

Public Document Pack



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PUBLIC

To: Members of Improvement and Scrutiny Committee - Climate Change, Biodiversity and Carbon Reduction

Friday, 24 November 2023

Dear Councillor

Please attend a meeting of the **Improvement and Scrutiny Committee - Climate Change, Biodiversity and Carbon Reduction** to be held at **2.00 pm** in Committee Room 1 on **Monday, 4 December 2023**; the agenda for which is set out below.

Yours faithfully

A handwritten signature in black ink that reads 'Helen E. Barrington'.

Helen Barrington
Director of Legal Services

A G E N D A

PART I - NON-EXEMPT ITEMS

1. Apologies for absence
To receive apologies for absence (if any)
2. Declarations of Interest
To receive Declarations of Interest (if any)

3. Minutes of Previous Meeting (Pages 1 - 12)

To confirm the non-exempt minutes of the Improvement and Scrutiny - Climate Change, Biodiversity and Carbon Reduction meeting held on 18 September 2023.

4. Public Questions (Pages 13 - 14)

30 minutes maximum in total for this item. Questions may be submitted to be answered by the Scrutiny Committee or Council officers who are attending the meeting as witnesses, on any item that is within the scope of the Committee. Please see the procedure below for the submission of questions.

5. Derbyshire County Council Climate Change Strategy: Annual Review of Progress (2023) (Pages 15 - 54)

6. Reducing the Environmental Impact of Council Grey Fleet Mileage (Pages 55 - 64)

7. Briefing on the Derbyshire Highways Decarbonisation Programme (Pages 65 - 78)

8. Work Programme 2023-24 (Pages 79 - 80)

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MINUTES of a meeting of **IMPROVEMENT AND SCRUTINY COMMITTEE - CLIMATE CHANGE, BIODIVERSITY AND CARBON REDUCTION** held on Monday, 18 September 2023 at Council Chamber, County Hall, Matlock.

PRESENT

Councillor W Major (in the Chair)

Councillors B Bingham, J Bryan, D Collins, A Hayes, G Hickton, D Taylor and A Gibson.

Also in attendance was Councillor B Lewis.

Apologies for absence were submitted for Councillor S Bull and M Ford.

23/23 DECLARATIONS OF INTEREST

There were no declarations of interest.

24/23 MINUTES OF PREVIOUS MEETING

RESOLVED – to confirm the non-exempt minutes of the meeting of the Improvement & Scrutiny – Climate Change, Biodiversity and Carbon Reduction committee held on 03 July 2023.

25/23 PUBLIC QUESTIONS

1. Question received from Councillor Gez Kinsella:

At the last full council meeting in February a question was asked by Anne Thoday about the limited decline in projected emissions from DCC's core and grey fleet over the next 10 years.

On the issue of the core fleet Anne asked, how long it would take to convert all the council's vehicles to ZEVs. No specific answer was provided by Cllr Lewis. The counties core fleet stands at 550 vehicles, and I understand five vehicles were replaced by ZEVs in 2022 with plans to replace another four this year.

On the matter of the grey fleet Anne also asked about the plan for reducing the carbon emissions from the council's grey fleet; Cllr Lewis responded saying DCC are 'working with industry experts across local government and academia'.

When will you publish a clear plan, including a projected target date to replace all core business fleet to ZEVs? Secondly, is there a plan and targets in place for the reduction of carbon emissions from grey fleet and can these be shared? Will employees be consulted on this plan, as they can offer expertise on effective business practice change to reduce grey fleet mileage?

Response provided:

The Derbyshire County Council core fleet (excluding non-core school minibuses and plant) at the end of September 2023 will be 398 vehicles in total, this is following current disposals of non-CAZ compliant vehicles and the delivery of 10 new gritters and 5 new EV vans.

The table below shows the number of Internal Combustion Engine (ICE) and Full Electric vehicles per vehicle type.

Vehicle Type	Internal Combustion Engine (ICE)	Full Electric
Car	7	8
Car MPV	5	0
4x4	55	0
Light Commercial Vehicle (vans)	227	5
Minibus	16	0
HGV	75	0
Total	385	13

A core fleet replacement programme for vans to transition from diesel to electric is in place. The implementation of this programme and the target for replacing 20 vehicles per year will be achieved once the necessary EV charging infrastructure is in place, which will include additional charge points installed at County Hall and new charge points installed at all Council depots where scheduled replacement vehicles are sited. The Sustainable Travel Team is developing the strategy for a comprehensive charging network across the Council's estate, which includes undertaking the necessary feasibility assessments and charging technology option appraisals.

A new policy is being considered to support the transition of 60% of Council diesel vans to electric that are based at employees' homes. Solutions for either providing charge points at home for these employees or changing the way services are provided so that electric replacement vans can be charged efficiently at other charging locations are being investigated, with preliminary discussions between Fleet, relevant Services and HR having already commenced.

In addition to vans, the Council currently has 75 HGVs within its fleet. Most of these vehicles are now Clean Air Zone (CAZ) compliant and the remainder will be CAZ compliant by April 2024 or will be on order and awaiting delivery. There will be four remaining library HGVs where discussions are ongoing to replace these with smaller, more effective electric library vans.

The aim is the full transition of core fleet to zero emission vehicles by the Council's net zero target date of 2032, or sooner, although is subject to the following being achieved:

- The availability of an extensive EV charging infrastructure at home addresses, roadside and depots which includes direct fast charging for larger HGV vehicles.
- Advance in HGV technology and hydrogen readily available at depots or fuel stations.
- Departmental Services being able to change Service Delivery Models to allow for the reduction in load carrying capacity of light and heavy commercial vehicles and the reduction of available miles per day achievable due to time loss for recharging of EV vehicles.

With regards to grey fleet emissions, the report titled 'Reducing the Environmental Impact of Business Travel' presented at today's meeting outlines the current strategies and ongoing initiatives aimed at reducing these emissions. In addition to today's presentation, the Sustainable Travel team will be presenting a comprehensive forward plan for reducing grey fleet emissions at the next meeting of the Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction on 4 December 2023.

Targets for grey fleet emissions are developed annually for each Department, with each Departmental Management Team tasked with incorporating these targets into Departmental and Divisional Service Plans and each taking responsibility for achieving the targets. A revised set of targets are currently under development for implementation in 2024-25. These targets will be included in the Council's annual report of progress against delivery of its climate change targets and ambitions, which is due to be presented to the Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction on 4 December 2023.

The Council has consistently maintained a commitment to fostering employee engagement on climate change and wider environmental matters, including hosting regular events to gain valuable insights and ideas from the workforce. Most recently, a Journey to Net Zero employee engagement event was held at County Hall in June 2023, which sought to promote awareness regarding sustainable travel options and highlight the associated benefits. The Council will continue to engage proactively with

employees through events such as these, through the monthly Journey to Net Zero edition of Our Derbyshire, and through climate change training and engagement activities led by the Climate Change Team.

2. Question received from Councillor Gez Kinsella:

The installation of solar panels is a simple and relatively cheap way of reducing emissions. Renewable energy sources, such as solar provides cheap energy and maximise energy security. Given the administration have been in power for over two years, why are solar panels not being installed as a matter of course for new schools or where schools are being extended?

Response provided:

The identification and implementation of opportunities to install solar panels on the Council's maintained schools is ongoing. One recently completed new school (Harrington) has roof mounted solar panels installed and has an Energy Performance Certificate (EPC) rating of B and has scope for further provision of solar panels to achieve an A rating, subject to Department for Education (DfE) funding. Another recently completed new school (Breadsall Primary) has had the maximum number of solar panels possible for its roof space installed.

Design standards developed by Corporate Property recommend that any new build over 1,000m² has the maximum number of solar panels feasible for its roof space installed, with design standards also developed for smaller builds and refurbishment projects. These proposed design standards were presented to the Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction on 13 February 2023. Subject to agreement by the Corporate Property Senior Management Team during Q2 2023-24, the standards are ready for formal implementation on all projects.

In addition to the funding received by the Council from the DfE for implementing carbon reduction measures at schools, approval was given at the Full Council meeting held on 15 February 2023 for the allocation of £4m of capital funding to support carbon reduction projects in maintained Derbyshire schools. Children's Services are in the process of identifying which schools should be prioritised for investment in carbon reduction measures, which includes solar panel installation.

3. Question received from Councillor Gez Kinsella:

An update on DCC's climate change performance has not been published since 2022/23 quarter 4 data was shared with this Committee in May.

When will 2023/24 quarter 1 & 2 performance information be shared?

Response provided:

The Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction has taken the decision that the quarterly Climate Change Performance Dashboard will no longer be a standing agenda item at Committee meetings to allow more time for consideration and scrutiny of live and planned projects and initiatives.

The Climate Change Performance Dashboard for Q1 2023-24 (April – June 2023) was presented to and endorsed by the Council's Climate Change and Environment Programme Board, which is chaired by the Executive Director for Place, on 17 July 2023 and is readily available to the Committee if requested.

The Climate Change Performance Dashboard for Q2 2023-24 (July – September 2023) will be developed in October 2023 and made available to the Committee if requested.

4. Question received from Lisa Hopkinson (Transition Chesterfield):

The report on Decarbonising Derbyshire's Housing (item 7) suggests that not only are 98% of homeowners interested in energy efficiency measures, but that there is an acute skill shortage in the retrofit sector. What measures has the Council taken to work in partnership with FE colleges in Derby and Derbyshire to ensure that future construction workers are being trained in the necessary skills and will the council consider setting up a Net Zero Training Hub similar to Portsmouth City Council and their local College? And given that the retrofit sector is 'under high demand from work generated by social housing retrofitting programmes' what measures are being developed to ensure that any learning from social housing retrofits is being captured and transferred more widely to the sector?

Response provided:

Derbyshire County Council recognises the acute skill shortage in the retrofit sector and over the last few years has been working with partners on practical solutions to educate, improve awareness, train, upskill and reskill the county's workforce to support the alleviation of this shortage. This recognition is based on the scale of the housing sector retrofitting required to deliver the net zero commitments of the Council and central Government.

As part of the overall growing green skills sector, the Council is developing a more comprehensive understanding of the green skills, jobs and vacancies being created across the Derbyshire so that skill gaps and challenges, such as for domestic retrofitting, can be fully understood. This

will enable the Council to work effectively in partnership with others to maximise the skills and employment opportunities for Derbyshire residents.

The Council is taking active steps as a supporting partner to tackle the skills shortage in this area in a number of ways, with examples being:

Working in partnership with FE Colleges across Derbyshire

The Council has excellent working relationships with the four Further Education (FE) colleges in Derbyshire. These colleges are spread geographically across the county, which would pose logistical and delivery challenges for developing just one hub. One of the areas where the Council is a key partner is the Construction Skills Hub being delivered by Chesterfield Borough Council as part of the Staveley Town Deal where an on-site construction training facility will serve to develop a pipeline of skilled construction workers through training provided by Chesterfield College and Derby University.

The Council also promotes the Midlands Net Zero Hub (MNZH) Home Decarbonisation Skills Training scheme. This scheme provides grant funding to registered retrofit training providers, including FE colleges, to deliver accredited training at scale to support the whole retrofit sector.

Social Housing retrofit partnership with Midlands Net Zero Hub (MNZH)

Supported by the Council and the district and borough councils, MNZH are managing local skills training competitions on behalf of the Department for Energy Security and Net Zero, providing opportunities for upskilling the local retrofit workforce across a range of areas that include:

- Heat Training Grants: Heat Pumps – this offers grants that will support trainees to undertake heat pump installation and maintenance training.
- Heat Training Grants: Heat Networks – this funds the delivery of training to upskill heating engineers to install and maintain heat networks.
- Green Home Grant Skill Training – this scheme (now closed) funded 18 training providers to deliver courses on installing individual energy efficiency and low carbon heating measures.

Social Housing retrofit partnership with the Local Authority Energy Partnership (LAEP)

The Local Authority Energy Partnership (LAEP) offers a forum (funded by subscription and hosted by the Council) for all councils across Derbyshire and Nottinghamshire to collaborate on alleviating fuel poverty, reducing carbon emissions, improving energy efficiency, and promoting sustainable

energy generation. The LAEP plays an important role in supporting the capture, collation and transfer of knowledge, experience and learnings from the Green Homes Grant Scheme, Local Authority Delivery Scheme and the Social Housing Decarbonisation Fund that are delivered by district and borough councils. This includes monthly meetings, webinars, and bespoke training sessions from subject matter experts.

Partnership working between Midlands Net Zero Hub (MNZH) and the national Retrofit Academy also facilitates learning and sharing good practice through activities such as online sessions and learning courses for different aspects of housing retrofit management and delivery. Training through this mechanism has been delivered to district and borough council employees directly involved in housing retrofit programmes across D2N2.

26/23 CLIMATE CHANGE PORTFOLIO UPDATE

Councillor Barry Lewis, Cabinet Member for Strategic Leadership, Culture, Tourism and Climate Change, gave a verbal presentation, providing an update to the Committee on the climate change work of the Portfolio Holder.

Building on the launch of the Derbyshire Climate and Carbon Reduction Manifesto in 2019, and the establishment of the Council's net zero target of 2032, or sooner, the Derbyshire County Council Climate Change Strategy: Achieving Net Zero (2021-2025) was developed and subsequently approved for adoption by Cabinet on 14 October 2021. The Strategy was now almost two years into its implementation and the majority of the actions and targets within the Strategy were on track to be achieved, with some already exceeded.

The Council's emissions had fallen by 64.2% between the baseline year of 2009-10 and 2021-22. This included a 43% reduction in emissions from Corporate Property since 2009-10 and an 83% reduction in emissions from streetlighting.

