic estimated increased costs of the projects. Officers explained that Table 3.1 in the report set out forecast total expenditure of around £59.317m, acknowledging that the costs could go slightly higher than this estimate. It was highlighted that the ongoing expenditure along with risks and other factors would be monitored by the Green Investment and Utilities Advisory Group as well as by the Committee. It was clarified that the report related solely to increasing the value of the framework and there was no funding or borrowing impact.
- raised concern over increasing the target value to the maximum allowable amount of 50% due to concerns that the approval becomes the target rather than maximum spend. It was clarified that no requests for additional capital on any projects were being made at this point, and the budget which was previously estimated at £50m was approved by Committee for this framework under procurement regulations. As the value of the projects is now known to be over £59m, there was a need to increase the framework value for the procurement process to remain compliant.
- addressed that this was a four-year programme which commenced in 2017, therefore would appear that it is three years out of date. Officers clarified that if a

project had commenced within the framework period, it would remain under the procurement and could continue past the initial four years.

- ascertained that this report was not seeking an increase in funding or borrowing for the projects. A Member suggested that the international inflation, though indisputable, was not the only reason for this being off track, off budget, and not delivering for the Cambridgeshire taxpayer.
- queried at what point compliance was triggered. Officers advised that variations were dealt with as they arose. The purpose of this request was to ensure the Council's £50m target expenditure was not exceeded before the uplift was approved, acknowledging it was over £48m already and therefore getting close. Members raised that the spending as of 30 May 2024 was only £1.8m short of the absolute cap and expressed concern this could have been exceeded as it is now July. Officers gave an assurance that spending was closely monitored and had not exceeded the current budget of £50m.
- raised concerns over the lateness of bringing this to the Committee for approval. It was acknowledged that the general election affected the scheduling of this meeting, however some Members expressed continued concern at the frequency of meetings under the current Administration.

On being put to vote, it was resolved to:

- a) Approve an extension to the target value for the contract awarded under the Re:fit 3 Framework in November 2017 from £50million to £75million for energy performance contracting as detailed in paragraphs 3.5 and 3.6 of the report.
- b) Delegate authority to the Executive Director of Place and Sustainability in consultation with the Chair and Vice Chair of this Committee to authorise the extension of this contract.

## 207. March Household Waste Recycling Centre Redevelopment

The Committee received an update on the March Household Recycling Centre (HRC) project position and details of the tender exercise and cost report, indicating that capital costs would exceed the original capital allocation by £576k. Approval was being sought for the submission of an Environmental Permit application to the Environment Agency required to operate the site, with consideration that the current wait time for permit applications was 12 months. Approval to proceed with construction at the increased capital cost of £576k to execute a contract for design and build, as well as submit a permit application to the Environment Agency would allow the Council to deliver a split-level site for the local community, and both wider and future residents of Cambridgeshire.

Officers advised that the report would normally have been taken to the Environment and Green Investment Committee first and then to the Strategy, Resources and Performance (SR&P) Committee. However, changes to the committee schedule

necessitated by the general election meant that it had been taken first to SR&P which *noted* and did not *approve* the additional capital funding of £576k.

Reference was made to confidential Appendix C. Members were asked if they wished to discuss in confidential session. None wished to do so.

While discussing the report, individual Members:

- acknowledged that many providers appointed following tender undertook their own checks. Following such checks, should additional services be required due to unknowns, such as archaeological finds, Members queried whether this would significantly affect the cost of the project. Clarification was provided that the current costing report factored in £300k as part of a risk pot and £105k as risk contingency. Though such unknowns were unforeseeable as this is a greenfield site, it was believed the costing based on the information received from tenders was accurate. This meant that theoretically, should no problems arise upon execution, the cost could be reduced by £405k. The contingency funding covered unforeseen circumstances and prevented the need to return to Committee for additional funding if needed, though the progress of milestones within the budget would be monitored throughout.
- queried whether the relocation would impact on any future review of the waste management Private Finance Initiative (PFI) contract. Officers clarified that the development would be a Council asset, built on Council owned land, and for Council use. The report at paragraph 2.5 identified it as a reverting asset back to the Council at the end of the PFI contract.
- raised that it was entirely appropriate to raise the matter of contingency for risk which may or may not get used, but that it did not appear to be a complicated site.
- reported that both local Members for March North and Waldersey were in full support of the proposals as the existing recycling centre in March was well-used but coming to the end of its life.

On being put to vote, it was resolved unanimously to:

Note the recommendation to Strategy, Resources and Performance Committee to ~~approve~~ **note** the additional capital expenditure of £576K, and subject to that approval:

- a) approve the preferred option to proceed with construction of the March HRC at an increased capital cost as set out in Section 3 of this report.
- b) delegate authority to the Executive Director of Place and Sustainability, in consultation with the Chair and Vice Chair of the Environment and Green Investment Committee, to award and execute a contract to the successful Design and Build Contractor.
- c) delegate authority to the Executive Director of Place and Sustainability, in consultation with the Chair and Vice Chair of Environment and Green Investment



Committee, to submit an application to the Environment Agency (EA) for the necessary Environmental Permit (EP) for this site.

## 208. Finance Monitoring Report – Outturn 2023-2024

The Committee received a report to review and comment on the outturn for 2023/2024. In February, there was an overspend forecast of £1.8m. However, during March, the waste position was reviewed, and it was decided a previous forecast of £800k operational savings from plants being closed would not be accrued, rather this would be addressed as part of a contractual change. In addition, a review of capital revenue spending saw feasibility work identified at £1.2m of capital expenditure charged to revenue, creating a pressure. These matters created a £2.2m change in position, therefore the actual term position across all of Place and Sustainability was an overspend of £4m. On the capital side, across Place and Sustainability, there was a slippage of £13.2m in excess of the capital programme variation.

While discussing the report, individual Members:

- acknowledged the economic factors affecting cost overrun, including Brexit, the war in Ukraine, inflation affecting rise in project costs, and the complexity of some projects including their innovative nature. Members addressed the condition in which projects were bequeathed to them and that Officers had worked to rectify this which added pressure on the Authority to deliver, as discussed in confidential session. Members also identified that these projects had been supported unanimously as they were believed to be valuable and demonstrated new ways of tackling climate change.
- commented that overruns on energy projects had cost the Council millions of pounds. This had been raised previously within this Committee as well as at Strategy, Resources and Performance Committee, at which a deep dive was requested to identify causation. The conclusion stated that these projects were complicated, and more time and money at the start of them was needed. Following discussion at SR&P the Section 151 Officer confirmed they would look at this again.
- The Chair identified that all groups had representation on the Green Investment and Utilities Advisory Group which analysed risk and where projects were thoroughly scrutinised.

The Committee reviewed and commented on the report.

## 209. Finance Monitoring Report – May 2024

The Committee received a report to note and comment on the financial position for May 2024/25. The Committee was advised that revenue across all of Place and Sustainability had a forecast overspend of £3.4m, composing of two elements. Firstly, waste with a pressure of £1.8m due to operational savings not being issued, and decisions being made later in the year on future contractual arrangements, hence plants

not becoming operational within this financial year. Secondly, pressure on energy projects forecasting £3m, with the main factor that electricity income was expected to be less than estimated due to wholesale electricity price reduction and income delays due to energy projects.

Regarding capital, Appendix 3 in the report reflected budgets carried forward and reprofiled from the last financial year as reported to the Strategy, Resources and Performance Committee, including the additional budget for March Household Recycling Centre and Smart Energy Grid Project.

While discussing the report, individual Members:

- queried whether the impact was known regarding re-basing of gas and electricity prices, with the plan that electricity would decrease in cost and gas would increase, anticipating this would have a knock-on effect on revenue from the Council's various solar projects. It was clarified that the report reflected the latest best estimates of the contractual price and pressure on the Council at this time.

On being put to vote, it was resolved unanimously to:

- a) Note the recommendation to Strategy, Resources & Performance Committee to approve the capital carry-forward and reprofiling as detailed in Appendix 3 of the Finance Monitoring Report; and
- b) Note the recommendation to Strategy, Resources & Performance Committee to approve the additional capital budget / funding as detailed on Paragraph 2.3 of this covering report.

## 210. Agenda Plan, Training Plan, Appointments to Outside Bodies and Internal Advisory Groups and Panels, and the Appointment of Member Champions

Two notes of correction to this item were reported by the Democratic Services Officer. The first was that this Committee did not appoint Member Champions, therefore this element could be disregarded. The second issue with reference to Outside Bodies, the Little Paxton Quarry Liaison Group ought to refer to Cllr Prentice as a Labour Member.

An error was identified in the dates of the appointment for the Conservator of the River Cam. Officers undertook to correct this. **Action required**

Cllr Dupré proposed the replacement of herself as the main Member of the Regional Flood and Coastal Committee with Cllr Coutts, and with herself acting as a substitute.

On being put to vote, it was resolved unanimously that the Committee:

- a) review its Agenda Plan attached at Appendix 1.
- b) review the appointments to outside bodies as detailed in Appendix 2.

- c) appoint Councillor Piers Coutts to the Anglian (Great Ouse) Regional Flood and Coastal Committee and appoint Councillor Lorna Dupré as substitute member.
- d) review the appointments to Internal Advisory Groups and Panels as detailed in Appendix 3.

Chair



## Environment and Green Investment Committee - Minutes Action Log

This is the updated action log, as of 25 September 2024, and it captures the actions arising from recent Environment and Green Investment Committee meetings and updates Members on the progress on compliance in delivering the necessary actions.

Minutes of the Committee Meeting Held on 13 October 2022					
Minute No.	Agenda Item	Officer(s)	Action	Comments	Status
98.	Draft Interim Corporate Tree and Woodland Strategy	P Clark	Arrange workshop for Committee members to input into development of the final strategy next year.	A timeline was circulated to the committee, which included a workshop held on 17 June 2024.	Complete
Minutes of the Committee Meeting Held on 18 January 2024					
Minute No.	Agenda Item	Officer(s)	Action	Comments	Status
181.	Annual Carbon Footprint Report 2022-23	S Wilkinson	Provide Members with a briefing note on whether the Council had considered using methane produced by landfill as a source of hydrogen for fuel.	<p>A briefing note from the Executive Director of Place and Sustainability was circulated to Members on 2 February 2024.</p> <p>Further to this, the following update has been provided by the Head of Service for Waste Management:</p> <p>The Council has not considered using landfill methane as a source of hydrogen for fuel on its landfills. The landfills it manages are the older closed landfills where methane production is</p>	Complete

				<p>tailing off and gas yields are low so this is not likely to be viable.</p> <p>The more recent landfills in the county have the higher methane gas yields, but these are not under the Council's control. Waterbeach landfill is owned and operated by Thalia, for which the Council has a disposal sub-contract, which means it is not a Private Finance Initiative asset and the Council has no rights over the gas produced. Milton landfill is leased to FCC Environment, which has responsibility for managing the methane emissions, and it is understood this is currently used to generate electricity that is fed into the grid.</p>	
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### Minutes of the Committee Meeting Held on 14 March 2024

Minute No.	Agenda Item	Officer(s)	Action	Comments	Status
187.	Low Carbon Heating Programme for Council buildings	C Ramsbottom	Provide a written response on the use of reversible natural heat recovery units	A briefing note was circulated on 23 April 2024.	Complete
188.	Cambridgeshire's Policy and Protocol for Enforcement Action under the Land Drainage Act 1991	H Tandy	Check if there were any further updates from the Law Society on engaging conveyancers and provide an update to be provided to Members.	Contact has been made with the Law Society and the issue has been passed to their Conveyancing and Land Law Committee sub-group for consideration.	Ongoing

188.	Cambridgeshire's Policy and Protocol for Enforcement Action under the Land Drainage Act 1991	H Tandy	Investigate the suggestion of adding a planning point of a ditch being handed over by the developer in a good condition, and also feed back on the allocation and success of the grant scheme.	Contact has been made with one planning authority initially to consider how ditch handover can be conditioned (or similar). Discussions are ongoing. A grant allocation briefing note was circulated to Members on 9 April 2024.	Ongoing
189.	East Park Energy Solar Farm Proposal	J Croft	Organise a briefing session for local Members, although open to all Members, once the developer submitted a proposed consultation document.	The developer is proposing to hold a briefing session for Members in advance of the Statutory Consultation. The session is currently scheduled for the final week in August, although the date will be agreed with host authorities.	Ongoing
			Seek clarification on whether the developer had considered the significant delays that were possible when establishing the final wire connection.	The developer has confirmed that the connection agreement that BSSL Cambsbed 1 Ltd (formerly RNA Cambsbed 1 Ltd) has with the National Grid includes contracted milestones for the connection, subject to development consent being granted.	Complete
			Raise with developer the issue of battery storage systems not effectively flowing back into the grid and provide a Member briefing note.	The developer has requested clarity on the issue being raised. In response to whether there are any technical constraints that would affect efficiency of a battery energy storage	Ongoing

				<p>system being located within the East Park site, it has confirmed the battery storage system would operate efficiently, and the electricity stored by the system would be released and connect into the National Grid via the proposed grid connection to the Eaton Socon Substation.</p> <p>Officers are preparing the development of a Member Briefing note on Solar and Battery storage.</p>	
		S French	Provide a Member briefing note on the difference between the transmission network and distribution network, and the issues with transferring or storing energy.	This will be covered in the briefing note on battery storage referenced above.	Ongoing
190.	Place and Sustainability Risk Register	H Tandy	Provide Members with a briefing note on the Schedule 3 SuDS Approval Body (SAB) role, followed by a workshop once greater clarity had been provided by the government.	A briefing note on the Schedule 3 SuDS Approval Body (SAB) role was circulated on 8 April 2024. A workshop will be arranged once further clarity has been provided by the Government.	Ongoing



### Minutes of the Committee Meeting Held on 18 April 2024

Minute No.	Agenda Item	Officer(s)	Action	Comments	Status
197.	Heat Pumps for Friday Bridge	C Parkin	Provide Members with the final figures for uptake of the Heat Pumps for Friday Bridge project, as well as final costs.	<p>To date none of the 14 Friday Bridge residents who received home surveys and proposals have accepted their proposals. Although late acceptances are possible, it seems unlikely at this stage that any residents will be proceeding to installation works.</p> <p>Update provided to Committee members by email on 9 July. No resident uptake or installation costs. Council staff costs are being reclaimed from the DESNZ project funding.</p>	Closed

### Minutes of the Committee Meeting Held on 11 July 2024

Minute No.	Agenda Item	Officer(s)	Action	Comments	Status
210.	Appointments to Outside Bodies and Internal Advisory Groups and Panels	S Rankine	An error was identified in the dates of the appointment for the Conservator of the River Cam. Officers undertook to correct this.	Action has been completed	Complete



## Climate Change and Environment Strategy Progress Report and Annual Carbon Footprint for 2023 - 2024

To:	Environment and Green Investment Committee
Meeting Date:	3 October 2024
From:	Executive Director of Place and Sustainability
Electoral division(s):	All
Key decision:	Yes
Forward Plan ref:	2024/083
Executive Summary:	<p>The Council reports annually on its carbon footprint and progress towards delivery of its Climate Change and Environment targets. This report highlights positive climate action taken during the last year; the impact the Council's climate change programme is having on achieving its net zero and nature targets, and for the first time, is seeking to set annual carbon milestones for the Council's organisational emissions to improve forward planning for emissions reductions. Bringing this all together provides a more comprehensive approach to climate reporting for the Council.</p>
Recommendation:	<p>The Committee is recommended to:</p> <ul style="list-style-type: none"><li>a) Approve the annual carbon footprint report as a record of the Council's known greenhouse gas emissions for the financial year 2023 - 2024 as outlined at Appendix 1;</li><li>b) Approve the annual Climate Change and Environment Strategy Risk Report for the period October 2023 - October 2024 (Appendix 2);</li><li>c) Note the progress, key challenges, and residual risk in delivery of the Council's Climate Change and Environment Strategy targets as outlined at Section 5 of this report;</li><li>d) Approve the setting of annual carbon milestones, see Section 6;</li><li>e) Approve the updates to the Climate Change and Environment targets and action plan, as set out in Section 7;</li><li>f) Support the next steps set out in Section 8 to continue alignment of council action with delivery of the Climate Change and Environment targets.</li></ul>

Officer contact:

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# 1 Creating a greener, fairer and more caring Cambridgeshire

- 1.1 **Ambition 1:** Net zero carbon emissions for Cambridgeshire by 2045, and our communities and natural environment are supported to adapt and thrive as the climate changes:

The report outlines progress towards reaching this corporate ambition.

- 1.2 **Ambition 2:** Travel across the county is safer and more environmentally sustainable:

Transport is the largest contributor to Cambridgeshire's carbon footprint. The Climate Change and Environment Strategy (CCES) Action Plan includes actions to support sustainable travel.

- 1.3 **Ambition 3:** Health inequalities are reduced:

Improving the natural environment is a key wider determinant of health, supporting better health outcomes and reducing inequalities across the County. Reducing carbon emissions whether via transport or building improvements improves local air quality.

- 1.4 **Ambition 4:** People enjoy healthy, safe, and independent lives through timely support that is most suited to their needs:

The actions within the strategy deliver several wider co-benefits that align to this ambition. For example, managing flood risk and water supplies for safety and health; managing waste, supporting building retrofits and adapting services to ensure they continue at their best despite the changing climate.

- 1.5 **Ambition 5:** People are helped out of poverty and income inequality.

Just transition is a key theme of the strategy. For example, work on community energy and wider energy system changes serve to support individuals and communities to benefit financially and manage future fuel poverty, whilst work in managing flood risk supports communities and the most vulnerable to climate impacts.

## 2 Background

- 2.1 The UK has a legally binding national target to reach Net Zero by 2050 and reports annually at the UN International Climate Conference (COP) on its 'Nationally Determined Contribution' to the Paris Agreement. There is no statutory duty on Local Authorities to achieve Net Zero status, however, government strategies, policies, and incentives are aimed at achieving this at a national level.

- 2.2 Full Council approved the Council's Climate Change and Environment Strategy in February 2022. This strategy sets out how the Council will support its communities, businesses, and wildlife to thrive whilst tackling the causes of climate change, reducing carbon, and dealing with the effects of a changing climate on services and people. It includes seven targets across carbon reduction, adaptation, and improving nature as set out below.

2.3 The current targets within the Climate Change and Environment Strategy are as follows:

Target 1	Understand and grow our natural capital account to benefit people and nature by 2025
Target 2	The Council will reduce emissions from our buildings and fleet transport to net zero by 2030 (scopes 1 and 2)
Target 3	The County Council will reduce its supply chain emissions (all scope 3) by 50.4% by 2030
Target 4	Improve our Biodiversity across Council estate by 2030
Target 5	Cambridgeshire carbon emissions will be net zero by 2045
Target 6	Support our communities and businesses to decarbonise by 2045
Target 7	All Council buildings and infrastructure to be resilient to climate change impacts by 2045

2.4 To facilitate delivery of the strategy and its targets, the Council has allocated a total £4.78m from the Just Transition Fund to deliver the following programme which comprises:

- Enabling Net Zero (£2.175m) – a four-year programme to set a council-wide framework to facilitate delivery of the CCES across the organisation
- Flood Management and Community Led Nature Restoration- a four-year programme of £1.735m to deliver community flood mitigation schemes; community led nature restoration and data improvements to set evidence-based targets.
- Delivering the strategy actions (£854K) – supporting delivery of nature and biodiversity improvements; community energy and scoping of adaptation and climate risk impacts on council services.

2.5 This report brings together the monitoring of the Climate Change and Environment Strategy, targets and programme to inform the Council as to whether it is on track to deliver its ambitions. It includes a backward look (annual carbon footprint and progress reporting) and a forward look that includes setting annual carbon milestones. The report also includes key delivery highlights and recommends next steps.

2.6 The report is set out in the following sections:

- Key Programme highlights from the last year
- Carbon Footprint 23/24; key findings – Full Report, see Appendix 1
- Annual progress update on the delivery of the targets in the Climate Change and Environment Strategy – Full report, see Appendix 2
- Setting Annual Carbon Milestone, please see Section 6
- Proposed updates to the CCES targets and actions, please see Section 7
- Areas of focus from 24/25 onwards, please see Section 8

### 3 Key Delivery Highlights of the Climate Change Environment Strategy during the last year

#### 3.1 Below are highlights delivered during the last year

Cross- CCES target support	Key actions delivered
Organisational learning and data improvements	<ul style="list-style-type: none"> <li>To date 3468 staff have undertaken climate e-learning (64.5% of staff in current workforce)</li> <li>393 staff at P4 and above have been trained on carbon literacy</li> <li>467 staff have been trained in 'Net Zero – Getting There and My Part'.</li> <li>All staff have an outcome on Climate and Nature for a second year. This is driving training uptake.</li> <li>A new automated dashboard is being created to generate future annual carbon footprints. This will reduce officer time collating data.</li> </ul>
External funding secured (or forecast) for low carbon and environment projects in CCES	<ul style="list-style-type: none"> <li>£19.56m of grant funding has been secured from external bodies towards the costs of capital and revenue project delivery. For example, Innovate UK, Public Sector Decarbonisation Scheme, Flood Levy.</li> </ul>

CCES - Current Targets	Key actions delivered
<p>Target 1: Understand and grow our natural capital account to benefit people and nature by 2025</p> <p>Target 4: Improve our Biodiversity across Council estate by 2030</p>	<ul style="list-style-type: none"> <li>Biodiversity audits on the Council estate have been completed and are being incorporated into the Draft Biodiversity Strategy</li> <li>A Tree and Hedgerow Canopy survey delivered to identify the data for the Trees and Woodland Strategy <i>(NB. Scheduled for January 2025 EGI Committee approvals)</i></li> <li>Repairs on Giant's Hill, Rings End, Kingston, Isleham nature reserves</li> <li>128 Great Crested Newts identified at Worts Meadow LNR</li> </ul>

CCES - Current Targets	Key actions delivered
<p>Target 2: The Council will reduce emissions from our buildings and fleet transport to net zero by 2030 (scopes 1&amp;2)</p>	<ul style="list-style-type: none"> <li>• 25 Council buildings have been retrofitted for low carbon heating reducing carbon emissions. See how this contributes in Figure 1 below</li> <li>• 44 heat decarbonisation plans have been completed to assess feasibility and access external funding to support projects</li> <li>• A comprehensive fleet review sets out how the Council can improve and decarbonise its fleet. A business case for implementation is underway.</li> </ul>
<p>Target 3: The County Council will reduce its supply chain emissions (all scope 3) by 50.4% by 2030</p>	<ul style="list-style-type: none"> <li>• 47 companies have signed the Council's Carbon Procurement Charter</li> <li>• Low Carbon Procurement Guidance published for contract managers</li> <li>• The Net Zero by Design guidance issued and incorporation into the Council's Project Management Framework underway</li> <li>• 15 procurements including Waterbeach station, All Age Carers Service and QoL survey have specifications and evaluation processes incorporating climate and nature outcomes</li> <li>• Established a Net Zero baseline and high-level action plan for the Rural Estate with the support of consultants</li> <li>• A Net Zero Strategy for Highways Maintenance and route map to deliver emissions reductions by 2030 and 2045. 702 tCO<sub>2</sub>e reduced in the last year and more planned in 24/25.</li> <li>• A Net Zero Waste report was commissioned to inform the waste management service and closed landfill sites future planning</li> <li>• 10 heat decarbonisation plans delivered for maintained schools to help access funding</li> </ul>
<p>Target 5: Cambridgeshire carbon emissions will be net-Zero by 2045</p> <p>Target 6: Support our communities and businesses to</p>	<ul style="list-style-type: none"> <li>• A £5m business case was submitted to government for approval to resource public EV Charging Infrastructure</li> <li>• Swaffham Prior Community heat project saved 260 tCO<sub>2</sub>e with clean heat supplied to 65 customers during the last year</li> <li>• Triangle Solar Farm generated over £1.3m revenue (excl VAT) last year and produced c.12,500,000 kWh of clean electricity saving on average 3121 tCO<sub>2</sub> emission</li> </ul>

CCES - Current Targets	Key actions delivered
decarbonise by 2045	<ul style="list-style-type: none"> <li>• £300,000 funding secured for Cambridgeshire Local Area Energy Planning. Stakeholder engagement specialists appointed to progress business and community engagement</li> <li>• £150,000 Innovate UK funding supported research and collaborations on a shared climate evidence base, delivery and investment framework – also called a ‘Locally Determined Contribution’ for Cambridgeshire</li> <li>• Recruitment for a Net Zero Finance Innovation Manager underway to attract inward investment into net zero projects collaborating with businesses, investors and communities</li> <li>• Draft Community Energy Action Plan consultation secured over 140 responses with mostly positive support and comes to November committee for approval</li> <li>• 39MW North Angle Solar Farm delivered and energising from October 2024</li> </ul>
Target 7: All Council buildings and infrastructure to be resilient to climate change impacts by 2045	<ul style="list-style-type: none"> <li>• Assessed 111 flood risk options at 16 ‘at risk’ locations across Cambridgeshire</li> <li>• 517 new planning applications assessed for climate and flood risk impacts</li> <li>• Updated the Flood Risk enforcement policy</li> <li>• 1 x Community flood conference delivered with 100+ attendees</li> <li>• 30 water level monitors installed across the County to monitor data and inform community flood plans</li> <li>• 5 community drop-in events hosted in Cambridgeshire libraries</li> <li>• £60k secured from The Environment Agency for SuDS retrofit in the town of March</li> <li>• 1 x Flood management scheme implemented in Alconbury Brook through the local community Flood Group</li> <li>• Data analysis on historical Cambridgeshire floods, drought and over- heating events to identify costs on Council services and infrastructure</li> </ul>

## 4 Annual Carbon Footprint Report 2023/24

4.1 The Council has previously published its annual carbon footprint for the financial years



2018/19 to 2022/23. This is the sixth annual carbon footprint developed and covers the Council's organisational carbon footprint for the year 2023-24, and also that of the geographical area of Cambridgeshire as a whole (for which the most recent data available is the calendar year 2022). The full report for 2023/24 is available in Appendix 1.

- 4.2 Organisational emissions: Scopes 1 and 2 are those that the council has the most control over, as they comprise emissions from our own assets, such as council buildings or vehicles. Our scopes 1 (direct) and 2 (purchased electricity) emissions for 2023-24, together amounted to 941 tonnes CO<sub>2</sub>e.
- 4.3 Scope 1 and 2 emissions in 2023-24 were 42% lower than in our baseline reporting year of 2018-19. The largest share of scope 1 emissions was from gas to heat our buildings. The main reason for the reduction in scope 1 emissions this year is the Council's programme of low carbon heating projects, where fossil fuel-based heating systems (such as gas or oil boilers) have been replaced with low carbon air source heat pumps. The Council's Asset Improvement Programme is likely to further reduce the Council's scope 1 and 2 emissions in future years.
- 4.4 All of the emissions for scope 2 are zero, because the Council purchases a zero-carbon electricity tariff through our supply contract.
- 4.5 Figure 1 below identifies Scope 1 emissions reductions to date and predictions for 24/25 onwards.

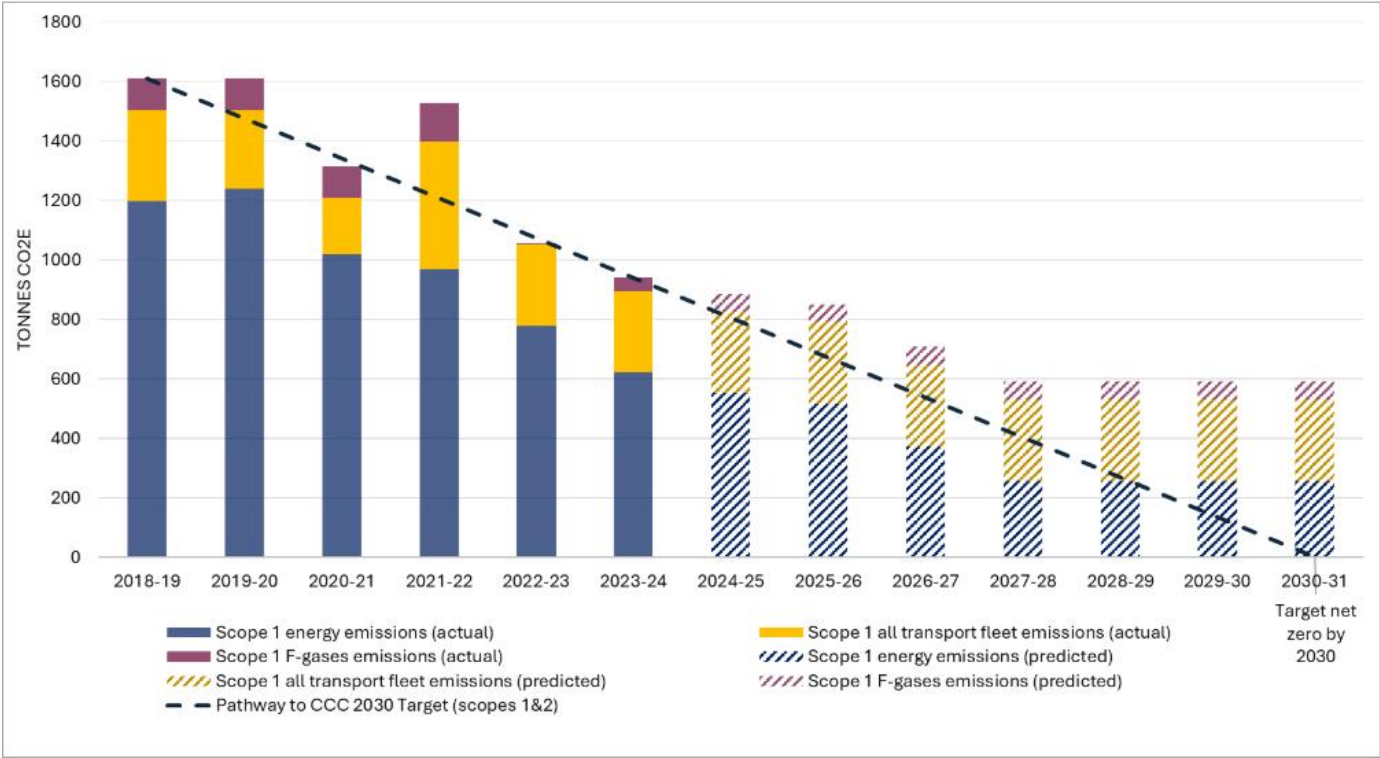


Figure 1 CCC annual GHG emissions, scope 1 (actual and predicted)

- 4.6 The vast majority (~99%) of all known emissions by the County Council were within scope 3 (indirect). Scope 3 means indirect emissions from assets outside of the Council's direct

control, such as those of our contractors and suppliers. Scope 3 emissions were 111,307 tonnes CO<sub>2</sub>e in 2023-24, excluding the rural estate. (For details on the rural estate emissions and why they are calculated separately, please see paragraph 4.9 below.) Scope 3 includes transport emissions from vehicles not under Council control (such as employees' own cars or contractors' vehicles), emissions from county waste disposal and treatment, emissions from Local Authority maintained schools' energy usage, and emissions associated with purchased goods and services delivered by third parties, such as construction works. The largest share of scope 3 emissions was from purchased goods and services, in particular waste disposal.

- 4.7 Scope 3 emissions were 39% lower in 2023-24 than in the baseline year of 2018-19. The largest reduction in scope 3 emissions (and overall emissions) since the baseline year is due to reduced construction work.
- 4.8 The Council's total known greenhouse gas emissions in 2023-24 for all 3 scopes amounted to 112,248 tonnes CO<sub>2</sub>e (using the market-based method for scope 2). This is 39% lower than our baseline year of 2018-19. The largest share of emissions outside the rural estate was from waste, largely due to the Council's statutory duty as the Waste Disposal Authority. There is a more detailed breakdown of all the sources of emissions and methodology, alongside further information and graphs, in the full accompanying annual carbon footprint report (Appendix 1).
- 4.9 During 2023/24, the Council procured expert consultancy support to identify the baseline carbon emissions for the rural estate and to produce a high-level action plan. Data previously held for the Council on its rural estate was out of date, particularly for peat, and therefore the Council had low confidence in its accuracy to inform monitoring and improvement planning. It is clear from the recent consultancy work the carbon emission baseline is greater than originally understood, and that achieving net zero in agriculture, land use, and land use change is not possible. Even very ambitious plans could only reach 54% emissions reductions, and this would require significant national policy support and new business economic models. There are further constraints achieving this level of emissions reductions, for example, the volume of land that would need to be taken out of food production. More work is needed to identify what can be achieved on the rural estate, by when and which partnerships are needed to support delivery.
- 4.10 On this basis it is proposed to separate out the targets for scope 3 rural estate emissions from the Council's target for all other scope 3 emissions. This would allow an increased focus on this important area, and the intention is to develop a target specifically for the rural estate as it is part of the Council's scope 3, whilst still monitoring and measuring the carbon emissions associated with all parts of scope 3.
- 4.11 More detailed analysis will be conducted to agree an achievable target for the Rural Estate aspect of the scope 3 emissions. Calculating carbon emissions from land use and agriculture is complex but an estimated baseline of emissions for the rural estate is around 200,000 tonnes CO<sub>2</sub>e – significantly more than all other sources of emissions from Council activities put together. The implications of this, and proposals for re-alignment of carbon

reduction targets is discussed in Section 7.

4.12 In summary, the Council has successfully invested into reducing scope 1 and 2 emissions as shown by Figure 2 below. The difference between the black line and the orange line highlights the difference or impact between doing nothing and investing in carbon emissions reductions.

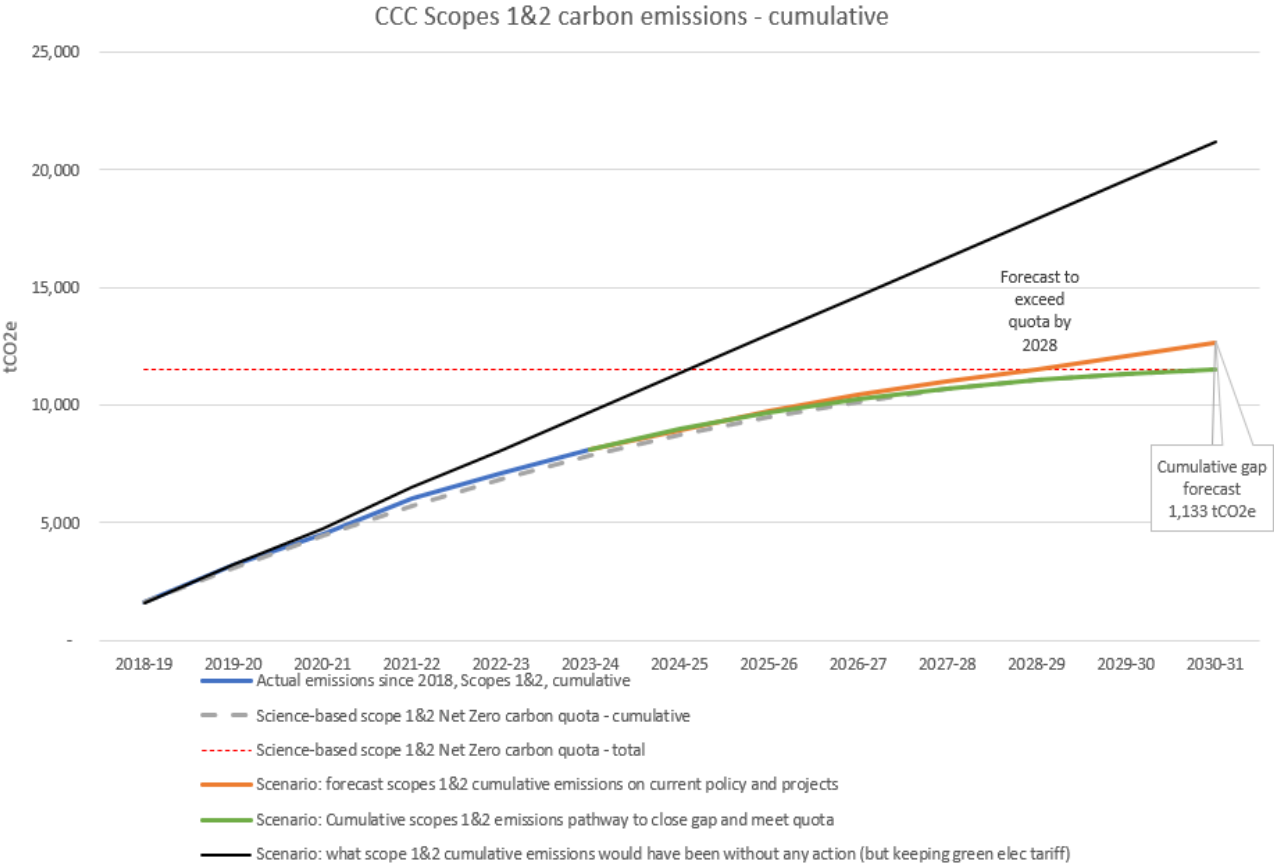


Figure 2 Scopes 1 and 2 cumulative carbon emissions

4.13 When considering the reduction across all three scopes, Figure 3 demonstrates the reductions against the 2018/19 baseline. However, keeping construction emissions low is a challenge due to the cyclical nature of growth and infrastructure investment and delivery.

