2024-2025

Gloucestershire's sixth annual climate change report

Gloucestershire
COUNTY COUNCIL

Contents

Foreword by Councillor Martin Horwood **4**
Executive summary 6
Table 1: Carbon emissions from Gloucestershire County Council operations for Scope 1, 2 and 3 7
Working across Gloucestershire financial year 2024/2025 8
Getting Gloucestershire to net zero 8
Climate Leadership Gloucestershire 9
Local transport plans 10
Air quality 12
Case study - Thinktravel's spring campaign and the 'Big Walk and Wheel' 13
Working with businesses – The Growth Hub and net zero 14
Case study - Engaging with businesses - The Orchard Trust 15
Waste reduction 16
Case study - Reducing food waste in Gloucestershire 17
Community engagement 18
Case study - The cycle revolution - Love to Ride 21
Nature recovery 22
Adaptation 23
Case study - Co-benefits Atlas 24
Table 2: Top 3 categories of value from additional benefits (total £ millions saved from 2025-2050) 24
Gloucestershire County Council carbon emissions Financial year 2024/2025 25
Calculating Gloucestershire County Council emissions 25
Table 3: Emission information 26
Case study - Gloucestershire archives' 'Green Pledge' project, 2023-2025 27
Heating and power (including streetlights) 29
Case study - Solar panels 30
Fleet vehicles 31
Solar Energy and savings 32
Case study - Reducing emissions through intelligent transport scheduling 33
Upstream transport and distribution 34
Waste generation 34
Business travel 34
Employee commuting 34
Case study - Active businesses Gloucestershire and the decarbonisation of the commute 35
Purchased goods and services (including capital goods) 37
Social Value Case Studies 37
Investments 38
Offsetting and insetting 38
Case study - Rural estates: Gamage Hall Farm, Dymock 39
Annex: Table 4: progress on actions across the county in 2024/2025 40
Table 5: progress on actions within Gloucestershire County Council 43

Foreword

Climate change poses an existential risk to humanity, and it is already affecting Gloucestershire in many different ways. We face increased risk of more intense and extreme weather, including storms, flooding, and higher temperatures. This threatens our local ecology and food production, impacting all of us but especially those most vulnerable in our communities.

Gloucestershire County Council declared a climate emergency in 2019, but we recognise the need to intensify our efforts. The new administration will take more steps to reduce greenhouse gas emissions and to adapt to the inevitable impact we are seeing within Gloucestershire.

We have an outstanding team here at the county council, already working hard to reduce the council's own emissions, adapt where we need to and support action within the broader county. This report provides an update on actions and achievements already taken.

As the report explains, greenhouse gas emissions from our own buildings and the energy we use are being successfully reduced in part because we now purchase 100% green electricity. However, most of our emissions, like other councils, are generated from procured goods and services from suppliers and contractors, with progress on that front much less clear. That's why in financial year 2025-2026 we will implement changes in the way we award contracts to make sure suppliers monitor and commit to reducing their emissions.

We won't just make these changes ourselves but will support our suppliers to make them too, especially local small businesses. This is part of a wider commitment to make sure climate consideration is embedded into everything we do.

Our Growth Hub service supports local businesses and our own suppliers to reduce their carbon footprint (page 14).

The good news is that many of the actions we have taken in Gloucestershire to reduce our carbon footprint and adapt to climate change bring other valuable benefits to people who work and live here. These include saving residents money, supporting good physical and mental health, making our air cleaner, supporting businesses to become more efficient, and improving our local environment. See page 24 for the modelled financial value of these benefits.

Reducing and recycling food waste (page 17) doesn't just reduce methane emissions, it produces non-fossil fuel gas and valuable organic fertiliser for local farmers. In our survey of over 3,000 residents, the proportion saying they are recycling their food waste has increased from 63% in 2022 to 83% in 2024.

We are enabling residents to travel more easily across the county by supporting active travel initiatives. Examples include Thinktravel's Big Walk and Wheel (page 13), and improved public transport such as the Robin Bus (page 11). These projects support our local communities and reduce carbon emissions.

Improving our transport for those with additional needs has saved the council money as well as reducing travel times (see case study on page 33).

Within the council's own estate, we are already working to install solar panels on our buildings (page 30) saving the local taxpayer money as well as helping the environment - work that will be accelerated.

We are improving health and wellbeing as well as reducing carbon emissions by getting more of our residents on their bikes, with over 827 people taking part in Cycle September, and over 62,000 miles cycled, see Love to Ride (page 21).

As part of the Gloucestershire Archives Green Pledge project, we have worked to reduce our environmental impact. We have also catalogued over 9,000 environmental records and collected new ones that document the significant role Gloucestershire people and organisations have played in environmental matters (page 27).

We are working fast to introduce the Local Nature Recovery Strategy to help restore nature and increase biodiversity. With the support of local landowners, over 130,000 trees in Gloucestershire have been planted, capturing more carbon and creating more natural shade and enhancing local environments.

Through work with Gloucestershire Local Nature Partnership, we're putting in place new natural flood management measures and we want to do much more to prevent catastrophic damage and loss in local communities, adapting to climate change and storing more carbon in the landscape.

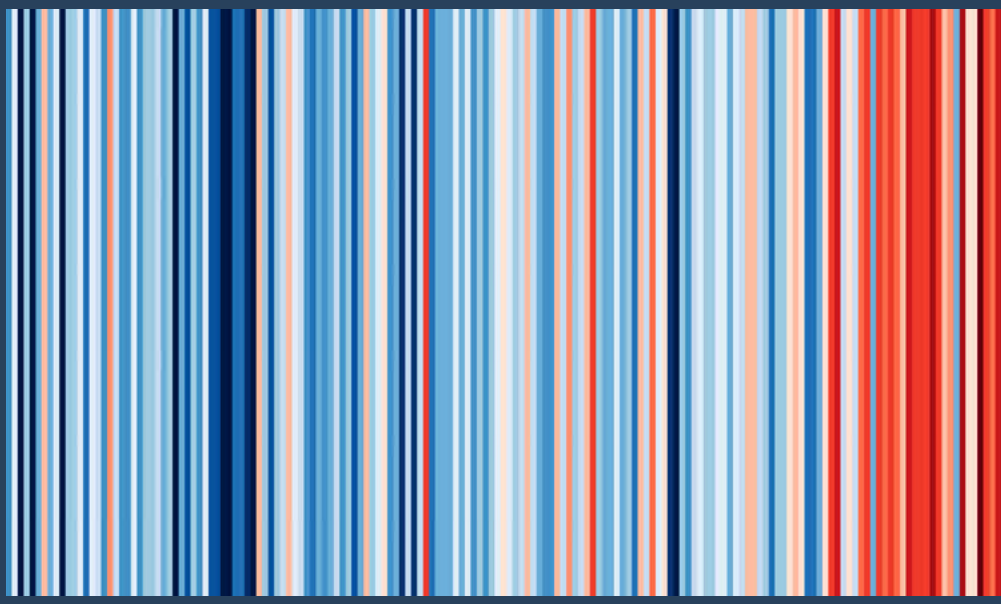
This is all good news but climate change really is an emergency. As the **#ShowYourStripes** chart shows, local temperatures in are already changing dramatically. The chart shows the shift from blue representing cooler temperature to red showing the warmer temperatures in the last decade.

There remains a serious gap between what we have achieved so far and what we need to do to prevent catastrophic climate change and meet our own targets, and we have a lot more to do.

Preventing and adapting to climate change is now one of the county council's top priorities and we all need to redouble our efforts to lead the county in facing probably the greatest challenge of our time.

"We know climate change is an urgent threat. While much more needs to be done, the progress we report here shows that if we embed climate action into everything we do ***we can create a cleaner, healthier, happier, safer and more hopeful future in Gloucestershire for generations to come****."*

Councillor Martin Horwood
Cabinet lead for nature, climate and waste reduction



Temperature data for Gloucester, 1850-2024, (from University of Reading). The average temperature 1961-2010 is set as the boundary between red and blue. Further details on the graphic can be found by searching for ***#ShowYourStripes***

Executive summary

Across the UK local authorities are responsible for between 2-5% of emissions[1] through their direct activities. Addressing emissions beyond the direct control of Gloucestershire County Council will have a more significant impact on climate change mitigation than focusing solely on those generated by the council's own activities.

The council is working with partners across the county to reduce emissions beyond its direct control to contribute to a healthier county. Focussing on countywide emissions is essential to meeting our goal of becoming a net zero county by 2045.

Key partners in influencing these wider emissions include internal teams at the county council – highways, transport planning, and public health, and external partners – businesses, community groups, other local councils, the NHS, and many more..

The county council is working to influence wider county emissions, including work with small and medium businesses (page 14), work with our transport team to reduce surface transport emissions (page 10) and community engagement (page 18). With limited resources the council has targeted interventions that not only help reduce carbon emissions but improve health outcomes for residents, increase local resilience and adaptation to climate change impacts and save residents' money by improving efficiency. A summary of our planned pathway to net zero is below (page 8).

Gloucestershire's county-wide emissions were just over 5 tonnes of CO_2e per person, with 3,329 $ktCO_2e$ in 2023.

In addition to the data available for the county, the county council commissioned a 'Pathways to net zero' report in 2023-2024. This report provided a breakdown of current emissions in the county, a breakdown of the average resident carbon footprint in the county and potential carbon reduction pathways to reach Net Zero by 2045 (see below).

Gloucestershire County Council emissions	FY21/22	FY22/23	% change
Emissions total	3,502	3,229	-5.2%
Per capita emissions total	5,39	5,09	-5.6%

[1] https://www.theccc.org.uk/wp-content/uploads/2020/12/Local-Authorities-and-the-Sixth-Carbon-Budget.pdf

Our existing corporate targets are to achieve an 80 per cent reduction in the council's corporate carbon emissions by no later than 2030, striving towards 100 percent with carbon offsetting by the same date. Crucially as an anchor organisation within Gloucestershire, we can lead change within the county, both directly reducing our corporate emissions but also indirectly by influencing others, thereby helping to achieve net zero for the county by 2045.

Our emissions are calculated in line with the international Greenhouse Gas Protocol, and as such as are subdivided into three Scopes. Scope 1 is from direct emissions (e.g. fuel and gas burnt in boilers), Scope 2 from indirect emissions through energy used (e.g. electricity). Scope 3 covers the other indirect emissions through things such as commuting, business travel and procurement of goods and services.

Our calculated emissions for Scope 1 are 6,458 tCO_2e emissions and due to purchasing 100% renewable electricity the emissions for Scope 2 are calculated as zero. Scope 1 shows a 11% reduction compared to the previous year. Scope 3, which was calculated using spend based data provides an approximation of carbon emissions. The data shows a 7% reduction.

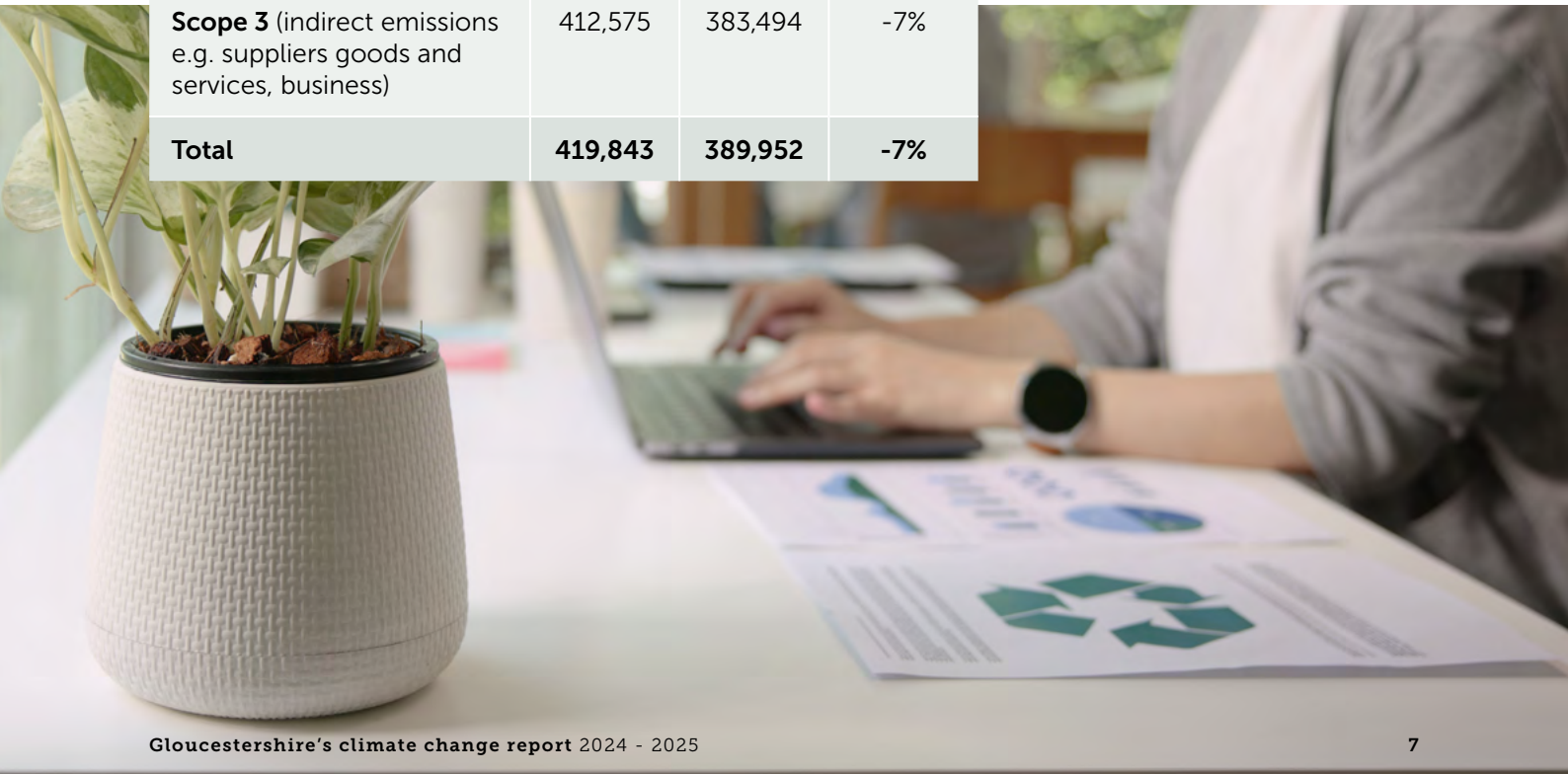
Procured goods and services continue to make up most of the calculated emissions. Therefore, it is imperative that we improve our data collection and look to reduce these emissions. In the coming financial year, the county council will be implementing changes in new contracts to address this. This will be supported by The Growth Hub (see case details, p15) to ensure our suppliers have the information and knowledge to achieve this, especially in the case of small and medium sized enterprises.