To ensure further emission reductions the Council remained on track to achieve net zero by 2032, or sooner, Corporate Property had been developing a decarbonisation plan for the Council's corporate estate. The Sustainable Procurement Policy was approved by Cabinet in July 2022 and was being applied on contracts. The Council had also produced a policy to reduce the amount of Single Use Plastics it uses in its buildings and the services. It was recognised that, even with significant effort to reduce emissions from the Council's estate and activities, there would be some residual emissions that would need to be offset to ensure the Council meets its net zero target. As such, opportunities for an increase level of renewable energy generation on Council buildings and land, as well as increased carbon sequestration through tree planting, were actively being

investigated and implemented.

The Climate Change Planning Guidance and Metric had been developed, which achieved a commendation in the Best Plan of the Year category in this year's East Midlands Royal Town Planning Institute's Awards for Planning Excellence. As well as this, the Derbyshire Spatial Energy Study and the Derby and Derbyshire Minerals Local Plan had also been developed as well as the Strategic Framework for Council action for progress to net zero energy in Derbyshire.

The Council was formally supporting a number of community energy projects. As well as proving funding and support through the Green Entrepreneurs Fund, Derbyshire Grants and DE-Carbonise.

With recent Active Travel England Capability fund grant awards, the Council would now begin to develop a series of local market town scale active travel plans. This workstream would be a primary focus of the next 12 months and look to explore the opportunities, barriers and interventions required to ensure walking, wheeling, and cycling can play a key role in daily movement needs of Derbyshire's residents and visitors. A Public/Stakeholder Engagement Report for the joint D2N2 Draft Local Cycling and Walking Infrastructure Plan was being finalised for publication and to inform the final Plan for Cabinet Member endorsement.

In 2021 the Council commissioned a Natural Capital Strategy for the county. The Strategy was now being used to identify the priority areas for the protection, restoration, and enhancement of natural capital assets. As part of the Council's commitment to tackling the effects of climate change, the Council planned to facilitate the planting of a million trees in the county by 2030. As of 1 September 2023, 315,098 had been added to our online Million Trees totaliser.

A joint Vision Derbyshire Climate Change Strategy (2022-2025) had been developed that set out how Derbyshire councils could work together to reduce emissions across the county to net zero by 2050. There had been collaboration across D2N2 through the Innovate UK funded two-year Fast Followers project; as well as Collaboration across D2N2 through the Department for Energy Security & Net Zero funded Local Energy Advice Demonstrator project.

27/23 REDUCING THE ENVIRONMENTAL IMPACT OF BUSINESS TRAVEL

Alan Marsden, Head of Strategic Transport and Sustainable Travel, introduced the report, which had been circulated in advance of the meeting and gave an update on activities within the Council that sought to reduce

the environmental impact of travel, including work being undertaken to reduce the Council's 'grey fleet' mileage, electrify its fleet vehicles and promote/raise awareness of public transport and active travel initiatives for staff.

The report was accompanied by a presentation that gave further detail into reducing the environmental impact of business travel.

The key strands to reducing the environmental impact of business travel were:

- Roll out a Council wide electric vehicle sharing programme and electric vehicle charging points at all key Council sites, coupled with a behaviour change campaign and evaluation of working practices to facilitate a zero emission fleet;
- Develop car share and cycle to work schemes;
- Provide discounted bus and rail ticket offerings; and
- Advocate and create awareness through support of national campaigns, such as Cycle To Work day and Travel Wise week.

By the next meeting of the Committee in December 2023 officers would have received Government Guidance and 'policy playbook' to support quantifying carbon emission reduction from transport (to support preparation of a new Local Transport Plan). Would be able to provide an update on the delivery programme for the electric vehicle charge point network across the County Council estate. And would have completed a review of sustainable travel initiatives offered to employees and their effectiveness in reducing grey fleet emissions.

Following a number of questions on the subject, committee members agreed that an item on the bus networks be added to the work programme. As well as be provided with further detail on avoiding unnecessary trips, insisting on alternative methods of travel, and what was in place to encourage employees to purchase electric vehicles.

RESOLVED to

1) Note the update on activity to reduce the environmental impact of travel, including work being undertaken to reduce the Council's 'grey fleet' mileage, electrify its fleet vehicles and promote/raise awareness of public transport and active travel initiatives for staff; and

2) Discuss and consider the progress being made, share issues and raise questions as appropriate.

Caroline Toplis, Programme Manager for Climate Change, introduced the report, which had been circulated in advance of the meeting and gave an update on the work being undertaken by the Council in supporting the decarbonisation of Derbyshire's housing.

The report was accompanied by a presentation.

There were a number of existing schemes and funding; UK Government Social Housing Decarbonisation Fund, UK Government Homes Upgrade Grant, UK Government Local Authority Delivery, and ECO 4 Local Authority Flex.

Derbyshire County Council:

- Supported the Warmer Derby and Derbyshire Helpline;
- Delivered the Healthy Home project, which offered people with a long-term health condition help with cold homes; and
- Provided online advice on saving energy and information on the help available with paying fuel bills

The challenges that Derbyshire faced were that a fifth of homes in Derbyshire were off-grid, the difficulty retrofitting homes in conservation areas and historic buildings, limited information and support available to homeowners, as well as a limited supply chain already under high demand.

Officers had been holding a number of engagement exercises; a multi-stakeholder community engagement exercise on retrofit, three online surveys, face-to-face meetings and focus groups, attendance at community events, and dialogue with community groups.

The outcomes of the engagement informed the draft Action Plan to 2025 which had been out to consultation. The Action Plan was to be co-delivered with local authorities, communities, and other stakeholders.

The Action Plan included knowledge and advice for residents to help them gain a further understanding into the options available to them. As well as further work on skills and training and supply chain development.

The Council worked with a number of community groups on skills and training, officers would provide Committee Members with a list of these groups.

RESOLVED to

- 1) Note the work being undertaken by the Council in supporting the decarbonisation of Derbyshire's housing.

Committee members agreed that an item on the bus networks be added to the work programme.

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Procedure for Public Questions at Scrutiny Committee meetings

Members of the public who are on the Derbyshire County Council register of electors, or are Derbyshire County Council tax payers or non-domestic tax payers, may ask questions of the Improvement and Scrutiny Committees, or witnesses who are attending the meeting of the Committee. The maximum period of time for questions by the public at a Committee meeting shall be 30 minutes in total.

Order of Questions

Questions will be asked in the order they were received in accordance with the Notice of Questions requirements, except that the Chairman may group together similar questions.

Notice of Questions

A question may only be asked if notice has been given by delivering it in writing or by email to the Director of Legal Services no later than 12 noon three working days before the Committee meeting (ie 12 noon on a Wednesday when the Committee meets on the following Monday). The notice must give the name and address of the questioner and the name of the person to whom the question is to be put.

Questions may be emailed to democratic.services@derbyshire.gov.uk

Number of Questions

At any one meeting no person may submit more than one question, and no more than one such question may be asked on behalf of one organisation.

Scope of Questions

The Director of Legal Services may reject a question if it:

- Exceeds 200 words in length;
- is not about a matter for which the Committee has a responsibility, or does not affect Derbyshire;
- is defamatory, frivolous or offensive;
- is substantially the same as a question which has been put at a meeting of the Committee in the past six months; or
- requires the disclosure of confidential or exempt information.

Submitting Questions at the Meeting

Questions received by the deadline (see **Notice of Question** section above) will be shared with the respondent with the request for a written response to be provided by 5pm on the last working day before the meeting (ie 5pm on Friday before the meeting on Monday). A schedule of questions and responses will be produced and made available 30 minutes prior to the meeting (from Democratic Services Officers in the meeting room).

It will not be necessary for the questions and responses to be read out at the meeting, however, the Chairman will refer to the questions and responses and invite each questioner to put forward a supplementary question.

Supplementary Question

Anyone who has put a question to the meeting may also put one supplementary question without notice to the person who has replied to his/her original question. A supplementary question must arise directly out of the original question or the reply. The Chairman may reject a supplementary question on any of the grounds detailed in the **Scope of Questions** section above.

Written Answers

The time allocated for questions by the public at each meeting will be 30 minutes. This period may be extended at the discretion of the Chairman. Any questions not answered at the end of the time allocated for questions by the public will be answered in writing. Any question that cannot be dealt with during public question time because of the non-attendance of the person to whom it was to be put, will be dealt with by a written answer.



FOR PUBLICATION

DERBYSHIRE COUNTY COUNCIL

**IMPROVEMENT AND SCRUTINY COMMITTEE - CLIMATE CHANGE,
BIODIVERSITY AND CARBON REDUCTION**

MONDAY, 4 DECEMBER 2023

Report of the Executive Director - Place

**Derbyshire County Council Climate Change Strategy: Annual Review of
Progress (2023)**

1. Purpose

- 1.1 The purpose of this report is to update the Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction on:
- The progress being made against the Council's net zero target of 2032, or sooner, and the County's net zero target of 2050, and the challenges being faced to reduce emissions from corporate property, streetlighting, core fleet and grey fleet.
 - The progress being made against each target and action within the Derbyshire County Council Climate Change Strategy: Achieving Net Zero (2021-2025).
 - Details on other key projects, initiatives and schemes that are contributing to the Council's climate change and wider sustainability agenda and objectives.

2. Information and Analysis

- 2.1 As set out in the Corporate Environment Policy and the Derbyshire County Council Climate Change Strategy: Achieving Net Zero (2021-2025) (the "Strategy"), the Council has established a net zero target for its estate and operations of 2032, or sooner. The Council also recognises the important role it plays in reducing the County's

emissions to net zero by 2050, in line with the UK Government's national commitment.

2.2 To structure and guide the delivery of projects and initiatives to help enable these targets to be achieved, the Strategy was developed in early 2021 and approved by Cabinet on 14 October 2021 (Minute No. 166/21 refers). This report provides an annual summary of progress made during 2023 against delivery of the Strategy and the Council's net zero targets

Progress against Net Zero Targets – Council Emissions

2.3 Council emissions are recorded and reported as tonnes of carbon dioxide and equivalent greenhouse gases (CO₂e). Emissions from four sources are currently included within the Council's net zero target of 2032, or sooner, these are:

- Corporate Property (gas, electricity, oil and propane use) – excluding schools
- Streetlighting (electricity use)
- Core fleet (mileage)
- Grey fleet (mileage)

2.4 Carbon emissions from the Council estate and operations (the above four sources combined) **have fallen by 14% between 2021-22 and 2022-23**, from 14,712 tonnes to 12,609 tonnes. This demonstrates a **71% reduction since the 2009-10 baseline year** where emissions were 42,965 tonnes.

2.5 Figure 1 presents emissions reductions since the baseline year (2009-10).

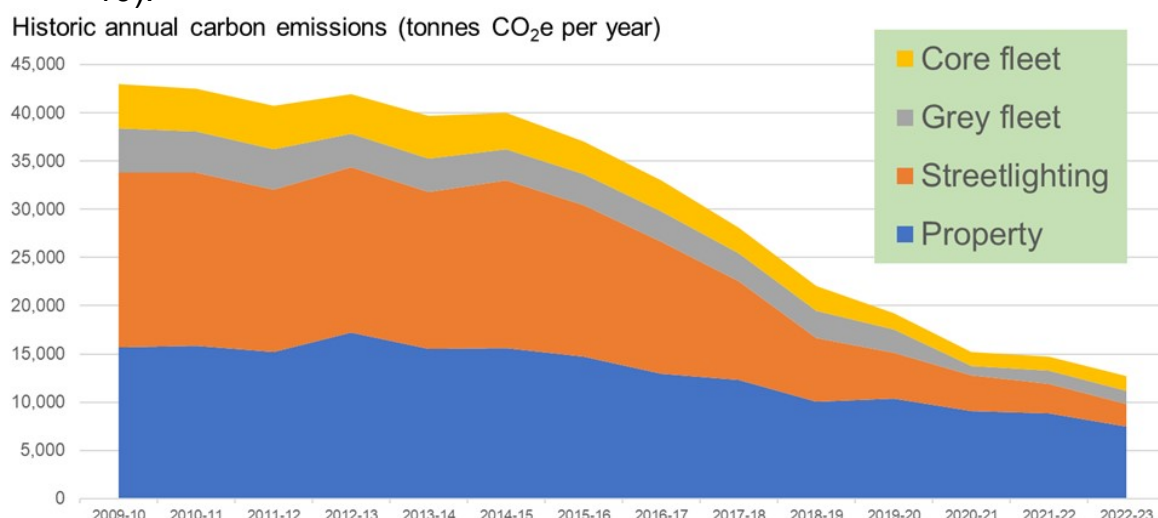


Figure 1: Council emissions reductions since 2009-10 baseline

2.6 Table 1 summarises the latest data for the four emissions sources reported for 2022-23 and provides a summary of the work being undertaken and planned to reduce emissions going forward.

