East Cambridgeshire District Council

Climate and Nature Action Plan and Monitoring Report 2024

[draft for Finance and Assets Committee 27 June 2024]

Contents

1. Highlights Report (June 2024)

Achievements 2023-24

1.1. East Cambridgeshire District Council remains committed to tackling climate change and bringing back nature to East Cambridgeshire. It is pleased to publish this annual report of our activities in the past year and our planned actions for the coming 12 months. In summary, the highlights from 2023-24 for this 2024 annual report are as follows.

1.2. Helping to ***Bring Back Nature*** to East Cambridgeshire, in the period June 2023-May 2024 the Council:

- Awarded more than £60,000 towards ***18 community nature projects*** across East Cambridgeshire, delivering new ponds, tree planting, hedgerow planting, bird and bat box installations, churchyard restoration, wildflower sowing and much more!
- Committed to the ***long-term recovery of hedgehogs*** in the district, after the public voted (August 2023) for hedgehogs as the species most wanted to be supported.
- ***Gave away 75 oak trees to 21 communities*** to mark the King's Coronation and 75th Birthday.
- Set up a ***Biodiversity Net Gain system in our planning department***, meaning all new development now must deliver a gain for nature as part of their planning applications. This included funding the recruitment of the Council's first ever senior ecologist.

1.3. Helping to ***tackle climate change***, in the period June 2023-May 2024 the Council:

- Commenced the use of Hydrotreated Vegetable Oil (HVO) fuel in all our refuse collection vehicles from April 2024. HVO fuel has the potential to more than ***halve*** the Council's entire carbon emissions.
- Reduced the amount of paper we use by more than a third in a year! That's a whopping ***250,000 less sheets of paper used***. If stacked up, it would exceed the height of four adult giraffes standing on top of each other!
- ***Reduced our electricity bill by nearly £14,000*** in the first year of operating our newly installed solar panels at our business start-up office block at E-Space North, Littleport. The solar panels saved around 7.3 tonnes of carbon dioxide emissions, and produced enough electricity in a year to boil around 200,000 full kettles!
- Achieved ***Investors in the Environment silver accreditation***, and moved into the ***top 20% of best rated district council's*** in the country for our climate action according to the independent Climate Emergency UK organisation.
- Commenced ***carbon literacy training for all staff***, with around half of staff accredited by June 2024, and more training for remaining staff underway.

1.4. Helping the Council, our local residents and our communities ***adapt to a changing climate***, the Council:

- Continued to ***support households with advice and tips*** to reduce energy use and adapt/retrofit their homes. Our joint website is a great starting point: https://www.actiononenergycambs.org/.
- Adjusted how we ***manage our parks and open spaces***, with earlier grass cuttings due to warmer wetter winters, and being better prepared for hotter drier summers.
- Carried out a review and started to investigate key risks to the Council and our communities from a changing climate.

1.5. Our latest 'carbon footprint' (carbon emissions) data is as follows:

- ***For the Council, as an organisation:*** 1,282 tonnes CO_2e (period 2022-23). This is up 8% compared with the previous year, but down 2% compared with our baseline year of 2018-19.

- ***For East Cambridgeshire, as a district:*** 1,410,000 tonnes CO_2e in 2021. This is up 3% compared with the previous covid impacted year (2020), but down 25% from the baseline year of 2005.
- ***For Cambridgeshire, as a county:*** 6,790,000 tonnes CO_2e in 2021. This is up 6% compared with the previous covid impacted year (2020), but down 15% from the baseline year of 2005.

1.6. Some of the main challenges we faced in 2023/24 were as follows:

- Decided against launching the planned bird/bat box campaign, so we could focus on the hedgehog recovery campaign.
- We have shifted our trees and woodland strategy (Action 8) preparatory work into 2024/25, early work on the strategy has been prepared but it is not ready for Council consideration.
- We did not manage to reduce our black bin waste volume across the district as hoped, though with an ever-growing number of households (c1.5-2% increase in households per year recently), it is always a challenge to reduce total waste collected.
- Unable to identify any easy-win electric vehicle (EV) charging point grants, either for use on our own land or for supporting parish councils with their EV charging point bids.
- We postponed to 2024/25 further investment in solar panels on our own estate. This was partly to align to, and take advantage of, government funding for solar panels for public swimming pools (which we successfully gained a grant for in 2023/24, for spend in 2024/25).
- We were unable to reduce our overall carbon emissions in our latest reporting year (2022/23) and our overall emissions remain stubbornly near to our baseline year of 2018/19, but we are hopeful of a significant reduction in the coming year due to the use of HVO fuel.
- We only made limited progress on preparing a new climate and nature chapter for the Local Plan, as a result of new limitations on the content of such chapters set by Government in December 2023.
- We struggled to engage with a wide range of our community on developing a 'climate action plan' for the district as a whole. We therefore postponed the establishment of such an action plan, but intend to re-look at this option once further work at the county level has been completed relating to what Cambridgeshire (as a whole) should establish as its 'locally determined contribution' to mitigating climate change.

Top 20 Actions for 2024-25

1.7. For the coming 12 months (June 2024-May 2025), we have set ourselves a **new set of 'Top 20' actions** to help bring back nature to East Cambridgeshire, mitigate climate change and adapt to a changing climate.

1.8. For a summary of the Top 20 Actions please see our separately published poster entitled 'Our Climate and Nature Top 20 Actions for 2024'

1.9. For a fuller explanation of each of the Top 20 actions, please see the main part of this Monitoring Report.

2. Bringing Back Nature to East Cambridgeshire

Our achievements for the period June 2023 to May 2024

2.1. During the last monitoring year, we delivered many activities to help Bring Back Nature to East Cambridgeshire, as the following sections illustrate.

2.2. We list below all those activities which we committed to as a Top 20 priority action in June 2023, and set out progress on each:

Hedgehog Recovery Launch *(Top 20 Action #7 of 2023-24)*

2.3. In June 2023, we set ourselves the following action:

> ***Action 7: Via the 'Green Fair' in August 2023 (see action 10), put to the public vote the launch of a single species recovery programme for East Cambridgeshire, with the long term aim of East Cambridgeshire being recognised as the national hub helping the recovery of that species - East Cambridgeshire: Home of [You Choose the Species!] Recovery. By June 2024, we will have invested at least £5,000 to kick start on-the-ground improvements for the species you vote for.***

2.4. In addition to the Green Fair event, we also held additional voting opportunities (alongside general opportunities to engage with residents on nature and climate issues) at all three Youth Fusion events (at Soham, Bottisham and Littleport), as well as a one-off stall in Ely Market Square. The animals voted upon were: bats; barn owls; toads/frogs; otters; hedgehogs; and bees.

2.5. Whilst there was a good spread of votes across all the animals, hedgehogs came out on top. This means we kicked off a series of activities, actions and education programmes, focussed on hedgehogs but at all times utilising that 'people's favourite' to help encourage and educate on wider habitat and biodiversity issues.

2.6. We are committed to this being a long-term recovery programme over many years, rather than a one-off activity. We have commenced establishing what a comprehensive 'hedgehog recovery' programme will contain. To help gain momentum, and since the August 2023 vote, activities have included:

- Running several hedgehog awareness events including a very popular Hedgehog café and two Ely library engagement events
- Set up our own Hedgehog hero's project on the 'The Big Hedgehog Map'
- Prepared a draft Hedgehog Recovery Supplementary Planning Document to embed hedgehog protection and support as part of all new planning applications
- Wider communications and events, especially around 'Hedgehog week' in early May 2024
- Hedgehog house competition and giveaway, during May 2024

2.7. We've received excellent local press coverage, as well as national recognition on the BBC and social media.

Coronation Oak Tree Giveaway *(Top 20 Action #8 of 2023-24)*

2.8. In June 2023, we set ourselves the following action:

> ***Action 8 (part): To mark the Coronation of King Charles III, as well as his 75th birthday in November 2023, we will plant 75 oak trees, via gifting the trees to parish councils, community groups and schools. For schools, we will also provide a selection of tree related literature to help children appreciate and understand the value of trees.***

2.9. The Coronation oak project was popular with communities with a good distribution of applicants across East Cambridgeshire. The oak trees will not only improve biodiversity in their area but help boost local pride and provide significant health and wellbeing gains, including shade for our ever-warming summers. Most of the trees were planted in public areas, but four schools also took part

and planted the oak trees in their grounds. Each school also received a bonus nature themed book bundle, helping excite the next generation of nature lovers.