Reducing carbon emissions is an opportunity, not just for the environment, but also to deliver other important benefits such as improving people's health and wellbeing and reduce the impact of climate change on our communities. Further details of the benefits, including financial, can be found here at the UK co-Benefits Atlas UK. By the county council considering these wider benefits, the council can ensure it is delivering value for money and supporting projects that extend across service areas.

Net zero cannot be achieved by business as usual and will require commitment to change. By doing this, we can continue to deliver on the council's 2019 climate emergency commitment, influencing and impacting across the county and demonstrating the vision being brought to life.

Gloucestershire County Council emissions	FY23/24 tCO_2e	FY24/25 tCO_2e	% change
Scope 1 (direct emissions e.g. gas boilers and fuel)	7,268	6,458	-11%
Scope 2 (energy generation e.g. electricity)	0	0	0
Scope 3 (indirect emissions e.g. suppliers goods and services, business)	412,575	383,494	-7%
Total	**419,843**	**389,952**	**-7%**

Table 1: Carbon emissions from Gloucestershire County Council operations for Scope 1, 2 and 3. Note the % change is a raw change (e.g. no correction for difference in year to year temperature or due to variance in goods and services has been applied).



Working across Gloucestershire financial year **2024/2025**

Getting Gloucestershire to net zero

Gloucestershire emissions show a 5% decrease from 3,502 kilotonnes of CO_2 equivalent ($KtCO_2e$) in 2022 to 3,320 $ktCO_2e$ in 2023[2]. This is roughly equivalent to 5.09 tonnes CO_2e per person in Gloucestershire. The decrease in emissions is in line with national trends for both other local authority areas and the UK[3], but there is still a significant gap between this reduction and what we need to achieve to meet our targets. This data is released two years in arrears by the Department for Energy Security and Net Zero (DESNZ).

Gloucestershire County Council commissioned a 'Pathways to Net Zero' report in 2023-24. This report provided a breakdown of current emissions in the county (see above), a breakdown of the average resident carbon footprint in the county (see community engagement below) as well as potential carbon reduction pathways to reach net zero by 2045. These pathways show the areas of emissions that are highest and that have feasible decarbonisation actions associated with them.

The report has identified the top five priority interventions to achieve Gloucestershire's "fair share" emissions targets. Fair share emissions targets seek to ensure that the transition to net zero does not disproportionately impact particular groups.

1. Goods and services (footprint for residents is 31% of the whole baseline) - Reducing consumption patterns by buying less, repairing, reusing and repurposing goods, and favouring more local supply chains.
2. Food and drink (footprint for residents is 27% of total) – Dietary shift to more plant-based foods reduces emissions and allows more land to be used for nature recovery and carbon sequestration.
3. Car use (footprint for residents is 19% of total) – A shift to active travel and public transport, along with localisation to ensure rural communities are still well served without being locked into car dependence.
4. Visitor economy (16% of total) – As much visitor travel by public transport as possible, as well as encouraging longer stays and more local visitors.
5. Household fuel use (footprint for residents is 9% of total) – A complete switch away from oil and gas for household heating, along with significant energy demand reduction measures.

While there are many more puzzle pieces needed to fully decarbonise Gloucestershire, these five interventions represent highly impactful areas to address. Through the combination of integrated and sustainable spatial planning, active travel and local service re-establishment, renewable energy technology, and carbon sequestration efforts, Gloucestershire can make meaningful progress toward its climate goals.

This holistic approach will also help mitigate any negative socio-economic impacts on rural communities of localisation, changes to farming practices, and nature recovery programmes, ensuring a just transition and a prosperous future for all.

[2] https://www.gov.uk/government/collections/uk-local-authority-and-regional-greenhouse-gas-emissions-statistics
[3] https://assets.publishing.service.gov.uk/media/67a30e4f7da1f1ac64e5feb1/2023-final-greenhouse-gas-emissions-statistical-release.pdf

Climate Leadership Gloucestershire

Climate Leadership Gloucestershire brings together key stakeholders within Gloucestershire such as county and district councils alongside other public bodies such as the NHS and police to co-ordinate and drive climate action. It has developed a comprehensive action plan covering 10 key themes including energy, economy, planning, waste, retrofit, transport, adaptation, food and farming, biodiversity and behaviour change.

Climate Leadership Gloucestershire funded four projects from its action fund this year – a green skills coordinator role, a shared funding bid writer role, a climate risk and vulnerability assessment, and a contribution to a research study on either the council's role if specific to Gloucestershire County Council or councils' roles if general about the roles of councils.

In addition to the projects funded from its action fund this year, the group has:

- Launched a one-stop home energy efficiency platform for all residents in January 2025.
- Coordinated a successful bid to the Southwest Net Zero Hub to recruit retrofit engagement officers in three Districts.
- Facilitated a new countywide forum supporting development of community energy organisations.
- Contracted the development of a countywide Local Area Energy Plan, with match funding from the Southwest Net Zero Hub; Gloucestershire County Council have provided the additional funding for this project.

The group has also brought partners onboard to represent higher education, town and parish councils and young people. The Climate Leadership Officers Group shares information and best practice across Gloucestershire.

Over the next couple of years, the planned actions include the completion of key projects such as the Local Area Energy Plan and the Climate Risk and Vulnerability Assessment (see further details on page 23), and further work on retrofit engagement.

Future work will also support further engagement with local farmers on net zero, recruiting a shared Climate Change and Planning Manager to better support sustainability policies in local plans, nature recovery, and transport and council fleet decarbonisation pathways.

The group is developing a countywide Local Area Energy Plan, ***with funding from the Southwest Net Zero Hub and Gloucestershire County Council***

Local transport plans

The Gloucestershire Local Transport Plan[4] includes a commitment to develop an emissions reduction pathway to deliver on the commitment to reduce per capita transport carbon emissions by 2045, which is currently significant across Gloucestershire. The Journey to net zero is a route map summary[5] for transforming travel in Gloucestershire, summarising a programme of work to reduce the impact of transport on climate change. Transport is the sector that contributed the most to carbon emissions and 19% of total resident emissions in Gloucestershire are from car use (page 18).

We are working to improve cycling and walking infrastructure. The 'Thinktravel' team is helping to shift transport behaviours through education and behaviour change programmes, encouraging active travel for daily trips or as part of a multi-modal sustainable journey by E-scooter, bus, or rail. We use the Department for Transport's Modeshift Stars Education and Business Travel planning platform to track progress and instil action. In June 2024, we published the second Bus Service Improvement Plan[6] with a vision to return bus patronage levels to pre-covid levels through an investment pipeline to deliver improvements across the network.

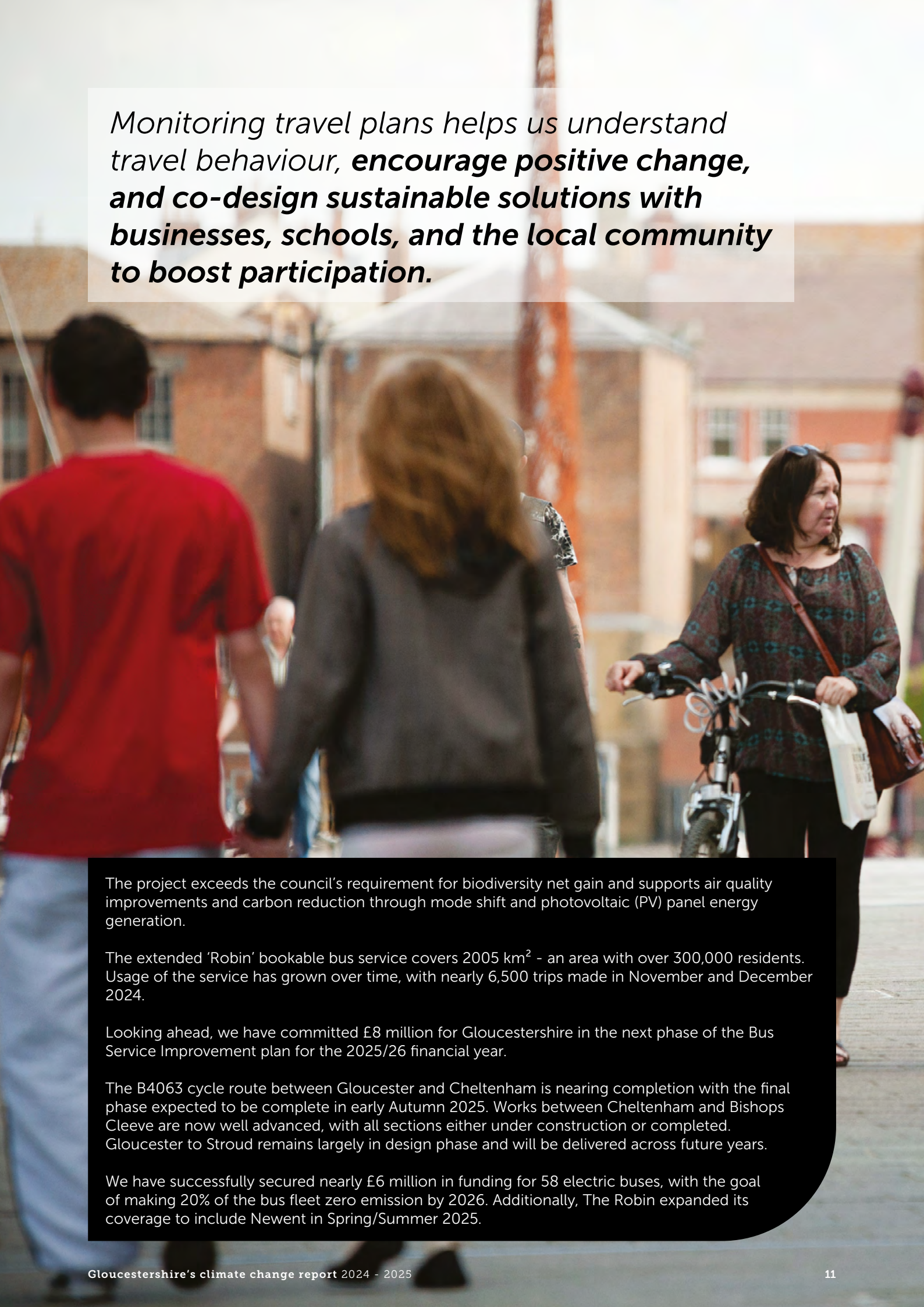
Cycling figures in Gloucestershire are on the rise, the newly introduced VivaCity cycle counters recorded an increase in journeys in 2024. In particular, the Arle Court cycle path has seen notably high usage in 2024, with an annual average of 322 cyclists, significantly higher than other routes across the county.

Monitoring travel plans helps us understand travel behaviour, encourage positive change, and co-design sustainable solutions with businesses, schools, and the local community to boost participation.

By April 2025, the total number of public use EV charge points installed is 238. In 2023-4, over 142,000 kWh of charging was undertaken, equating to 40 tonnes of CO_2e. From June 2024 – March 2025 there were 236,957 trips on Voi e-scooters in Gloucestershire. Scooter users covered over 267,00 miles, saving 35.25 tonnes CO_2e compared to using cars for these journeys.

The Arle Court Transport Hub was completed in March 2025. It is home to the largest contactless payment EV charging public transport hub in the UK. It provides passengers Park & Ride options to Cheltenham and Gloucester, access to the UK's coach network, 100 Electric Vehicle fast charging points (+4 super-fast charging), indoor and outdoor waiting facilities, secure cycle storage, free Wi-Fi, and a customer service desk to facilitate easy transport mode shift.

[4] https://www.gloucestershire.gov.uk/transport/gloucestershire-local-transport-plan-2020-2041/
[5] https://www.gloucestershire.gov.uk/media/acih5xp3/j2nz_decarbroutemapsummary_for-issuev22_final_with-hyperlink.pdf
[6] 10969-gcc_bus-service-improvement-plan-2024.pdf



Monitoring travel plans helps us understand travel behaviour, ***encourage positive change, and co-design sustainable solutions with businesses, schools, and the local community to boost participation.***

The project exceeds the council's requirement for biodiversity net gain and supports air quality improvements and carbon reduction through mode shift and photovoltaic (PV) panel energy generation.

The extended 'Robin' bookable bus service covers 2005 km^2 - an area with over 300,000 residents. Usage of the service has grown over time, with nearly 6,500 trips made in November and December 2024.

Looking ahead, we have committed £8 million for Gloucestershire in the next phase of the Bus Service Improvement plan for the 2025/26 financial year.

The B4063 cycle route between Gloucester and Cheltenham is nearing completion with the final phase expected to be complete in early Autumn 2025. Works between Cheltenham and Bishops Cleeve are now well advanced, with all sections either under construction or completed. Gloucester to Stroud remains largely in design phase and will be delivered across future years.

We have successfully secured nearly £6 million in funding for 58 electric buses, with the goal of making 20% of the bus fleet zero emission by 2026. Additionally, The Robin expanded its coverage to include Newent in Spring/Summer 2025.