Table 1: Summary of Council emissions and key activities

Emissions Source	Progress to reduce emissions
Corporate Property	<p>Total emissions from corporate property in 2022-23 were 7,475 tonnes, which is a 16% reduction since the previous year (2021-22) and a 52% reduction since the baseline year (2009-10).</p> <p>This is the largest annual reduction in emissions since 2018-19 and is the result of a focused effort on property rationalisation, improved monitoring and control of energy use together with the impact of a milder than average winter on heating demand in buildings.</p> <p>Electricity use for 2022-23 includes a small percentage (less than 0.5%) attributable to electric vehicle (EV) charging. As EV charging will increase in the future, mechanisms are being investigated for how this energy use can be reported separately to avoid the double-counting of emissions.</p> <p>Some further modest emission reductions in future years are expected from ongoing property rationalisation and improved energy management.</p> <p>Any residual emissions from buildings will largely be due to the difficulty of decarbonising heat; 70% of energy used in the Council's buildings is gas. Changing heating systems to low carbon solutions (such as heat pumps) is disruptive and expensive and so Corporate Property is not currently planning a heat decarbonisation programme on an estate-wide basis.</p> <p>Deeper emissions savings will need to come from investments in retrofitting to reduce energy consumption and conversion to low carbon heat sources, as well as roof-mounted photovoltaic (PV) electricity generation. This will not be possible without adequate revenue and capital funding and the Council successfully bidding to national funding schemes such as the Public Sector Decarbonisation Scheme (PSDS). The Council has been unsuccessful in its recent bids to the PSDS due to a lack of robust feasibility studies being in place that are needed to inform bids, and the requirement for match funding by the</p>

	<p>Council as part of any bid. The PSDS is also very competitive with high levels of demand on the fund nationally.</p>
Streetlighting	<p>Total emissions from streetlighting in 2022-23 were 2,373 tonnes, which is a 23% reduction since the previous year (2021-22) and an 87% reduction since the baseline year (2009-10).</p> <p>As in previous years, the emissions reduction is due to continuation of the LED replacement programme, night-dimming and part-night lighting, along with decarbonisation of the electricity grid.</p> <p>The streetlighting LED replacement programme is nearing completion with 500 streetlights left to convert which are scheduled for whole column and cabling replacements. In addition, there are 411 cast iron lighting columns to be replaced.</p> <p>There are also 5,500 streetlights awaiting adoption which are not included in the data above. These will add an estimated 365 MWh of energy use to the load annually (increasing energy use overall from streetlighting by 3-4%), but the timescale for this depends on the ability of developers to achieve adoptable standards of road networks in a timely manner.</p> <p>An increase in emissions is expected next year due to the factors above and as the UK government has calculated a one-off increase in the emissions associated with grid electricity. In future years the increased consumption should be offset by continuing improvements in LED light efficiency, grid decarbonisation and smarter controls.</p>
Core Fleet	<p>Total emissions from core fleet in 2022-23 were 1,394 tonnes, which is a 2% reduction since the previous year (2021-22) and a 68% reduction since the baseline year (2009-10).</p> <p>Core fleet data has been comprehensively reviewed this year to remove previous inaccuracies in data provided by the telematics supplier and to ensure vehicles are correctly classified by emissions type. This shows that, rather than emissions bouncing back after the Covid-19 pandemic, they have remained relatively stable, suggesting that a new 'business as usual' point has been reached.</p> <p>Following the delivery of 10 new gritting vehicles in September 2023, the Council will operate 75 HGVs within its fleet; 67 of</p>

	<p>these HGVs are now Clean Air Zone (CAZ) compliant with orders placed to replace three of the eight remaining HGVs with new CAZ complaint vehicles. These vehicles are due for delivery by December 2023. Discussions are ongoing to replace four library lorries with smaller more efficient electric library vans and the final Highways HGV with a more appropriate alternative.</p> <p>A core fleet replacement programme for all Council vans to transition from diesel to electric by 2032 is in place with the target of replacing 20 vehicles per year. Currently the fleet has five electric vans and eight electric pool cars with two more on order, meaning that the target of replacing 20 vehicles per year is not currently being met. The success of this programme relies on having EV charging infrastructure in place which will need to include additional charge points installed at County Hall and at the six Council depots where scheduled replacement vehicles are sited. Discussions between Fleet, Corporate Property, Sustainable Travel and the service areas that require the replacement vehicles are ongoing to ensure this replacement programme is successfully delivered. Once the necessary charging infrastructure is in place orders can be placed to procure replacement vehicles and bring the Council back on track to replace at least 20 vehicles per year with electric vehicles.</p> <p>Solutions to support the transition of the estimated 60% of Council vans that are based at employees' homes to electric, and which consequently require home charging, are being explored.</p>
Grey Fleet	<p>Total emissions from grey fleet in 2022-23 were 1,367 tonnes, which is a 5% increase since the previous year (2021-22) and a 70% reduction since the baseline year (2009-10).</p> <p>The increase in emissions is due mainly to the increased mileage undertaken by employees from Children's Services and Adult Social Care and Health to meet additional care needs in communities.</p> <p>A modest annual reduction in these emissions is expected from increases in the fuel efficiency of employee vehicles, a move to a greater ownership of EVs and an increase in the use of core fleet vehicles for business travel.</p>

	<p>The Council is targeting activity at high mileage teams and individuals, with the provision of dedicated Council fleet EVs for individuals and teams in Children’s Services and Adult Social Care and Health being proposed. Grey fleet emission reductions could be significant for those individuals or teams undertaking more than 17,000 miles per year (a breakeven point for costs). However, any approach to switching from private vehicle use to a core fleet vehicle for business travel may have HR policy and contractual implications, which are being fully explored.</p>
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2.7 In order to quantify the gap between the Council’s net zero target and current and planned activities, annual emissions projections to 2031-32 have been modelled using information on modest ongoing and planned initiatives (as detailed in Table 1), anticipated changes in carbon conversion factors (influenced by national factors, such as the amount of renewable energy generated) and any other influencing factors, such as the gradual increase in EVs amongst employees. The projections assume that no significant investment above those noted in Table 1 will be made to reduce emissions at scale across the Council’s estate and operations.

2.8 These emission projections to 2031-32 are presented in Figure 2 against a linear trajectory (the dotted line) to reach net zero by 2031-32, in line with the Council’s current target.

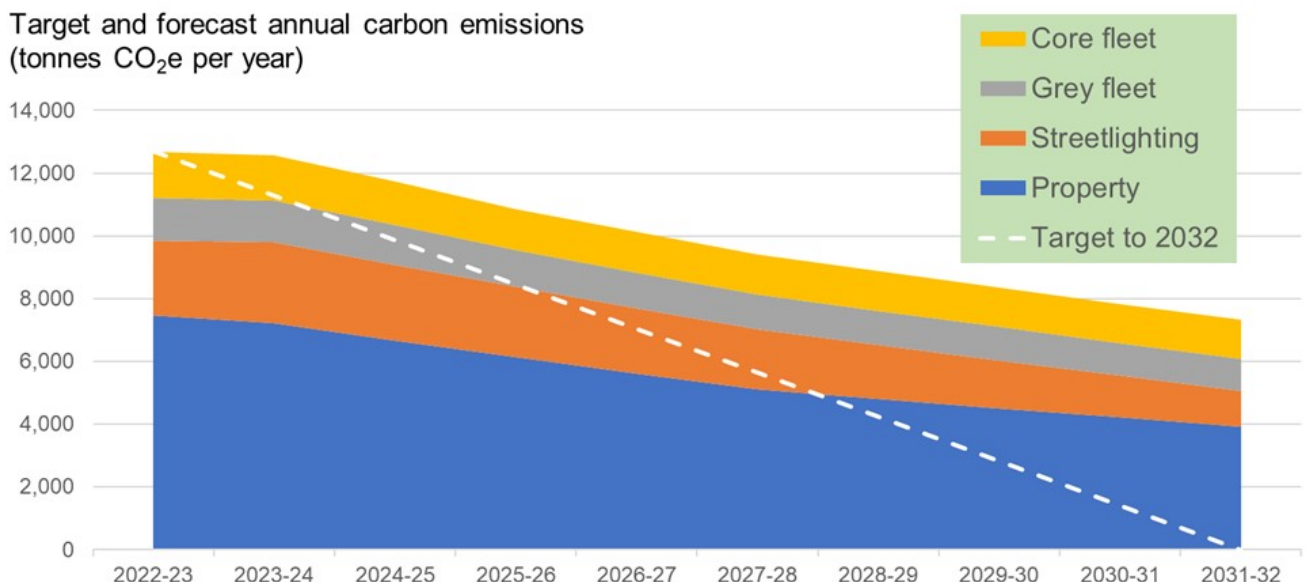


Figure 2: Council emission reduction projections (based on confirmed and planned activities)

- 2.9 Despite the good progress made to-date to reduce the Council's emissions, and the ongoing and planned work detailed in Table 1 to reduce emissions further, the modelling undertaken suggests that, for the four sources measured and reported, there will be a **potential shortfall in the necessary emissions reduction of 7,250 tonnes CO₂e by 2031-32**. Over 50% of these residual emissions will be from the Council's Corporate Property.
- 2.10 This requires both:
- a) a step-change in emissions reduction performance, particularly for decarbonising heat in buildings and the reduction in and electrification of travel by car and vans; and
 - b) the development and implementation of plans to offset some of the residual emissions through renewable energy generation on Council-owned buildings and land (e.g. solar PV), and to sequester carbon through activities such as tree planting.
- 2.11 Supplementary work is underway to establish how this shortfall can be most effectively addressed. However, both the step change in emissions reduction performance and the development of renewable energy generation requires significant financial investment, which may be impacted by the Council's current financial situation. The implication of any pressures on future investment requires consideration as to how it influences this shortfall or delay to the achievement of the Council's net zero target.
- 2.12 Furthermore, alternative funding (through external scheme funds such as the PSDS) and delivery options are being assessed to understand the implications of the Council taking different approaches to tackling the four emission sources, particularly for Corporate Property decarbonisation where high levels of investment are required.
- 2.13 Whilst it is difficult to compare the Council's emissions reduction performance to-date against other councils (due to the absence of standard reporting rules meaning that all councils measure and report on emission differently) the Council recognises that some councils are putting in place measures which will lead to significant emission reduction and that the Council could seek to learn from and replicate in some areas. For example, it is noted that, typically, those councils achieving the greatest speed and scale of emissions reduction are those that are committing to large scale, ongoing carbon reduction plans, such as estate-wide property refurbishment and heat decarbonisation projects (such as Cambridgeshire County Council), or

large-scale renewable energy generation projects (such as Cornwall Council).

Council Scope 3 Emissions

- 2.14 Within the Council's Climate Change Strategy, the Council has set a target to *"Baseline all Council Scope 3 emissions by 2023, and set a target date to achieve net zero Scope 3 emissions for the Council"*.
- 2.15 Scope 3 emissions are indirect emissions that occur in the upstream and downstream activities of an organisation. The Council already reports on one element of its Scope 3 emissions (grey fleet mileage), but wider Scope 3 emissions not currently recorded or reported include those emissions associated with purchased goods and services, employee commuting, waste disposal, hired vehicles, leased assets and water supply.
- 2.16 As Scope 3 emissions are thought to typically account for 85-95% of any organisation's total emissions, understanding the Council's Scope 3 emissions is key to accurately assessing what actions should be taken and where attention should be focussed to ensure emissions are reduced whilst also delivering cost savings and wider co-benefits.
- 2.17 A review of Scope 3 emissions carried out during 2023 has identified where data is available and these emissions have been quantified where possible for several of the Scope 3 emission sources. Due to the volume of data involved in this analysis, further work is being carried out to quantify a wider range of Scope 3 emission sources and to set a realistic target date for net zero for the Council's Scope 3 emissions. This is due for completion in early 2024. Appendix 2 provides a summary of this analysis.

Progress against net zero targets – Derbyshire emissions

- 2.18 In line with the UK Government's legally binding commitment, and to contribute to this commitment locally, Derbyshire needs to work towards becoming a net zero county by 2050. Data is provided by the Department for Energy Security and Net Zero (DESNZ), which reports annually (two years in arrears) on emissions arising within each Council's geographic area. DESNZ groups emissions by source: industry, commercial, the public sector, homes, transport, agriculture, and waste management. Around 98% of these area-wide emissions are outside the direct control of local authorities. The latest data relates to the 2021 calendar year, so does not represent any changes over the past two years, and is provided in Table 2.

- 2.19 The data shows there was a 9% increase in Derbyshire’s emissions between 2020 and 2021. This is fairly consistent with the increase in overall UK emissions in 2021, which increased by 5% largely due to Covid-19 restrictions easing and colder than average winter temperatures increasing the use of heating in buildings.
- 2.20 Emissions from industry and transport increased by the greatest amount, and the only sector to see a reduction in emissions between 2020 and 2021 was waste management. This is also consistent with UK figures.
- 2.21 The total emissions reduction for the county between 2005 and 2021 is 22%. In comparison, the UK’s total emissions reduced by 39% during the same period. This difference is mostly due to industry’s contribution to Derbyshire’s overall emissions, which was 42% in 2005 and 48% in 2021. Of these industrial emissions, Derbyshire’s large industrial installations, such as the mineral products industry, account for almost 70%. In comparison, industry accounted for 23% of the UK’s emissions in 2005 and 21% in 2021. Furthermore, emissions from industry have reduced by 43% between 2005 and 2021 when looking at the whole UK, whereas they have only reduced by 12% for Derbyshire’s industry over the same period.
- 2.22 Emissions reduction percentages across all other sectors are similar in Derbyshire to the UK average.