Pride of Place *(Top 20 Action #9 of 2023-24)*

2.10. In June 2023, we set ourselves the following action:

> ***Action 9: The Council will implement its £100,000 'Pride of Place' grant scheme, aiming to 100% grant support dozens of open space improvements and nature led projects in our communities.***

2.11. Our Pride of Place grant scheme has been a considerable success, with community groups applying for funds from across the district. Projects have ranged from new ponds to wildflower meadows, from trees to a plethora of various bird and bat box installations. There were 18 projects approved by end of March 2024, and at last count a further 4 projects have been approved with applications continue to be received. Following the success, we are proposing to extend the grant scheme through to end of October 2024 (for projects completing by March 2025).

Ely Green Fair *(Top 20 Action #10 of 2023-24)*

2.12. In June 2023, we set ourselves the following action:

> ***Action 10: Working alongside Ely Cathedral's 'Green Fair' on 5 August 2023, set up a family friendly activity and education day on Palace Green, with a focus on nature related hands on activities, engagement events and children's activities.***

2.13. We successfully trialled this collaboration event with the Cathedral by opening up Palace Green to allow a greater number of charities to be represented on the day. Charities were free to display with many offering giveaways and activities for families. Sadly, the weather was exceptionally wet and cold for the August event, and this affected footfall on the day. Nevertheless, the principle of the event was confirmed, and we will look to continue to support the Cathedral's Green Fair in future years.

2.14. Partly reflecting the poor weather for the Green Fair, we held over the past 12 months a series of additional mini-fairs or stalls to engage with the public, including in Ely Library, Ely Market square and the three Youth Fusion events (at Soham, Littleport and Bottisham).

Fulfil our new Biodiversity Duty *(Top 20 Action #19 of 2023-24)*

2.15. In June 2023, we set ourselves the following action:

> ***Action 19: To proactively fulfil our duty to conserve and enhance biodiversity, we will:***
>
> ***(a) by 1 January 2024, publish an 'ECDC Biodiversity Action Plan' which will contain policies and specific action that we will take to conserve and enhance biodiversity***
> ***(b) support all parish council with their duty to publish a similar such action plan for their parish***
> ***(c) play an active role in the preparation of the first ever county-wide Local Nature Recovery Strategy (LNRS). To help deliver and communicate all these actions, we will establish and dedicate a special section on our website to biodiversity.***

2.16. Nature recovery and wider biodiversity actions are a rapidly increasing area of attention for all councils, and East Cambridgeshire District Council is warmly embracing its new duties. Over the past 12 months, we've commenced a long-term process of proactively helping nature to recover and thrive in our district, including on our own land.

2.17. In January 2024 we published a report exploring the possible ways we, as a Council, can help take action to help nature recover. We are also actively supporting the production of the cross-Cambridgeshire LNRS. To read the report, and other activities by the council including the LNRS, please review our natural environment webpage at https://www.eastcambs.gov.uk/content/nature-recovery

2.18. We have also taken opportunities to advise and support parish councils, who equally have a set of new biodiversity duties to comply with. This includes supporting parishes to prepare a parish based nature recovery plan, with further details at this page: https://www.eastcambs.gov.uk/content/parish-nature-recovery-plans

2.19. To help make sure we are taking the right action for nature, and supporting others take the right action (including developers), in autumn 2023 we appointed our first ever senior ecologist.

Parish based nature recovery plans *(Top 20 Action #20 of 2023-24)*

2.20. In June 2023, we set ourselves the following action:

> ***Action 20 (part): Work with Natural Cambridgeshire Local Nature Partnership (LNP), with a special focus over 2023/24 on supporting community-led preparation of local nature recovery plans.***

2.21. As stated under the previous action, we have assisted parish councils to prepare their own nature recovery plans.

2.22. More generally, the LNP for our area continues to provide support and advice across the County.

Actions outstanding from the period June 2023 to May 2024

2.23. In the last monitoring year of 2023-24, there were a number of nature related actions we set ourselves to achieve that presently haven't yet been complete. These are listed below, together with commentary on their progress and our future intentions for each.

Heaton Drive nature area *(Top 20 Action #5 of 2023-24)*

2.24. In June 2023, we set ourselves the following action:

> ***Top 20 Action #5: Spend up to £40,000 tackling one or more disused public areas, and turning them into nature rich community areas. One such area, off Heaton Drive, Ely, will be achieved in collaboration with Palace Green Homes.***

2.25. We have made some progress with this action, with the site now cleared and ready to be transformed. We are firming up plans for the land. As such, the above Action from 2023-24 will be completed in 2024-25.

Bird and Bat Box Campaign *(Top 20 Action #6 of 2023-24)*

2.26. In June 2023, we set ourselves the following action:

> ***Top 20 Action #6: Launch in summer 2023 a new long term 'one plus one' campaign, seeking to achieve the installation of one bird or bat box for every household in the district.***

2.27. This Action has predominantly been postponed, and we will consider whether to launch it at a future date. Whilst we did some limited work on encouraging bird and bat box installations in gardens, including a free birdbox giveaway to all those who attended the free mini-green fair in Ely Library, we became concerned with the resource implications of attempting to run and monitor a district wide target. We were also concerned with launching a second district-wide and long-term nature related campaign at a similar time to the very successful launch of the hedgehog recovery campaign, and the risk that such a second separate campaign might undermine that hedgehog campaign.

2.28. Therefore, whilst we will continue to take opportunities to encourage residents to install bird and bat boxes in their garden, including ad hoc free giveaways at relevant fairs or other events, it is uncertain whether we will formally launch a comprehensive one-plus-one campaign as originally envisaged in June 2023.

Trees and Woodland Strategy *(Top 20 Action #8 (part) of 2023-24)*

2.29. In June 2023, we set ourselves the following action:

Top 20 Action #8 (part): We will update our Trees and Woodland Strategy, so that we maximise tree planting and tree protection through both the planning system and on our own land; and at the same time, emphasise the need for the right tree to be panted in the right place.

2.30. Action 8 comprised two parts, first the Coronation Oak giveaway, which was successfully achieved as reported earlier, and second the preparation of an updated Trees and Woodland Strategy. Early work on such a Strategy has been prepared, but it is not ready for Council consideration.

2.31. As such, and considering the scale of resource required to achieve it, this Action from 2023-24 will be rolled forward into 2024-25 as a specific action.

Our proposals to help Bring Back Nature, for the period June 2024 to May 2025

2.32. The following section lists our priority actions in full that the Council will undertake over the coming year, to help Bring Back Nature to East Cambridgeshire.