Walk, cycle or scoot your commute

Cycling produces **zero emissions, reduces air pollution** and helps **ease congestion** on roads.

www.gloucestershire.gov.uk/CleanAirDay

CHELTENHAM BOROUGH COUNCIL Gloucestershire COUNTY COUNCIL

Air quality

The District Air Quality Grant awarded £23,400 to several district councils for air quality projects. These include:-

- anti-idling awareness and the installation of self-build air quality monitors for schools in Cheltenham,
- anti-idling campaigning in known areas of congestion and schools in Tewkesbury,
- and the purchase of particulate matter monitors for wood burning and traffic emission monitoring in Stroud.

In a related initiative, a parish council has been awarded £500 towards anti-idling signage and campaigning in known problem areas with high pollution levels.

The Air Quality Monitoring Dashboard now features particulate matter monitoring data provided by Cheltenham Borough Council and additionally, reference to monitoring by other organisations (e.g. Charlton Kings Parish Council, Clean Air Cheltenham, Airly particulate matter monitoring).

The District Air Quality Steering Group consisting of Gloucestershire County Council Public Health and Air Quality, as well as the district council Air Quality and Environmental Health Officers continues to meet on a quarterly basis. Guest speakers have been in attendance, including a representative from the NHS to discuss Asthma Friendly Schools.

Furthermore, we have expanded our focus on the health impacts of poor air quality. We have secured a position to attend the Gloucestershire health professional's Integrated Locality Partnership. We are also liaising with GPs regarding the installation of anti-idling signage in surgery car parks, and the use of infographics and videos in surgery waiting rooms. Additionally, we are incorporating discussions on pollution exposure into patient respiratory health consultations. A countywide Air Quality Strategy referred to in last year's Climate Change Strategy is currently halted until Local Government Reorganisation plans are confirmed.

Actions taken to improve air quality also support reductions in carbon emissions. This can result in significant value through avoided costs of an economic, social and environmental nature, which impact on life expectancy and health outcomes. Within Gloucestershire, this amounts to a modelled figure of £466,429,000 (2025-2050) (for further details see case study on co-benefits, page 24).

In a related initiative, a parish council has been awarded ***£500 towards anti-idling signage and campaigning*** *in known problem areas with high pollution levels.*

Case study

Thinktravel's spring campaign and the 'Big Walk and Wheel'

Thinktravel's spring active travel programme and the Big Walk and Wheel 2025 (24th March-4th April) campaign is now in its fourth year. Funded through the Sustainability Climate Change Fund for the Safer Routes for School Programme there was increased engagement in Active travel training, skills development, inter-active workshops through dynamic delivery, and enthusiastic school participation. Over the course of 12 weeks, the initiative empowered pupils to embrace active travel, explore their communities, and develop vital road safety skills through a range of inspiring activities.

Project outcomes:
Big Walk and Wheel 2025 stands out as a significant milestone in Gloucestershire's active travel journey. With over 58,000 journeys logged and over 50 schools involved, the campaign not only promoted healthier travel habits but also strengthened community engagement and pupil wellbeing.

Schools have expressed appreciation for the variety, accessibility, and educational value of this year's Big Walk and Wheel activities, Approximately 150 education, training and skills sessions were delivered associated with walking and wheeling over 12 weeks leading up to the Big Walk and Wheel challenge.

From imaginative assemblies to interactive travel adventures, the initiative successfully blended learning with fun and community spirit.

Total Active Journeys Recorded: 58,333

- On Foot or Wheelchair: 42,484
- Scooter Journeys: 8,930
- Cycling Trips: 6,453
- Other Active Modes: 466

After Participation Summary

- A total of 52 schools signed up
- This comprises 2 very small primary schools, 33 small primary schools and 17 large primary schools
- Of those, 42 schools actively logged journeys.

Top performing schools

Very Small Primary School Winner:	Small Primary School Winner:	Large Primary School Winner:
English Bicknor Church of England Primary School	Prestbury St Mary's C of E Junior School	Charlton Kings Infants' School
72% active journeys	88% active journeys	88% active journeys

Working with businesses - **The Growth Hub and net zero**

The Growth Hub net zero service provides support for businesses across the county in the form of carbon auditing and carbon foot printing with tailored guidance on multiple topics relating to net zero resulting in:

- Outreached to over 1600 businesses signposting them to information
- Supported over 180 businesses on how to start a journey to net zero
- Arranged twelve events and three conferences in the six Growth Hubs with over 250 businesses attending over the past three years.

The range of topics presented has included: circular economy business models, sustainability in finance, sustainability and compliance in marketing, environmental standards and B Corp, solar energy installation, culture and community in sustainability and carbon auditing.

It is also focused on providing support for the county council's supply chain, helping suppliers to audit their carbon emissions and start a carbon reduction plan, aligned with public sector procurement as part of their future engagement with the council.

The service will provide workshops on carbon auditing at Growth Hub venues, delivering in-depth technical support on the audit process and guidance on mitigation and adaptation activities.

Further details of the work being done is given in the case study (page 15) of The Orchard Trust who have been supported by the Net Zero service.

Case study

Engaging with businesses - The Orchard Trust

Health services can sometimes be seen as a more challenging area to reduce carbon emissions. The Orchard Trust have provided the following feedback along with their experience of having used The Growth Hub to start their carbon reduction journey.

The Orchard Trust provides engaging and fulfilling lives to adults with learning disabilities. The Trust was set up in 1989 by a group of families who were seeking a different way of looking after their children who had additional needs from the institutional facilities available at the time. They have now expanded to run four care homes and two supported living homes within the Forest of Dean, supporting 47 people 24 hours a day.

Becoming a more environmentally sustainable charity is important to the Trust, and they have made improvements for a few years - increasing recycling, seeking renewable energy contracts and moving to a more ethical pension provider. The next step on this journey was to determine their CO_2 equivalent emissions and identify the most effective follow-up tasks in reducing these, as well as increasing biodiversity across their sites, to help balance the emissions they are unable to eliminate.

They became aware of the Growth Hub's net zero specialists through the Forest Economic Partnership. Finding experienced, sensible, and practical advice and support to determine their CO_2 calculation and then to understand the most appropriate actions to take was incredibly useful and has helped them with their ongoing journey.

They started the conversation, unsure of the best place to start but with guidance from The Growth Hub Net Zero team they soon created a list of objectives.

Firstly, they calculated their CO_2 emission figure with hands-on support throughout this process, so the trust now has an emissions figure.

Secondly, they created a plan prioritising which emissions to reduce first, based on their business model and various limiting factors. This led to the writing of a carbon reduction plan (in line with procurement note PPN06/21) which they are in the process of completing, and a draft environmental sustainability policy. They are working with staff teams to implement carbon reduction plans and ensuring sustainability is at the forefront of all business decisions.

They will also continue actioning the opportunities set out within the reports from Wye Valley Landscape, Gloucestershire Wildlife Trust and Herefordshire Meadows to improve biodiversity, soil quality and ensure land is managed in a way that is environmentally sustainable at their smallholding.

" There is so much information available on sustainability it became a minefield to navigate and difficult to know where to start.

Finding experienced, sensible and practical advice and support to determine our CO_2 calculation and then to understand the most appropriate actions to take was incredibly useful and has helped us with our ongoing journey."

Waste reduction

Reducing waste and increasing reuse and recycling has a direct impact on carbon emissions. Some key materials that will be impacted by this include food, electronics, and textiles. More traditional household recycling like paper, card, glass, plastics, and metals have a smaller associated carbon footprint than the materials above.

569,811.37m^3 of biogas was produced at the Severn Trent Green Power facility in 2024. Estimates vary when comparing the carbon produced by biogas and natural gas, but biogas has between a 51-70% reduction in CO2e compared to midstream natural gas according to recent research[7].

Gloucestershire County Council is part of the Gloucestershire Resources and Waste partnership (GRWP), a partnership between the county and district councils of Gloucestershire. These are Cheltenham Borough Council, Cotswold District Council, Forest of Dean District Council, Gloucester City Council, Gloucestershire County Council, Stroud District Council and Tewkesbury Borough Council.

The GRWP is an informal partnership that provides countywide leadership and a framework for joint working on resources and waste related matters. GRWP members work together to optimise waste management services across the county. The partnership is committed to the development and implementation of a Gloucestershire Resources and Waste Strategy in order maintain continual improvement in service standards and performance.

During the financial year 2024/2025, Gloucestershire achieved a recycling rate of 53.2%, which has remained relatively stable over the past few years.

The Gloucestershire Real (reusable) Nappy Project continues to be a success by reducing the number of nappies being disposed of in Gloucestershire.

Gloucestershire's Master Composter volunteers have engaged with various community groups, helping at least 20 people per volunteer to start or improve home composting, diverting 48 tonnes of waste annually.

Further community support initiatives include two Libraries of Things locations, 16 Repair Cafés, and a range of waste reduction campaigns which have seen significant public engagement. Over 1,000 residents were engaged through 50 community outreach events across the year. This included 20 classes on low food waste cooking, run in partnership with Wiggly charity and the Council's adult education, with a regular low food waste cookery course launched in 2025.

The continuation of Waste Wizard, a widget on Gloucestershirerecycles.com which helps residents find out how to reuse, recycle or dispose of their items, has seen over 82,000 material searches in financial year 2024/2025.

Although primarily aimed at helping people recycle things in the right place, waste reduction options are included where applicable such as Repair Cafés and charity shops.

Future plans include continuing the compost bin discount, with an increased value around Biodiversity Week to encourage residents to start composting. We will also introduce a composting coordinator to boost the work of the Master Composters and others promoting home composting. In addition, we will provide a low waste guide for Gloucestershire to help residents reduce the amount of waste they throw away.

Gloucestershire's Master Composter volunteers have engaged with various community groups, ***helping at least 20 people per volunteer to start or improve home composting****, diverting 48 tonnes of waste annually.*

[7] https://pubs.rsc.org/en/content/articlehtml/2024/ee/d3ee02516k

Case study

Reducing food waste in Gloucestershire

The Gloucestershire Resources and Waste Partnership launched the food waste campaign 'It all adds up' in January 2024. The campaign highlighted how to reduce food waste throughout the year, providing general tips to make the most of the food residents buy to reduce waste and save money.

The aims of the campaign were to divert food waste from the residual bin by:

- reducing the amount that residents wasted and
- by increasing food waste recycling.

In Gloucestershire food waste is used to generate biogas which is injected into the gas grid. Biogas has between a 51-70% reduction in CO_2e compared to midstream natural gas according to recent research[8].

Project outcomes.
The campaign used a wide variety of community engagement methods:

- 100 residents attended low waste cookery classes, organised by the Adult Education team. 98% of attendees changed the way they cooked to reduce waste and further courses are in the pipeline.
- 12,000 doors were knocked and a team of temporary staff talked to over 3,000 residents to encourage them to recycle food waste.
- An animated video was created that outlined why recycling food is important alongside a 'real' filmed video that outlined how food is recycled.
- An 8 page booklet was posted to over 300,000 households in April 2024, focussing on how to reduce the amount of food wasted at home.
- Advertising was added to the side of waste vehicles and Household recycling centre containers to encourage food waste recycling.

The proportion of people surveyed who reported recycling food waste increased from 63% in 2022 to 83% in 2024. This trend is consistent with national reports from the waste charity WRAP, which indicate that more households are becoming aware of food waste issues and taking proactive measures.

[8] https://pubs.rsc.org/en/content/articlehtml/2024/ee/d3ee02516k

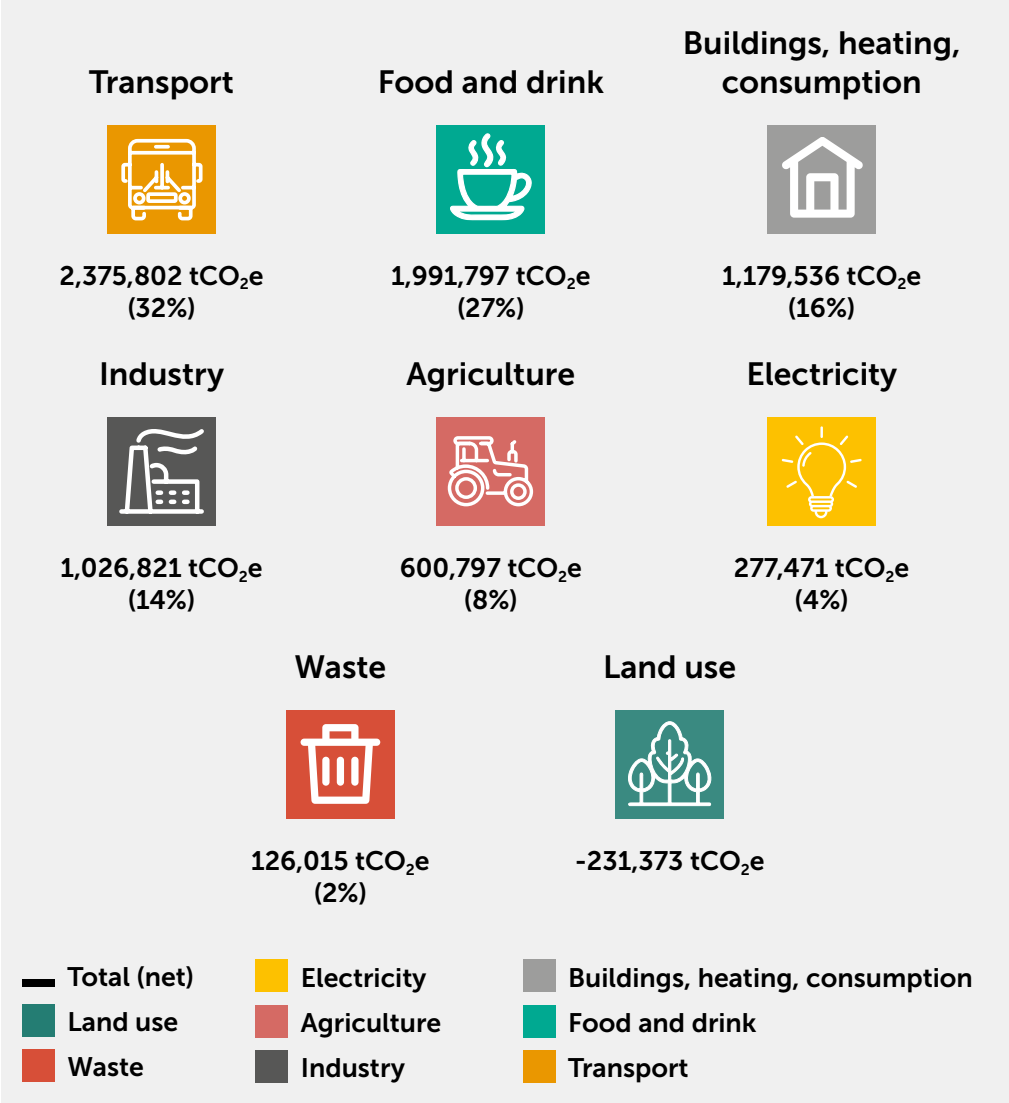
As a result of the campaign the tonnage of food waste collected was higher in early 2025 compared to the same period in 2024, aligning with the shift in messaging as part of the campaign from reducing food waste to recycling food waste in late 2024. An estimated 29–40 tonnes of carbon was saved through increased food waste recycling in the 9 months following the campaign. The plant overall generates enough gas to supply just under 4,000 homes per year.