Table 2: Derbyshire’s emissions for 2021 and compared to previous year (2020) and baseline year (2005)

Source of emissions	2005 (kt CO ₂ e)	2020 (kt CO ₂ e)	2021 (kt CO ₂ e)	Change (2020-2021) (kt CO ₂ e)	% change (2020 to 2021)	% change (2005 to 2021)
Industry	4,613	3,630	4,071	+441	+12%	-12%
Commercial	653	113	138	+26	+23%	-79%
Public sector	225	114	134	+20	+18%	-40%
Domestic	2,020	1,221	1,256	+35	+3%	-38%
Transport	2,087	1,624	1,846	+222	+14%	-12%
Agriculture	881	771	783	+13	+2%	-11%
Waste management	478	313	279	-33	-11%	-42%
Total	10,957	7,785	8,508	+723	+9%	-22%

- 2.23 Alongside these figures, DESNZ also produces projections for national emissions up to 2040 based on current rates of change and the

reductions likely to be achieved under 'business as usual', taking into account agreed Government policies and funding. The latest data was published in October 2022 and projects that UK emissions will reduce by 18% between 2020 and 2040. This indicates the need for ambitious, deep and widespread action across the UK and across all sectors to achieve the target of net zero by 2050.

Review of Strategy Targets and Actions

2.24 The Council's Climate Change Strategy sets out targets and actions across five themes:

- Council Estate and Operations
- Low Carbon Economy
- Decarbonising the Domestic Sector
- Transport, Travel and Infrastructure
- Waste



2.25 A review of each target and priority action has been undertaken and a summary of the latest position is provided below. Each target and priority action has been allocated a RAG rating to indicate performance against expectation at this stage.



2.26 There are **27 targets** within the Strategy, with progress against each of these summarised in Table 3 below. It should be noted that, apart from the targets set out under ‘Council Estate and Operations’, many of the targets are outside of the direct control of the Council and reflect wider national challenges, with the Council instead holding an influencing, facilitating or partnership working role. For any targets that are assessed as either requiring Review or Action, endeavours will be made to accelerate pace wherever possible to achieve the targets, and this is summarised in the table below.

- ✔ Good On track or complete with outcomes in line with expectations
- ◻ Review Some risk to achieving timetable and/or outcomes
- ◻ Action Unlikely to achieve timetable and/or to deliver required outcome



Table 3: Summary of progress made against each target in the Climate Change Strategy



COUNCIL ESTATE AND OPERATIONS		
Target	Status	Summary of Progress
By 2022 all Derbyshire streetlighting will be replaced by LEDs	◻	The LED streetlighting replacement programme is 99% complete with approximately 500 streetlights left to convert which are scheduled for whole column and cabling replacements. In addition, there are 411 cast iron lighting columns to be replaced.
The Council will switch its existing electricity tariff to a 100% renewable electricity tariff by 2023 with an optional buy-in for schools.	◻	Discussions held with the Council’s energy supplier in September 2023 indicate that the procurement of a renewable energy tariff for 2024-25 will not be feasible due to energy market pressures, price rises and insufficient supply capacity. This will be monitored and revisited ahead of the 2025-26 financial year.
Reduce emissions from heating buildings	◻	Energy use across the corporate estate reduced by 16% between 2021-22 and 2022-23, the largest proportion of this reduction was from heating fuels (gas, oil and propane). The Council’s Asset Review process is identifying buildings for disposal, which will further



to less than 700tCO ₂ e by 2032.		<p>reduce heating demand. Current forecasts from this review suggest a further saving of 8 million kWh per annum, to be achieved over the next five years. This equates to 21% of total energy use in 2022-23 and would save over 850 tonnes of carbon per year.</p> <p>A review of poorly performing buildings has identified further savings that can be achieved through retrofit projects if funding is available. Capital funding for seven retrofit projects was approved by Full Council in February 2023 however is currently on hold because of the Council's financial position. Furthermore, along with many other councils across the UK, the Council was unsuccessful with a recent application to the Public Sector Decarbonisation Scheme to deliver projects needed to achieve some of these savings.</p> <p>The Council continues to develop and deliver low-cost projects to reduce energy use, such as through behaviour change campaigns and analysing energy use data to identify anomalies and wastage and opportunities to reduce use. However, the scale of the challenge will require deeper action and investment, and advice is being sought on good practice and innovation from outside the Council.</p>
Quadruple existing microgeneration of renewable energy on Derbyshire County Council's estate to 200 MWh by 2032.		<p>35 Council owned buildings (including schools) currently have solar panels installed with an estimated annual output of 159 MWh, of which 73 MWh is from non-school sites.</p> <p>Further solar PV projects have been identified to deliver an estimated 445 MWh of renewable energy by summer 2024. A capital funding bid to deliver these projects was approved by Full Council in February 2023, however, is currently on hold because of the Council's financial position. Further suitable sites are likely to emerge as the Asset Review is completed.</p>
Replace 20 Derbyshire County Council vans per year in the core fleet with zero emission		<p>A core fleet replacement programme for all vans to transition from diesel to electric by 2032 is in place. Currently the fleet has five electric vans and eight electric pool cars with two more on order, meaning that the target of replacing 20 vehicles per year is not currently being met. The success of this programme relies on having EV charging infrastructure in place which will need to include additional charge points installed at County Hall and at the</p>



<p>vehicles (ZEVs) from 2022.</p>		<p>six Council depots where scheduled replacement vehicles are sited. Discussions between Fleet, Corporate Property, Sustainable Travel and the service areas that require the replacement vehicles are ongoing to ensure this replacement programme is successfully delivered. Once the necessary charging infrastructure is in place orders can be placed to procure replacement vehicles and bring the Council back on track to replace at least 20 vehicles per year with electric vehicles.</p> <p>A project to explore and take forward the provision of dedicated Council fleet EVs for high mileage teams in Children’s Services and Adult Social Care and Health is also underway. Charging points are proposed to be installed at strategic hubs where dedicated electric fleet vehicles can be located. Solutions to support the transition of the estimated 60% of Council vans that are based at employees’ homes to electric, and which consequently require home charging, are also being explored.</p>
<p>Replace all Derbyshire County Council HGVs with low emission vehicles by 2032.</p>	<p></p>	<p>Following the delivery of 10 new gritting vehicles in September 2023, the Council will operate 75 HGVs within its fleet. 67 of these HGVs are now Clean Air Zone (CAZ) compliant with orders placed to replace three of the eight remaining HGVs with new CAZ complaint vehicles. These vehicles are due for delivery by December 2023, meaning that 93% of the Council’s HGVs will be CAZ compliant.</p> <p>Discussions are ongoing to replace four library lorries with smaller more effective electric library vans and the final Highways HGV with a more appropriate alternative.</p>
<p>Baseline all Council Scope 3 emissions by 2023 and set a target date to achieve net zero Scope 3 emissions for the Council.</p>	<p></p>	<p>The review of Scope 3 emissions has identified where data is available and the data confidence levels for each element. These emissions have also been quantified where possible and where the information is available. Appendix 2 provides a summary of this analysis. Assessing this information has commenced and, due to the volume of data involved and the annual variations, will be completed in early 2024 and will inform the establishment of a realistic target date for net zero for the Council’s Scope 3 emissions.</p>



Achieve net zero emissions across all schools in Derbyshire by 2050 and set a more ambitious net zero target for schools within the Derbyshire County Council portfolio.	✔	The Council has undertaken a detailed scoping project, which involved consultation with Derbyshire Schools and school leaders, about what support and services schools need and want to help them on their climate change journey. This has also involved reviewing the services that the Council currently provides to schools that directly or indirectly link to tackling climate change. The findings are being used to establish a strategic approach across the council for climate change school support and inform the development of appropriate targets for a net zero schools' portfolio. The Council actively supports schools in tackling climate change through promoting and signposting to internal and external initiatives and sharing good practice case studies and guidance.
LOW CARBON ECONOMY		
Target	Status	Summary of Progress
Reduce manufacturing and construction emissions by 70% by 2035 (against 1990 levels) through energy efficiency improvements and expansion of Carbon Capture, Utilisation and Storage (CCUS) technologies, and promotion of fuel switching.	✔	National data from the Climate Change Committee shows that emissions from manufacturing and construction have fallen by 56% since 1990 largely due to movement towards a less carbon intensive mix of industrial output, improvements in energy intensity and changes in fuel mix. The Council is supporting the decarbonisation of these sectors through activities such as joint working with the county's Mineral Products Industry on net zero and through the Green Entrepreneurs Fund. Large scale Carbon Capture, Utilisation and Storage (CCUS) is being proposed through the Peak Cluster project, which would enable the removal of an estimated quarter of Derbyshire's annual emissions. If approved, construction would begin in 2026 with operations from 2030.
All commercial efficiency renovations complete by 2030 to be in line with UK	✔	Data from the Department for Energy Security and Net Zero shows that emissions from Derbyshire's commercial sector have reduced by 79% since the 2005 baseline year. Energy efficiency improvements in commercial buildings are largely driven by national legislation and investment. For example, the requirement for commercial buildings to have



<p>government's industrial and commercial energy consumption reduction target of 20%.</p>		<p>an EPC certificate on construction, sale or rent was introduced by the Government in 2008. Since April 2023 any rented commercial building must have an EPC rating of E or above. From 2025 onwards, any newly rented commercial building must have a rating of C or higher. Such national changes provide the impetus to improve the energy efficiency of these buildings, with the success of which dependent upon on enforcement by district and borough councils through the planning process.</p> <p>The Council's recently developed Climate Change Planning Guidance and the Council's engagement with the D2N2 LEP (Local Enterprise Partnership) on commercial and industrial energy use will also help to drive improvements.</p>
<p>Undertake a feasibility assessment to understand the opportunities for renewable energy developments across the county and support the development of commercial scale developments where appropriate, by 2023.</p>	<p></p>	<p>This target has been achieved through:</p> <ul style="list-style-type: none"> • Feasibility assessments by APSE Energy on the technical, legal, procurement, financial and planning requirements, and assessment of the feasibility of solar farm development on Council-owned land. • The development of a Derbyshire Spatial Energy (completed in September 2022) to identify the scope for medium to large scale renewable technologies, to help guide planning policy and decision making.
<p>24,000 skilled green jobs to be created in Derbyshire by 2030 to help reach net zero emissions and enable</p>	<p></p>	<p>PwC's Green Jobs Barometer presents a regional view of the status of green jobs in Great Britain. That latest data from 2022 shows that 2.2% of all jobs created in the East Midlands have "green" elements, which is around the average for the UK and slightly up on the previous year (1.2% of jobs in 2021). Furthermore, separate analysis undertaken by the Council on jobs advertised in the D2N2 region during 2022-23 shows that, of the 316,023 total job postings, 3.3% (10,581, which can be considered against the target of 24,000) were from organisations sourcing green jobs and skills.</p>



our local economy to grow and flourish.		As part of the overall growing green skills sector, the Council is developing a more comprehensive understanding of the green skills, jobs and vacancies being created across the Derbyshire so that skill gaps and challenges, such as for domestic retrofitting, can be fully understood. This will enable the Council to continue to work effectively in partnership with others, such as the Midlands Net Zero Hub, to maximise the skills and employment opportunities for Derbyshire residents. The Council's Green Entrepreneurs Fund also supports reskilling for the green economy through scholarship grants for individuals.
All new commercial building developments to be net zero carbon by 2030, and all commercial and industrial properties to be net zero by 2050		The Future Building Standards were first announced in 2019 and will not be finalised until 2025. In the meantime, the Government has introduced an interim uplift of standards. New commercial developments are subject to energy efficiency requirements within Building Regulations (updated in June 2022). This includes the requirement to reduce carbon emissions by 27% relative to 2013 standards and sets higher standards for thermal efficiency, lighting, heating controls, air tightness and flow temperatures. The impacts of this change will be felt slowly as projects with prior planning approval may still be built to previous building regulation standards. This is a national issue, which the Council is working to influence, but is ultimately dependent on further national legislation to enforce net zero developments.
Net zero focussed education, training courses and apprenticeships available at every academic and training institution in Derbyshire by 2028, e.g. net zero building retrofit, renewable energy engineering, heat pump installation.		<p>The Council is taking measures to support the development of net zero focussed education, training courses and apprenticeships, specifically across the housing retrofit market, renewable energy and heat pump installation.</p> <p>The Council has excellent working relationships with the four Further Education (FE) colleges across Derbyshire. One of the areas where the Council is a key partner is the Construction Skills Hub being delivered by Chesterfield Borough Council as part of the Staveley Town Deal where an on-site construction training facility will serve to develop a pipeline of skilled construction workers through training provided by Chesterfield College and Derby University. The Council promotes the Midlands Net Zero Hub (MNZH) Home Decarbonisation Skills Training scheme. This scheme provides grant funding to registered retrofit training providers, including FE colleges, to deliver accredited training at scale to support the whole retrofit sector. Supported by the Council and the district and borough councils, MNZH is also managing local skills training competitions on behalf of the Department for Energy Security and Net Zero,</p>




		providing opportunities for upskilling the local retrofit workforce across a range of areas that include heat pump installation and heat network development.
DECARBONISING THE DOMESTIC SECTOR		
Target	Status	Summary of Progress
All new residential buildings to be zero carbon by 2025.		<p>The Government's forthcoming Future Homes Standard will require all new homes built from 2025 to produce 75-80% less carbon emissions than homes built under the current Building Regulations. Homes will also need to be 'zero carbon ready', with no retrofit work required, to benefit from the decarbonisation of the electricity grid and the electrification of heating.</p> <p>The Climate Change Planning Guidance and associated assessment metric, developed in collaboration with the district and borough councils, is being used to inform the measures that may be implemented to reduce the climate change impact of new developments. They also form an evidence base and county-wide 'net zero ambition' for use by all Derbyshire councils in the drafting of local plan policies.</p> <p>The Council is also working the district and borough councils to explore opportunities for the development a Design Guide/Code for Derbyshire to support housebuilders in designing homes which are in-keeping with local character whilst enabling the inclusion of net zero measures.</p>
All existing owner occupier domestic properties EPC rating C by 2035.		<p>Approximately 61% of Derbyshire's homes are rated at an EPC level of D or below (212,000 homes) and will require some form of energy efficiency measures to be installed to reach an EPC rating of C.</p> <p>Current national funding schemes are being used by the Council, district and borough councils and agency partners (such as the MNZH) to support the delivery of retrofitting measures for social housing and households with low incomes or in fuel poverty. A programme of work, funded through the DESNZ, was launched in Autumn 2023 to the provision of support and advice on energy efficiency retrofitting to private homeowners who do not fall into the low-income category across Derbyshire and Nottinghamshire.</p>