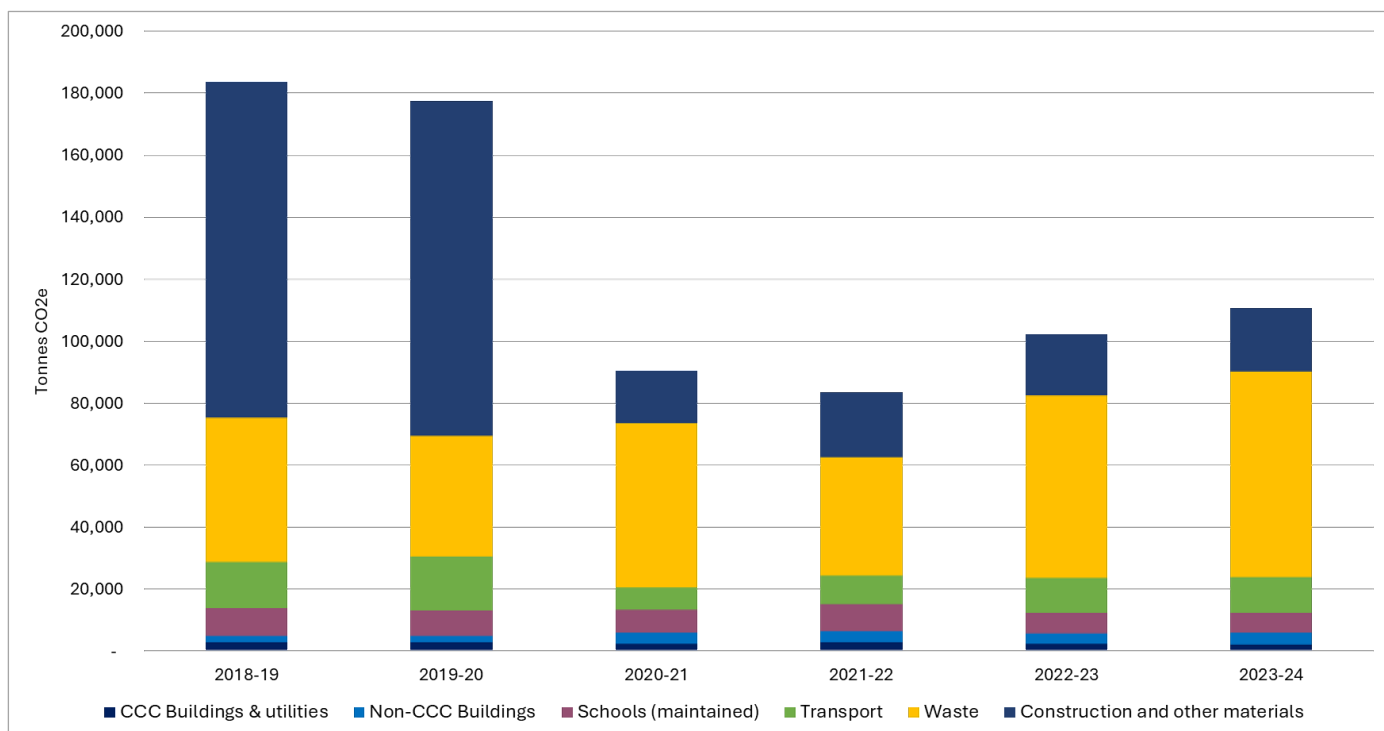


Figure 3 CCC annual GHG emissions, by source sector (all 3 scopes)

**4.14 Cambridgeshire-wide Emissions:** The carbon footprint of the geographical area of Cambridgeshire comprises greenhouse gas emissions from commercial and industrial sources, domestic homes, transport, agriculture, waste, and land use. The vast majority of this is outside of the control of the Council. This has been informed by [data published by the UK Government Department for Energy Security and Net Zero \(DESNZ\) on GHG emissions by local authority area](#) to identify the carbon footprint of the geographical area of Cambridgeshire.

**4.15** In 2022, the most recent year of available data, the total greenhouse gas emissions (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) for the geographical area of Cambridgeshire were 6.45 million tonnes CO<sub>2</sub>e. This is a 3% fall from 2021. Transport remains the highest emitting sector in the county, accounting for 27% of emissions, followed by land use, land use change and forestry (LULUCF), at 23%, agriculture (15%) and domestic energy use (13%). Further details are available in the accompanying annual carbon footprint report (Appendix 1).

## 5 Annual Risk Report on the Delivery of the Climate Change and Environment Strategy (23/24)

**5.1** The annual risk report looks at progress towards achieving the Council's seven targets (set out in paragraph 2.3 above). It provides assurance that targets are on track for delivery. The methodology treats the action plan as risk mitigations to manage the risk of the council not meeting its targets. Where actions are insufficient to deliver ambitions, they are amended, improved or new actions added to ensure delivery can bring us back on track. The residual risk reported is the risk of not achieving the target(s). The first progress report using this approach was approved at [October 2023's Environment and Green Investment Committee](#)

(item 5).

5.2 A summary of the risk change is highlighted below (Table 1, Figure 4). The residual risk in October 2024 has decreased since the last report in 2023. The risk of non-delivery of the Council's targets is now 16 which is a positive shift. Whilst this decrease reflects the substantial action that has been implemented in the last year, there remains a significant risk. However, with 6 years to go to achieve the Net Zero organisational targets as an example, and the impacts of enabling works still to take effect, the main take away is to keep delivering actions in the strategy and strengthening their impact across the organisation.

Table 1 Overall Climate Change & Environment Strategy delivery risk.

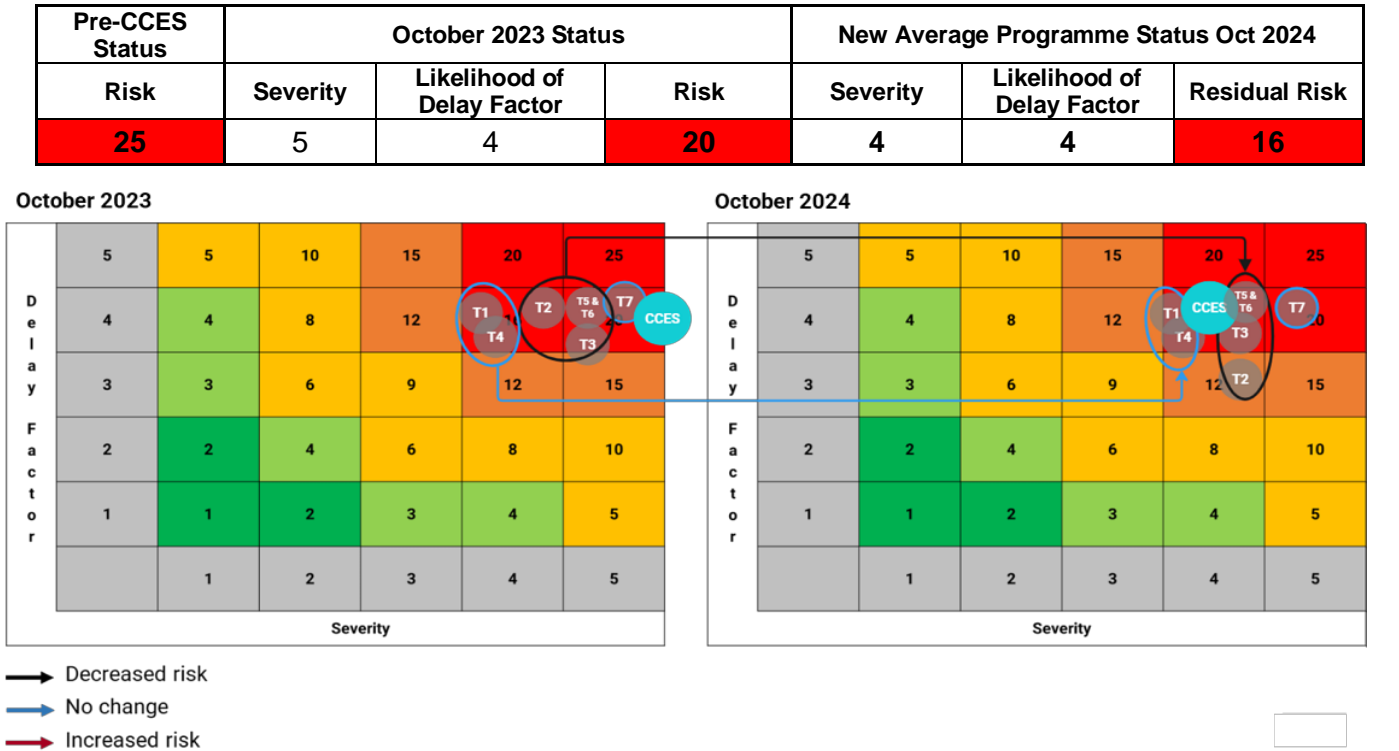


Figure 4 Comparison of residual risk between October 2023 and October 2024

- 5.3 The change demonstrates continued progress towards delivery of the Council's targets, with the risk of non-delivery decreasing for four of the seven targets since the previous year. The remaining three targets are holding steady.
- 5.4 Delivery of the reduced overall risk has been driven by significant cross-organisational action, underpinned by the Climate Change and Environment Programme as set out in section 3.
- 5.5 The full Annual Risk Report for 2023-2024 is available in Appendix 2 providing further detail on target delivery and next steps.

PATHWAYS TO GREEN

- 5.6 The strategy includes a range of actions tailored to each target. The continued delivery of these actions over the short to medium term will build the Council's pathway to achieving

green and target delivery. Work to define the required steps is ongoing, particularly for the biodiversity related targets, however there is greater clarity for carbon reductions and adaptation as set out below.

5.7 Target 2: The Council will reduce emissions from our buildings and fleet transport to net zero by 2030 (scopes 1&2)

Figure 5 illustrates the key actions completed and those that are needed in the future to deliver Target 2. It is important to note that it requires both new actions and the continued delivery of existing actions – e.g. the continued purchased of green tariff electricity. In particular, there will need to be a focus on expanding the transition of council buildings onto Low Carbon Heating and electrification of Fleet and the ongoing challenge will be to secure the funding and resources to facilitate these.



Figure 5 Waterfall diagram – how to achieve net zero by 2030 for scopes 1 and 2

5.8 Target 3: The County Council will reduce its supply chain emissions (all scope 3) by 50.4% by 2030

Figure 6 illustrates the key actions to achieve Target 3. There is greater uncertainty for this target, as the pathway is very dependent on maintaining reduced levels of construction (mainly across education and highways). Construction is usually a cyclical activity, with requirements fluctuating according to demand and growth. The Council will need to consider its forward capital programmes for schools and infrastructure projects to understand the impact these will have on carbon emissions and incorporate this into pathway planning and annual carbon milestone setting.

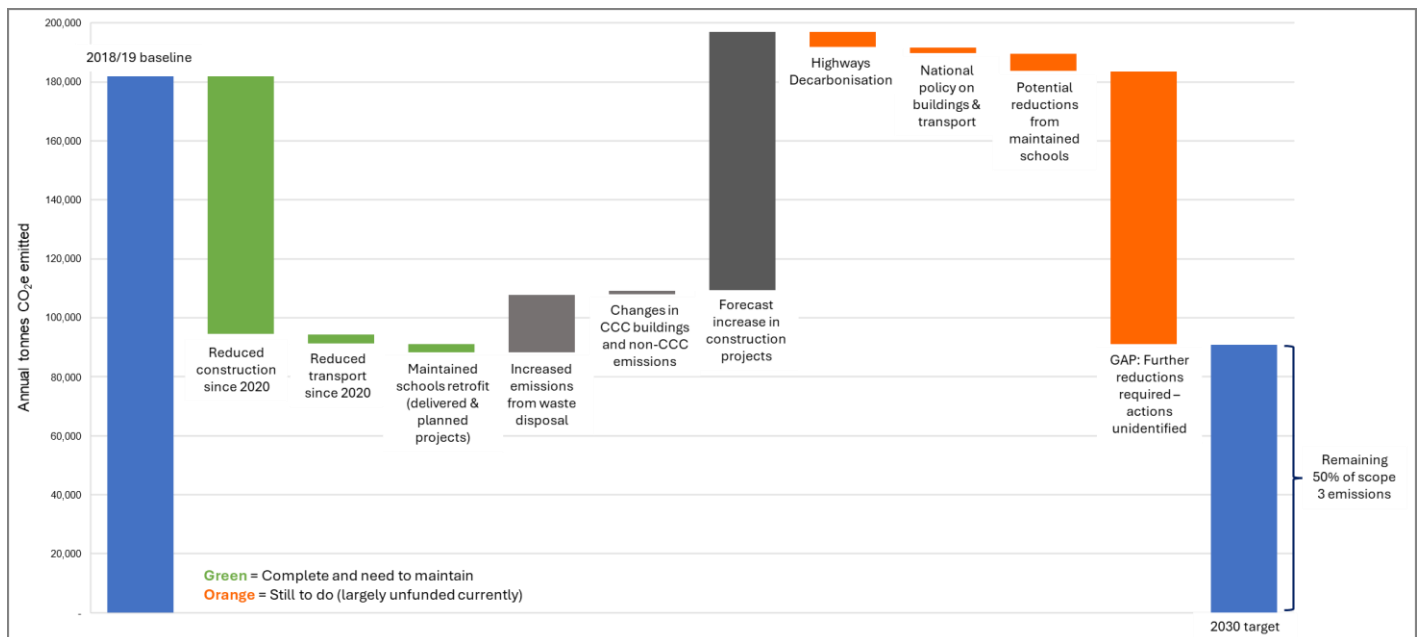


Figure 6 Waterfall diagram – how to achieve a 50% reduction in scope 3 emissions by 2030.

A significant challenge for scope 3 is the large segment of carbon reductions for which actions are largely not yet clear or known. Future policy could positively impact these, but the next focus is to understand this better and what it means for policy and planning. It is likely this will consist of a wide range of smaller activities rather than a single big one.

Agriculture and land use has been separated out, following the proposal set out in sections 6.7 4.9-4.11 and 7.2 and a similar diagram to figure 6 will be developed specifically for the rural estate.

## 5.9 Target 5: Cambridgeshire carbon emissions will be Net Zero by 2045 and Target 6: Support our communities and businesses to decarbonise by 2045

Delivery of these targets requires strategic collaborations and partnership approaches. Two key projects that the council is leading are:

- Locally Determined Contributions (LDC) – development of a shared target/carbon budget and framework for reporting and investment. This work will seek to align local action with national ambitions, provide a consistent evidence base for discussions on devolution for climate and net zero and inform the CPCA's Climate Action Plan. The project is a partnership between Cambridgeshire local authorities, CPCA, Hughes Hall University of Cambridge and Collaborate CIC. The initial LDC design will be complete by mid-2025.
- Local Area Energy Planning – development of a strategic geo-spatial plan identifying the key energy infrastructure required to enable delivery of low carbon energy, electrified transport and further renewables across Cambridgeshire. It involves modelling current and future energy demand, growth plans and local ambitions to produce a costed plan that can feed into local and regional energy planning. For example, it will inform UK Power Network's five-year business plan approved by Ofgem.

#### 5.10 Target 7: All Council buildings and infrastructure to be resilient to climate change impacts by 2045

A brief and scope for development of a Climate Change Risk Assessment (CCRA) to enable the Council to understand service and infrastructure vulnerability to climate impacts has been developed. This is a cross organisational/service approach and the timing for this work is under discussion as it will need a roots and branch approach to do well. To complement this work, data on the costs experienced by the Council and its communities resulting from flood events, drought and over-heating are being scoped to inform future discussions and risk management. The project has Just Transition Funding, and when started, will help manage and deliver this target.

#### 5.11 Section 8 identifies key focus areas for the coming 12 months that are the immediate action needed for delivery of the above pathways to green.

## 6 Setting Annual Carbon Milestone Reductions

### 6.1 In January 2024, Internal Audit concluded a review of the Council's Climate Change and Environment Strategy (February 2022 version), with key recommendations to:

- Set annual carbon emissions reduction targets; and
- Demonstrate how the Climate Change and Environment Strategy actions contribute to annual carbon emissions reductions.

### 6.2 The Council's Climate Change and Environment Strategy includes two targets directly related to the Council's own operations:

- By 2030, greenhouse gas (GHG) emissions from scopes 1 and 2 to be net zero.
- By 2030, to deliver a 50.4% reduction in scope 3 GHG emissions compared to a 2018/19 baseline.

### 6.3 Currently, progress towards these targets is measured through the retrospective annual Carbon Footprint report. As a result, there is a risk that problematic issues may not be identified in time to manage their impact on target delivery.

### 6.4 To actively manage progress towards our targets, the Council needs to look forward and set annual carbon milestones according to the most effective/appropriate carbon reduction pathway to 2030. This will then allow the planning and delivery of carbon reduction actions to be considered alongside business planning.

### 6.5 Using established methodologies (Science based Targets Initiative (SBTi)), the Council's carbon quota for the period 2018 to 2030 has been provisionally calculated (based on currently available data) as:

- 11,518 tCO<sub>2</sub>e total for scopes 1 & 2 to 2030 (Figure 2 above)
- 1,770,644 tCO<sub>2</sub>e total for scope 3 to 2030 (excluding rural estate) (Figure 7), and



- A separate target and carbon quota for scope 3 agriculture and land use emissions will be calculated over the coming months. (It is established global best practice to treat emissions from land use, land use change, and forestry and agriculture separately to other sources of GHG emissions. This is because these sources of emissions are different in nature and require different methodologies to calculate and measure.)

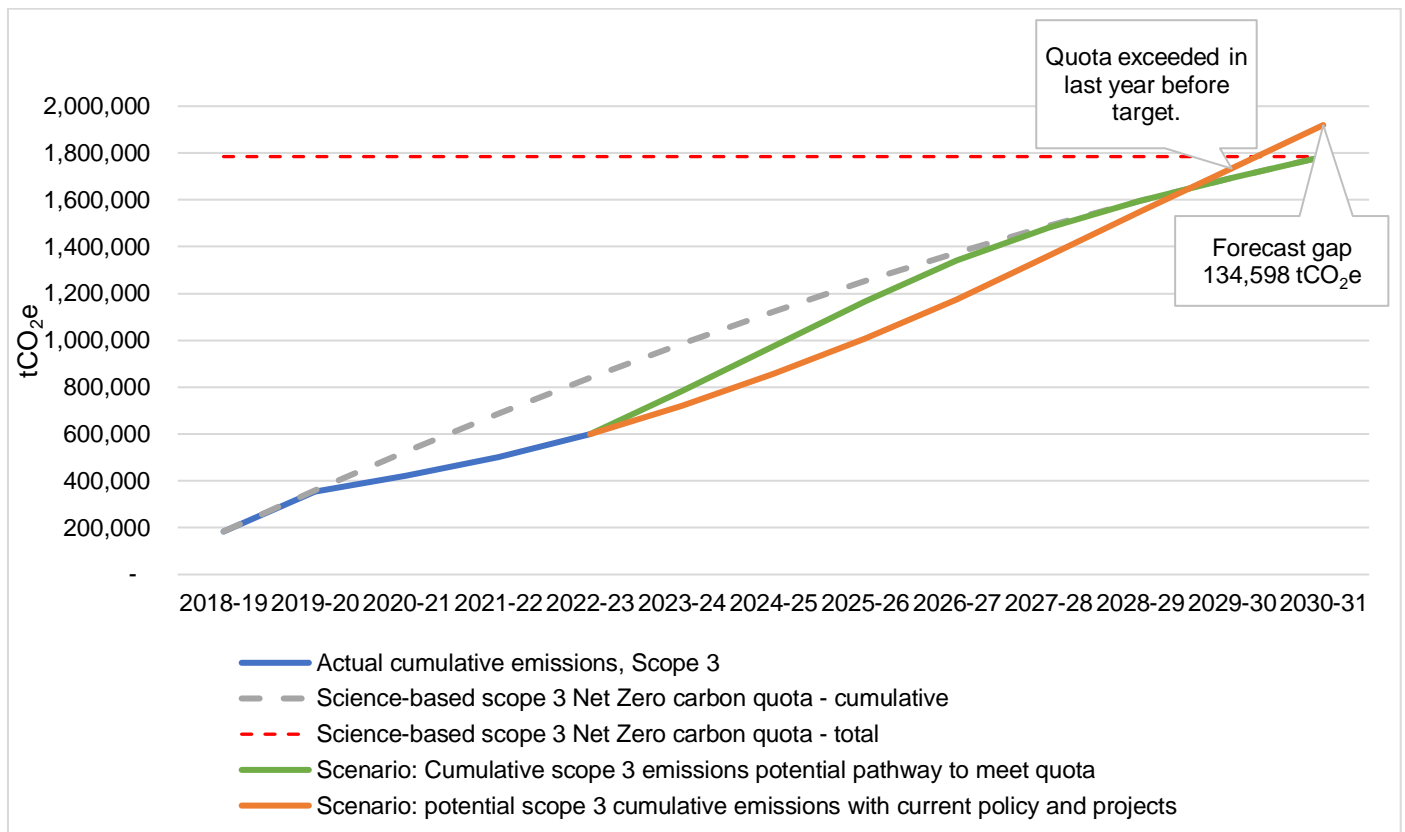


Figure 7- Scope 3 carbon quota - cumulative emissions

- 6.6 The carbon quota is used to determine annual carbon reduction milestones. These milestones are adjusted annually according to performance. For example, if the Council cannot invest financially in a year due to budget pressures and as a result emissions do not fall to meet the milestones, the future annual milestones change to reflect the remaining carbon quota.
- 6.7 Cambridgeshire wide Carbon Budget: This will be delivered through the collaboration on the locally determined contribution project discussed at 5.9.

## 7 Proposed updates to the Climate Change and Environment Strategy Targets and Action Plan

- 7.1 To ensure delivery of the strategy, an Action Plan was approved as a “live” document to which amendments and new actions could be added as greater knowledge and further evidence come forward. It was also acknowledged that the targets may require amending for

the same reasons. In light of the progress made to date, key recommendations from the Council's Internal Audit and new emerging approaches a range of updates are proposed as outlined below.

## 7.2 Proposed amendments to the targets are:

EXISTING	PROPOSED CHANGE	NEW TARGET
Target 3: The County Council will reduce its supply chain emissions (all scope 3) by 50.4% by 2030.	<p>It is proposed to separate the rural estate carbon emissions from the other scope 3 emissions due to their significance and complexity to address.</p> <p>It is proposed to develop a separate target for the rural estate that focusses on the decarbonisation challenges for this sector, building on national, regional and local collaborations and partners. See section 4.9. Work will progress to develop and test a new target for the rural estate which will be brought back for endorsement in due course.</p>	The County Council will reduce its indirect emissions (scope 3) by 50.4% by 2030. Excluded from this target are emissions relating to agriculture and land use.
Target 6: By 2045, support our communities and businesses to decarbonise	<p>This target is a subset of target 5 (Cambridgeshire carbon emissions will be net-Zero by 2045).</p> <p>Following advice from Internal Audit, it is proposed to remove this target as its duplication with Target 5 makes reporting challenging. The two targets currently reported together within this report.</p> <p>Simplifying into the one target will provide greater clarity on progress.</p>	n/a- is considered delivered via target 5; Cambridgeshire carbon emissions will be net-Zero by 2045.

7.3 Interim Milestone for area-wide emissions: In addition to the proposals outlined above, an interim milestone is proposed to support monitoring of progress towards the Cambridgeshire-wide 2045 net zero target. While the Locally Determined Contributions project outlined at 6.7 will provide a long-term strategic ambition and carbon reduction pathways for Cambridgeshire and Peterborough, establishing an interim milestone for now will support reporting progress to third parties e.g. the Carbon Disclosure Project and Climate Emergency UK, given the long-term nature of the 2045 net zero target. The proposed milestone for the Cambridgeshire geographical areas based on SBTi is:

*“Cambridgeshire area carbon emissions to reduce by 71.4% by 2035, compared to a 2018 baseline, excluding emissions from Land Use, Land Use Change and Forestry (LULUCF) and agriculture”.*

7.4 A number of changes have been made to the action plan to reflect progress. The full action plan with proposed changes is available in Appendix 3. Key changes include:

- The majority of actions related to developing strategies, policies and/or guidance to support the Council to better consider climate change have been completed and closed. Actions related to delivery of these strategies have been introduced;

- Introduction of a new action related to council catering for internal events;
- Evolving the current internal support offer to also support partners on climate related matters; and
- Facilitating climate related funding mechanisms to enable Cambridgeshire communities and businesses to decarbonise.

## 8 Areas of focus for 2024/25 onwards

8.1 There are several emerging areas that require strategic focus in the coming year(s) to ensure delivery of the targets and carbon reductions continue. These include:

- Sustaining the strong leadership and commitment from senior management and politicians into delivery of the Council's targets and action plan. For organisational targets such as scopes 1, 2 and 3, this will be particularly relevant as the Climate and Environment Programme shifts further to embedding change across the organisation and towards a new "business as usual", while needing to avoid loss of momentum in delivery of climate ambitions;
- Continued resourcing and funding, particularly for projects such as the Low Carbon Heating Programme and fleet electrification to address scope 1&2 emissions that will contribute to delivery of the council's near-term targets;
- Continued work on the capital programmes to design out construction emissions, and implement better forecasting of capital programme emissions into future years;
- Support for strategies and innovative approaches to dealing with the Council's "tougher to treat" scope 3 emissions, such as the waste strategy and rural estate and continue to embed carbon reductions into existing programmes;
- Continued support for the Locally Determined Contributions project, a cross-partner collaboration to align Local Authorities' geographical climate ambitions with those of our businesses and communities;
- Increased focus on new financing models for climate and nature solutions to attract inward investment, particularly from the private and community sectors;
- Continued focus on ensuring a Just Transition in Cambridgeshire - e.g. equity of opportunity and access to low carbon approaches; and
- Accelerating current work to understand how climate change will impact council services to manage demand and cost risks.

## 9 Alternative Options Considered

9.1 No other options considered – this report is substantively reporting progress following established and previously approved processes. However, changes are being proposed to target and actions to reflect current position and keep delivery on track.

## 10 Conclusion and reasons for recommendations

10.1 Good progress is underway delivering the Council's scopes 1, 2 and 3 emissions. Paragraph 9.1 sets out the key areas of focus moving forward, and Section 7 proposes changes to existing targets and actions as well as the inclusion of an interim milestone for the Cambridgeshire 2045 Net Zero target. The recommendations are set out at the front of the report.

## 11 Significant Implications

### 11.1 Finance Implications

There are no direct financial implications resulting from the recommendations within this report. However, future delivery of actions will be subject to separate finance and funding decisions and will be considered alongside the Council's other ambitions, service obligations and pressures, as well as keeping within the Council's overall financial limits. Some climate actions can reduce costs (such as those that lead to reduced energy use, reduced use of material resources and reduced waste, and/or mitigate the risk of other future costs), and other actions will not result in a financial pay back.

### 11.2 Legal Implications

There are no implications under this category.

### 11.3 Risk Implications

There are no direct risk implications resulting from the recommendations within this report, however progress on the strategy feeds into the overall position for the Risk 12 on the Council's corporate risk register. Progress towards these carbon targets is a key mechanism of monitoring and assuring management of Risk 12.

### 11.4 Equality and Diversity Implications

There are no implications under this category.

### 11.5 Climate Change and Environment Implications

This report outlines progress towards the Council's climate change and environment ambitions. Through setting out progress to date, this report highlights where further attention is required to assure delivery, supporting the Council's strategic response.

### 11.6 Procurement implications

There are no implications under this category.

### 11.7 Resource implications

There are no direct resourcing implications resulting from the recommendations within this report. Through setting out progress to date, this report highlights where further attention is required to assure delivery, however future resourcing will be subject to separate decisions.

## 12 Source Documents

### 12.1 CCES Progress Report October 2023 (item 5)

[https://cambridgeshire.cmis.uk.com/ccc\\_live/Meetings/tabid/70/ctl/ViewMeetingPublic/mid/397/Meeting/2100/Committee/67/Default.aspx](https://cambridgeshire.cmis.uk.com/ccc_live/Meetings/tabid/70/ctl/ViewMeetingPublic/mid/397/Meeting/2100/Committee/67/Default.aspx)

### 12.2 Previous Annual Carbon Footprint Reports

<https://www.cambridgeshire.gov.uk/residents/climate-change-energy-and-environment/carbon-footprinting-how-big-is-the-problem>

### 12.3 Other Reports

[FINAL CLIMATE REPORT LOW \(002\).pdf \(hubspotusercontent40.net\)](#)

## 13 Appendices

### 13.1 Appendix 1 Annual Carbon Footprint Report 23/24

### 13.2 Appendix 2 Annual Risk Report: Climate Change and Environment Targets

### 13.3 Appendix 3 CCES Updated Action Plan



# Cambridgeshire County Council Annual Carbon Footprint Report

April 2023 – March 2024

This is the Council's Sixth Annual Carbon Footprint Report.

**DRAFT VERSION**

Updated 24 September 2024.

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# 1. Introduction

## 1.1 About this report

This is Cambridgeshire County Council's **DRAFT** annual carbon footprint report for the period April 2023 to March 2024. This report examines both the carbon footprint of Cambridgeshire County Council as an organisation (for the financial year 1 April 2023 to 31 March 2024), and also that of the geographical area of Cambridgeshire as a whole (for which the most recent data available is the calendar year 2022).

Cambridgeshire County Council updated its Climate Change and Environment Strategy in 2022, setting a number of targets relating to reducing greenhouse gas emissions, including reducing the Council's own 'scopes 1 and 2' (direct) emissions to net zero by 2030, reducing 'scope 3' (indirect) emissions by 50.4% by 2030 (compared to the 2018 baseline), and to support delivery of net zero for the county of Cambridgeshire by 2045. In order to monitor progress against these targets, it is necessary to measure the Council's carbon footprint each year.

### Recovering from COVID-19

In 2020-21, the global COVID-19 pandemic led to nationwide lockdowns, reduced travel and changed ways of working for many people, combined with unprecedented demands on public health and social care services. Greenhouse gas emissions globally fell during that year and carbon reductions were also experienced both in Cambridgeshire and across the UK. In the following years, as we started to recover from the impacts of COVID-19, there were inevitably some increases in emissions as services began to return to pre-pandemic levels. This year, that journey of a gradual return to normality has continued.



## 1.2 What is a carbon footprint?

A carbon footprint is a measure of greenhouse gases (GHGs) emitted into the atmosphere. The most common GHG is carbon dioxide (CO<sub>2</sub>), which makes up around 80% of UK GHGs. Other GHGs such as methane (CH<sub>4</sub>) or nitrous oxide (N<sub>2</sub>O) are measured in 'carbon dioxide equivalent' (CO<sub>2</sub>e), which takes into account the different global warming potential (GWP) of different gases.

GHGs are produced by a variety of activities, including energy generation (burning fossil fuels such as coal, oil and gas), transport (burning fossil fuels like petrol and diesel), agriculture (such as methane from livestock and nitrous oxide from fertilisers), waste management (such as methane from landfill sites) and land use (such as carbon loss from soil erosion or deforestation).

We can measure the carbon footprint of a geographical area, or of an organisation, or of a product or an activity. In this report we have included both the carbon footprint of Cambridgeshire County Council as an organisation, and that of the geographical area of Cambridgeshire. More information about the methodology is in section 2.11.

Nationwide, emissions of CO<sub>2</sub> make up about 80% of GHG emissions, with the remainder from methane (14%), nitrous oxide (4%) and fluorinated gases (2%), when weighted by GWP, as shown in Figure 1.

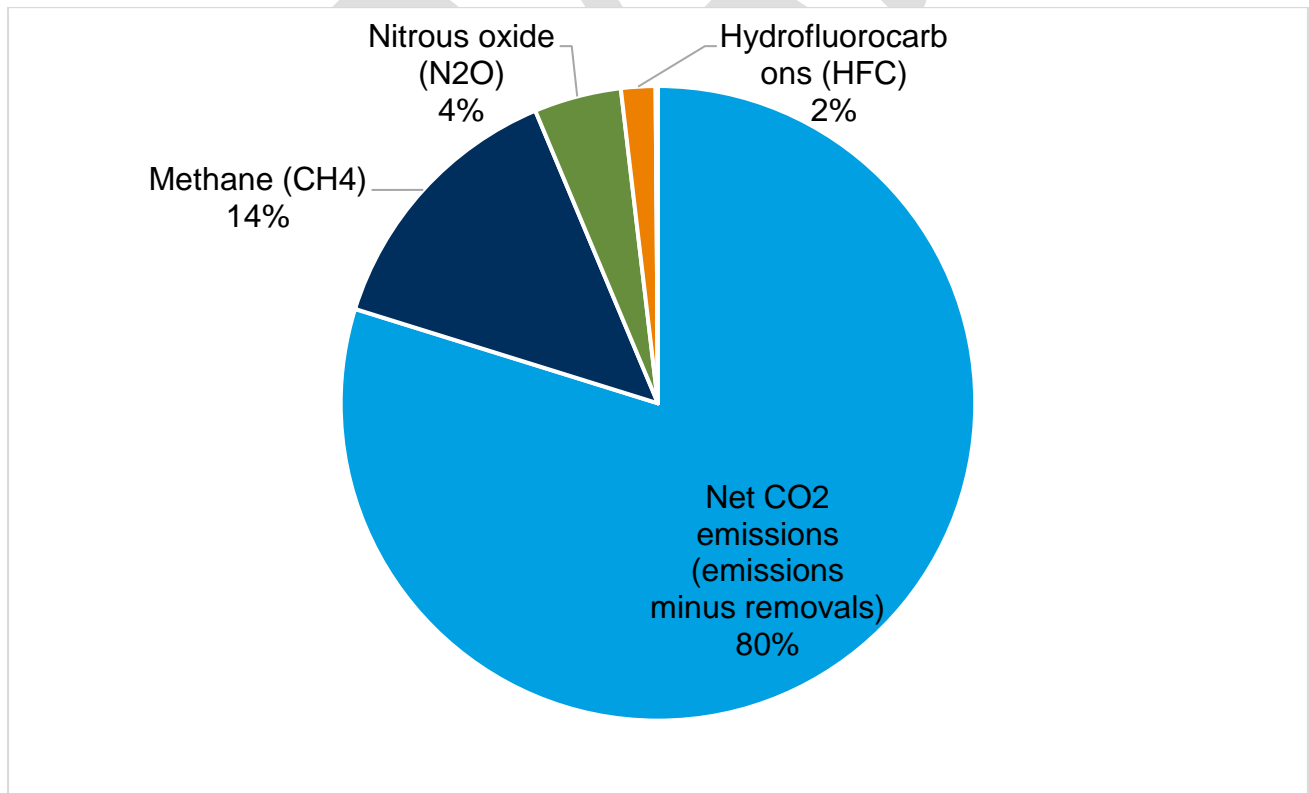


Figure 1: UK-wide Greenhouse Gas Emissions, 2022, by type of gas (CO<sub>2</sub>e) (data from DESNZ)

### 1.3 What are scopes 1, 2 and 3?

Emissions-releasing activities of organisations are classified in the GHG Protocol Corporate Standard into three groups known as scopes. These are described in Table 1 and illustrated in Figure 2 below.

Table 1: Scopes

Scope	Description
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 that organisation (e.g. travel in employee-owned vehicles or public transport, purchased goods and services).

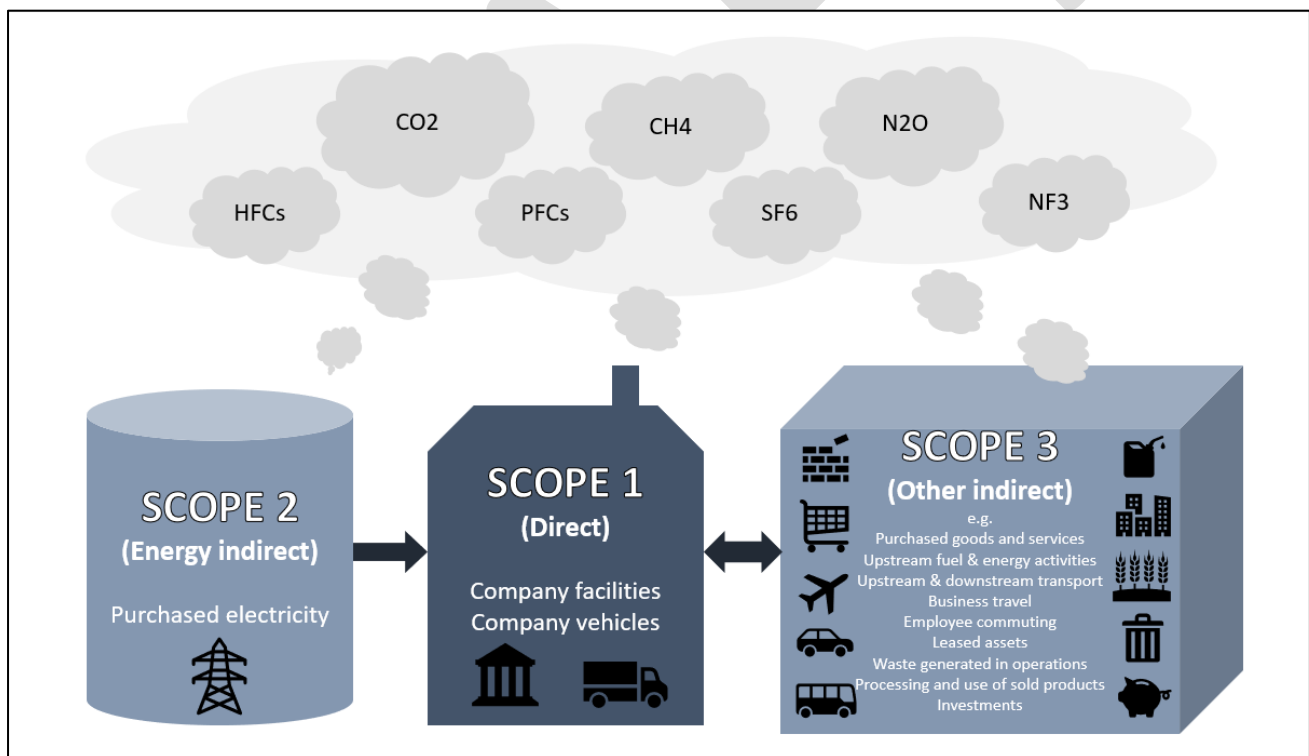


Figure 2: Diagram of scopes 1, 2 and 3 GHG emissions

Activities in all three scopes have been included in this report. However, 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.

The vast majority (99%) of the Council's GHG emissions fall under 'scope 3', which means these are indirect emissions from assets outside of the Council's direct control.

## 1.4 Reducing our carbon footprint

Cambridgeshire County Council's [Climate Change and Environment Strategy](#) and [Action Plan](#) sets out the work we are already doing, and plan to do, to reduce our impact on the climate and on nature.