Top 20 Action Reference Number	Action to be undertaken
1	A new 'Hedges for Hedgehogs' campaign will be launched by Autumn 2024, including free native hedgerow plants given away to local communities for planting in Winter 2024/25, benefitting not just hedgehogs but lots of wildlife.
2	Further Hedgehog Recovery actions, including: • financially supporting local hedgehog rescue centres, helping them to pay for basic care to nurse more hedgehogs back to health • providing training for our Open Spaces team and other interested local land managers to raise awareness of hedgehog safety and hedgehog friendly land management • adopting a new Hedgehog Recovery planning policy, so all new developments are hedgehog friendly.
3	The Council will extend the successful Pride of Place grant application scheme to the end of October 2024, giving 100% grant support to even more communities for open space and nature led projects in our district.
4	We will work with local residents to create an accessible one-acre (0.5 ha) woodland in Bottisham, a woodland designed for people and for nature.
5	The Council will prepare and publish Habitat Management Plans for each of its significant parks and open spaces by May 2025, with each Plan showing what we will do to manage the site, including grass cutting and wildflowers seeding, in the best way for people and for nature.
6	Delivering Biodiversity Net Gain (BNG): We will work with local farmers to help them set up large scale 'habitat banks' in our district and proactively support BNG via the planning system by educating, helping and explaining its benefits.
7	We will strengthen our plans and activities for long term nature recovery in the district by assisting the creation of a Cambridgeshire-wide Local Nature Recovery Strategy.
8	We will deliver a Trees and Woodlands strategy, which sets out how we will manage trees on our land, where we would like landowners to prioritise planting new woodlands (including incentives to do so), and how we will deal with planning applications for new or replacement trees or other tree works.
9	We will create a 'butterfly mound' in one of our public parks, constructed to attract butterflies and other pollinators. It will be wildflower seeded, with the winning design chosen via a poll.
10	Palace Green Homes, part of the Council's trading company, commits to its developments being nature friendly, including our upcoming proposal for Phase 3, Arbour Square, Ely. Specifically, this Phase 3 development will include hedgehog friendly gardens, the use of swift bricks in appropriate places, and climate change resistant native plants in our garden layouts. Water butts will be included in all appropriate gardens to help reduce tap water use and help slow storm water flows.

2.33. Progress on achieving the above actions will be reported on in June 2025.

3. Tackling Climate Change

Our achievements for the period June 2023 to May 2024

3.1. During the last monitoring year, we delivered many activities to help mitigate climate change, as the following sections illustrate.

3.2. We list below all those activities which we committed to as a Top 20 priority action in June 2023, and set out progress on each:

Use of HVO fuel in our Refuse Collection Vehicles *(Top 20 Action #1 of 2023-24)*

3.3. In June 2023, we set ourselves the following action:

> ***Action 1: Via an investment of over £2m in new vehicles, commence by the first half of 2024 the use of Hydrotreated Vegetable Oil (HVO) fuel in our refuse collection vehicles (RCVs), aiming to reduce the carbon emissions of such vehicles by up to 90%.***

3.4. In early 2024, we commenced a trial on the use of HVO fuel in one of our refuse collection vehicles (RCVs). With no apparent impact on vehicle use or service delivery, Council agreed to fund the commencement of HVO fuel use in all its RCVs from April 2024. We now use HVO fuel in all our refuse collection vehicles.

3.5. Whilst we recognise the considerable emission savings arising from the use of HVO fuel, which will considerably reduce the Council's 'carbon footprint', we also recognise this is an interim measure as we make the transition to very low or zero-carbon fuels in the future (which is mostly likely to be all-electric vehicles). HVO fuel is not an ideal long-term solution because of the potential risks in the supply chain, with such fuel coming from overseas (*the risks include the risk of supply itself due to ever increasing demand for HVO fuel, and the risk of being able to guarantee that the source of supply is reputable and sustainable and not, for example, palm oil derived from rainforest destruction. The Council is working hard to minimise these risks as much as possible*).

Reducing Paper Use *(Top 20 Action #3 of 2023-24)*

3.6. In June 2023, we set ourselves the following action:

> ***Action 3: The Council will make further reductions in its paper use, so that, by 2030/31, we will use 70% less paper per year than we did, on average, during the period 2017-2019 (when we used an average 1.07million sheets a year). Specifically, we will reduce our paper use by 10% every year compared with 2022/23 paper use, meaning our targets are:***
>
> - ***2023/24 = 630,000 sheets of paper used (max)***
> - ***10% reduction each year thereafter***
> - ***By 2030/31 = 335,000 sheets of paper used (max)***

3.7. The Council is on track to reach its 2030-31 target of using less than 335,000 sheets of paper a year. Most services actively reduced their daily paper use in the past year. Across the Council we used 250,000 less sheets of paper than we did in 2022-23. If stacked up, this amount of paper saved would exceed the height of four adult giraffes standing on top of each other! We therefore easily beat out target of 630,000 sheets for 2023/23, instead consuming just 449,000 sheets.

Staff Travel Plan *(Top 20 Action #4 of 2023-24)*

3.8. In June 2023, we set ourselves the following action:

> ***Action 4: The Council will finalise its staff Travel Plan, and implement at least five actions from it by June 2024.***

3.9. The travel plan was finalised in December 2023 and adopted by the Council with actions beginning in January 2024. Actions so far include:

- a new travel expenses policy from HR including for the first time a payment for cycle miles travelled

- commenced procurement of a new shower facility in The Grange, enabling current and future cyclists to shower at work
- commenced procurement of new lockers for cyclists
- A two-day bike repair service was provided for council staff in May 2024. Thirty-six staff had their bike serviced and mended, with some staff saying they will now use their bike for the first time in years!
- We are investigated other options such as using the Lift share app, making it easier for staff members to make less single person commutes to work.

Water Bottle Filling Stations *(Top 20 Action #11 of 2023-24)*

3.10. In June 2023, we set ourselves the following action:

> ***Action 11: The Council will identify candidate sites for installing free water bottle filling stations, with a target of installing a minimum of three such stations during 2023/24. Candidate sites will be investigated based on ease of installation and high public footfall (such as Ely Market and Riverside area – we'd welcome other suggested locations by emailing us at climatechange@eastcambs.gov.uk).***

3.11. Three sites have now been identified for such water bottle filling stations to be installed, which will hopefully be installed ready for Summer 2024 use. We will communicate their locations once installed and ready to use.

Carbon Literacy Training *(Top 20 Action #15 of 2023-24)*

3.12. In June 2023, we set ourselves the following action:

> ***Action 15: Undertake an environment training programme for all Councillors and staff ('carbon literacy' training), so the whole organisation understands the scale of the climate and biodiversity crisis, what the options are to tackle the crisis and what each individual can do in their role to help address the emergency. By June 2024, target Carbon Literate Silver accreditation, which means at least 50% of employees and councillors have undertaken the training by that stage.***

3.13. We have so far delivered eight fully accredited carbon literacy training sessions to 98 members of staff, which is just over half of total employees. 66 of those attendees have so far completed the post-course pledges (one personal and one work-based) and successfully completed the course understanding questionnaire, meaning they have formally achieved carbon literacy status and been awarded a certificate from the Carbon Literacy Trust. This means 66 staff have so far made a combined 66 personal pledges to reduce impact on the environment as well as 66 work-based pledges. Pledges have included greater energy efficiency across offices, better recycling habits, more sustainable commuting to work, as well as commitments to share learning and encourage others to take more action.

3.14. Therefore, approximately half of ECDC staff have now completed the training, and we are getting close to 50% of staff completing their pledges and gaining full accreditation.

3.15. We have a few more training courses to go for remaining staff that have not attended the course, and we will also consider how best to accommodate Councillors that want to attend a course. In the Autumn we will consider formally applying for a corporate 'carbon literate council' accreditation.

Investors in the Environment *(Top 20 Action #16 of 2023-24)*

3.16. In June 2023, we set ourselves the following action:

> ***Action 16: The Council will aim to achieve, as an organisation, Investors in the Environment (iiE) accreditation Silver award in 2023, and work towards achieving Green award in 2024.***

3.17. Following our application submission in November 2023, the Council was successful in being awarded Silver Accreditation IIE in January 2024. We will now commence the process of achieving the most challenging 'Green' level, though that is unlikely to be achieved until 2025.

Actions outstanding from the period June 2023 to May 2024

3.18. In the last monitoring year of 2023-24, there were a number of climate related actions we set ourselves to achieve that presently have not yet been complete. These are listed below, together with commentary on their progress and our future intentions.

Solar Panel Investment *(Top 20 Action #2 of 2023-24)*

Top 20 Action #2: Progress up to £100,000 further investment in photovoltaic (PV) solar panels on our own estate.

3.19. After the successful installation of panels on our E-Space North (Littleport) building in early 2023, we first explored the potential to install panels on the sister office building E-Space South (Ely).

3.20. However, E-Space South is unusually connected to the electricity grid, in that all individual office units within the building have their own separate electricity meter and connection to the wider external electricity network. This makes it extremely challenging (and expensive) to install solar panels, because there is no single electricity connection in and out of the building. We unfortunately, therefore, decided it was not practical or cost effective to install panels on that building.