		Although these programmes of work will support an increase in home energy efficiency improvements in the county, the overall scale of the national challenge is significant and existing national funding models and supply chain capacity will not, at present, support the scale and speed of action needed.
All owner occupiers and renters to have access to education and training programmes to decarbonise their homes by 2025.		<p>In partnership with other councils across Derbyshire and Nottinghamshire, funding has been secured through the DESNZ Local Energy Advice Demonstrator (LEAD) project to deliver advice and support to residents on energy efficiency retrofitting. Over the next two years this project will include the development of Derbyshire and Nottinghamshire focussed guidance, case studies and advice, and a revision of the ‘Everybody’s Talking About Climate Change’ website to provide location-specific information on retrofit which will complement information available nationally.</p> <p>Given the current energy crisis and increase in cost of living, the Council provides online energy advice and signposting to external support to help residents to reduce their fuel bills and increase the energy efficiency of their homes.</p>
At least 20% of domestic buildings to have PV installed by 2030.		<p>Research from MCS shows that, at the start of 2023-24 approximately 4.1% of the country’s homes have solar panels installed. MCS data also shows that the number of households installing rooftop solar panels reached its highest level in more than seven years in the first months of 2023, with a 144% increase seen in registered solar panel installations in August 2023 when compared to August 2022.</p> <p>The Derbyshire Spatial Energy Study and the Climate Change Planning Guidance and assessment metric provide a strong evidence base to support local plan development policies, which in turn will support the installation of PV on existing and new buildings. Revisions to national Building Regulations are needed to further facilitate the progress required to meet this target.</p> <p>Delivery of the Council’s Homes Fit for the Future Action Plan also includes actions designed to increase the uptake in solar panel installations, including the provision of face-</p>

		to-face and online information and support to homeowners as well as measures to grow the supply chain for housing retrofit activities. .
TRANSPORT, TRAVEL AND INFRASTRUCTURE		
Target	Status	Summary of Progress
All new cars and vans in the country to be zero emission vehicles by 2030.		<p>In March 2023 there were 11,065 electric vehicles in Derbyshire and a further 4,262 plug-in hybrids. This represents approximately 2.8% of all cars and vans currently registered in the county.</p> <p>The sale of electric and plug-in hybrid cars in the UK continues to increase, with 17% of all new car registrations in the UK during September 2023 being electric vehicles. This is a 20% increase since 2021. The number of electric vans as a proportion of all new vans in the UK increased from 3.6% in 2021 to 5.9% in 2022.</p> <p>The recent change in UK Government legislation for all new cars and vans sold in Great Britain to be zero emission by 2035 (from the previous target of 2030) means that meeting this target will continue to be challenging due to the reliance on national investment and enforcement. However, the Council will continue to work with partners to encourage the uptake in these vehicles and increase the availability of public and domestic electric vehicle charge-points across the county.</p>
<p>Deliver 1000 EV charging points for public use by the end of 2025 in collaboration with partners.</p> <p>Support the installation of electric vehicle chargers at</p>		<p>Data from the Department for Transport shows that, at the end of April 2023 there were 287 publicly available EV charging points in Derbyshire, up from 274 in July 2022. This equates to 36 publicly available EV charging points per 100,000 of population in Derbyshire, compared to an average of 61 in England as a whole. This difference is mainly due to the county's largely rural nature, meaning that suitable sites can be challenging to identify. A study has been completed into potential demand across the county and to assess the preferred locations and types of charge points needed to meet this demand through an online survey and in collaboration with all Derbyshire district and borough councils, the findings from which are now being incorporated into a detailed delivery plan.</p>

144,000 properties across Derbyshire by 2035.		Research suggests that only 2% of UK homes have charge points installed, this equates to an estimated 7,000 homes in Derbyshire. The development and implementation of Climate Change Planning Guidance and updated Building Regulations for England (introduced in June 2022) is starting to facilitate a growth in charging infrastructure at private properties.
Double the number of people cycling regularly as a mode of transport from 106,000 in 2016 to 212,000 by 2030.		<p>The Council is directly supporting this area of work through activities and project including increasing the distance of Key Cycle Network including the White Peak Loop, increasing the number of schools participating in Modeshift Stars programme (and therefore implementing cycle to school initiatives) and, together with other D2N2 authorities to develop and deliver the D2N2 Local Cycling and Walking Infrastructure Plan (LCWIP).</p> <p>At the time of the Strategy's development, this target was taken from the Derbyshire Cycling Plan 2016-2030, using data from the national Active Peoples Survey. However, this survey is no longer undertaken (it ended in 2016), which means that progress can no longer be tracked in this way. Data on cycling trends is now collected through the Sport England Active Lives Survey. This data shows that, between 2021-22 and 2022-23, the percentage of adults cycling for leisure at least twice in a 28-day period in Derbyshire fell from 10.7% to 8.8%. The percentage of adults cycling for travel at least twice in a 28-day period in Derbyshire increased from 3.5% to 3.8% during the same period.</p> <p>It is therefore proposed that the target is changed to reflect a new data set and baseline to the following:</p> <p>Double the percentage of people in Derbyshire cycling at least twice in a 28-day period:</p> <ul style="list-style-type: none"> • Cycling for leisure: from 10.1% in 2015-16 to 20.2% in 2030-31 • Cycling for travel: from 5.3% in 2015-16 to 10.6% in 2030-31
Reverse the decline in bus travel and increase total		Bus passenger numbers are reflecting a slower than anticipated recovery post pandemic although the beginning of a recovery is now being seen. As of July 2023, overall patronage




<p>journeys to 30 million per year by 2023 (from 21 million in 2019).</p>		<p>levels were estimated at around 80% of pre-pandemic levels. Patronage data is taken from Department for Transport (DfT) bus statistics.</p> <p>Following receipt of £47m of Bus Service Improvement Plan funding from the DfT in November 2022, work has commenced via an Enhanced Partnership between Derbyshire County Council and Bus Operators, to drive bus improvements for passengers. These externally funded improvements are required to be delivered by March 2025. A series of targets have been developed as part of the BSIP delivery, which reflect the state of play in the sector after the pandemic.</p> <p>It is therefore proposed that this target is changed to align with these BSIP targets to:</p> <p>Reverse the decline in bus travel and increase total journeys to 20.9m by March 2025 and 23.0m by March 2030.</p>
<p>Deliver 2 hydrogen re-fuelling stations in Derbyshire and up to 30 hydrogen powered buses by 2025 by working with partners in the public and private sectors.</p>	<p></p>	<p>Through the D2N2 LEP a Hydrogen Fuelled Waste Collection project is being progressed, which will include a mobile hydrogen refuelling point established at South Derbyshire District Council's waste depot in Swadlincote. This project is due to be launched in November 2023.</p> <p>The D2N2 Low Carbon Mobility Task Force is also looking at hydrogen fuel, vehicle and technology opportunities for the region, which includes a potential hydrogen bus project within the county (subject to funding being secured).</p> <p>Derbyshire's mineral products industry is also exploring hydrogen technologies and an East Midlands Hydrogen Cluster was launched in September 2023 to accelerate the development of, and attract investment to, the growing cluster of concentrated hydrogen demand, production and distribution infrastructure in the East Midlands.</p>
<p>Reduce HGV emissions in the county by 50% by</p>	<p></p>	<p>UK Government data for 2020 shows that emissions from HGVs accounted for 19% of total road transport emissions and have fallen by 21% since 2005. The Council is engaging with relevant groups through the D2N2 LEP to tackle this issue and with the county's mineral</p>

2035 against baseline.		products industry to explore collaborative efforts to reduce HGV emissions through a reduction in vehicle mileage and the use of more sustainable vehicles.
WASTE		
Target	Status	Summary of Progress
Reduce household waste production by 20% by 2025 against 2015 baseline.		<p>Whilst household waste increased in Derbyshire in 2021 due to the COVID-19 pandemic, it reduced again in 2022. This reduction, together with a slight increase in population since 2021, results in an overall decrease of 0.01tonnes of household waste in Derbyshire per capita (to 0.48 tonnes per head).</p> <p>The Council, as Waste Disposal Authority, runs campaigns and, where possible, does so in partnership with Waste Collection Authorities (WCAs). The Council uses social media messages as much as possible. Videos have been promoted to encourage food waste reduction, with a plan to promote more messages when resources permit. The Council is continuing to work closely with WCAs to design and deliver initiatives.</p>
Less than 10% municipal solid waste to be sent to landfill by 2035, with 100% waste diverted by 2050*.		The percentage of Local Authority Collected Municipal Solid Waste (LACMSW) sent to landfill has reduced from 27.5% to 13.7% since 2014-15. New contracts for residual waste treatment contain contractual obligations to divert residual waste from landfill. These are expected to reduce the total amount of LACMSW to 10.81% over the next two years, thereby indicating that the target will be met ahead of the target date.
No more food and garden waste sent to landfill by 2030.		<p>The Council achieved an 86.3% landfill diversion rate of LACMSW in 2022-23.</p> <p>Achieving this specific target requires either 100% availability of, and participation in, food waste collections, or 100% diversion of residual waste from landfill into Energy from Waste (EfW). Based on current and planned local EfW infrastructure, the latter is not considered realistic within the target timescale.</p> <p>At present two of the eight district and borough councils do not offer any food waste collection service and of the six that do, five offer it on a fortnightly basis co-mingled with</p>

	<p>garden waste. Through the Environment Act 2021, the government has introduced a requirement for all WCAs to offer a free, weekly food collection service for recycling or composting for all households in England by 31 March 2026. WCAs will also be required to collect garden waste in accordance with the new requirements by 31 March 2026, but, as is currently the case, they will still be able to charge for the service. This means that the duty to collect garden waste only arises once the householder has requested its collection and has paid any charge. These two key pieces of legislation will help to ensure the target is met.</p>
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* Excluding asbestos. Burying asbestos waste in landfill is currently the only legal final destination available for the material. There are alternative techniques being developed internationally but they are not currently commissioned for use in the UK.










2.27 There are **32 priority actions** within the Strategy, with the current delivery status of each of these provided in Table 4 below. A detailed review of priority action performance is carried out on a quarterly basis, and this quarterly review, which includes commentary on any work being undertaken to address any risks to delivery, is reported each quarter to the Council's Climate Change and Environment Programme Board and the Portfolio Holder.









-  Good On track or complete with outcomes in line with expectations
-  Review Some risk to achieving timetable and/or outcomes
-  Action Unlikely to achieve timetable and/or to deliver required outcome








2.28 Table 4 shows that, at the end of Q2 2023-24, 18 (56%) of the priority actions are on track or complete, with the remaining 14 (44%) under close monitoring and review due to some risk to achieving timetable and/or outcome.




Table 4: Status of each priority target in the Climate Change Strategy

COUNCIL ESTATE AND OPERATIONS		
Ref	Priority Action	Status
1	Identify land for renewable energy generation and carry out pre-feasibility assessments to identify whole life project costs.	
2	Develop a design standard for future estate development which sets the requirement to develop net zero enabled buildings which can be net zero but also resilient to future climatic changes.	
3	Deliver Public Sector Decarbonisation Schemes and evaluate to inform further work.	
4	Identify buildings to be retained and undergo energy efficiency retrofit.	
5	Roll out a Council wide electric vehicle sharing programme and electric vehicle charging points at all key Council sites, coupled with a behaviour change campaign and evaluation of working practices to facilitate a zero-emission fleet.	

6	Develop a Sustainable Procurement Framework using the UK government's green procurement guidance to embed environmental requirements and Social Value into all contracts.	
7	Review the commissioning principles across all teams to ensure that climate change is embedded across our services and partner working.	
8	Carry out a feasibility study to identify low carbon energy procurement options.	
9	Include climate change training as part of the induction process for all Elected Members and staff to strengthen knowledge of carbon emissions, climate resilience and net zero development.	
LOW CARBON ECONOMY		
Ref	Action	Status
10	Develop a Renewable Energy Strategy for the county including an energy resource assessment that identifies opportunities for renewable energy generation as well as decarbonisation of heating and energy use in homes.	
11	Work with the Midlands Energy Hub, D2N2 LEP and universities and colleges to build technical and economic capabilities to deliver renewable energy and low carbon heating projects.	
12	Liaise with Distribution Network Operators (DNOs) and D2N2 LEP to understand grid capacity/constraints for generation opportunities.	
13	Deliver the Derbyshire Green Entrepreneurs scheme and provide additional support for reducing environmental impacts, driving innovation, and curating sustainable growth for smaller businesses.	
14	Take forward the COVID Recovery Strategy to identify high carbon commercial industries and support the business community in shifting to and benefiting from the low carbon economy through collaboration with climate change and carbon experts.	