The Council has already taken a variety of measures to reduce our carbon footprint. For example, our programme of low carbon heating works has already reduced our scope 1 carbon emissions, and these will reduce further over the next few years, as we replace gas and oil heating with low carbon air source heat pumps at more sites. We have already decarbonised 25 of our buildings and are working on more this year. An example of one of these projects is shown in case study 1 above.

### CASE STUDY 1

#### – LOW CARBON HEATING AT MARCH COMMUNITY CENTRE

Technologies installed	Strebel air source heat pumps
Total project cost	£369k
Grant funding obtained from the Public Sector Decarbonisation Scheme	£149k (grant covered 40% of project costs)
Project status	Completed June 2024
Estimated carbon saving	23 tonnes CO <sub>2</sub> e per year





Scope 1 emissions have also been further reduced by swapping diesel for Hydrotreated Vegetable Oil (HVO) biofuel on some larger fleet vehicles for our highways service.

Our scope 2 emissions are zero, using the market-based method, because we purchase a 100% zero carbon electricity tariff through our supply contract. (See section 2.11 on methodology.)

The Council already has several key measures in place to reduce our 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 (e.g. 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.

## CASE STUDY 2

### – HAUXTON PRIMARY SCHOOL LOW CARBON HEATING PROJECT

Technologies installed	2 x Modutherm Air Source Heat Pumps, TREND Building Energy Management System and LED lighting upgrade
Total project cost	£224k
Grant funding obtained from the Public Sector Decarbonisation Scheme	£86k (grant covered 38% of project costs)
Project status	Completed March 2024
Estimated carbon saving	15 tonnes CO <sub>2</sub> e per year



As well as our own buildings, the Council has been running a programme to retrofit energy conservation measures in both maintained and academy schools in Cambridgeshire since 2014. To date the Council has worked with 69 schools, to invest more than £17m in energy efficiency, energy generation and low carbon heating measures. The [schools energy programme](#) is delivering significant savings on both energy bills and carbon emissions for schools. One example of this is at Hauxton Primary School, featured in case study 2.

In addition, the Council has a number of [large scale renewable energy projects](#). Our solar assets, including our 12MW solar farm in Soham (pictured in Figure 3) and several rooftop solar PV installations across multiple Council buildings, between them generated enough electricity to power about 5,000 homes, and avoid 2,580 tonnes CO<sub>2</sub>e of greenhouse gas emissions in 2023-24.



Figure 3. CCC's Triangle Farm solar park in Soham

We are also working on more large scale renewable energy projects, such as [Smart Energy Grids at St Ives and Babraham Park and Rides](#) (featured in Case Study 3 on the next page).

### CASE STUDY 3

#### – BABRAHAM PARK AND RIDE SMART ENERGY GRID

Technologies installed	Microgrid including Solar PV on carports and EV chargepoints
Project status	Construction in progress (as at July 2024)
Estimated renewable electricity output	71 GWh over 30 years
Estimated carbon saving	5,735 tonnes CO <sub>2</sub> savings over 30 years
Other benefits	<ul style="list-style-type: none"><li>• Direct supply of 100% renewable electricity for the Park &amp; Ride's on site usage such as for lighting and CCTV.</li><li>• Electricity generated will also supply the new electric vehicle chargepoints for members of the public to use.</li><li>• Excess electricity will be exported to a large local customer via new infrastructure.</li><li>• Generating income for the Council from the sale of exported electricity and from EV charging services.</li></ul>





## CASE STUDY 4

### – USING RECYCLED MATERIALS FOR ROAD REPAIRS

What are we doing?	Here we are recycling the existing road into the new, by reusing the excavated material to form the new unbound road layers. We are also utilising stabilisation grids to manage movement caused by peat deposits under the road.
The project in numbers:	<ul style="list-style-type: none"> <li>• 7500 m<sup>2</sup> of road reconstructed</li> <li>• Zero imported aggregate required</li> <li>• 5300 tonnes of recycled material used</li> <li>• Over 24 tonnes CO<sub>2</sub>e of carbon saved</li> </ul>
Other benefits:	<p>Safer travel for our local communities.</p> <p>The stabilisation grids prolong the design life of the road.</p> <p>Whilst we are on site the team are also installing new safety fencing and refreshing over 4 linear km of white lining, all whilst keeping the local community informed and up to date.</p>





## 2. Cambridgeshire County Council’s Carbon Footprint

### 2.1 Key findings for 2023-24 – scope 1 and 2 emissions

Scopes 1 and 2 are those that the council has the most control over, as they comprise of emissions from our own assets, such as council buildings or vehicles. Scope 1 comprises of direct emissions from the council’s assets and includes emissions from gas and oil boilers for heating our buildings, fugitive refrigerant gases and emissions from fleet vehicles.

Scope 2 is emissions from purchased electricity for our buildings and street lighting etc.

We found that our scopes 1 (direct) and 2 (purchased electricity) emissions, together amounted to **941 tonnes CO<sub>2</sub>e**. All of the emissions for scope 2 are zero, using the market-based method, because the Council purchases a zero carbon electricity tariff through our supply contract. (See section 2.11 on methodology.) The breakdown of the scope 1 emissions is shown in Figure 4 below, with the largest share coming from gas to heat our buildings.

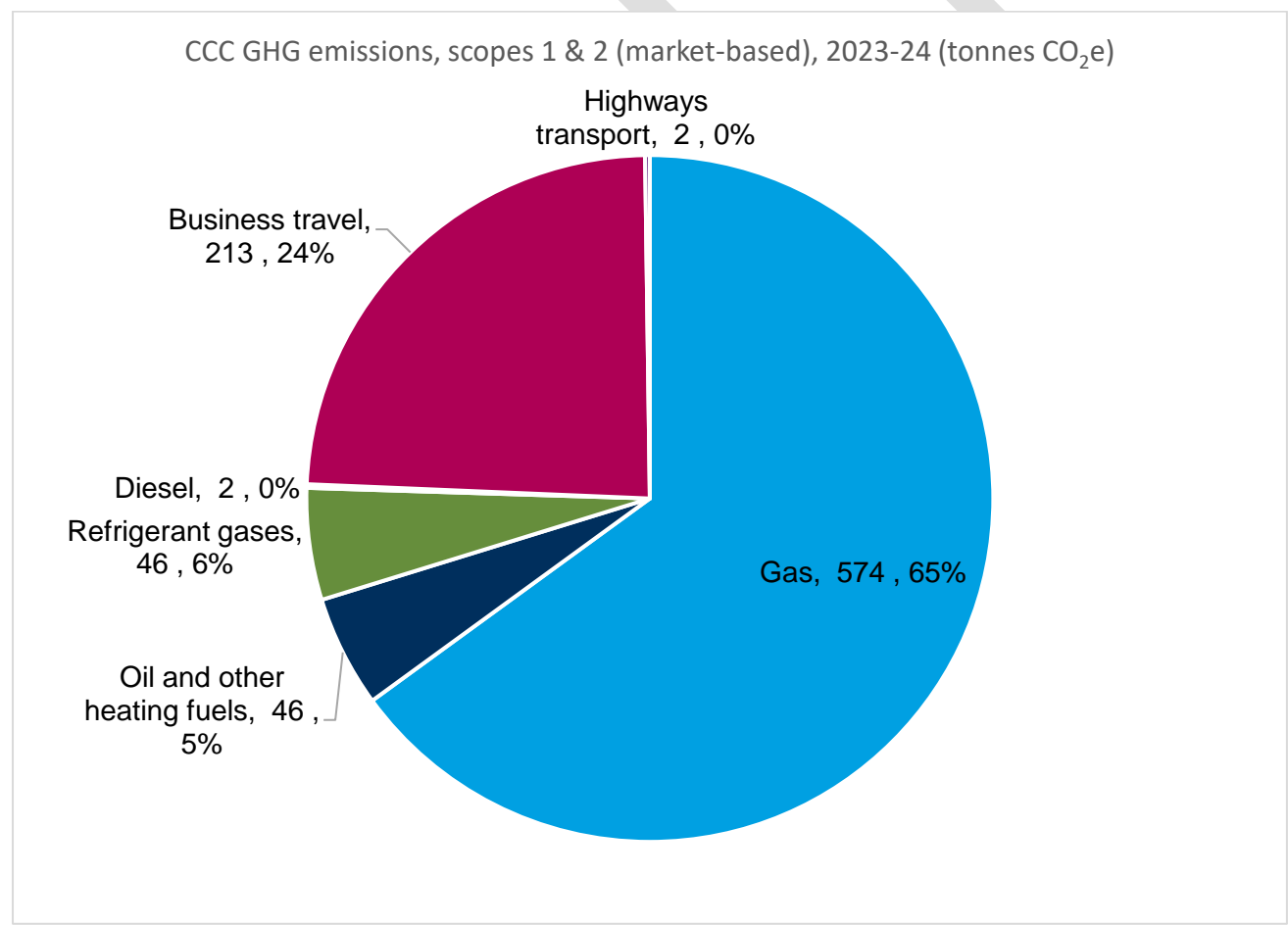


Figure 4: CCC GHG emissions, 2023-24, scopes 1 and 2, by category

## 2.2 Key findings for 2023-24 - scope 3 emissions

Scope 3 means indirect emissions from assets outside of the Council's control, such as those of our contractors and suppliers. This means that it is harder to measure scope 3 because we do not always have access to all of the required data. The Council's gross scope 3 emissions were **111,307 tonnes CO<sub>2</sub>e** in 2023-24.

The vast majority (~99%) of all known emissions were scope 3 (indirect). This includes transport emissions from vehicles not under Council control (such as employee's own cars or contractors' vehicles), emissions from county waste disposal and treatment, emissions from Local Authority maintained schools' energy usage, and emissions associated with purchased goods and services delivered by third parties, such as capital construction works.

For this first time, this year, our scope 3 emissions have also been categorised into the 15 categories of the GHG Protocol *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*. The reasons for doing this are to provide a better comparator to other organisations and also to offer new insights on the sources of the Council's scope 3 emissions. The results are shown in Figure 5. (Not all categories are used, since some are not applicable to the Council.)

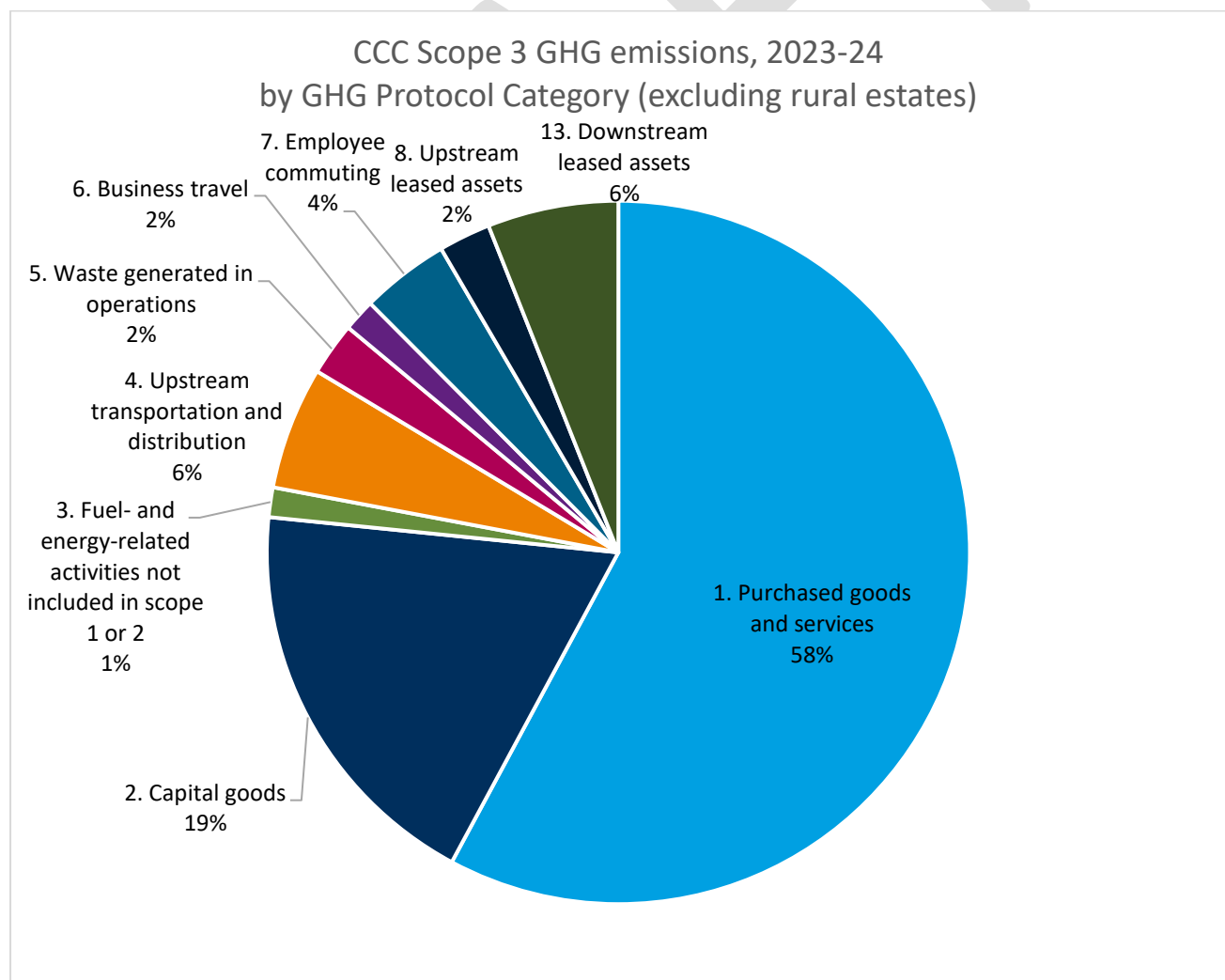


Figure 5. CCC Scope 3 emissions, 2023-24, by GHG Protocol Category

Note that the county waste disposal service is categorised under ‘purchased goods and services’ because the Council purchases these services from its waste disposal contractors. The ‘waste generated in operations’ category includes waste from the Council’s own sites and from construction work. ‘Purchased goods and services’ also includes a variety of other sources from the Council’s supply chain, unless they fall under one of the other categories such as fuel or transportation. Construction projects are categorised as ‘capital goods’.

Some additional emissions associated with purchased goods and services are not yet included, because we do not have the relevant data to calculate these. However, we are working to improve this coverage. More information on this data improvement process and the results so far, along with a list of what has been included and excluded, together with reasons for exclusions, is in section 2.11.

One of the categories not yet included is emissions from agriculture and land use. During 2023-24, the Council commissioned detailed work on the rural estate to identify its carbon emissions, agree a baseline and identify the range of actions needed to reduce these carbon emissions. This work found that the scale of carbon emissions on the rural estate is significant, at approximately 200,000 tonnes CO<sub>2</sub>e per annum, which is almost double all other scope 1,2 and 3 emissions. Due to the need for further assessment of these findings, our reporting on the rural estate emissions is not yet included in the scope 3 emissions data here, but is reported in more detail and separately in section 2.10.

## 2.3 Key findings for 2023-24 - all scopes

The Council’s total known gross GHG emissions in 2023-24 for all 3 scopes (but excluding the rural estate) amounted to **112,248 tonnes CO<sub>2</sub>e** (using the market-based method for scope 2). (This would have been 116,506 tonnes CO<sub>2</sub>e using the location-based method for scope 2.)

Excluding the rural estate emissions, means the largest share of emissions was from waste, mainly due to the Council’s statutory duty as the Waste Disposal Authority. This is shown in Figure 6 and Table 2.

Table 2: CCC GHG emissions, 2023-24, by source category

Category	Scope 1	Scope 2 (market-based)	Scope 3	Total (tonnes CO <sub>2</sub> e)
CCC Buildings & Utilities	668	-	1,537	2,205
Non-CCC Buildings	-	-	3,645	3,645
Schools (maintained)	-	-	6,616	6,616
Transport	273	-	11,280	11,552
Waste	-	-	67,638	67,638
Construction and other materials	-	-	20,592	20,592
<b>Total gross GHG emissions</b>	<b>941</b>	<b>-</b>	<b>111,307</b>	<b>112,248</b>

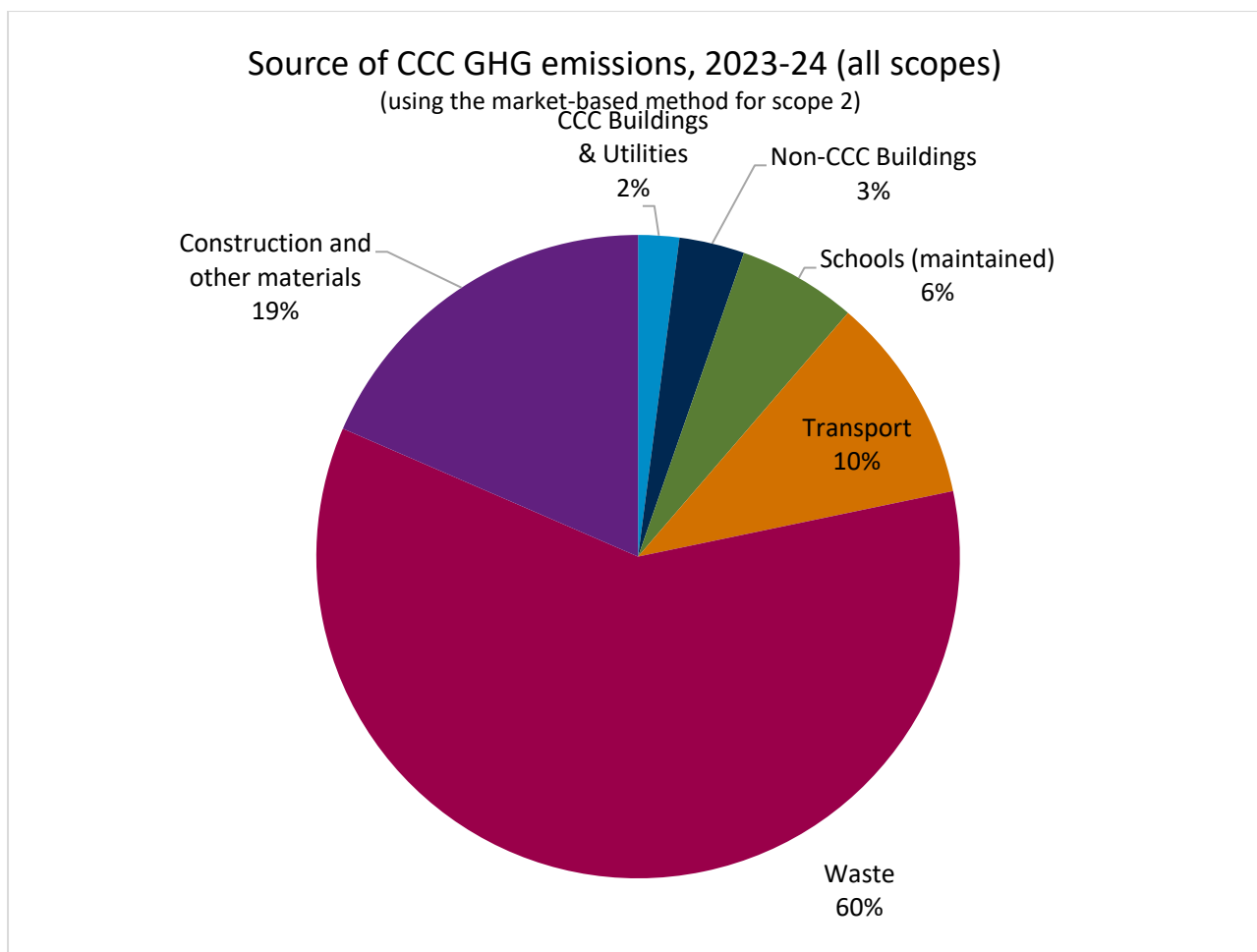


Figure 6: CCC GHG emissions, 2023-24, by source category

There is also a more detailed breakdown of all the sources of emissions in Table 5 on page 19.

In addition, this year, emissions sources have been aligned to the five Directorates of the Council's organisational structure, where possible, in order to help directorates understand the scale and scope of emissions that sit within their remit. This is shown in Figure 7.

Although rural estates is not included here, it would be the largest source of carbon emissions and sits within the 'Finance and Resources' Directorate. This is discussed separately in section 2.10. The next highest directorate, which is shown in the graph below, is 'Place and Sustainability', as it hosts the waste service as well as highways. 'Children, Education and Families' includes schools' energy use and education capital construction works.

Emissions from council buildings, employee commuting and business travel are classed as 'Multiple' since these sources include more than one service. Some directorates show as 0% because all of their emissions are either within the 'multiple' section, or are not yet included (such as the rural estate).

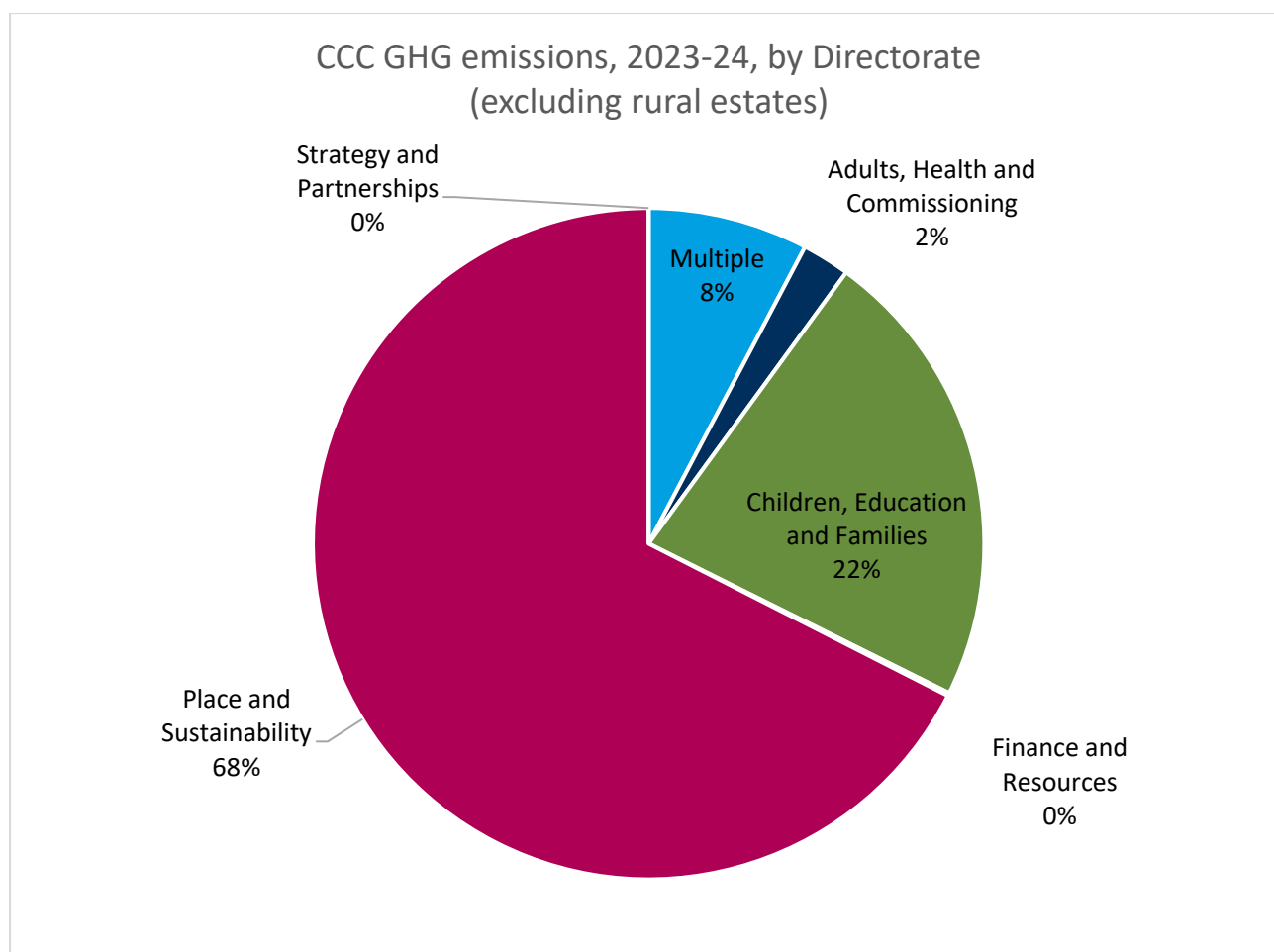


Figure 7: CCC GHG emissions, 2023-24, by Directorate

## 2.4 Comparison to previous years

Emissions from all previous years back to our baseline year of 2018-19 have been recalculated where possible, in order to be more accurate where updated data becomes available, and to ensure consistency with emissions reported now, in terms of what is included and the calculation methodology. These changes, along with some other minor updates, mean that the baseline year net emissions for 2018-19, in total for all three scopes, are now calculated at **179,943 tonnes CO<sub>2</sub>e** (using the market-based method for scope 2), as shown in Table 3. (This is excluding the rural estate.)

The Council's total known net GHG emissions in 2023-24, for all 3 scopes, amounted to **103,255 tonnes CO<sub>2</sub>e** (net, after reductions for avoided emissions and excluding the rural estate). This is 43% lower than our baseline year of 2018-19.

The tables below show the Council's total carbon emissions across all 3 scopes, for each year since 2018-19, using both the market-based method (Table 3) and the location-based method (Table 4) for scope 2.

Table 3 CCC Annual GHG emissions – using market-based method for scope 2

(tonnes CO <sub>2</sub> e)	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Scope 1	1,611	1,611	1,314	1,528	1,055	941
Scope 2 (market-based)	0	0	0	0	0	0
Scope 3	182,090	176,081	89,279	82,089	101,152	111,307
<b>Gross total scopes 1-3</b>	<b>183,701</b>	<b>177,692</b>	<b>90,593</b>	<b>83,617</b>	<b>102,206</b>	<b>112,248</b>
Reductions	-3,758	-3,371	-3,085	-2,861	-3,653	--8,993
<b>Net total in scope after reductions</b>	<b>179,943</b>	<b>174,320</b>	<b>87,508</b>	<b>80,756</b>	<b>95,866</b>	<b>103,255</b>
Outside of scopes	0	37	181	15,131	17,874	26,469

Table 4: CCC Annual GHG emissions – using location-based method for scope 2

(tonnes CO <sub>2</sub> e)	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Scope 1	1,611	1,611	1,314	1,528	1,055	941
Scope 2 (location-based)	5,537	5,021	4,349	4,138	3,727	4,258
Scope 3	182,090	176,081	89,279	82,089	101,152	111,307
<b>Gross total scopes 1-3</b>	<b>189,238</b>	<b>182,713</b>	<b>94,942</b>	<b>87,755</b>	<b>105,933</b>	<b>116,506</b>
Reductions	-3,758	-3,371	-3,085	-2,861	-3,653	-8,993
<b>Net total in scope after reductions</b>	<b>185,480</b>	<b>179,342</b>	<b>91,858</b>	<b>84,894</b>	<b>102,280</b>	<b>107,514</b>
Outside of scopes	0	37	181	15,131	17,874	26,469

For an explanation of the methodology (including emissions outside of scopes) see section 2.11.

Our scopes 1 and 2 emissions (market-based) were 11% lower in 2023-24 than the previous year, and 42% lower than in our baseline reporting year of 2018-19. (Scopes 1+2 was the same as scope 1 alone, since scope 2 emissions were zero using that method.)

**Scopes 1 and 2 emissions  
down 42%**  
since 2018-19 baseline  
(using market-based method for scope 2)

The main reason for the reduction in scope 1 emissions this year is our programme of low carbon heating projects, where we have been removing fossil fuel based heating systems (such as gas or oil boilers) at some sites, and installing low carbon air source heat pumps instead. We are continuing our programme of low carbon heating projects in order to further reduce gas and oil usage in future, as more sites switch to using heat pumps. The beneficial impact of the low carbon heating programme in reducing our scope 1 carbon emissions is illustrated in Figure 8, in the light blue sections, which have been reducing year on year.

For the past two years, our highways service has been using Hydrotreated Vegetable Oil (HVO) biofuel for some of our largest vehicles, instead of diesel. This led to a large reduction in GHG emissions last year, which has stayed low in 2023-24. This is shown in dark blue in Figure 8.

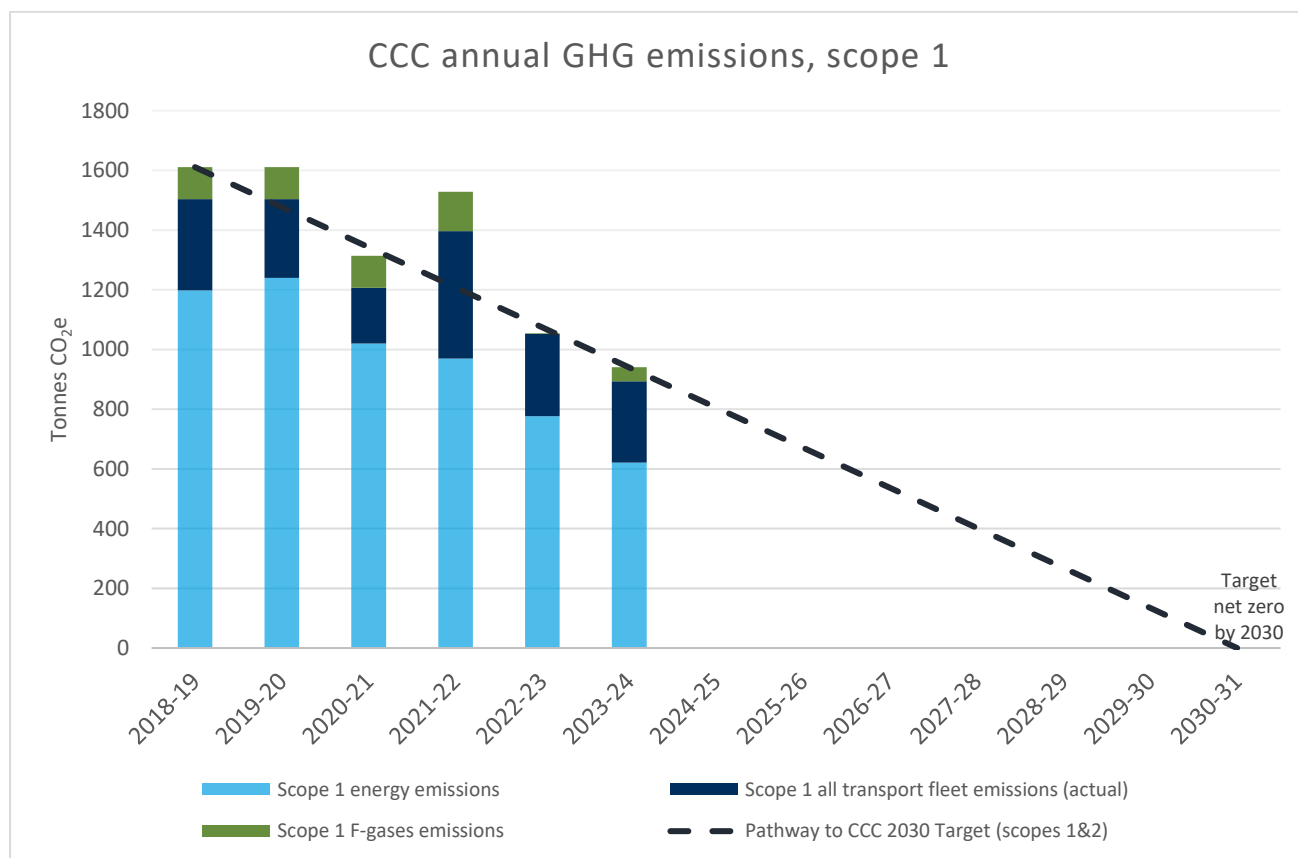


Figure 8: Cambridgeshire County Council annual GHG emissions, scope 1

Scope 3 emissions were 10% higher in 2023-24 than in the previous year, but 39% lower than in our baseline year of 2018-19.

The change in scope 3 emissions is shown in Figure 9 below.

The largest reduction in scope 3 emissions (and overall emissions) since our baseline year is due to reduced construction work. This is shown by the purple bars in Figure 10. Construction activity has been low for the past few years, partially due to the impacts of the COVID-19 restrictions and their impact on the construction sector, followed by a partial recovery in the following years. However, it is anticipated that construction work will increase again in future years. We are working to develop better forecasting of carbon emissions from our capital programme in future.

Further detail on each sector is in the relevant sections (2.6 to 2.10) below.

**Scope 3 emissions  
down 39%  
since 2018-19 baseline**

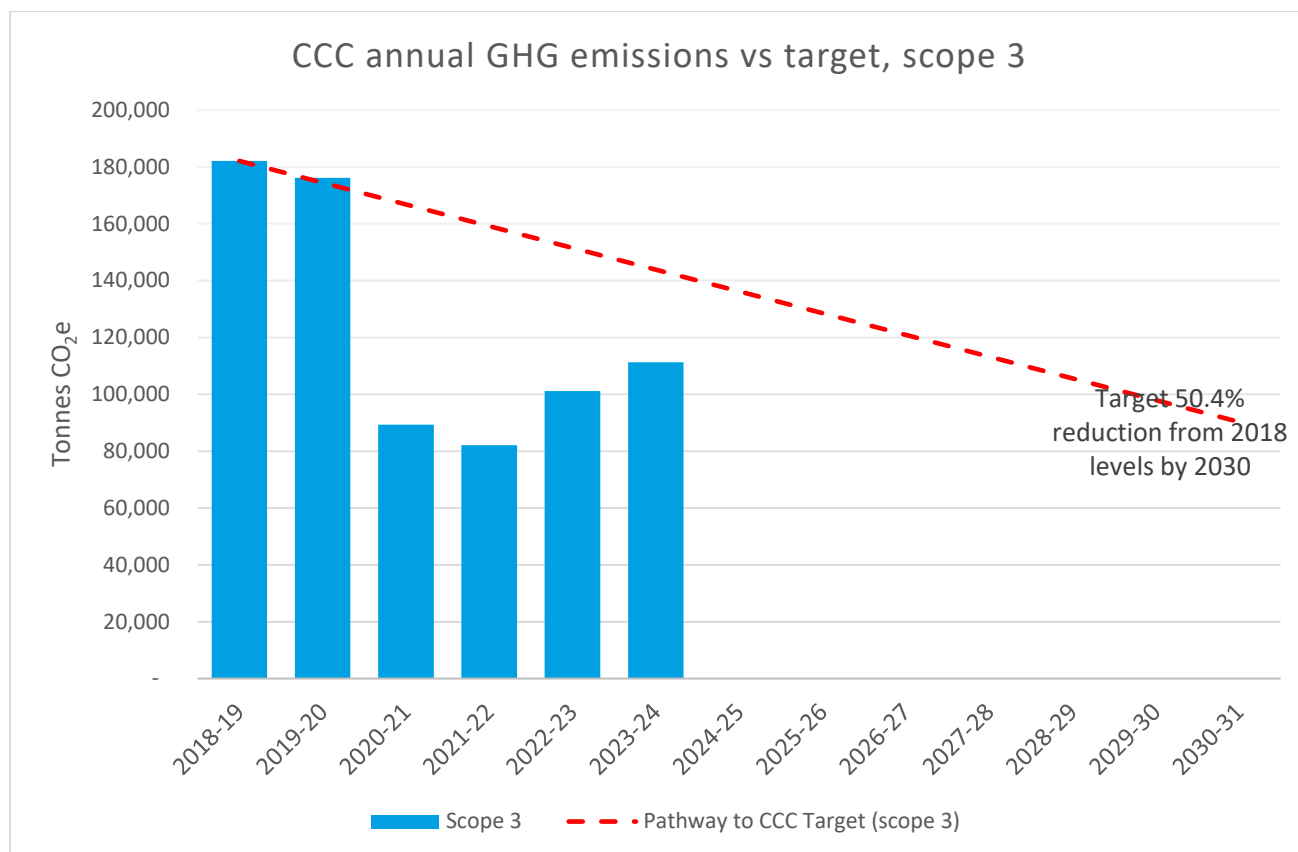


Figure 9: Cambridgeshire County Council annual GHG emissions, scope 3

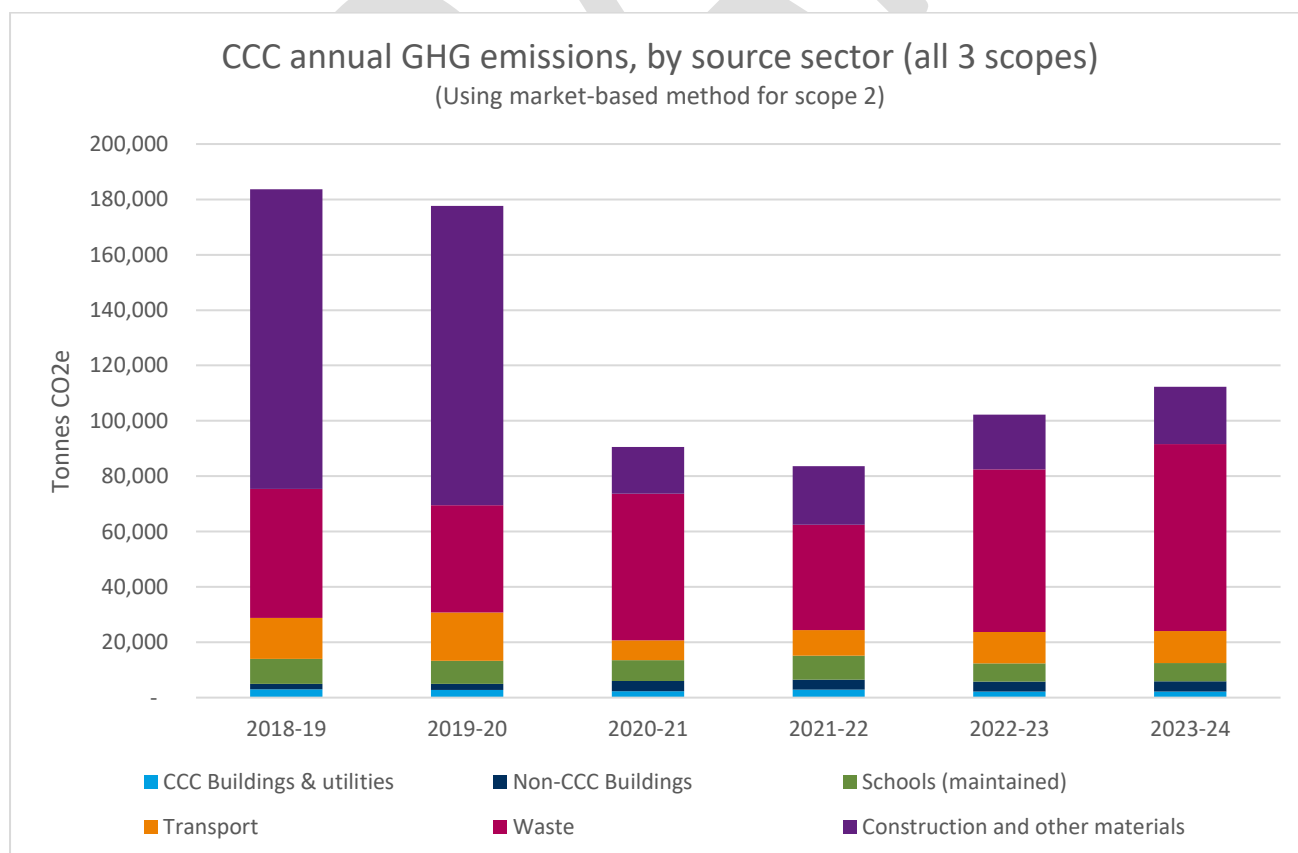


Figure 10: Cambridgeshire County Council annual GHG emissions, all scopes



## 2.5 Full breakdown

Table 5: Cambridgeshire County Council Greenhouse Gas emissions 2023-24, breakdown

Category	GHG emissions (Tonnes CO <sub>2</sub> e), 2023-24 (rounded to nearest tonne)				
	Scope 1	Scope 2 (market-based)	Scope 3	Total in scopes 1-3	Outside of scopes
CCC Buildings & utilities	668	-	1,537	2,205	-
Gas	574	-	95	668	-
Oil and other heating fuels	46	-	10	56	-
Refrigerant gases	46	-	-	46	-
Diesel for generators	2	-	0	2	-
Electricity for CCC buildings	-	-	661	661	-
Electricity for street lighting	-	-	733	733	-
Water and sewerage for CCC sites	-	-	38	38	-
Schools (maintained)	-	-	6,616	6,616	-
Electricity	-	-	2,342	2,342	-
Gas	-	-	3,619	3,619	-
Oil	-	-	507	507	-
Other heating fuels	-	-	149	149	-
Non-CCC buildings	-	-	3,645	3,645	-
Electricity for data centre	-	-	38	38	-
Cloud-hosted IT services	-	-	15	15	-
Commissioned care homes	-	-	2,582	2,582	-
Employees home working	-	-	1,010	1,010	-
Transport	273	-	11,280	11,552	654
Business travel	213	-	1,613	1,826	-
Highways vehicles	2	-	122	124	654
Social & education transport	58	-	3,711	3,769	-
Employee commuting	-	-	3,453	3,453	-
Construction transport	-	-	2,381	2,381	-
Waste	-	-	67,638	67,638	25,814
Asbestos disposal	-	-	0	0	-
CCC site waste	-	-	171	171	-
Construction waste	-	-	2,480	2,480	-
County waste disposal - landfill and MBT	-	-	54,588	54,588	17
County waste disposal – other processes	-	-	10,388	10,388	25,797
Highways waste	-	-	11	11	-
Construction and other materials	-	-	20,592	20,592	-
Education capital projects	-	-	9,816	9,816	-
Highways and major infrastructure	-	-	10,670	10,670	-
Minor works	-	-	19	19	-
IT hardware	-	-	86	86	-
<b>Total (gross, before reductions)</b>	<b>941</b>	<b>-</b>	<b>111,307</b>	<b>112,248</b>	<b>26,469</b>
Avoided emissions from solar assets				-2,580	
Avoided emissions from waste-to-energy				-6,413	
<b>Net total emissions</b>				<b>103,255</b>	

For transparency, and to align with the GHG Protocol Scope 2 Guidance, we are reporting our scope 2 emissions using both the market-based and location-based methods.