The proportion of people surveyed who reported recycling food waste increased from 63% in 2022 to 83% in 2024.

Community engagement

The seventh carbon budget was published by the Climate Change Committee in February 2025. It highlighted that a third of all changes needed to meet net zero are dependent on the choices that individuals make.

The county council's recent "Pathways to Net Zero" report identified that 70% of emissions in Gloucestershire can be attributed to individuals and half of Gloucestershire's emissions come from just three key areas - food and drink, transport fuel, and heating homes. This report used the most recent data available at the time of publishing which was from the financial year 2022/2023. Transport contributed the highest percentage of emissions (32%) followed by food and drink (27%) and buildings (16%).



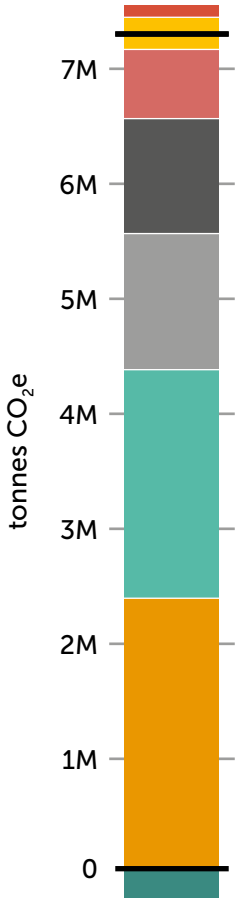
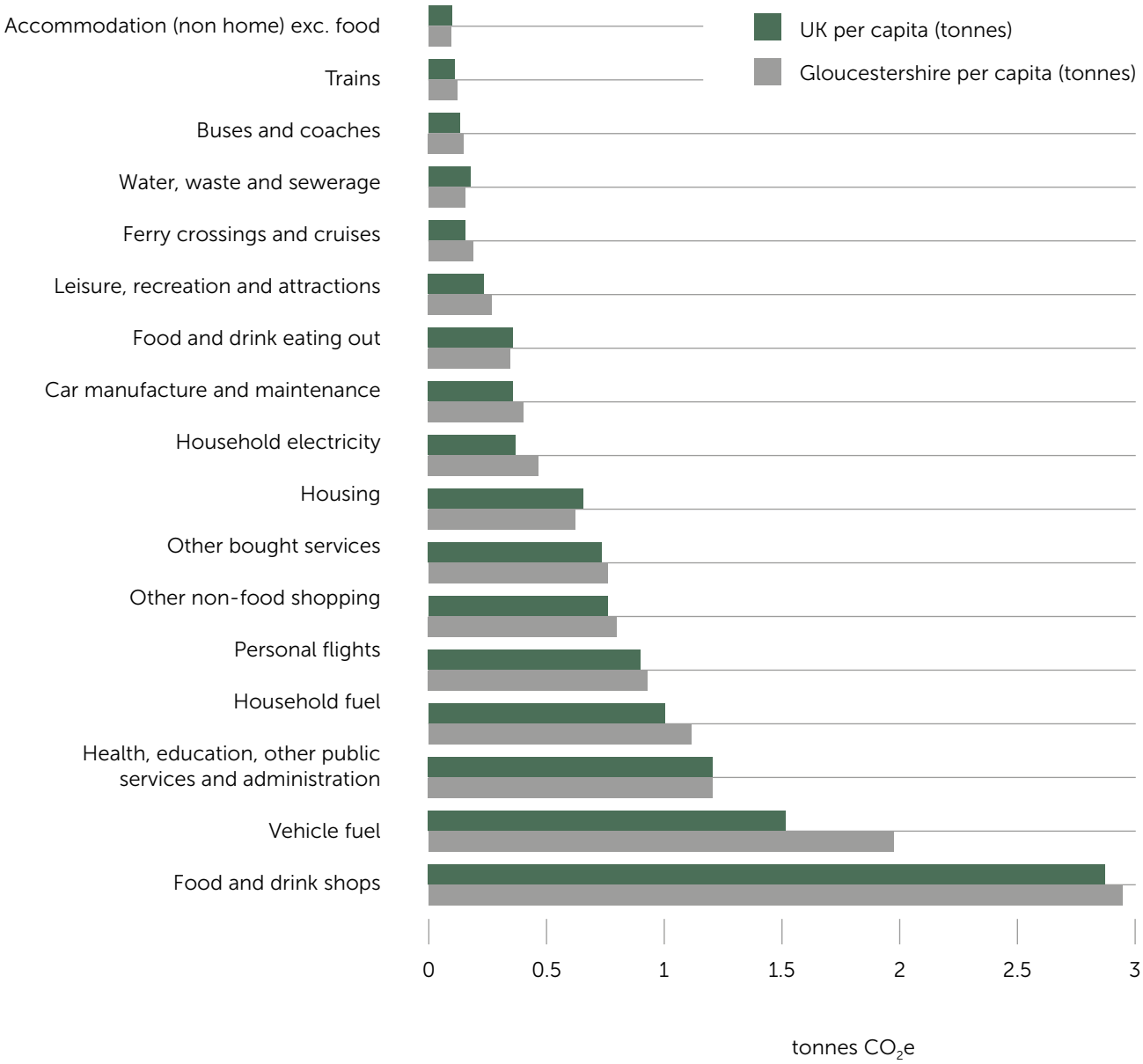


Figure 1 breakdown of the average resident footprint in 2022/2023



Comparison to UK average footprint

Nearly 600,000 people live in Gloucestershire. Of the 7.3 $MtCO_2e$ (million tonnes) footprint described above, 70% is due to residents and 11% due to visitors, with the rest arising from industrial energy use, land use emissions and agriculture.

Gloucestershire residents' footprint is **6% larger** per capita than the UK average.

The largest difference is due to household electricity consumption, **21% higher** for a Gloucestershire resident than the UK average.

The rural nature of several districts also influences vehicle fuel use (2.4 tCO_2e per resident): **20% higher** than the UK average.

Figure 2 Per Capita emissions for Gloucestershire residents compared to the UK average.

Residents are the biggest and most important stakeholder group to engage around our net zero targets. Our community engagement plans outline how we will approach different key stakeholder groups on a variety of topics. Due to the diversity of climate actions and residents a tailored plan for each intervention and campaign ensures that we can encourage the most carbon reduction whilst maximising co-benefits and lowering costs.

Community engagement focussed on several key themes in financial year 2024/2025:

- **Waste reduction** – food and textiles
- **Nature** – Biodiversity Week and Local Nature Recovery Strategy Consultation
- **Transport** – Cycle September
- **Community funding** – Climate Change Community Fund.

Waste reduction engagement focussed on food throughout the year (see case study on page 17). As part of our textile waste interventions a 'clothes swap kit' was made available for hire to local community groups and helped the swapping of almost 500 garments, saving around 10 tonnes of carbon in September-December 2024. A full impact report is available online[9].

Gloucestershire Biodiversity Week was held for the first time in May 2024. Events to celebrate our local nature were held across the county including wildlife festivals in Gloucester and Cheltenham.

Alongside this, residents and key stakeholders fed back on the draft Local Nature Recovery Strategy, at events and online, and the first draft of the strategy was created in 2024.

Cycle September had its highest number of participants ever in Gloucestershire with over 800 people recording cycle journeys and collectively saving 3 tonnes of carbon.

12 community grants were awarded to a diverse array of organisations, covering themes from food to repair. The projects were completed by March 2025 collectively saving an estimated 20 – 60 tonnes of carbon over the course of the year[10].

Looking ahead to the financial year 2025/2026 resident engagement will focus on:

- **Making homes warmer and more efficient** – saving money and improving health
- **Increasing active transport use** – improving air quality and health.
- **Allocating £100,000 in community grant funding**, which will empower communities to take proactive measures and disseminate best practices in carbon reduction.

[9] https://www.gloucestershirerecycles.com/reduce/fashion/wear-not-waste-2024-campaign-impact/
[10] https://www.gloucestershire.gov.uk/planning-and-environment/greener-gloucestershire-dashboard/greener-gloucestershire-community-fund/previously-funded-projects/

Case study

The cycle revolution - Love to Ride

Love To Ride Gloucestershire is an online behaviour change platform, which encourages cycling for daily local and community riding. Gloucestershire residents can access a fully funded supported cycling community programme, which encourages and tracks your progress no matter what your level as an individual or a workplace/organisation.

Every journey is encouraged, with incentivised seasonal challenges peaking during Cycle September. This incentivisation also aligns with the construction of Gloucestershire's first route that adheres to Active Travel England's active design guidelines (LTN/120).

Love to Ride helps to:

- Encourage more people to start cycling, especially women and harder to reach groups
- Encourage more people to cycle for transportation and log their journeys
- Increases the use of existing and developing walking and cycling infrastructure – Gloucestershire's Cycle Spine
- Boost participation in local cycling initiatives
- Work in partnership with the council and key stakeholders
- Provide the Thinktravel service with a proven behaviour change approach to drive local campaigns
- Provide a tracked and measurable outcome of the project including: Total number of people and businesses engaged, number of 'new cyclists' who are now cycling regularly, reasons for travel-i.e. transport, with the kids, school run commute, sport or leisure and carbon saved.

Love to Ride helps to ***encourage more people to cycle for transportation and log their journeys***

Outcomes of Cycle September 2024 showed significantly increased reach through the successful partnership between Thinktravel Sustainability, Integrated transport, and Love To Ride with numbers of participants engaged tripling in three years and carbon saved quadrupling.

Nature recovery

Gloucestershire County Council is a key member of the Gloucestershire Local Nature Partnership (GLNP)[11], working with partner organisations around the county on action for biodiversity.

In 2023/2024, the county council commissioned the partnership to begin developing the Local Nature Recovery Strategy, engaging with the public, landowners, and key partners to gather essential information. A countywide Biodiversity Week campaign was held by Gloucestershire County Council to highlight ongoing work and encourage grassroots community involvement in local biodiversity conservation.

During this year, key achievements have included the completion of a natural flood management project within the Forest of Dean and reduced roadside verge mowing in collaboration with Highways and district council teams.

Over the next year, the county council will continue participation in the Local Nature Partnership and the implementation of the Local Nature Recovery Strategy holding local consultation events. It will also support the Gloucestershire Nature and Climate Fund to establish donor sites for carbon offsetting and Biodiversity Net Gain, collaborating with planning authorities on these efforts. Gloucestershire County Council continues to plant trees to support biodiversity. Last season over 130,000 trees were planted in partnership with parish and town councils, district councils, private estates, and many individual landowners.

Gloucestershire County Council helps to ensure the survival of new and existing trees by providing advice to landowners on how best to care for trees, particularly when they are first planted or when the weather is drier. Gloucestershire County Council is currently planning projects for the 2025/2026 planting season, which starts in November and runs through to the end of March.

Tree planting is also involved in innovative projects that support nature and increase biodiversity even further – for example, on land next to Bournside School in Cheltenham there is a disused railway which has been converted into a wildlife corridor. This was done by managing existing hedgerows and mature trees alongside planting 2,500 new trees during the 2022/2023 planting season. Now in its third year, the flora and fauna continue to thrive.

Tree planting is also involved in ***innovative projects that support nature and increase biodiversity even further***

[11] https://www.gloucestershirenature.org.uk/

Adaptation

Gloucestershire needs to effectively plan how we will adapt to the impacts of climate change. These impacts are increasingly clear, with the effects of flooding, drought, and heatwaves, as well as storms and extreme weather impacting people and services across the county.

To better understand the risks posed by climate change, Climate Leadership Gloucestershire have commissioned AtkinsRealis and Sustainability West Midlands to deliver a Climate Risk and Vulnerability Assessment (CRVA) for Gloucestershire County Council, its constituent district councils, and key strategic partners, such as the NHS, Gloucestershire Local Nature Partnership, and emergency services.

The goal of the project is to strengthen the understanding of climate risks across the county, and provide the evidence needed to identify priority projects and investments that are needed to reduce climate impacts. The project is designed so that engagement with a wide range of key stakeholders is a central pillar of the approach.

By understanding the challenges faced by diverse groups, including public services, business, vulnerable groups and Gloucestershire residents, the project will translate information on changes in climate variables (such as extreme temperatures and rainfall), into clearly prioritised risks, along with potential options to manage these risks. Importantly, the project will also assess existing capacity within the county to manage key risks and identify areas where this needs strengthening.

It will also ensure that there is a continued focus on the groups and communities most vulnerable to climate change, and how our health, third sector and emergency response partners work with Local Authorities to support those most at risk. Ultimately, this project will provide the necessary information to enhance and build upon the commendable work already underway in Gloucestershire, while also supporting the transition to a more climate-resilient county.