3.21. We then turned our attention to The Hive. However, at the same time, Government launched a swimming pool support scheme, which targeted projects which improve the energy efficiency of pools and reduce their running costs. We submitted a bid for The Hive and were successful in being awarded grant funding for the majority of the PV solar panel costs. The £100,000 of our money will pay for the additional costs involved, and the remaining funds retained for investigating other potential energy savings initiatives.

3.22. We are therefore now progressing proposals to install PV solar panels on The Hive, with a forecast installation being in early 2025.

Electric Vehicle Charging *(Top 20 Action #12 of 2023-24)*

3.23. In June 2023, we set ourselves the following action:

Action 12: The Council will undertake a programme of Electric Vehicle Charging (EVC) initiatives, including:

- ***improved information on our website about EVC***
- ***assisting parish councils and residents to find grants to help install EVC points***
- ***bid for grants to instal more EVCs in our own public carparks.***

3.24. Whilst some limited improved information on our website about EVCs was undertaken, we were unsuccessful at identifying further grants to install further charge points in our carparks, or assistance for parish councils and residents.

Reducing Black Bag Waste *(Top 20 Action #14 of 2023-24)*

3.25. In June 2023, we set ourselves the following action:

Action 14: East Cambs Street Scene (ECSS), the Council's wholly owned company that collects your domestic waste, will target a reduction of over 100 tonnes of black bag waste collected over the year to March 2024. To achieve this, ECSS will further promote ways for residents to reduce waste, recycle more and compost more food and green waste where possible.

3.26. Unfortunately, our residual waste has increased by over 500 tonnes in Q1-3, which equates to just over a 5% increase. Whilst we await Q4 data at time of writing, it is extremely unlikely that over the full year that we will meet our target of a 100 tonne reduction.

3.27. Part of the increase in waste collected arises from the fact there were c2% more households to collect from in 2023/24 than the previous year. However, waste per household also increased by around 2% on average, with similar trends in recycling and organic waste collected.

3.28. ECSS has worked with colleagues across the county this past year to devise waste minimisation initiatives, including:

- the Metal Matters campaign: we know that some metal which can be collected in the blue lidded bin is still being disposed in black bags. This is also the heaviest and most valuable item of recycling and so a campaign has been launched in the county to increase awareness and drive behaviour change.
- the Wipe Out Waste project, a collaboration with Anglian Water and the Rivers Trust. The project aimed to encourage the use of reusable wipes by providing lower income families with a free kit. These were distributed at food or baby banks and community events, and feedback was requested to understand the barriers to using these more sustainable options and opportunities for scaling up.
- the Fight Food Waste Pledge, a social media campaign asking residents to pledge to cut the amount of their food waste at home, preventing it from going to landfill. The message focused on economic benefits as well as on the link between food waste and climate change. Residents were supported with information and tips to help reduce the amount of food waste and incentivised with a monthly prize of shopping vouchers.

3.29. ECSS continue to supply discount codes for the purchase of reusable nappies, attend various events to raise awareness and, where requested, speak at local primary schools.

District Wide Climate and Nature Action Plan *(Top 20 Action #18 of 2023-24)*

3.30. In June 2023, we set ourselves the following action:

> ***Top 20 Action #18: How do you imagine a future 'cleaner, greener East Cambs?'. By June 2024, we will facilitate an engagement programme with residents, businesses and the wider community, and come up with a collectively generated set of targets for East Cambridgeshire as a whole. For example, we want your help to establish targets such as:***
>
> - ***net zero emissions for the district as a whole***
> - ***increased recycling rates***
> - ***and/or electric vehicle uptake.***

3.31. We commenced work on this project with our already established partnership groups, and also attended an 'Earth Café' event to commence a conversation. However, it quickly proved challenging to reach out beyond these small circles, and it was realised that it would require a considerable staff resource to attempt to achieve the action as envisaged.

3.32. Consequently, we paused further work on it, and will reconsider our options. This will include reflecting on the realistic resources available to achieve the task as planned.

Our proposals to help mitigate climate change, for the period June 2024 to May 2025

3.33. The following section lists our priority actions in full that the Council will undertake over the coming year, to help mitigate climate change.

Top 20 Action Reference Number	Action to be undertaken
11	Through 2024, we will move substantially all our Refuse Collection Vehicles to Hydrotreated Vegetable Oil (HVO) fuel, which has at least an 80% reduction in carbon emissions compared with regular diesel. This move will be subject to any supply or excessive price constraints which temporarily prevents HVO being used.
12	By June 2025, we will have installed solar panels on the roof of the Hive swimming pool, aiming to save at least 5 tonnes of CO_2e emissions and save over £10,000 in annual running costs. We will also support other leisure venues to become more energy efficient.
13	We will consider options for including environmental considerations when revising the Council's Contract Procedure Rules.
14	Continue to deliver Carbon Literacy training for all staff at the Council; seeking to achieve well over 50% of staff to be fully carbon literate accredited by December 2024. In 2025, run one or more carbon literacy training courses to parish councils.
15	Continue to provide support and advice to residents who want to undertake energy efficiency improvements in their homes, with targeted events in communities. We will participate in all available domestic retrofit grant funded schemes to enable low income, fuel poor and vulnerable to cold residents improve the thermal comfort of their homes. This includes £1.5m of Home Upgrade Grant 2 (HUG2) funding for spend across East Cambridgeshire.

3.34. Progress on achieving the above actions will be reported on in June 2025.

4. Adapting to a Changing Climate

Our achievements for the period June 2023 to May 2024

4.1. During the last monitoring year, we commenced activities to help all of us to be more prepared for the impacts of a changing climate, as the following sections illustrate.

4.2. We list below all those activities which we committed to as a Top 20 priority action in June 2023, and set out progress on each:

Retrofitting Homes *(Top 20 Action #13 of 2023-24)*

4.3. In June 2023, we set ourselves the following action:

> ***Action 13: We will aim to spend up to £2m investing in energy efficiency measures for non-gas homes in East Cambridgeshire, as part of a wider £10m Cambridgeshire Energy Retrofit Partnership (CERP) scheme of which we are a member. We will also provide wider support to help other residents, including those on-gas, to access grants for energy efficiency installations, partly through our new website Action on Energy Cambs.***

4.4. We have just ended year 1 of this two-year scheme. As seen with previous schemes it takes time for installers to increase capacity and confidence in delivering a new scheme, but we now have good capacity in the East Cambridgeshire area and are actively promoting the scheme to residents who we feel may be eligible. This project therefore continues to progress into year 2, as planned.

Actions outstanding from the period June 2023 to May 2024

4.5. In the last monitoring year of 2023-24, there was an adaptation related action we set ourselves to achieve that presently has not yet been completed. This is listed below, split into two sections, with commentary on progress and our future intentions.

Climate Adaptation and Climate Risk Plan *(Top 20 Action #17(part) of 2023-24)*

4.6. In June 2023, we set ourselves the following action:

> ***Top 20 Action #17 (part): In acknowledgement that climate change is happening, and will continue to accelerate, the Council will establish a climate adaptation and climate risk plan, identifying the greatest risks to the Council and its services, and how it can start to help our communities adapt to a changing climate and biodiversity loss.***

4.7. An informal process was undertaken to identify potential risks for the Council's operation as a consequence of a changing climate. This considered potential risks such as major floods, severe heatwaves, extended drought periods and wildfires (and the cascading impacts on supply chains, inflation and staff health and wellbeing).

4.8. It was, however, decided not to prepare a *climate adaptation and climate risk plan* as originally intended and set out in Action 17. Instead, lessons learnt from the informal exercise will assist in future updates of the corporate risk register and help inform wider resilience planning.