15	Work with local academic institutions, trade unions, and regional Chamber of Commerce to identify geographical areas for low carbon industry growth, as well as assessing and developing the capabilities and skills of the region in supplying those industries.	
16	In line with Vision Derbyshire, continue working with district and borough councils to develop a Strategic Joint Planning Framework for Derbyshire to ensure that planning measures for net zero commercial buildings are integrated into Local Plans.	
DECARBONISING THE DOMESTIC SECTOR		
Ref	Action	Status
17	Conduct an updated feasibility assessment on the low carbon heat and renewable energy opportunities within the county.	
18	Use outputs of the Renewable Energy Strategy to work with partner local authorities to adopt a whole-system Local Area Energy Planning approach to increase onsite low-carbon energy generation and reduce the demand for energy.	
19	Through the Vision Derbyshire process agree the approach to supporting the decarbonising of homes recognising the specific opportunities and challenges faced by renters and homeowners and reflecting the need to particularly support those in fuel poverty.	
20	Planning work with the districts and boroughs to develop a Strategic Joint Planning Framework for Derbyshire to ensure achievement of minimum energy standards and net zero housing development.	
21	Work with local authority and wider government partners to develop a Regional Skills Strategy that identifies areas of upskilling within the house building and retrofit sectors, and creates investor-ready training programmes to receive support from the proposed National Skills Fund.	
22	Develop an information sharing campaign to educate homeowners and renters on how to improve the energy efficiency of their property.	

TRANSPORT, TRAVEL AND INFRASTRUCTURE		
Ref	Action	Status
23	Promote integrated, and place-based development in transport planning as part of Derbyshire's COVID recovery and economic revival of market towns, to reduce emissions from first and last mile journeys and provide an economic boost to local retail and businesses.	
24	Support the new Enhanced Bus Partnership arrangements being introduced in Derbyshire as part of the new National Bus Strategy. This will involve Derbyshire County Council and the bus operators investing in new service provision, improved roadside bus infrastructure, mobility as a service, integrated ticketing systems, and upgraded information availability to provide an improved public transport offering to Derbyshire residents.	
25	Support the implementation of the Derbyshire Cycling Plan and the Local Cycling and Walking Infrastructure Plan.	
26	Support actions for increasing the uptake of active transport to reduce emissions particularly within marginalised groups, and improve health and wellbeing for all.	
27	Continue to support the above average growth of zero emissions vehicle ownership in the county by establishing public private investment partnerships to develop a network of mixed speed public charging and hydrogen infrastructure, which is affordable, consistent, accessible and user friendly for residents and visitors.	
28	Evaluate the use of smart technologies and alternative fuels to reduce the emissions associated with commercial and freight transports e.g. consolidation hubs, hydrogen sub-stations, transport mobility hubs, mobility as a service etc.	
WASTE		
Ref	Action	Status
29	Identify solutions to increase the diversion of organic waste including food, soiled materials, carpets, organic textiles, etc. from landfill.	

30	Undertake a cross authority behaviour change campaign to promote reduction in waste and resource consumption in the home and businesses.	
31	Work with local producers and businesses to restrict the use of single use products and support the market for remanufactured goods.	
32	Explore the potential for partnering with local charities and organisation to segregate and redistribute good quality products from HWRC	

Summary of additional activities

2.29 This section provides an overview of the additional key projects and initiatives carried out over the past 12 months that have not been covered in the detail provided above and are contributing to the Council's climate change and wider sustainability objectives.

Energy system decarbonisation

2.30 The Council has developed a **Strategic Framework for Council action for progress to net zero energy in Derbyshire** (endorsed by Cabinet in June 2023), which sets out the elements of the net zero energy agenda the Council is best placed to contribute to progressing and what role it should take in so doing. This includes the establishment of six priority workstreams to 2025, including joint working with the Mineral Products Industry and joint working with the county's rural and farming networks.

2.31 The Council has been collaborating with other local authorities across D2N2 through the Innovate UK funded two-year **Fast Followers project**, which will accelerate progress on D2N2's net zero ambitions and is designed to complement and feed into the development of the East Midlands Combined County Authority (EMCCA). This includes the development of consistent messaging to citizens and businesses across D2N2 about climate change, and the development of a D2N2 Local Area Energy Plan (LAEP) to identify the most effective pathway to decarbonising each district across D2N2.

2.32 The Council is formally supporting a number of **community energy** projects, through the provision of officer time and the provision of grants, such as £0.130m of funding through the Green Entrepreneurs Fund to the Cromford Water Power project for the reinstatement of hydropower and a waterwheel at Cromford Mill and the provision of £0.050m of funding through the Derbyshire Grants scheme to Derbyshire Dales Community Energy (DDCE) to support the establishment of a Derbyshire Community Energy Hub to link all the community energy groups and projects across Derbyshire.

2.33 A range of local and community led projects have been awarded funding under the 'being green and sustainable' funding priority of the Council's **Derbyshire Grants** scheme. Projects funded this year include:

- Funding the establishment of wildflower areas in Killamarsh and Breaston.

- Funding the installation of energy efficient LED lighting at a village hall in Newton Solney
- Funding to encourage more staff and visitors to Whitworth Park in Matlock to use bikes by providing fixed bike racks on the site so there is a safe, secure area for bicycles.
- Funding a community e-cargo bike in New Mills to support the local community with free, zero emissions transport for local people and community organisations.
- Funding towards the installation of solar panels and a battery storage system at a scout hut in Long Eaton.

2.34 The Council has formed a collaborative relationship with the County's **Mineral Products Industry** to work together to help the industry become net zero by 2050. A Memorandum of Understanding has been formed which sets out priority areas of collaboration, including low carbon infrastructure, renewable energy, skills and employment and planning.

Enhancing and protecting the natural environment

2.35 With support from a specialist external consultancy the Council has developed a **Natural Capital Strategy** for the County. The Strategy considers the natural capital assets that are key to the county's future prosperity, health, and wellbeing and provides the evidence base for the county's approach to Local Nature Recovery. The project has involved mapping ecological networks / habitat connectivity, and mapping areas of strategic priority and opportunity for biodiversity. The Natural Capital Strategy is now being used to identify the priority areas for the protection, restoration, and enhancement of natural capital assets and informing the development of a Local Nature Recovery Strategy by March 2025.

2.36 A **Tree and Woodland Strategy for Derbyshire** has been developed and was approved by Cabinet in September 2023. It is designed to direct the effective management and enhancement of existing trees and woodlands in Derbyshire to ensure their current value is maximised and liabilities mitigated. It will also help to facilitate the planting of up to one million trees across the county by 2030 and contribute to the preparation and delivery of the Derbyshire Local Nature Recovery Strategy.

2.37 As part of the Council's commitment to tackling the effects of climate change, a target to facilitate the planting of a **million trees** in the county by 2030 was set in 2021. As of 23 October 2023, 388,461 have been added to the online Million Trees totaliser.

Strengthening the Council's approach to tackling climate change

- 2.38 The **Corporate Environment Policy** sets out the Council's commitment to championing, protecting and enhancing the natural and built environment for long-term public benefit. The original Policy was approved for adoption by Cabinet in November 2004 and was reviewed and updated in 2014 and 2019. The Policy has been reviewed and updated by the Climate Change Team during 2023 following extensive consultation with a range of relevant Council services, including Conservation Heritage and Design, Countryside Service, Procurement, Corporate Property, Resources and Waste, Highways, and Public Health. It has also been updated to include recent changes to legislation, national policy and environmental standards, and to reflect the Council's corporate commitments and ambitions with regards to tackling climate change, conserving the natural environment and wider sustainable development. Publication of the revised policy is subject to Cabinet Member approval during Q3 of 2023-24.
- 2.39 The Climate Change Team continues to deliver a **comprehensive training package** to employees and Elected Members. This includes a 30-minute e-learning module that is now a mandatory part of the induction process for all new employees. A comprehensive two-hour "Climate Change – Everybody's Business" training is delivered nine times per year, either online or in person and is available for all employees to register for. As of the end of October 2023, almost 200 employees had undertaken this two-hour training with more booked on to attend sessions in late 2023 and early 2024.
- 2.40 The Climate Change Team held a **Journey to Net Zero Employee Open Day** at County Hall in June 2023 to showcase to employees and Elected Members the range of work being undertaken across the Council to tackle climate change and deliver wider sustainability benefits to the people of Derbyshire, and to give employees the opportunity to provide feedback and share their ideas on the Council's work in this area. Approximately 150 employees attended the drop-in style event with 20 services holding stalls and/or delivering presentations at the event. This included Sustainable Travel, Countryside Service, Planning, Waste and Resources, Public Health and Procurement.
- 2.41 In October 2023 the Climate Change and Energy teams launched an **"Energy Champions" scheme** to bring together employees who are keen to help reduce energy use in the Council's buildings. These Energy Champions will take a lead in promoting and implementing energy efficiency behaviour change to help save costs, reduce emissions, and make the Council more sustainable. They will be a local

contact for energy reduction guidance and support in each building or building area. Energy Champions will be given access to the Council's online energy portal so that they can see how much energy is being used in their building and will have access to range of support materials on how teams can reduce their workplace energy consumption.

- 2.42 With Council services and assets continuing to be under strain from the lasting impacts of the coronavirus pandemic and economic pressures, it is imperative that the Council understands the **risks to Council services and assets from the current and future impacts of climate change** and puts in place plans to increase resilience. As such, a project is being delivered to understand and evaluate the risks and ensure any necessary measures to adapt to the risks posed are understood and implemented. The project report and recommendations will be finalised during Q3 and Q4 of 2023-24, which will be followed by the implementation and monitoring of findings and recommendations during 2024-25.

Conclusion

- 2.43 To-date, the Council has made good progress towards its net zero target of 2032, or sooner, with a 71% reduction in Council emissions achieved between 2009-10 and 2022-23. However, the speed of reduction is now at risk of slowing and data modelling carried out using information on activities (those in progress and planned) suggests that there may be a shortfall in the necessary emissions reduction of 7,250 tonnes CO₂e by 2031-32. This highlights that further effort is required to reduce the Council's emissions, particularly those emissions resulting from heating Council buildings and emissions from core and grey fleet. Supplemental work is now underway to explore how the further reductions necessary might be achieved, and to understand the resource implications of doing so.
- 2.44 Any step change in emissions reduction performance and the development of renewable energy generation requires significant financial investment, which may be impacted by the Council's current financial situation. The implication of any reduction in future investment will be considered for how it influences this shortfall or delay to the achievement of the Council's net zero target. Alternative funding (through external schemes funds such as the PSDS) and delivery options are being assessed to understand the implications of the Council taking different approaches to tackling the four emission sources, particularly for Corporate Property decarbonisation where high levels of investment are required.

2.45 Effective and robust delivery of the Strategy this year has meant that over 50% of the priority actions are on track to meet or exceed the desired outcomes, and action is being taken to address any risks to delivery of any targets and actions currently not on track. A quarterly review of performance will continue to be undertaken using the Climate Change Performance Dashboard, with the Climate Change and Environment Programme Board continuing to manage and oversee this progress and performance.

3. Consultation

3.1 Not applicable.

4. Alternative Options Considered

4.1 **Not to report on delivery of the Climate Change Strategy** – The Climate Change Act 2008 (as amended) commits the UK to a legally binding target to reduce greenhouse gas emissions to net zero by 2050. The Council must, therefore, play its part in reducing emissions and take action to achieve this in line with the targets set out by the UK Government. If the Council did not have a Strategy and Action Plan in place and monitor and report on progress in an effective way, emissions from the Council and across the county would not reduce sufficiently to achieve the targets.

5. Implications

5.1 Appendix 1 sets out the relevant implications considered in the preparation of the report.

6. Background Papers

6.1 None identified.

7. Appendices

7.1 Appendix 1 – Implications.

7.2 Appendix 2 – Scope 3 Emissions Analysis.

8. Recommendations

That the Committee:

- a) Notes the progress being made against the Council's net zero target of 2032, or sooner, and the county's net zero target of 2050, and the challenges being faced to reduce emissions from Corporate Property, streetlighting, core fleet and grey fleet.
- b) Notes the progress being made against each target and action within the Derbyshire County Council Climate Change Strategy: Achieving Net Zero (2021-2025).
- c) Notes the other key projects, initiatives and schemes that are contributing to the Council's climate change and wider sustainability agenda and objectives.

9. Reason for Recommendations

- 9.1 To ensure that the Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction is informed of progress against delivery of the Council's Climate Change Strategy: Achieving Net Zero and the net zero targets.

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Implications

Financial

- 1.1 There are no direct financial implications arising from this report. The projects and activities in progress are funded from existing budget approvals in both revenue and capital budgets. The delivery of some of the priority areas of work within the Strategy may have future financial implications for the Council. These will be considered on a project-by-project basis and will be subject to separate reports and approvals.

Legal

- 2.1 There is no statutory obligation on Derbyshire's councils to produce a Climate Change Strategy, however, councils have the power contained in the Local Government Act 2000, Local Government & Public Involvement in Health Act 2007, Sustainable Communities Act 2007 and Localism Act 2011 to engage directly and work with other agencies in helping to tackle climate change.
- 2.2 The delivery of some of the priority areas of work within the Strategy may have legal implications. These are considered on a project-by-project basis.

Human Resources

- 3.1 The delivery of some of the priority areas of work within the Strategy may have human resource implications. These are considered on a project-by-project basis.

Information Technology

- 4.1 The delivery of some of the priority areas of work within the Strategy may have information technology implications. These are considered on a project-by-project basis.

Equalities Impact

- 5.1 The delivery of some of the priority areas of work within the Strategy may have equalities impact implications. These are considered on a project-by-project basis.