The Climate Risk and Vulnerability Assessment was commissioned at the start of 2025, with initial research and stakeholder mapping taking place in the Spring of this year. Further assessment of risks, workshops and select interviews on key adaptation capacity and planning for these risks will take place, with the final Assessment and recommendations delivered in October 2025. This will inform and lead key adaptation planning across the county to minimise the impacts, risks, and vulnerabilities to climate change across the county.

Case study

Co-benefits Atlas

Actions that are undertaken to reduce carbon emissions can result in a swathe of other benefits. For example, actions can include improved public transport and active travel, improved home insulation and reduction in noise pollution. These can result in reduced costs to individuals (e.g. better insultation reduces heating costs), improved air quality (e.g. through reduced reliance on cars), improved health and well-being (active travel and reduction in air pollution).

These additional benefits can often be dispersed but by providing a financial calculation of savings by 2050, it allows the long-term benefits of climate action to be recognised. Modelling carried out by Edinburgh Climate Change Institute looked at 11 additional benefits based on actions recommended by the Climate Change Committee (CCC) in its Seventh Carbon Budget (2025) UK Co-Benefits Atlas.

Many of these actions will be those supported or delivered by work done at both district and county level. In Gloucestershire, the total value of additional benefits (2025-2050) would be £1.7 billion.

Value per benefit (£)			
Co-benefit	Active Travel (Physical Activity)	Air Quality Improvements	Improved Home Warmth (Excess Cold Reduction)
Cheltenham	259,579,000	84,240,000	19,168,000
Cotswolds	287,074,000	66,637,000	15,506,000
Forest of Dean	298,952,000	63,909,000	12,273,000
Gloucester	210,297,000	94,188,000	20,084,000
Stroud	308,926,000	88,150,000	23,072,000
Tewkesbury	247,499,000	69,305,000	17,360,000
Gloucestershire Total	**£1,612,327,000**	**£466,429,000**	**£107,463,000**

Table 2 – Top 3 categories of value from additional benefits (total £millions saved from 2025-2050)

Gloucestershire County Council carbon emissions **Financial year 2024/2025**

Calculating Gloucestershire County Council emissions:

The Greenhouse Gas (GHG) protocol, which provides global standardised frameworks to measure and manage greenhouse gas emissions[12] says that 'to most effectively track performance, companies should use primary data collected from suppliers and other value chain partners for scope 3 activities targeted for achieving Greenhouse gas reductions[13]' (see more about scope 3 emissions below).

These are classified under scope 1, 2 and 3. In simplified terms, scope 1 covers direct emissions of greenhouse gas, scope 2 is indirect emissions through electricity generation. For scope 3 there are 15 categories (a full list can be found in the Greenhouse gas protocol[14] and further details about the scopes[15]) with purchased goods and services making a significant component of the carbon emissions within scope 3, reflecting the fact that councils operate on a service-based model.

Scope 1, 2 and the first five categories of Scope 3 within Table 3 are those specified under central government procurement note PPN006. Central government use PPN006 as a supplier requirement for reporting on higher value contracts (further details can be found here: **https://assets.publishing.service.gov.uk/media/67b716f078dd6cacb71c6a87/2025-02-05_PPN_006_Guidance_on_taking_account_of_carbon_reduction_plans_-_adopting_and_applying_conditions_of_participation.docx.pdf).**

Within the county council there is now a requirement for all service plans to report on their net zero efforts starting from April 2025.

The available carbon emissions data summarised in Table 3 of this report does not encompass all the county council's emissions, especially those classified under Scope 3, but provides data in line with that provided in financial year 2023/2024.

A series of recommendations were made in the previous report to improve data collection of our carbon emissions. Some of these - e.g. inclusion of additional data collection in the software for business travel - are being implemented over time in line with other software phased changes to ensure cost effectiveness of changes.

Within the county council there is now a requirement for all service plans to report on their net zero efforts starting from April 2025). This reflects the start of the journey to embed net zero across the council's operations and service delivery. There is also a recognition that the opportunities available extend beyond just reducing carbon emissions, helping support and build towards a healthier and more sustainable future.

[12] About Us | GHG Protocol
[13] Scope 3 Detailed FAQ.pdf (ghgprotocol.org)
[14] Scope3_Calculation_Guidance_0[1].pdf (ghgprotocol.org)
[15] What are Scope 3 emissions and why do they matter? | The Carbon Trust

Scope	Name of category	Service area / data source	Data quality: Calculated by primary data or £ spend or other	Improvements for upcoming year	FY23-24 emissions tCO_2e	FY24-25 emissions tCO_2e	% change contribution within relevant Scope
1	Heating (oil, gas and biomass) Fuel	Schools, Fire service, Gloucestershire County Council	Primary		7,268	6,458	-11%
2	Electricity	Schools, Fire service, Gloucestershire County Council	Primary	Develop Heat Decarbonisation Programme and seek funding opportunities. The sustainability team are working with Asset Management and Property Services to identify a decarbonisation programme so that available funding can be matched to projects.	0	0	
3	Upstream transportation and distribution (Category 4)	Transportation of waste	Primary data provided by contractors	Further analyses of this category required to look at full contribution.	557	632	0%
3	Waste generated in operations (Category 5)	Recycling and waste from staff bins. Wastewater (where water use metered)	Primary data	Improve reporting to fully understand waste from all operations.	1409	1438	0%
3	Business Travel (Category 6)	Staff mileage (software changes), staff expense claim (train, plane and bus and accommodation)	Mixed data- some primary (though not full info), £ spend data for train, bus, plane and accommodation	Claims and purchase card spend to include full info to allow carbon calculations.	24,638	25,462	0%
3	Employee Commuting (Category 7)	2022 commuting survey and home working calculation using 2025 Full Time Equivalent (FTE)	Primary data: Survey of staff (may be impacted by post-covid)	New staff survey.	2,360	2,649	0%
3	Downstream transportation and distribution (Category 9)	Budget spend over £500	Same as for purchased goods and services (Category 1 and 2)	Further analyses of this category required to look at full contribution.	70	1	0%
3	Purchased goods and services and capital goods (Category 1 and 2)	Budget spend over £500	£ spend and not directly linked to individual contracts- number of assumptions applied to info in budget spend data. Utilising spend over £500 data, excluding employee costs (salary, pension and NI) leaves around 5% of total Gloucestershire County Council spend unaccounted for.	Move to contract based spend (rather than budget spend). Suppliers begin to report companies carbon footprint under PPN006. Service area plans include requirement about recording and reduction of carbon emissions.	310,935	285,234	-6%
3	Fuel and Energy related activities (Category 3)	Well to Tank and Transmission losses	Primary data	Ensure any other activities are recorded.	3,119	2.830	0%
3	Investments (Category 15)	Pension	Primary data (amount invested), partial dataset (all known data included- see section for further details)	Additional investments on pensions and investments when available	58,616	54,898	-1%
3		Investment	Primary data (amount invested), partial dataset (all known data included- see section for further details)	Additional investments on pensions and investments when available	10,871	10,352	0%
				Total tCO_2e	**419,843**	**389,952**	**-7%**

Table 3: Emission information including categories, indicating data sources and key potential future improvements. Primary data is data provided by suppliers (or other value chain partners) related to specific activities for example the kWh usage for power and provides a more robust understanding of carbon emissions. Secondary data includes industry average data, financial data, proxy data or other generic data.

Case study

Gloucestershire archives' 'Green Pledge' project, 2023-2025

With funding from the National Lottery Heritage Fund, Gloucestershire Archives' staff have been taking a holistic 'green' approach. Further details can be found https://www.gloucestershire.gov.uk/archives/our-projects/the-green-pledge-project/

In order to 'get our own house' in order, we've carried out periodic waste audits, significantly reducing our waste. We have used Julie's Bicycle online climate tools to measure our reduced power usage (see below) and co-created a green action plan for our service with staff and partners.

We have also conducted a biodiversity audit and encouraged cycling through the 'Love to Ride' scheme. In addition, we have contacted suppliers about their green credentials and tried to 'think green' in our procurement decisions. Finally, we introduced lunchtime walks to recycle soft plastics.

Before the Green Pledge Project, we already had a mostly passive strongrooms, a beautiful community garden that had been developed by archive staff (on a voluntary basis) and Cotswolds Gardening School students. In addition, all our lights had been replaced with LEDs in 2022/23.

During the project, Asset Management and Property Services colleagues have enabled the removal of air conditioning from remaining strongrooms and the replacement of faulty cooling equipment for our photographic store with a low-cost, low-energy unit (like those used for wine cellars).

In our community garden, we welcomed two charities, Project Grow and the feeding charity, Wiggly. Project Grow has transformed our space into a productive market garden whilst Wiggly uses the produce in their education programme to focus on nutrition, food and cooking skills for life.

We're delighted that volunteering on this project is proving life-changing for some volunteers. The project has now been extended to the Bishop of Gloucester's Garden and Kingsholm Primary School and will be featured at the June 2025 Cheltenham Science Festival.

In our community garden, we welcomed two charities, Project Grow and the feeding charity, Wiggly. Project Grow has transformed our space into a productive market garden whilst Wiggly uses the produce in their education programme to focus on nutrition, food and cooking skills for life.

We're delighted that volunteering on this project is proving life-changing for some volunteers. The project has now been extended to the Bishop of Gloucester's Garden and Kingsholm Primary School and will be featured at the June 2025 Cheltenham Science Festival.

Achievements (to date)

- Over 9000 environmental records catalogued
- Collected new records documenting the significant role Gloucestershire people and organisations have played in environmental matters
- Engaged with meteorologists working on climate change models using our unique historic weather records
- Digital copies of orchard records have been sent to those working with endangered species in Kent
- Reduced our digital footprint (filing and emails) by 80%
- With Salix funding, significant arrays of solar panels have been installed on three roofs, enabling us to avoid the consequences of a lengthy power cut in Kingsholm recently and providing shade to keep temperatures lower in the strongrooms in summer
- Significantly reduced power consumption of the archives' estate.

Future plans

- Host a flooding workshop for water professionals and those planning preventative measures
- Continue through a major outreach programme to get more people engaged with climate issues and making green pledges
- We're now exploring options to 'green' our car park, install EV charging points, and reduce use of mains water supplementing the water butts already installed
- Install a domestic-scale solution to dehumidification saving staff time as well as energy.

Gloucestershire Heritage Hub's community garden

Heating and power
(including streetlights)

Gloucestershire County Council has a contract with West Mercia Energy (WME) for the supply of electricity and gas. This contract has over 500 electricity supplies and 350 gas suppliers, including the Gloucestershire County Council estate, schools and road signs / street lighting.

In January 2024 Gloucestershire County Council renewed its contract with West Mercia Energy for the supply of 100% renewable energy, backed by Renewable Energy Guarantees of Origin.

The county council has committed the final funds relating to the successful bids against the (now closed) Salix revolving recycling fund. This fund was backed by central government and allowed local authorities to access an interest free loan to invest in carbon reduction schemes. The first scheme to benefit from this fund was a project to replace street lighting in the county with low energy LED lights to reduce cost and carbon emissions. The savings in energy consumption will then be used to repay the loan.

The second (and final scheme) was a project to install photovoltaic solar panels on more than a dozen corporate buildings, including libraries, children's centres, the archive office and coroner's court. The final installations should be completed by July 2025 and, as with the previous scheme, it will result in both a reduction in carbon emissions and costs.

As the use of externally sourced heating and power is reduced and replaced by locally generated power e.g. solar panels, this will reduce the scope 3 emissions, in particular transmission losses.

Looking to the future, through the medium-term financial strategy planning process Gloucestershire County Council have secured funding to deliver a resilient hybrid replacement heating solution for Shire Hall in Gloucester. This will consist of 70% provided by Air Source Heat Pump and 30% kept on gas boiler. This will consist of new highly efficient gas boilers being installed (in areas which are currently on gas and have new heat emitters), with other areas having older style perimeter heating being replaced with air source heat pumps.

Typical payback of the type of heat pumps that will be installed is 8-10 years, but this can vary depending on factors like insulation, solar Photovoltaic and unit cost from the grid. Heat pumps can be around 3-4 times more efficient than boilers, because they give out a lot more heat than the electricity they use to run.

Case study

Solar panels

Using a mix of internal and external funding, Property Services have installed a significant number of solar panels across both the corporate estate and schools in the last 12-months.

Examples include:

- **Coroners Court:** As part of Gloucestershire County Council's ongoing commitment to decarbonisation and sustainable energy, a 100 kWp (kilowatt-peak) solar photovoltaic system was successfully installed at the Coroner's Court in Gloucester. The installation forms part of a broader strategy to reduce carbon emissions across the council's estate while achieving long-term energy cost savings.

  The system is expected to generate approximately 86,739 kWh of clean electricity annually, offsetting more than half of the building's total electricity consumption. This equates to an annual carbon saving of over 20 tonnes of CO_2 – the equivalent of planting more than 900 trees each year. With current electricity prices, the system is projected to deliver financial savings in the region of £21,684.75 per annum.

- **Schools:** Yorkley Primary School is one of several sites to benefit from Gloucestershire County Council's "Solar for Schools" initiative, which reduces carbon emissions while embedding sustainability into school culture. A 20 kWp rooftop solar photovoltaic system was installed using ethically traceable panels, generating around 17,400 kWh of clean electricity annually.

  This contributes directly to the school's energy use, reducing reliance on the national grid. A unique feature of the project was a school-wide competition inviting pupils to design the front display for the solar photovoltaic generation monitor. The entries were shortlisted by the school's Eco Committee, with one winning design selected to be featured on the display now installed in the school reception. This engaging approach has helped raise awareness and excitement among pupils around the themes of sustainability and renewable energy. The competition was part of a wider rollout across schools participating in the Solar for Schools programme, aiming to embed climate literacy through creativity and ownership.

  The display board, visible to all visitors, presents real-time data on energy generation and carbon savings — and now does so framed within a colourful and pupil-led piece of artwork. This initiative demonstrates how technical carbon reduction measures can be paired with meaningful educational engagement, turning infrastructure upgrades into learning opportunities for the next generation.

These projects and others like them are delivering significant savings for the county council in terms of both cost and carbon.