New Climate and Nature Chapter for the Local Plan *(Top 20 Action #17(part) of 2023-24)*

4.9. In June 2023, we set ourselves the following action:

> ***Top 20 Action #17 (part): We will commence preliminary work and consultation on a new 'climate' chapter for the Local Plan, which will look at how new buildings can be both more energy efficient and have the ability to adapt to a changing (warming) climate.***

4.10. Work on this new chapter was commenced in 2023, with the broad scope and structure for such a chapter approved by the Council at its Finance and Assets Committee meeting of 23 November 2023. For further details, see Item 8 of https://www.eastcambs.gov.uk/meetings/finance-assets-committee-231123.

4.11. Further work on the chapter continued over Winter 2023-24, with the intention of commencing public consultation in Spring 2024. However, due to uncertainty over national policy on this matter following a Written Ministerial Statement of December 2023, a pause on the work was agreed by the Council in March 2024 until greater clarity emerged on national policy. For further details, see Item 8 of https://www.eastcambs.gov.uk/meetings/finance-assets-committee-280324.

Our proposals to help adapt to a changing climate, for the period June 2024 to May 2025

4.12. The following section lists our priority actions in full that the Council will undertake over the coming year, to help the Council and its communities get ready to adapt to a changing climate.

Top 20 Action Reference Number	Action to be undertaken
16	*'Water, water everywhere* [then] *not a drop to drink':* Water runs through the heart of East Cambridgeshire's rich history, and its future is also entwined with this vital resource. Partly climate change driven, we need to become more resilient to the dual threat of *water, water everywhere* in winter, but then *not a drop to drink* in summer. We will therefore commence a water resilience campaign, sharing tips and resources from partners to help conserve water, how to be prepared for winter storms and floods, and what can be done to help nature access water it needs.
17	Investigate and then implement measures to reduce water use in our own main office building (The Grange), aiming for a 10% reduction by June 2025 and further reductions in future years.
18	Deadly Top Twenty! We will support native species to adapt and thrive in East Cambridgeshire through a public campaign to spot the Top 20 most unwanted, damaging and deadly invasive species in the district, and informing residents what they could do to help.
19	Let's Adapt Together: We all need to do our bit to help bring back nature, minimise climate change and adapt to a changing climate. We will therefore arrange community events and boost our engagement work as we foster a coming together approach to tackle these crucial issues. We will set aside up to £5,000 to help local community groups, charities and parish councils establish their own community engagement forums and events on climate or nature.
20	We want our local businesses to thrive on our journey to a greener, cleaner East Cambridgeshire. We will engage with businesses and investors to identify opportunities for green and sustainable economic growth.

4.13. Progress on achieving the above actions will be reported on in June 2025.

5. Carbon Footprint Reporting Data

Carbon Footprint Calculations

5.1. Before deciding what to do differently to reduce emissions, we need to properly understand what our current activities are emitting. This is sometimes known as working out a 'carbon footprint' which, in technical terms, is a measure of the greenhouse gases, such as carbon dioxide, emitted into the atmosphere from a specified area (such as Cambridgeshire) or by an organisation (such as East Cambridgeshire District Council) or by an individual. A carbon footprint calculation can provide pointers to where action could be best taken to reduce your impact on the environment.

5.2. Whilst not an exact science, you can have a go at calculating your own (or your family's) carbon footprint using an online tool such as: https://footprint.wwf.org.uk/.

5.3. In the next three sections we report on the carbon footprints of:

- **Cambridgeshire, as a geographical area**
- **East Cambridgeshire, as a geographical area**
- **East Cambridgeshire District Council, as an organisation**

5.4. For the first two sections, the data is compiled by central government, and usually published with at least a two-year lag. Thus, the latest data available at the time of writing was released in July 2023, for the period to 2021. The full dataset for all local authority areas is available at https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021.

Cambridgeshire Carbon Footprint (2021 data)

5.5. This section reports on the 'carbon footprint' of Cambridgeshire as a geographical area.

5.6. The latest government data shows the carbon footprint for Cambridgeshire was around 6.79million tonnes CO_2e in 2021 (out of 399MtCO_2e for the UK as a whole). Whilst still an enormous amount, the Cambridgeshire total is on a steady falling trajectory, down from 9.04 MtCO_2e in 2005. However, the 2021 figure identifies a 6% increase in emissions from the year before (2020), but that was primarily due to the steep decline in 2020 as a consequence of covid restrictions. Over the two-year period 2019 to 2021, there was just under 1% reduction in emissions in Cambridgeshire.

5.7. The following table splits Cambridgeshire's emissions of 6.79million tonnes CO_2e (2021) into various main sectors:

Source	CO_2e emissions – **Cambridgeshire** (2021) in thousand tonnes	CO_2e emissions – **Cambridgeshire** (2021) as percentage of all CO_2e emissions
Industry	785	12%
Commercial	134	2%
Public sector	222	3%
Domestic	968	14%
Transport	1,815	27%
Land Use, Land Use Change and Forestry (LULUCF)	1,525	22%
Agriculture	982	14%
Waste	355	5%
Total	*6,786*	

5.8. Cambridgeshire's largest source of emissions therefore came from transport (27%), followed closely by land use, land use change & forestry (LULUCF) (22%). In fact, Cambridgeshire is the worst performing county in the UK by far under the LULUCF category, emitting twice as much as the next worst county (Norfolk). Indeed, many counties have a minus LULUCF score, meaning their land absorbs more carbon (such as through trees growing) than it emits, which helps them offset some of their emissions from other sectors.

5.9. The reason for Cambridgeshire's very high LULUCF emissions is simple: high intensive farming, the subsequent drying of our peat lands, combined with very low levels of tree cover. To reduce our LULUCF emissions will require significant changes in the way we manage and farm our land, and it is unlikely we could ever eliminate emissions arising from this source in Cambridgeshire.

East Cambridgeshire (as a district) Carbon Footprint (2021 data)

5.10. This section reports on the 'carbon footprint' of **East Cambridgeshire** as a geographical area.

5.11. The latest government data shows the carbon footprint for East Cambridgeshire was around 1.41million tonnes CO_2e in 2021 (out of 399MtCO_2e for the UK as a whole). The following table splits East Cambridgeshire's emissions of 1.41million tonnes CO_2e (2021) into various main sectors:

Source	CO_2e emissions – **East Cambridgeshire** (2021) in thousand tonnes	CO_2e emissions – **East Cambridgeshire** (2021) as percentage of all CO_2e emissions	CO_2e emissions – **East Cambridgeshire** (2021) as percentage of all CO_2e emissions (excluding LULUCF)
Industry	68	5%	8%
Commercial	11	1%	1%
Public sector	13	1%	2%
domestic	137	10%	17%
Transport	254	18%	31%
Land Use, Land Use Change and Forestry (LULUCF)	583	41%	-
Agriculture	295	21%	36%
Waste	46	3%	6%
Total	*1,407*		

5.12. The East Cambridgeshire total is on a very steady falling trajectory, down from 1.66 MtCO_2e in 2005 to 1.41 MtCO_2e in 2021. However, the 2021 figure identifies a 3% increase in emissions from the year before when it was 1.37 MtCO_2e (2020), but that was primarily due to the significant decline in 2020 as a consequence of covid restrictions. Over the two-year period 2019 to 2021, there was a 2% reduction in emissions in East Cambridgeshire.

5.13. To help visualise what 1.41 MtCO2e looks like, that amount of CO_2e emissions would fill somewhere in the region of ***1,000 hot air balloons every day***, and for ***just East Cambridgeshire***.

Cambridgeshire and East Cambridgeshire Emissions on a Per Capita Basis (2021 data)

5.14. An alternative way to monitor emissions at a geographical level is to look at how much emissions are arising in that area on a per person (sometime known as per capita) basis. The following chart identifies emissions on a per capita basis for the UK, Cambridgeshire and East Cambridgeshire, and does so over the time frame 2005 to 2021.