If we had used the location-based method for scope 2 emissions, then scope 2 emissions would have been 4,258 tonnes CO<sub>2</sub>e (all within the 'buildings and utilities' category). 2,021 tonnes CO<sub>2</sub>e of this was for electricity for street lighting, and the remaining 2,238 tonnes CO<sub>2</sub>e was for electricity for buildings and other assets. Emissions in all other categories would be the same as in the table above. However, using the market-based method, the Council's scope 2 emissions for 2023-24 were zero, as shown in the table above.

## 2.6 Buildings and utilities

### Council buildings

The Council's buildings and utilities were responsible for 2,205 tonnes CO<sub>2</sub>e (2%) of the Council's GHG emissions in 2023-24 (across all 3 scopes, using the market-based method for scope 2). This is 2% lower than the previous year, but 26% lower than our baseline year of 2018-19. Most of this is in scope 3, with some emissions in this category also in scope 1.



Figure 11. St Neots Library, which is now heated by air source heat pumps

The main source of greenhouse gas emissions within the Council's own buildings is gas use, which accounts for 668 tonnes CO<sub>2</sub>e. Gas is currently used to heat many of our buildings. The Council purchased 19% less mains gas in 2023-24 compared to the previous year, with the reduction mainly due to the replacement of fossil fuel heating with low carbon air source heat pumps in some buildings, such as those at St Neots Library (pictured below) and those at March Community Centre, featured in the case study in section 1.4. More low carbon heating projects completed during 2023-24 and beyond will lead to further reductions in future years. To date, 25 buildings have had heat pumps installed and more are being planned.

Burning oil (kerosene) and other heating fuels, although more carbon intensive than gas, accounted for only 56 tonnes CO<sub>2</sub>e in 2023-24, because there were very few CCC sites that used these fuels.

Scope 2 emissions from electricity use were zero using the market-based method, because the council purchases a zero carbon electricity tariff. The Council purchased around 21 million kWh of electricity in 2023-24, over half of which was for street lighting. Scope 3 emissions associated with this electricity still apply though (with either method), which account for transmission and distribution losses in the electricity grid, and 'well-to-tank' emissions associated with extraction and production of fuels used for electricity generation. These scope 3 emissions connected to the council's electricity usage accounted for 1,394 tonnes CO<sub>2</sub>e for street lighting and electricity used in council buildings and other assets in 2023-24.

Mains water and sewerage services for all our buildings and sites (where the Council is the bill payer) accounted for 38 tonnes CO<sub>2</sub>e in 2023-24.

Finally, fugitive emissions of refrigerant gases from equipment such as air conditioning units accounted for 46 tonnes CO<sub>2</sub>e, and diesel for generators led to 2 tonnes CO<sub>2</sub>e emissions.

### **Maintained schools buildings**

Schools' emissions (which are all counted as scope 3) for all the Local Authority maintained schools in Cambridgeshire accounted for 6,616 tonnes CO<sub>2</sub>e in 2023-24. This is similar to the previous year, but 27% lower than our baseline year 2018-19. The largest share of this is from mains gas, followed by electricity, and oil and other heating fuels.

This includes data for all Cambridgeshire maintained schools that either purchase their utilities through the ESPO contract or have provided their utilities data to us directly.

We do not currently have any data for schools' water and sewerage services or air conditioning gases in schools.

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

### **Other (non-CCC) buildings**

Also in scope 3 were 3,645 tonnes CO<sub>2</sub>e for Council activities related to non-CCC sites, such as the county council's share of electricity used for our data centre (space shared with

Peterborough City Council), commissioned care home places and Council employees home working.

The electricity used for Cambridgeshire County Council's equipment at the Peterborough data centre accounted for 38 tonnes CO<sub>2</sub>e in 2023-24, and our cloud-hosted IT services such as those from Microsoft, accounted for 15 tonnes CO<sub>2</sub>e.

Commissioned care homes is a category of emissions that we have been able to include for the first time this year. This service provides residential care to elderly and vulnerable people. The emissions from the share of energy use in these care homes allocated to residents funded by the Council is estimated at 2,582 tonnes CO<sub>2</sub>e in 2023-24.

We have also calculated the estimated emissions associated with home energy use for employees working from home. This is estimated at 1,010 tonnes CO<sub>2</sub>e this year. Prior to 2020, home working was only around 10% of employee time, but this increased significantly at the start of the Covid-19 pandemic in 2020 to over 80%. In the following years it has gradually decreased again to its current level of around 50%. However, when people work from home more and travel less, the increased emissions associated with home working are much smaller than the associated reduction in emissions from employee commuting, as shown in Figure 12 below. This is because, for most people, travel causes more GHG emissions than home energy use.

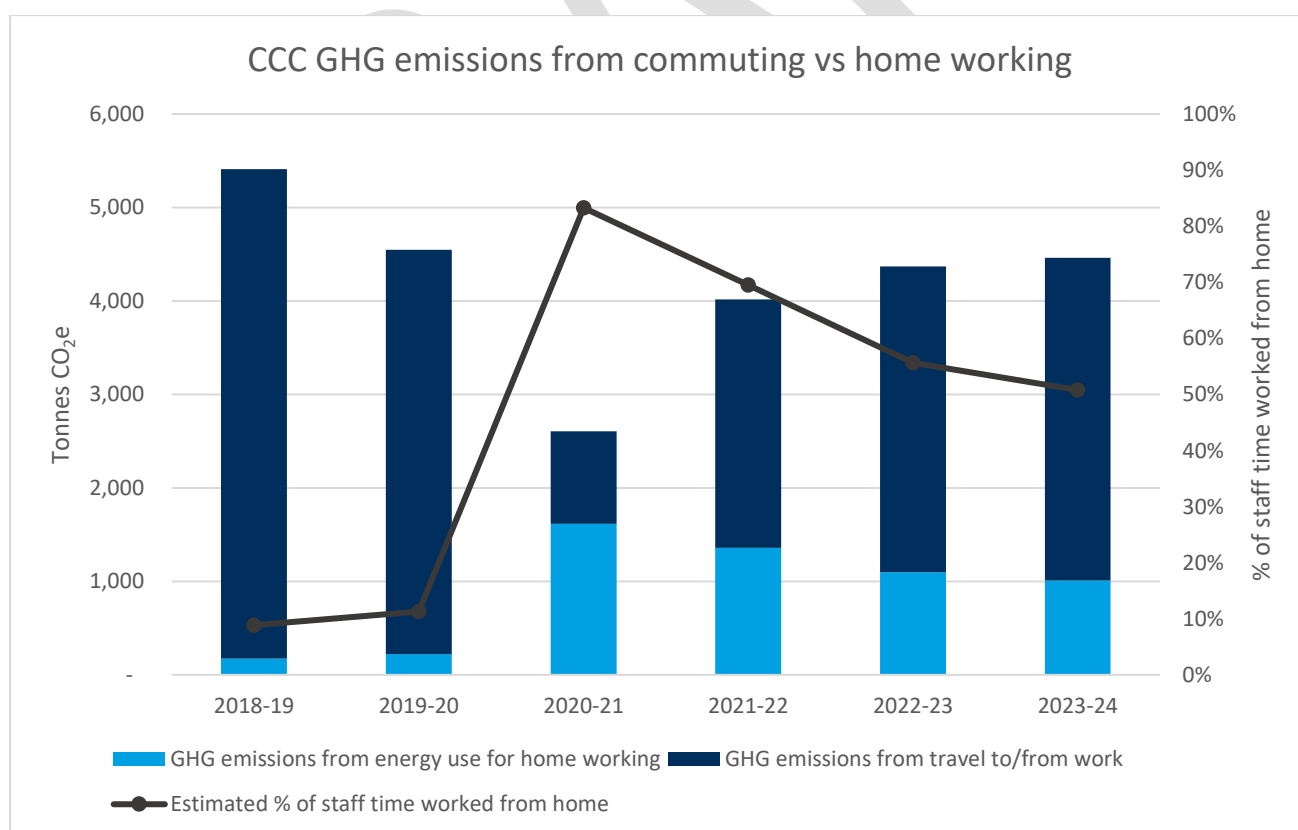


Figure 12: GHG emissions from commuting and home working

## 2.7 Transport

Transport accounts for 11,552 tonnes CO<sub>2</sub>e (10%) of council GHG emissions in 2023-24. This includes some scope 1 emissions (from CCC fleet vehicles) and some scope 3 emissions (from vehicles not under the control of the Council, such as vehicles belonging to CCC employees or contractors).

Transport emissions in 2023-24 were similar to the previous year (2% increase) but were 22% lower than in our baseline year of 2018-19.

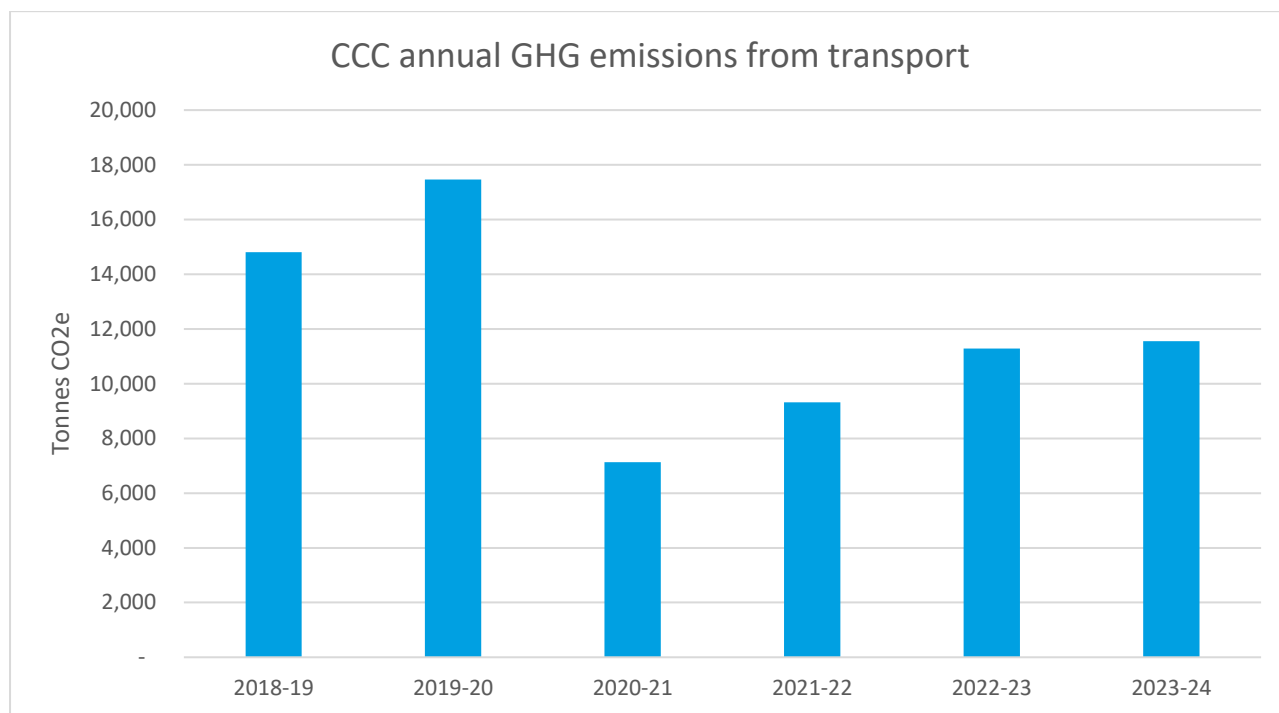


Figure 13: CCC Annual transport emissions

Of all the Council's transport emissions in 2023-24, the largest share was from our social and education transport service, at 3,769 tonnes CO<sub>2</sub>e, which includes home to school transport as well as social care transport. Education transport emissions have fallen slightly over the years despite the rise in demand for this service.

The second largest share of transport emissions (estimated at 3,453 tonnes CO<sub>2</sub>e) was from employee commuting. This is a small increase since the previous year, which is likely to be due to more staff travelling to work sites compared to the previous years, when travelling significantly reduced during the Covid-19 lockdowns and afterwards. However, it should also be noted that data on employee commuting is based on a staff travel survey carried out during October 2023 and relies on assumptions that the survey week was representative of the whole year, and that those who responded to the survey are representative of all staff. There is therefore some uncertainty in the figure for this source of emissions, but it does give us an estimate.



Business travel accounted for 1,826 tonnes CO<sub>2</sub>e in 2023-24. This includes emissions associated with our pool cars, vans and other fleet vehicles, as well as business travel in employees' own vehicles and travel by public transport (trains, buses and taxis).

Highways services transport (such as the road gritters pictured) accounted for just 124 tonnes CO<sub>2</sub>e in 2023-24. This was a 73% reduction in emissions compared to the previous year, due to the highways service switching to use HVO biofuel for more of their larger vehicles.

Finally, transport related to construction projects accounted for 2,381 tonnes CO<sub>2</sub>e.

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



Figure 14: Some of the Council's highways gritting fleet

## 2.8 Waste

Excluding the rural estate, waste accounts for the largest share (60%) of our known emissions in 2023-24, at 67,638 tonnes CO<sub>2</sub>e. The vast majority of this (estimated at 64,976 tonnes CO<sub>2</sub>e) is due to the Council's statutory responsibility as the Waste Disposal Authority for treatment and disposal of waste from Cambridgeshire residents.

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.

In 2023-24 there were 313,260 tonnes of waste collected from both the household kerbside collections and the Council's nine Household Waste Recycling Centres. Of that, 38% went directly to landfill, and 4% was processed through a Mechanical-Biological Treatment (MBT) plant, whilst 26% was composted, 26% was recycled and 6% was used for energy generation.

We have found that emissions from waste were 15% higher than the previous year, and 45% higher than our baseline year 2018-19. Waste emissions have increased this year due to more waste being sent to landfill, as well as an increase in the total amount of waste collected.

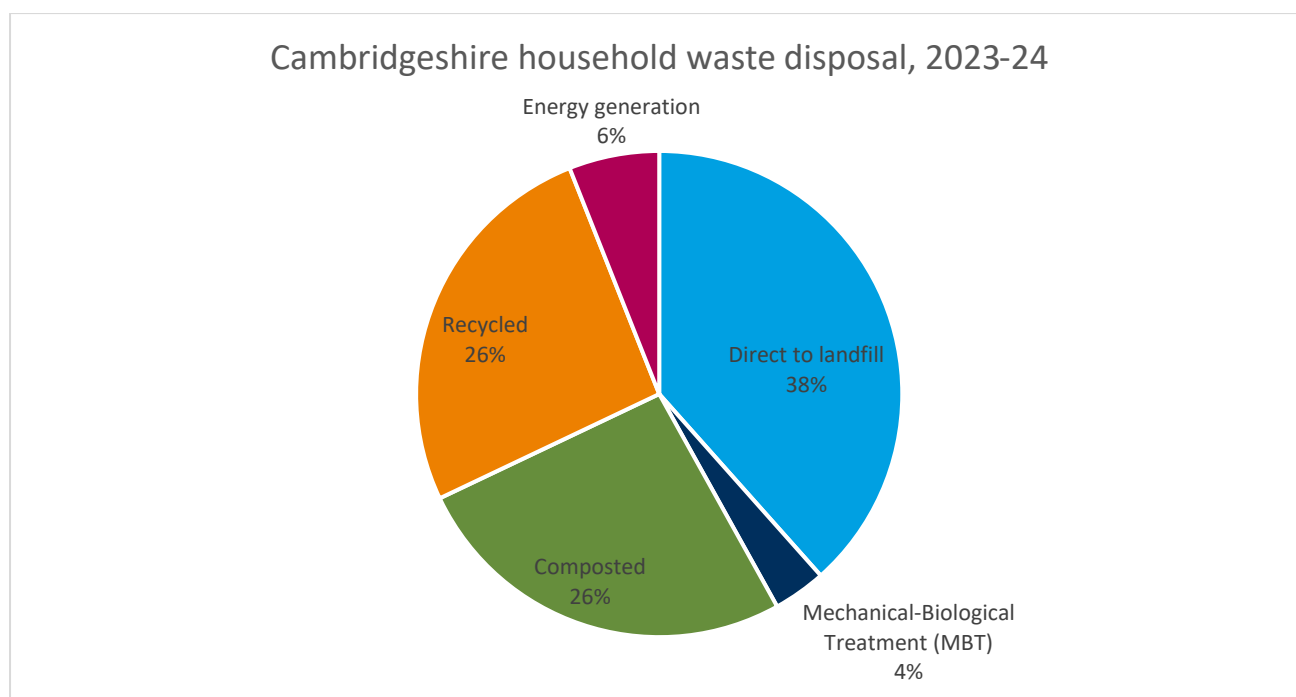


Figure 15: Cambridgeshire household waste disposal

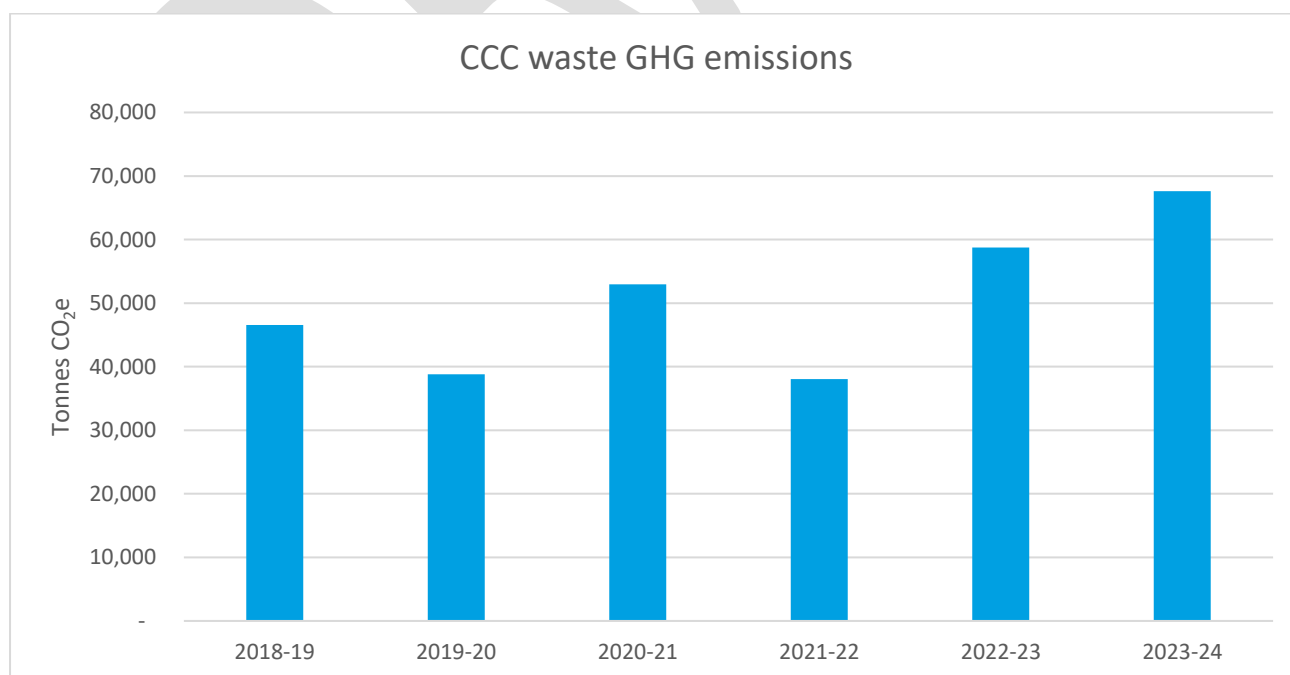


Figure 16: CCC Annual waste emissions

The small remainder of the waste category is from the waste generated at the Council's own sites, accounting for 171 tonnes CO<sub>2</sub>e emissions, construction waste (109 tonnes CO<sub>2</sub>e), highways waste (11 tonnes CO<sub>2</sub>e) and asbestos disposal (less than 1 tonne CO<sub>2</sub>e).

## 2.9 Construction projects and other materials use

A 19% share of the Council's 2023-24 carbon footprint (20,592 tonnes CO<sub>2</sub>e) is from construction materials used for building projects, highways and major infrastructure, and other physical materials in items purchased. This comprises of emissions associated with extraction/mining, production/manufacture and transportation of materials to the point of purchase. These emissions are also known as 'embodied carbon'. Use of fuels for equipment on site is also included in the construction category.

Construction emissions were 4% higher this year than in the previous year, but still 81% lower than in our baseline year 2018-19. This is reflective of the very low emissions from construction activity since 2020-21, partially due to the impacts of the COVID-19 restrictions on the construction sector, followed by a partial recovery in 2021-22 and 2022-23.

10,670 tonnes CO<sub>2</sub>e in 2023-24 was from highways and transport work, including roads maintenance and resurfacing works and highways projects completed through the Council's highways framework contracts. However, there were also some projects, including infrastructure projects carried out by the Greater Cambridge Partnership, for which we have not yet obtained full data, but we have included those projects where data was available.

9,816 tonnes CO<sub>2</sub>e was from education capital projects such as building new schools and extensions. This is more than double the previous year, since there was more education construction work on site this year.

19 tonnes CO<sub>2</sub>e was from minor capital works such as renovations and maintenance of existing buildings. At the moment we are only able to calculate the emissions from some of these minor works, because we do not have access to the relevant data on materials to be able to calculate the remaining emissions. Although this is a very small share of overall emissions, we are working with our contractors to try to obtain more of this data in future.

Some other types of construction work, such as some of our large energy projects, are not yet included in these figures as we await the detailed data from our contractors to calculate the construction carbon. We are currently working on this and hope to be able to include this data in future years' reports. The energy projects are helping to reduce carbon emissions in the county by generating energy from renewable sources and thus reducing the use of fossil fuels. The carbon emitted from the construction phase will therefore be 'paid back' by the carbon savings within a short time.

There were also an estimated 86 tonnes CO<sub>2</sub>e emissions in embodied carbon from the purchase of new IT hardware in 2022-23.



## 2.10 Agriculture and land use, land use change and forestry (LULUCF)

The council owns a large rural estate of around 33,000 acres, which is let out to more than 160 tenant farmers, and therefore these emissions will form part of the council's scope 3 emissions. The vast majority of the County Farms estate is cropland (arable farms), with a small amount of livestock. The council also owns a variety of other land including some parkland, built-up land (buildings and highways) and forest / woodland.



*Figure 17: A field of wheat at Flegcroft farm, Whittlesey - one of the Council's leased out farms*

Agricultural emissions occur from various sources including livestock and from application of fertiliser to land. These emissions are difficult to calculate as they depend on many different factors including soil types, fertiliser type and application rate, livestock types and more.

Land use, land use change and forestry (LULUCF) can either be a source of GHG emissions (for example from soil erosion) or a sink where GHGs are removed (for example through tree growth). In Cambridgeshire, LULUCF is often a source of emissions due to the types of land in our region.

This year, the Council's Just Transition Fund paid for a piece of work by Eunomia Research & Consulting Ltd to help the Council better understand the agricultural and land use related GHG emissions from its rural estate. This has provided an estimated baseline of these emissions, a tool to recalculate these emissions in future when we have more data, and information about potential pathways and actions to reduce emissions.

A sample of the rural estate tenant farmers completed surveys and provided data, which enabled extrapolation of the findings to the whole estate, taking into account the land area of each farm, farm type, soil type, livestock numbers, and details of buildings on the farm.

Eunomia's report found that the estimated gross GHG emissions of the rural estate in 2022-23 were 200,030 tCO<sub>2</sub>e, while -2,649 tCO<sub>2</sub>e was sequestered during the same period<sup>1</sup>. Of the gross emissions, more than 97% come from agricultural activities with the remainder caused by on-farm and residential buildings.

This would make the rural estate the largest source of greenhouse gas emissions across all Council activities. Due to the large uncertainties involved, these emissions have not been included in the total organisational emissions in this report, but are for the time being reported separately, here. This will allow further work to be carried out to verify the figures and further surveys with more of our tenant farmers this winter. It is hoped that a more accurate total can be reported next year.

A driving factor contributing to this high figure is the soil composition of the rural estate, with more than half of the rural estate (52%) sitting on peat soils. Arable land makes up 90% of farmland in the estate, 51% of which is on peat soils. Mixed arable-pasture land contributes 8% of all farmlands and is comprised of 53% peat soils. The remaining 2% of land is purely pasture, 20% of which is on peat soils. Drained peatland is a significant source of carbon dioxide and methane emissions, and the Fens are home to approximately 70% of the drained peat in England. More information on this issue is in section 3.3.

The main source of emissions across the Council's rural estate come from change in soil carbon stocks (68%). Other large sources of emissions come from nitrous oxide from managed soils. See Figure 18.

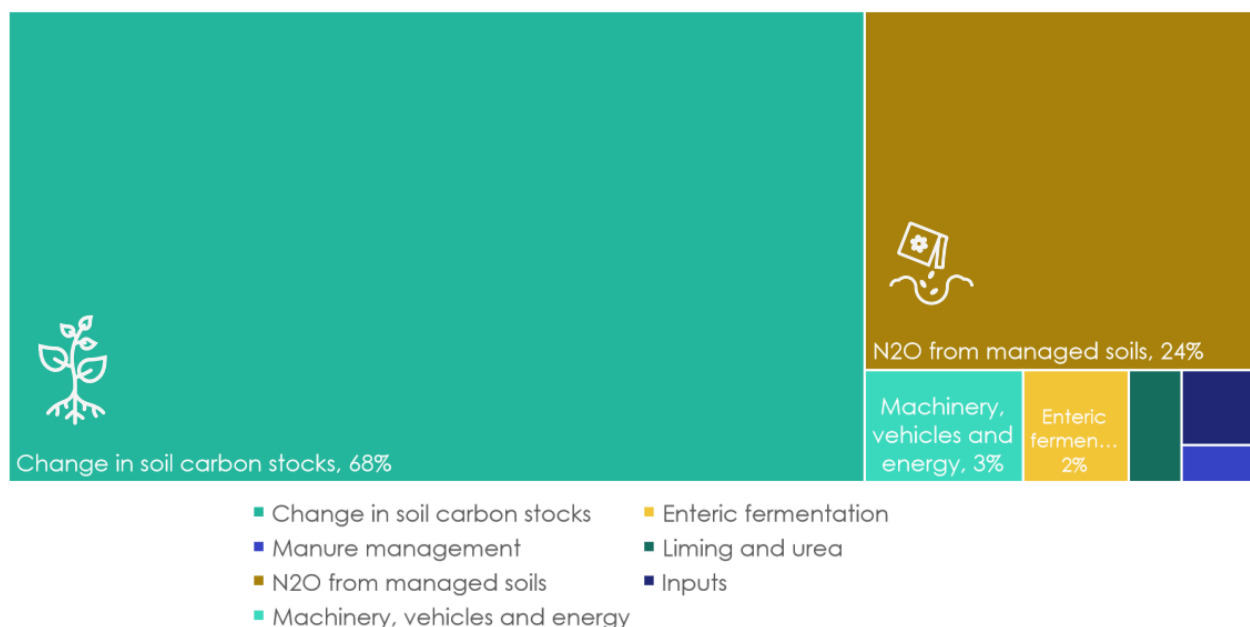


Figure 18: Rural estate GHG emissions by source (chart from Eunomia)

<sup>1</sup> A separate report commissioned to inform the Council's Trees and Woodland Strategy looked at (amongst other topics) carbon sequestration from across all of the Council's land holdings, including rural estates, urban estates, highways, footpaths and bridleways, byways, hedgerows and wildlife sites. This suggested that the total carbon sequestration from all of these could be as much as -15,000 tonnes CO<sub>2</sub>e per year. Further work is needed to understand this in more detail.



The Eunomia report also found that carbon emission intensity varies significantly from farm to farm and, while there is a correlation between the size of a farm and its overall emissions, the highest emitting farms are not necessarily the largest. The farming practices used on each farm have a large influence on the overall emissions. For example, a farm with one of the greatest emissions reported a very high usage of inputs, which are associated with significant nitrous oxide emissions from soils. Furthermore, farms which had at least some pasture area were more likely to rank higher in terms of absolute emissions than their size would suggest due to the higher soil emissions intensity associated with livestock farming.

It is important to note that farmland is typically more difficult to decarbonise than other sources, because emissions come from a wider variety of activities/sources; there are fewer well-known decarbonising interventions; the co-benefits of decarbonising agriculture are not as well understood; and there is a need to continue producing food. The Fens hold over 50% of the most productive, grade 1 land in England and produce around one-fifth and one-third of its crops and vegetables, respectively.

It is not possible to have a zero-emission agriculture system using current technology. However, there will be actions we can take to reduce emissions. The Council is now considering what actions it can take to help tenants to further reduce their emissions, whilst recognising that many tenants are already doing a lot of great work in this area.



*Figure 19: Biodiversity Net Gain (BNG) scheme at Lower Valley Farm, Fulbourn*

As well as looking at GHG emissions, the Council is also making use of some of the rural estate to increase biodiversity, with a scheme at Lower Valley Farm, Fulbourn (pictured above) now offering Biodiversity Net Gain (BNG) credits for developers to purchase. The scheme is providing public footpaths, education opportunities, new species, rich chalk grassland and support habitat connectivity across the landscape. Several sales of BNG units have already been completed, and the chalk grassland is now about to be established.

## 2.11 Methodology

The Council's own organisational carbon footprint has been calculated in line with the UK Government's Environmental Reporting Guidelines for Voluntary Greenhouse Gas Reporting<sup>2</sup>, 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, as far as possible.

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<sub>2</sub>e), to calculate gross emissions using appropriate carbon conversion factors.
4. Note actions taken to reduce emissions (e.g. solar generation), then also report net emissions.

The reporting period is the financial year 1 April 2023 to 31 March 2024.

The carbon conversion factors used for this reporting period are mostly the 2023 [UK Government published carbon conversion factors](#), except where there is no appropriate emissions factor given, or a more accurate conversion factor is available. Where alternative methodologies have been used, these are explained in Table 3 below.

In line with the international GHG Protocol, Scope 2 emissions from electricity generation are calculated and reported in two different ways; the location-based method and the market-based method. The location-based method is based on the average carbon intensity of the country's electricity grid, meaning that emissions would be the same for everyone in the UK, if they used the same amount of electricity. In contrast, the market-based method takes into account contractual arrangements, and divides all of the emissions up according to the specific fuel mix of the electricity generated for each tariff of each supplier. This method means that customers who purchase electricity from suppliers that use more renewables

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<sup>2</sup> [2019 Environmental Reporting Guidelines](#), Chapter 3

would have lower emissions than those whose electricity comes more from fossil fuel sources. The market-based method is the Council's primary reporting method and the one to which our targets apply. However, both methods are included, for transparency.

## Scope and boundary of reporting

Emissions-releasing activities of organisations are classified into three groups known as scopes. These are defined in the GHG Protocol Corporate Standard and are described in section 1.3. Activities in all three scopes have been included in this report.

Carbon dioxide produced from biologically-sequestered carbon, e.g. from the combustion of biomass for electricity and / or heat generation, is not included in either scopes 1, 2, or 3. However, this is reported separately as 'outside of scopes'. This is because an equivalent amount of carbon dioxide would have been absorbed from the atmosphere during the plant growth phase. This carbon dioxide would have been emitted 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 in line with the approach generally taken in international carbon accounting standards.

All activities under the operational control of Cambridgeshire County Council are within the boundary of reporting, 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 6.