Fleet vehicles

Fleet Replacement Programme. Fleet vehicles are being switched to electric by default when replaced, although in the short-term some practical challenges remain for full conversion. For example, in 2024, Corporate Fleet Unit introduced seven new Fire Service Officer Response cars, which were a mixture of fully Electric and Plug-in Electric Hybrid vehicles. This has been followed up in 2025 with receipt into Gloucestershire Fire and Rescue Service (GFRS) of 14 fully Electric vans for Business Fire Safety and Community Safety, with a further order of 13 fully Electric Station vehicles. This transitions away from combustion vehicles for Gloucestershire Fire and Rescue Service on the non-response vehicles. Recent Cabinet approval has also recently been given to replace all remaining 20 Officer Response vehicles for Plug-in Electric Hybrid vehicles through 2025/2026. In addition, 10 New Fully Electric Vehicle (EV) Large Vans for Gloucestershire Equipment Loan Service (GELS) are complete and being introduced into the operation. Over the past two years, a total of 38 full EV and Plug-in EVs for combustion vehicles have been ordered, with a further 13 fully EV on order.

EV Charging Points. The charging network continues to grow, with 65 charge points now available for use by county council's fleet including at nine fire stations and eight corporate locations across Gloucestershire. Further points are being installed in 2025-2026 to all remaining Fire Stations, and further sites including Dean House in Cinderford, the Archive Centre in Gloucester and the Cotswold Locality office. Highways and Library sites are being assessed for power supply to further enhance the ability to continue to transition to Electric vehicles.

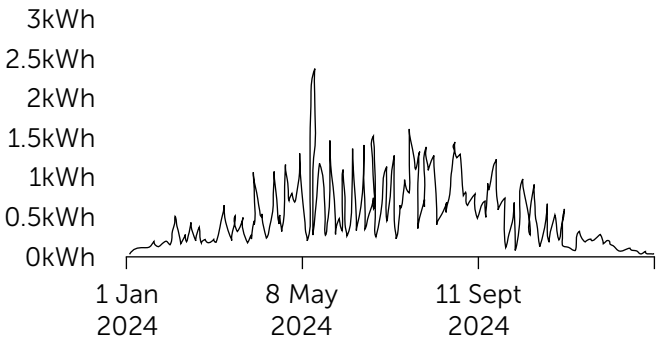
Fleet innovation. For the larger Gloucestershire Fire and Rescue Service specialty vehicles, solar systems are being installed to the new 10 appliances under construction. This system has been trialled over the past two years and reduces the load on the engine to drive the alternator when charging the vehicle battery, thereby reducing emissions. All new large combustion vehicles will be fitted with this technology. Hydrotreated vegetable oil (HVO) will be introduced to the bunker tanks at the Fire Stations to replace regular diesel. This transition will be completed once the majority of vehicles at stations are Euro 6 engines. Hydrotreated vegetable oil (HVO) combined with the solar system will make the vehicles over 95% less polluting than an equivalent vehicle.

Solar Energy and Savings

Analysis of the amount of solar energy generated and the associated financial and environmental benefits is detailed below. Only energy used to power vehicle ancillaries and charge the battery is reported - therefore energy generation will naturally be greater for highly utlilsed vehicles than for parked, unattended vehicles.

Solar Generation

183kWh **+44% vs. previous period**
+44% vs. last year



Solar Savings

Diesel
251 Litres

Diesel Assets **3**

CO_2 Reduction **642.0 kg**

AdBlue Saved **11 litres**

Solar data based on fitment to 3 vehicles in Gloucestershire Fire and Rescue Service, showing 642.0 Kg CO_2 reduction, and 251 litres of fuel saved in 1 year. 183kWh of power was generated across the 3 vehicles, which reduced load on the engine.

Public EV Charging points. The first phase of the EV charging points project has included the installation of 32 of the 33 locations with 124 EV charging points. The installation of the final site is in progress which will bring the installed number to 128. The next phase of public EV charging points, funded by the Department for Transport through the Local Electric Vehicle Infrastructure Fund, involves the installation at approximately 50 sites. 15 locations have completed the engagement stage and been handed over to the contractor to plan the installations. 100 public EV charge points have been installed at the Arle Court transport hub. A further 4 rapid EV charge points have been installed.

Work is underway to finalise the locations for the second phase. Councillor and resident engagements are ongoing.

Case study

Reducing emissions through intelligent transport scheduling

Gloucestershire County Council sought to reduce the environmental impact of its home-to-school transport service for pupils attending six special schools.

Through the strategic implementation of QRoutes, an intelligent transport planning platform, the council achieved a measurable reduction in vehicle mileage, carbon emissions, and operational inefficiencies, while maintaining a high standard of service for vulnerable learners.

The council supports over 487 Special Educational Needs pupils daily across six geographically dispersed special schools. Transport demand was rising, with legacy scheduling contributing to high vehicle mileage and under-utilised routes.

Environmental and financial pressures:

- Aligning with the council's carbon reduction plan and local net zero ambitions
- Rising fuel costs and service pressures due to growing demand for Special Educational Needs transport
- Complex needs requiring bespoke route planning.

Impacts of project:

	Daily mileage reduction	Annual mileage reduction	Total reduction (kg CO_2)
Total (5 schools)	645.2	122,588	34,692.40

- **Carbon Footprint Reduction: 34,692 kg CO_2 saved.** A tangible reduction in daily emissions, achieved by streamlining multi-pupil journeys and reduced route overlap
- **Financial savings: Annual saving of £1.14 million.** Improved vehicle utilisation and fewer contracted vehicles led to direct cost savings
- **Service Quality improved: 2795 hours of travel time saved.** Maintained or improved journey times and reliability for pupils with complex needs
- **Planning Agility**: Scenarios could be re-run instantly in response to pupil and road network changes.

Future plans

- Embed QRoutes into daily operational planning throughout the academic year
- Expand Model Coverage: Continue QRoutes expansion to cover remaining Special Educational Needs transport cohorts to unlock further efficiencies and sustainability benefits
- Scenario Testing for Vehicle Strategy: Utilise scenario planning functionality to assess alternative vehicle types, especially on high-volume routes
- Inform Strategic Alignment: Leverage insights and outputs to shape Gloucestershire's broader sustainable transport strategy and support ongoing transformation of services.

Upstream transport and distribution

The estimated carbon emissions for the transport of waste under the county council's control is 564 tCO_2e for 2024/2025. This is defined as the waste that is managed by the council once it is either deposited by householders at the household recycling centres or transferred from one of Gloucestershire County Council's contracted Bulking and Transfer Stations to Javelin Park.

This is calculated using data transmitted from the waste vehicles themselves or, where this is not possible, using estimated standard assumptions to calculate the annual mileage and number of tonnes delivered. This figure does not include any CO_2 emissions generated once the waste is delivered to the treatment site, as county council's ownership of the waste ends at the point of delivery. This figure is for all waste managed by the county council, meaning bulked household residual waste, bulked food waste, and various waste streams from the household recycling centres hauled by the councils service providers.

Waste generation

The council's buildings generated an average of 100 tonnes of refuse waste, 28 tonnes of food waste and 45 tonnes of mixed recycling per month. This is the equivalent of 641 kg CO_2e for refuse waste per month, 288 kg CO_2e for mixed dry recycling per month and 247 kg CO_2e for food waste per month.

Over the financial year 2024/2025 waste from Gloucestershire County Council buildings generated 14.12 tonnes CO_2e. Our recycling rate for dry recycling in 2024/2025 was 31% compared to 32% in 2023-2024. When including food waste recycling our recycling rate increased to 42%. All sites (including council managed schools) have introduced recycling of most materials by 31st March 2025 in line with Defra's Simpler Recycling legislation. Further work is needed to ensure all recyclable materials are diverted from refuse to recycling.

Business travel

Gloucestershire County Council has a business travel policy which encourages employees to consider the financial and environmental costs of travel, including reimbursement of bicycle business mileage. The business travel policy includes reference to the Cycle scheme programme operated by the council, and to the bicycle loan scheme for those not eligible to participate in the Cycle scheme programme. Three e-bikes have been purchased to support staff to use active travel for short distance business trips. Over 51,000 miles were travelled in 6 EVs from the carpool CarClub scheme within Shire Hall. The Corporate Fleet Unit are aiming to double the scheme in the next year, expanding to more locality sites, to enable more staff business travel through this option. Corporate Fleet is exploring the option to add a public-use element to CarClub, by offering CarClub locations for providers to operate vehicles. Employees are asked to consider if meetings could be conducted by telephone or video conference.

Employee commuting

The Thinktravel team are currently scoping the production of a staff travel plan which will use Modeshift Stars and be informed by an upcoming staff travel survey which is planned for 2025/26. The staff travel survey will gather information about employees' current commuting patterns, barriers to alternative modes of travel, and opportunities to incentivise more sustainable travel choices.

The current Mobilityways survey is being used to help inform staff travel choices. Recent provisions such as the Arle Court Transport Hub and improvements to the cycle spine between Cheltenham and Gloucester have been completed this year, positively impacting staff travel as well as wider travel within the county. The council is part of the Cycle to Work salary sacrifice scheme, a government initiative that allows staff to get a brand-new bike and safety equipment tax free for commuting to work. Cycle September saw the county's biggest increase in cycling over a single month, which continued into Winter Wheelers campaign.

Furthermore, the council has created flexible workspaces in several buildings across the county to support more agile working and reduce both commuting and business miles. Locality hubs are currently being redesigned to include standardised drop-in spaces, enabling staff to easily 'plug-in' and work. In addition, the council has purchased a license from a lift-share platform to encourage car sharing among staff from organisations and businesses across the county, including approximately 90 county council users.

Case study

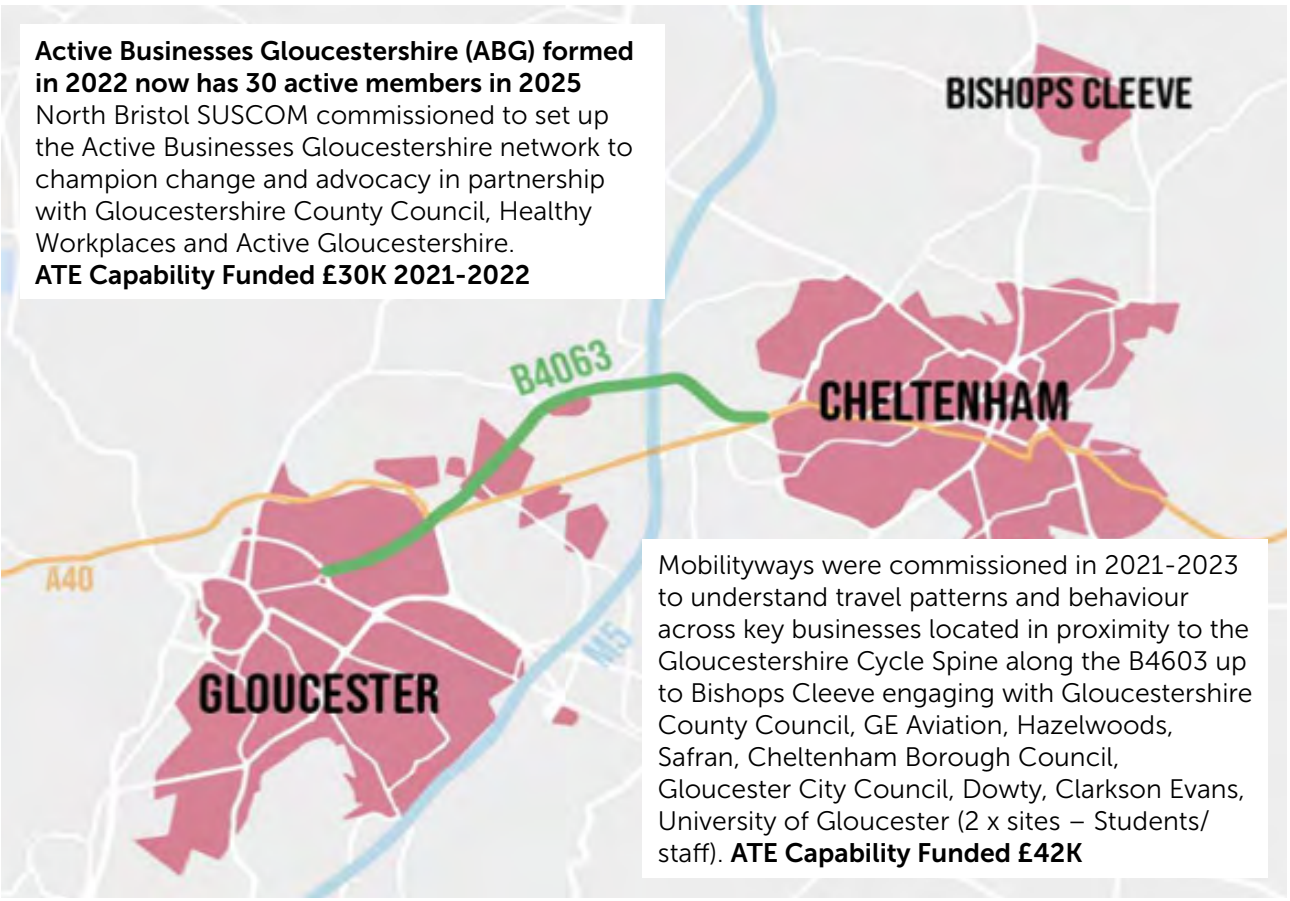
Active Businesses Gloucestershire and the decarbonisation of the commute

The council's Thinktravel service has been leading on co-ordinating Active Travel England's (ATE) Capability Fund behaviour change programme for the last four years.

The work has focussed on encouraging and enabling increased participation in active travel along the developing Gloucestershire Cycle Spine, a flagship project, being the first route to meet Active Travel England's active design guidelines (LTN/120).