Year	Emissions per capita (in tCO_2e) - UK	Emissions per capita (in tCO2e) - Cambridgeshire	Emissions per capita (in tCO2e) – East Cambridgeshire
2005	10.9	15.5	21.5
2006	10.7	15.2	21.2
2007	10.4	14.8	20.2
2008	9.9	14.2	19.4
2009	9.0	13.1	18.7
2010	9.1	13.0	18.7
2011	8.3	12.3	18.2
2012	8.6	12.7	18.4
2013	8.3	12.3	18.0
2014	7.6	11.6	17.5
2015	7.3	11.2	17.2
2016	6.8	10.9	16.9
2017	6.6	10.7	17.0
2018	6.5	10.6	16.7
2019	6.2	10.2	16.6
2020	5.6	9.5	15.7
2021	6.0	10.0	16.0

5.15. The above figure identifies the very large differences, on a per capita basis, between East Cambridgeshire and the UK average, with Cambridgeshire broadly in the middle.

5.16. In East Cambridgeshire, we emit nearly three times as much CO_2e per person (16.0 tonnes CO2e in 2021) compared with the average across the UK (6.0 tonnes CO_2e in 2021). The primary reasons for this very high per capita rate in East Cambridgeshire is twofold:

- High levels of emissions from land use and agriculture (and corresponding very low emission capture due to a lack of trees and other functioning carbon sinks such as peatlands)
- Relatively high emissions from transport, reflecting our heavy reliance on cars in the district and the relatively high degree of commuting (with such commuting predominantly by car).

East Cambridgeshire District Council Carbon Footprint (2022-23 data)

5.17. The previous sections, looking at Cambridgeshire as a whole and East Cambridgeshire as a whole, used data collected and published by other parties. In this section, we look just at East Cambridgeshire District Council, as an organisation.

5.18. To work out the carbon footprint of an individual company or organisation, like East Cambridgeshire District Council, a lot more data collection and analysis is required to be done by that organisation to determine a robust carbon footprint. For an explanation of the method we have adopted for calculating our carbon footprint, please refer to Appendix 1.

The Council's Carbon Footprint 2022-23 – a summary

5.19. The baseline carbon footprint (using data for the financial year 1 April 2018 to 31 March 2019), as set out in detail in our Environment Plan 2020, resulted in a **baseline (2018-19) carbon footprint for the Council being established as 1,317 tonnes of CO_2e**.

5.20. Each year since, the Council has reported an update on its annual emissions. Below is the fifth set of such data, for the financial year 2022-23.

5.21. It is estimated that the measurable carbon footprint for the Council in 2022-23 (i.e. to April 2023) as being **1,282 tonnes of CO_2e**. Thus, in headline terms, the Council's calculated carbon footprint has seen **an overall 2% decrease** in its gross emissions in the five-year period starting in 2018-19 and ending in 2022-23.

5.22. The change in emissions from baseline to present year is summarised in the table below:

	2018-19	2019-20	2020-21	2021-22	2022-23
Scope 1: Direct emissions	839	871	892	843	886
Scope 2: Indirect emissions	164	120	95	95	87
Scope 3: Other Indirect emissions	314	325	254	266	308
Gross emissions total	**1,317**	**1,315**	**1,241**	**1,204**	**1,282**

The Council's Carbon Footprint 2022-23 – further detail

5.23. A detailed breakdown of the source of the Council's calculated emissions in 2022-23 is set out below (note: 'well-to-tank' is listed as a separate row but is a direct consequence of fuel used by the Council, and therefore primarily arises from the fuel consumed by its fleet vehicles).

Scope 1 (tCO_2e)	2018-19	2019-20	2020-21	2021-22	2022-23
Gas Consumption	63.7	71.0	81.6	74.6	68.5
Heating Oil	-	-	17.8	18.4	17.7
Refrigerant gases	9.7	-	-	-	6.7
Fleet Vehicles	765.4	800.1	792.5	750.2	793.0
Scope 1 Total	**838.8**	**871.1**	**891.9**	**843.2**	**885.8**

Scope 2 (tCO_2e)	2018-19	2019-20	2020-21	2021-22	2022-23
Electricity	152.5	118.3	86.5	72.5	81.6
Street Lighting	12.0	1.4	8.7	8.7	5.7
Scope 2 Total	**164.5**	**119.7**	**95.2**	**81.2**	**87.2**

Scope 3 (tCO_2e)	2018-19	2019-20	2020-21	2021-22	2022-23
Water and sewerage	7.1	7.5	8.1	5.9	6.5
Waste generated in operations	0.5	0.6	0.6	0.6	0.4
Business travel	81.9	84.7	24.0	41.8	17.0
Purchased goods and services					65.8
Transmission & Distribution	14.0	10.2	10.2	7.0	8.0
Well-To-Tank	210.0	221.7	210.7	209.6	210.7
Scope 3 Total	**313.5**	**324.7**	**253.5**	**265.0**	**308.4**

Tonnes CO_2e	2018-19	2019-20	2020-21	2021-22	2022-23
Gross emissions	**1,316.9**	**1,315.5**	**1,240.7**	**1,189.3**	**1,281.5**

The Council's Carbon Footprint 2022-23 – commentary and analysis

5.24. Calculating an organisation's carbon footprint is very challenging, and reported data each year should be read with some caution. What is reported in this document is given in good faith and to the best of the author's ability, but it has to be acknowledged that there are considerable limitations and uncertainties with calculating and reporting such data.

5.25. For example, some data is more easily collected and converted to emissions than others. Electricity and gas use is relatively straight forward, because the data is available on the statements (bills) received from suppliers; whereas emissions arising from refrigeration gases or purchased goods are much more difficult to determine.

5.26. Emission calculations rely on the data being collected and available in a useable form. It is therefore prone to under- or over-reporting if the data collected is not fully robust. This is particularly the case at the Council for the following items:

- '**Heating Oil**' was missed form the data collection in the first two years, as reporting officers were unaware we used any heating oil (it was used away from our main office buildings). Once known, the data was requested, and is now reported. Hence, we 'under reported' our heating oil emissions in the first two years.
- '**Business Travel**' appears to have been over-reported in some early years, though we are still uncertain on this and need to investigate further. The issue appears to be that the data provided by the finance team on 'business travel' may, for some years and for some journeys, been provided as two rows of data for one journey, with one row being the journey and the second row being the 'VAT' refund being claimed by the Council. However, as this was not immediately clear in the spreadsheets provided, both rows appear to have been used in some years/journeys as if they were two separate journeys, and the emissions arising therefore 'double counted'. Consequently, it is highly likely that 'business travel' has been over-reported in some years. Nevertheless, using alternative data as a proxy (namely, the amount, in £, claimed in expenses by staff for business miles), this has persistently shown a steep declining trajectory in total business miles claimed, even allowing for covid restrictions, therefore we are confident the emissions arising from business travel is significantly less than the baseline year of 2018-19.
- '**Purchased goods and services**' we know is significantly under-reported. For the first four years we did not account for any such emissions arising. For this year, for the first time, we are reporting on a small element of those purchases, namely paper. However, the true emissions arising from all the other goods and services we buy is unknown, yet likely to be a very significant amount.

5.27. Despite these acknowledged limitations, we can still draw some useful conclusions from the data we have collected.

5.28. For 2022-23, by far the largest single contributing area continues to be the Council's **'fleet vehicles',** such as the vehicles it uses for waste collection, maintaining our parks and open spaces, general maintenance of our properties and land, and any lease vehicles. This is especially so once 'well-to-tank' is factored in. In total, such vehicles account for over **three-quarters of the council's reported emissions**. Such a figure also excludes any scope 3 emissions arising from the manufacturing and distribution of such vehicles (known as 'embedded carbon'), so the true full-life emissions arising from our fleet vehicles is likely to be an even greater share of the Council's emissions.

5.29. Compared with our fleet vehicles, all other sources of emissions are relatively low.

5.30. Very few of our emissions appear to have a significant trend down or up, other than electricity use, which is significantly down from the 2018-19 baseline. However, emissions from electricity actually went up in 2022-23. It is not certain why, though it might be accounted for by the extreme heat in summer 2022, which resulted in heavy use of the air conditioning units, and/or the installation by the Council of electric based fan heaters in the rear lobby of The Grange for winter 2022-23. With the national grid becoming increasingly decarbonised, emissions arising from electricity should persistently decrease, even if an organisation does nothing directly to reduce its own electricity use. Thus, any increase in emissions arising from electricity use in an organisation is an area of significant concern.