Table 6: CCC Emissions Sources Included

Area	Activity	GHG Protocol category	CCC Directorate(s)	Methodology / Data source	Accuracy / Confidence level
CCC Buildings and utilities	Gas burned for heating and hot water at CCC buildings	Scope 1 + scope 3 category 3. Fuel- and energy-related activities not included in scope 1 or 2	Multiple	Usage data from utility bills	High
CCC Buildings and utilities	Oil burned for heating and hot water at CCC buildings	Scope 1 + scope 3 category 3. Fuel- and energy-related activities not included in scope 1 or 2	Multiple	Usage data from utility bills	High

Area	Activity	GHG Protocol category	CCC Directorate(s)	Methodology / Data source	Accuracy / Confidence level
CCC Buildings and utilities	Electricity used at CCC buildings	Scope 2 + scope 3 category 3. Fuel- and energy-related activities not included in scope 1 or 2	Multiple	Usage data from utility bills	High
CCC Buildings and utilities	Electricity used for CCC street lighting, traffic signals etc.	Scope 2 + scope 3 category 3. Fuel- and energy-related activities not included in scope 1 or 2	Multiple	Usage data from utility bills	High
CCC Buildings and utilities	Refrigerant gases leakage from air conditioning units in CCC-controlled buildings	Scope 1	Multiple	Based on leakage identified from top-ups at servicing, applied to CCC list of A/C units, type of refrigerant gas and capacity. Or estimated on assumed leakage rates of 3% to 6% where service records were not available.	Medium
CCC Buildings and utilities	Diesel used for on-site generators	Scope 1 + scope 3 category 3. Fuel- and energy-related activities not included in scope 1 or 2	Multiple	Litres of fuel purchased	High
CCC Buildings and utilities	Water supply and wastewater collection and treatment	Scope 3 category 1. Purchased goods and services	Multiple	Usage data from utility bills.	High
Non-CCC Buildings	Energy used for data centre in Peterborough	Scope 3 category 8. Upstream leased assets	Finance and Resources	Energy usage data from sub-metering on site	High
Non-CCC Buildings	Commissioned care homes energy use	Scope 3 category 8. Upstream leased assets	Adults, Health and commissioning	Care homes energy expenditure data sourced from Fair Cost of Care Needs Assessment, used to estimate energy usage in each of a sample of care homes. The number of CCC clients is divided by the total bed capacity, to obtain an average energy use per client, which is then multiplied by the total number of CCC clients in all commissioned care homes.	Low



Area	Activity	GHG Protocol category	CCC Directorate(s)	Methodology / Data source	Accuracy / Confidence level
Non-CCC Buildings	Energy used for heating and IT equipment whilst home working	Scope 3 category 7. Employee commuting	Multiple	Estimate of hours worked from home based on staff travel survey and HR data.	Medium
Non-CCC Buildings	Cloud-hosted IT services	Scope 3 category 1. Purchased goods and services	Finance and Resources	Data provided by Microsoft and extrapolated to previous years	Medium
Buildings – maintained schools	Gas burned for heating and hot water at Cambridgeshire schools, where purchased through ESPO.	Scope 3 category 13. Downstream leased assets	Children, Education and Families	Gas usage data.	High
Buildings – maintained schools	Electricity used at Cambridgeshire schools, where purchased through ESPO.	Scope 3 category 13. Downstream leased assets	Children, Education and Families	Electricity usage data.	High
Buildings – maintained schools	Oil and LPG used for heating at some Cambridgeshire schools. Other heating fuels not purchased through ESPO.	Scope 3 category 13. Downstream leased assets	Children, Education and Families	Heating fuels usage data provided by the schools.	Medium
Transport	Travel in CCC pool cars. Travel in hire cars.	Scope 1 + scope 3 category 6. Business travel	Multiple	Data from mileage reports and invoices. Based on miles travelled and type of car where known.	High
Transport	Social and education transport in own fleet.	Scope 1 + scope 3 category 6. Business travel	Children, Education and Families	Data from fuel usage.	High
Transport	Social and education transport by contractors (including home to school transport).	Scope 3 category 4. Upstream transportation and distribution	Children, Education and Families	Estimated based on known number of journeys made, estimated distances, and assumed vehicle types for each supplier.	Medium
Transport	Social and education transport by volunteer drivers.	Scope 3 category 4. Upstream transportation and distribution	Children, Education and Families	Mileage claims	Medium
Transport	Highways maintenance gritting fleet.	Scope 1 + scope 3 category 3. Fuel and energy-related activities not included in scope 1 or 2,	Place and Sustainability	Data from fuel usage.	High
Transport	Other highways maintenance vehicles	Scope 3 category 4. Upstream transportation and distribution	Place and Sustainability	Data provided by Highways maintenance contractor	High

Area	Activity	GHG Protocol category	CCC Directorate(s)	Methodology / Data source	Accuracy / Confidence level
Transport	Employee travel on CCC business in own vehicles	Scope 3 category 6. Business travel	Multiple	Data from miles claimed on employee expenses system.	High
Transport	Travel by public transport incl flights, trains, buses and taxis, where known	Scope 3 category 6. Business travel	Multiple	Currently only have partial data on this. Some train and bus travel estimated from spend.	Low
Transport	Hotel stays on CCC business	Scope 3 category 6. Business travel	Multiple	Currently only have partial data on this. Estimated from spend.	Low
Transport	Employee home to work commuting	Scope 3 category 7. Employee commuting	Multiple	Estimated based on staff travel survey carried out in October 2023.	Low
Waste	Waste produced from CCC sites – general waste, recycling and confidential paper waste	Scope 3 category 5. Waste generated in operations	Multiple	Data from waste transfer notes / invoices.	High
Waste	Waste from CCC construction projects	Scope 3 category 5. Waste generated in operations	Place and Sustainability (for highways projects and energy projects), Children, Education and Families (for education capital projects), Finance and Resources (for property minor works)	Estimates provided by project managers or contractors	Medium
Waste	Disposal / treatment of Cambridgeshire waste (as the statutory waste authority)	Scope 3 category 1. Purchased goods and services	Place and Sustainability	Based on waste volumes collected by all the City and District Councils in Cambridgeshire, and from all the Household Waste Recycling Centres, and proportions of waste recycled, composted, sent to energy generation and landfilled. Emissions calculated mainly using <a href="#">custom carbon calculator</a> developed with the Local Government Association and University College London.	Medium



Area	Activity	GHG Protocol category	CCC Directorate(s)	Methodology / Data source	Accuracy / Confidence level
Construction and other materials	Construction and buildings works – major capital projects, minor works and energy projects	Scope 3 category 2. Capital goods	Place and Sustainability (for energy projects), Children, Education and Families (for education capital projects), Finance and Resources (for property minor works)	Inventory of each material used and quantity (tonnes) data from project information and/or capital works contractors (where available).	Medium
Construction and other materials	Highways works	Scope 3 category 2. Capital goods	Place and Sustainability	Data provided by our highways contractors for the works they did on our behalf.	Medium
Construction and other materials	IT hardware	Scope 3 category 2. Capital goods	Finance and Resources	Quantities of each item purchased, and emissions per item based on manufacturer data (where known) or similar products.	Low

## Exclusions

Some additional emissions associated with purchased goods and services are not yet included, because we do not have the relevant data to calculate these. This includes:

- Parts of Adults and Children's social care provision, commissioned services (other than those reported above and our own buildings and staff travel, which are included);
- Legal, consultancy, insurance, pensions, investments, banking, telecommunications, post and other business services (other than our own buildings and staff travel);
- Office machinery, furniture and the like;
- Other goods and services not mentioned elsewhere.

Since the emissions data for these goods and services lies with other organisations it is more difficult to collect the relevant data. However, we are working to improve this.

These missing data will account for an unknown quantity of additional scope 3 emissions. Our action plan includes steps to identify more of this data, which we have been doing and will continue to do.

For example, our Policy and Insight team has been working with our IT team to identify, collate and analyse data to enable us to calculate the GHG emissions from cloud hosted IT services. Emissions from our use of Microsoft cloud services are included for the first time this year (and estimated back to all previous years). Work is continuing to collate and analyse data to include further cloud emissions in these estimates going forwards.

We are also investigating potential methods of estimating emissions from other purchased goods and services.

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

*Table 7: Exclusions*

Area	Activity	Reason for exclusion
Buildings and utilities	Energy used at other sites outside of CCC control e.g. space in a shared building, third party premises, and CCC-owned sites let to commercial or private tenants. (other than those mentioned as included above)	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	Energy used at those schools that do not purchase energy through ESPO and have not provided data directly.	We do not have access to this data.
Schools	All data for Academy schools.	These schools are outside of Council control.
Transport	Subsidised public bus routes	No longer responsibility of CCC. This is now the C&P Combined Authority.
Transport	Other travel by third parties, contractors and suppliers (other than those mentioned in scope)	We do not have access to this data.
Waste	Other waste streams from CCC sites and projects not mentioned in scope above	We do not have access to this data.
Waste	Collection and transport of Cambridgeshire household waste	This is not CCC's responsibility. (City/District Councils do this.)
Agriculture and Land use, land use change and forestry (LULUCF)	County farms / rural estates activities	Provisional data is discussed in section 2.10. Currently excluded from total emissions due to the need for further analysis work. Work is in progress to refine these figures and estimate for other years.
Purchased goods and services	All other goods and services purchased or used by CCC not accounted for elsewhere	Only spend data available. No accurate method available to convert spend to emissions.

### 3. Cambridgeshire's Area Carbon Footprint

The carbon footprint of the geographical area of Cambridgeshire comprises GHG emissions from commercial and industrial sources, domestic homes, transport, agriculture, waste and land use. The vast majority of this is outside of the control of the Council.

We have used the data published by the UK Government Department for Energy Security and Net Zero (DESNZ) on GHG emissions by local authority area to identify the carbon footprint of the geographical area of Cambridgeshire.

#### 3.1 Latest GHG emissions data for Cambridgeshire

The Government publishes [detailed data at a local authority \(district\) level](#), on emissions of certain greenhouse gases. This dataset includes carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) as well. This means that about 98% of all GHG emissions are now included. F-gases (the missing 2%) are still not included (these are included in UK-wide statistics but no breakdown by local authority area is available).

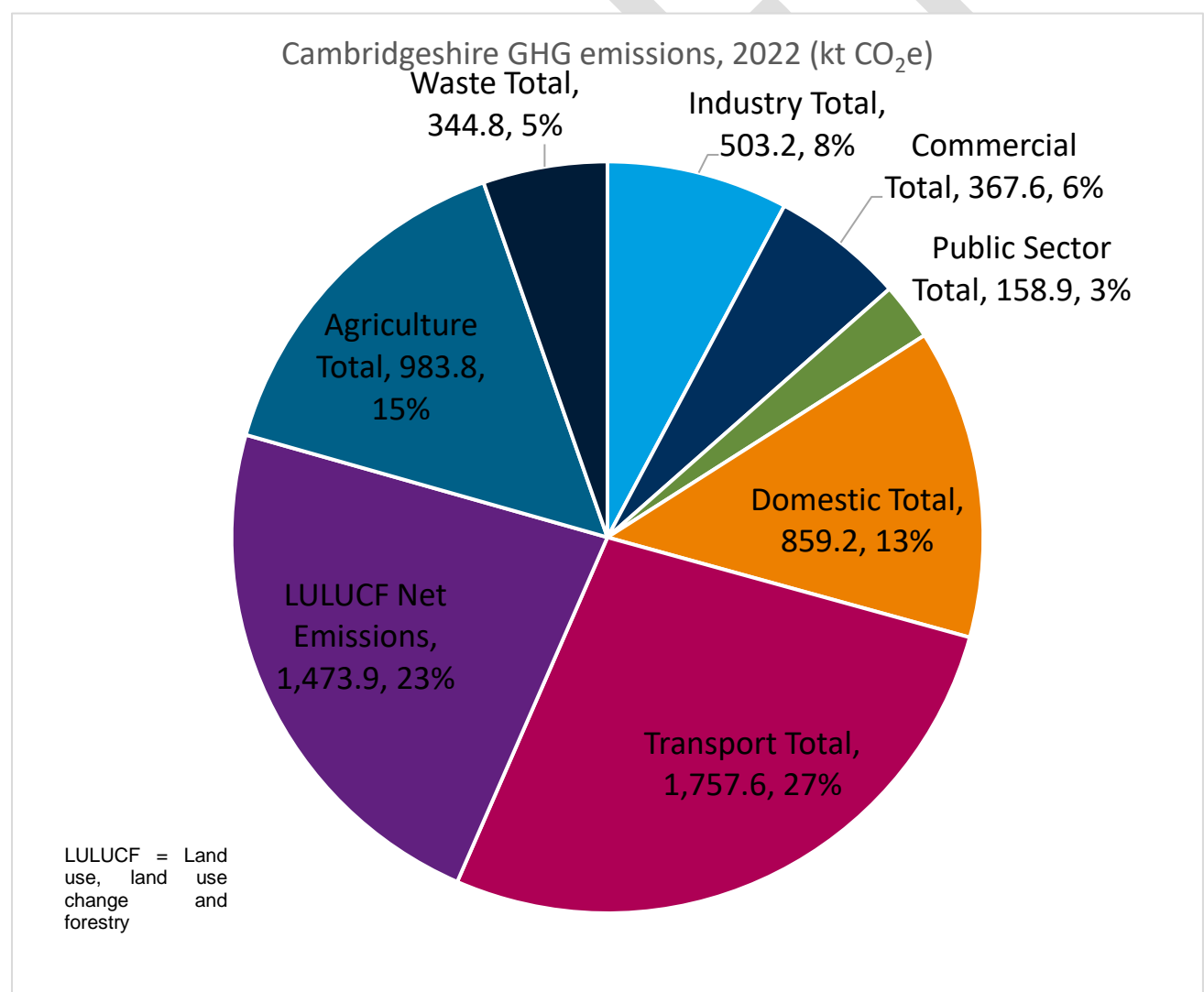


Figure 20: Cambridgeshire area GHG emissions, 2022, by source sector

2022 is the most recent year of data currently available at the time of writing, since there is a two-year time lag in this dataset being published. In 2022, the total GHG emissions (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) for the geographical area of Cambridgeshire were **6.45 million tonnes CO<sub>2</sub>e**. Transport was the highest emitting sector in the county, accounting for 27% of emissions, followed by land use, land use change and forestry (LULUCF), at 23%, illustrated in Figure 20.

These emissions are broken down into sub-sectors as illustrated in Figure 21 below. This shows that most of the transport emissions are from A roads, most of the LULUCF emissions are from peatland, and most of the domestic emissions are from gas use.

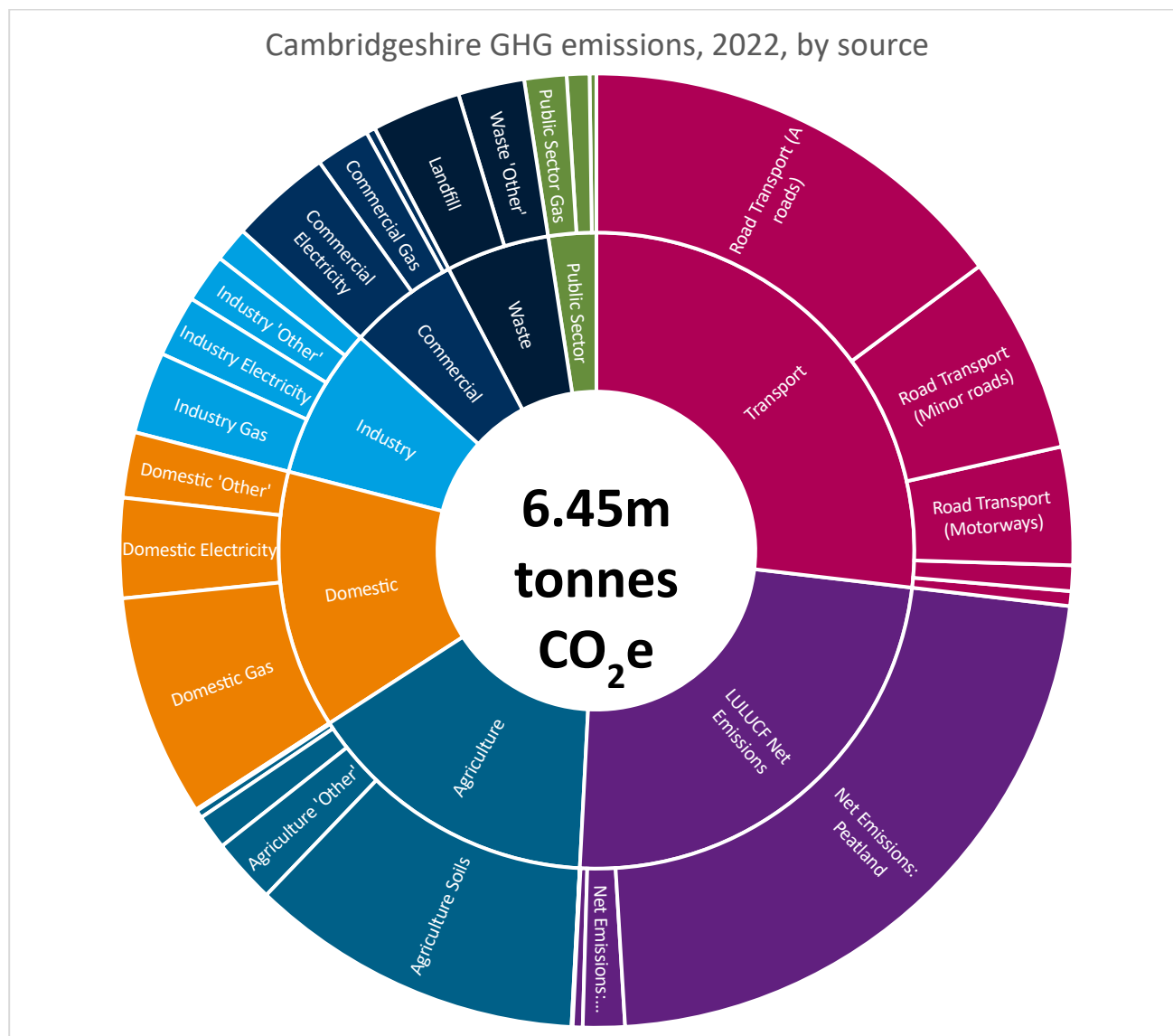


Figure 21: Cambridgeshire area GHG emissions, 2022, by source sector and activity

Land use and agricultural emissions are both very high in Cambridgeshire, partly due to the prevalence of peat soils (more information on this is in section 3.3) and also due to the county's rural economy being a significant producer of food.

Figure 22 below shows a breakdown of the county's GHG emissions by sector and District. This illustrates some of the differences between the different parts of the county. For example,

there is a higher share of LULUCF emissions in East Cambridgeshire and Fenland, due to the peatland areas there. Huntingdonshire and South Cambridgeshire have higher emissions from the transport sector, due to the major roads in those areas such as the A1. The city of Cambridge has a smaller footprint due to being a smaller size and a more urban area.

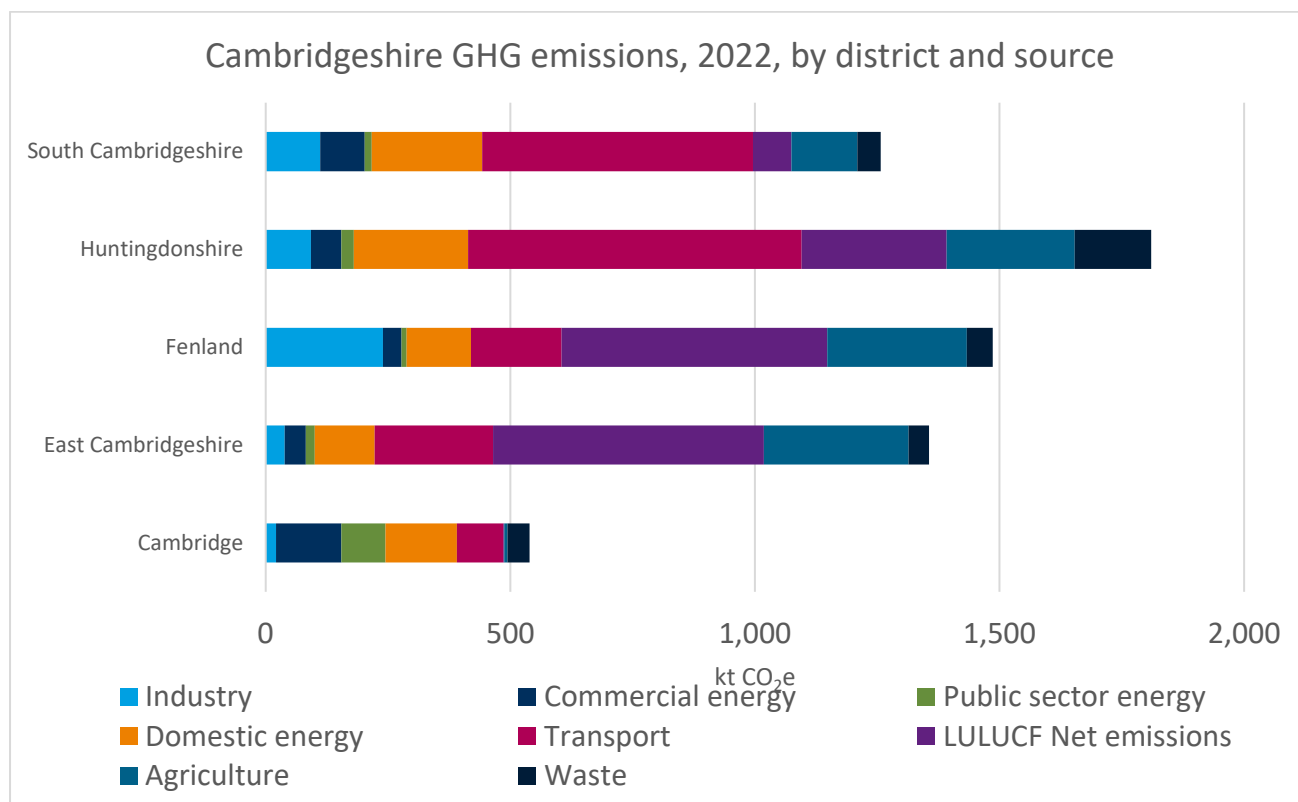


Figure 22: Cambridgeshire area GHG emissions, 2022, by District

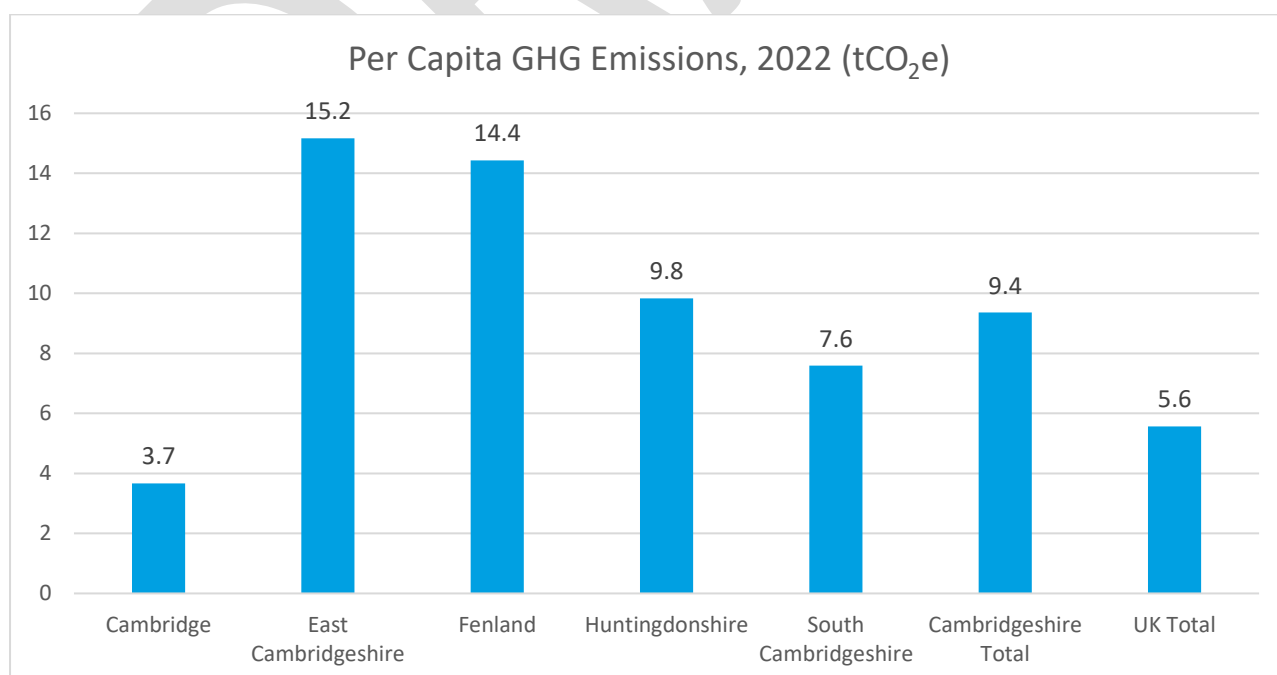


Figure 23: GHG emissions per capita in the five Cambridgeshire districts

Cambridgeshire's emissions per person in the population are 9.4 tonnes CO<sub>2</sub>e in a year, which is higher than the UK average of 5.6 tonnes, due to being mainly a rural area and the larger emissions from land use, agriculture and transport in our county. However, in the city of Cambridge, emissions per person are lower than average, at 3.7 tonnes CO<sub>2</sub>e per person, due to the higher population density there. This is illustrated in Figure 23.

### 3.2 Change in Cambridgeshire's GHG emissions from 2005 to 2021

There has been a **28% reduction in Cambridgeshire's GHG emissions between 2005 and 2022**. In 2005 the total emissions from the county were around 9 million tonnes CO<sub>2</sub>e and they have now reduced to 6.45m.

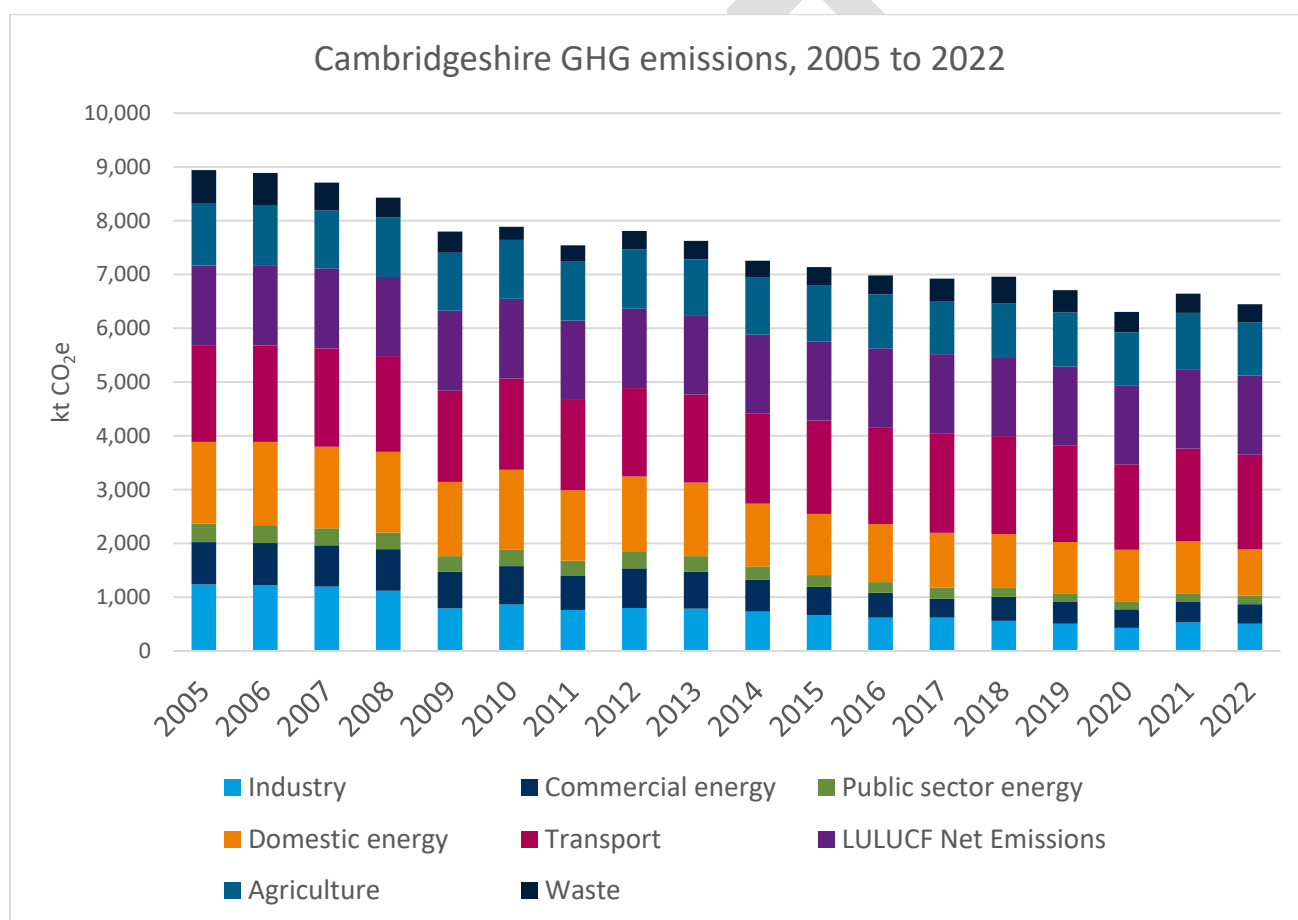


Figure 24: Cambridgeshire GHG emissions, 2005 to 2022

Emissions reductions have not occurred equally across all sectors though, with some changing much more than others. Since 2005, industrial emissions have fallen by 59%, commercial by 53%, public sector by 54% and domestic by 44%, but transport emissions have fallen by only 2% in those 17 years. This is shown in Figure 25.

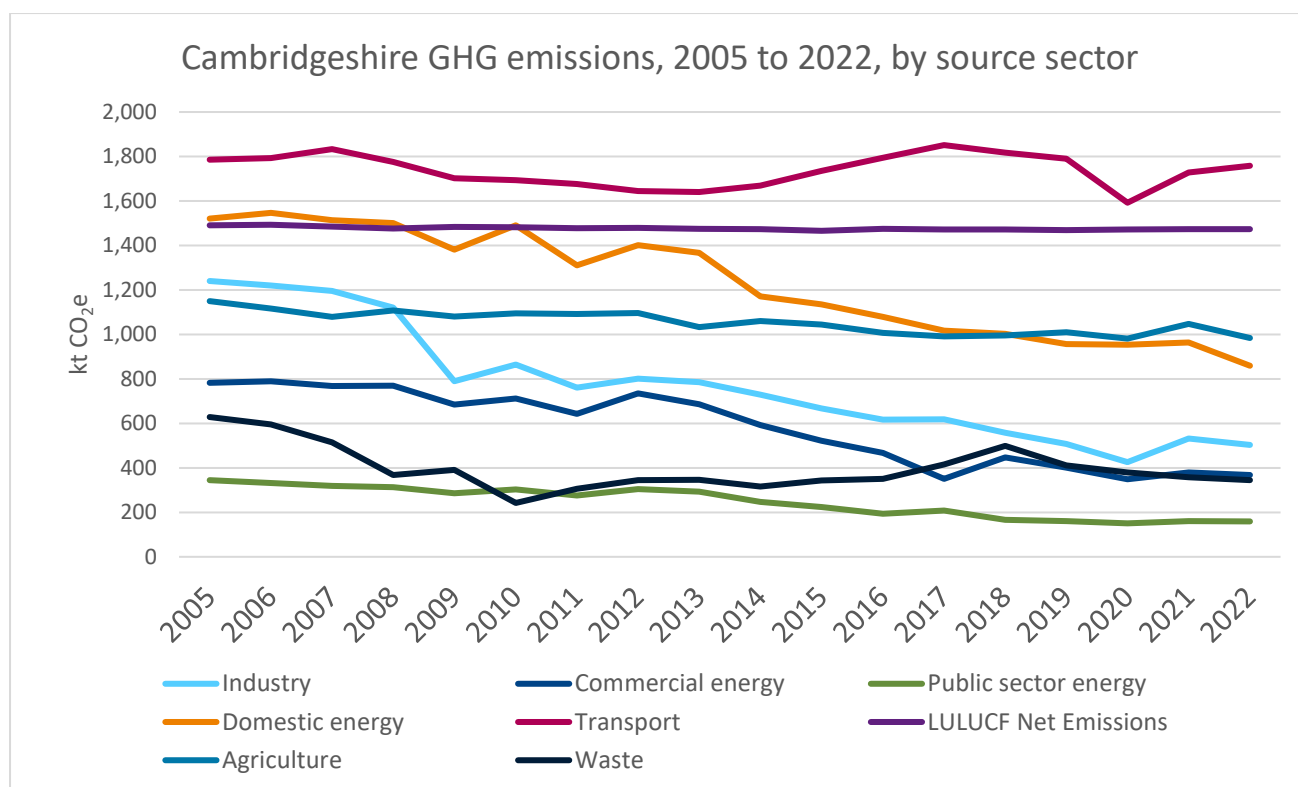


Figure 25: Cambridgeshire GHG emissions, 2005 to 2022, by source sector

Despite the gradual reduction in total emissions over the years, in 2020 there was a greater reduction, due to reduced transport and business activity as a result of the UK-wide lockdowns when the global COVID-19 pandemic hit. In 2021, activity and emissions began to return to more normal levels, and this has continued in 2022. This is in line with the picture across the UK.

Aside from LULUCF, the trend in Cambridgeshire is reflective of the national trend: emissions are slowly and steadily declining over the last few years, due mainly to the decarbonisation of the electricity grid.

### 3.3 Note on Land Use, Land Use Change and Forestry (LULUCF)

Land use, land use change and forestry (LULUCF) emissions can be caused by drainage and management of organic soils (peatland), land use change on mineral soils (soil disturbance, change in amount of biomass decomposition), biomass burning (wildfires), deforestation or peat extraction.

However, LULUCF is a carbon *sink* in some areas (absorbing more GHGs than emitted), due to forest growth, grassland (mineral soil) land use change, or rewetting / restoration of peatland.

LULUCF emissions are higher in Cambridgeshire than most of the UK, due to the large areas of peatland drained for agriculture, where the wasted peat loses carbon from the soil as CO<sub>2</sub>. This is shown in the red and orange areas of the map below. However, LULUCF is a net sink



in many other regions of the UK (the blue areas of the map below), where CO<sub>2</sub> is removed from the atmosphere through forest growth and conversion of cropland to grassland.

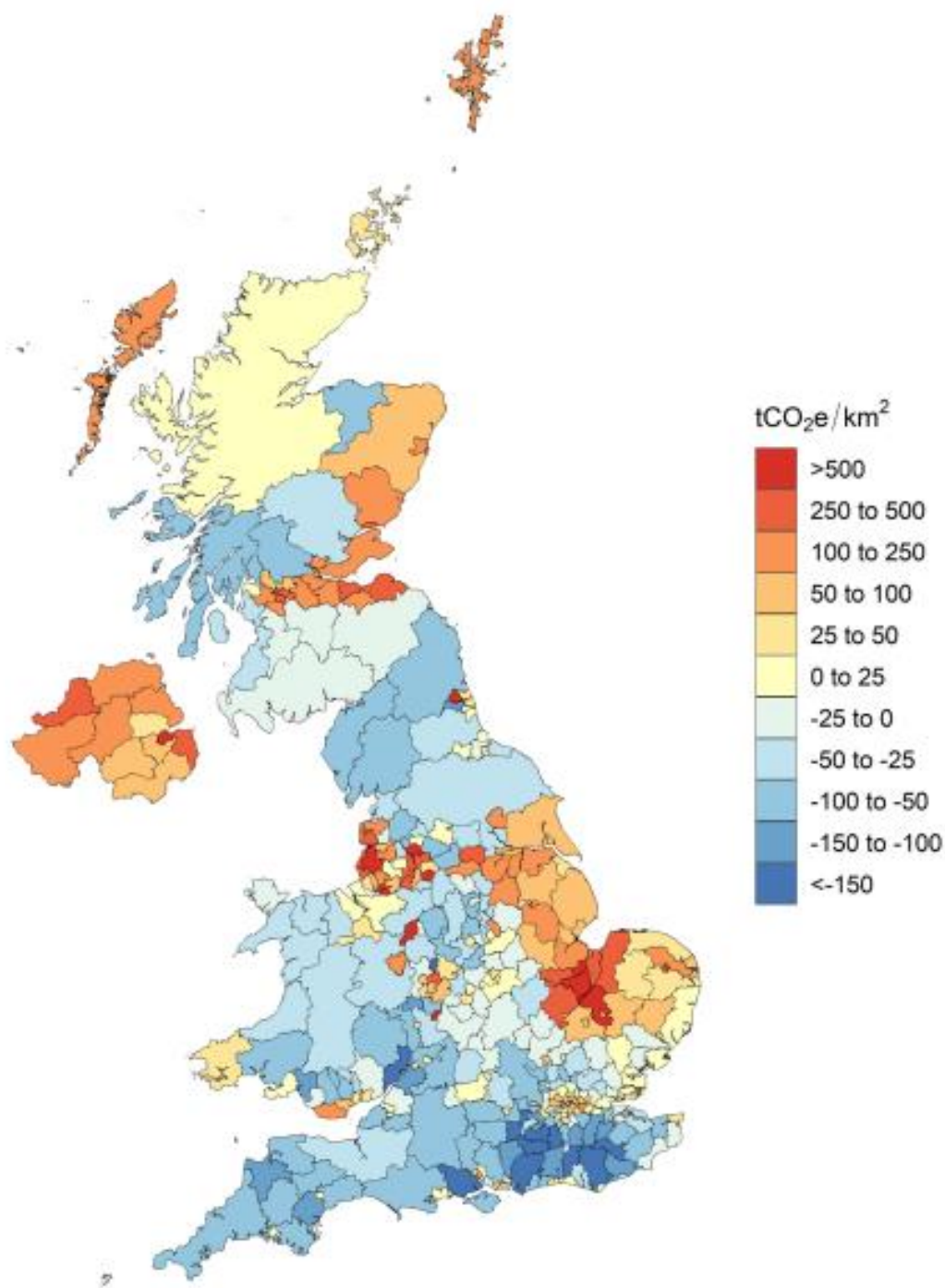


Figure 26: Emissions or removals of GHGs from land use, land-use change and forestry per local authority area (tCO<sub>2</sub>e/km<sup>2</sup>) in 2022. Image from DESNZ.



## 4. Glossary

Expression	Meaning
<b>Carbon</b>	Used as abbreviation for carbon dioxide or carbon dioxide equivalent
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CO<sub>2</sub>e</b>	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 CO <sub>2</sub> that would create the same amount of warming, using GWPs.
<b>GHG</b>	Greenhouse gas: a gas that absorbs and emits radiant energy within the thermal infrared range. Greenhouse gases cause the greenhouse effect.
<b>Greenhouse effect</b>	The heating of the earth's surface caused by solar radiation trapped by atmospheric gases (rather like a greenhouse roof).
<b>GWP</b>	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 28 and nitrous oxide has a GWP of 265. (Intergovernmental Panel on Climate Change) By definition, CO <sub>2</sub> has a GWP value of 1. Quantities of GHGs are multiplied by their GWP to give results in units of carbon dioxide equivalent (CO <sub>2</sub> e).
<b>kt</b>	kilotonne = 1000 metric tonnes
<b>LULUCF</b>	Land Use, Land use change and forestry.
<b>Net zero</b>	Achieving an overall balance between emissions produced and emissions taken out of the atmosphere. This can take place on different scales and is sometimes achieved through offsetting.
<b>Offset</b>	An action intended to compensate for GHG emissions by an equivalent quantity of reductions elsewhere or removals.
<b>Sequestration</b>	The long-term removal, capture or sequestration of carbon dioxide from the atmosphere to slow or reverse atmospheric CO <sub>2</sub> pollution and to mitigate or reverse global warming.
<b>WTT – Well to tank</b>	The emissions associated with extracting, refining and transporting fuels to the point of purchase.
<b>Zero carbon</b>	No emissions of GHGs at all

## 5. Further information

Please visit <https://www.cambridgeshire.gov.uk/climate-change>

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# **Annual Risk Report: Delivery of Climate Change and Environment Targets**

*October 2023 – October 2024*

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# 1 Climate Reporting at Cambridgeshire County Council

## 1.1 Climate Change and Environment Strategy, targets, and action plan

Full Council approved its Climate Change and Environment Strategy (CCES) in February 2022. The strategy covers three areas - mitigation, adaptation, and natural capital – and sets out how the Council will support its communities, businesses, and wildlife to thrive whilst tackling the causes of climate change and dealing with the effects of a changing climate on services and people.