Mobilityways data insights quantified the propensity to change behaviour based on distance of commute, connectivity, and key barriers and drivers to change. These insights help to prioritise the most impactful initiatives to decarbonise the commute. The data showed that:

- Majority of journeys (58%) continue to be made in single occupancy vehicles, which yield the biggest carbon footprint
- The potential to change behaviour to more active and sustainable modes however is particularly high among businesses located near the Cycle Spine
- Access to e-bikes and cycling showed the greatest potential, across all the employers, to increase active travel on the commute, with walking as a mode to reach public transport second best. Lift share was also nearly accessible to everyone.



Active Businesses Gloucestershire (ABG) formed in 2022 now has 30 active members in 2025
North Bristol SUSCOM commissioned to set up the Active Businesses Gloucestershire network to champion change and advocacy in partnership with Gloucestershire County Council, Healthy Workplaces and Active Gloucestershire.
ATE Capability Funded £30K 2021-2022

Mobilityways were commissioned in 2021-2023 to understand travel patterns and behaviour across key businesses located in proximity to the Gloucestershire Cycle Spine along the B4603 up to Bishops Cleeve engaging with Gloucestershire County Council, GE Aviation, Hazelwoods, Safran, Cheltenham Borough Council, Gloucester City Council, Dowty, Clarkson Evans, University of Gloucester (2 x sites – Students/staff). **ATE Capability Funded £42K**

34 ABG members and 25 very engaged

Engaged 10 key members surveying 19,000 commuters

The travel surveys indicated high potential to travel by sustainable modes across the 10 employers:

Walking 9-25%

Cycling 23-48%

Public Transport 14-76%

Liftshare 61-91%

Cheltenham Borough Council had the highest rates with 84% of employees being able to walk and cycle. Safran in comparison had only 2% walking potential but 44% cycling.

Employees also identified 3 key drivers to incentivise Active Travel with:

- **23-35%** of employees wanted to feel safer and have better crossings
- **11-29%** want to see improved showers/lockers/bike facilites
- **14-28%** want to see increased incentivisation cycling per mile.

Project outcomes: Thinktravel have worked in partnership to deliver the following key initiatives between 2022-2025 into 2026:

- 20 x Active Travel England and council funded Active Travel Grants– offered to schools/workplaces to improve facilities/deliver campaigns and events to promote Active/Sustainable Travel
- 10 x Cycle training and Confidence rides
- 10 x Guided walks to improve confidence and fitness
- 20 x Travel planning events
- 150 e-bikes per year accessed through Active Travel England Capability funded workplace e-bike scheme
- September 2024- Launch of Community e-bike scheme – Pedal Eazy – 100% of bikes hired out this Spring 2025
- Love To Ride -Community Cycling Behaviour change platform to incentivise cycling.

Purchased goods and services (including capital goods)

A survey sent in Autumn 2024 to Gloucestershire County Council suppliers found that 86% of responding companies support the UK's net zero target of 2050, with only 2% opposed. 60% of responding businesses already have carbon reduction targets or plans, with two-thirds of respondents indicating a willingness to provide information on carbon emissions of goods and services they supply to the Gloucestershire County Council. Notably, an additional 14.3% expressed an interest in engaging with the Growth Hub's net zero Business support service, indicating that for some businesses additional support may facilitate discussions about their carbon emissions.

Through the council's Social Value Policy, we ask organisations bidding to deliver contracts to consider the additional social, economic and environmental benefits that they can deliver for the local area.

Procurement and contract management are a key lever through which we seek to influence bidders and suppliers to deliver a net zero county. The council has published a Social Value Toolkit outlining local needs and priorities, and signposting ways for organisations to work with us. In July 2025, we published a Social Value Impact Report, looking at the social value initiatives delivered since the adoption of our current policy in 2022.

Social Value Case Studies

800 tonnes of waste were diverted by supplier **Montel Civil Engineering Ltd** through reuse of products and materials on the 'Rushmire Hill Geotechnical Remediation and Standish Multi-User Path' contract. 800 tonnes of 6F5 capping material were donated to two agricultural sites, Upper Rushmire Farm and The Ridge (GL12), for use in farm tracks and hard standings. The material was originally used on-site as a temporary piling platform to provide a stable base for the piling rig. Without this donation, the material would have been disposed of off-site at a Household Recycling Centre, so this reuse has directly reduced waste and extended the material's lifecycle.

Solo Service Group, who provide cleaning and caretaking services for the council, have made positive social value contributions through environmental initiatives. These include:

- Offsetting all scope 1 and 2 emissions associated with business activities in line with the PAS2060 carbon neutral standard by collaborating with the Carbon Offsetting provider Ecologi. Between 2022-2024, £6,480 (864 tCO_2e) worth of offsets were purchased from Ecologi, supporting international climate projects, specifically Solar photovoltaic generation in Indonesia, methane capture to generate energy in India and rainforest protection in Brazil.
- Switching to the zero plastic and 100% biodegradable Jangro Enviro Sachet range for cleaning chemicals and packaging, avoiding the use of 5.33 tonnes of plastic packaging.
- Supporting local conservation efforts by donating £4,770 to the Gloucestershire Wildlife Trust's Corridor of Life appeal. This aims to rebuild areas of hedgerow and orchards between the Forest of Dean and Wyre Forest to provide shelter from traffic and unsustainable development for threatened local wildlife and help prevent further biodiversity loss.

Caterlink provides school meals in Gloucestershire and pride themselves on delivering healthy and nutritious meals that use locally sourced produce. Caterlink has developed a sustainable food waste management strategy across the 180 primary schools they cater for across the UK. Food waste is split into three categories:

- Plate waste
- Production waste
- Preparation waste.

Plate waste is reduced by creating meals that appeal to children and are positioned correctly. A cooking matrix has been delivered so the right number of meals are prepared each day to reduce production waste. By weighing total food waste at the end of the day, Caterlink make frequent adjustments to menu items to further minimise production waste.

These small changes help to reduce serious environmental impacts associated with catering services, such as reduced water, emissions, and energy consumption during production and packaging stages, as well as reduced waste to landfill.

Investments

Pensions:

The council act as the administering authority of the Gloucestershire Pension Fund on behalf of over 240 employers, and over 60,000 members. Most of the fund's investments are managed through the Brunel Pension Partnership, a collaboration of ten Local Government Pension Funds. The Fund is fully committed to providing transparent disclosures on investments including carbon performance, where possible. A net zero carbon target of 2045 has been set, as well as interim milestones to track carbon reduction progress towards net zero.

The Fund's carbon performance is compared to the average investment and for the year ending December 2024, demonstrated a relative carbon efficiency of +29%. The fund is committed to the requirements of the Taskforce on Climate Related Financial Disclosures (TCFD) and published its first report in 2024, ahead of the mandatory deadline.

The analysis is based on the position as of 31 December 2024 and is used as the reported position for 2024-2025. The total value of the Pension Fund at the end of Dec 2024 totalled £3.64bn, of which the county council's (including its schools) value amounted to £1.69bn, which equates to a 46.43% share of the Fund. The value of equities and Bond Investment holdings held by the Fund, where carbon data was available for analysis amounted to £2.401bn. Therefore, the council's share of this totalled £1.114bn equates to 54,898 tCO_2e. There is no carbon information currently available for the remainder of the investment portfolio, but we will continue to work with fund managers and the Brunel Pension Partnership to broaden this analysis over time.

Investments:

Gloucestershire County Council manages its surplus cash to generate a return for the authority to support the revenue budget. To manage inflation risk, this includes investing £95 million in pooled strategic funds during 2024/2025. When investing in banks and funds, the authority will prioritise banks that are signatories to the UN Principles for Responsible Banking and funds operated by managers that are signatories to the UN Principles for Responsible Investment, the Net Zero Asset Managers Alliance and/or the UK Stewardship Code.

Some of our funds have a small exposure to fossil fuel extraction. In percentage terms this accounts for around 0.29% of our total portfolio as of July 2025. All of our funds are active in promoting responsible investing. Of the £95 million invested in pooled strategic funds during 2024/2025, £40 million currently lacks the data to calculate a carbon footprint, however these funds are looking at how they could compile this data for future years. An additional £10 million does not provide carbon data as this fund does not target any sustainable objectives. The total carbon footprint of the remaining £45 million is calculated as 10,352 tCO_2e for 2024/2025.

Javelin Park

The Gloucestershire Energy from Waste Facility at Javelin Park is run by FCC Environment, and as the county council receives an income from the electricity generated at the facility, some of the CO_2 emissions emitted from the facility must be attributed to the council's emissions. To achieve this, the proportion of total profit can be utilised. The emissions are determined using the total estimated emissions in 2024 from the combustion of waste at the facility, which were 113,174 tonnes of CO_2. Data for other greenhouse gas emissions are not currently available.

Offsetting and insetting

Gloucestershire County Council is committed to reducing carbon emissions by 80% by 2030, with any remaining reductions achieved through further cuts or carbon offsetting. Currently, we do not purchase carbon offset credits. For 2024 the cost of UK Green Book traded carbon emission was £40/tCO_2e for net zero strategy aligned pathway[16], and for non-traded £128-£384/tCO_2e[17]. Insetting is similar to offsetting but focuses on reducing, removing, and sequestering emissions within one's own value chain[18].

[16] Carbon valuation - GOV.UK (www.gov.uk)
[17] Valuation of greenhouse gas emissions: for policy appraisal and evaluation - GOV.UK (www.gov.uk)
[18] Carbon insetting vs offsetting – an explainer | World Economic Forum (weforum.org)

Case study

Rural estates: Gamage Hall Farm, Dymock

Melview Ginny
Junior Female Champion National Angus Show and World Angus Forum

Gamage Hall Farm, Dymock is a 180 acre Gloucestershire County Council mixed holding in the Forest of Dean. It specialises in rearing premium Aberdeen Angus cattle for both breeding and meat.

It also runs a small suckler herd of Murray Greys and a commercial sheep flock. Paul and Kirsty Westaway who farm the unit, are passionate about working with the environment. This ethos is evidenced by the fact that half of the farm is in Level 2 Countryside Stewardship and the other half is enrolled within the Sustainable Farming Incentive (SFI). The farm business plan focusses not only on farm profitability but also on:

- Soil health
- Carbon accounting
- Sustainability.

"Here at Gamage Hall, carbon auditing is a key part of our business and it's our aim to be carbon neutral as soon as possible. The audits allow us to track our progress and make sure we get there as quickly as we can while running a profitable and sustainable business".

Project outcomes

Soil testing is undertaken annually with only farmyard manure now used, replacing artificial compound fertilisers, to increase fertility where results show it is necessary. Improvements in the soil and therefore fodder are achieved by utilising long term species rich leys, lucerne and both red and white clover.

Carbon accounting, over recent years, has become a key component of the overall business plan. The specific carbon calculator used at the farm also offers adaption and mitigation suggestions, furthering supporting the farm's progress towards carbon neutrality.

Carbon data:

- The holdings' permanent grassland is sequestering 12933tCO_2e.
- Overall, including the livestock enterprises, the farm is currently offsetting and sequestering almost 50% of its carbon (see info box).

Future developments:

- Evidence of carbon sequestration is likely to increase further as improved ley management and general soil carbon storage data becomes available.
- Solar panels are scheduled to be fitted onto a newly erected building, with the electricity generation expected to meet the majority of the farm's energy needs.
- The holding is expecting to be carbon neutral by 2027/2028.

Sandy's Carbon Calculator Report	*Sandy version 4.6.0*
Organisation	Innovation for Agriculture (CFD)
Farms	Gamage Hall Farm
Total farm size	72

Carbon Calculation breakdown for 2024

177.76		347.34		-169.58
Total net carbon balance (tCO_2e)	=	**Total emissions** (tCO_2e)	+	**Total sequestration** (tCO_2e)

Annex

Progress on actions within Gloucestershire County Council in 2024/2025

The table below follows the format of previous reports. The updates below are taken from the actions outlined in the 2023/2024 action plan that is available online. The actions below are split into two parts, actions impacting all of Gloucestershire and actions that impact Gloucestershire County Council's operations. They are then further split into 7 key areas of work: 1. decision making, 2. buildings, 3. transport, 4. power, 5. waste, 6. influencing others and 7. land use and biodiversity. Where actions have been completed or superseded these will not be taken forward into next year.

Table 4: progress on actions across the county in 2024/2025

Theme		Action	Update 2024/2025
Decisions	1.1	Countywide coordinated approach and action plan	Gloucestershire County Council continues to part fund and work with Climate Leadership Gloucestershire (page 9). In December 2024 national government announced the intention that two tier authorities will be merged to create unitary authorities. This will impact the planning of countywide projects and plans until the planned implementation of the merge in 2027/2028.
	5.8	Promote the circular economy	Circular economy added to the Economic Strategy 2024-2035[19]
	1.4	Pathways to Net Zero	A 'Pathways to Net Zero' report was commissioned to Small World Consulting in 2024 and was completed in January 2025. This has been analysed and used in this report.
	1.7	Gloucestershire Youth Climate Group	The group has continued to work with a core panel of between 20 and 30 young people throughout the year and provided activities for wider groups of young people (aged 16-25).
Transport	3.2	Electric Vehicle (EV) Strategy	262 /1000 EV chargers were in place by May 2025.
	3.3	Local Transport Plan	The local transport plan continues, and the latest Local Transport Monitoring Plan is available online[20]
	7.1	Flood risk management and sustainable drainage schemes	Every year the council spends £2.1 million on flood prevention and highway drainage. Large water storage areas have been created in Cheltenham. In Nailsworth, underground drainage has been improved to reduce the flood risk. In the Forest of Dean, natural flood management schemes are working with nature by installing 'leaky dams' and reconnecting flood plains to slow the flow of water through the landscape. Following Council Motion 925, the Flood Forum was held in May 2024. The forum was a knowledge-sharing exercise, where all agencies with a stake in managing flood risk came together to promote their roles, enhance existing networks and demonstrate the power of collaborative working in building resilience to a changing climate.
	3.4	Schools transport engagement programme in place via the Think Travel team	The Thinktravel team spent 70% of work time with schools encouraging behaviour change directly linked to climate change (5 full time equivalent coordination staff and school crossing patrols). Annual Schools Spring Safer Routes for School Programme linked to a national Sustrans Big Walk and Wheel Campaign linked to achieving an accredited Modeshift Stars travel plan which monitors and tracks progress (page 13). Spring 2025 saw the programme extended for 12 weeks (from 6 weeks in 2024) across 56 schools. 150 inclusive training activities delivered. Over 66% (10% modal-shift) of the school community travelled actively as part of the Campaign, logging 52,415 active journeys from 38,192 in 2023. Bournside and Leckhampton secondaries took part of a trial Modeshift Active Travel Ambassador Programme, which enables pupils to create their own Active Travel Campaign and if successful are awarded funding to deliver it. This trial is planned to expand in Gloucestershire 2025/2026. 15 priority Gloucestershire Schools have been awarded the opportunity to apply for Active Travel grants. 5,000 school students trained in Bikeability in 2024/2025.