5.31. Allowing for the possible over and under reporting of some items, it is probably fair to say that the 'carbon footprint' of the Council since the baseline year of 2018-19 has remained stable or perhaps a very slight downward trend, though the year 2022-23, broadly speaking, identified a number of areas where the emissions arising actually ticked upwards not down.

6. Renewable Energy in East Cambridgeshire

How much renewable energy do we produce in East Cambridgeshire?

6.1. Whilst East Cambridgeshire as a district has one of the highest rates of per capita emissions in the UK, on the flip side (and not reflected in the emissions statistics) we are, as a district, a relatively high producer of renewable energy. According to the latest BEIS data published in September 2023 (Source of data: https://www.gov.uk/government/statistics/regional-renewable-statistics), East Cambridgeshire **generated** 507,550 MWh of renewable energy in 2022 (+13% compared with 2021) as follows:

Type of Renewable Energy	**MWh generated in 2022**
Photovoltaics (PV) solar	145,013
Wind	240
Anaerobic Digestion	107,780
Landfill Gas	0
Plant Biomass (eg straw burning plant)	254,516
All other possible sources (eg hydro)	0
Total	**507,550**

Please note that the table above identifies a zero contribution from Landfill Gas. Landfill Gas is excluded from the BEIS data because according to BEIS "there was some generation [of Landfill Gas in East Cambridgeshire] but it has been suppressed to prevent the output of individual plants being revealed" i.e. if the data was released, it would be commercially sensitive. Nevertheless, using historical data we have, the figure is likely to be less than 5,000MWh and would consequently be less than a 1% addition to the total district renewable energy production.

6.2. On a per household basis, it means an average of just under 14MWh of renewable energy is produced per household in East Cambridgeshire. On the basis that a typical medium household (2-3 bedroom house; 2 to 3 people) uses around 4MWh per year of electricity per year (though this of course varies considerably from home to home, and assumes electricity is not used for heating), the amount of renewable energy generated in the district would power more than three times the number of homes we have. Of course, this statistic excludes other major electricity users in the district, such as businesses and public buildings. Nevertheless, the district is a significant generator of renewable energy.

6.3. Indeed, **more renewable energy is produced in East Cambridgeshire than any other district in Cambridgeshire**, and the district is one of the top 10% renewable energy producing districts in the UK.

6.4. That said, the use of electricity in the district of East Cambridgeshire only contributes a small fraction (approx. 6% in 2021) towards our total CO_2 emissions. Thus, whilst having a high level of renewable energy produced in the district is, in principle, a good thing, even if we generated enough electricity to power the electricity currently used in every home, business and other building in the district, it would only reduce our district wide carbon footprint by around 6%.

6.5. What we need to do is reduce our other c94% of emissions (from petrol, diesel, oil and the way we manage our land) and switch more and more of our power use towards renewable-generated electricity.

Appendix 1 – Carbon Footprint Calculations Method

Introduction

In section 5, we set out the headline emissions or 'carbon footprint' of East Cambridgeshire District Council, as an organisation. In this appendix, we set out further details on the method employed and the assumptions used, together with acknowledgment of the limitations in the method.

Over time, the Council is committed to making its carbon footprint calculations as comprehensive and robust as possible.

Method

The starting point for carbon management is to accurately establish the emissions baseline. The scope of the baseline includes the required types and sources of emissions over a defined timescale. The baseline is a fixed point against which a reduction target can be set and future performance monitored. Our baseline was set as emissions arising in 2018/19.

To calculate CO_2e emissions arising, it is necessary to convert the 'raw' data (such as kWh of electricity used) into CO_2e emissions. This process is relatively straightforward, using what are known as 'conversion factors'. The carbon conversion factors used for this Environment Plan are the UK Government published carbon conversion factors for 2022 available at https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022 .

The Council is reporting on emissions within its operational control boundary, following the Greenhouse Gas (GHG) Protocol reporting standards available at https://ghgprotocol.org/corporate-standard.

'In Scope'

Defining the organisational boundary involves establishing which activities and functions are counted (or 'in scope') for the purpose of determining the Council's overall emissions, and by default what activities and functions are not counted ('out of scope'). This stage of the process involves reviewing the Council's operations to determine activities that give rise to carbon emissions.

Emissions, and their associated activities, are reported across three different scopes as follows:

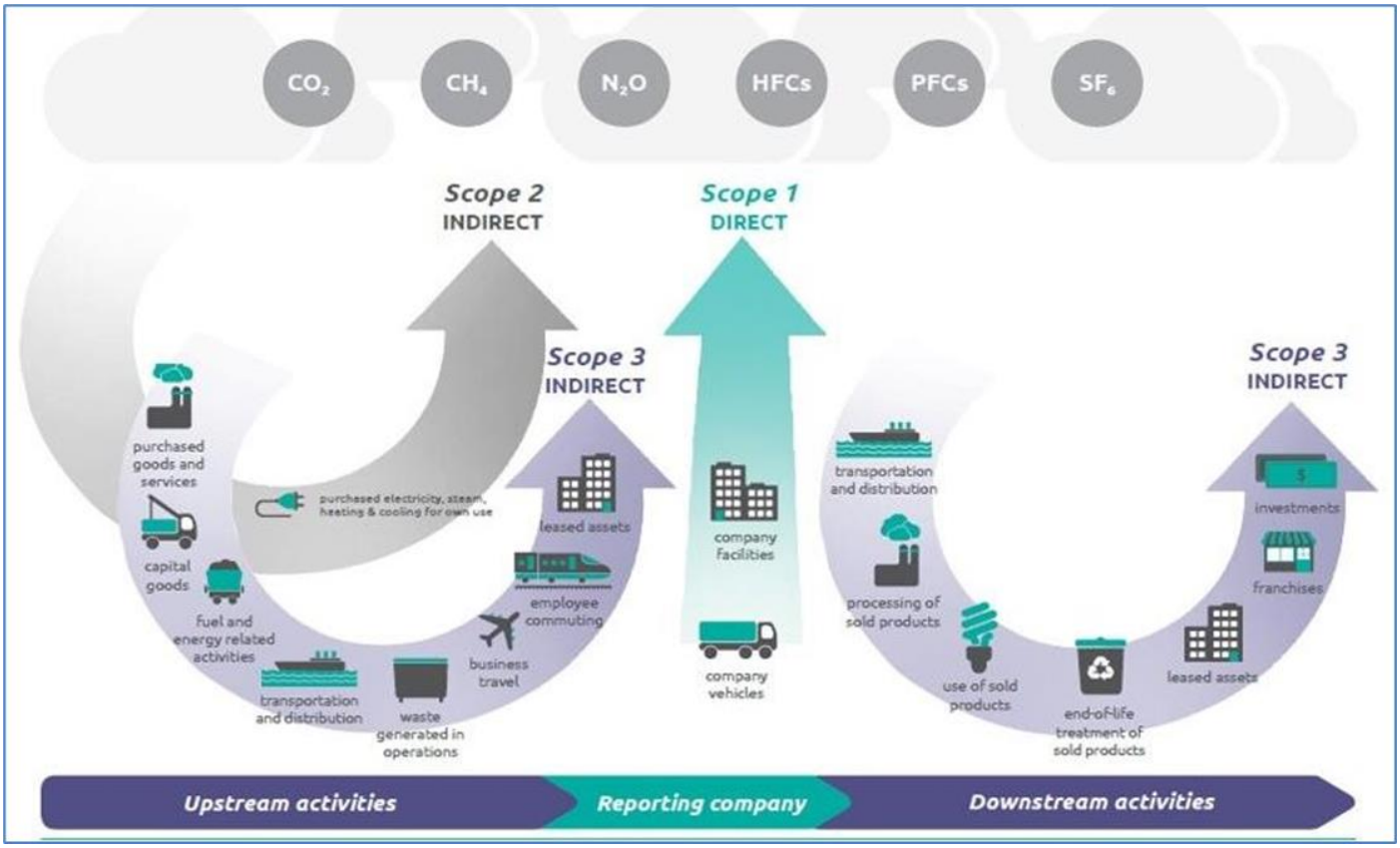
Scope 1 Direct emissions from Council controlled or owned sources

Scope 2 Indirect emissions from the generation of purchased energy used by Council

Scope 3 Indirect emissions associated with the value chain of the Council, both upstream into the Council and downstream out of the Council

Scope 1 and 2 emissions are generally considered to be areas that an organisation has a high degree of control over and can therefore reduce the resultant emissions significantly, if not completely. Scope 3 are considered to be indirect emissions that an organisation cannot directly control and therefore the ability to reduce emissions is far more challenging.