There are currently seven targets within the CCES across carbon reduction, adaptation and improving nature (Table 1).

*Table 1 Cambridgeshire County Council's current targets within the Climate Change and Environment Strategy*

Target 1	Understand and grow our natural capital account to benefit people and nature by 2025
Target 2	The Council will reduce emissions from our buildings and fleet transport to net zero by 2030 (scopes 1&2)
Target 3	The County Council will reduce its supply chain emissions (all scope 3) by 50.4% by 2030
Target 4	Improve our Biodiversity across Council estate by 2030
Target 5	Cambridgeshire carbon emissions will be net-Zero by 2045
Target 6	Support our communities and businesses to decarbonise by 2045
Target 7	All Council buildings and infrastructure to be resilient to climate change impacts by 2045

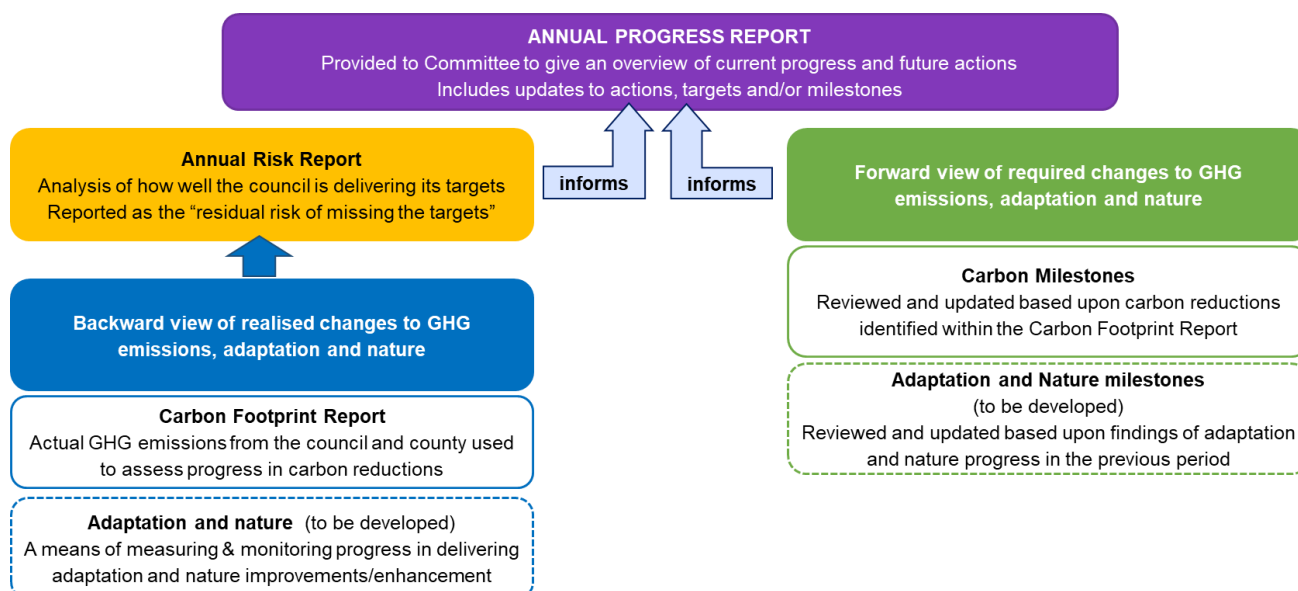
To deliver these targets the Council has an Action Plan which sets out the projects/interventions that will be implemented. The action plan is a “live” document, iterating as new approaches, policy and/or innovations come forward or where the Council’s residual delivery risk remains high. This ensures the Council is responsive to the rapidly evolving understanding of climate impacts and the needs of our communities.

Pro-active monitoring and reporting on these actions and their contribution to the targets is essential to provide assurance that targets are on-track for delivery, particularly given their medium and/or long-term nature. Where targets may be “off-track” further resource can be mobilised to ensure delivery is not compromised.

The council currently employs two mechanisms to monitor delivery of its climate and nature ambitions and is seeking support to set annual carbon milestones as advised by internal audit. Annual carbon milestones will provide the forward planning aspect. Set out below is a brief summary of the monitoring mechanisms and milestone settings and how they relate together.

## 1.2 Annual Progress Report – Committee Paper

This is a summary position for the delivery of the council's climate ambitions. It brings together the findings from the monitoring activities and is the mechanism through which updates to the actions or targets are approved. The below illustrates how the mechanisms come together:



### 1.2.1 Annual Carbon Footprinting

Carbon footprints provide an account of the greenhouse gas emissions produced by both the council's own operations and across the geographical county area. Reporting takes place annually and is always a retrospective view. They enable the council to understand the scale of emissions and where its highest emission areas are, to target action, and monitor the success of projects to reduce carbon, and track progress against relevant targets.

The council's organisational emissions are compiled for the preceding financial year, and the data are collated and calculated by council officers. Emissions are reported across scopes 1, 2 and 3<sup>1</sup>.

The county-wide emissions are compiled using national statistics data provided by the Department for Energy Security and Net Zero (DESNZ). These data sets are published

<sup>1</sup> Emissions-releasing activities of organisations are classified in the GHG Protocol Corporate Standard into three groups known as scopes.

Scope	Description
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 that organisation (e.g. travel in employee-owned vehicles or public transport, purchased goods and services).

two years behind the reporting year, with the most recent dataset for 2022 published in summer 2024.

The Annual Carbon Footprint Reports provide an overview of the operational and county-wide greenhouse gas emissions for the preceding period. The council is in its 6<sup>th</sup> year of carbon foot printing, for the year 2023/24. All the council's carbon footprint reports are [published on the councils website](#).

### 1.2.2 Annual Risk Report on Delivery of the CCES

This Annual Risk Report is an overarching view of how well the council is delivering its climate change targets.

The risk-based analysis methodology treats the Action Plan as a list of interventions that will manage down the risk of the council not meeting its targets. Where the interventions are insufficient to deliver the targets, they are amended, improved or new actions added to ensure delivery can bring us back on track. The residual risk reported is the risk of not achieving the target(s).

This method provides the journey to green and reaching the targets. It offers a realistic view of the Council's progress over time and represents a precautionary approach to manage optimism bias. In 2024, it is not expected that all actions can be delivered fully to reach targets. However, over time as current actions are implemented and new actions recommended for inclusion in the CCES action plan that the risk should decrease.

The first progress report using this approach was approved at [October 2023's Environment & Green Investment Committee](#) (item 5).

### 1.2.3 Forward-looking Milestones

Current monitoring on the climate change and environment strategy is all retrospective, providing assurance of delivered change. However, this approach lacks the ability to monitor in-year performance more proactively against a position/milestone that is aligned to the overall targets. This will enable faster identification of success and/or problems with delivery of the targets.

- Carbon Milestones – this uses established methodologies (Science based Targets Initiative (SBTi)) to calculate “carbon quotas,” annual reduction pathways and milestones out to 2030. Milestones are developed for scopes 1 and 2, scope 3 (excluding rural estate), and a separate set for agriculture and land use emissions will be developed. Separating out these emissions aligns with established best practice due to the nature of the emissions sources.
- Adaptation and Nature Milestones – these will develop similar pathways and milestones but for adaptation action and nature enhancement. The methodologies for these are not established yet but are likely to be on longer than annual timeframes due to the lag time between actions and benefit realisation. These will form part of the overall progress picture once developed.

Work is ongoing to develop this forward-looking approach.

## 2 Overall Position Across All Targets

A summary of the risk change is highlighted below (Table 2 Figure 1). The risk profile has improved as indicated in the October 2024 position, with four of the seven targets showing a decreased risk position. The remaining three targets are unchanged since last year, but detailed planning is underway.

Table 2 Overall Climate Change & Environment Strategy delivery risk.

Pre-CCES Status	October 2023 Status			New Average Programme Status Oct 2024		
Risk	Severity	Likelihood of Delay	Risk	Severity	Likelihood of Delay	Residual Risk
25	5	4	20	4	4	16

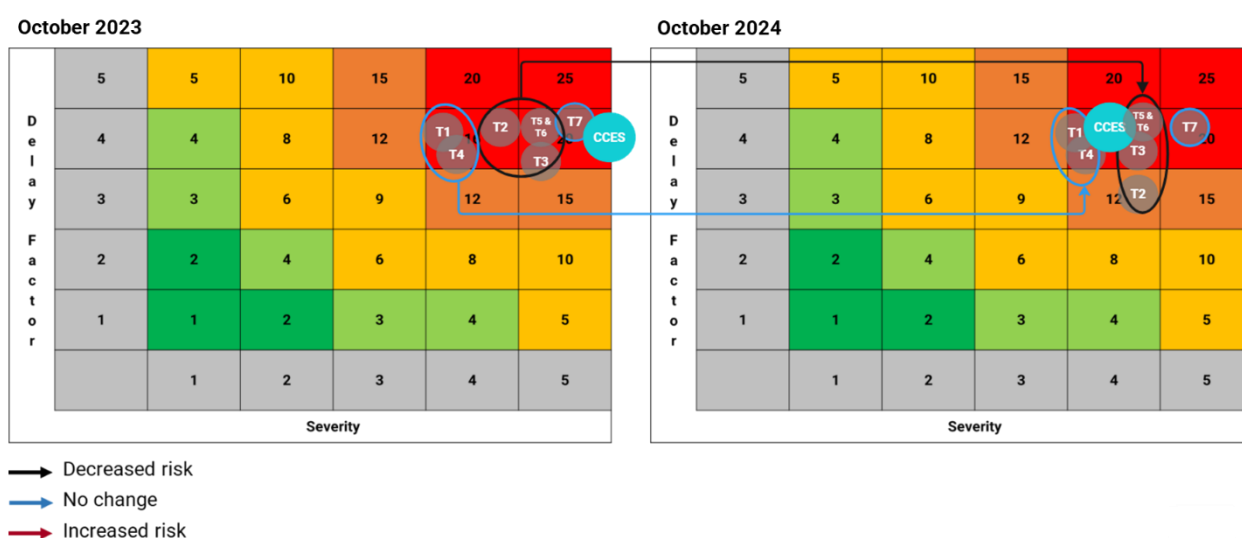


Figure 1 Comparison of residual risk between October 2023 and October 2024.

The overall residual risk in October 2024 has decreased since the last report in 2023. The risk of non-delivery of the council's targets is now 16 – this decrease reflects the substantial action that has been implemented but that continued and sustained action is needed to manage the pathway to green over the next 6 years. **Error! Reference source not found.**

## 3 Risk Analysis by Target

### 3.1 Target 1: Understand and grow our natural capital account to benefit people and nature by 2025

Initial (2022)	2023 Average Target Status			2024 Average Target Status			
Risk	Severity	Likelihood of Delay	Residual Risk	Severity	Likelihood of Delay	Residual Risk	Risk Direction
25	4	4	16	4	4	16	steady

There are 18 actions mitigating the risk of non-delivery of this target. Progress establishing the Council's strategic approach to biodiversity, trees and woodland, and natural capital is underway. For example, work has continued on development of the



Local Nature Recovery Strategy and collaborations with Fenland Soil to develop approaches to peatland management.

Biodiversity and the Tree and Woodland Strategies have been drafted from a robust evidence base encompassing the Council's estate and coming to committee in January 2025 for approval. This work and evidence base can now inform the development of SMART targets. Work to finalise the new targets is underway, and to recruit further resources to upscale delivery of key actions.

### 3.2 Target 2: The Council will reduce emissions from our buildings and fleet transport to net zero by 2030 (scopes 1&2)

Initial (2022)	2023 Average Target Status			2024 Average Target Status			
Risk	Severity	Likelihood of Delay	Residual Risk	Severity	Likelihood of Delay	Residual Risk	Risk Direction
25	5	4	20	4	3	12	decreasing

There are 16 actions mitigating the risk of non-delivery of this target. Actions are progressing well on building decarbonisation, and the residual risk level for this target has reduced substantially this year.

The biggest source of scope 1&2 carbon emissions is heating of council buildings using gas or oil. To date 25 sites have been decarbonised by replacing gas and oil boilers with air source heat pumps. The most recent low carbon heating projects to be completed in 2023-24 are those at March Community Centre, St Neots Library and Tennyson Lodge. Projects to decarbonise a further 9 sites are now underway for 2024/25 and 2025-26. Work funded via the Council's Climate Change and Environment Programme has also completed decarbonisation plans for 44 corporate buildings which has identified which decarbonisation technologies are suitable for which sites and estimated costs of implementation.

To maintain progress, funding and project resource will be needed to decarbonise the remaining 26 sites that still use gas or oil heating (unless any of these sites are disposed of).

1.1. Fleet is the other key focus. A Review of the Council's Fleet was conducted during 2024. This identified a range of options to improve fleet provision, efficiency, and sustainability, with a business case now under development to deliver the report's recommendations.

1.2. It will require proactive management to ensure timely delivery in support of the target.

### 3.3 Target 3: The County Council will reduce its supply chain emissions (all scope 3) by 50.4% by 2030

Initial (2022)	2023 Average Target Status			2024 Average Target Status			
Risk	Severity	Likelihood of Delay	Residual Risk	Severity	Likelihood of Delay	Residual Risk	Risk Direction

25	5	4	20	4	4	16	decreasing
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There are 26 actions mitigating the risk of non-delivery of this target. Decarbonisation baselines and plans have been delivered for the Rural Estate, Highways and Schools. These have provided useful insight into the scale of emissions and the type of actions required to effectively decarbonise. Work now turns to developing deliverable projects informed by the plans. Key areas of note include:

Emissions from waste were 13% higher than the previous year, and 42% higher than the baseline year 2018-19. Consultancy was procured to inform where and how carbon emission reductions could be identified for different waste disposal options. This has informed current and ongoing work by the Council on its waste strategy and operations.

Significant work has been completed to support the consideration of climate and nature within procurement. Low Carbon Purchasing Guidance, Net Zero by Design Guidance and a Carbon Charter have all launched. Attention turns to monitoring implementation to understand any implications of greater environmental requirements on contract delivery and value - potential funding implications remain a key risk along with highly limited ability of some already stretched markets to make changes (e.g., social care provision, school bus provision); and

Baselining of the rural estate's emissions has completed. This has highlighted both the challenges of decarbonising agriculture - it is not possible to have a zero-emission agriculture system using current technology – and best practice for setting targets for agricultural emissions, which regards these emissions differently to other sources. For example, both the UK Climate Change Committee and the Science Based Targets Initiative use different definitions of Net Zero for agriculture and land use emissions than those used for all other sources of emissions. While there are actions the council is exploring, it is proposed to remove rural estate emissions from the current scope 3 target and to collaborate on a more specific target for the rural estate.

### 3.4 Target 4: Improve our Biodiversity across Council estate by 2030

Initial (2022)	2023 Average Target Status			2024 Average Target Status			
Risk	Severity	Likelihood of Delay	Residual Risk	Severity	Likelihood of Delay	Residual Risk	Risk Direction
25	4	4	16	4	4	16	steady

There are 20 actions mitigating the risk of non-delivery of this target. As with Target 1 actions are in their infancy, with a focus on developing specific plans and strategies to inform our approach to biodiversity as stage 1 and then progress actions that will deliver SMART targets. As with Target 1, the intention is to make this a SMART evidence-based target.

Delivery of the Biodiversity Strategy and Updated Tree & Woodland Strategy will support delivery of this target, and consideration for nature is also incorporated into council asset decarbonisation plans. Similarly, the Rural Estates and Highways Service

decarbonisation plan incorporate improvements to nature in their scopes. Management of this target will rely on effective implementation of these strategies and plans.

### 3.5 Error! Reference source not found. **Target 5: Cambridgeshire carbon emissions will be net-Zero by 2045 and Target 6: Support our communities and businesses to decarbonise by 2045**

Initial (2022)	2023 Average Target Status			2024 Average Target Status			
Risk	Severity	Likelihood of Delay	Residual Risk	Severity	Likelihood of Delay	Residual Risk	Risk Direction
25	5	4	20	4	4	16	decreasing

Initial (2022)	2023 Average Target Status			2024 Average Target Status			
Risk	Severity	Likelihood of Delay	Residual Risk	Severity	Likelihood of Delay	Residual Risk	Risk Direction
25	5	4	20	4	4	16	decreasing

Due to their strong overlap, these two targets are discussed together. Across these targets there are 40 actions -the majority of the action plan.

As described in the Annual Carbon Footprint Report, Cambridgeshire-wide emissions are varied and largely outside of direct control of the council. Instead, actions focus on facilitating, enabling, and supporting delivery of decarbonisation in partnership or by other parties, e.g. communities and businesses; with collaborative/partnership working a key underpinning theme.

Successful collaborative work on schools' energy retrofit and supporting communities via the Cambridgeshire Action on Energy Partnership, along with developing the council's approach to Community Energy, are key areas where the Council has delivered over the last year. Local Area Energy Planning is progressing with Local Authority partners and the CPCA along with collaborations aligning Cambridgeshire's climate ambitions through a shared evidence base and Locally Determined Contribution to inform Devolution planning for Climate and Net Zero. Continued efforts to strengthen both community, business and partner collaborations is required to sustain engagement and support for Net Zero into the future.

Engaging the community is key to change. Our Communities, Libraries and Skills teams have a range of climate initiatives underway to build social capital and have developed a net zero action plan for their service. Actions underway include the libraries hosting sustainability events, sharing their experiences of having air source heat pumps installed enabling residents to "experience" what a heat pump is like and identifying new ways to collaborate with community groups to share environmental messaging.

Evidence indicates that one of the most effective roles the Council could play in supporting communities and businesses to decarbonise relates to delivery of strong engagement, centred around practical advice, support and signposting. A collaborative

approach with CPCA and key partners is in development however resource has limited outputs.

### 3.6 Target 7: All Council buildings and infrastructure to be resilient to climate change impacts by 2045

Initial (2022)	2023 Average Target Status			2024 Average Target Status			
Risk	Severity	Likelihood of Delay	Residual Risk	Severity	Likelihood of Delay	Residual Risk	Risk Direction
25	5	4	20	5	4	20	steady

There are 22 actions mitigating the risk of non-delivery of this target. While significant progress in managing flood risk across the County is recognised within the risk analysis, there remains a key challenge in ensuring the council and its infrastructure are resilient to the additional pressures the changing climate may bring.

Work is underway to improve the preparedness of the council's highways to flood risk, focussing on improved gulley management. Funding has also been secured to explore solutions to the region's peat affected roads.

The Just Transition Fund is funding work to understand the Councils current and future exposure to climate change is in development. This will develop an understanding of the scale of the risks, identify opportunities for action and will support the organisation to take the necessary steps towards being suitably adapted to a changing climate. The timing of this proposal is important as it requires senior and member level engagement to ensure a successful project. Once the timing for this work is agreed and the project commences it will provide a major step forward towards delivery of this target and planning for future demand risk on key services. This must be a key focus for the Council over the next year.

## 4 Next Steps

This report demonstrates continued progress towards delivery of the council's targets, with the risk of non-delivery decreasing for four of the seven targets since the previous year. The remaining three targets are holding steady. It highlights where significant progress has been made and the key activities underway that are anticipated to further mitigate target delivery risk in the coming 12 months.

The Carbon Milestones, outlined in section 0, will be further developed over the coming year. This will allow next year's report to be better placed within the context of the carbon reductions the organisation needs to deliver annually, providing further quantified assurance that delivery of targets is on-track. Bringing forward similar forward-looking milestones for adaptation and nature will also commence, although a methodology for these is more complex than for carbon.

While the council is confident that progress is being made, there remains significant further work to do. The scale of the challenge is large and complex, and the council continues its efforts to understand what needs to be done using robust evidence to plan

and deliver on its climate change and environment commitments. This will support a “greener, fairer and more caring Cambridgeshire” to be realised.

<b>Delivery Status Definitions</b>
<b>Decide:</b> Early concept stage. Still establishing how to best implement the action
<b>Define:</b> Confirming the proposed delivery approach
<b>Design:</b> Finalising project approach, procurement strategy and funding
<b>Develop:</b> finalisation of project, undertaking facilitating activities e.g. procurement
<b>Deploy:</b> Project being delivered
<b>Complete:</b> project concluded
<b>Closed:</b> Projects concluded but incomplete. e.g. where new technologies supersede the current actions. Usually replaced or incorporated into other actions.

No.	Element(s) of CCES Met			Actions "Mitigations for not delivering the targets"	Delivery Status		
	Mitigation	Adaptation	Natural Capital		Delivery Status (definitions in note)	Progress Summary	Notes on changes to the action(s) compared to 2023 version
1		yes		As Lead Flood Authority, work with the Future Fens Project and Fens Water Partnership, 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	Deploy	The Council continues to work with other internal and external partners on the development of Fens 2100, Fens integrated adaptation and Fens reservoir projects. Partnership working continues on the development and delivery of flood risk projects. The Flood Mitigation programme has assessed a number of locations and developed a short list of 68 options to explore the feasibility of, with the ultimate aim of reducing the impact of flooding.	
2	yes			Support communities to develop Community Energy Projects, building on learnings from the Swaffham Prior Community Heat Network project.	Deploy	Swaffham Prior Heat Network continues to add new connections – 64 homes connected to date. Community Energy Policy agreed by E&GI Committee in March 23 and investment secured for dedicated resource and a development fund. Community Energy Action Plan under development.	
3	yes	yes	yes	Develop an External Climate Change and Environment Communications and Engagement Plan to provide residents, communities, and businesses information on the challenges of climate change, enable them to make the right choices to reduce their environmental impact and signpost to actions our communities can take along with funding opportunities. To incorporate: -Carbon footprinting -Waste minimisation -Incorporation of climate into neighbourhood plans -Travel and EVs (Electric vehicles) myth busting -Enhancing nature, such as wildflower planting -Reducing water waste -Local impacts of climate change and how to reduce them -A web presence to keep the public and other organisations aware of the County's climate work and progress on delivering the Strategy -Flood resilience and responsibilities -toolkits for key organisations, such as Schools, to share wider messages	Design	A communications plan has been developed; however reactive communications have dominated activity to date. Work continues to identify adequate resources to accelerate delivery of this action, including opportunities for collaboration with partners.	

4	yes			Collaborate with partners to establish Locally Determined Contributions for Cambridgeshire to support ownership of carbon emissions and associated action.	Deploy	Funding secured from Innovate UK, and the partnership project is in delivery with LAs. Project runs Feb 2024 – June 2025.	
5	yes	yes	yes	Collaborate with partners to strategically advocate for government to: -Incorporate stronger mitigation, adaptation and natural capital requirements into building regulations and the National Planning Policy Frameworks. -Ensure that all nationally significant infrastructure projects assess their climate impacts using both national and local carbon budgets -Improve and extend initiatives and funding schemes for projects to deliver carbon reductions, air quality improvements, adaptation and natural capital improvements, shaping the format of these schemes to enable appropriate funding regimes that provide certainty and longevity to enable business investments -Develop and promote policies to ensure public transport and active transport is more competitive and attractive than the private car -Deliver improvements in legislation around riparian watercourses and drainage provision for new developments Enable Councils to collect a wider range of materials, especially those that are currently difficult to dispose of, through provision of funding for the additional costs of doing so	Deploy	Advocacy focuses on participation in consultation activities and providing feedback when requested from key stakeholder (govt departments, LGA etc). Local positions and challenges related to key topics have also been fed back to groups including UK100 and ADEPT.  Participation in the EELGA Regional Climate Change Forum provides an important strategic advocacy platform.	Language change from "lobbying" to "advocacy"
6	yes	yes	yes	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	Define	Ongoing collaborations to influence plans as they are developed.	
7		yes	yes	Work with partners to develop local heritage listings and strengthen ties between nature and heritage to improve management approaches to create a better environment for communities and encourage use of green open space.	Deploy	On-going collaborative project with the District Councils	
8	yes			Scope a Cambridgeshire Decarbonisation Fund to leverage public and private investment (e.g. carbon offsets, CSR etc) into low carbon projects. Explore verification process to develop a pipeline of projects with verified carbon offsets that may be purchased for formalised offsetting of carbon emissions by the purchaser.	CLOSE	Initial work paused following lack of market maturity. A range of Local Authorities are interested in this concept and raised with the Greater South East Net Zero Hub (GSENZH). A strategic piece of work is underway at the Hub mapping the opportunities and starting wider discussion with Government on how this can work.	Action closed and integrated into a new action 53 on finance.
9	yes	yes	yes	Develop and deliver a programme of "Climate Lab" for cross-organisational "blue sky thinking" on how to tackle the climate and nature crisis.	CLOSE	Six Climate Labs have taken place, with the methodology developed and refined during this process. No current plans for future Climate Labs, however these can be delivered when required.	Action closed, however new Climate Labs can be held as required
10		yes		Develop and deliver a Corporate Climate Change Risk Assessment (CCRA) and associated action plan to: -proactively manage the risk climate presents on the Council's service delivery - support officers to understand the scale of potential impact on their services and integrate into business continuity planning support finance and corporate teams to better incorporate climate risk into the annual budgeting process	Design	The councils corporate risk register now recognises the risk climate poses to council services. Work to develop the CCRA has not yet commenced, however funding has been secured to support this activity. Some activities independent of the strategy have commenced - e.g. gully clearance in highways	



11	yes			Develop a carbon quota (or carbon budget) for the Council's scope 1,2 and 3 emissions, and emissions reductions pathways and establish how this can be integrated into business planning.	Develop	A carbon quota for scopes 1,2, and 3 is proposed at October 2024 EGI committee. Initial work has modelled the annual trajectories and milestones and further work on emissions pathways is now required, alongside cost profiling for business planning.	
12	yes			Update the Local Validation List to incorporate carbon evidence to support applicants and planners to adequately consider carbon impacts of new minerals and waste applications.	Develop	Climate Change and Carbon Checklist for Minerals & Waste Applications developed and under review to ensure compliance with national planning procedures.	
13	yes	yes	yes	Develop a Corporate Tree & Woodland Strategy for the Council and County. Setting out principles by which the Council will plant and manage its tree assets to maximise carbon and biodiversity benefits.	COMPLETE	Final Tree and Woodland Strategy complete subject to final approval by Environment and Green Investment Committee. This has been informed by a canopy assessment of CCC land holdings.	New Action 61 on implementation of the strategy.
14	yes			Develop a joint Public EV Infrastructure Strategy with districts, CPCA and PCC to enable residents without access to off-street parking to switch to electric vehicles, to include: -establishing CCC's position, commercial approach and delivery mechanism - leveraging available public and private finance e.g. LEVI - securing additional resource to deliver a programme of infrastructure role out	Deploy	On-street EV Infrastructure Policy approved by Highways & Transport Committee in December 2023. A Combined Authority wide EV Infrastructure Strategy is complete and awaiting approval. Funding from LEVI secured supporting capacity and resource to deliver EV chargers and a LEVI funding application submitted to draw down £5.4M funding and plans made for <del>procurement of a contractor to deploy chargers across the region</del>	
15	yes	yes	yes	Develop decarbonisation plans for maintained schools and work with them to support their decarbonisation and improve environmental outcomes, including: -Support schools to retrofit buildings to improve energy efficiency and offering finance mechanisms including lifecycle heating and hot water replacements in schools to be fitted with low carbon solutions, offering energy performance contracts and heat agreements -Encourage purchasing of 100% renewable electricity -Encourage schools to utilise a full range of waste disposal options (e.g. providing recycling to students) Provide guidance and advice to all schools to enhance and manage <del>their sites for natural capital, such as SuDS and biodiversity enhancement, including tree</del>	Delivery	10 heat decarbonisation plans developed and a wider net zero pathway for all maintained schools developed. Project in developemnt to replace end of life gas and oil boilers in 35 maintained schools with low carbon heating systems, with potential 29,000 tCO2e savings over the 20 year lifetime.	
16	yes			Develop a suitable monitoring dashboard to improve monitoring of target and action delivery.	COMPLETE	First iteration complete, with refinement being picked up via action 35.	
17	yes			Develop Sustainable Travel Guidance for all CCC staff, encouraging and enabling use of lower carbon alternatives.	COMPLETE	Guidance approved in June 2024 and launched in early October 2024.	
18	yes		yes	Develop a Waste Service Decarbonisation Plan to ensure the service most appropriate can: -Review disposal and treatment mechanisms in use and make strategic carbon-evidenced decisions on waste treatment processes -actively manage the closed landfill portfolio to reduce their environmental impact <u>Monitor and measure carbon reductions</u>	Design	Initial carbon baselining work complete, along with technical feasibility of different solutions. Further development and implementation wrapped up in strategic decisions for waste serve re-design.	
19	yes	yes	yes	Develop and deliver a training programme to upskill all CCC staff (and Members where possible) on carbon, climate, and biodiversity to enable improved decision making and delivery of other actions. Type of training to reflect needs of different types of staff.	Deploy	Training programme developed supported by additional information on the internal Climate and Nature Hub. Number of organisation trained (as Aug '24): -Climate e-learning – 65% -Carbon Literacy Training – 9% -Net Zero & My Part – 11% Additional "bite sized learning" and biodiversity learning in development.	
20	yes			Develop and deliver a carbon offsetting policy to enable the Council to consider options for dealing with its residual "hard to prevent" emissions in a robust and credible way.	Develop	Best practice research has completed and early iterations of the policy developed for internal review.	

21			yes	Develop and implement a Biodiversity Strategy for the Council to describe how and where biodiversity enhancement can take place. For County Council assets– including wildlife sites, highways, rural estate and others – this should look to deliver improved environmental outcomes, adaptation, and a doubling of nature.	COMPLETE	Biodiversity audit completed and Strategy to be approved by Environment and Green Investment Committee in October 2024.	New Action 54 on implementation of the strategy.
22	yes	yes	yes	Develop and implement a Climate Charter for use in procurement and commissioning to ensure suppliers/contractors are aware of our climate ambitions, set out expectations regarding climate and require pro-active acknowledgement of the ambitions.	COMPLETE	<a href="#">Climate Charter launched in September 22 and is now a standard question in all procurements over £100,000. Suppliers are asked to sign up to the Climate Charter, and efforts are being made to obtain signed versions during the contract award process. In total, 47 suppliers signed the Climate Charter in 2023–24.</a>	To be closed and replaced with a broader procurement action bringing together other procurement actions. New action 56
23	yes			Develop approach to enable decarbonisation of Council fleet, to include: -Scope all Council buildings for suitability for workplace EV chargepoints and commence a delivery programme at all suitable locations Agree and deliver a coordinated plan for transitioning fleet to appropriate low carbon alternatives e.g. gritters, mobile libraries, highways fleet, pool and hire car & vans etc	Develop	EV chargers are available at 13 locations. Further sites to be scoped as part of wider council assets strategy. Review of CCC fleet is complete, with decarbonisation a key factor. Awaiting development of an implementation plan.	
24	yes			Develop innovative large scale renewable energy projects on County Council assets to trial new technologies and business models.	Deploy	<a href="#">Work continues to deliver projects at several sites, and establish a pipeline of future opportunities.</a>	Wording amended to remove examples of technology types and include new
25	yes	yes	yes	Develop Low Carbon Purchasing Guidance to support officers involved in procurement and commissioning to appropriately integrate carbon and nature into these activities.	COMPLETE	The Low Carbon Purchasing Guidance was approved in December 2023.	Implementation wrapped into broader new action 56
26	yes	yes	yes	Develop Net Zero by Design guidance to support officers to embed carbon reduction and nature enhancement into all aspects of their roles. Including: design, delivery, budgeting, governance and decision making	COMPLETE	The guidance was approved in June 2024, and will be officially launched in October. The guidance has been integrated into the Council's new Corporate Project Management Framework.	
27	yes	yes	yes	Develop new funding mechanisms to deliver the councils net zero by 2030 target, eg.: - business models to enable investment into projects supporting mitigation, adaptation, and natural capital. - identification of appropriate grant funding regimes - expansion of new opportunities - e.g. BNG credits	Develop	BNG credits are progressing via the Lower Valley Farm project, further work on carbon credits is being developed. Some approaches integrated into CANFFUND IUK application.	
29	yes			Embed climate and nature into the culture of the organisation through: -alignment of climate and nature policies into HR Workforce and People Strategies /People strategies/policies - eg recruitment, induction processes etc establishing a corporate climate and nature outcome for "Our conversations" and associated information pages on Camweb	COMPLETE	Review of HR policy/strategy has been completed and climate has been incorporated. This is underpinned by the corporate outcome on climate and nature which is in its second year.	
30	yes	yes	yes	Embed climate mitigation, adaptation and nature recovery into decision making across the organisation, including: -Integration of climate and environment into all Committee Paper significant implications evaluations Embed climate impact assessment across the organisations, particularly at key decision stages of projects/proposals. e.g. through shadow carbon pricing at Capital Programme	Deploy	Change to committee sign off process is now well established. Environment Impact Assessment process has been developed and being piloted.	
31	yes			Ensure the Council's corporate energy supplies are as climate conscious as possible, e.g. purchase 100% renewable electricity for all buildings and street lighting operated by County Council.	Deploy	The Council is already purchasing zero carbon electricity for all assets where it is the bill-payer. In addition, the Council is taking steps to reduce use of fossil fuels like oil and gas.	
32	yes			Establish funding mechanisms to support delivery of the strategic infrastructure required to deliver net zero by 2045 for Cambridgeshire, e.g. Local Area Energy Plans, significant renewable energy, energy retrofit etc	Design	The Peterborough Accelerated Net Zero (PANZ) project is exploring some of these. Link to action 44 for development of the LAEP which will include high level costings.	

33	yes	yes	yes	For CCC Corporate buildings, incorporate the principles of the CCES into the Council's Asset Strategy, to include: -Building Decarbonisation Plans -Plan to ensure buildings are resilient to extreme weather events and fitted with appropriate passive building adaptations -approaches to maximise biodiversity potential, targeting 20% net gain Approaches to minimise waste, especially water through use of water saving and grey water approaches	COMPLETE	The new Land and Property strategy was approved in February 2024. Sustainability is a key "guiding principle" and the ethos of carbon reduction and nature improvement incorporated. Building decarbonisation plans have been developed for XXX sites.	Please see action 55 based on delivery of the strategy
34	yes		yes	For leased-out properties (rural, and built) , develop our approach to management to include: -develop decarbonisation pathways for the land and associated buildings - include or strengthen requirements for tenants to implement methods that are environmentally beneficial. For example: encouragement for carbon reduction measures, adaptation measures (i.e., water reservoirs to use in drought) and positive management of wildlife interest	Develop	Rural estate decarbonisation baseline work complete, commencing work to try to find 'quick wins' and funding resource for the enabling work.	
35	yes			Identify and implement mechanisms to improve the data provision for carbon footprinting across all scopes 1,2 and 3	Deploy	Schedule of data improvement work identified, including filling data gaps, automation and development of reporting. Some data improvements already implemented into 23.24 carbon footprint.	
36	yes	yes	yes	Integrate climate and nature into highways service design, including: -Develop and deliver decarbonisation plans for the highways service considering lifecycle analyse, use of low carbon materials -and building resilience to climate change into design approaches - Develop and deliver plans to improve highways maintenance approaches to deliver 20% biodiversity net gain and increased tree canopy deliver projects to manage flood risk and peat affected roads	Design	Decarbonisation pathway developed., with work underway to integrated delivery into current service delivery and to try to fund the 'quick wins'. Trajectory work commencing to give annual targets.	
37				Develop and deliver an Internal Engagement Plan to deliver organisational/behavioural change to support officers in translating climate/environment/carbon as a priority across the current and future workforce.	Deploy	A range of internal communications developed and delivered via internal communication channels and the Camweb Climate and Nature Hub.	
38				Strengthen environmental requirements within Social Value portion of procurement specifications, specifying expected outcomes where appropriate and monitoring delivery via robust contract management	COMPLETE	The broader importance of social value within contracts had been developed, including the use of it in supporting environmental outcomes. For larger contracts the Social Value Portal is in use and this includes environmental options.	Action complete. See related new action 56 on implementation of the various new procurement related
39	yes	yes	yes	Provide biodiversity and carbon advice to Cambridgeshire and Peterborough Local Authority Partners and on NSIPs to inform planning decisions and consultation feedback	Deploy	Advice continues to be provided. Work underway to more formally establish the function within the Climate team.	
40	yes			Support residents and communities (working with partners where appropriate) to access energy efficiency and renewable energy technologies. E.g. through collective purchasing, grant provision etc	Deploy	Action on Energy Cambridgeshire, to which the council is a partner, delivering retrofit in low income households using Home Upgrade Grant 2 funding. Low resident uptake on Heat Pump Ready means project closed.	Removal of reference to specific example schemes
41		yes		Update county-wide Flood and Water Supplementary Planning Document (SPD) to reflect the evolution of national and local planning policies and the need for adaptive measures	Define	Implementation of Schedule 3 of the Flood and Water Management Act and the reform of Supplementary Planning guides have experienced delays at a national level. A new timetable is awaited. The Lead Local Flood Authority are investigating preparatory work to inform future policy changes.	
42	yes			Work in partnership with our strategic transport partners to ensure policy and new schemes promote the travel hierarchy and contribute to carbon reductions, including: - Work with GCP & CPCA to facilitate public and active transport being the "natural first choice" for Cambridgeshire residents through delivery of improved cycling and walking infrastructure. Influence the CPCA's Local Transport Planning process to ensure policy measures will deliver carbon reductions - Continuing to expand the transport hub/Park & Ride network - Working with partners to increase the access to railways offer currently available.	Delivery	Delivery of various active travel projects is ongoing along with participation in Greater Cambridge PArtnerships and CPCA strategic plans, projects and programmes.	