Corporate objectives and priorities for change

- 6.1 The Strategy supports the Council's ambition to be a net zero organisation by 2032, or sooner, and for the County to be net zero by 2050 and informs the action that needs to be taken to achieve these ambitions. The Strategy will also help deliver the following Council Plan priorities: Resilient, Healthy and Safe Communities; High Performing, Value for Money and Resident-Focused Services; A Prosperous and Green Derbyshire.

Other (for example, Health and Safety, Environmental, Sustainability, Property and Asset Management, Risk Management and Safeguarding)

Environmental Sustainability

- 7.1 Delivery of the Strategy will improve the environmental sustainability of the Council and the County and, in particular, will reduce greenhouse gas emissions.
- 7.2 The delivery of some of the priority areas of work within the Strategy may have other implications. These are considered on a project-by-project basis.

Scope 3 Emissions Analysis

Activity	Data source and calculation methodology	Estimated annual carbon emissions for 2022-23 (tonnes)	Accuracy / confidence level
<p>Scope 3: Indirect emissions</p> <p><i>Emissions from procured goods and services, often referred to as ‘Scope 3’ and which can be over 85-95% of total emissions for councils.</i></p>			
Water supply and wastewater collection / treatment	Only around 50% of the Council’s corporate sites have water meters installed. Work is underway in Corporate Property to improve this situation, and, for where water meters aren’t feasible, estimate the volume used.	Not currently available	N/A
Hire vehicles	This data is being sought from the contracted hire companies but is not currently available for 2022-23.	Not currently available	N/A
Travel to school	This represents bus and taxi journeys either for individuals or additional services. High level of estimation required as exact routes and vehicles are not known.	Not currently available	N/A
Business travel by train, taxi, bus and flights	Data for journeys booked through the travel agency used by the Council. It does not include bus, taxi or train travel claimed through expenses. No flights were undertaken in 2022-23.	3.9 tonnes	High

Activity	Data source and calculation methodology	Estimated annual carbon emissions for 2022-23 (tonnes)	Accuracy / confidence level
Hotel stays for Council business	Data is available for bookings made through the travel agency used by the Council.	1.3 tonnes	High
Employee commuting or working from home	An employee survey attempted to estimate a figure, but low completion rates and an extremely variable work pattern post-pandemic means the data could not be interpreted meaningfully. Work is ongoing to identify other methods of estimation.	Not currently available	N/A
Waste produced at Council sites	This is a complex area covered by several contracts. Work has been undertaken to map and analyse what detail is available with an estimated figure for 2022-23 established and now undergoing verification.	553 tonnes (provisional)	Medium
Purchased goods and services (general)	External support has been obtained to scope the scale of emissions from procurement. This will be used to develop a robust baseline and identify the contracts with the highest potential carbon emissions.	N/A	N/A
Construction and building works – major capital projects	This data will emerge from the assessment of purchased goods and services (general).	N/A	N/A
Highways works	External support from a specialist consultant has been commissioned to establish a Scope 3 baseline	N/A	N/A

Activity	Data source and calculation methodology	Estimated annual carbon emissions for 2022-23 (tonnes)	Accuracy / confidence level
	for the service. This will be completed in early 2024		
Council maintained schools - electricity and other fuel use	Analysed through billed energy data.	11,895	High
Disposal and treatment of municipal waste	The Council is the statutory authority and collects data on waste tonnages and processing routes, which has been assessed to establish a provisional figure for 2022-23. This is currently being verified.	64,524 tonnes (provisional)	N/A
Sub-metered energy use by tenants of council buildings	The Council does not have access to this data and would typically be reported by the tenants as their Scope 2 emissions.	N/A	N/A

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FOR PUBLICATION

DERBYSHIRE COUNTY COUNCIL

**IMPROVEMENT AND SCRUTINY COMMITTEE - CLIMATE CHANGE,
BIODIVERSITY AND CARBON REDUCTION**

MONDAY, 4 DECEMBER 2023

Report of the Executive Director - Place

Reducing the Environmental Impact of Council Grey Fleet Mileage

1. Purpose

- 1.1 To provide an update on the Council's Staff Travel Policy, Council grey mileage trends, and set out a forward plan of activities to further reduce carbon emissions associated with Council business travel.

2. Information and Analysis

Background

- 2.1 Corporate business travel in this report is focused on reducing the environmental impact of the 'grey fleet mileage'. Grey fleet mileage is defined as any journey undertaken in the direction of an employee's duty which involves use of a motorised vehicle owned by them. Employees duties include attending seminars, conferences, ad hoc training and vocational training funded by the Council.
- 2.2 A Staff Travel Policy is currently in place which sets out the guiding principles that underpin business travel for working arrangements, and are as follows:
- Culture and associated working arrangements are built on mutual trust.
 - The Council recognises the importance of flexibility, the need to reduce our carbon footprint in delivering its services to residents and communities.

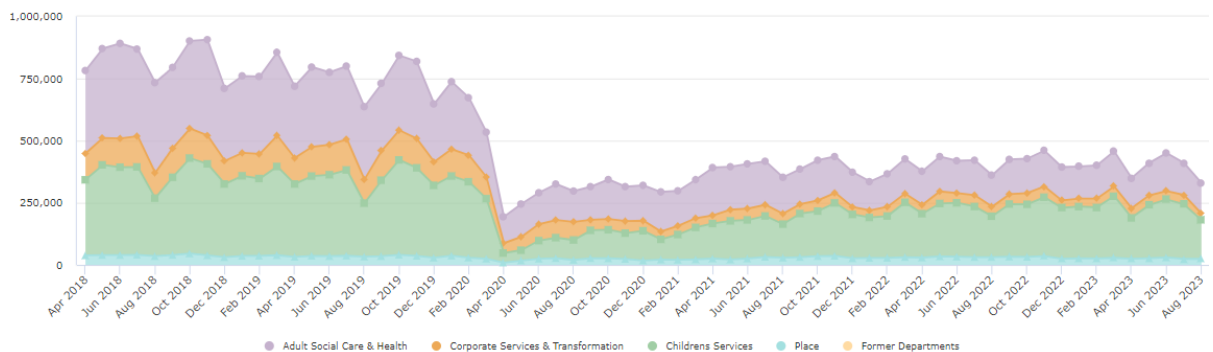
- All employees have a responsibility to take the most appropriate and sustainable method of transport, co-ordinating travel, where possible, to keep the number of separate car journeys to an absolute minimum.
- Employees must travel by the most cost-effective route and should only undertake Council work related journeys that are absolutely necessary.
- All travel arrangements are agreed with the relevant line manager.

2.3 Before authorising mileage and expenses, managers are required to consider whether alternative means of transport/online meeting communication would be more appropriate than driving. Where a work-related journey is essential employees should seek to use one of the electric pool cars rather than their own vehicle. The exception to this will be when there are no pool cars available or unable to use public transport or walk or cycle.

2.4 Notably, since the COVID-19 pandemic, the Council has fully adopted the use of hybrid working (a mixture of home and office working) and use of online meeting platforms into usual working practices. Available data shows that 81% of meetings held in the Council’s hybrid meeting rooms have been held partially online. This trend is aligned to national changes in hybrid working where 44% of workers reported home or hybrid working, and 56% reported only travelling to work in the last seven days (September 2022 to January 2023).

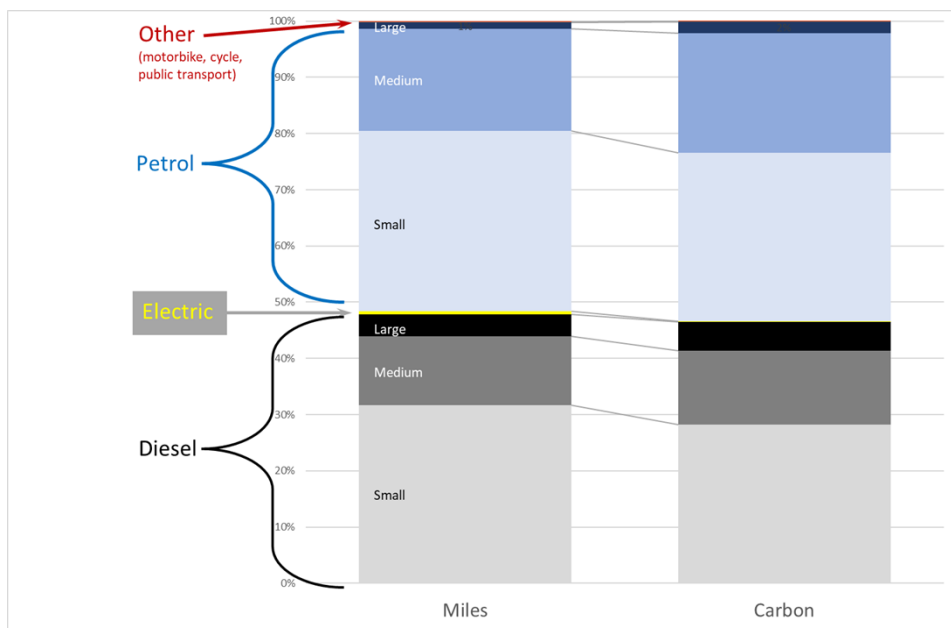
2.5 Whilst online meeting platforms have been adopted, it is clear that travel remains essential for some Council operations and employee duties, particularly in adult social care, child protection and delivery of place-based projects. Analysis of grey fleet mileage demonstrates that in some Council Departments as few as four divisions can be responsible for over 90% of grey fleet mileage. Consequently, the forward programme set out in this report recognises a need for a more focused approach to reduce carbon emissions associated with essential travel.

Grey fleet mileage by department



2.6 Analysis of grey fleet mileage data has highlighted good potential to undertake a more focused approach which utilises data on employee vehicle engine sizes and their fuel type to further tackle carbon emissions. A methodology has been developed which provides a clearer insight into where resources can be prioritised to deliver a greater reduction in carbon emissions; as opposed to using average vehicle data with unknown fuel types. The Committee should note that this methodology underestimates grey fleet emissions by approximately 8%, but the benefits of a more granular dataset outweighs this factor in determining where actions should be targeted to reduce carbon emissions.

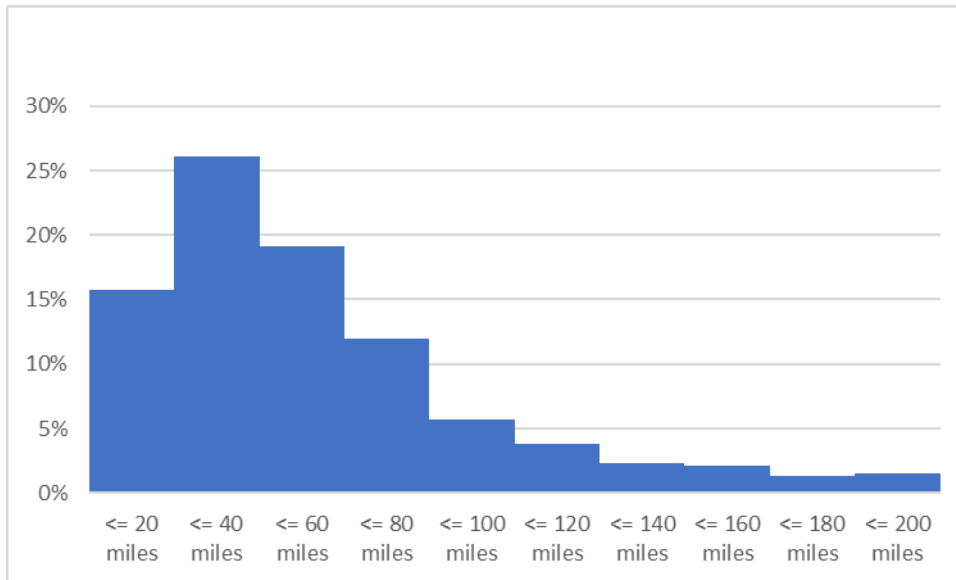
2.7 It is estimated that 64% of employee grey fleet mileage is currently undertaken in smaller engine petrol or diesel cars, which will have lower carbon emissions despite being powered by fossil fuels. Less than 1% of grey mileage is currently undertaken in electric or other low emission vehicles.



2.8 Grey fleet mileage data is now also available to assist with understanding the length of individual trips undertaken by employees, and therefore inform which are the most appropriate travel choices for essential journeys. Key findings are:

- Less than 0.5% of claims are for journeys of 5 miles or less and only 2% for 10 miles or less. Whilst a low percentage of overall mileage, there is potential to target up to 245,000 miles annually by providing increased travel choice for active travel and public transport which are more appropriate for short journeys.

- 79% of journeys are less than 100 miles and a further 11% between 100 and 200 miles. Consequently, the highest opportunity for grey fleet mileage reduction will be to further increase the use of online meeting software, encourage use of bus and rail travel, and replace diesel and petrol car journeys with low emission car journeys e.g. electric vehicles.



Forward Programme

- 2.9 An update on the range of interventions available to employees to support more sustainable travel choices was provided to the Committee at its previous meeting. This report now sets out a forward programme of work that will be completed to support a further reduction in grey fleet mileage and associated carbon emissions.

1. Children’s Services Pilot Grey Mileage Reduction

- 2.10 Children’s Services Department has been highlighted as having a Service with the highest grey mileage. Two pilot exercises have been included into the proposed forward programme to work closely with Children’s Services employees to better understand business travel requirements and to how carbon emissions can be reduced. The intention is to use the pilot exercises to develop a proposal that can then be replicated and implemented across the Council.