An overview of what falls in different scopes is set out in the diagram below (source page 5 of https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporing-Standard_041613_2.pdf)



An ongoing review process has determined that, for East Cambridgeshire District Council, it is appropriate to include the following sources ('in-scope') at the present time:

Scope	Activities typical to an office-based organisation	Identified Council emission sources
1	**Stationary** Production of electricity, heat or steam	• Gas used in Council Offices e.g. The Grange • Gas used in buildings operated by the Council e.g. E-Space North
1	**Mobile** Transportation of raw materials / waste	• Travel in cars, vans and heavy goods vehicles operated by the Council
1	**Fugitive** Hydrofluorocarbons (HFC) emissions during use of refrigeration and air-conditioning equipment	• Air conditioning used in Council Offices e.g. The Grange
2	**Stationary** Consumption of purchased electricity, heat or steam	• Electricity used in Council Offices e.g. The Grange, Portley Hill Depot • Electricity used in Council owned street and car park lighting which also includes road signs and illuminated bollards • Electricity used in business facilities operated by the Council e.g. E-space North, E-space South • Electricity used in public facilities operated by the Council e.g. Ely Market Square, Jubilee Gardens
3	**Stationary & Process** Production emissions from purchased materials	• Purchase materials (paper) • All other purchased materials – ***Excluded (see below)***

3	**Mobile** Transportation of raw materials / products / waste, employee business travel, employee commuting	• Staff business travel and accommodation • Employee commuting – ***Excluded (see below)*** • Supply and treatment of water used in Council Offices e.g. The Grange • Supply and treatment of water used in public facilities e.g. Public toilets • 'Well to tank' (this being emissions arising from the production, transportation, transformation and distribution of fuel before it reaches the vehicle that actually uses the fuel)

'Out of Scope'

In addition to the sources detailed above, there are other emission causing activities that the Council holds insufficient detail to accurately measure. Such emissions are therefore **excluded (or 'out of scope')** from the carbon footprint we report.

Such activities are listed below (taken from and defined in the GHG Protocol as 'scope 3' emissions) and are as follows:

Category 1	Purchased goods and services
Category 2	Capital goods
Category 7	Employee commuting
Category 8	Upstream leased assets
Category 9	Downstream transportation and distribution
Category 13	Downstream leased assets
Category 15	Investments

It is not unusual for an organisation to declare certain activities to be categorised as 'out of scope'. That's not because the organisation wants to exclude or otherwise 'hide' such emissions, but it is a pragmatic acceptance that it is too difficult, with resources available to that organisation, to calculate such emissions.

However, over time, the Council intends to make as many of these areas as possible 'in scope', therefore taking even greater responsibility for emissions arising, even where direct control is not present.

Of purchased materials, for example, we have, from reporting year 2022/23, introduced purchased paper into our calculations as being 'in scope', due to reliable data for the carbon impact of paper production and consumption becoming available. This has been calculated predominantly through a spend-based approach, which is a calculation method that estimates emissions by collecting data on the economic value of goods and services purchased and multiplying it by relevant secondary (e.g., industry average) emission factors (e.g., average emissions per monetary value of goods).

Employee commuting may be another early activity we could attempt to quantify scope 3 emissions arising.

Data Collection

The energy data used to calculate the carbon footprint is gathered from different sources, for example invoices received by the Council, annual energy statements from utility providers and property services. Work continues to ensure that this data is robust and systems are in place to ensure ongoing timely and accurate collection of such data. The table below provides more details:

Emissions Source Type	Data Source	Data Quality / Estimation techniques
Gas consumption	Energy invoices from different suppliers, meter readings	Where estimations have been used records are held with source data. Methods include: Annualising consumption or average data calculated using bookended data

Heating oil	Energy invoices from different suppliers	Annualising consumption where required
Refrigerants	Service invoices for air conditioning units	Annualising consumption where required
Fleet vehicles	Fuel purchased and vehicle log books	Annualising consumption where required
Electricity	Energy invoices from different suppliers, meter readings	Where estimations have been used records are held with source data. Methods include: Annualising consumption or average data calculated using bookended periods
Water supply & disposal	Energy invoices from different suppliers	Annualising consumption where required
Waste	Waste collection reports	Annualising consumption where required
Staff business travel	Staff mileage claims, fuel purchased and vehicle log books.	Annualising consumption where required
Hotel Stays	Staff claim forms	N/A

The carbon footprint of East Cambridgeshire District Council (as an organisation) has been calculated in line with the UK Government's Environmental Reporting Guidelines for Voluntary Greenhouse Gas Reporting, which are 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.

Market-based and location-based reporting

As set out in the tables in section 5, around 7% of the Council's CO2e emission come from 'scope 2' activities. In simple terms, in our case, these are emissions arising from the electricity the Council uses, mostly in its offices. When calculating the Council's headline carbon footprint, we are reporting these scope 2 emissions on a *location-based method* basis, which means those emissions are calculated using the average emissions intensity of the national grid. We think this is the fairest and most honest way of reporting our true emissions.

Indeed, the UK Government (in its 2019 'Environmental Reporting Guidelines', including Streamlined Energy and Carbon Reporting requirements) make it clear that, whilst not compulsory, "*organisations are encouraged to use location-based grid average emission factors to report the emissions from electricity, including those consumed from the grid*."

However, an alternative way of reporting our electricity activities is on a *market-based method* basis. Such a method takes account of the contractual basis of where we buy electricity from. The Council's electricity tariffs are almost entirely on a 100% renewable energy contract basis (a few of our isolated street lighting contracts are not, for example), and therefore under the *market-based* method, our scope 2 emissions would be almost eliminated entirely. This would reduce our total emissions (and our carbon footprint) by around 6%.

Some Councils and other organisations that are on 100% renewable energy tariffs are choosing to use this *market-based method* to report their emissions, and consequently are claiming a lower carbon footprint than they would do so if they reported under the *location-based method*. East Cambridgeshire District Council has chosen not to do so, for one simple reason. By reporting on a *market-based method*, that organisation does not actually reduce the net emissions of itself or the country as a whole; it simply means another organisation uses a greater share of 'dirtier' electricity than otherwise would be the case, because the organisation using the *market-based method* is in effect making the rest of the national grid, which is shared with everyone else, more carbon intensive. In fact, if an organisation which is on a 100% renewable energy tariff reports only on a *market-based method* basis, there is no incentive for that organisation to reduce its electricity use at all, because it would already be set at 0 tonnes CO_2e emissions.

Again, government gives advice in the aforementioned guidelines, as follows:

"*Where organisations have entered into contractual arrangements for renewable electricity and wish to reflect a reduced emission figure based on its purchase, this can be presented in the relevant report using*

a "market-based" reporting approach. It is recommended that this is presented alongside the "location-based" grid-average figures."

Put another way, *market-based* reporting alone is arguably a misleading way of trying to claim a lower carbon footprint than would otherwise be the case under the *location-based* method. If *market-based* reporting is to be reported at all, it should, according to government, be alongside *location-based* reporting. We have reported it only as *location-based* reporting.

Overall, whilst it is important that East Cambridgeshire District Council does operate a renewable energy tariff for its electricity supply, because that will generate investment in renewables across the country, the Council is not headlining its carbon footprint calculations on that basis. Instead, it prefers, in line with government guidance, to headline its reporting of emissions using the *location-based reporting method*. However, the above commentary helps explain how we present our data in the most transparent and accurate way possible.