43	yes	yes		Work with Cambridgeshire 'Community Service' to support our communities to reduce their impact and to build community resilience /	Deploy	Net Zero Action Plan for the service nearing completion. Various events held via Libraires on green activities.	
44	yes			Work with key partners to lead development of a Local Area Energy Plan (LAEP) for Cambridgeshire to facilitate a net zero Cambridgeshire at lowest cost (support the decarbonisation of housing, jobs, and transport), and an associated funding framework to enable delivery.	Develop	Cross-stakeholder working group to deliver this action has been established. Procurement for stakeholder engagement complete and procurement for remainder of project underway.	
45			yes	Work with partners across the public and private sector (e.g. Fenland SOIL) to: - support improvements in the evidence base for Cambridgeshire peatland GHG emissions, soil improvement, research, environmental, social and economic adaptation and reduction of the carbon footprint for our Fen peat landscapes <del>support partner ambitions (e.g. NELU) to deliver carbon reductions and minimise sustainable waste management practices</del>	Delivery	Relationships established with a number of existing partnerships. CCC sit on boards of several of these and a project collaborator. CCC is a Fenland SOIL member.	
46	yes			Work with partners in the Cambridgeshire and Peterborough Waste Partnership (RECAP) to robustly embed climate and nature into the emerging Joint Waste and Resource Strategy to align with the principles of the circular economy to promote more <del>sustainable waste management practices</del>	Define	Development of the strategy is ongoing, however lack of clarity on regulatory changes makes progress slow.	
47		yes	yes	Work with partners to develop Natural Flood Management (NFM) projects to allow catchment-wide adaptation to flooding and sea level rise	Deploy	Progress has been achieved through partnership working and work funded by JTF, including; • Partnership schemes with Anglian Water entering design phase in March • identification of Natural Flood Management priority areas through the Flood Mitigation Programme, with feasibility to be explored next • Supporting community schemes in Alconbury and Cambridge	
48	yes			Work with Public Heath, NHS and Social Care partners to support development of the Integrated Care Service (ICS) Green Plan and ensure this is aligned to the Council's net zero ambitions for Cambridgeshire	Deploy	Plan largely in place. ICS now in implementation phase	
49			yes	Work with the Districts, CPCA and GCP to improve air quality by: - Strengthening collaboration within existing partnerships to tackle air quality challenges - Developing a shared vision for air quality improvement approaches that maximise the air quality, carbon, and wider environmental benefits	Deploy	Partnerships continue to strengthen, particularly within Cambridge City AQMA areas.	
51		yes	yes	Develop the Local Nature Recovery Strategy and work with partners to deliver the 'Doubling Nature' ambition and promote the benefits of blue/green infrastructure for their adaptation benefits to communities	Deploy	Strategic partnership is now well established, and various consultations and engagement activities have completed/are underway.	Removal of reference to the Cambridgeshire & Peterborough Parks Partnership which is currently inactive.
52		yes		Work with Public Sector partners (CPCA, districts, Local Resilience forum etc) to develop a strategic evidence base for climate risk and develop Adaptation Plans for the County.	Decide	Focus to date has been on managing flood risk. Wider strategic collaboration under development to produce an evidence base and agree an approach to Adaptation plan development. Awaiting funding decision from CPCA	
53	yes	yes	yes	Work with partners to develop and deliver funding mechanisms to support Cambridgeshire communities and businesses to decarbonise. E.g. grants, private finance, CSR, new asset classes, low cost loans, carbon offsets etc	NEW ACTION 2024	Ongoing via the Peterborough Accelerated Net Zero (PANZ) project, and provision of access to grants to communities via the council.	
54		yes	yes	Implementation of the Council's Biodiversity Strategy & Actions to deliver biodiversity benefit across the Council's estate	NEW ACTION 2024	not started - Strategy to be approved shortly	
55	yes	yes	yes	Implement the CCES and Corporate Land and Property Strategy ambitions for corporate assets through: - Developing and implementing building decarbonisation plans; - Delivering climate resilience improvements (e.g. shading, water saving etc); and - Improving biodiversity.	NEW ACTION 2024	A rolling programme of work (funding dependant) under development to support corporate building decarbonisation. Other areas, requiring further work. See action 34.	
56	yes			All new significant procurement activities implement the Low Carbon Purchasing Guidance and Carbon Charter, use Net Zero by Design guidance, and specify and/or evaluate on carbon and biodiversity. Including effective contract management and carbon reporting.	NEW ACTION 2024	Some action ongoing already, however further work to embed across the organisation required.	

57	yes			Work with partners to establish a support mechanism for council suppliers - especially SME's and VCIS- to ensure they understand carbon, privilege its inclusion in their business practice and are prepared for increasing council requirements related to carbon.	NEW ACTION 2024		
58	yes			Embed the Net Zero by 2045 corporate priority within all relevant CCC Policies and Strategies, via the council's Policy Community of Practice.	NEW ACTION 2024	Early work underway.	
59	yes			Establish a Climate Consultancy function within the Council to provide internal support to services to develop decarbonisation plans, embed delivery and better implement action.	NEW ACTION 2024	Some activities already being delivered, e.g. climate and carbon advice on planning, support on procurements etc but formalisation and establishment of the function continues.	
61		yes	yes	Implementation of the Council's Tree & Woodland Strategy & Actions to deliver biodiversity benefit across the Council's estate	NEW ACTION 2024	not started - Strategy to be approved shortly	
62				Develop a strategic position on the role dietary choices play in the climate crisis, including: - Scope and develop a plant-based food policy for internal council catered activities.	NEW ACTION 2024	not started	
63	yes			Support the delivery of the Cambridgeshire & Peterborough EV Infrastructure strategy through the delivery of public chargepoints. To include: - Delivery of on-street infrastructure under the Local EV Infrastructure (LEVI) Fund - Piloting solutions to pavement "crossing-over" - Expanding public chargepoint provision across suitable council assets, e.g. Park and Ride sites.	NEW ACTION 2024		



## School Low Carbon Heating Project Approvals

To:	Environment and Green Investment Committee
Meeting Date:	3 October 2024
From:	Executive Director Place of Sustainability
Electoral division(s):	Hardwick Soham South & Haddenham Roman Bank & Peckover Romsey
Key decision:	Yes
Forward Plan ref:	2024/073
Executive Summary:	The report provides information on the financial investment required to deliver low carbon heating projects in schools that exceed the £500k key decision threshold. The report seeks Committee approval for the investment, from the approved capital programme, into the projects as these will decarbonise the schools' heating and prevent installation of new gas and oil boilers.
Recommendation:	<p>The Committee is recommended to:</p> <ul style="list-style-type: none"><li>a) Agree that funding is allocated for the low carbon heating projects at Meridian, Robert Arkenstall and St Philip's primary schools as set out in paragraph 3.6. In the event that one project cannot proceed, Committee is asked to approve funding for a low carbon heating project at Alderman Payne primary school as a reserve.</li><li>b) Note that an urgent decision-making process was used to approve funding for a low carbon heating project at Stretham Community Primary School for the reasons set out in paragraph 3.10.</li><li>c) Confirm the ongoing availability of up to £214k as the lending facility from the Council for the schools specified in this report for low carbon and energy efficiency projects, continuing the approach set out in paragraphs 2.1 and 2.2.</li><li>d) Agree the proposed use of UK Power Networks for both non-contestable and contestable elements of electrical supply upgrades as discussed in paragraphs 3.11 and 3.12.</li></ul>
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## 1. Creating a greener, fairer and more caring Cambridgeshire

- 1.1 This report relates to **Ambition 1: Net zero carbon emissions for Cambridgeshire by 2045, and our communities and natural environment are supported to adapt and thrive as the climate changes**. Decarbonisation of heat in buildings, including the county's schools, is essential to achieve this target. Emissions from maintained school energy use form part of the Council's Scope 3 emissions.
- 1.2.1 The report also relates to **Ambition 7: Children and young people have opportunities to thrive**. The proposed low carbon heating projects all deliver net energy bill savings relative to retaining gas and oil heating, reducing pressure on school budgets, and enabling greater focus on educational spend.

## 2. Background

- 2.1 The General Purposes Committee on 14 September 2014 agreed a loan funding budget for a programme of projects installing **energy efficiency measures** at schools. The maximum borrowing facility to provide loans for these projects was raised to £20m by the Assets and Investment Committee on 22 July 2016. Schools are charged interest at 1.8% above the Council's Public Works Loan Board (PWLB) borrowing rate in order to cover Council staff time. The investment criterion for these projects is that projected bill savings over a maximum of 20 years should fully cover loan repayments to the Council. 61 schools have been supported to date. Operational performance of projects is monitored. Current data shows electricity savings achieved 99.8% of those projected. Gas and oil savings achieved appear to be 87% of those projected, although there are gaps in consumption data provided by schools. A key factor behind this latter under-performance has been some schools struggling to maintain optimised control of their heating. With current energy prices being around three times those projected when projects went ahead, the financial benefit achieved is far in excess of that projected.
- 2.2 In addition, the Environment and Green Investment Committee on 1 July 2021 agreed a new funding model for **low carbon heating projects** at maintained schools. This retained the use of loan funding (as described in 2.1, but with no uplift charged over the Council's PWLB borrowing cost), repayable from projected energy bill savings, but supplemented this with non-repayable capital contributions. These capital contributions are from Education Capital (equivalent to costs that would otherwise be incurred in replacing boilers on a like for like basis) and from the Environment/Decarbonisation Fund, equivalent to the monetised value of the carbon savings delivered by the programme. It was agreed that Environment/Decarbonisation Fund contributions could be allocated flexibly across schools in the programme, with "surplus" monetised carbon savings from projects with stronger business cases cross-subsidising higher contributions to support schools with weaker business cases. In addition to Council capital contributions, central Government grants from the Public Sector Decarbonisation Scheme (PSDS) would be applied for.

School low carbon heating projects completed to date are summarised below.

PSDS Phase	Number of School	Capital Cost	PSDS Grant	Education Capital contribution	Decarbonisation Fund contribution	Loan
Phase 2	Two	£415,052	£186,099	£80,119	£39,205	£116,611
Phase 3a	Seven	£2,276,518	£991,212	£258,996	£679,400	£321,910
<b>Totals</b>	<b>Nine</b>	<b>£2,691,570</b>	<b>£1,177,311</b>	<b>£339,115</b>	<b>£718,605</b>	<b>£438,521</b>

- 2.3 These projects will deliver 189 tonnes of CO<sub>2</sub> savings per annum, contributing to the Council's target of a 50.4% reduction in Scope 3 emissions (of which schools make up 7%) by 2030. The programme implements Action 51 of the Council's Climate Change and Environment Strategy commitment to supporting maintained schools to replace end of life boilers with low carbon heating.
- 2.4 Investment decisions in individual school projects within the programme are delegated. The delegation was most recently updated by Environment and Green Investment Committee on 19 January 2023 to the following:
- "the delegation of individual green investment and contract decisions for schools to the Executive Director Finance and Resources in consultation with the Assistant Director for Education & Place Planning, Executive Director Place & Sustainability and Chair/Vice Chair of Environment and Green Investment Committee."*
- 2.5 Key decisions e.g. investments in excess of £500k, may not be taken by delegated decisions, but require Committee approval.
- 2.6 This report seeks Committee approval to invest in low carbon heating projects at Meridian, Robert Arkenstall and St Philip's primary schools. Business cases for these projects are due to be presented to the schools in September. A verbal update will be provided to Committee on whether the schools are minded to accept the proposals. If one of the schools decides against proceeding, or cannot proceed, Committee is asked to approve investment in a low carbon heating project at Alderman Payne primary school as a reserve. Available budget is sufficient to take any three of these schools forward.
- 2.7 The funding package for these projects is in line with the approach agreed by Environment and Green Investment Committee in July 2021, but Committee approval is required as the projects exceed the £500k delegated decision threshold. The projects will ensure that end of life gas and oil boilers at these schools are replaced with Air Source Heat Pumps (ASHPs) combined with LED lighting upgrades and/or solar PV installations to reduce carbon emissions and deliver energy bill savings to the schools. The Council's investment in these schools has been budgeted for, and will be managed within, the existing Environment/Decarbonisation Fund budget for 2024/25.

### 3. Main Issues

- 3.1 The Council secured £2.3m of grant funding for 13 school low carbon heating projects at Phase 3b of PSDS in early 2023, but with the grant being deferred to the 2024/25 financial year. A further £587k of grant funding for five school low carbon heating projects was secured at Phase 3c of PSDS earlier this year.
- 3.2 Grants were secured on the basis of Outline Business Case (OBC) proposals produced by the Council's Energy Performance Services Framework contractors Equans and SSE. These business cases involve significant work (site surveys, energy analysis, outline design and financial modelling) and are produced at no cost to the Council and at the contractors' risk.
- 3.3 Two of the Phase 3b schools have progressed to installation works. Draft Investment Grade Proposals (IGPs) have now been received for the remaining eleven. IGPs are firm price proposals that have been produced by a process of detailed design, subcontractor tendering and obtaining UK Power Networks quotations for upgrading the capacity of the schools' electrical supplies (to meet the additional demand from the ASHPs). Inflation in project capital costs over the two years since OBCs were provided has been 43% on

average. In addition to general inflation in construction costs, high UKPN connection upgrade costs, lengthy pipework runs due to space constraints on ASHP locations, increased Project Management and Provisional Cost budgets have contributed to these cost increases.

- 3.4 Capital cost for all but three of the 13 Phase 3b projects has come in above the £500k threshold for delegated approval. The projects that are the subject of this approval request are affordable within the £1.85m Decarbonisation Fund budget available for schools in 24/25. CPCA have agreed to provide a contribution towards three school projects, which would otherwise not be affordable, of which St Philip's is above £500k capital cost and included in the table below.
- 3.5 Subject to Committee and school approval, the projects at Meridian, Robert Arkenstall are ready to proceed to works contracts. St Philip's will require planning consent prior to entering into works contract.
- 3.6 The capital costs, grant funding, Council investment, energy bill savings, net savings after loan payments and carbon savings of these projects are summarised below.

		<b>Meridian</b>	<b>Robert Arkenstall</b>	<b>St Philip's</b>	<b>Total</b>
Capital cost		£893,480	£612,029	£928,446	<b>£2,433,955</b>
PSDS grant		£394,521	£182,855	£301,602	<b>£878,978</b>
Council investment	Decarbonisation Fund	£302,388	£380,409	£389,775	<b>£1,072,572</b>
	School Condition Allowance	£53,417	£10,539	NA	<b>£63,956</b>
	Loan	£143,154	£38,226	£32,064	<b>£213,444</b>
CPCA contribution		-	-	£104,000	<b>£104,000</b>
Bill savings (over 20 years)		£310,369	£91,900	£65,890	<b>£468,159</b>
Net financial saving after loan (over 20 years)		£48,504	£13,239	£10,923	<b>£72,666</b>
Carbon savings (over 20 years) tCO <sub>2</sub> e		1,250	536	734	<b>2,521</b>

- 3.7 The above figures are based on draft IGPs, but inclusive of Provisional Cost allowances to accommodate unknowns and inflation in subcontractor costs between now and start of works. Occasionally scope of works is varied during installation, which may necessitate an increase in Council contributions. Approval for any such changes will be sought via the delegated approval process referred to in paragraph 2.4.
- 3.8 If one of the above schools does not wish to or is unable to proceed, it is proposed to substitute it with a low carbon heating project at Alderman Payne primary school (subject to the school's acceptance). This will ensure that as much grant funding as possible is secured for delivering carbon savings on Cambridgeshire schools. The capital costs, grant funding, Council investment, energy bill savings, net savings after loan payments and carbon savings for this project are summarised below.

		Alderman Payne
Capital cost		£625,335
PSDS grant		£207,881
Council investment	Decarbonisation Fund	£381,850
	School Condition Allowance	£0
	Loan	£35,604
CPCA contribution		-
Bill savings (over 20 years)		£75,788
Net financial saving after loan (over 20 years)		£15,526
Carbon savings (over 20 years) tCO <sub>2</sub> e		640

- 3.9 St Philip's is a Voluntary Aided school. The site is owned by the Diocese of Ely and Church Schools of Cambridge. Responsibility for maintenance of this site sits with the Diocese of Ely, who have agreed to contribute £101,005 (the equivalent cost of like for like boiler replacement). The Department for Education classes Voluntary Aided schools as local authority-maintained schools and their carbon emissions sit within the Council's Scope 3 emissions.
- 3.10 Approval for the Stretham Primary School was granted by the Chief Executive in July under urgent approval procedures. This project has a capital cost of £634,096 of which £215,179 is from PSDS grant funding, £145,452 from Education Capital, £184,471 from the Decarbonisation Fund and £88,904 in loan funding. The IGP Business Case for this project was delivered on 9 July 2024. Unfortunately, the school suffered a heating pipework failure and hot water calorifier failure while the IGP was in development. These required rectification over the summer to ensure the school had heating and hot water in the autumn term. For these reasons, urgent approval was sought and granted.
- 3.11 All of the PSDS Phase 3b schools projects require an increase in the electrical supply capacity of the schools. In all cases, this involves upgraded cabling to the site. In some cases, it also requires new substations on site or upgrades to existing UK Power Networks' (UKPN) substations. These costs are highly variable from site to site, depending on length of trenched cabling required and scope of substation works, which in turn depends on how constrained the local distribution grid is. Total UKPN costs across the three schools are £89k. To avoid paying Framework Contractor markups on these costs, the Council plans to pay UKPN direct. The costs of this are included in the Capital cost and Decarbonisation Fund contribution figures in paragraph 3.6. We have raised high UKPN supply upgrade costs with the Department for Energy Security and Net Zero as a barrier to decarbonising some sites.
- 3.12 UKPN are a monopoly supplier for part of the supply upgrade works. "Contestable" elements of supply upgrade works can be delivered by other suppliers. It is proposed to use UKPN for both non-contestable and contestable works rather than competitively tendering for the contestable element of the works. This is because many of the upgrades are low value with only minor cost savings possible and, more significantly, procuring both elements from UKPN reduces technical and project management risks in delivering the supply upgrades e.g. incompatibility of an Independent Connection Provider's contestable works with UKPN's non-contestable works, co-ordination of works by two separate suppliers. The Council is not well placed to manage this technical risk as it requires electrical engineering

expertise. As procurement of supply upgrades from UKPN is a single tender, we will submit a waiver approval request for this work. We will batch the upgrades into a single waiver request covering as many schools as possible.

## 4. Alternative Options Considered

- 4.1 **Do Nothing:** In the absence of making a decision to invest in low carbon heating projects at Meridian, Robert Arkenstall and St Philip's primary schools (Recommendation (a)) the projects will not go ahead.
  - 4.1.1 All of these schools have boilers which are nearing the end of their lives. If the projects do not go ahead, the boilers are likely to be replaced with new gas or oil boilers. Costs of emergency boiler replacement at Meridian and Robert Arkenstall would sit with the Council's Education Capital team and with the Diocese of Ely for St Philip's. New boilers are likely to remain in operation for a further 20 years or so. This is in conflict with Action 51 of the Council's Climate Change & Environment Strategy (which says the Council will support schools to replace end of life boilers with low carbon heating) and with the Council's Ambition 1 to achieve Net Zero by 2045. Schools form 7% of the Council's Scope 3 emissions. The Do-Nothing option has been discarded as it is inconsistent with Council policy.
- 4.2 **Delay a Decision:** In principle, we could delay decisions to invest in these projects and use the delay to re-tender in an attempt to drive down costs.
  - 4.2.1 The projects have all been procured under the Council's Energy Performance Service Framework with Equans and SSE. The contractors have competitively tendered within their supply chain to drive best value. There has been several months delay in finalising Investment Grade Proposal business cases for these projects while Equans and SSE review and value engineer their designs. This has involved re-tendering with their supply chain and seeking lower UK Power Networks connection upgrade costs. It is therefore unlikely that a further re-tendering would deliver significant cost savings. More critically the projects have PSDS grant funding (totalling £879k) that has to be spent in the current financial year, or it will be lost. The Delay option has been discarded due to this risk of loss of grant funding.

## 5. Conclusion and reasons for recommendations

- 5.1 Agreeing the investment in three school low carbon heating projects will deliver 2,521 tCO<sub>2</sub>e savings over the 20-year equipment lifetime and deliver a modest (£72,666) financial saving to the schools over 20 years. These will contribute to the Council's Ambition 1 and avoid new gas and oil boilers being installed, locking in these schools' carbon emissions from heating for another 20 years.

## 6. Significant Implications

### 6.1 Finance Implications

- 6.1.1 The Education Capital and Decarbonisation Fund contributions for three of these projects are affordable within the budgets allocated for this financial year (£1.85m Decarbonisation

Fund budget for schools, £200k Education Capital contribution). Repayable loan funding for up to £214K is also expected to support the projects specified in this report.

- 6.1.2 Proceeding with these three projects will secure £879k of central Government grant funding investment into decarbonising these schools.

## 6.2 Legal Implications

- 6.2.1 If approved, project delivery will be under the Council's Energy Performance Services Framework. Works contracts are between the schools and the framework contractors Equans and SSE rather than the Council being in contract for the works. The works contract terms are standardised under the Framework and utilise industry standard (JCT Design & Build) contract terms. Council staff will support the schools on any contractual issues arising during works delivery. Pathfinder Legal Services Ltd will be instructed to review the necessary contractual documents.

## 6.3 Risk Implications

- 6.3.1 Capital cost over-run: To mitigate this risk, projects are contracted on a firm price basis. Increases in contract value are only permissible where a change in project scope is agreed by the client. This is relatively rare. In the nine PSDS Phase 2 and 3a projects, only one contract value increase was agreed, and this was to add additional low energy lighting into scope of the project. Approval of additional funding for any such variations would be subject to the delegated approval process referred to in paragraph 2.4. There are some elements of project scope which cannot be accurately costed ahead of works e.g. asbestos management costs, trenching for electrical supply cable upgrades, low voltage electrical works etc. Each project has a Provisional Cost budget, included within the capital costs summarised in paragraph 3.6, to cover such costs and general contingency. These Provisional Cost budgets are summarised below.

	<b>Meridian</b>	<b>Robert Arkenstall</b>	<b>St Philip's</b>	<b>Total</b>
Provisional Cost Budget	£135,860	£81,349	£101,198	<b>£318,407</b>

- 6.3.2 Provisional Cost over-allocation: Provisional Cost budgets are substantial, and the contractors have included significant contingency within these budgets to manage their risk of over-spend in delivering the contracted scope of works. There is therefore a risk that these budgets will not be fully spent and some of the funding package transferred to the school might have to be clawed back at completion. To prevent this, we will only transfer Provisional Cost budget to the schools as its use is authorised (a Variation Order has to be signed by the school for each item of Provisional Cost budget spend).
- 6.3.3 Operational under-performance: These projects involve a full plant room refurbishment including new controls. Whilst all the individual technologies are mature and their potential performance in real world conditions is well understood, performance does vary from site to site and there are complex interactions between pre-existing sensors, relays, actuators, new controls, and new plant. Control software is also effectively a "black box" which can have visually undetectable faults. In our experience from the schools energy efficiency programme and Phase 2 and 3a school low carbon heating projects, all of the above issues have been encountered. To address these risks, we have:

- Reviewed IGP assumptions on ASHP performance against operationally achieved ASHP Coefficients of Performance to ensure realistic average performance assumptions;
- Specified heat and electricity sub-metering with Council remote access as mandatory for all projects, so performance and effective control can be validated and monitored;
- Required the contractors to provide evidence prior to project completion that all plant responds to control system heating and hot water schedules as expected;
- Contingency allowances in Provisional Cost budgets to cover cost of replacing failed pre-existing sensors, actuators, relays etc;
- Where affordable, energy savings guarantees within the contracts. These require the contractor to compensate for under-performances due to design or installation faults;
- Our own monthly monitoring of performance using meter remote access.

6.3.4 Other operational cost increases: From Phase 3a projects we have learned that electrical supply upgrades can expose sites to new electricity bill costs not associated with the volume of energy consumed. The most significant of these is Distribution Use of Service (DUoS) charge which applies to all supplies over 100 kVA capacity and can typically add up to £300 a month to a school's electricity bill. Meter operating services contracts and changes in standing charge between an old and new supply can also add costs, although these are smaller than DUoS costs. This risk is being mitigated through:

- Keeping connection capacity below 100 kVA where possible;
- Accounting DUoS and meter operating service costs within IGP business cases when calculating the net bill impact of a project;
- Monitoring kVA usage post completion and administratively reducing supply capacity to minimise DUoS costs. NB the physical supply capacity required is always higher than the kVA usage. This is because physical kVA capacity needs to cater for high startup power demand from the ASHPs that occurs only for short duration transients. For billing purposes, kVA usage is assessed based on the highest half hourly average kVA in each month.

## 6.4 Equality and Diversity Implications

6.4.1 There are no implications under this category.

## 6.5 Climate Change and Environment Implications

6.5.1 The projects will make a positive impact contributing 2,521 tCO<sub>2</sub>e savings over the 20-year equipment lifetime to reducing the Council's Scope 3 carbon emissions, see paragraphs 1.1 and 2.3 for more detail on the Council's decarbonisation targets. The projects will be delivered under the terms of the Council's Energy Performance Services framework. This requires the contractors to deliver year on year reductions in their supply chain carbon emissions in line with the Council's Scope 3 emissions target.



## 7. Source Documents

None



# EQUALITY IMPACT ASSESSMENT - CCC641842764

Which service and directorate are you submitting this for (this may not be your service and directorate):

Directorate	Service	Team
Place and Sustainability	Climate and Energy Services	Climate and Energy Staffing Budgets

**Your name:** Christopher Parkin

**Your job title:** Community Energy Manager

**Your directorate, service and team:**

Directorate	Service	Team
Place and Sustainability	Climate and Energy Services	Climate and Energy Staffing Budgets

**Your phone:** 01223715909

**Your email:** Christopher.Parkin@cambridgeshire.gov.uk

**Proposal being assessed:** School Low Carbon Heating Project Approvals

**Business plan proposal number:** Cambridgeshire County Council

**Key service delivery objectives and outcomes:** The Council's Strategic Ambition 1 is to achieve Net Zero Carbon for Cambridgeshire by 2045. This will require heating in all buildings to be decarbonised. The Council's Climate Change & Environment Strategy also sets a target for the Council to reduce its Scope 3 carbon emissions by 50.4% by 2030. Emissions from school heating and electricity use make up 7% of the Council's Scope 3 emissions. The Council's Climate Change and Environment Strategy Action Plan states that the Council will support maintained schools to replace end of life gas and oil boilers with low carbon heating. The Council has an established programme of school low carbon heating projects. Projects are usually approved by delegated decision. This EqIA covers the request to approve funding for low carbon heating projects at 4-6 schools where capital costs per school exceed the £500k delegated decision making threshold.

**What is the proposal:** To approve a funding package for projects to replace end of life gas and oil boilers at 4-6 schools with low carbon heating.

**What information did you use to assess who would be affected by this proposal?:** Impact is solely on staff and pupils at the 4-6 schools.

**Are there any gaps in the information you used to assess who would be affected by this proposal?:** No

**Does the proposal cover:** All service users/customers/service provision in specific areas/for specific categories of user

**Which particular employee groups/service user groups will be affected by this proposal?:**

Staff and pupils at the schools.

**Does the proposal relate to the equality objectives set by the Council's EDI Strategy?:**No

**Will people with particular protected characteristics or people experiencing socio-economic inequalities be over/under represented in affected groups:** About in line with the population

**Does the proposal relate to services that have been identified as being important to people with particular protected characteristics/who are experiencing socio-economic inequalities?:** No

**Does the proposal relate to an area with known inequalities?:**No

**What is the significance of the impact on affected persons?:**The low carbon heating projects will provide a positive example of decarbonisation in action for school staff, pupils and parents. In addition to the substantial carbon savings (c.70% reduction in heating emissions) the projects are projected to deliver small energy bill savings for the schools reducing pressure on educational budgets. Bill impacts are inherently sensitive to oil & gas v electricity prices. At central estimates a small bill saving is projected. If future electricity prices are higher than projected and/or future oil & gas prices are lower than projected then this could turn into a small energy bill increase. Conversely if future oil & gas prices are higher than projected and electricity prices lower than projected the bill savings will be greater than projected. There have been multiple calls on Government to "rebalance" policy costs applied to energy prices away from electricity and onto gas to make low carbon heating financially attractive so the risk of an adverse long term shift in the electricity:gas price ratio is deemed to be low.

**Category of the work being planned:**Project

**Is it foreseeable that people from any protected characteristic group(s) or people experiencing socio-economic inequalities will be impacted by the implementation of this proposal (including during the change management process)?:** No

**Age:** The proposal affects primary school pupils and staff only.

**Disability:** The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population disproportionately affect disabled people.

**Gender reassignment:**

The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population disproportionately affect transgender people.

**Marriage and civil partnership:** The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population disproportionately affect people according to their marital status.

**Pregnancy and maternity:** The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population disproportionately affect pregnant women.

**Race:** The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population disproportionately affect people of different races.

**Religion or belief (including no belief):** The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population disproportionately affect people according to their religious beliefs.

**Sex:** The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population disproportionately affect people of any particular sex.

**Sexual orientation:** The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population disproportionately affect people of any particular sexual orientation.

**Socio-economic inequalities:** The proposal affects primary school pupils and staff only. Impacts are limited to the exemplar of decarbonisation action and a small energy bill saving. Neither the impacts nor the population have disproportionate impacts on different socioeconomic groups.

**Head of service:** Sheryl French

**Head of service email:** sheryl.french@cambridgeshire.gov.uk

**Confirmation:** I confirm that this HoS is correct



## Finance Monitoring Report – August 2024

To:	Environment and Green Investment Committee
Meeting Date:	3 October 2024
From:	Executive Director, Place and Sustainability Executive Director, Finance and Resources
Electoral division(s):	All
Key decision:	No
Forward Plan ref:	Not applicable
Outcome:	The report is presented to provide Committee with an opportunity to note and comment on the August financial position for 2024/25.
Recommendation:	The Committee is recommended to review and comment on the report.

Officer contact:  
Name: Sarah Heywood  
Post: Strategic Finance Manager  
Email: [sarah.heywood@cambridgeshire.gov.uk](mailto:sarah.heywood@cambridgeshire.gov.uk)



# 1. Creating a greener, fairer and more caring Cambridgeshire

- 1.1 This regular financial monitoring report provides the consolidated management accounts of the Place and Sustainability Directorate, enabling members to be aware of, and to scrutinise, the delivery of the business plan for 2024-25.

## 2. Background

- 2.1 This report is intended to give Committee an update on the financial position of the Place and Sustainability Directorate and detail forecast pressures and underspends across the different services and an explanation for variances.
- 2.2 The Finance Monitoring Report attached provides the financial position for the whole of the Place and Sustainability Directorate, and as such, not all the budgets contained within it are the responsibility of this Committee. Members are requested to restrict their questions to the lines for which this Committee is responsible.

## 3. Main Issues

- 3.1 Revenue: The overall position for Place and Sustainability budgets to the end of August 2024 is a forecast overspend of £3.9m. The key issues and pressures in the Finance Monitoring Report (FMR) are as follows:-

**Waste Management:** The £1.844m forecast pressure arises because the waste plant facilities do not comply with the new Environment Agency environmental permit conditions following the introduction of the Industrial Emissions Directive and the Best Available Techniques conclusions (BATc) and waste, therefore needs to be managed through separate arrangements at additional cost to the Council. Strategic options to address this issue have been assessed and an overall strategy will be recommended to members to consider during 2024-25.

**Energy Projects:** The delivery of the private wire to connect the North Angle Solar Farm is complete but energy market fluctuations mean that electricity prices are now lower than the forecasts used at the time the business plan was approved in February 2024, and the scheme is still to be energised. Also, there are income delays to the Smart Energy Grid Projects at St Ives and Babraham park and ride sites. Overall, the energy projects are forecasting an income shortfall of £2.995m.

There is additional forecast income in Highways which partly offsets the above pressures, leaving a forecast position at the bottom line of £3.9m.

- 3.2 Appendix 2 of the FMR Outturn Report provides the service explanation for the revenue variances (both over- and under-spends).
- 3.3 Capital: Across Place and Sustainability as a whole, there has been £3.9m slippage compared to the budgeted capital programme variation of £30.6m. There are no material variances in the capital forecasts on the budgets within the remit of this Committee.

- 3.4 The budget for the Babraham P&R Energy Grid will be increased by £233K to reflect an agreed commercial settlement.
- 3.5 In relation to the Swaffham Prior Community Heat Network scheme, the directors for Swaffham Prior Community Heat Network Ltd have applied to wind up the company, on the basis that its intended purpose of being a special purpose vehicle for HNIP grant has now been completed.
- 3.6 The Savings Tracker and Technical Appendices as at the end of Quarter 1 are included in the Finance Monitoring Report as Appendices 4 and 5 respectively.

## 4. Significant Implications

### 4.1 Finance Implications

This report details the financial position across Place and Sustainability.

### 4.2 Legal Implications

There are no significant implications within this category.

### 4.3 Risk Implications

There are no significant implications within this category.

### 4.4 Equality and Diversity Implications

There are no significant implications within this category.

## 5. Source documents

### 5.1 None



Directorate: Place and Sustainability  
Subject: Finance Monitoring Report – August (period 5)

## Contents

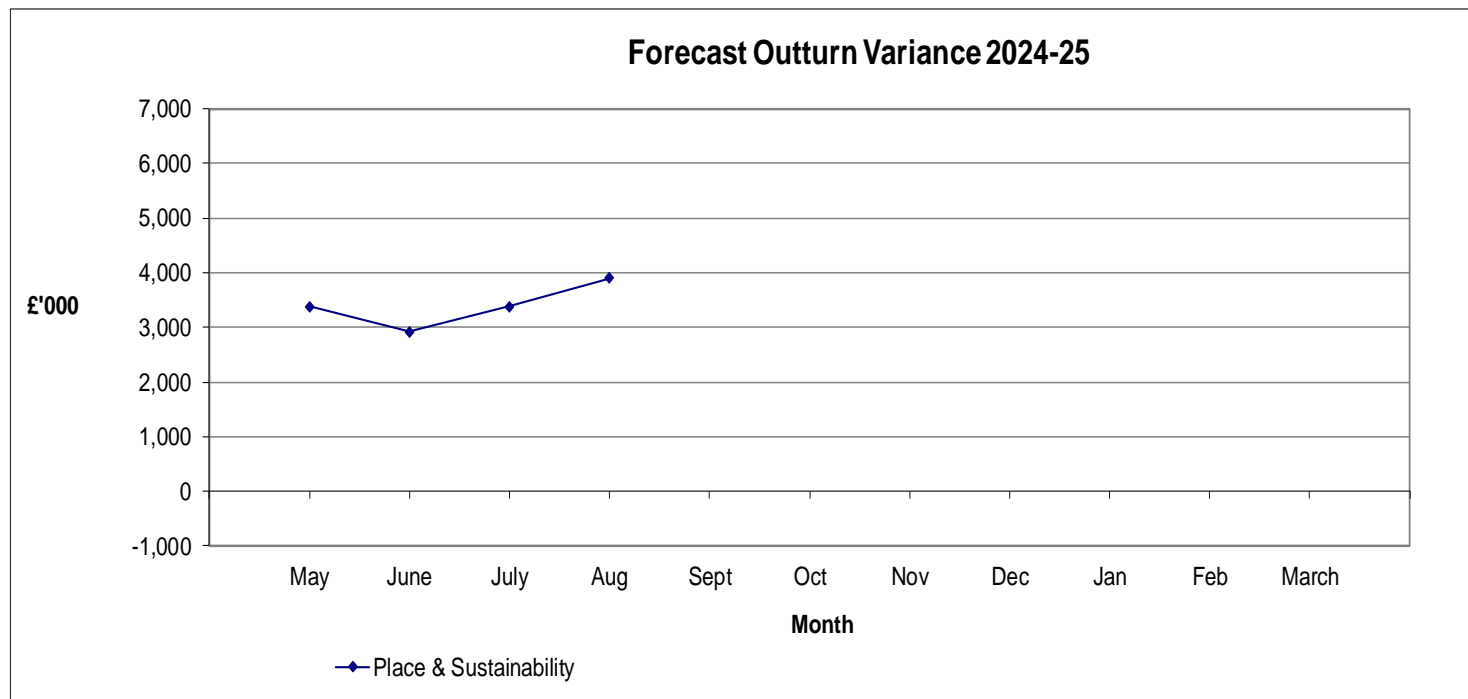
Section	Item	Description
1	Revenue Executive Summary	High level summary of information and narrative on key issues in revenue financial position
2	Capital Executive Summary	Summary of the position of the Capital programme within Place and Sustainability
3	Savings Tracker Summary	Summary of the latest position on delivery of savings
4	Technical Note	Explanation of technical items that are included in some reports
5	Key Activity Data	Performance information linking to financial position of main demand-led services
Appx 1a	Service Level Financial Information	Detailed financial tables for Place and Sustainability main budget headings
Appx 2	Service Commentaries	Detailed notes on revenue financial position of services that have a significant variance against budget
Appx 3	Capital Appendix	This contains more detailed information about the capital programme, including funding sources and variances from planned spend.
<i>The following appendices are included quarterly as the information does not change as regularly:</i>		
Appx 4	Savings Tracker	Each quarter, the Council's savings tracker is produced to give an update of the position of savings agreed in the Business Plan.
Appx 5	Technical Appendix	Each quarter, this will contain technical financial information showing: Grant income received Budget virements Earmarked & Capital reserves

# 1. Revenue Executive Summary

## 1.1 Overall Position

At the end of August 2024, Place and Sustainability is projected to be £3.9m overspent.

## 1.2 Summary of Revenue position by Directorate



## 1.2 Place and Sustainability

Forecast Outturn Variance (Previous) £000	Service Area	Gross Budget £000	Income Budget £000	Net Budget £000	Actual to date £000	Forecast Outturn Variance £000	Forecast Outturn Variance %
-200	Executive Director	1,630	-2,216	-587	-58	-200	-34.1%
-2,032	Highways & Transport	48,830	-23,167	25,663	8,546	-1,685	-6.6%
1,844	Planning, Growth & Environment	54,742	-6,143	48,600	16,477	2,016	4.1%
3,776	Climate Change & Energy Service	3,524	-5,469	-1,946	-222	3,776	194.1%
0	Community Safety and Regulatory Service	5,574	-3,404	2,169	633	0	0.0%
<b>3,388</b>	<b>Total</b>	<b>114,300</b>	<b>-40,400</b>	<b>73,900</b>	<b>25,376</b>	<b>3,906</b>	<b>5.3%</b>

### 1.3 Significant Issues

The overall position for Place and Sustainability budgets to the end of August 2024 is a forecast overspend of £3.9m. The key issues and pressures that are highlighted in this report are as follows.