[19] https://www.gloucestershire.gov.uk/council-and-democracy/grow-gloucestershire/gloucestershire-s-economic-strategy-2024-2034/#:~:text=Gloucestershire's%20Economic%20Strategy%20(2024%2D2034)%20covers%20the%20next%2010,contribute%20to%20and%20benefit%20from
[20] https://www.gloucestershire.gov.uk/media/hcvfexf4/ltp-progress-report-2022-23-and-2023-24-final.pdf

Theme		Action	Update 2024/2025
	3.6	Business transport engagement in place via the Thinktravel team	Gloucestershire Active Business Group continues to support businesses to complete travel plans and create sustainable and active travel strategies and initiatives. Working in partnership with Active Gloucestershire to create a Gloucestershire Active Business Network to decarbonise local commutes. Supporting via Workplace E-Bike scheme, confidence rides/cycle training, led walks and car sharing alongside funding Love To Ride Gloucestershire. Love To Ride (L2R) Gloucestershire is a flagship project, which is now in Year 3 of delivery. Love to Ride offers a 365 Community Cycling Platform with seasonal challenges to encourage community and every-day cycling. Highest participant rate achieved in the Cycle September 2024 challenge to date increasing to 827 riders signed up with 553 riding 62,897 miles achieving 6,288 trips saving 3.8 tonnes CO_2e.
	3.8	Cycle route developments	The B4063 cycle route between Gloucester and Cheltenham is nearing completion with the final phase expected to be complete in early Autumn 2025. The work between Cheltenham and Bishops Cleeve is now well advanced with all works now being constructed or complete. Gloucester to Stroud remains largely in design phase and will be delivered across future years. We have attracted nearly £6 million of funding for 58 electric buses, aiming for 20% of the bus fleet to be zero emission by 2026. The Robin increased the areas that it covers to include Newent in Spring/Summer 2025.
	3.9	Arle Court Transport Hub	The Arle Court Transport Hub was completed in March 2025. It is home to the largest contactless payment EV charging public transport hub in the UK. It provides passengers Park & Ride options to Cheltenham and Gloucester, access to the UK's coach network, 100 Electric Vehicle fast charging points (+4 super-fast charging), indoor and outdoor waiting facilities, secure cycle storage, free Wi-Fi, and a customer service desk to facilitate easy transport mode shift. The project exceeds the council's requirement for biodiversity net gain and supports air quality improvements and carbon reduction through mode shift and photovoltaic (PV) panel energy generation.
	3.10	Bus service improvement plan (BSIP)	£8m for Gloucestershire in the next phase of the BSIP for the 2025/2026 financial year. In June 2024, we published the second BSIP with a vision to return bus patronage levels to precovid levels and then exceed them through continued support for bus services and an investment pipeline to deliver improvements across the county's bus network. Funded by the Department for Transport over the last 3 years to date.
	3.11	Develop pathways to zero tonnes per capita from transport by 2045	Gloucestershire County Council declared a Climate Emergency in 2019. The Gloucestershire Local Transport Plan commits to develop an emissions reduction pathway to deliver on the commitment to reduce per capita transport carbon emissions by 2045. Journey to Net Zero is a route map summary for transforming travel in Gloucestershire, summarising a programme of work to reduce the impact of transport on climate change.
	3.12	Improve Air Quality	See Air Quality section above (page 10).
Power	4.3	District Heating	The Southwest Net Zero Hub are working with Gloucestershire County Council and other partners on the next steps for a district heat network. The feasibility study in the golden valley was completed by Cheltenham Borough Council with funding support from Gloucestershire County Council.
Waste	5.1	Behaviour change campaigns	See community engagement section (page 18)
	5.2	Real Nappies Project	Real Nappies Project issued 145 vouchers (with 104 being redeemed), had 425 face- to- face interactions, loaned 13 kits, and had a combined digital reach of 10,906 on Instagram and Facebook (Facebook reactions, Facebook reach, and Instagram reactions) in 2024/2025. The project also raised £150 for the local Kidstuff charity through the sale of around 100 second hand donated nappies, distributed leaflets and flyers around the county including libraries and hospitals, and added over 350 free reusable nappies to a number of baby changing areas across the county.

Theme		Action	Update 2024/2025
	5.3	Master Composters Project	The Master Composters Project has retained 15 volunteers in 2023-2024 and received additional funding through budget amendments in March 2024. A dedicated coordinator with a wider community engagement remit will be hired and deliver activities in financial years 2025-2027.
	5.6	New waste transfer stations	Cabinet paper passed in December 2024 https://glostext.gloucestershire.gov.uk/mgConvert2PDF.aspx?ID=105915 implementation of transfer stations will reduce waste vehicle mileage.
	5.7	Creation of reuse shop at Hempsted household recycling centre	Hempsted reuse shop designs have been produced. Planning application is underway along with recruitment of the shop manager.
	5.8	Promote the circular economy	In addition to the work completed to support repair cafes and Libraries of Things across the county the Gloucestershire Economic Strategy outlines plans to integrate the circular economy into economic planning[21]
Influencing others	6.1	Community fund for decarbonisation and behaviour change projects	12 projects delivered in 2024/2025 with a further £50,000 of funding released in February 2025 and June 2025[22]
	6.2	Libraries Green Zones	An estimated 1,094 tonnes of carbon is saved per year through lending 1,563,757 books compared to buying new books. Library Green Zones continue to host and promote the 'Greener Together' book collections and they continue to be amongst the most popular library collections.
	6.3	Engagement strategy	Sustainability engagement strategy for 2025/ 2026 developed with Climate Leadership Officers Group partners and Waste Minimisation engagement strategy developed with Gloucestershire Resources and Waste Partnership.
	6.4	Support business engagement work	The Growth hub continues to work with Small and Medium Enterprises to help reduce carbon emissions. Our wider procurement work aims to encourage further carbon reduction action from our suppliers (see page 14).
Land Use and Biodiversity	7.2	Plant one million trees	Over 500,000 trees planted in Gloucestershire between 2020 and March 2025.
	7.3	Look into developing a Gloucestershire carbon offsetting scheme	Gloucestershire Nature and Climate Fund continues to be supported by Gloucestershire County Council.
	7.4	Development of Gloucestershire's Local Nature Recovery Strategy with the Local Nature Partnerships	Gloucestershire's Local Nature Recovery Strategy has been drafted after consultation with the Local Nature Partnership, local communities and landowners and farmers. The draft strategy will outline governance processes.
	7.5	Research projects to increase and enhance biodiversity	The Biodiversity Officer post is funded for 2-years as a fixed term appointment and will work with the Ecology team to enhance biodiversity through the delivery of the Local Nature Recovery Strategy.
	7.6	Work with partners across the county to reduce grass cutting to minimum necessary	Continue to work with Highways and local authorities to promote 'No Mow May'. Appointment of Biodiversity Officer will enhance capacity to approach grass-cutting from a biodiversity perspective alongside the delivery of the Local Nature Recovery Strategy.
	7.8	Design and deliver a Biodiversity Week in line with the recent council motion on Biodiversity	Biodiversity week 2024 delivered in May. Biodiversity week 2025 planned and work with Gloucestershire Local Nature Partnership partners and the Master Composter network, focussing on soil health.
	7.9	Implement Biodiversity Net Gain policy	Pending Biodiversity Officer recruitment and implementation of Local Nature Recovery Strategy in 2025/2026.

[21] https://www.gloucestershire.gov.uk/media/d0glpm5n/gloucestershires-economic-strategy-2024-2034-strategy.pdf
[22] https://www.gloucestershire.gov.uk/planning-and-environment/greener-gloucestershire-dashboard/greener-gloucestershire-community-fund/previously-funded-projects/

Table 5: progress on actions within Gloucestershire County Council

Theme		Action	Update 2024/2025
Decisions	1.3	Recruit staff	Sustainability team staff: Sustainability and Engagement Officers X 1 Climate Action Officer X 2 (1 maternity cover) Energy and Renewables Officer X1 Air Quality and Climate Officer X1 Tree Project Officer X1 Tree Project Support Officer Climate Action Engagement Manager X1 Climate Action Programme Manager X1 Head of Environment and Waste X1 Successfully recruited new staff: Sustainability and Engagement Officer Maternity cover Climate Action Officer (waste) Climate Action Officer (biodiversity)
	1.5	Carbon baselines investigated and carbon reporting through contracts investigated	Carbon reporting through contracts to become mandatory on contracts above threshold in 2025.
	1.6	Stress test public sector services and assets for climate resilience	Business Continuity Management plans are in place and tested annually. Ongoing membership of the Department for Environment, Food and Rural Affairs' (Defra) Local Adaptation Advisory Panel which is a conduit between councils and government on adaptation to climate change. A countywide Climate Risk and Vulnerability Assessment has been commissioned via Climate Leadership Gloucestershire.
	1.8	Review and update council climate change strategy and fully incorporate actions around biodiversity conservation	The new management team are implementing activities which will support the review and update of the strategy. The review will take place in 2025/2026, so that our clearer understanding of carbon emissions will help to guide and inform our new strategy.
Buildings	2.1 & 2.2	All new developments support the move to zero carbon and improve resilience.	Planning documents currently outline the need to be net zero by 2030. When procuring new buildings specifications outline the need for low carbon/ zero carbon requirements. A wide variety of sustainability considerations are built into new developments. Wheatridge school has progressed, and the build is intended to be net zero, both from construction materials and in running. See heating and lighting (page 29).
	2.3	Decarbonisation of buildings	Some corporate owned buildings have had minor improvements this year. Archives buildings have been remodelled to keep site at the right atmospheric conditions passively. Solar panel installations planned across the estate including solar installations on six owned schools[23]. Smart meters used to control and manage school heating and electricity via Trend control panels.
	2.4	Develop Heat Decarbonisation Programme and seek funding opportunities	The sustainability team are working with Asset Management and Property Services to identify a decarbonisation programme so that available funding can be matched to projects.

[23] https://www.gloucestershire.gov.uk/gloucestershire-county-council-news/news-february-2025/six-more-gloucestershire-primary-schools-to-benefit-from-solar-energy/

Theme		Action	Update 2024/2025
Transport	3.1	Council fleet expansion to include more sustainable vehicles	4 e bikes made available to staff in 2024/2025 and training rides offered to staff via the Thinktravel team. 65 (45 last year) electric vehicle charge points have been installed to date on county council sites. 12 more sites in planning to install a further 46 EV charging points by end of 2025. 10 new 3.5t fully Electric Vans for Gloucester Equipment Loan Service, 14 small EV Vans for Gloucestershire Fire and Rescue Service, and 4 EV Officer Cars delivered into service. 13 EV vans on order for Gloucestershire Fire and Rescue Service, with further EV vehicles for asset management and property services, Highways, Streetworks, and Adults and Children's services planned to order in 2025/26 this will represent a change from combustion to 34 fully EV, in addition to 3 plugin Hybrid vehicles.
	3.5	Council travel plan	2022 Mobilityways survey used to inform staff travel choices and create a personalised travel plan for staff. A new survey will be conducted in 2026.
Power	4.1	Continue to purchase 100% renewable electricity supply (backed by REGOs)	100% renewable electricity purchased backed by Renewable Energy Guarantees of Origin (REGOs).
	4.2	Energy from Waste Facility – heat offtake	Annual heat study completed; potential opportunities will be explored.
	4.4	Fosse Cross House recycling centre, 1MW photovoltaic array and battery storage	Continue to explore options at the site and relevant funding opportunities.
	4.5	Develop a council position for roof mounted solar photovoltaic on council buildings (including schools)	Asset Management and Property Services are working with the sustainability team to identify future funding opportunities following the government spending review announcement (in June 2025) that the Public Sector Decarbonisation Scheme (PSDS) was being closed.
	4.6	£1m energy efficiency 'Salix Fund'	Using funding from the Salix Recycling Fund, 15 sites were identified for solar photovoltaic at a total estimated value of £850k. The project will be delivered by Asset Management and Property Services and should complete by September 2025. The loan will be repaid using the savings in electricity, across an 8-year period from 2026. The recycling fund is now closed, and the government has announced as part of their spending review that there will be no more PSDS funding in the current guise.
	4.7	Continue to generate renewable electricity	Electricity is generated from existing solar photovoltaics on Shire Hall, alongside energy generated through Anaerobic Digestion in Bishops Cleeve (page 17). The electricity generated by the Energy from Waste Facility at Javelin Park is enough electricity to power the equivalent of 25,000 homes per year.
Waste	5.4	Consider the renewable energy and biodiversity gains to be made when redeveloping the Household recycling centres	Ongoing, will be reviewed as refurbishment works are planned at individual sites.
	5.5	Continue to collaborate with the Gloucestershire Resources and Waste Partnership to develop a waste and resources action plan	The interim resources and waste strategy remains in place while the implementation of new sector regulations takes place. This will see producers become responsible for the costs associated with packaging waste, and a deposit-return-scheme established for beverage containers. These changes will drive more recycling out of the system in the next 2-3 years, providing a new baseline prior to us devising a new strategy and considering further changes to waste services.

GCC_4635 12.25

Gloucestershire
COUNTY COUNCIL