Pilot Group 1: Generic Children’s Services grey mileage group – Fostering Team

2.11 The overall aim is to promote actions that could lead to the reduction in carbon emissions from Children’s Services Grey Mileage. The pilot will be led by the Climate Change team and will:

- Understand grey mileage patterns in Children’s Services and the potential to change how journeys are planned and undertaken.
- Develop a hierarchy of low carbon travel options to consider and understand how the Council can change behaviour to ensure success.
- Co-design actions/solutions that could be implemented to reduce grey mileage, including provision of information and tools, e.g. a grey mileage toolkit.
- Promote and monitor these actions to understand their success.

Pilot Group 2: Children’s Services group with access to electric vehicle pool car hubs – High Peak Electric Vehicle Hub

2.12 Overall aim is to co-design a method for promoting the use of electric vehicles as the first vehicle of choice. The aim will be to understand the level of travel demand and to how the available electric vehicle fleet can be optimised to meet that demand. The pilot will be led by the Climate Change team and will:

- Understand which journeys are suitable for electric vehicle pool car use.
- Understand the how electric vehicles are used in the Hub and develop a hierarchy of other options to reduce grey fleet emissions.
- To co-design actions/solutions that could be implemented to reduce grey mileage, including provision of information and tools.
- To promote and monitor these actions to understand their success.

Forward Programme: Estates Electric Vehicle Charging network

2.13 In July 2023, the Council established a focused Project Delivery Group (PDG), with representatives from key services to develop the Council estates electric vehicle charging network. The Council’s Sustainable Travel team facilitates the PDG meetings and provides overarching project management support. As this project develops it will require increasing levels of support and input from the various services involved.

- 2.14 PDG responsibilities include the delivery of pilot sites and the work required to provide a comprehensive, estate wide charging network. With the former acting as a proof of concept of a Council owned charging system. The pilot phase is currently working to deliver up to 12 electric vehicle charge-points across six sites. Notably focusing initially on the urgent need to provide this service to the Adult Social Care and Health and Childrens Services to support a reduction in grey fleet mileage. Taking this phased approach will allow the Council to evaluate the model, test reporting mechanisms (including energy off-setting and cost recouping), as well as providing an opportunity for testing operating systems away from County Hall such as vehicle booking, vehicle management, fault and issue reporting, and service performance.
- 2.15 Further development of a comprehensive charging network – the Strategic Roll out – where multiple sites, use cases and vehicles are involved will require a far more detailed investigation. This will include, but not be limited to, detailing both existing and forecast demand, site feasibility, electric capacity assessments, and engaging with suppliers to further understand the options available and the cost and energy impacts of a large-scale installation.

Forward Plan: Smarter Travel Hub

- 2.16 The Committee received a report on the various interventions available to support employees to adopt smarter and sustainable options for their journey to work, for business travel, and to reduce travel. Whilst the range of measures is considered effective to support increased sustainable travel choices it is proposed to review how these measures can be brought together more effectively as a one-stop-shop to provide easy access to smarter travel options. This will include:
- Refresh of the Miles Better – travel to work campaign and extend this to encourage use of sustainable travel modes for business travel.
 - Promotion of the county-wide car share scheme provided by ‘Kinto Join’ which enables a journey matching service to support employees making shared journeys.
 - Promote the availability of electric vehicles and charge-point locations across the County.
 - Encourage further uptake of the cycle to work scheme (over 900 bicycles purchased under this scheme to date), including purchase of an electric bicycle – up to £3,000.
 - Further development of an electric vehicle salary sacrifice scheme.
 - Promotion of public transport options and the availability of discounted travel tickets.

Grey fleet emissions targets

- 2.17 Targets for grey fleet emissions have been developed for each Department, starting from a baseline of 2021-22. It was assumed that the proportion of emissions for each Department remains the same with a linear trajectory to zero by 2031-32. Each departmental management team is encouraged to incorporate these targets into Departmental and Divisional Service Plans with each Department taking responsibility for achieving the target.
- 2.18 Targets will be achieved through reduction in grey fleet mileage (e.g. through use of corporate vehicles) and through gradual improvement of vehicle emissions.

3 Consultation

- 3.1 There is no consultation associated with this paper. As each workstream and project is developed and implemented, engagement with Council staff, senior officers and members is undertaken where necessary and appropriate.

4 Alternative Options Considered

- 4.1 Option 1: No action - Taking no action to reduce the environmental impact of business travel would not support the urgent need to reduce greenhouse gas emissions to reach the Council's target to achieve net zero emissions across the County by 2050.
- 4.2 Furthermore, officers will continue to consider, review, and explore all existing, new and alternative schemes and initiatives that can further reduce the environmental impact of travel for businesses purposes by Council staff.

5 Implications

- 5.1 Appendix 1 sets out the relevant implications considered in the preparation of the report.

6 Background Papers

- 6.1 None identified.

7 Appendices

- 7.1 Appendix 1 – Implications.

8 Recommendations

That the Committee:

- a) Notes the current Staff Travel Policy in place and to how this is implemented to minimise grey fleet mileage.
- b) Notes the analysis of grey fleet mileage data and current trends.
- c) Notes the proposed forward plan to further reduce carbon emissions associated with employee business travel.

9 Reason for Recommendations

- 9.1 To ensure appropriate information and understanding of the various work programmes to reduce carbon emissions and encourage more sustainable travel.

Report Author: Alan Marsden

Contact details: Alan.Marsden@derbyshire.gov.uk

Implications

Financial

- 1.1 The Estates charging project has secured a Capital budget of £300,000 secured across three years (2022-2025) for the installation of electric vehicle charge points on Council premises to serve fleet and pool vehicles.
- 1.2 All projects detailed in this paper are live and ongoing, and are being delivered by the Climate Change and Sustainable Travel teams using existing budgets. There is no requirement for any further financial commitments from the Council at this time.
- 1.3 Where additional spend is required, this will be considered on a case-by-case basis.

Legal

- 2.1 There are no legal implications associated with this report.

Human Resources

- 3.1 It is expected that the current staffing arrangement within the Sustainable Travel, Climate and Fleet Management teams will be adequate to deliver on ambitions stated in this report.

Information Technology

- 4.1 Bookable services such as car share schemes, Electric Vehicle charging points, rail ticketing etc require reliable digital connectivity. Such implications are considered at project development stage to ensure deliverability.

Equalities Impact

- 5.1 The delivery of specific actions within this paper may have Equalities Impact implications for the Council. These will be considered on a case-by-case basis.

Corporate objectives and priorities for change

- 6.1 The actions set out in this paper support the Council's commitments to tackling climate change and reduce vehicle borne emissions, as set out

in the Derbyshire County Council Climate Change Strategy (2021-2025) and Zero Emission Vehicle Strategy (2019-2029).

Other (for example, Health and Safety, Environmental, Sustainability, Property and Asset Management, Risk Management and Safeguarding)

- 7.1 Environmental sustainability considerations are embedded in the overall programme of work described above and in the individual projects.



FOR PUBLICATION

DERBYSHIRE COUNTY COUNCIL

**IMPROVEMENT AND SCRUTINY COMMITTEE - CLIMATE CHANGE,
BIODIVERSITY AND CARBON REDUCTION**

MONDAY, 4 DECEMBER 2023

Report of the Executive Director - Place

Briefing on the Derbyshire Highways Decarbonisation Programme

1. Purpose

- 1.1 To provide the Committee with an update on the Derbyshire Highways Decarbonisation Project.

2. Information and Analysis

- 2.1 This information is provided in the slide presentation format described in Appendix 2. The presentation provides committee members with a briefing on the Derbyshire Highways Decarbonisation Project including the background and what the project is setting out to achieve.

3. Consultation

- 3.1 Not required.

4. Alternative Options Considered

- 4.1 Not applicable.

5. Implications

- 5.1 Appendix 1 sets out the relevant implications considered in the preparation of the report.

6. Background Papers

6.1 None identified.

7. Appendices

7.1 Appendix 1 – Implications.

7.2 Appendix 2 – Presentation ‘Derbyshire Highways Decarbonisation Project Briefing’ (under separate cover).

8. Recommendation

That the Committee:

- a) Notes the update on the Derbyshire Highways Decarbonisation Project provided.

9. Reasons for Recommendation

9.1 To support the Committee to consider areas of the Derbyshire Highways Decarbonisation Project for further scrutiny as part of its future work programme.

Report Author: Neill Bennett

Contact details: Neill.Bennett@derbyshire.gov.uk,

Implications

Financial

1.1 None at this stage.

Legal

2.1 None at this stage.

Human Resources

3.1 None at this stage.

Information Technology

4.1 None at this stage.

Equalities Impact

5.1 None at this stage.

Corporate objectives and priorities for change

6.1 None at this stage.

Other (for example, Health and Safety, Environmental, Sustainability, Property and Asset Management, Risk Management and Safeguarding)

7.1 None at this stage.

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Email ask.jules@derbyshire.gov.uk

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Derbyshire Highways Decarbonisation Project Briefing

Climate Change, Biodiversity & Carbon Reduction I&S Committee

4 December 2023

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Background

Highways Decarbonisation – HEADLINES

Highways Decarbonisation – AIMS

Highways Decarbonisation – PROGRESS

Highways Decarbonisation – REVIEW

Next Steps

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DCC Climate Change Strategy

“Our aim is to reduce emissions generated by the county council to net-zero by 2032 or sooner and help the rest of Derbyshire reduce carbon emissions generated within the county to net zero by 2050 or sooner. This is in line with national government targets.”

Highways Decarbonisation – HEADLINES...to date...



Derbyshire Highways can contribute to the reduction of carbon emissions across all aspects of highway services including fleet management, asset management and maintenance practices, materials selection, procurement and depot operations



We are well on the way to completing our baselining exercise using the Future Highways Research Group (FHRG) Carbon Calculation Accounting Standard which we have helped to develop.



DCC Highways Decarbonisation Plan was initiated with AtkinsRealis in March 2023 with an initial 'kick-off' meeting held in May 2023.



Financial support provided by the Climate Change & Environment Programme Board

Highways Decarbonisation – AIMS

The DCC Highways Decarbonisation Plan Project aims to deliver a clear route map to net-zero for Derbyshire Highways.

Key project themes

- **Asset Management** - embedding the drive for decarbonisation in asset management strategy, policy and operational practices.
- **Sustainable Procurement** – Working with our suppliers and contractors to ensure we can account for carbon emissions throughout the lifecycle of products and services we purchase.
- **Climate Adaptation** – Identifying and quantifying climate-related risks to highways assets and maintenance activities.
- **Measurement & Management** – developing effective methods of measuring our progress towards a net-zero highways service.

Highways Decarbonisation – PROGRESS



- **Project work plan delivered - May 2023**



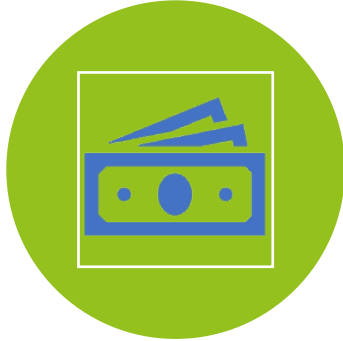
- **First draft DCC Highways Decarbonisation Plan document delivered – July 2023**



- **Sustainable Procurement – suppliers/contractors survey carried out and responses analysed – October 2023**



- **Draft communication and engagement plan currently in progress – November 2023**



REASONS FOR REVIEW

PROMPTED BY :

BUDGETARY PRESSURES
PRESSURES ON HIGHWAY
SERVICE - STORM BABET

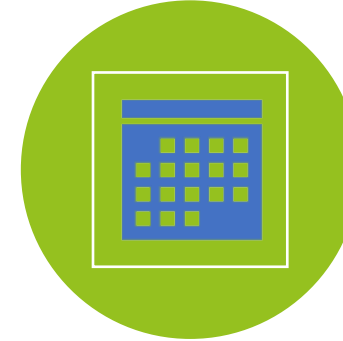
TO ENSURE:

VALUE FOR MONEY IS BEING
REALISED AND
OUR AIMS ARE BOTH REALISTIC
AND DELIVERABLE



REVIEW

ATKINSREALIS CURRENTLY
UNDERTAKING A FULL REVIEW OF
THE PROJECT PLAN AND
DELIVERABLES TO DATE.



REVIEW PLANNING

MEETING WITH ATKINSREALIS 29
NOVEMBER 2023 TO DISCUSS
PROGRESS AND DEVELOP A
REVISED PLAN FOR PROJECT
ACTIVITIES GOING FORWARD INTO
2024.

Next Steps

- Review
- Scrutiny Involvement/Co-Design

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Email ask.jules@derbyshire.gov.uk



I & S - Climate Change, Biodiversity and Carbon Reduction Committee

Proposed 2023/24 Work Programme

Monday 5 February 2024			
Topic	Lead Officers	Purpose	Portfolio Holder
Nature Recovery - Biodiversity of Highway Verges	Glyn Dutton	To consider and review the work being undertaken with the district and borough councils on improving the biodiversity of roadside verges across the county.	Cllr Charlotte Cupit
Green Entrepreneurs Fund	Joe Battye / Karl Apps	To consider and review progress on the delivery of the Green Entrepreneurs Fund, including an update on the grants awarded and assessment of outcomes.	Cllr Tony King
Improving Derbyshire's bus network	Chris Hegarty	To consider and review the work being undertaken to improve Derbyshire's bus network, including addressing gaps in the network, improving rural connectivity and ensuring bus travel is an integral part of the decarbonisation of transport and travel in Derbyshire.	Cllr Charlotte Cupit
Decarbonising the Corporate Estate	Janet Scholes/ David Beard	To consider and review the progress being made on decarbonising the Council's Corporate Estate and the forward plan of activities.	Cllr Simon Spencer

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