**Waste Management:** The additional costs relate to the fact that the waste treatment facilities at Waterbeach that are managed through a Waste Private Finance Initiative (PFI) contract are not able to operate currently. This is because the facilities do not comply with the new Environment Agency environmental permit conditions following the introduction of the Industrial Emissions Directive and the Best Available Techniques conclusions (BATc) and waste therefore needs to be managed through separate arrangements at additional cost to the Council. Strategic options to address this issue have been assessed and an overall strategy will be recommended to members to consider during 24-25.

**Energy Projects:** The St Ives Smart Energy Grid Project is proceeding towards the reopening of the car park in September, subject to a number of works being complete. It is anticipated that electric vehicle charge points will be available in November. At the Smart Energy Grid Project at Babraham Road Park and Ride work is progressing and the next major milestone will be the works at the PPA customer's site scheduled for early October.

Regarding construction of the private wire to connect the North Angle Solar Farm, consultants have assisted the Council with securing the best available price for the electricity that will be exported to the grid.

On Swaffham Prior Heat Network, work is underway for the connection of the next tranche of homes to connect to the heat network. Progress has been slower than expected but it is too early to tell whether this will impact on the number of home connections made within the period.

**Highway Development Control and Streetworks Income:** The pressures above are partially offset by a positive forecast in the level of income projected for 24-25 in relation to Highways Development Control and Streetworks. This is due to significant activity by developers and utility providers, so an overachievement of fee income is forecast.

## 2. Capital Executive Summary

Appendix 3 reflects the changes due to:

Total Scheme Revised Budget £000	Total Scheme Forecast Variance £000	Service Area	Original 2024-25 Budget as per BP £000	Revised Budget for 2024-25 £000	Actual Spend (August) £000	Forecast Outturn Variance (August) £000
541,815	0	Highways & Transport	89,779	79,756	15,579	-3,861
28,368	0	Planning, Growth & Environment	24,693	3,378	18	0
82,526	0	Climate Change & Energy Services	9,581	10,747	1,187	10
26,289	0	Connecting Cambridgeshire	5,454	4,579	1,471	0
		Capitalisation of Interest	984	984	0	0
<b>678,998</b>	<b>0</b>	<b>Total</b>	<b>130,491</b>	<b>99,444</b>	<b>18,255</b>	<b>-3,861</b>
		Capital Programme variations	-30,810	-30,605	0	3,861
		<b>Total including Capital Programme variations</b>	<b>99,681</b>	<b>68,839</b>	<b>18,255</b>	<b>0</b>

Details for all capital schemes are shown in Appendix 3.

## 3. Savings Tracker Summary

The savings trackers are produced quarterly to monitor delivery of savings against agreed plans. The first quarterly savings tracker for 2024-25 is included in Appendix 4.

## 4. Technical note

On a quarterly basis, a technical financial appendix will be included as Appendix 5. This appendix covers:

- Grants that have been received by the service, and where these have been more or less than expected.
- Budget movements (virements) into or out of the directorate from other directorates, to show why the budget might be different from that agreed by Full Council.
- Service earmarked reserves – funds held for specific purposes that may be drawn down in-year or carried-forward – including use of funds and forecast draw-down.



## Appendix 1 – Place and Sustainability Detailed Financial Information

Forecast Outturn Variance (Previous)  £000	Committee	Note	Budget Line	Gross Budget  £000	Income Budget  £000	Net Budget  £000	Actual to date  £000	Forecast Outturn Variance  £000	Forecast Outturn Variance  %
<b>Executive Director</b>									
-200		1	Executive Director	1,630	-2,216	-587	-58	-200	-34%
<b>-200</b>			<b>Executive Director Total</b>	<b>1,630</b>	<b>-2,216</b>	<b>-587</b>	<b>-58</b>	<b>-200</b>	<b>-34%</b>
<b>Highways &amp; Transport</b>									
<b>Highways Maintenance</b>									
0			Asst Dir - Highways Maintenance	122	0	122	86	0	0%
-33		2	Highway Maintenance	11,020	-143	10,877	3,482	284	3%
-107		3	Highways Asset Management	1,353	-453	900	563	-138	-15%
0			Winter Maintenance	3,262	0	3,262	96	0	0%
<b>Project Delivery</b>									
0			Asst Dir - Project Delivery	-4	0	-4	298	0	0%
0			Project Delivery	498	-11	487	306	0	0%
-337		4	Street Lighting	13,121	-4,073	9,048	2,253	-393	-4%
<b>Transport, Strategy &amp; Development</b>									
0			Asst Director - Transport, Strategy & Development	140	0	140	61	0	0%
-102		5	Traffic Management	4,354	-4,284	71	598	-302	-428%
129		6	Road Safety	1,242	-846	397	151	290	73%
51			Transport Strategy and Policy	881	-816	64	746	25	39%
-1,700		7	Highways Development Management	2,664	-2,664	0	-875	-1,700	0%
0		8	Park & Ride	2,638	-2,338	300	1,052	183	61%
67			Parking Enforcement	7,539	-7,539	0	-269	67	0%
<b>-2,032</b>			<b>Highways &amp; Transport Total</b>	<b>48,830</b>	<b>-23,167</b>	<b>25,663</b>	<b>8,546</b>	<b>-1,685</b>	<b>-7%</b>
<b>Planning, Growth &amp; Environment</b>									
0			Asst Dir - Planning, Growth & Environment	189	0	189	84	13	7%
0		9	Planning and Sustainable Growth	2,013	-787	1,226	557	148	12%

Forecast Outturn Variance (Previous)  £000	Committee	Note	Budget Line	Gross Budget  £000	Income Budget  £000	Net Budget  £000	Actual to date  £000	Forecast Outturn Variance  £000	Forecast Outturn Variance  %
0			Natural and Historic Environment	2,031	-1,074	957	341	11	1%
1,844		10	Waste Management	50,509	-4,281	46,227	15,495	1,844	4%
<b>1,844</b>			<b>Planning, Growth &amp; Environment Total</b>	<b>54,742</b>	<b>-6,143</b>	<b>48,600</b>	<b>16,477</b>	<b>2,016</b>	<b>4%</b>
<b>Climate Change &amp; Energy Service</b>									
-102		11	Climate and Energy Services	386	-263	123	130	-102	-83%
3,878		12	Energy Services	3,138	-5,207	-2,069	-352	3,878	187%
<b>3,776</b>			<b>Climate Change &amp; Energy Service Total</b>	<b>3,524</b>	<b>-5,469</b>	<b>-1,946</b>	<b>-222</b>	<b>3,776</b>	<b>194%</b>
<b>Community Safety and Regulatory Service</b>									
0			Registration & Citizenship Services	1,271	-2,050	-780	-416	0	0%
0			Coroners	3,468	-1,232	2,237	850	0	0%
0			Trading Standards	835	-122	713	198	0	0%
<b>0</b>			<b>Community Safety and Regulatory Service Total</b>	<b>5,574</b>	<b>-3,404</b>	<b>2,169</b>	<b>633</b>	<b>0</b>	<b>0%</b>
<b>3,388</b>			<b>Overall Place and Sustainability Total</b>	<b>114,300</b>	<b>-40,400</b>	<b>73,900</b>	<b>25,376</b>	<b>3,906</b>	<b>5%</b>

## Appendix 2 – Service Commentaries on Forecast Outturn Position

Narrative is given below where there is a forecast variance greater than 2% of net budget or £100,000 whichever is greater for a service area.

Note	Commentary vs previous month	Service Area / Budget Line	Net Budget  £000	Forecast Outturn Variance  £000	Forecast Outturn Variance  %	Commentary
1	Unchanged	Executive Director	-587	-200	-34%	Forecast vacancy savings exceed the budget set in the Business Plan.
2	Updated	Highways Maintenance	10,877	284	3%	The Business Case for the Highways Material Recycling Facility is being reviewed and updated and it is unlikely that savings will be made this financial year. This is being mitigated through increased level of income from highway development control.
3	Updated	Highways Asset Management	900	-138	-15%	Forecast underspend in safety inspection support and vehicles.
4	Updated	Street Lighting	9,048	-393	-4%	The forecast saving reflects reduced expected energy savings to be achieved by the delayed installation of LED lanterns starting in Autumn 2024 as part of the County Councils LED lantern replacement project. This budget forecast has also been reduced to reflect the forecasted reduction in expenditure due to lower than expected energy inflation figures, which were included in the budget for 2024-25.
5	Updated	Traffic Management	71	-302	-428%	The forecast is due to additional income from road closures and openings, and utility companies staying on highways for extended time, partly offset with the loss of income from providing Tables and Chairs licences.
6	Updated	Road Safety	397	290	73%	The forecast reflects a decrease in the number of Road Safety Audit requests coming in from external clients. There are a number of factors that can influence this, reduced Highway Development work by contractors, contractual agreements with external competitors continuing to use other providers.
7	Unchanged	Highways Development Management	0	-1,700	0%	Forecast income for Highways Development Management (HDM) team in 2024-25 is assessed based on income generated in 2023-24 and in first three months of 2024-25. Further:

Note	Commentary vs previous month	Service Area / Budget Line	Net Budget  £000	Forecast Outturn Variance  £000	Forecast Outturn Variance  %	Commentary
						<ul style="list-style-type: none"> <li>Bond rates (and by extension S.38 fees) increased (as of April 2024) by 15-20% dependent on nature of infrastructure. The increase in rates is proportionate to inflation in construction costs as benchmarked by Milestone.</li> <li>More robust planning of pre-application fee recovery to take place.</li> <li>More robust fee recovery for developer temporary directional signs to take place.</li> <li>Potential S.184 income to facilitate new S01/S02 roles.</li> <li>Gradual realisation of the commuted sum policy of April 2023 as sites come through the development pipeline.</li> <li>Interim / consultant fees should drop by around ~£200,000 in 2024-25.</li> </ul>
8	New	Park & Ride	300	183	61%	The Business Rates liability for the Trumpington Park and Ride site has grown due to the expansion of the site in 2019. Around £150k of the variance shown reflects this year's additional liability and backdating of previous years liability to 2019. The remainder of the variance is due to the increase in Business Rates from last year.
9	New	Planning and Sustainable Growth	1,226	148	12%	The forecast pressure shown relates to delayed legal fees in relation to the Envar appeal not going through as anticipated in 23/24 and a reduction of planning income from major County Council planning schemes.
10	Unchanged	Waste Management	46,227	1,844	4%	The forecast pressure is due to two main factors, (1) The waste plants will not become operational near the end of the financial year. This was previously assumed but the options assessment exercise highlights that this may not be in the best interest of the council in the long term and therefore a revised strategy is being developed for members to consider, and (2) no additional operational savings are assumed in excess of the commercial settlement and any additional operational savings will be wrapped up in the future contract costs.

Note	Commentary vs previous month	Service Area / Budget Line	Net Budget  £000	Forecast Outturn Variance  £000	Forecast Outturn Variance  %	Commentary
11	Unchanged	Climate & Energy Services	123	-102	-83%	The forecast saving is due to the removal of an agency staff requirement from the Climate Change and Energy Service staff budget and charging this directly to a funded project.
12	Unchanged	Energy Services	-2,069	3,878	187%	<p>Across the energy schemes there is a forecast variance shortfall of £3,878k, explanations are below. This is the same as the previous month:-</p> <p><b>St Ives:-</b> The project is forecasting an overall £212k saving to the Council this year due to the project delay. This is made up of a saving of £341k of debt charges this year minus the projected income shortfall of £129k as a result of the delay. The project delay is due to the main contractor identifying the need for remediation works. The current programme is forecast to start generating in December 24.</p> <p><b>Babraham:</b> Income generation is delayed due to similar main-contractor issues as described above. Generation should start in February 2025 in-line with their current expected programme. This means approximately £60k of net income is forecast (a forecast shortfall of £402k). Although there are also savings on debt charges of £233k, it still leaves a net pressure of £169k on the scheme for 24-25.</p> <p><b>North Angle:</b> As previously reported, the wholesale electricity price forecasts for 2024 for exporting electricity to the grid have fallen substantially. The expected UKPN connection date for the private wire is scheduled for end of August and for NASF for end of September. This will then allow electricity to be exported however the mobilisation phase is several weeks to reach full export capacity. The income reduction of £3,234k is a combination of factors including the market price reduction per Kwh of electricity and longer timescales for connecting to the grid for both the private wire and NASF largely due to third party issues. This has a significant impact on income due to the fact that</p>

Note	Commentary vs previous month	Service Area / Budget Line	Net Budget  £000	Forecast Outturn Variance  £000	Forecast Outturn Variance  %	Commentary
						<p>generating and exporting will now be past the peak summer months.</p> <p><b>Swaffham Prior:</b> The forecast worst case scenario shortfall in May 24 was £1,009k. This had improved to £712k in July 24 following a review of the forecast income to be received from heat and the Renewable Heat Incentive (RHI) and a review of the input electricity costs. The input electricity costs have been high during 2023 and 2024 as the heat network is drawing electricity from the grid plus limitations on the ground source heat pump operations reducing RHI income as an interim position. The other reason is that whilst waiting for the private wire connection, the number of customers able to connect to the heat network has been constrained. To date 64 compared to a forecast 130 homes have been connected during 2023-24. Actual income will depend on the rate of connection sign ups, construction programme and the actual private wire connection date. Work is underway to connect further homes in 2024-25.</p>

## Appendix 3 – Capital Position

### 3.1 Capital Expenditure

Scheme Budget £000	Scheme Forecast Variance £000	Committee	Scheme	Original 2024-25 Budget as per Business Plan £000	Budget Changes in Year £000	Revised Budget for 2024-25 £000	Actual Spend (August) £000	Forecast Variance Outturn (August) £000
			<b>Integrated Transport</b>					
125	0	H&T	Air Quality Monitoring	25	0	25	1	0
5,048	0	H&T	Local Infrastructure Improvements	895	471	1,366	337	-213
77	0	H&T	Minor improvements for accessibility and Rights of Way	0	77	77	10	0
2,800	0	H&T	Safety Schemes	600	24	624	28	-504
880	0	H&T	Safety Schemes – Swaffham Heath Crossroad	0	772	772	53	0
850	0	H&T	Safety Scheme – Puddock Road	0	517	517	39	-226
2,725	0	H&T	Strategy and Scheme Development work	545	182	727	267	0
6,860	0	H&T	Delivering the Transport Strategy Aims	1,546	84	1,630	292	0
1,045	0	H&T	Bar Hill to Northstowe Cycle Route	992	-559	433	11	0
26,000	0	H&T	Annual Contribution to A14 upgrade	1,040	0	1,040	0	0
			<b>Operating the Network</b>					
36,720	0	H&T	Carriageway & Footway Maintenance incl. Cycle Paths	7,050	104	7,154	1,507	-624
1,175	0	H&T	Rights of Way	235	0	235	68	0
10,690	0	H&T	Bridge Strengthening	2,347	476	2,823	622	0
3,545	0	H&T	Traffic Signal Replacement	778	-98	680	307	0
835	0	H&T	Smarter Travel Management - Int Highways Man Centre	183	-9	174	35	0
500	0	H&T	Traffic Signals Green Light Fund (GLF)	0	500	500	0	0
124	0	H&T	Traffic Signals Obsolescence Grant TSOG)	0	124	124	0	0
			<b>Highways &amp; Transport</b>					
			<b>Highways Maintenance</b>					
40,985	0	H&T	Pothole Grant Funding	7,829	0	7,829	3,896	0
4,728	0	H&T	Additional Highways Maintenance (HS2 allocation)	2,364	479	2,843	-24	0
20,000	0	H&T	Footways	4,000	430	4,430	1,343	120
24,750	0	H&T	A14 De-trunking	4,000	4,561	8,561	321	-2,568
2,500	0	H&T	Highways Materials Recycling	2,200	-2,125	75	35	-75
40,000	0	H&T	Further Highways Prioritisation	20,000	0	20,000	1,748	0
950	0	H&T	Essential Works on Guided Busway	950	0	950	0	0
1,250	0	H&T	Step Survey and Works	250	0	250	0	0
			<b>Project Delivery</b>					
49,006	0	H&T	Ely Crossing	0	47	47	-720	0
145,952	0	H&T	Guided Busway	2,747	-2,747	0	22	0
4,690	0	H&T	Cambridge Cycling Infrastructure	203	214	417	17	0
33,500	0	H&T	King's Dyke	0	-3,348	-3,348	143	0
1,181	0	H&T	Emergency Active Fund	0	72	72	56	0



Scheme Budget £000	Scheme Forecast Variance £000	Committee	Scheme	Original 2024-25 Budget as per Business Plan £000	Budget Changes in Year £000	Revised Budget for 2024-25 £000	Actual Spend (August) £000	Forecast Variance Outturn (August) £000
1,883	0	H&T	Wisbech Town Centre Access Study	0	109	109	31	0
6,795	0	H&T	Wheatsheaf Crossroads	5,020	-4,618	402	20	0
7,901	0	H&T	March Future High Street Fund and Broad Street	1,996	1,052	3,048	1,749	0
7,905	0	H&T	St Neots Future High Street Fund	5,524	-2,671	2,853	923	14
3,329	0	H&T	March Area Transport Study - Main schemes	377	-272	105	196	0
7,000	0	H&T	March Area Transport Study Phase 2	0	400	400	0	0
2,740	0	H&T	St Ives local Improvements	1,015	-201	814	389	493
6,000	0	H&T	A141 and St Ives Improvement	3,072	-1,770	1,302	229	0
4,000	0	H&T	A10 Ely to A14 Improvements	1,532	-708	824	86	0
550	0	H&T	Witchford A10 Non-Motorised Users	0	230	230	61	52
2,860	0	H&T	Transforming Cities Fund	0	829	829	365	-31
2,891	0	H&T	Southern Busway Widening – widening of maintenance track	2,441	-1,740	701	614	156
1,230	0	H&T	Soham Wicken Non-Motorised Users	924	31	955	12	-455
1,192	0	H&T	Active Travel 4	0	427	427	68	-10
1,100	0	H&T	Active Travel 4 – Extension	0	1,100	1,100	0	0
13,283	0	H&T	Street Lighting LED	7,099	-2,822	4,277	10	0
			<b>Transport Strategy and Network Development</b>					
1,665	0	H&T	CaPCAM and Electric Vehicles	0	353	353	412	0
			<b>Planning, Growth &amp; Environment</b>					
8,000	0	E&GI	Waste Infrastructure	5,521	-2,143	3,378	8	0
20,367	0	E&GI	Waterbeach Waste Treatment Facilities	18,338	-18,338	0	10	0
1	0	E&GI	Reallocation and funding of cost cap for Northstowe phase 1	834	-834	0	0	0
			<b>Climate Change &amp; Energy Services</b>					
14,170	0	E&GI	Swaffham Prior Community Heat Scheme	2,730	-1,530	1,200	162	0
5,686	0	E&GI	St Ives Smart Energy Grid Demonstrator scheme	0	475	475	6	0
9,065	0	E&GI	Babraham Smart Energy Grid	1,287	1,824	3,111	355	0
8,595	0	E&GI	Stanground Closed Landfill Energy Project	0	40	40	-15	0
150	0	E&GI	Woodston Closed Landfill Energy Project	0	0	0	0	0
32,649	0	E&GI	North Angle Solar Farm, Soham	3,478	343	3,821	649	0
635	0	E&GI	Fordham Renewable Energy Network Demonstrator	0	0	0	0	0
3,047	0	E&GI	Environment Fund - Decarbonisation Fund - School Low Carbon Heating Programme	1,919	-69	1,850	0	0
500	0	E&GI	Environment Fund - Oil Dependency	167	0	167	0	0
300	0	E&GI	Treescape Fund (Natural capital)	0	31	31	7	0
3,145	0	E&GI	School Ground Source Heat Pump Projects	0	52	52	15	0
157	0	E&GI	Cambridge Electric Vehicle Chargepoints - On-street	0	0	0	-47	0
928	0	E&GI	Alconbury Civic Hub Solar Car Ports	0	0	0	10	10
3,499	0	E&GI	Environment Fund- Decarbonisation Fund - School Education Capital	0	0	0	45	0
			<b>Connecting Cambridgeshire</b>					
26,289	0		Connecting Cambridgeshire	5,454	-875	4,579	1,471	0
3,162	0		Capitalisation of Interest	984	0	984	0	0
<b>682,160</b>	<b>0</b>			<b>130,491</b>	<b>-31,047</b>	<b>99,444</b>	<b>18,255</b>	<b>-3,861</b>
-98,433			Capital Programme variations	-30,810	205	-30,605	0	3,861

Scheme Budget	Scheme Forecast Variance	Committee	Scheme	Original 2024-25 Budget as per Business Plan	Budget Changes in Year	Revised Budget for 2024-25	Actual Spend (August)	Forecast Variance Outturn (August)
£000	£000			£000	£000	£000	£000	£000
583,727	0		Total including Capital Programme variations	99,681	-30,842	68,839	18,255	0

The table above outlines the results of a thorough review that has been undertaken for each scheme to provide a profile that is based on an assessment of risk and deliverability. Based on this reprofiling, there are two schemes with significant variances (>£250k) to report.

The schemes with a significant variance (>£250k) either due to changes in phasing or changes in overall scheme costs to be reported this month can be found below.

Ref	Directorate/Committee	Commentary vs previous month	Scheme	Scheme Budget	Budget for 2024-25	Forecast Outturn Variance	Cause	Commentary
				£000	£000	£000		
a	H&T	New	Safety Schemes	2,800	600	-504	Slippage	The safety schemes budget has been identified as a critical fund for the International Road Assessment Programme (iRAP). The iRAP report has been delayed and is now due to be published for the December Committee Cycle. Once the iRAP report has been analysed and schemes identified this fund will be used to begin the programme of small works around the iRAP aspirations of creating safer roads and roads side supporting our Vision Zero values.
b	H&T	Updated	Carriageway & Footway Maintenance incl. Cycle Paths	36,720	7,154	-624	Slippage	This slippage relates to two projects c.£550k is linked to a surfacing project which can't commence until a GCP funded scheme has been completed. This scheme has now moved into delivery in 25/26, so this funding has been moved accordingly, c.£60k is linked to a footway project which upon further investigation requires significantly more funding than has been allocated, this will be reprofiled for delivery in 25/26 also, with further funding assigned.
c	H&T	Unchanged	A14 De-trunking	24,750	8,561	-2,568	Slippage	The 24-25 contained an allowance of 30% for risk and optimism bias due to CCC not knowing what state the asset would be in when handover from National Highways was completed. This hasn't yet been applied to the figure in the FMR, which has now been adjusted to account for this.

								<p>Of the total amount Structures have been assigned c.£3.2m for spend in 24-25 of the £8.5m, following a check and challenge of this budget, it has emerged that most schemes will be in development &amp; design through 24-25 and will not be ready for delivery until 25-26 FY. £750k identified for spend in 24-25 from this budget.</p> <p>To mitigate underspend against previous forecast as much as possible the team are actively working to identify further projects which could be designed and delivered before the end of 24-25.</p>
d	H&T	New	St Ives Local Improvement	2,740	814	493	Ahead of profile	Additional schemes are being delivered in FY24-25 following discussion with the scheme funder due to available funding and resource.
e	H&T	New	Soham Wicken Non-Motorised Users	1,230	955	-455	Slippage	Planned construction start date has been delayed pending further survey work and licencing requirements for protected species along the route. Work is anticipated to commence in 24-25, with completion early in 25.26.

### 3.2 Capital Variations Budget

Variation budgets are set annually and reflect an estimate of the average variation experienced across all capital schemes, and reduce the overall borrowing required to finance our capital programme. There are typically delays in some form across the capital programme due to unforeseen events, but we cannot project this for each individual scheme. We therefore budget centrally for some level of delay. Any known delays are budgeted for and reported at scheme level. If forecast underspends are reported, these are offset with a forecast outturn for the variation budget, leading to a balanced outturn overall up to the point when rephasing exceeds this budget.

### 3.3 Capital Funding

Original 2024-25 Funding Allocation as per Business Plan  £000	Source of Funding	Budget Carried- forward 2024-25  £000	Budget Revisions 2024-25  £000	Revised Budget for 2024-25  £000	Forecast Spend - Outturn (August)  £000	Forecast Variance - Outturn (August)  £000
13,672	Local Transport Plan	4,552	-2,065	16,159	15,377	-782
14,693	Other DfT Grant Funding	2,602	921	18,216	15,768	-2,448
10,435	Other Grants	952	-5,954	5,433	5,433	0
5,149	Developer Contributions	276	-974	4,451	4,451	0
73,097	Prudential Borrowing	5,515	-39,047	39,545	38,880	-665
13,465	Other Contributions	3,637	-1,462	15,640	15,674	34
-30,810	Capital Programme Variations	0	205	-30,605	-26,744	3,861
<b>99,681</b>	<b>Total including Capital Programme Variations</b>	<b>17,534</b>	<b>-48,376</b>	<b>68,839</b>	<b>68,839</b>	<b>0</b>

## Appendix 4 – Savings Tracker

### 4.1 Place & Sustainability Savings Tracker 2024-25 Quarter 1

Directorate	Committee	Type	Business Plan Reference	Title	Planned Savings 2024-25 £000	Forecast Savings £000	Variance from Plan £000	% Variance	RAG	Forecast Commentary
P&S	H&T	2024-25 saving	C/R.6.221	Street lighting energy savings	-977	-166	811	83%	Red	<p>The energy calculation in the previous forecast was based upon has been updated taking account of the rates on the new energy framework. The current projections are that the energy costs will reduce by c.40% hence the reduction in return on investment. This risk has always been key to business case in relation to payback, clearly this can fluctuate throughout the year, but this is the latest information available to CCC.</p> <p>Delay to LED programme now due to start in September due to slow DoV sign of by PFI provider. Although the LEDs will not make the whole saving, the reduction in electricity costs means that there is not actually an overall pressure this year.</p>
P&S	H&T, E&GI, CSMI	2024-25 saving	C/R.6.231	Management efficiencies	-75	0	75	100%	Black	Savings from the restructure will not be met through staffing changes due to the related one-off costs, and instead the savings will be met in year by vacancy savings for the teams. Savings will be fully achieved in future years.
P&S	H&T	2024-25 income	C/R.7.102	Review and re-baselining of P&S income	-400	-400	0	0%	Green	On track
P&S	E&GI	2023-24 cfwd	C/R.7.106 (2023-24)	St Ives Smart Energy Grid - Income Generation	-116	-34	82	71%	Amber	The project is due to energise end of November 2024 to export electricity to the grid until on-site demands are connected and supplied. This project will supply wholesale electricity to the grid and retail electricity to customers on site via EV charging and direct supply. Wholesale electricity prices have reduced since last year reflecting market changes and hence the income reductions.

Directorate	Committee	Type	Business Plan Reference	Title	Planned Savings 2024-25 £000	Forecast Savings £000	Variance from Plan £000	% Variance	RAG	Forecast Commentary
P&S	E&GI	2023-24 cfwd	C/R.7.107 (2023-24)	Babraham Smart Energy Grid - Income Generation	-462	-60	402	87%	Amber	Two thirds of the smart energy grid is complete and the last third under construction. The timeline for energisation has shifted to February 2025 due to the private wire connection final works at CUH, being shifted back to October 2024. Electricity not used on the park and ride for EV charging and lighting will be sold directly by private wire to CUH to supplement their requirements.
P&S	E&GI	2023-24 cfwd	C/R.7.109 (2023-24)	North Angle Solar Farm, Soham - Income Generation	-3,943	-709	3,234	82%	Red	The wholesale electricity price forecasts for exporting electricity to the grid reduced at the end of 2023 impacting income forecasts by almost 50%. In addition, a short delay connecting the private wire and NASF to the distribution network and a ramping up of generation export from 20%-100% over time, impacts the overall income forecasts for 24/25. This is the mobilisation of a significant power station.
P&S	E&GI	2023-24 cfwd	C/R.7.110 (2023-24)	Swaffham Prior Community Heat Scheme - Income Generation	-521	-181	340	65%	Red	64 homes are connected and further connections will be made ahead of and during the heating season supported by the private wire which is due to energise August/Sept. The private wire provides the additional electrical capacity for further home connections. The project is behind its forecast connection programme in part due to the connection of the additional electrical capacity.
P&S	CSMI	2024-25 income	C/R.7.140	Recharge for shared regulatory services with Peterborough City Council	-68	-68	0	0%	Green	On track
P&S	CSMI	2024-25 income	C/R.7.143	Increased income from registration services	-125	-94	31	25%	Amber	Additional revenue from new bespoke ceremonies, and statutory fee increases is on track to meet saving target. Reporting as Amber as ceremony revenue from Approved Venues is down as they are experiencing a downturn in the market, this outside the control of the council.

Directorate	Committee	Type	Business Plan Reference	Title	Planned Savings 2024-25 £000	Forecast Savings £000	Variance from Plan £000	% Variance	RAG	Forecast Commentary
P&S	E&GI	2024-25 income	C/R.7.147	Connecting Cambridgeshire - additional funding	-16	-16	0	0%	Green	On track
P&S	H&T	2024-25 income	C/R.7.150	Application of Parking Surplus	-512	-512	0	0%	Green	Changes to be implemented in March 24
P&S	H&T	2024-25 income	C/R.7.203	Surplus income other parking fees and permits	-129	-129	0	0%	Green	Changes to be implemented in April 24
P&S	H&T	2024-25 income	C/R.7.204	Street works permitting fees	-158	-158	0	0%	Green	Income predicted to roll forward on same basis as in 2023/24 with current high levels of applications for street works / TTROs.

Directorate	Committee	Type	Business Plan Reference	Title	Planned Savings 2024-25 £000	Forecast Savings £000	Variance from Plan £000	% Variance	RAG	Forecast Commentary
P&S	H&T	2023-24 cfwd	B/R.6.220 (2023-24)	Highways Materials Recycling	-100	0	100	100%	Black	<p>This package of work has been taken on by Project Delivery from February 24 and we are working up a detailed business case with the supply chain to validate assumptions made in business planning.</p> <p>Key risk to this projected saving:</p> <ul style="list-style-type: none"> <li>- We are talking about a temporary facility in March at this time which is restricted by planning and licencing, in particular impacting productivity due to constraints on scale.</li> <li>- An operational facility should the business case stack up will not be in place until August at the earliest. We would then need a programme of revenue funded work which would align to the material being produced, (note this could be difficult as the majority of this work is to some extent reactive with specific timescales for completion).</li> <li>- The rest of the work where this material would be used is capitally funded, so any savings allocated to the use of this recycled material would result in more work being done on site, rather than a revenue saving.</li> <li>- Any revenue subsidised by making use of income through selling of the material to third parties only comes should we have plans for a larger scale operation and is dependent on a full business case being produced which provides certainty around the market for the product given the upfront investment required.</li> </ul>



Directorate	Committee	Type	Business Plan Reference	Title	Planned Savings 2024-25 £000	Forecast Savings £000	Variance from Plan £000	% Variance	RAG	Forecast Commentary
P&S	H&T	2024-25 saving	C/R.6.220	Highways recycling of waste to reduce waste disposal costs	-150	0	150	100%	Black	<p>This package of work has been taken on by Project Delivery from February 24 and we are working up a detailed business case with the supply chain to validate assumptions made in business planning.</p> <p>Key risk to this projected saving:</p> <ul style="list-style-type: none"> <li>- We cannot proceed presently with dewatering at the current time as there is a need for a permanent setup which drains into a third parties system.</li> <li>- There is not enough space within the depot footprint for this facility in March plus room to store road plannings for recycling (on a scale needed to make cold recycling process more viable commercially).</li> <li>- There would be a saving in the cost of disposal of non-hazardous waste as opposed to hazardous should a solution come online at a later date.</li> <li>- The aspirations on both options was to have a super depot which had enough space for permanent facilities.</li> </ul>

### Key to RAG ratings

Total Savings	Over 500k	100-500k	Below 100k
<b>Black</b>	100% non-achieving	100% non-achieving	100% non-achieving
<b>Red</b>	% variance more than 19%	-	-
<b>Amber</b>	Underachieving by 14% to 19%	% variance more than 19%	% variance more than 19%
<b>Green</b>	% variance less than 14%	% variance less than 19%	% variance less than 19%
<b>Blue</b>	Over-achieving	Over-achieving	Over-achieving

## Appendix 5 – Technical Appendix

### 5.1 Grant Income Analysis

The table below outlines the additional Place and Sustainability grant income, which is not built into base budgets.

Grant	Awarding Body	Amount £000
<b>Grants as per Business Plan</b>		
Street Lighting PFI credits	DLUHC	3,944
Waste PFI grant	DLUHC	2,570
Bikeability	DFT	413
Public Health	Other	205
Woodland Creation	DEFRA	150
Non-material grants (+/- £60k)	Various	166
<b>Total Non-Baselined Grants 24-25</b>		<b>7,449</b>

### 5.2 Virements and Budget Reconciliation

Virements between Place and Sustainability and other service blocks

	£'000	Notes
<b>Budget as per Business Plan (BP)</b>	72,799	
Waste Disposal including PFI	100	Adjust Legal budget P&S with Waste
Energy Services	1,001	North Angle and Swaffham Prior debt charges budget correction
<b>Current Budget 2024-25</b>	<b>73,900</b>	

## 5.3 Reserves Schedule

### 5.3.1 Place and Sustainability Earmarked Reserve Schedule

Fund Description / Budget Heading	Opening Balance 2024-25  £000	Movemen t2024-25  £000	Balance at 30 <sup>th</sup> June 2024  £000	Yearend Forecast Balance  £000	Notes
<b>Other Earmarked Funds</b>					
<b>Strategic Framework Priorities Reserves:</b>					
Directorate priorities	1,469	0	1,469	1,156	Funding highways apprenticeships for 3 years and directorate led priorities
<b>Corporate risk reserves relating to services in this directorate:</b>					
Waste risks	1,000	0	1,000	0	To cover landfill tax costs
Coroners risks	255	0	255	0	Reserve specifically held for complex cases.
Other risk reserves	68	0	68	38	
<b>Ringfenced Reserves:</b>					
Developer commuted sums	5,769	-3,491	2,278	2,196	Amount for future maintenance held as agreed with developers
Ringfenced account	2,854	0	2,854	2,089	Surpluses for on-street parking to be used on Highways related work
Proceeds of crime	184	0	184	0	
Connecting Cambridgeshire	65	0	65	0	
Other ringfenced contributions	110	412	522	472	
<b>TOTAL EARMARKED RESERVES</b>	<b>11,775</b>	<b>-3,079</b>	<b>8,696</b>	<b>5,951</b>	

### 5.3.2 Place and Sustainability Capital Reserve Schedule

Fund Description / Budget Heading	Opening Balance 2024-25  £000	Movemen t2024-25  £000	Balance at 30 <sup>th</sup> June 2024  £000	Yearend Forecast Balance  £000	Notes
<b>Capital Reserves</b>					
Capital Grants	25,445	0	25,445	18,736	
Capital Contributions	749	-412	337	321	
<b>TOTAL CAPITAL RESERVES</b>	<b>26,194</b>	<b>-412</b>	<b>25,782</b>	<b>19,057</b>	





## Environment and Green Investment Committee Agenda Plan

Published on 2 September 2024

### Notes

The definition of a key decision is set out in the Council's Constitution in Part 2, Article 12.

\* indicates items expected to be recommended for determination by full Council.

+ indicates items expected to be confidential, which would exclude the press and public.

The following are standing agenda items which are considered at every Committee meeting:

- Minutes of previous meeting and Minutes Action Log
- Agenda Plan, Training Plan and Appointments to Outside Bodies and Internal Advisory Groups and Panels

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
03/10/24	Climate Change and Environment Strategy – Progress and Annual Carbon Footprint Report	E Bolton / S Wilkinson	2024/083	23/09/24	25/09/24
	School Low Carbon Heating Projects and Stretham Primary School Low Carbon Heat Project approval	C Parkin	2024/073		
	Finance Monitoring Report – August 2024	S Heywood	Not applicable		
28/11/24	Connecting Cambridgeshire Programme Annual Progress Report	C Clulow	Not applicable	18/11/24	20/11/24
	Community Energy Action Plan	C Parkin	2024/084		
	Finance Monitoring Report – October 2024	S Heywood	Not applicable		

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
	Performance Monitoring Report – Quarter 2 (2024-25)	R Springbett	Not applicable		
	Milton Household Waste Recycling Centre Redevelopment	A Smith	2024/069		
	Risk Update	F Jordan / P Gell	Not applicable		
	Performance Monitoring Report – Quarter 1 (2024-25)	R Springbett	Not applicable		
	North East Cambridge	T Watkins	Not applicable		
16/01/25	Scrutiny of Draft Business Plan and Budget	F Jordan	Not applicable	06/01/25	08/01/25
	Biodiversity Strategy	P Clark	Not applicable		
	Fens Reservoir and Lincs Reservoir NSIP Proposals	A Tithecott / T Watkins	Not applicable		
	Trees and Woodland Strategy – Progress and Target Update	P Clark	Not applicable		
13/03/25	Climate Change and Environment Strategy – Progress and Annual Carbon Footprint Report	E Bolton / S Wilkinson	Not applicable	03/03/25	05/03/25
	Finance Monitoring Report – January 2025	S Heywood	Not applicable		
	Performance Monitoring Report – Quarter 3 (2024-25)	R Springbett	Not applicable		
	Kingsway Solar Farm NSIP Proposals	D Carford	Not applicable		
	Grimsby to Walpole NSIP Proposals	A Tithecott	Not applicable		
12/06/25	Notification of Chair and Vice-Chair	J Harron	Not applicable	02/06/25	04/06/25

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
	Finance Monitoring Report - Outturn 2024-25	S Heywood	Not applicable		
	Performance Monitoring Report – Quarter 4 (2024-25)	R Springbett	Not applicable		

Please contact Democratic Services ([democraticservices@cambridgeshire.gov.uk](mailto:democraticservices@cambridgeshire.gov.uk)) if you require this information in a more accessible format.



